

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

## APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

|                                                                                                                                                           |                |                                                                                 |               |                              |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|---------------------------------------------------------------------------------|---------------|------------------------------|
| 1a. TYPE OF WORK<br>DRILL <input checked="" type="checkbox"/> DEEPEN <input type="checkbox"/> PLUG BACK <input type="checkbox"/>                          |                | 5. LEASE DESIGNATION AND SERIAL NO.<br>SF 079938A                               |               |                              |
| b. TYPE OF WELL<br>OIL WELL <input type="checkbox"/> GAS WELL <input checked="" type="checkbox"/> OTHER <input type="checkbox"/>                          |                | 6. IF INDIAN, ALLOTTEE OR TRIBE NAME                                            |               |                              |
| 2. NAME OF OPERATOR<br>El Paso Natural Gas Company                                                                                                        |                | 7. UNIT AGREEMENT NAME                                                          |               |                              |
| 3. ADDRESS OF OPERATOR<br>PO Box 289, Farmington, NM 87401                                                                                                |                | 8. FARM OR LEASE NAME<br>Bolin                                                  |               |                              |
| 4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)*<br>At surface 1700'S, 1480'E<br>At proposed prod. zone same |                | 9. WELL NO.<br>1A                                                               |               |                              |
| 14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*<br>10 miles East of Blanco, NM                                                      |                | 10. FIELD AND POOL, OR WILDCAT<br>Blanco Mesa Verde                             |               |                              |
| 15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any)<br>1480'                            |                | 11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA<br>Sec. 30, T-29-N, R-8-W NMPM |               |                              |
| 16. NO. OF ACRES IN LEASE<br>320                                                                                                                          |                | 12. COUNTY OR PARISH<br>San Juan                                                |               |                              |
| 17. NO. OF ACRES ASSIGNED TO THIS WELL<br>E/ 320.00                                                                                                       |                | 13. STATE<br>NM                                                                 |               |                              |
| 18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.<br>2100'                                    |                | 19. PROPOSED DEPTH<br>5680'                                                     |               |                              |
| 20. ROTARY OR CABLE TOOLS<br>Rotary                                                                                                                       |                | 21. APPROX. DATE WORK WILL START*                                               |               |                              |
| 21. ELEVATIONS (Show whether DF, RT, GR, etc.)<br>6495' 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           |
| 13 3/4"                                                                                                                                                   | 9 5/8"         | 32.3#                                                                           | 200'          | 224 cu.ft. to circulate      |
| 8 3/4"                                                                                                                                                    | 7"             | 20.0#                                                                           | 3360'         | 313 cu.ft. to cover Ojo Alam |
| 6 1/4"                                                                                                                                                    | 4 1/2" liner   | 10.5#                                                                           | 3210-5680'    | 431 cu.ft. to fill to 3210'  |

Selectively perforate and sandwater fracture the Mesa Verde 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 E/2 of Section 30 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 <u>A. G. Guisco</u>               |  | TITLE <u>Drilling</u>             |  | DATE <u>1-25-79</u>                   |  |
| (This space for Federal or State office use) |  | APPROVAL DATE <u>FEB - 2 1979</u> |  | U. S. GEOLOGICAL SURVEY<br>FARMINGTON |  |
| PERMIT NO. _____                             |  | APPROVED BY _____                 |  | TITLE _____                           |  |
| CONDITIONS OF APPROVAL, IF ANY:              |  |                                   |  |                                       |  |

ok Frank

\*See Instructions On Reverse Side

NMOC

**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.

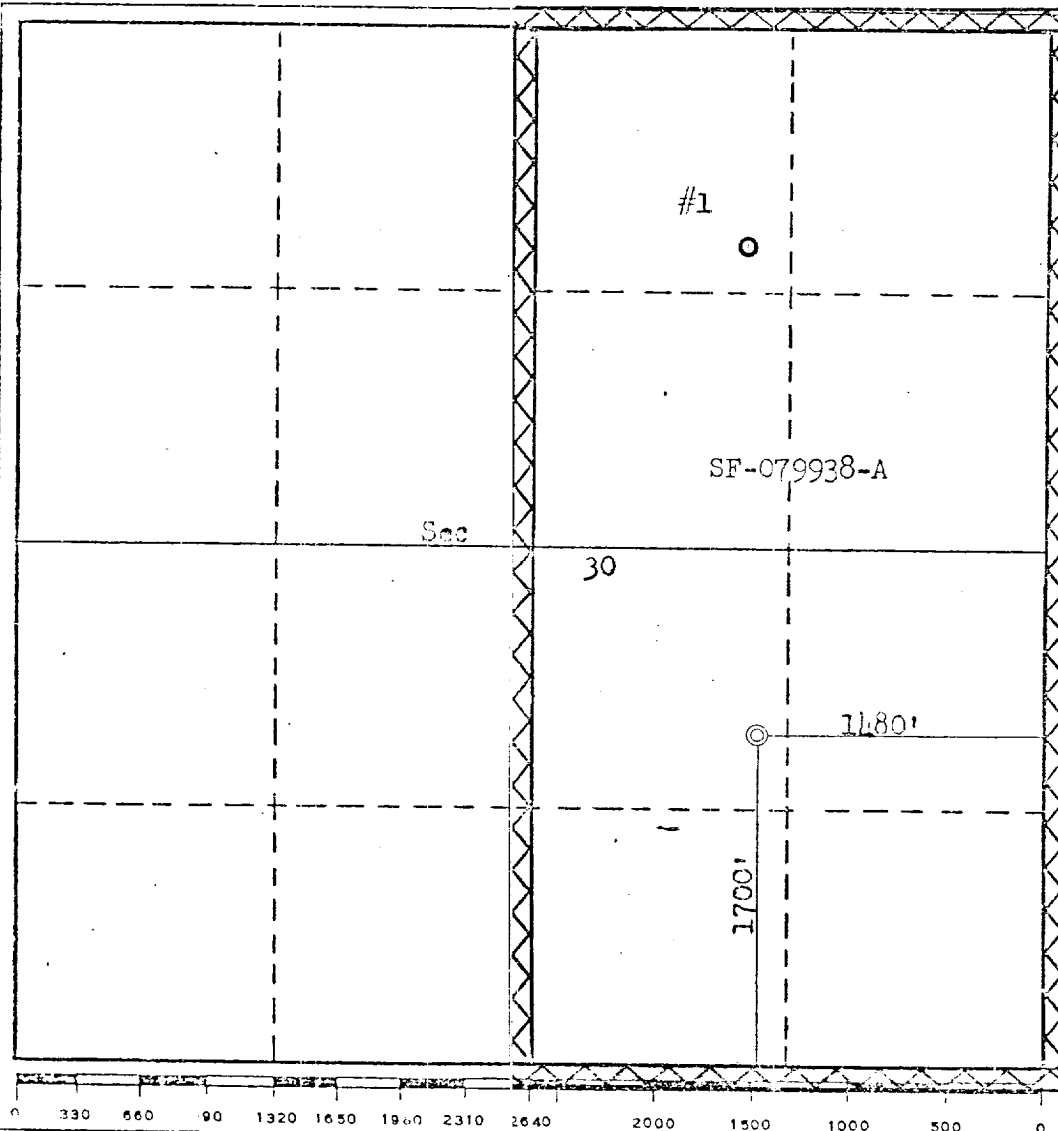
|                                                                                                                                |                                          |                        |                                     |                           |                                           |
|--------------------------------------------------------------------------------------------------------------------------------|------------------------------------------|------------------------|-------------------------------------|---------------------------|-------------------------------------------|
| Operator<br><b>EL PASO NATURAL GAS COMPANY</b>                                                                                 |                                          |                        | Lease<br><b>ROLIN (SF-079938-A)</b> |                           | Well No.<br><b>1A</b>                     |
| Unit Letter<br><b>J</b>                                                                                                        | Section<br><b>30</b>                     | Township<br><b>29N</b> | Range<br><b>8W</b>                  | County<br><b>San Juan</b> |                                           |
| Actual Footage Location of Well:<br><b>1700</b> feet from the <b>South</b> line and <b>1180</b> feet from the <b>East</b> line |                                          |                        |                                     |                           |                                           |
| Ground Level Elev.<br><b>6495</b>                                                                                              | Producing Formation<br><b>Mesa Verde</b> |                        | Pool<br><b>Blanco Mesa Verde</b>    |                           | Dedicated Acreage:<br><b>320.00</b> 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.



|                                                                                                                                                                                                                             |                                |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|
| <b>CERTIFICATION</b>                                                                                                                                                                                                        |                                |
| I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.                                                                                                         |                                |
| <i>A. J. Buiro</i>                                                                                                                                                                                                          |                                |
| Name                                                                                                                                                                                                                        | <b>Drilling Clerk</b>          |
| Position                                                                                                                                                                                                                    | <b>El Paso Natural Gas Co.</b> |
| Company                                                                                                                                                                                                                     | <b>January 29, 1979</b>        |
| 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                                                                                                                                                                                                               | <b>September 29, 1978</b>      |
| Registered Professional Engineer and/or Land Surveyor                                                                                                                                                                       |                                |
| <i>David B. Buiro</i>                                                                                                                                                                                                       |                                |
| Certificate No. <b>3950</b>                                                                                                                                                                                                 |                                |

Multi-Point Surface Use Plan  
Bolin #1A

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 Manzaneras Mesa 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,

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

SUBMIT IN DUPLICATE\*

(See other in-  
structions on  
reverse side)Form approved.  
Budget Bureau No. 42-R355.5

## WELL COMPLETION OR RECOMPLETION REPORT AND LOG \*

|                                                                                                                                                                                                                                                                                     |                                                                       |                                   |                                              |                                       |                                                                                |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------|-----------------------------------|----------------------------------------------|---------------------------------------|--------------------------------------------------------------------------------|
| 1a. TYPE OF WELL:                                                                                                                                                                                                                                                                   |                                                                       | OIL WELL <input type="checkbox"/> | GAS WELL <input checked="" type="checkbox"/> | DRY <input type="checkbox"/>          | Other _____                                                                    |
| b. TYPE OF COMPLETION:                                                                                                                                                                                                                                                              |                                                                       |                                   |                                              |                                       |                                                                                |
| NEW WELL <input checked="" type="checkbox"/>                                                                                                                                                                                                                                        | WORK OVER <input type="checkbox"/>                                    | DEEP-EN <input type="checkbox"/>  | PLUG BACK <input type="checkbox"/>           | DIFF. RESVR. <input type="checkbox"/> | Other _____                                                                    |
| 2. NAME OF OPERATOR                                                                                                                                                                                                                                                                 |                                                                       |                                   |                                              |                                       |                                                                                |
| El Paso Natural Gas Company                                                                                                                                                                                                                                                         |                                                                       |                                   |                                              |                                       |                                                                                |
| 3. ADDRESS OF OPERATOR                                                                                                                                                                                                                                                              |                                                                       |                                   |                                              |                                       |                                                                                |
| Box 289, Farmington, New Mexico 87401                                                                                                                                                                                                                                               |                                                                       |                                   |                                              |                                       |                                                                                |
| 4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements)*                                                                                                                                                                                        |                                                                       |                                   |                                              |                                       |                                                                                |
| At surface 1700' S, 1480' E                                                                                                                                                                                                                                                         |                                                                       |                                   |                                              |                                       |                                                                                |
| At top prod. interval reported below                                                                                                                                                                                                                                                |                                                                       |                                   |                                              |                                       |                                                                                |
| At total depth                                                                                                                                                                                                                                                                      |                                                                       |                                   |                                              |                                       |                                                                                |
| 14. PERMIT NO.                                                                                                                                                                                                                                                                      |                                                                       |                                   | DATE ISSUED                                  |                                       |                                                                                |
| 15. DATE SPUDDED                                                                                                                                                                                                                                                                    |                                                                       |                                   | 16. DATE T.D. REACHED                        |                                       |                                                                                |
| 4-27-79                                                                                                                                                                                                                                                                             |                                                                       |                                   | 5-02-79                                      |                                       |                                                                                |
| 17. DATE COMPL. (Ready to prod.)                                                                                                                                                                                                                                                    |                                                                       |                                   | 18. ELEVATIONS (DF, RKB, RT, GR, ETC.)*      |                                       |                                                                                |
| 6-19-79                                                                                                                                                                                                                                                                             |                                                                       |                                   | 6495' GL                                     |                                       |                                                                                |
| 20. TOTAL DEPTH, MD & TVD                                                                                                                                                                                                                                                           |                                                                       | 21. PLUG BACK T.D., MD & TVD      | 22. IF MULTIPLE COMPL., HOW MANY*            | 23. INTERVALS DRILLED BY              | 24. PRODUCING INTERVAL(S), OF THIS COMPLETION--TOP, BOTTOM, NAME (MD AND TVD)* |
| 5692'                                                                                                                                                                                                                                                                               |                                                                       | 5675'                             |                                              | ROTARY TOOLS<br>0-5692                | CABLE TOOLS                                                                    |
| 25. WAS DIRECTIONAL SURVEY MADE                                                                                                                                                                                                                                                     |                                                                       |                                   |                                              |                                       | 26. TYPE ELECTRIC AND OTHER LOGS RUN                                           |
| NO                                                                                                                                                                                                                                                                                  |                                                                       |                                   |                                              |                                       | IS/GRS, DBC/GRS, Temperature Survey                                            |
| 27. WAS WELL CORED                                                                                                                                                                                                                                                                  |                                                                       |                                   |                                              |                                       |                                                                                |
| NO                                                                                                                                                                                                                                                                                  |                                                                       |                                   |                                              |                                       |                                                                                |
| 28. CASING RECORD (Report all strings set in well)                                                                                                                                                                                                                                  |                                                                       |                                   |                                              |                                       |                                                                                |
| CASING SIZE                                                                                                                                                                                                                                                                         | WEIGHT, LB./FT.                                                       | DEPTH SET (MD)                    | HOLE SIZE                                    | CEMENTING RECORD                      | AMOUNT PULLED                                                                  |
| 9 5/8"                                                                                                                                                                                                                                                                              | 36#                                                                   | 209'                              | 13 3/4"                                      | 224 cu. ft.                           |                                                                                |
| 7"                                                                                                                                                                                                                                                                                  | 20#                                                                   | 3354'                             | 8 3/4"                                       | 313 cu. ft.                           |                                                                                |
| 29. LINER RECORD                                                                                                                                                                                                                                                                    |                                                                       |                                   |                                              |                                       |                                                                                |
| SIZE                                                                                                                                                                                                                                                                                | TOP (MD)                                                              | BOTTOM (MD)                       | SACKS CEMENT*                                | SCREEN (MD)                           |                                                                                |
| 4 1/2"                                                                                                                                                                                                                                                                              | 3235'                                                                 | 5692'                             | 431 cu. ft.                                  |                                       |                                                                                |
| 30. TUBING RECORD                                                                                                                                                                                                                                                                   |                                                                       |                                   |                                              |                                       |                                                                                |
| SIZE                                                                                                                                                                                                                                                                                | DEPTH SET (MD)                                                        | PACKER SET (MD)                   |                                              |                                       |                                                                                |
| 2 3/8"                                                                                                                                                                                                                                                                              | 5636'                                                                 |                                   |                                              |                                       |                                                                                |
| 31. PERFORATION RECORD (Interval, size and number)                                                                                                                                                                                                                                  |                                                                       |                                   |                                              |                                       |                                                                                |
| 4546, 4550, 4618, 4635, 4639, 4644, 4649, 4668, 4674, 4690, 4695, 4700, 4705, 4726, 4737, 4964, 5008, 5014, 5049, 5054, 5059, 5090' w/1 SPZ. 5212, 5228, 5234, 5240, 5254, 5258, 5263, 5282, 5287, 5292, 5308, 5320, 5325, 5346, 5444, 5458, 5552, 5583, 5607, 5630, 5655' w/1 SPZ. |                                                                       |                                   |                                              |                                       |                                                                                |
| 32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.                                                                                                                                                                                                                                      |                                                                       |                                   |                                              |                                       |                                                                                |
| DEPTH INTERVAL (MD)                                                                                                                                                                                                                                                                 |                                                                       | AMOUNT AND KIND OF MATERIAL USED  |                                              |                                       |                                                                                |
| 4546-5090                                                                                                                                                                                                                                                                           |                                                                       | 65,000# sand & 120,000 gal. wtr.  |                                              |                                       |                                                                                |
| 5212 - 5655                                                                                                                                                                                                                                                                         |                                                                       | 66,500# sand & 133,000 gal. wtr.  |                                              |                                       |                                                                                |
| 33. PRODUCTION                                                                                                                                                                                                                                                                      |                                                                       |                                   |                                              |                                       |                                                                                |
| DATE FIRST PRODUCTION                                                                                                                                                                                                                                                               | PRODUCTION METHOD (Flowing, gas lift, pumping--size and type of pump) |                                   |                                              |                                       | WELL STATUS (Producing or shut-in)                                             |
|                                                                                                                                                                                                                                                                                     | After Frac Gauge 1120 MCF/D                                           |                                   |                                              |                                       | Shut-in                                                                        |
| DATE OF TEST                                                                                                                                                                                                                                                                        | HOURS TESTED                                                          | CHOKE SIZE                        | PROD'N. FOR TEST PERIOD                      | OIL--BBL.                             | GAS--MCF.                                                                      |
| 6-19-79                                                                                                                                                                                                                                                                             |                                                                       |                                   |                                              |                                       |                                                                                |
| FLOW, TUBING PRESS.                                                                                                                                                                                                                                                                 | CASING PRESSURE                                                       | CALCULATED 24-HOUR RATE           | OIL--BBL.                                    | GAS--MCF.                             | WATER--BBL.                                                                    |
| SI 62                                                                                                                                                                                                                                                                               | SI 728                                                                |                                   |                                              |                                       |                                                                                |
| 34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.)                                                                                                                                                                                                                          |                                                                       |                                   |                                              |                                       |                                                                                |
| TEST WITNESSED BY                                                                                                                                                                                                                                                                   |                                                                       |                                   |                                              |                                       |                                                                                |
| Norman Waggoner                                                                                                                                                                                                                                                                     |                                                                       |                                   |                                              |                                       |                                                                                |
| 35. LIST OF ATTACHMENTS                                                                                                                                                                                                                                                             |                                                                       |                                   |                                              |                                       |                                                                                |
| 36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records.                                                                                                                                                  |                                                                       |                                   |                                              |                                       |                                                                                |
| SIGNED <u>D. G. Busco</u>                                                                                                                                                                                                                                                           |                                                                       | TITLE <u>Drilling Clerk</u>       |                                              | DATE <u>6-12-79</u>                   |                                                                                |

\*(See Instructions and Spaces for Additional Data on Reverse Side)

NMOCC

# INSTRUCTIONS

**General:** This form is designed for submitting a complete and correct well completion report and log on all types of lands and leases to either a Federal agency or a State agency, or both, pursuant to applicable Federal and/or State laws and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local, area, or regional procedures and practices, either are shown below or will be issued by, or may be obtained from, the local Federal and/or State office. See instructions on items 22 and 24, and 33, below regarding separate reports for separate completions.

If not filed prior to the time this summary record is submitted, copies of all currently available logs (drillers, geologists, sample and core analysis, all types electric, etc.), formation and pressure tests, and directional surveys, should be attached hereto, to the extent required by applicable Federal and/or State laws and regulations. All attachments should be listed on this form, see item 35.

**Item 4:** If there are no applicable State requirements, locations on Federal or Indian land should be described in accordance with Federal requirements. Consult local State or Federal office for specific instructions.

**Item 18:** Indicate which elevation is used as reference (where not otherwise shown) for depth measurements given in other spaces on this form and in any attachments. **Items 22 and 24:** If this well is completed for separate production from more than one interval zone (multiple completion), so state in item 22, and in item 24 show the producing interval, or intervals, top(s), bottom(s) and name(s) (if any) for only the interval reported in item 33. Submit a separate report (page) on this form, adequately identified, for each additional interval to be separately produced, showing the additional data pertinent to such interval.

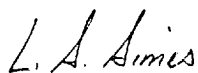
**Item 29:** "Sacks Cement": Attached supplemental records for this well should show the details of any multiple stage cementing and the location of the cementing tool. **Item 33:** Submit a separate completion report on this form for each interval to be separately produced. (See instruction for items 22 and 24 above.)

## 37. SUMMARY OF POROUS ZONES:

SHOW ALL IMPORTANT ZONES OF POROSITY AND CONTENTS THEREOF; CORED INTERVALS; AND ALL DRILL-STEM TESTS, INCLUDING DEPTH INTERVAL TESTED, CUSHION USED, TIME TOOL-OPEN, FLOWING AND SHUT-IN PRESSURES, AND RECOVERIES

| FORMATION | TOP | BOTTOM | DESCRIPTION, CONTENTS, ETC. | 38. GEOLOGIC MARKERS        |              |                  |
|-----------|-----|--------|-----------------------------|-----------------------------|--------------|------------------|
|           |     |        |                             | NAME                        | MEAS. DEPTH  | TRUE VERT. DEPTH |
|           |     |        |                             | Mesa Verde<br>Point Lookout | 4542<br>5221 |                  |

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 hills and sandstone ledges with railed pinon and cedar growing. Cattle graze 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.



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L. A. Aimes  
Project Drilling Engineer

Operations Plan  
Bolin #1A

I. Location: 1700'S, 1480'E, Section 30, T-29-N, R-8-W, San Juan County, NM

Field: Blanco Mesa Verde

Elevation: 6495'GL

II. Geology:

|                    |            |          |               |       |
|--------------------|------------|----------|---------------|-------|
| A. Formation Tops: | Surface    | San Jose | Lewis         | 3160' |
|                    | Ojo Alamo  | 1970'    | Mesa Verde    | 4630' |
|                    | Kirtland   | 2095'    | Menefee       | 4765' |
|                    | Fruitland  | 2684'    | Point Lookout | 5230' |
|                    | Fic.Cliffs | 3030'    | Total Depth   | 5680' |

B. Logging Program: GR-Ind. and GR-Density at Total Depth.

C. Coring Program: none

D. Natural Gauges: 4620', 4755', 5220' and at Total Depth.  
Also gauge any noticeable increase in gas. Record all gauges in daily drilling report and on morning report.

III. Drilling:

A. Mud Program: mud from surface to 3360'. Gas from intermediate casing to Total Depth.

IV. Materials:

|                    |           |            |             |            |
|--------------------|-----------|------------|-------------|------------|
| A. Casing Program: | Hole Size | Depth      | Casing Size | Wt.&Grade  |
|                    | 13 3/4"   | 200'       | 9 5/8"      | 32.3# H-40 |
|                    | 8 3/4"    | 3360'      | 7"          | 20.0# K-55 |
|                    | 6 1/4"    | 3210-5680' | 4 1/2"      | 10.5# K-55 |

B. Float Equipment: 9 5/8" surface casing - B & W guide shoe  
(Prod. No. FC 06-09611-0200)

7" intermediate casing - Pathfinder guide shoe (Part #1003-1-007) and Howco self-fill insert float valve (Price Ref.36A&37), 5 Pathfinder stabilizers (Part #107-10) every other joint above shoe. Run float two joints above shoe.

4 1/2" liner - 4 1/2" liner hanger with neoprene packoff. Larkin geyser shoe (Fig.222) and Larkin flapper type float collar(fig.404 M&F).

C. Tubing: 5680' of 2 3/8", 4.7#, J-55 8rd EUE tubing with a common pump seating nipple one joint above bottom. Tubing will be open ended.

D. Wellhead Equipment: 10" 900 x 9 5/8" casing head. 10" 900 x 6" 900 xmas tree.

## Operations Plan - Bolin #1A

### V. Cementing:

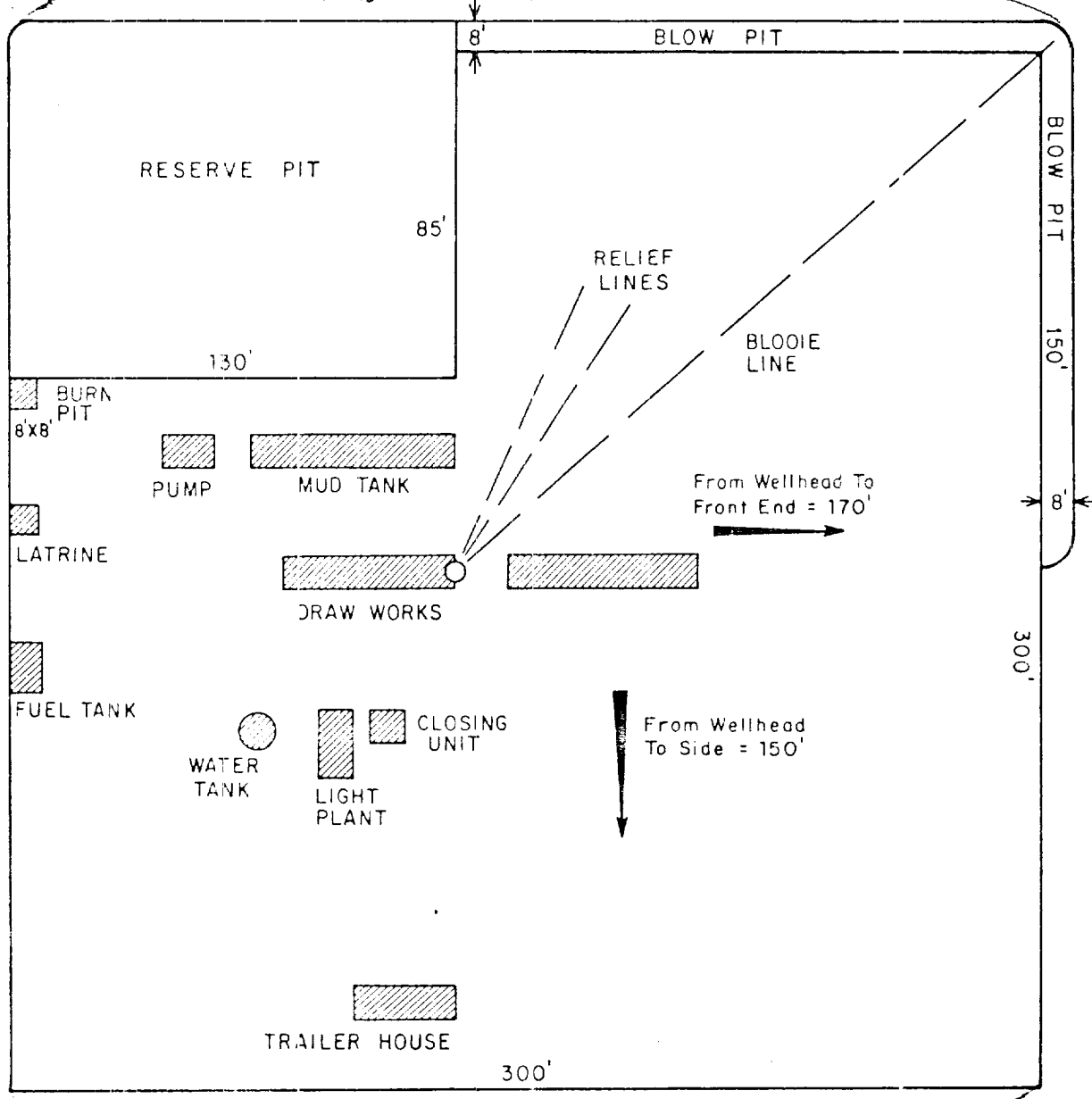
9 5/8" surface casing - use 190 sks. of Class "B" cement with 1/4# gel-flake per sack and 3% calcium chloride (224 cu.ft. of slurry, 100% excess to circulate to surface). WOC 12 hours. Test casing to 600#/30 minutes.

7" intermediate casing - use 121 sks. of 65/35 Class "B" Poz with 6% gel and 2% calcium chloride (8.3 gallons of water per sack) followed by 100 sks. of Class "B" with 2% calcium chloride (313 cu.ft. of slurry, 50% excess to cover Ojo Alamo). Run temperature survey at 8 hours. WOC 12 hours. Test casing to 1200#/30 minutes.

4 1/2" liner - precede cement with 20 barrels of gel water (2 sks. gel) Cement with 310 sks. of 50/50 Class "B" Poz with 2% gel, 0.6% Halad-9, 6.25# gilsonite plus 1/4# Flocele per sack (431 cu.ft. of slurry, 70% excess to circulate liner). WOC 18 hours.



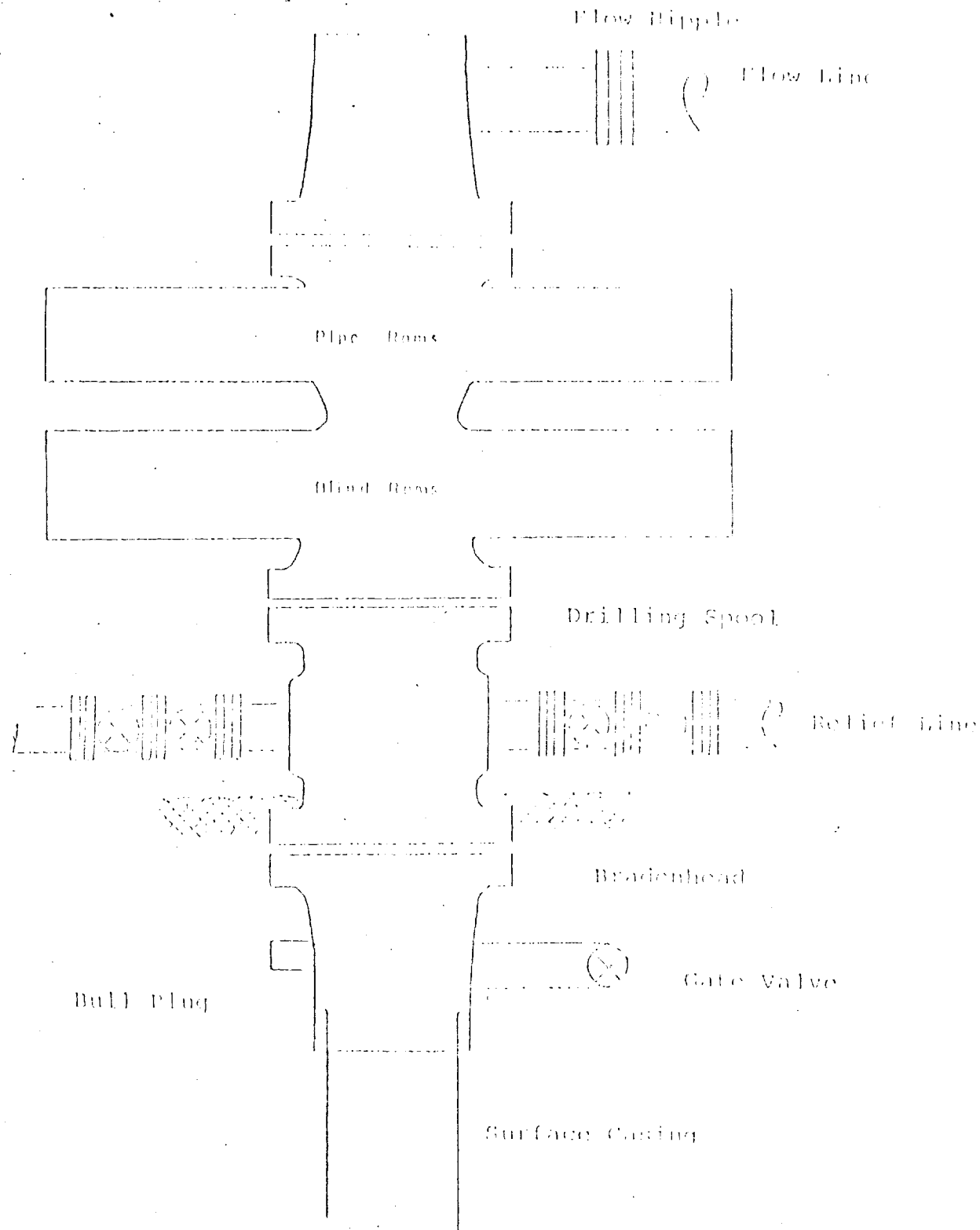
*Fill 6 Ft.*



*Cut 6 Ft.*

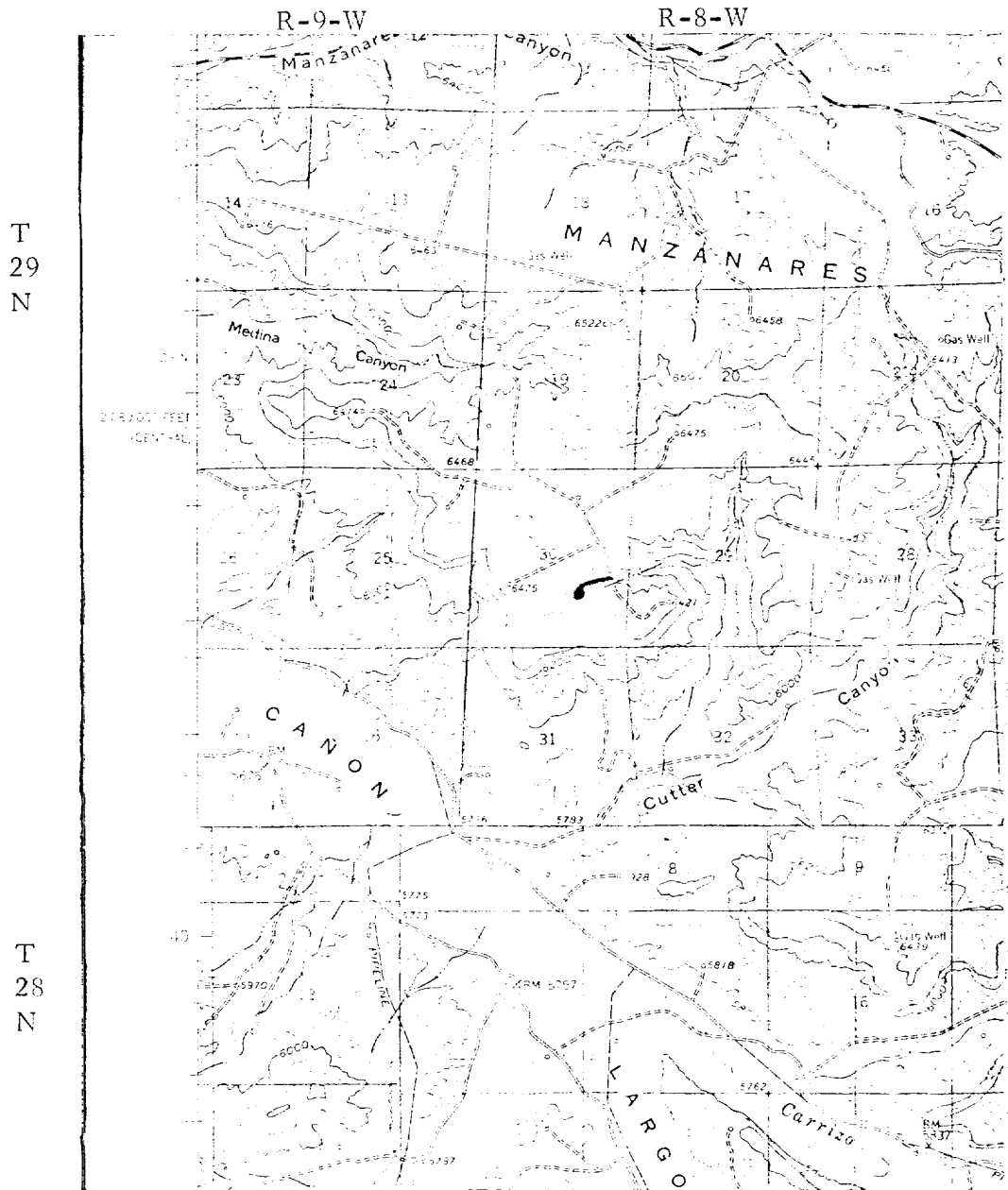
|              |  |  |  |  |            |  |                |  |                                                                                                                                                                         |  |  |                 |  |          |  |      |  |
|--------------|--|--|--|--|------------|--|----------------|--|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|-----------------|--|----------|--|------|--|
|              |  |  |  |  | ENG. REC.  |  | DATE           |  | <div style="text-align: center;"> <p><b>El Paso Natural Gas Company</b></p> <p><b>TYPICAL LOCATION PLAT FOR</b></p> <p><b>MESAVERDE OR DAKOTA DRILL SITE</b></p> </div> |  |  | SCALE: 1" = 50' |  | DWG. NO. |  | REV. |  |
|              |  |  |  |  | DRAWN      |  | J.L.H. 8-16-78 |  |                                                                                                                                                                         |  |  |                 |  |          |  |      |  |
|              |  |  |  |  | CHECKED    |  |                |  |                                                                                                                                                                         |  |  |                 |  |          |  |      |  |
|              |  |  |  |  | CHECKED    |  |                |  |                                                                                                                                                                         |  |  |                 |  |          |  |      |  |
|              |  |  |  |  | PROJ. APP. |  |                |  |                                                                                                                                                                         |  |  |                 |  |          |  |      |  |
|              |  |  |  |  | DESIGN     |  |                |  |                                                                                                                                                                         |  |  |                 |  |          |  |      |  |
| PRINT RECORD |  |  |  |  | W.O.       |  |                |  |                                                                                                                                                                         |  |  |                 |  |          |  |      |  |

# For Normal Pressure Well



Series 900 Double Gate BOP, rated  
 at 3000 psi Working Pressure  
 When gas drilling operations begin a Shaffer type 50  
 or equivalent rotating head is installed on top of the  
 flow nipple and the flow line is converted into a blowie line

EL PASO NATURAL GAS COMPANY  
Bolin #1A  
SE 30-29-8



MAP #1

LEGEND OF RIGHT-OF-WAYS

|                          |             |
|--------------------------|-------------|
| EXISTING ROADS           | — — — — —   |
| EXISTING PIPELINES       | + + +       |
| EXISTING ROAD & PIPELINE | + + + — — — |
| PROPOSED ROADS           | — — — — —   |
| PROPOSED PIPELINES       | + + +       |
| PROPOSED ROAD & PIPELINE | + + + — — — |

R. J. W

