



PHILLIPS PETROLEUM COMPANY

ODESSA, TEXAS 79762
4001 PENBROOK

EXPLORATION AND PRODUCTION GROUP

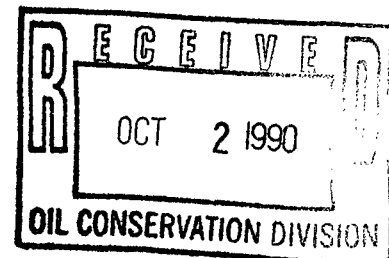
September 29, 1990

Unorthodox Location Request
San Juan 30-5 Unit, Well No. 210
Rio Arriba County, New Mexico

State of New Mexico
Oil Conservation Division
P. O. Box 2088
Santa Fe, New Mexico 87504-2088

Attention: Mr. William J. LeMay, Director

Gentlemen:



Phillips Petroleum Company respectfully requests an exception to Rule 7 of the Basin Fruitland Coal Gas Pool Rules for an unorthodox location for the subject well, due to topographic and archaeological conditions. This request can be approved administratively under the provisions of Rule 8 of the Basin Fruitland Coal Gas Pool Rules.

This is a Federal Lease with both the minerals and the surface use managed by the United States Department of the Interior, Bureau of Land Management, Farmington Resource Area. The staked location was agreed upon by Bill Liess, Surface Inspector, BLM; Peggy Gaudy, Archaeologist, BLM; and Larry Sanders, Phillips Petroleum Company employee. The staked location of Well No 210 is in Unit M, 1259' FSL and 745' FWL of Section 30, T-30-N, R-5-W, Rio Arriba County, New Mexico. The Basin Fruitland Coal Gas Pool Rules require the well location to be no closer than 790' to any outer boundary of the proration unit, and the staked location is 45' to near the west line of Section 30. Due to the topographical conditions of the area to the east of the staked location and an archaeological site to the north of the staked location, Phillips was unable to stake the well at a standard location. The 320-acre proration unit is offset to the west by Meridian Oil, Inc.


Attachments to support approval are:

1. Complete APD packet dated September 15, 1990, with all necessary attachments.
2. Archaeological report prepared by La Plata Archaeological Consultants.
3. A copy of a portion of the Gomez Ranch Quadrangle topographical map showing Section 30.
4. A certified statement that the information is current and correct.

Mr. William J. LeMay, Director
Non-Standard Location Request
San Juan 30-5 Unit, Well No. 210
Rio Arriba County, New Mexico
September 29, 1990
Page 2

The above attachments will provide all of the information requested in Mr. W. J. LeMay's memorandum dated March 21, 1990. If any additional information is required, please contact me at the letterhead address or telephone (915) 368-1488.

Sincerely,


L. M. Sanders, Supervisor
Regulation and Proration

LMS:jh
SJ30-5.210

Attachments

cc: United States Department of the Interior
Bureau of Land Management - Farmington, New Mexico
Oil Conservation Division - Aztec, New Mexico
Meridian Oil, Inc. - Farmington, New Mexico

ATTACHMENTS
(As Requested)
SAN JUAN 30-5 UNIT, WELL NO. 210

- I. See APD package and attached letters from the Bureau of Land Management.
- II. See APD package.
- III. See C-102 and attached copy of topographic map.
 - A. Information on topographic map.
 - B. I hereby certify the information is current and correct to the best of my knowledge and ability.

Signed: *L. M. Sanders*
Name: L. M. Sanders
Date: September 29, 1990
- IV. Copy of a portion of the Gomez Ranch Quadrangle topographical map.
 - A. Shown on map.
 - B. Shown on map.
 - C. Well No. 36 shown on map. The existing well pad for Well No. 36 cannot be used due to the location of Well No. 36. Well No. 36 is located at 1170' FSL & 800' FWL. An attempt was made to stake Well No. 210 at a standard location of 1259' FSL & 790' FWL, but this put the location next to a cliff and canyon leading into LaJara Wash.
- V. Enlargement of the topographic map provided.
 - A. Within the window, the terrain varies from 6400' to 6500'.
 - B. There is an existing access road and a gas pipeline to Well No. 36. The access road will be used to provide access to Well No. 210.
 - C. See Archaeological Report.
 - D. See Archaeological Report.
 - E. None.
- VI. See Archaeological Report.
- VII. See Surface Use Plan in APD packet.
- VIII. The additional expense required to drill a deviated hole to reach a standard location in an area of unknown coal gas development would make the well uneconomical to drill.
- IX. Meridian Oil operates the proration unit to the west. Phillips Petroleum Company is designated operator of the remaining offset proration units to the north, east, and south. Meridian Oil has been notified, by certified mail, of our request, and has been asked for a waiver of objections. Waiver is attached.

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

Phillips Petroleum Company

3. ADDRESS OF OPERATOR

300 W. Arrington, Suite 200, Farmington, N.M. 87401

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

At surface Unit M, 1259' FSL & 745' FWL

At proposed prod. zone Unit M, 1259' FSL & 745' FWL

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

30 Miles East From Blanco

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

745' FWL of
30-5 Unit

16. NO. OF ACRES IN LEASE
1400 AC

17. NO. OF ACRES ASSIGNED
TO THIS WELL
320.8 AC W/2 of Section

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

104' NW
from #36

19. PROPOSED DEPTH
3260'

20. ROTARY OR CABLE TOOLS

Rotary

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

6495' (GL Unprepared)

22. APPROX. DATE WORK WILL START*

Upon Approval

23.

PROPOSED CASING AND CEMENTING PROGRAM

| SIZE OF HOLE | SIZE OF CASING | WEIGHT PER FOOT | SETTING DEPTH | QUANTITY OF CEMENT |
|--------------|----------------|-----------------|---------------|--------------------------|
| 12-1/4" | 9-5/8" | 36#, K-55 | 250' | 200 sxs, Circ to Surface |
| 8-1/2" | 7" | 23#, K-55 | 3162' | 600 sxs, Circ to Surface |
| 6-1/8" | 5-1/2" | 15.5# or 23# | 3062'-3260' | * |

*If the coal is cleated a 5-1/2", 23#, P-110 liner will be run in the open hole without being cemented.

*If the coal is not cleated a 5-1/2", 15.5#, K-55 liner will be run, cemented with sxs cement and the well fractured.

Unorthodox location. Copies of unorthodox exception request from NMOCB will be provided.

Mud Program and BOP Equipment: See Attached

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 L.M. Sanders

TITLE Supv. Regulatory Affairs

DATE March 20, 1990

(This space for Federal or State office use)

PERMIT NO. _____

APPROVAL DATE _____

APPROVED BY _____

TITLE _____

DATE _____

CONDITIONS OF APPROVAL, IF ANY:

Submit to Appropriate
District Office
State Lease - 4 copies
Fee Lease - 3 copies

State of New Mexico
Energy, Minerals and Natural Resources Department

Form C-102
Revised 1-1-89

OIL CONSERVATION DIVISION

P.O. Box 2088
Santa Fe, New Mexico 87504-2088

DISTRICT I
P.O. Box 1980, Hobbs, NM 88240

DISTRICT II
P.O. Drawer DD, Artesia, NM 88210

DISTRICT III
1000 Rio Brazos Rd., Aztec, NM 87410

WELL LOCATION AND ACREAGE DEDICATION PLAT

All Distances must be from the outer boundaries of the section

| | | | | | |
|---------------------------------------|----------------------|----------------------------|-------------------------------|------------------------------------|------------------------|
| Operator PHILLIPS PETROLEUM | | | Lease SAN JUAN 30-5 | | Well No. 210 |
| Unit Letter M | Section 30 | Township T.30 N. | Range R.5 W. | County RIO ARriba COUNTY | |

Actual Footage Location of Well:

| | | | |
|--|---|---|--|
| 1259 feet from the SOUTH line and | | 745 feet from the WEST line | |
| Ground level Elev. 6495 | Producing Formation Fruitland | Pool Basin Fruitland Coal Gas | Dedicated Acreage: 320 Acres |

1. Outline the acreage dedicated to the subject well by colored pencil or hatchure marks on the plat below.

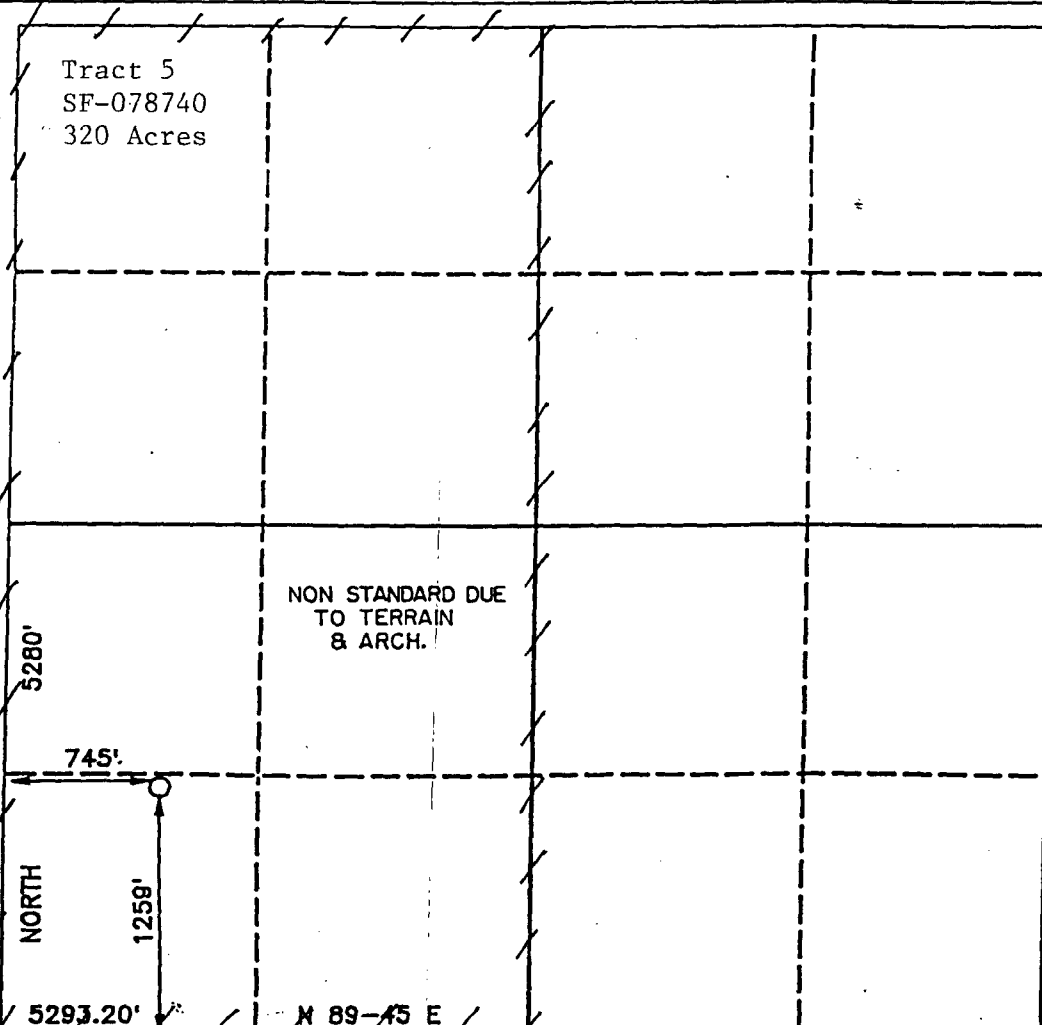
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).

3. If more than one lease of different ownership is dedicated to the well, have the interest of all owners been consolidated by communitization, unitization, force-pooling, etc.?

☒ Yes ☐ No If answer is "yes" type of consolidation **Unitized**

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 interest, has been approved by the Division.



OPERATOR CERTIFICATION

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

Signature

L. M. Sanders

Printed Name

L. M. Sanders

Position

Supv. Regulatory Affairs

Company

Phillips Petroleum Co.

Date

March 20, 1990

SURVEYOR CERTIFICATION

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

FEBRUARY 19, 1990

Signature & Seal of Professional Surveyor

R. HOWARD DAGGETT

Certificate No.

Registered Professional Land Surveyor

SURFACE USE PLAN

Phillips Petroleum Company , San Juan 30-5 Unit Lease, Well No. 210 , SW/4 SW/4, Section 30, T-30-N, R-5-W, Rio Arriba County, New Mexico. (Fed Lease No. SF-078740.)

This plan is to accompany "Application for Permit to Drill" the subject well which is located approximately 45 miles east from Blanco, New Mexico. The following is a discussion of pertinent information concerning the possible effect which the proposed drilling well may have on the environment of the well and road sites and surrounding acreage. A copy will be posted on the derrick floor so that all contractors and sub-contractors will be aware of all items of this plan.

1. Existing Roads:

- A. To reach the proposed location, start from Farmington, N.M. take N.M. 64 approximately 55 miles to Gobernador, N.M.. Turn north on Sims Highway and travel approximately 5 miles to the entrance into the Meridian 30-6 Unit. Turn right and follow the access road into the San Juan 30-5 Unit. Well No. 36.

2. Planned Access Roads:

- A. The access road is shown on the attached map. The new location is adjacent to an existing well pad, therefore no new access road will be necessary. All existing roads used to access the proposed location shall be maintained in the same or better condition than presently found. The access road is to be classified "Temporary Resource Road".
- B. Turnouts: None.
- C. Drainage Design: The present drainage will be maintained for the existing access road. After completion of Well No. 210, a kickoff on the north side of the existing access road will be routed into the a diversion cut that will be placed on the west end of the proposed pad with diversion to the north.
- D. Culverts, Cuts and Fills: See Cut and Fill Sketch.
- E. Surfacing Material: Natural materials at well site.
- F. Gates, Cattle Guards, Fences: As required
- G. Proposed Road: No new access road is needed.

3. Locations of Existing Wells: Well No. 36, 1170' FSL & 800' FWL

- 4. Locations of Tank Batteries, Production Facilities, Production Gathering, and Service Lines: In the event of production, production facilities will be located on the drill pad. The actual placement of this equipment will be determined when the well's production characteristics can be evaluated after completion. To protect livestock and wildlife, the reserve pit will be fenced with wire mesh. The condensate tanks will be enclosed by a dike. Upon completion of drilling, the location and surrounding area will be cleared of debris. After drilling is completed and the pits have been rehabilitated a diversion cut will be placed down the road around the southeast end of the pad to drain toward the canyon.

Surface Use Plan--San Juan 30-5 Unit Well No. 210

Page: 2

The pipeline from Well No. 36 is staked and flagged by NWP and will clear the pits located on the south side of the pad. The pit wall will protect the pipeline. The cut and fill dirt from the pits will be stockpiled on the north side of the pad between the pad edge and the archaeological site on the north side of the pad. The flow line from Well No. 210 is to run from a measurement point to the meter house at Well No. 36 location. A diagram of the production facilities will be submitted after final placement.

5. Water Supply Source: Will be provided by the drilling contractor and trucked to the drilling site. See Attachment No. 1 - WATER SUPPLY SOURCE.

6. Source of Construction Materials:

No additional construction materials will be required to build the proposed location.

7. Methods for Handling Waste Disposal:

A. The drill cuttings, fluids and completion fluids will be placed in the reserve pit. The reserve pit will be fenced with wire mesh on three sides away from the pad during drilling and the fourth side fenced as soon as the rig moves out. The reserve pit will be back filled, leveled and contoured so as to prevent any materials being carried into the watershed.. Upon completion, the pad will be leveled, contoured, and re-seeded with the appropriate seed mixture.

B. All garbage and trash will be placed in specially constructed wire mesh containers. Upon cleanup, the refuse in the containers will be hauled to an approved landfill site.

All produced water will be collected in tanks until hauled to an approved disposal system, or separate disposal applications will be submitted for appropriate approval.

8. Ancillary Facilities: None

9. Well Site Layout: Attached sketch shows the relative location and dimensions of the well pad, mud pit, reserve pit, and trash pit. Location will be 205' X 300'.

10. Plans for Restoration of Surface:

Pit will be back filled and levelled as soon as practical to original condition. If well is productive, drilling pad will remain as well service pad. If dry hole, the pad will be ripped per regulations. Commencement of rehabilitation operations will immediately follow removal of drilling and completion equipment from location and rehabilitation of the surface is planned to be completed within 60 days from commencement.

11. Other Information:

- A. Terrain: See Archaeological Survey
- B. Soil: See Archaeological Survey
- C. Vegetation: See Archaeological Survey
- D. Surface Use: See Archaeological Survey
- E. Ponds and Streams: See Archaeological Survey
- F. Water Wells: No water well located in Section 7
- G. Residences and Buildings: There are no occupied residences or buildings within one quarter of a mile of the proposed well location.
- H. Arroyos, Canyons, etc.: See Archaeological Survey
- I. Well Sign: Sign identifying and locating the well will be maintained at drill site with the spudding of the well.
- J. Archaeological Resources: See Archaeological Survey. The archaeological site encountered will be protected as recommended by La Plata Archaeological Survey. An Archaeologist will be on location during pad construction.

12. Operator's Representatives: Field personnel who can be contacted concerning compliance of the "Surface Use Plan" is as follows:

| | | |
|-------------------------------|----|-------------------------------|
| Production and Drilling | or | R. A. Allred |
| A. R. Lyons | | 300 West Arrington, Suite 300 |
| 300 West Arrington, Suite 300 | | Farmington, New Mexico 87401 |
| Farmington, New Mexico 87401 | | Phone: 505-599-3403 |
| Phone: 505-599-3401 | | |

13. Surface Ownership: The surface ownership is Federal.

14. Certification:

I hereby certify that I, or persons under my direct supervision, have inspected the 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 Phillips Petroleum Company and its contractors and sub-contractors in conformity with this plan and the terms and conditions under which it is approved.

L. M. Sanders

Typed or Printed Name

L. M. Sanders
Signature

March 20, 1990

Date

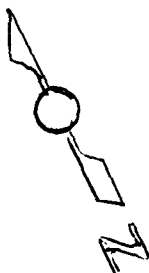
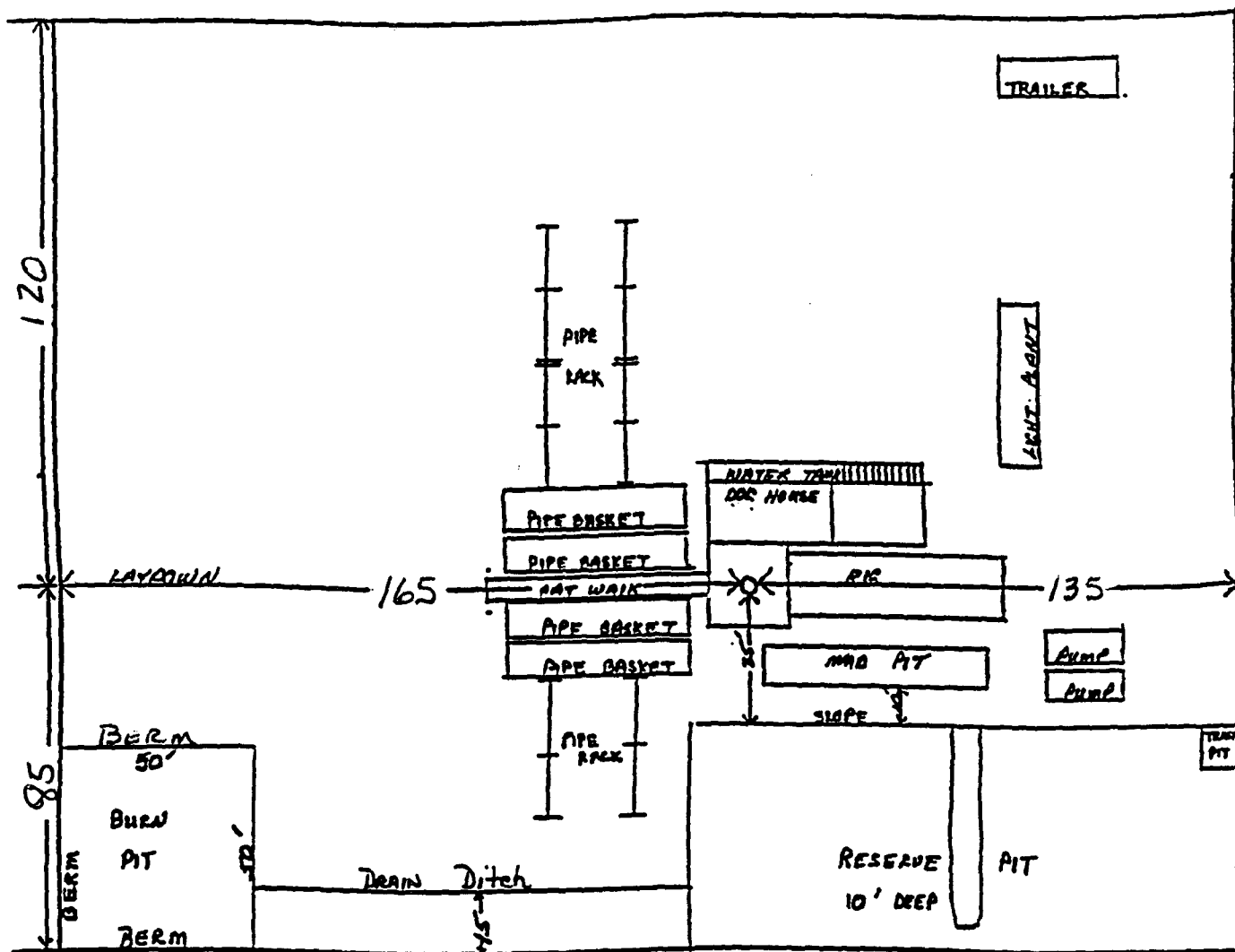
WATER SUPPLY SOURCE
Surface Use Plan
San Juan 30-5 Unit

Attachment No. 1

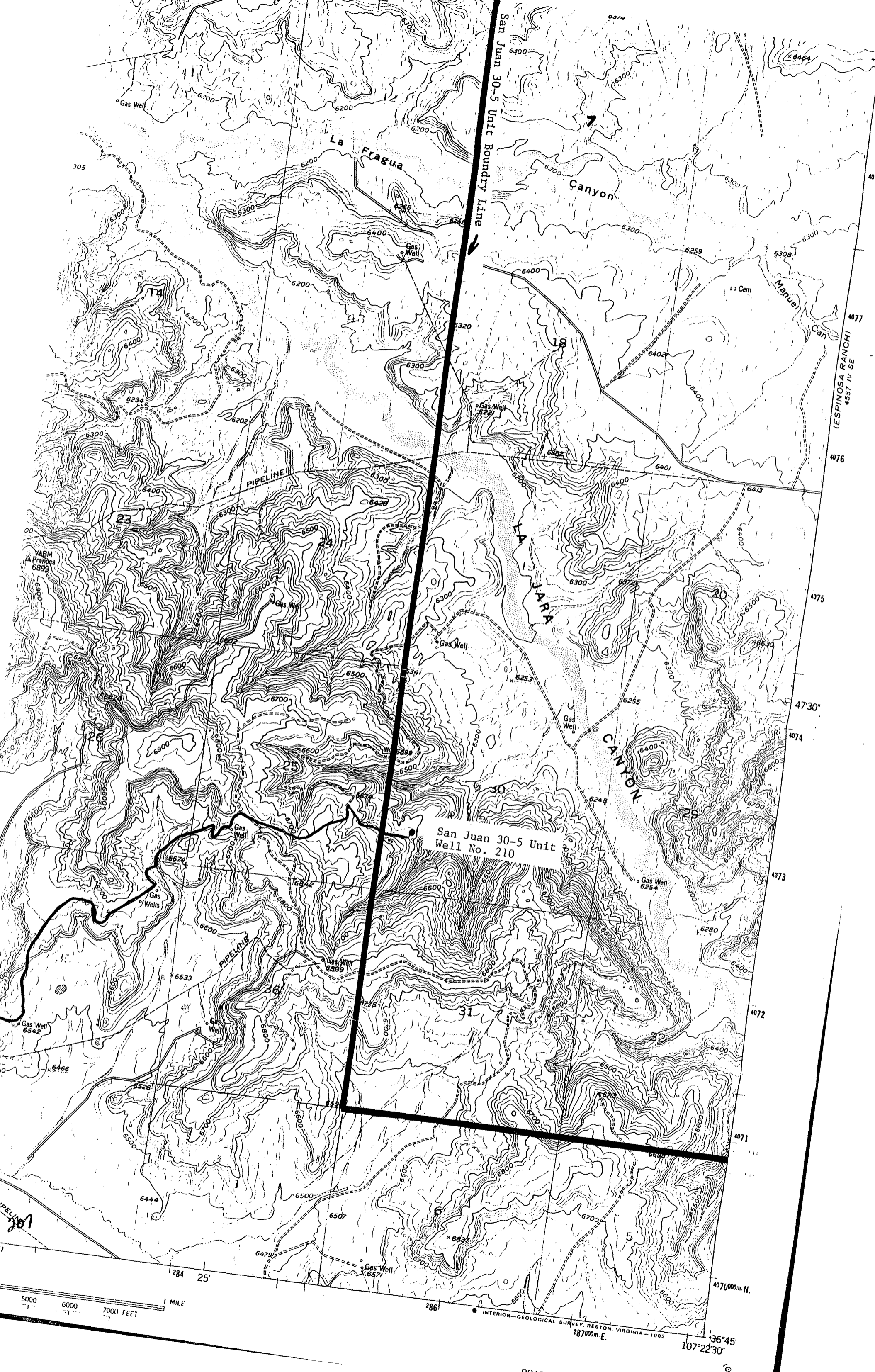
Depending on which drilling contractor is used, the water for drilling and completion operations will come from one of the following locations:

1. San Juan River at Blanco Bridge, NW SE SE Section 18, T-29-N, R-9-W.
2. 29-6 Waterhole in Unit L, Section 28, T-29-N, R-6-W.
3. Navajo Reservoir, SW NW SE Section 14, T-30-N, R-7-W.
4. Sims Mesa (S.J. #14) BW SW Section 35, T-31-N<R-7-W.
5. La Jara Water Hole, Unit M, Section 11, T-30-N, R-6-W.

watsup2.lar



SJ 30-5 # 210

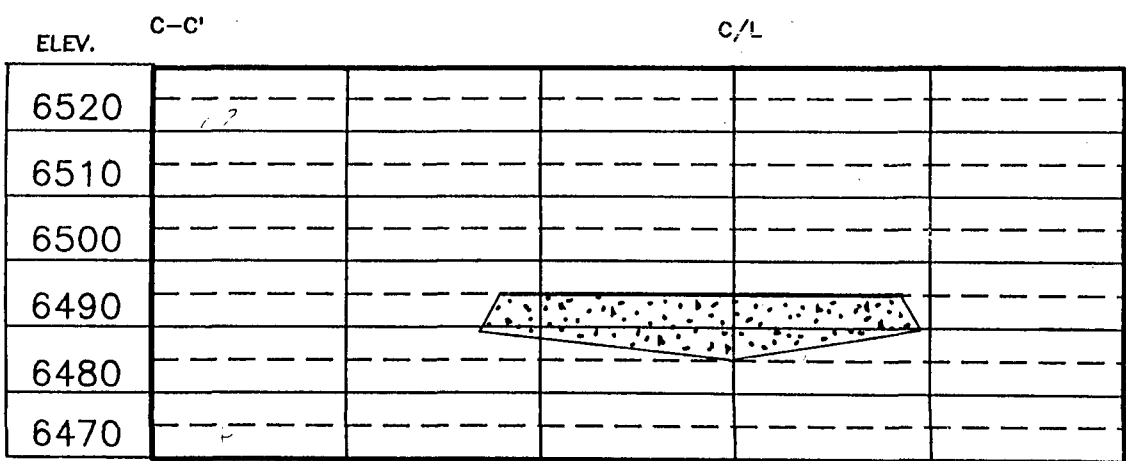
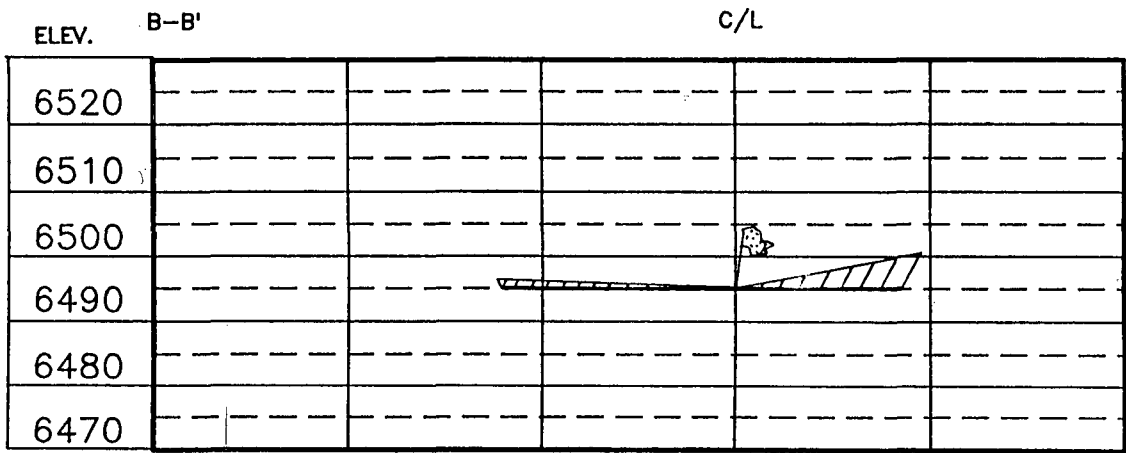
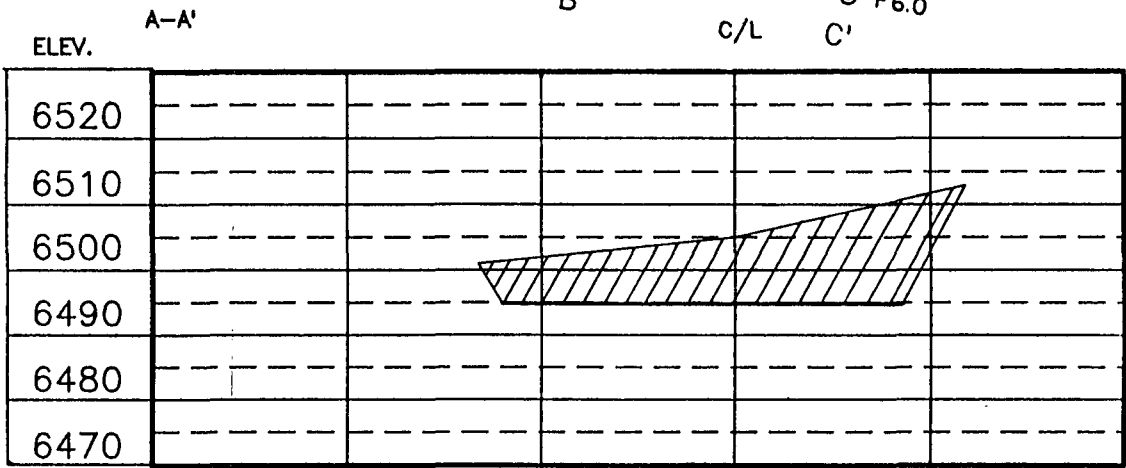
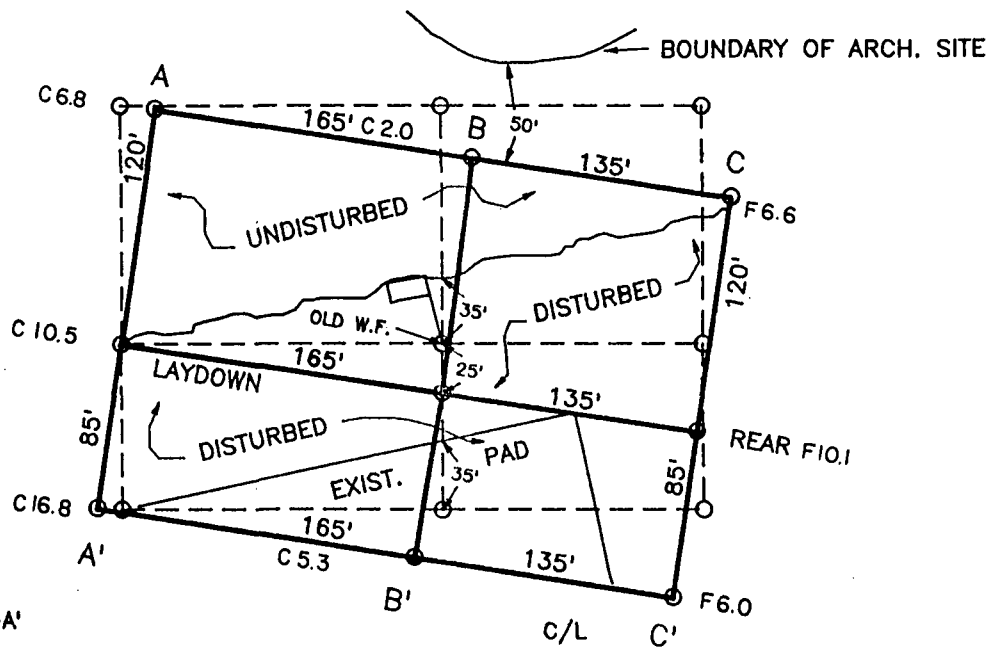


San Juan 30-5 Unit
Well No. 210

0 5000 6000 7000 FEET
1 MILE

INTERIOR-GEOLOGICAL SURVEY, RESTON, VIRGINIA-1983
2870000m. E. 36°45' 107°22'30"

COMPANY: PHILLIPS PETROLEUM
 LEASE: SAN JUAN 30-5 NO.210
 FOOTAGE: 1259 FSL, 745 FWL
 SEC.: 30, TWN: T.30 N., RNG: R.5 W., NMPM
 ELEVATION: 6495



March 20, 1990

PHILLIPS PETROLEUM COMPANY

Well Name: San Juan 30-5 Unit Well No. 210

DRILLING PROGNOSIS

1. Location of Proposed Well: 1259' FSL & 745' FWL of Section 30, T-30-N, R-5-W, Rio Arriba County.
2. Unprepared Ground Elevation: 6495'.
3. The geologic name of the surface formation is San Jose.
4. Type of drilling tools will be rotary.
5. Proposed drilling depth is 3260'.
6. The estimated tops of important geologic markers are as follows:

| | | | |
|--------------------|--------------|-------------------------|--------------|
| <u>Ojo Alamo -</u> | <u>2406'</u> | <u>Base Coal -</u> | <u>3250'</u> |
| <u>Kirtland -</u> | <u>2561'</u> | <u>Picture Cliffs -</u> | <u>3266'</u> |
| <u>Fruitland -</u> | <u>2976'</u> | <u>Int. Csg. -</u> | <u>3156'</u> |
| <u>Top Coal -</u> | <u>3172'</u> | <u>T.D. -</u> | <u>3260'</u> |

7. The estimated depths at which anticipated water, oil, gas, or other mineral bearing formations are expected to be encountered are as follows:

| | | |
|--------|-------------------------|--------------|
| Water: | <u>Ojo Alamo -</u> | <u>2406'</u> |
| Oil: | <u>None</u> | |
| Gas: | <u>Fruitland Coal -</u> | <u>3172'</u> |

8. The proposed casing program is as follows:

Surface String 9-5/8", 36#, K-55 @ 250'
Intermediate String 7", 23#, K-55 @ 3162'
Liner * 5-1/2", 23#, P-110 or 15.5#, K-55 @ 3260'

9. Cement Program:

Surface String = 200 sxs (317 cu ft) CL "B" W/3% CaCl₂ & 1/4# Cele-Flake/sk.

Intermediate String = Lead cmt. 500 sxs (1035 cu ft) CL "B" 65/35 POZ w/12% Gel & 1/4# Cele-Flake/sx.

San Juan 30-5 Unit Well No. 210.

Page 2.

Intermediate String (Continued)

Tail. 100 sxs (119 cu ft) Cl "B" w/1/4# Cele-
Flake/sk

Liner =

- * If the coal is cleated a 5-1/2" 23#, P-110 liner will be run in the open hole without being cemented.
- * If the coal is not cleated a 5-1/2", 15.5#, K-55 liner will be run and cemented with 100 sxs (146 cu ft) Cl "B" W/0.8% CF-1.

10. The minimum specifications for pressure control equipment which are to be used, a schematic diagram thereof showing sizes, pressure ratings (or) API series and the testing procedure and testing frequency are enclosed within the APD packet .

11. The proposed mud program is enclosed within the APD packet.

12. The testing, logging, and coring programs are as follows:

D.S.T.'s or cores: None

Logs: GR-D-N-NGT-ML

Special Tests: None

13. Anticipate no abnormal pressures or temperatures to be encountered or any other potential hazards such as Hydrogen Sulfide Gas. Low risk H₂S equipment will be used.

14. The anticipated starting date is immediately upon approval with duration of operations for approximately 30 days thereafter.

drlpro37.lar

PROPOSED MUD PROGRAM
 San Juan 30-5 Unit
 Well No. 210
 Rio Arriba County

| DEPTH | MUD WEIGHT | VISCOSITY | FLUID LOSS | CL-PPM | % SOLIDS | ADDITIVES |
|--------------|--------------------------|--------------|------------|----------|------------|--|
| 0-250 Ft. | Spud Mud Lima and Gel | | | | | Bentonite |
| 250-3000 Ft. | 8.0-9.0 PPG | 45-65 Sec/Qt | 8-10CC | 1200 PPM | | Drispac Lime, Soda Ash |
| 3000-TD | 9.5-10.0 PPG | 35-50 Sec/Qt | 6-8CC | | Low Solids | Drispac, Soda Ash Caustic Soda Bentonite |

250-3000' Polymer mud and water with sweeps every 500' or less if hole conditions dictate.

3000'-TD Fresh water mud with CaCo3 & Polymer, low solids. Mud Wt. 9.5 to 10.0 PPG, as necessary to control well.

Start mud up 100' above Fruitland

BLOWOUT PREVENTER REQUIREMENTS

Well Name: San Juan 30-5 Unit Well No. 210

- I. Blowout preventer equipment, installation, testing and responsibilities will be in accordance with Phillips Petroleum Company's Blowout Preventer Standards.
- II. Figure No. 7-9 or 7-10 (Drawing Attached): Casing String 9 5/8" surface BOP Size 10"; Working Pressure 3,000 psi.
- III. Equipment to be furnished by Contractor:
 - A. Ram Type BOPs:
 1. No. Required 2
 2. Acceptable Manufacturers & Types
 - a. Cameron Iron Works: QRC; F; SS; U
 - b. Shaffer Tool Works: B; E; LWS; LWP
 - c. Hydril
 - B. Annular Type BOPs:
 1. No. Required None
 2. Acceptable Manufacturers & Types
 - a. Hydril - GK
 - b. Shaffer - Spherical
 - c. Cameron - D
 - C. Preventer Operating Equipment
 1. Hydraulic Pump - air, steam or electrically operated of sufficient volume and pressure capacity to close the largest ram type preventer in less than 30 seconds. Electrically operated pump must be equipped with explosion proof motor and controls.
 2. Manifold with a control valve for each preventer.
 3. A Hydril or equivalent regulator for each annular type preventer.
 4. Accumulator of sufficient volume and pressure capacity to close all preventers in the assembly without recharging. If the pump in C.1. is incapable of recharging the accumulator in excess of 1500 psi, a separate pump capable of this is to be furnished.
 5. Remote control panel with a station for each preventer control valve.
 6. Steel piping to connect hydraulic closing units to preventers.
 7. Choke manifold with seamless steel piping and flanged or clamp hub connections. Choke manifold assembly and piping sizes as specified, on the attached drawing. All working lines, except hydraulic closing lines, shall have flanged or clamp hub connections to preventers, spools and casing heads.
 8. Full opening drill string safety valve (I.D. equal or larger

Blowout Preventer Requirements

Page 2

III. C. (continued)

- than I. D. of tool joint in use). Working pressure to equal or exceed specified BOP working pressure. O.D. and configuration such that valve can be run in the hole with adequate clearance.
9. Full opening upper Kelly cock. Working pressure to equal or exceed specified BOP working pressure.
 10. Hydraulic pump of sufficient pressure rating to test preventer assembly to rated working pressure with necessary hose and fittings to connect the pump to drill pipe box or safety valve pin.
 11. Drilling spool for use with single ram type preventers or with dual ram type preventers which do not have outlets between the rams.
 12. Two valves on each side of drilling spool or dual preventers, one side for choke manifold connection and the other for kill line connection.
 13. Hand wheels and extensions for manual operation of the ram type preventers. U-joints, extension guides, working platform(s) as necessary.
 14. A 1" - 5000 PSI WP plug valve on the closing side of the annular type preventer using a XXE 1" x 4" nipple.
 15. Flowlines from choke manifold to pits.
 16. Pressure gauge with pressure range at least equivalent to BOP WP.

IV. Equipment to be Furnished by Phillips:

- A. Test plug to seat in casing head.
- B. Remote controlled chokes, if installed.
- C. Casinghead with valves on outlets.
- D. Inside blowout preventer, if required.
- E. Mud-gas separator, if required, and necessary piping.

V. Location of Equipment & Controls:

- A. Remote control panel on the rig floor adjacent to drillers position and stairway exit from the floor.
- B. Accumulator-Hydraulic Control Valve Unit to be placed minimum of 50 feet from wellbore in easily accessible location.
- C. Choke Manifold located 5 feet or more from the BOPs with minimum number of turns in the run.
- D. Manual closing facilities installed so handwheels are outside the substructures in unobstructed location. U-joints, extension

V. (Continued)

guides and working platforms installed as necessary for proper and safe operation.

- E. Choke Manifold connection, where possible, is to be made between the two bottom ram type preventers through use of a drilling spool or by connecting between rams of dual type units with outlets so installed.
 - 1. On dual type preventers where outlets are not installed between rams, connection is to be made to a drilling spool installed between the ram type and annular type preventers.
- F. Position and Type Rams will be as shown on the attached drawing.
- G. Fill up line to be tied into the bell nipple above annular preventers.
- H. Safety Valve, open with connections and/or subs available to fit any tool joint in use, shall be on the rig floor at all times.

VI. Testing

- A. Initial Installation Test
Immediately after installation, each component part of the blowout preventer assembly including choke lines, valves and closing facilities will be tested individually by steps as outlined in the Blowout Preventer Testing Procedure section of Phillips' Blowout Preventer Standards. The test pressure will be at the working pressure specified in Item II. All components must be satisfactorily tested before drilling out.
- B. Ram Change or Repair Test
 - 1. After each ram change or when any component part of the preventer assembly, including lines and valves, is disturbed, the disturbed portion is to be tested to working pressure specified in Item II.
 - 2. Installation of casing rams is not required for running casing.
- C. Weekly Pressure Test
The first trip out of the hole after 12:01 AM, Tuesday, weekly test will be performed as outlined in the Blowout Preventer Testing Procedure which includes testing the entire assembly with water to 1/2 the specified working pressure for 10 minutes. The Kelly cock and safety valve are to be tested to the specified working pressure. The weekly test is not required where the test falls within three days after the initial installation test. Upper kelly cock valve with handle available.
- D. Operational Test
Each preventer unit is to be closed and opened on each trip or

Blowout Preventer Requirements

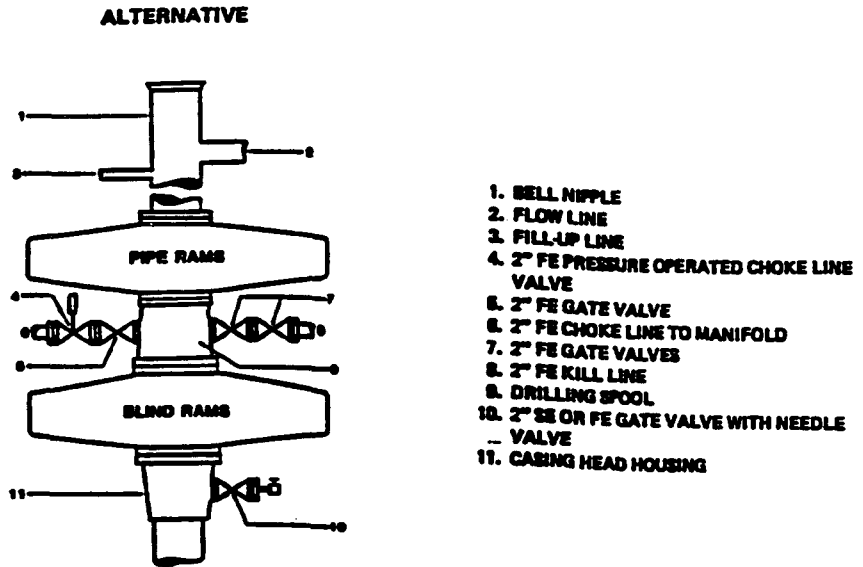
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VI. D. (continued)

at least once each 48 hours (trip is not required just to actuate blind rams or pipe rams that do not fit top section of tapered string).

VII. Responsibilities

- A. Contractor is to install and test the blowout preventer assembly as specified.
- B. The driller is to check and record the accumulator pressure on the daily drilling report at the beginning of each tour.
- C. Expense of rig time and pressure testing services for initial and weekly tests will be borne by:
 - 1. Contractor while on footage contract.
 - 2. Owner while on daywork contract.



NOTE: THE DRILLING SPOOL MAY BE LOCATED BELOW BOTH SETS OF RAMS IF A DOUBLE PREVENTER IS USED AND IT DOES NOT HAVE SUITABLE OUTLETS BETWEEN RAMS

Figure 7-9. Standard Hydraulic Blowout Preventer Assembly
3 M Working Pressure Alternative 1

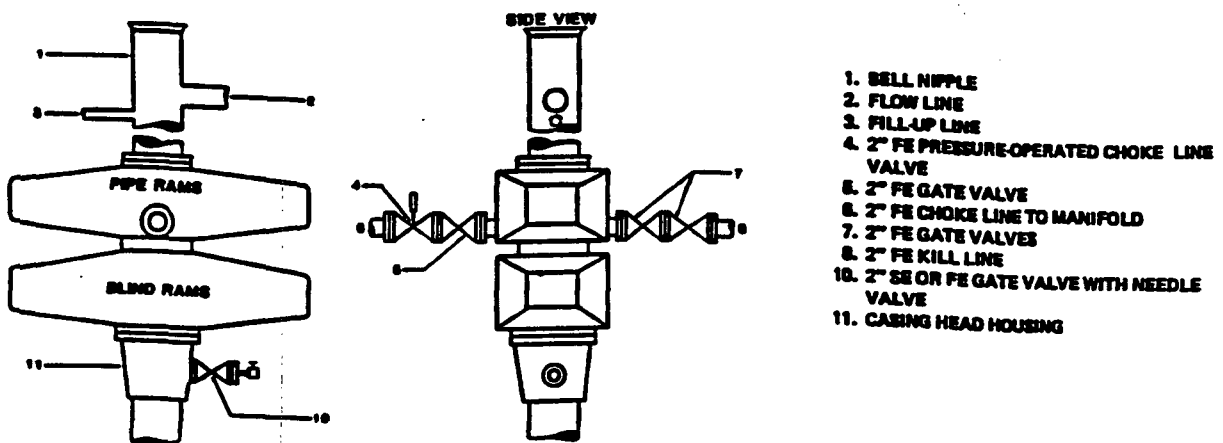


Figure 7-10. Standard Hydraulic Blowout Preventer Assembly
3 M Working Pressure Alternative 3 (without Drilling Spool)

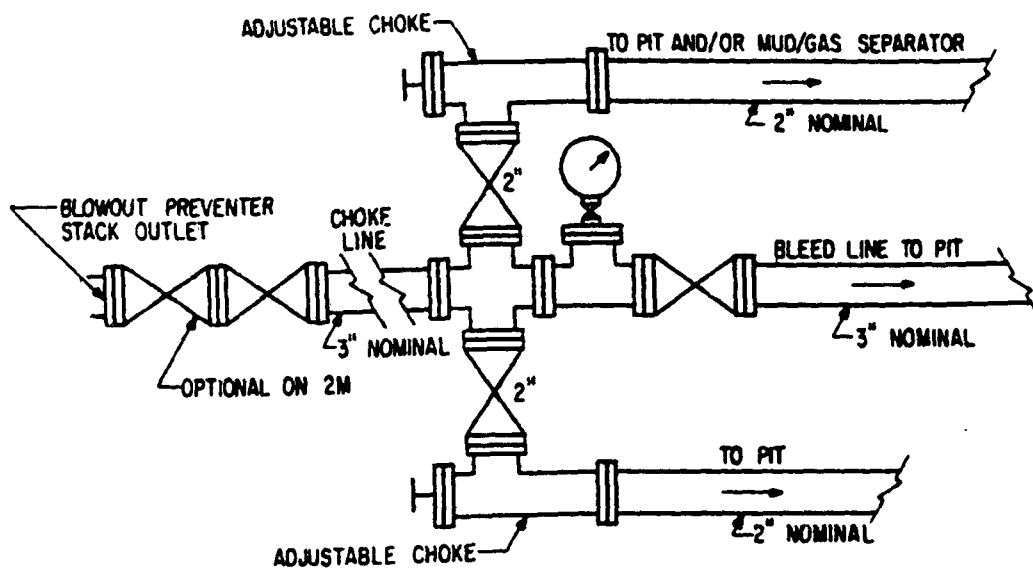
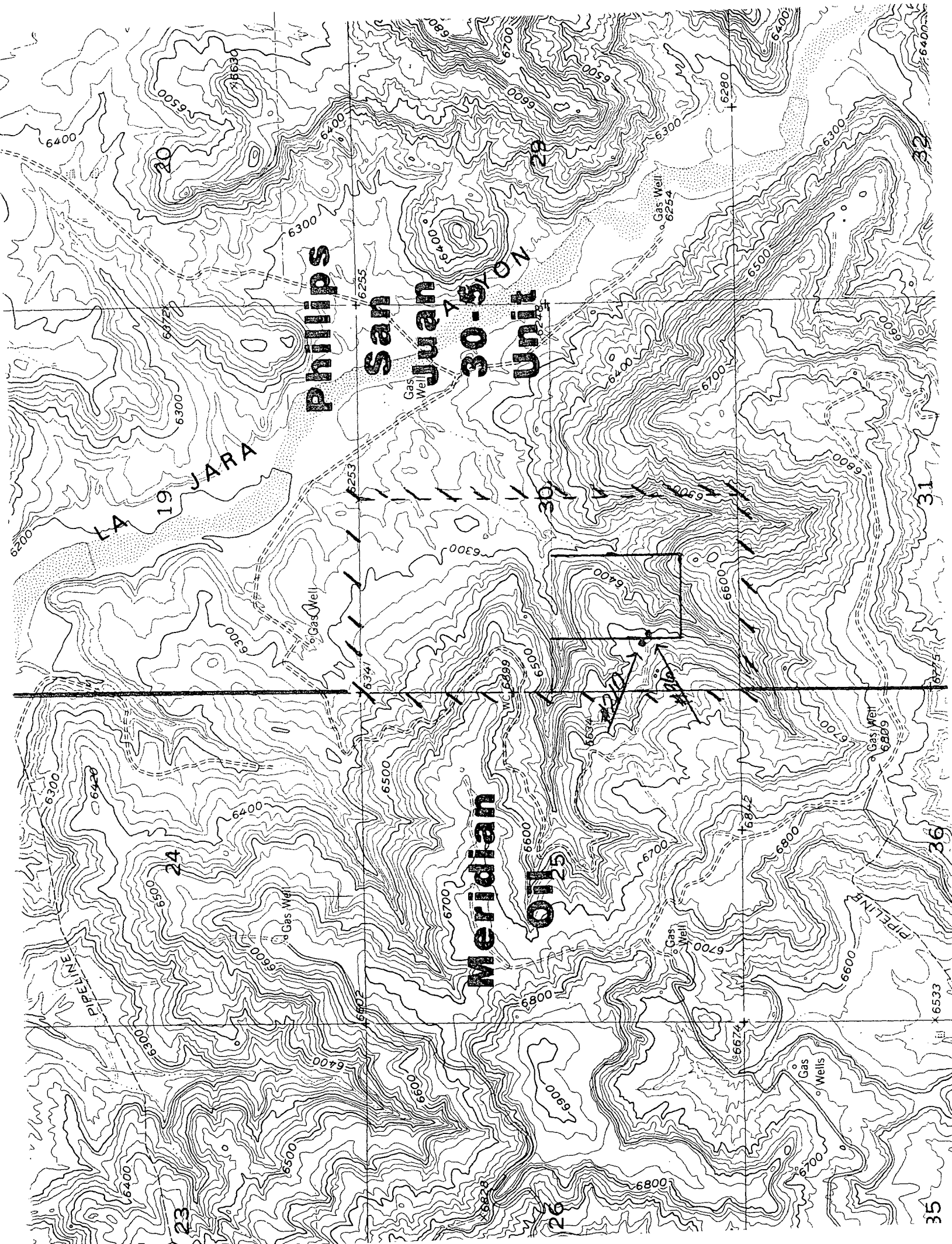


FIG. 3.A.1

**TYPICAL CHOKE MANIFOLD ASSEMBLY
FOR 2M AND 3M RATED WORKING
PRESSURE SERVICE – SURFACE INSTALLATION**



Philips

San Juan 30-5401 Unit

Meridian

Oil

LA JARA

PIPELINE

PIPELINE

Gas Well

Gas Well

Gas Well

Gas Well

Gas Wells

Gas Well

Gas Well

Gas Well

20

28

32

31

36

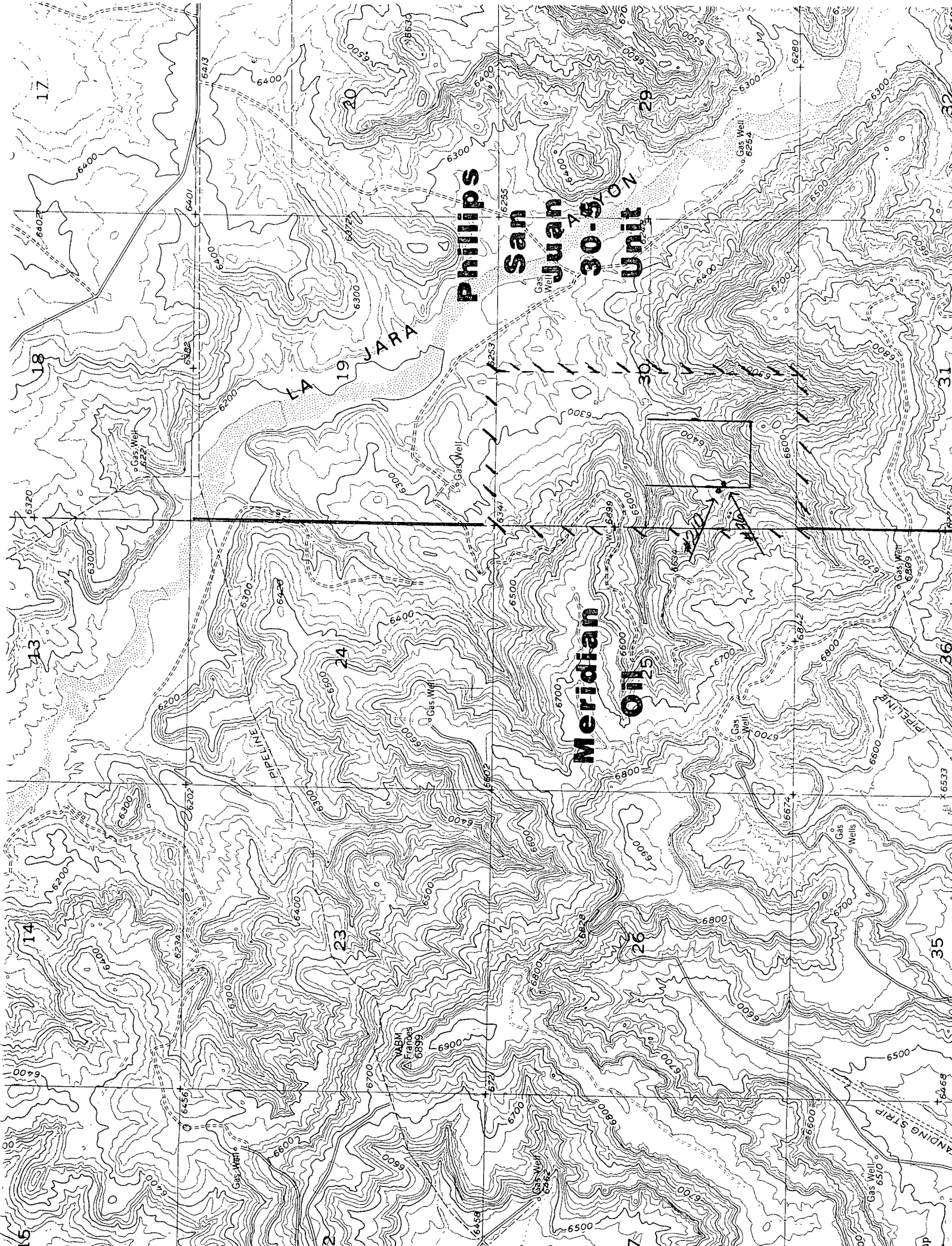
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**ARCHAEOLOGICAL SURVEY OF
PHILLIPS PETROLEUM'S
PROPOSED SAN JUAN 30-5 UNIT #210 WELL PAD
RIO ARriba COUNTY, NEW MEXICO**

LAC REPORT 9012e

by

Maureen C. Cavanaugh

LA PLATA ARCHAEOLOGICAL CONSULTANTS
P.O. Box 783
Dolores, Colorado 81323
(303) 882-4933

New Mexico Cultural Resource Use Permit No. 19-2920-89-F

March 7, 1990

Prepared For:

Phillips Petroleum
300 West Arrington, Suite 200
Farmington, New Mexico 87401

INTRODUCTION

The archaeological survey of Phillips Petroleum's San Juan 30-5 Unit #210 well pad was conducted on February 26, 1990 by personnel of La Plata Archaeological Consultants. The field work was conducted by Maureen Cavanaugh and Carol S. De Francia and the project was administered by Steven Fuller. The survey was conducted at the request of Mr. Larry Sanders, of Phillips Petroleum. Personnel of Daggett Land Surveying staked the proposed well location.

The project area is on lands administered by the Bureau of Land Management's Farmington Resource Area, and is within Rio Arriba County, New Mexico. All work was conducted under authority of Cultural Resource Use Permit No. 19-2920-89-F, issued to La Plata Archaeological Consultants.

The area was surveyed for one well pad planned by Phillips Petroleum. The well pad measures 205 by 300 feet. A total of 7.3 acres was intensively surveyed for this project. Access will be from an adjacent, existing well pad (SJ 30-5 #36). One new archaeological site was recorded during the survey. This site can be avoided and archaeological clearance is recommended for the well pad, with protective stipulations.

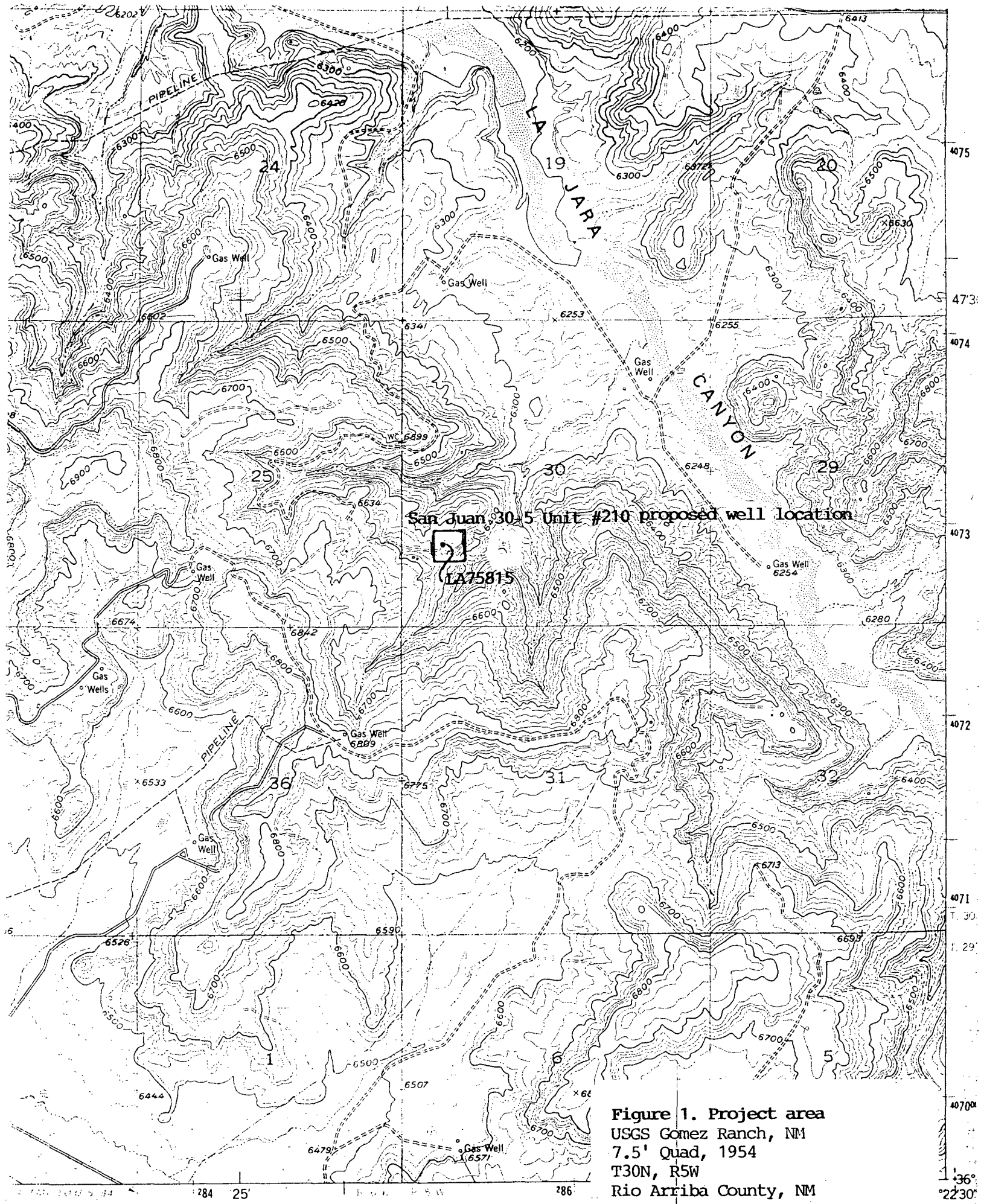
PREFIELD RECORDS SEARCH

On February 28, 1990, the records located in the Farmington Resource Area Office of the Bureau of Land Management's Albuquerque District were reviewed. Approximately three well pads and 2 pipeline right-of-ways have been surveyed within a one mile radius of the proposed project area. These surveys were conducted for energy development projects. There are five previously recorded sites within one mile of the proposed project area, as revealed by the record search. The location of these sites is shown in Figure 1a and they are described as follows:

| | |
|----------|---|
| LA27667 | Navajo hogan |
| LA31794 | Navajo Gobernador phase hogan and ceramic scatter |
| BLM35834 | No information |
| BLM31545 | Anasazi BMIII-PI Rosa Phase pithouse settlement |
| BLM35696 | Anasazi BMIII-PI Rosa Phase settlement |

FIELD METHODS

Prior to the survey, the proposed well pad was marked at the center, the four corners and at the four centerline endpoints. Off pad construction areas were not



delimited but were described as consisting of only a topsoil stockpile area which would not extend further than 50 feet from the pad. A 7.3 acre block (600 by 530 feet) was surveyed centered on the well center stake which was sufficient to cover the 300 by 230 foot pad, a 50 foot construction zone, and at least a 100 foot buffer for cultural resources. The 7.3 acre block was surveyed by pedestrian transects which were no further than 15 m or 50 feet apart. The extent of the survey area is illustrated on Figure 1.

The one new site found during the survey was mapped, photographed, and all pertinent data was recorded on a Laboratory of Anthropology site form.

ENVIRONMENT

The proposed well location is situated on a northeast aspect bench, on a mesa finger isolated by canyons to the north and east. These short canyons are tributary to La Jara Canyon to the northeast.

Sediments on the bench are varied. Clayey soils and shales were observed on slopes. A reddish brown aeolian loam was present on flatter areas, and shallow sandy residual soils were noted on the ledges adjacent to and below the canyon rims.

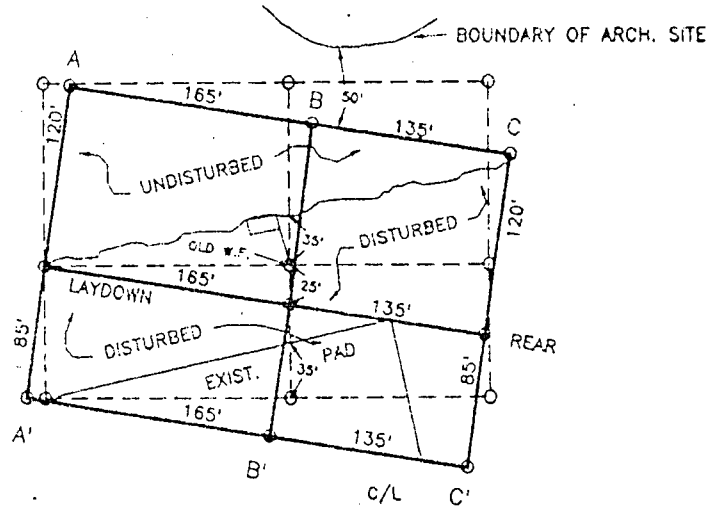
Vegetation was dominated by pinyon, juniper, Gambel oak, very sparse sage and sparse forbes and grasses. Rabbit brush, sage, and grasses provided ground cover in disturbed areas.

PROJECT LOCATION AND DESCRIPTION

| | |
|--------------------|---|
| Project Name: | Phillips Petroleum SJ 30-5 #210 well pad |
| Legal Description: | The well pad is within T30N, R5W, Section 30, SE 1/4 NW 1/4 SW 1/4. The actual footage of the location is 1259 FSL, 745 FWL, Rio Arriba County, New Mexico (see Figure 2, well plat). |
| Elevation: | 6495 feet |
| Map Reference: | USGS Gomez Ranch, New Mexico 7.5' (1954, photorevised 1982). |
| Land Jurisdiction: | Bureau of Land Management, Farmington Resource Area. |
| Project Area: | The well pad will measure 300 by 205 feet. Access is from an adjacent, existing well. |

Figure 2. Well pad plat.

COMPANY: PHILLIPS PETROLEUM
 LEASE: SAN JUAN 30-5 NO.210
 FOOTAGE: 1259 FSL, 745 FWL
 SEC. 30 TWN: T.30 N. RNG: R.5 W. NMPM
 ELEVATION: 6495



ELEV. A-A'

| | | | | | |
|------|--|--|--|--|--|
| 6520 | | | | | |
| 6510 | | | | | |
| 6500 | | | | | |
| 6490 | | | | | |
| 6480 | | | | | |
| 6470 | | | | | |

ELEV. B-B'

C/L

| | | | | | |
|------|--|--|--|--|--|
| 6520 | | | | | |
| 6510 | | | | | |
| 6500 | | | | | |
| 6490 | | | | | |
| 6480 | | | | | |
| 6470 | | | | | |

ELEV. C-C'

C/L

| | | | | | |
|------|--|--|--|--|--|
| 6520 | | | | | |
| 6510 | | | | | |
| 6500 | | | | | |
| 6490 | | | | | |
| 6480 | | | | | |
| 6470 | | | | | |

Surveyed Area: A 600 by 530 foot block (7.3 acres) for well pad, construction zone, and buffer zone. Total area surveyed: 7.3 acres. Approximately 30 percent of the surveyed area has been disturbed by construction of an existing well pad.

Results: During the survey, one new site (LA75815) was located 2m outside the north wellpad boundary. The well pad was rotated and modified, providing 50 feet of clearance between the north pad boundary and the site.

CULTURAL RESOURCES

One new archaeological site was discovered during survey of Phillips Petroleum San Juan 30-5 #210 proposed well pad location (Figure 3). This site is described as follows:

Site Number: LA75815

Description: The site is situated on a bench above a tributary to La Jara Canyon (Figure 3). The bench has an east aspect and is somewhat dissected. The canyon rim is approximately 45 m to the east. The site is manifested by a 3 m x 7 m ash stain, with sparse fire-cracked sandstone fragments. Five m west of the feature are two sandstone slab fragments, as well as 3 fragments of fire-cracked sandstone. A chalcedony side notched projectile point was observed 2 m south of the feature. Based on the presence of a small side notched projectile point, the site was assigned a Navajo cultural affiliation, with a pre-Gobernador or Gobernador temporal designation. Because of the possibility of intact subsurface deposits associated with the ash stain, the site is considered potentially significant.

CONCLUSIONS AND RECOMMENDATIONS

During the survey of Phillips Petroleum's San Juan 30-5 Unit #210 well pad, one new archaeological site was encountered. The site was initially within the boundaries of the proposed well pad. Moving the well pad in the immediate vicinity was not feasible, due to topographic constraints, the presence of cultural resources, and existing well facilities. The topography terminates in a steep canyon rim to the east; an existing well location with meter house and well head is the south; to the north is an archaeological site. The generally rugged canyon bench topography in the general vicinity also limits other location options. However, by rotating the well pad, Site LA75815 can be avoided by a distance of 50 feet. The site can be adequately protected by construction of a barrier fence, and by the presence of an archaeological monitor during erection of a barrier fence,

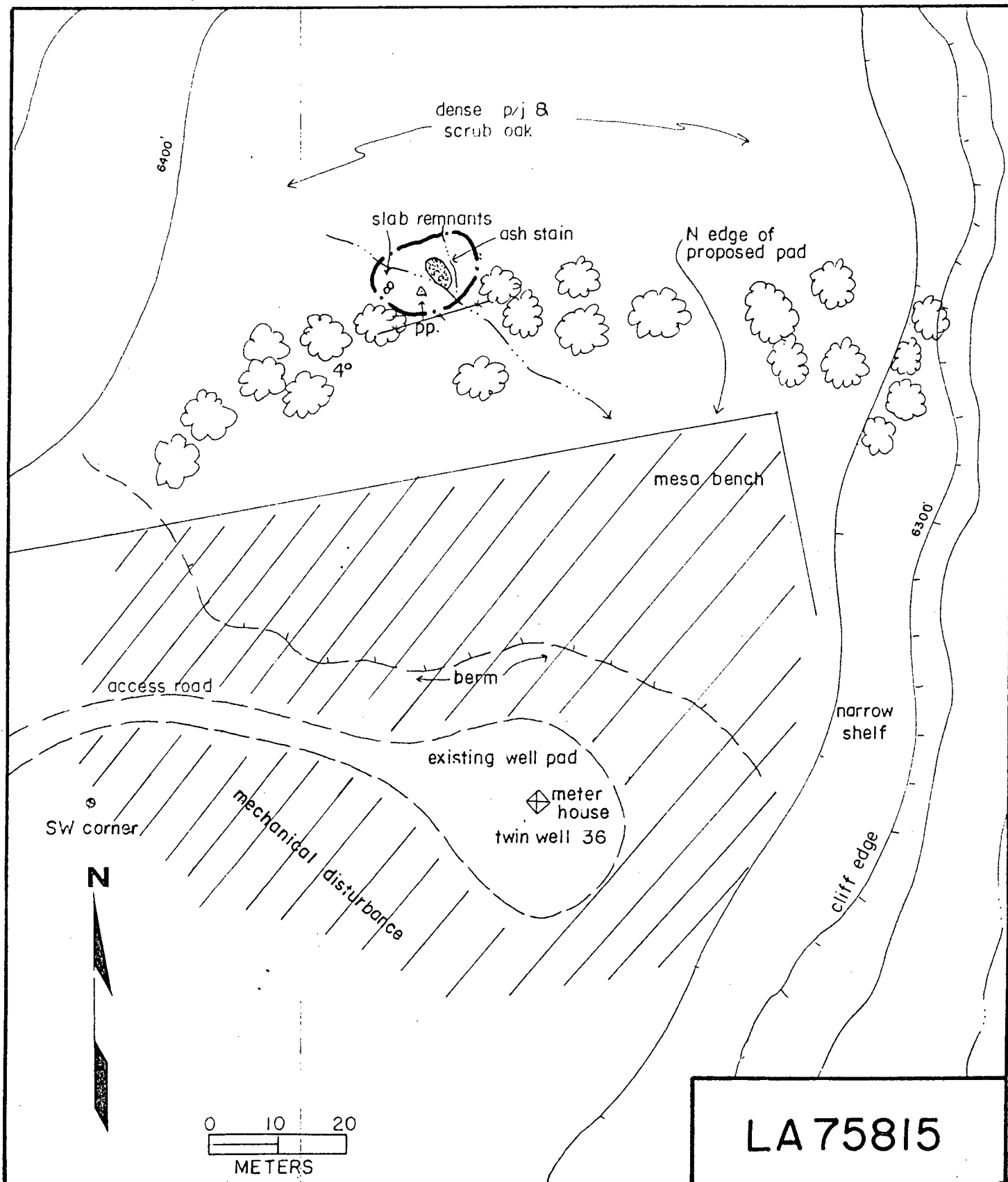


Figure 3

and during initial well pad construction activities. Presently, the proposed well pad location is in an area disturbed by previous construction activities, and construction would cause minimal impact to natural resources.

If the stipulations described above are followed, archaeological clearance is recommended for the San Juan 30-5 Unit #210 well.



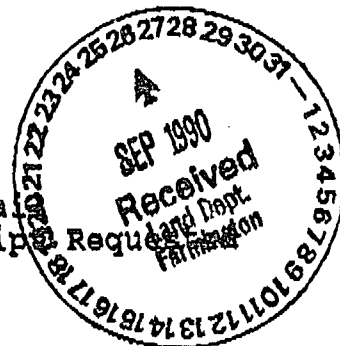
PHILLIPS PETROLEUM COMPANY

FARMINGTON, NEW MEXICO 87401
300 W. ARRINGTON, SUITE 200, PHONE: 505 599-3400

EXPLORATION AND PRODUCTION

Certified Mail
Return Receipt Requested

September 25, 1990



Meridian Oil, Inc.
P. O. Box 4289
Farmington, NM 87499-4289

Attn: Kent Beers
Region Land Manager

Re: Waiver of Objection to
Unorthodox Location
Offset Operator Notice
San Juan 30-5 Unit Well #210
1259' FSL, 745' FWL
Section 30-30N-5W
Rio Arriba County, NM

Gentlemen:

Phillips Petroleum Company is requesting NMOC administrative approval of an unorthodox well location for the referenced well due to topographical and archaeological reasons.

As Meridian is the offset operator of the San Juan 30-6 Unit, Phillips respectfully requests your waiver of objection to the subject unorthodox well location by signing in the space provided below and returning one copy of this letter to the undersigned as soon as possible.

Please contact the undersigned should you have any questions or comments.

Very truly yours,

Phillips Petroleum Company

A. J. Kieke
Area Landman
San Juan Basin
(505) 599-3410

We hereby waive objection to the unorthodox location for the San Juan 30-5 Unit Well #210.

Meridian Oil, Inc.

By:

Name: KENT BEERS, ATTORNEY-IN-FACT

Title: _____