



STATE OF NEW MEXICO
ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION DIVISION
AZTEC DISTRICT OFFICE

1000 RIO BRAZOS ROAD
AZTEC, NEW MEXICO 87410
(505) 334-6178

Date: 8-5-82

Attn: Mike Stagner

Oil Conservation Division
P.O. Box 2088
Santa Fe, NM 87504-2088

RE: Proposed MC _____
Proposed NSL 2 _____
Proposed WFX _____
Proposed NSP _____

Proposed DHC _____
Proposed SWD _____
Proposed PMX _____
Proposed DD _____

Gentlemen:

I have examined the application received on 7-20-82

for the Phillips Petroleum Co. S.F. 327 Unit #235
OPERATOR LEASE & WELL NO.

N-29-32N-7W and my recommendations are as follows:
UL-S-T-R

Approved

Yours truly,

Ernie Burch



PHILLIPS PETROLEUM COMPANY

FARMINGTON, NEW MEXICO 87401
5525 HWY 64 NBU 3004

July 17, 1992

Unorthodox Location Request
San Juan 32-7 Unit, Well No. 235
San Juan 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:

RECEIVED
JUL 20 1992
OIL CON. DIV.]
DIST. 3

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 topographical 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 the minerals and surface 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, and Richard Allred, Phillips Petroleum Company employee. The staked location of Well No. 235 is in Unit N, 463' FSL and 1568' FWL of Section 29, T-32-N, R-7-W, San Juan County, New Mexico. Due to topographical (mountainous) conditions we were unable to find suitable terrain and were unable to stake the well at a standard location. There is an existing pipeline within 500' of the location. The 320 acre proration unit is offset by CNG Development Co. to the West.

Attachments to support approval are:

1. Complete APD packet dated 5-22-92, with all necessary attachments.
2. Archaeological report prepared by La Plata Archaeological Consultants.
3. A copy of a portion of the Burnt Mesa Quadrangle topographical map showing Section 29.
4. A certified statement that the information is current and correct.

Mr. William J. LeMay, Director
Non-Standard Location Request
San Juan 32-7 Unit, Well No. 235
San Juan County, New Mexico
July 17, 1992
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 Gail Bearden at the letterhead address or telephone (505) 599-3412.

Sincerely,

A handwritten signature in cursive script, appearing to read "Richard Allred".

Richard Allred
Drilling Supervisor

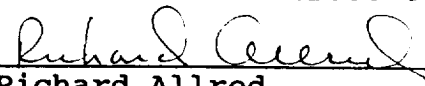
RA:gb
SJ327235.NSL

Attachments

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

ATTACHMENTS
(As Requested)
SAN JUAN 32-7 UNIT, WELL NO. 235

- I. See APD package.
- 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: 
Name: Richard Allred
Date: July 17, 1992
- IV. Copy of a portion of the Burnt Mesa Quadrangle topographical map.
 - A. Shown on map.
 - B. Shown on map.
 - C. None
- V. Enlargement of the topographic map provided.
 - A. See Map
 - B. There is an existing rehabbed, P&A'd location.
 - C. See topographical map.
 - D. None
 - E. Pine River arm of Navajo Lake. Mountainous terrain.
- VI. None (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. CNG Producing Company operates the production unit to the west. Phillips Petroleum Company is designated operator of the remaining offset proration units. CNG has been notified, by certified mail of our request, and has been asked for a waiver of objections. Copy of green return receipt card is attached.

<p>● SENDER: Complete items 1 and 2 when additional services are desired, and complete items 3 and 4.</p> <p>Put your address in the "RETURN TO" Space on the reverse side. Failure to do this will prevent this card from being returned to you. The return receipt fee will provide you the name of the person delivered to and the date of delivery. For additional fees the following services are available. Consult postmaster for fees and check box(es) for additional service(s) requested.</p> <p>1. <input type="checkbox"/> Show to whom delivered, date, and addressee's address. (Extra charge) 2. <input type="checkbox"/> Restricted Delivery (Extra charge)</p>	
<p>3. Article Addressed to:</p> <p>CNG Producing Company Attn: Robert A. Deluane 1450 Poydras Street New Orleans, Louisiana 70112-6000</p>	<p>4. Article Number</p> <p>P 565 395 784</p> <p>Type of Service:</p> <p><input type="checkbox"/> Registered <input type="checkbox"/> Insured <input checked="" type="checkbox"/> Certified <input type="checkbox"/> COD <input type="checkbox"/> Express Mail <input checked="" type="checkbox"/> Return Receipt for Merchandise</p> <p>Always obtain signature of addressee or agent and <u>DATE DELIVERED</u>.</p>
<p>5. Signature -- Addressee</p> <p>X</p>	<p>8. Addressee's Address (ONLY if requested and fee paid)</p>
<p>6. Signature -- Agent</p> <p>X</p> <p><i>[Signature]</i></p>	
<p>7. Date of Delivery</p> <p><i>6/24/92</i></p>	



PHILLIPS PETROLEUM COMPANY

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

June 19, 1992

CNG Producing Company
1450 Poydras Street
New Orleans, Louisiana 70112-6000

Attn: Robert A. Delaune
Senior Landman

Re: Unorthodox Gas Well Location
San Juan 32-7 Unit #235
463' FSL & 1568' FWL
Section 29-T32N-R7W
San Juan County, New Mexico
Basin Fruitland Coal Gas Pool

Dear Mr. Delaune:

Phillips Petroleum Company is requesting administrative approval from the New Mexico Oil Conservation Division of an unorthodox well location for the referenced well due to topographical and archaeological reasons.

As CNG is the offset operator, 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 if you have any questions or comments. Thank you for your timely attention to this matter.

Very truly yours,

PHILLIPS PETROLEUM COMPANY

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

We hereby waive objection to the unorthodox location for the San Juan 32-7 Unit Well #235.

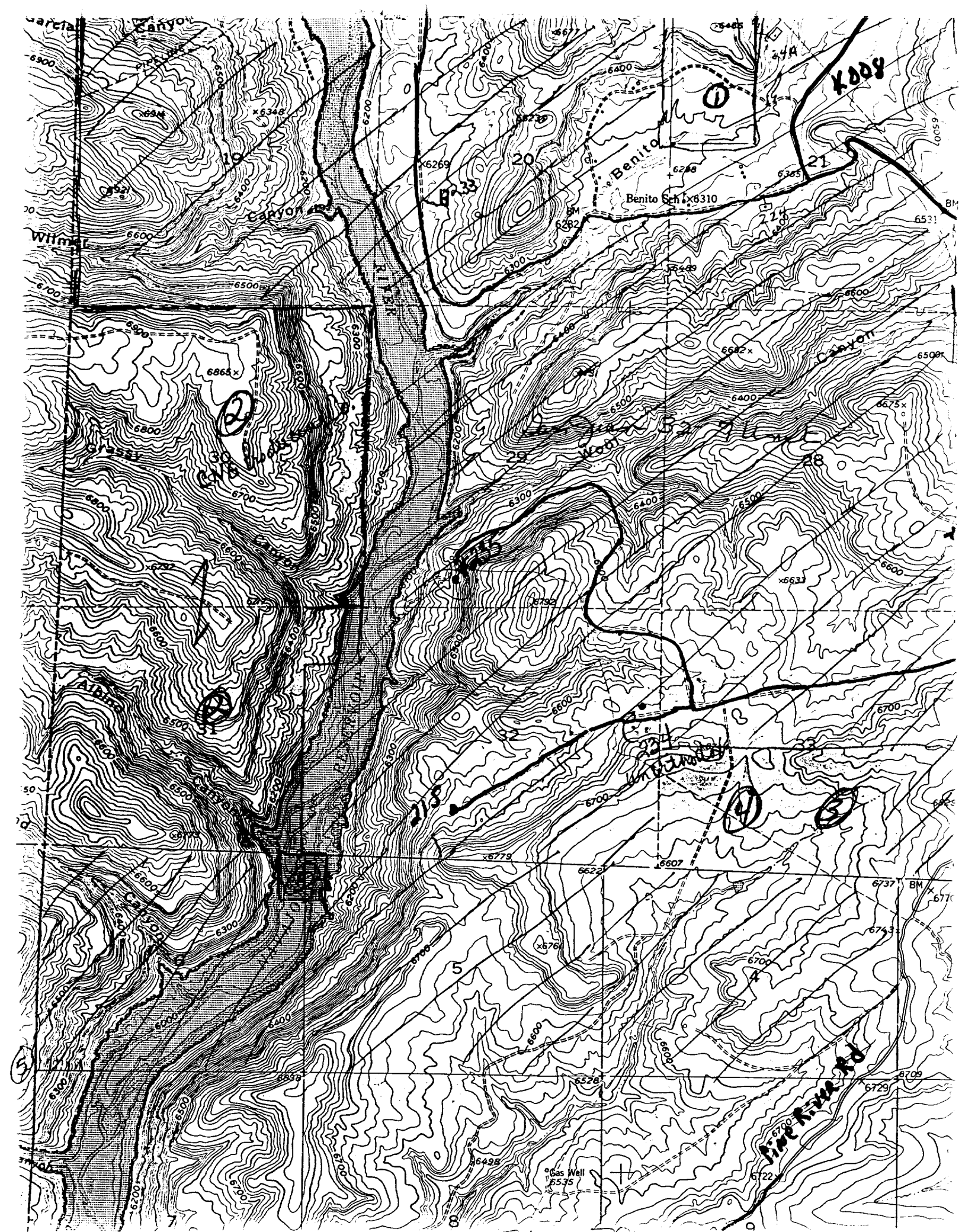
CNG Producing Company

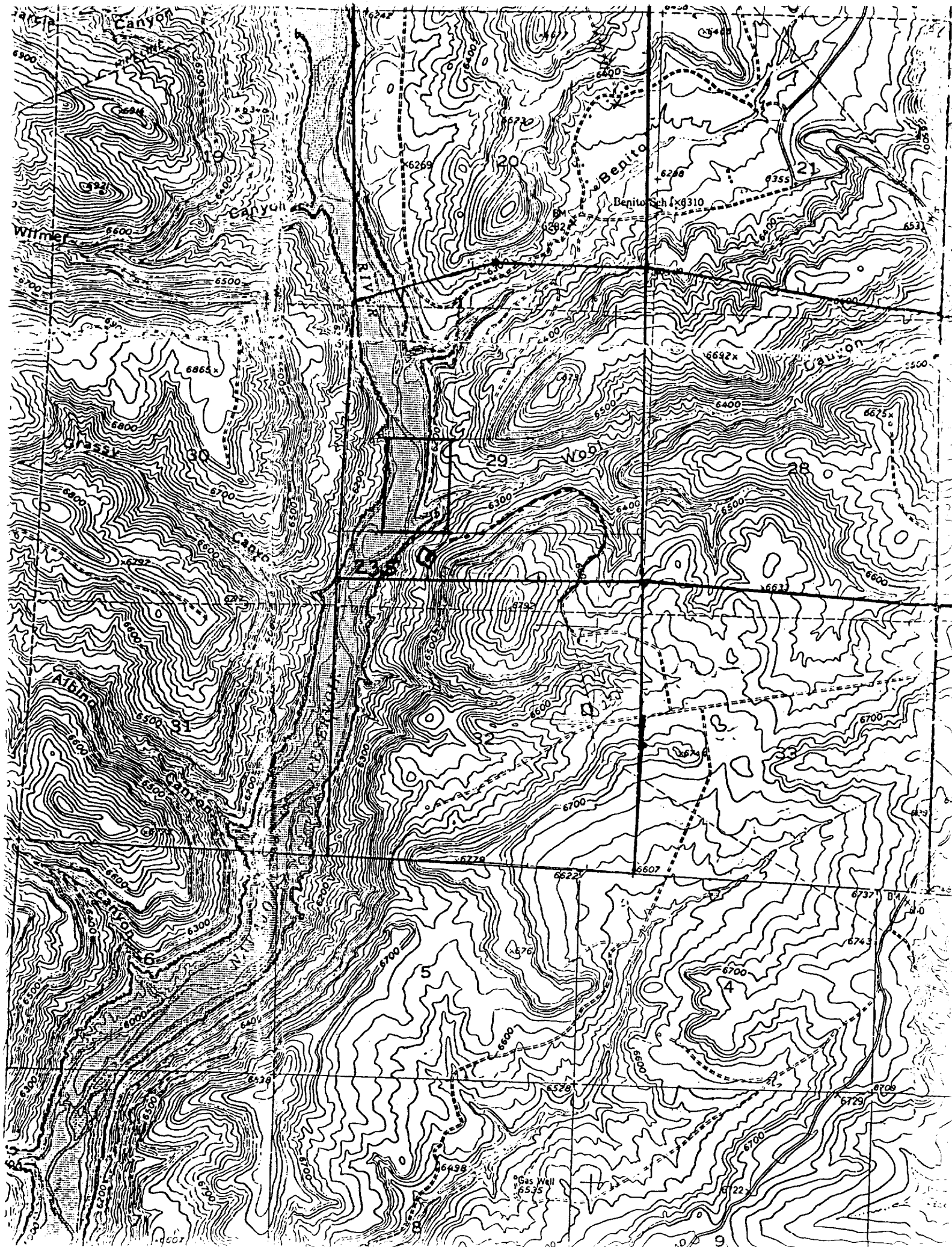
By: _____

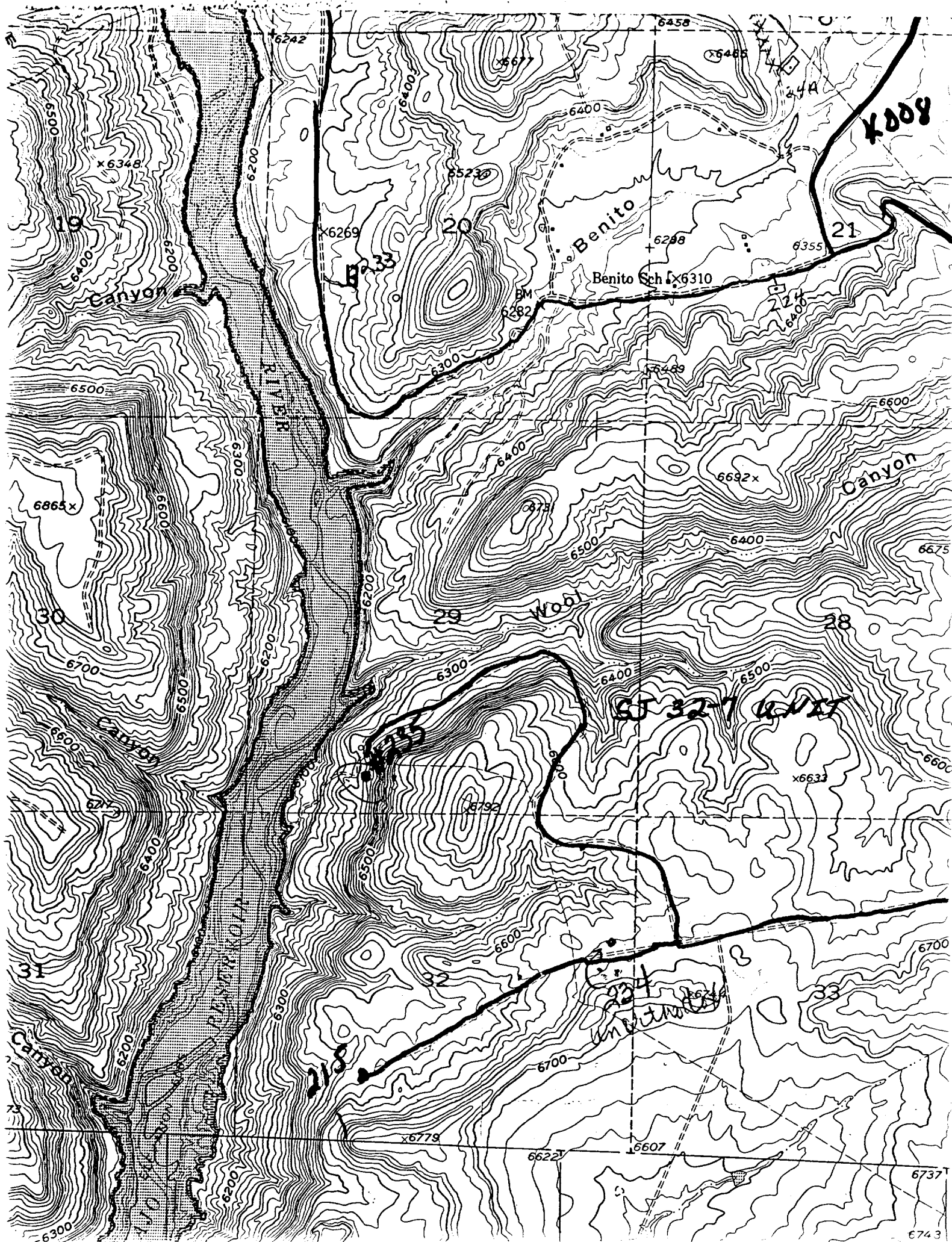
Name: _____

Title: _____

cc: New Mexico Oil Conservation Division







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

5525 Hwy 64 NBU 3004, Farmington, NM 87401

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

At surface

Unit N, 463' FSL & 1568' FWL

At proposed prod. zone Same as above

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

Approximately 15 miles Southeast of Ignacio, CO

15. DISTANCE FROM PROPOSED*

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

16. NO. OF ACRES IN LEASE

1198 Acres

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

19. PROPOSED DEPTH

3025'

17. NO. OF ACRES ASSIGNED
TO THIS WELL

320

20. ROTARY OR CABLE TOOLS

Rotary

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

6318' (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'	250 Sx, Circ to Surface
8-3/4"	7"	23#, K-55	2900'	650 Sx, Circ to Surface
6-1/8"	5-1/2"	23#	2800'-3025'	*

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

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. E. Robinson
L. E. Robinson

TITLE Sr. Drlg. & Prod. Engr.

DATE 5-22-92

(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 1-1-87

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, Azusa, NM 88210

DISTRICT III
1050 Rio Grande Rd., Azusa, 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 32-7 UNIT		Well No.		235	
Unit Letter		N		Section		29		Township		T.32 N.	
Range		R.7 W.		County		SAN JUAN		NMPSM			
Actual Location of Well:		463		SOUTH		1568		WEST		line	
feet from the		line and		feet from the		line		Dedicated Acreage:		320 Acres	
Ground level Elev.		6518		Producing Formation		Fruitland		Pool		Basin Fruitland Coal	

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

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, force-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. E. Robinson

Printed Name

L. E. Robinson

Position

Sr. Drilg. & Prod. Engr.

Company

Phillips Petroleum Company

Date

May 22, 1992

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.

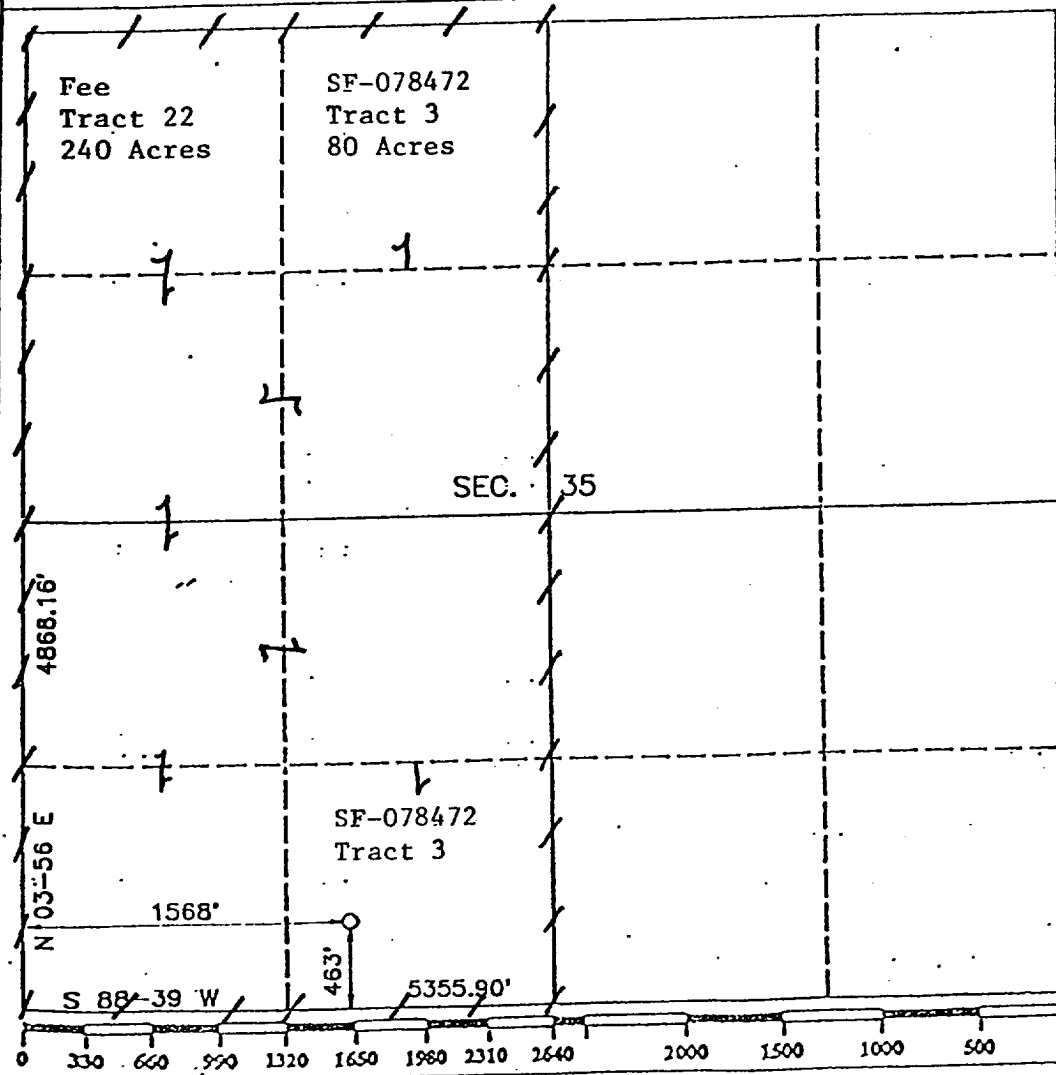
Date Surveyed

APR 13 1992

Signature & Seal of Professional Surveyor

ROYALTY MEXICO
A. ROSEN
8894

Certificate No. 8894



COMPANY: PHILLIPS PETROLEUM

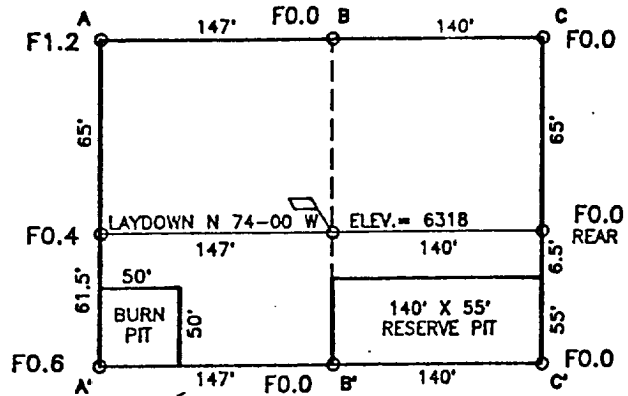
LEASE: SAN JUAN 32-7 UNIT 235

FOOTAGE: 463 FSL, 1568 FWL

SEC.: 29 TWN: T.32 N. RNG: R.7 W. NMPM

ELEVATION: 6318

NOT TO SCALE



ELEV. A-A'

C/L

6340					
6330					
6320					
6310					
6300					
6290					

ELEV. B-B'

C/L

6340					
6330					
6320					
6310					
6300					
6290					

ELEV. C-C'

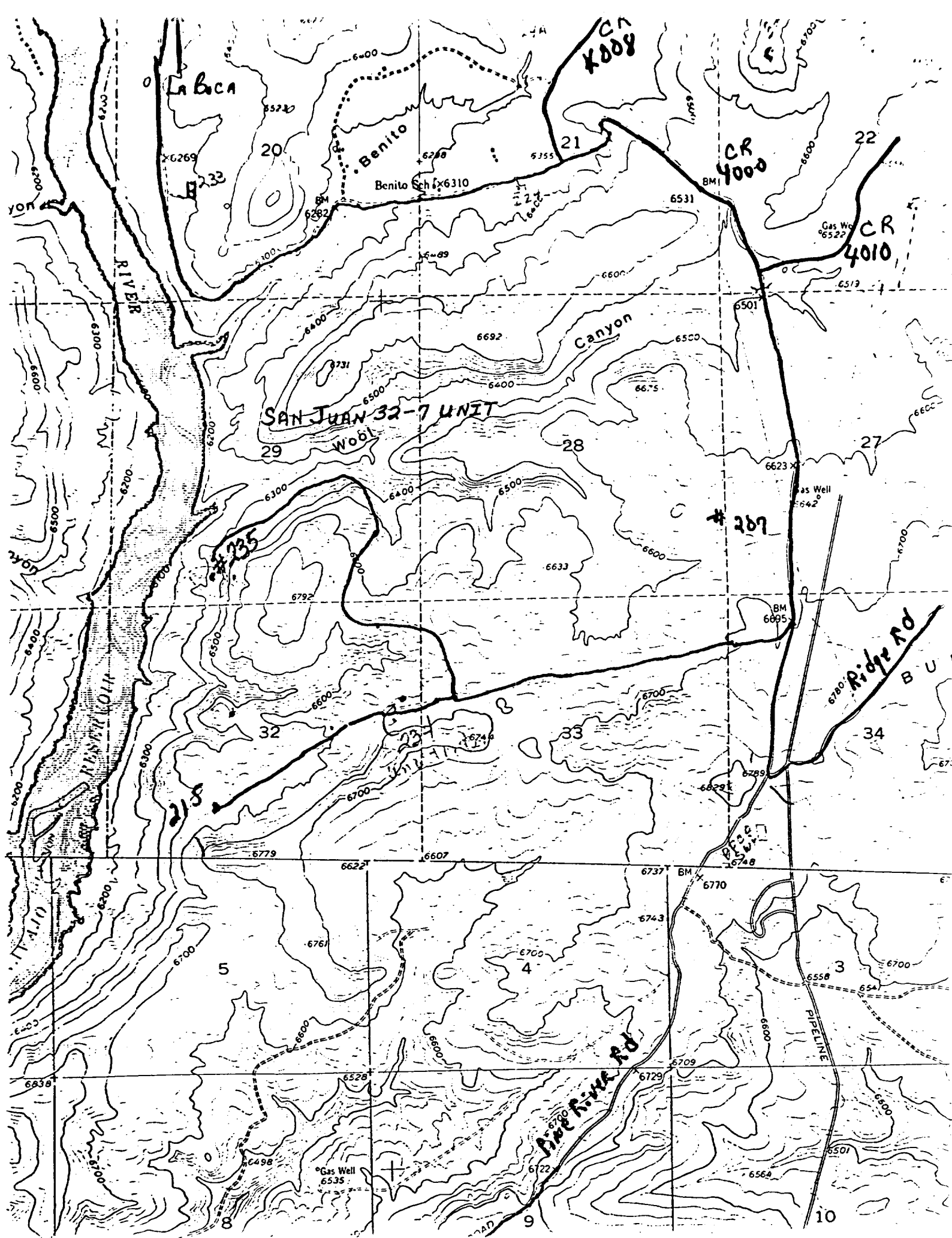
C/L

6340					
6330					
6320					
6310					
6300					
6290					



Daggett Surveying, Inc.

3638 E. 30th Street Suite No. 7B Ph. (806) 326-1772
Farmington, New Mexico 87401



SURFACE USE PLAN

Phillips Petroleum Company , San Juan 32-7 Unit , Well No. 235 , SE/4 SW/4 ,
Section 29 , T-32-N, R-7-W, San Juan County, New Mexico. (Federal Lease No. SF-
078472.)

This plan is to accompany "Application for Permit to Drill" the subject well which is located approximately 20 miles SE from Ignacio, Colorado. 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 Aztec on Hwy 550 and go right on Navajo Dam Road approximately 20 miles and turn left on Hwy 511. Go to La Boca Ranch and turn right. Go approx. 7 miles on CR 4000 and make right and go approximately 1.2 miles to location.

2. Planned Access Roads:

- A. 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: Culverts, Cuts and Fills: See Cut and Fill Sketch.
- D: Surfacing Material: Natural materials at well site.
- E: Gates, Cattle Guard, Fences: As required
- F: Proposed Road: See Cut and Fill Sketch.
- G: Drainage:
- H: Misc.: Closed loop mud system will be used. Block off road to south of location. Place tank battery against hill. Place gate at top of hill (Per State Park specs).

3. Locations of Existing Wells: None

- 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.

The flow-line from Well No. 235 is to run from a measurement point on the pad to a point on the existing road. 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.

Surface Use Plan— San Juan 32-7 Unit Well No. 235

Page: 2

6. Source of Construction Materials:

No additional construction materials will be required to build the proposed location. The dirt from the pit will be back-sloped and saved for use when the pit is rehabilitated.

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 127' X 287'.

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. Pit dirt will be saved to be used during restoration of the pit area.

11. Other Information:

- A. Terrain: See Archaeological Survey
- B. Soil: See Archaeological Survey
- C. Vegetation: See Archaeological Survey
- D. Surface Use: See Archaeological Survey

Surface Use Plan—San Juan 32-7 Unit Well No. 235

Page: 3

- E. Ponds and Streams: See Archaeological Survey
- F. Water Wells: No water wells are located in Section 29
- 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. No cultural resources encountered. No archaeological protection necessary.
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 |
| R. G. Flesher | | 5525 Hwy 64 NBU 3004 |
| 5525 Hwy 64 NBU 3004 | | Farmington, New Mexico 87401 |
| Farmington, New Mexico 87401 | | Phone: 505-599-3403 |
| Phone: 505-599-3401 | | |
13. Surface Ownership: 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. E. Robinson
Typed or Printed Name


Signature.

May 22, 1992
Date

su328246.jgb

PHILLIPS PETROLEUM COMPANY

Preliminary
5-14-92

Well Name: San Juan 32-7 Unit Well No. 235

DRILLING PROGNOSIS

1. Location of Proposed Well: 463' FSL & 1568' FWL, Section 29, T-32-N, R-7-W, San Juan County
2. Unprepared Ground Elevation: 6318'.
3. The geologic name of the surface formation is San Jose.
4. Type of drilling tools will be rotary.
5. Proposed drilling depth is 3025'.
6. The estimated tops of important geologic markers are as follows:

<u>Ojo Alamo -</u>	<u>2050'</u>	<u>Base Coal -</u>	<u>3000'</u>
<u>Kirtland -</u>	<u>2190'</u>	<u>Picture Cliffs -</u>	<u>3100'</u>
<u>Fruitland -</u>	<u>2820'</u>	<u>Int. Csg. -</u>	<u>2900'</u>
<u>Top Coal -</u>	<u>2915'</u>	<u>T.D.</u>	<u>3025'</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: Ojo Alamo - 2050'-2190'
 Oil: None
 Gas: Fruitland Coal - 2915'-3000'

8. The proposed casing program is as follows:

Surface String 9-5/8", 36#, K-55 @ 250'
 Intermediate String 7", 23#, K-55 @ 2900'
 Liner * 5-1/2", 23#, P-110 or 15.5#, K-55 @ 2800'- 3025'

9. Cement Program:

Surface String = 250 sxs (295 cu ft) CL "B" W/3% CaCl2 & 1/4# Cele-Flake/sk or quantity sufficient to circulate cement to surface.

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

Intermediate String (Continued)

Tail. 150 sxs (177 cu ft) Cl "B" w/1/4# Cele-Flake/sk.

Centralizer Program:

Surface: Centralizer at 10' above shoe. Top of 2nd Joint. Top of 4th Joint.

Intermediate: Centralizer at 10' above shoe. Top of 2nd Jt., Top of 4th Jt.
Top of 6th Jt., Top of 8th Jt.

Turbulator at 1 Jt. below Ojo Alamo

Turbulator at top of next joint.

Turbulator at top of next joint.

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 the well will be stimulated and a 5-1/2", 15.5#, J-55 liner will be run.

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.

DP327235.jgb

Revised 5/30/90

BLOWOUT PREVENTER REQUIREMENTS

Well Name: San Juan 32-7 Unit Well No. 235

- 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

Blowout Preventer Requirements
Page 3

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

Page 4

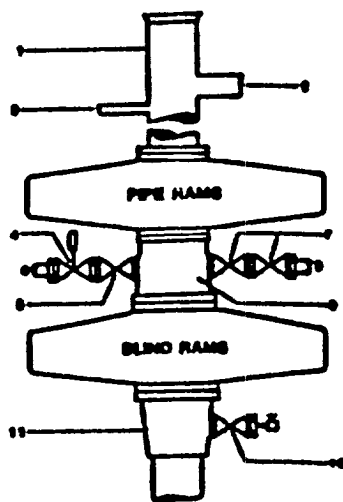
VI. D. (continued)

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.

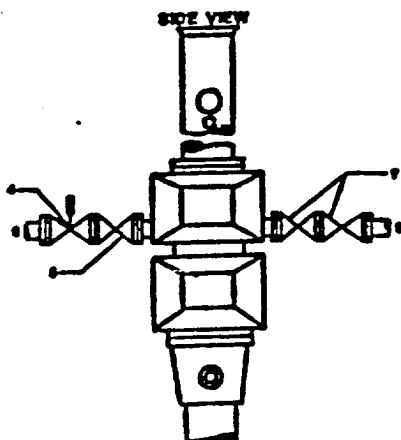
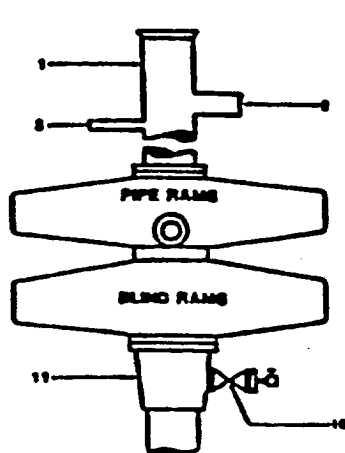
ALTERNATIVE



1. BELL NIPPLE
2. FLOW LINE
3. FILL-UP LINE
4. 2" FE PRESSURE OPERATED CHOKE LINE VALVE
5. 2" FE GATE VALVE
6. 2" FE CHOKE LINE TO MANIFOLD
7. 2" FE GATE VALVES
8. 2" FE KILL LINE
9. DRILLING SPOOL
10. 2" SE OR FE GATE VALVE WITH NEEDLE VALVE
11. CASING HEAD HOUSING

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



1. BELL NIPPLE
2. FLOW LINE
3. FILL-UP LINE
4. 2" FE PRESSURE-OPERATED CHOKE LINE VALVE
5. 2" FE GATE VALVE
6. 2" FE CHOKE LINE TO MANIFOLD
7. 2" FE GATE VALVES
8. 2" FE KILL LINE
10. 2" SE OR FE GATE VALVE WITH NEEDLE VALVE
11. CASING HEAD HOUSING

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

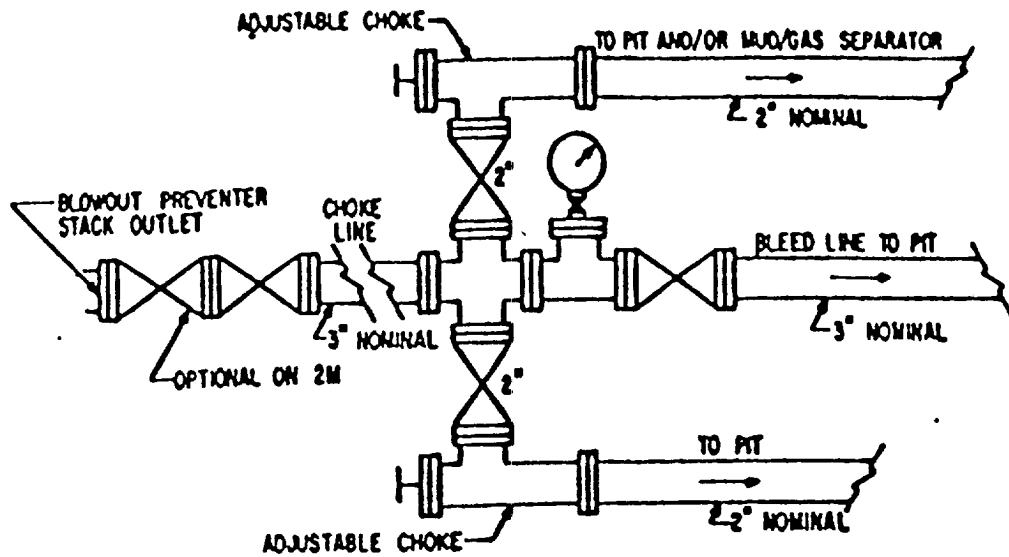


FIG. 3.A.1
TYPICAL CHOKES MANIFOLD ASSEMBLY
FOR 2M AND 3M RATED WORKING
PRESSURE SERVICE — SURFACE INSTALLATION

DEPTH	MUD WEIGHT	VISCOSITY	FLUID LOSS	CL-PPM	% SOLIDS	ADDITIVES
0-250 Ft.	Spud Mud Lime 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 CaCO ₃ & Polymer, low solids. Mud Wt. 9.5 to 10.0 PPG, as necessary to control well.					
	Start mud up 100' above Fruitland					

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.

WATER SUPPLY SOURCE
Surface Use Plan
San Juan Unit Wells

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.
6. Pine River
7. City of Ignacio

watsup6.jgb

**ARCHAEOLOGICAL SURVEY OF
PHILLIPS PETROLEUM'S PROPOSED
SAN JUAN 32-7 UNIT NO. 235
WELL PAD
SAN JUAN COUNTY, NEW MEXICO**

LAC REPORT 91111f

by

Maureen Cavanaugh and Barbara Cullington

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

New Mexico Cultural Resource Use Permit No. 19-2920-90-K

June 3, 1992

**Prepared For:
Phillips Petroleum
5525 Highway 64 NBU 3004
Farmington, New Mexico 87401**

INTRODUCTION

The archaeological survey of Phillips Petroleum's San Juan 32-7 No. 235 well pad was conducted by personnel of La Plata Archaeological Consultants on April 23, 1992. The fieldwork was conducted by Maureen Cavanaugh and the project was administered by Steven Fuller. The survey was conducted at the request of Mr. Richard Allred of Phillips Petroleum, who accompanied the archaeologists during the fieldwork phase of the project. Personnel of Daggett Land Surveying staked the proposed well location.

The project is on public lands administered by the BLM's Farmington Resource Area and is in San Juan County, New Mexico (Figure 1). All work was conducted under the authority of New Mexico Cultural Resource Use Permit No. 19-2920-90-I issued to La Plata Archaeological Consultants.

The area was surveyed for a well pad proposed by Phillips Petroleum. The well pad will measure approximately 287.0 by 126.5 ft. The location is superimposed over an abandoned well pad which has disturbed most of the area. The existing road to the abandoned well pad will be utilized for access, and no new access from New Mexico State Highway 511 will be required. A total of 5.75 acres was intensively surveyed to cover the project area, 50-ft construction zone and 100-ft cultural resources buffer. No archaeological sites were encountered.

PREFIELD RECORDS SEARCH

The recently updated ARMS records on file at La Plata Archaeological Consultants were consulted, as well as a recent copy of the BLM data base map for this area. Three sites have been recorded within 1 mile of the proposed location. The closest previously recorded site is 2000 ft south-southeast of the project area (refer to Figure 1a provided with the BLM copy of this report).

FIELD METHODS

Prior to the survey, the proposed well pad was marked at the center, the four corners, and the four centerline endpoints. A 5.8-acre block (587.0 by 426.5 ft) was surveyed centered on the well center stake. This was sufficient to cover the well pad, 50-ft construction zone, and at least a 100-ft buffer for cultural resources. The total 5.8-acre area was surveyed by pedestrian transects, which were no farther apart than 15 m or 50 ft. The extent of the area surveyed is illustrated on Figure 1.

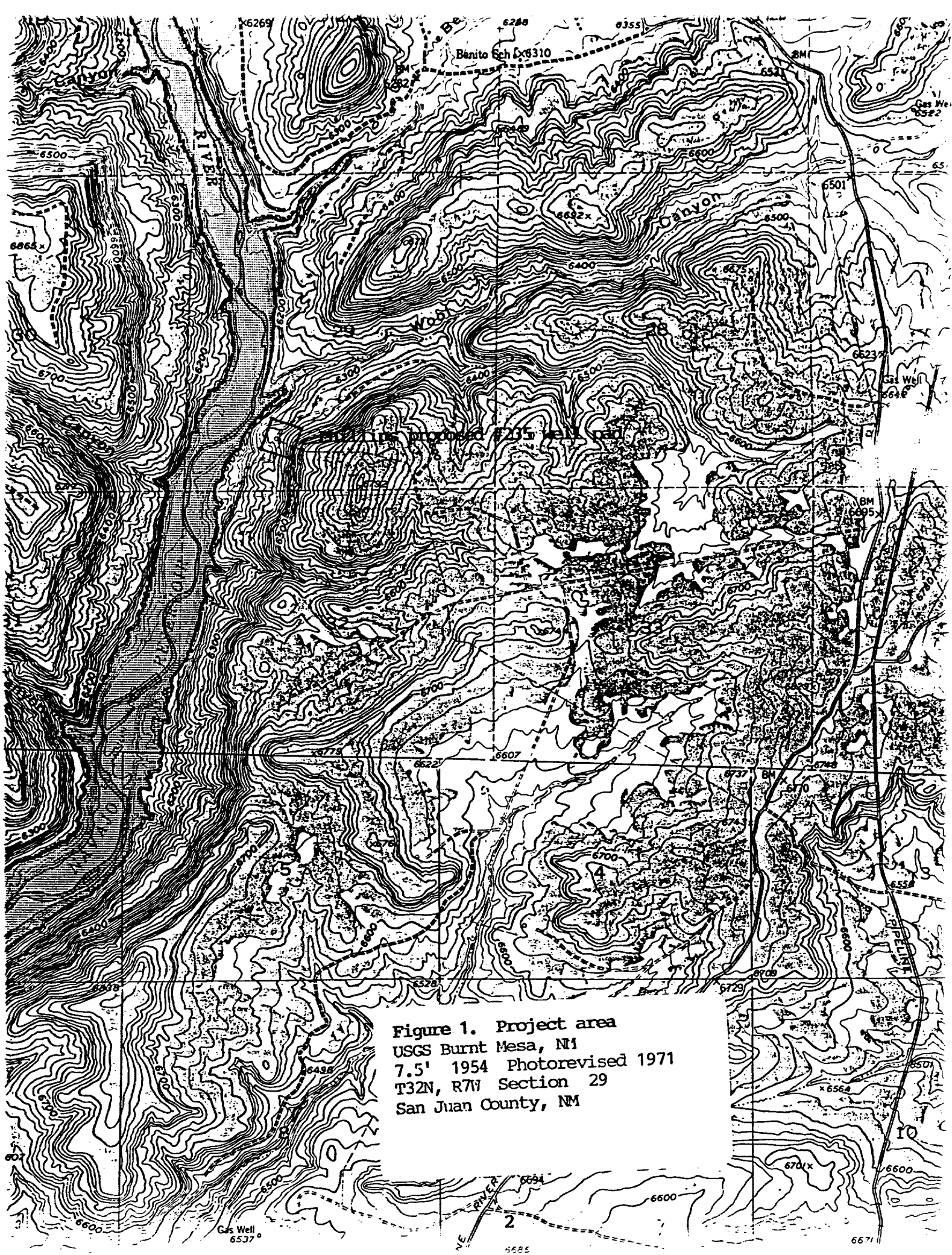


Figure 1. Project area
USGS Burnt Mesa, NM
7.5' 1954 Photorevised 1971
T32N, R7W Section 29
San Juan County, NM

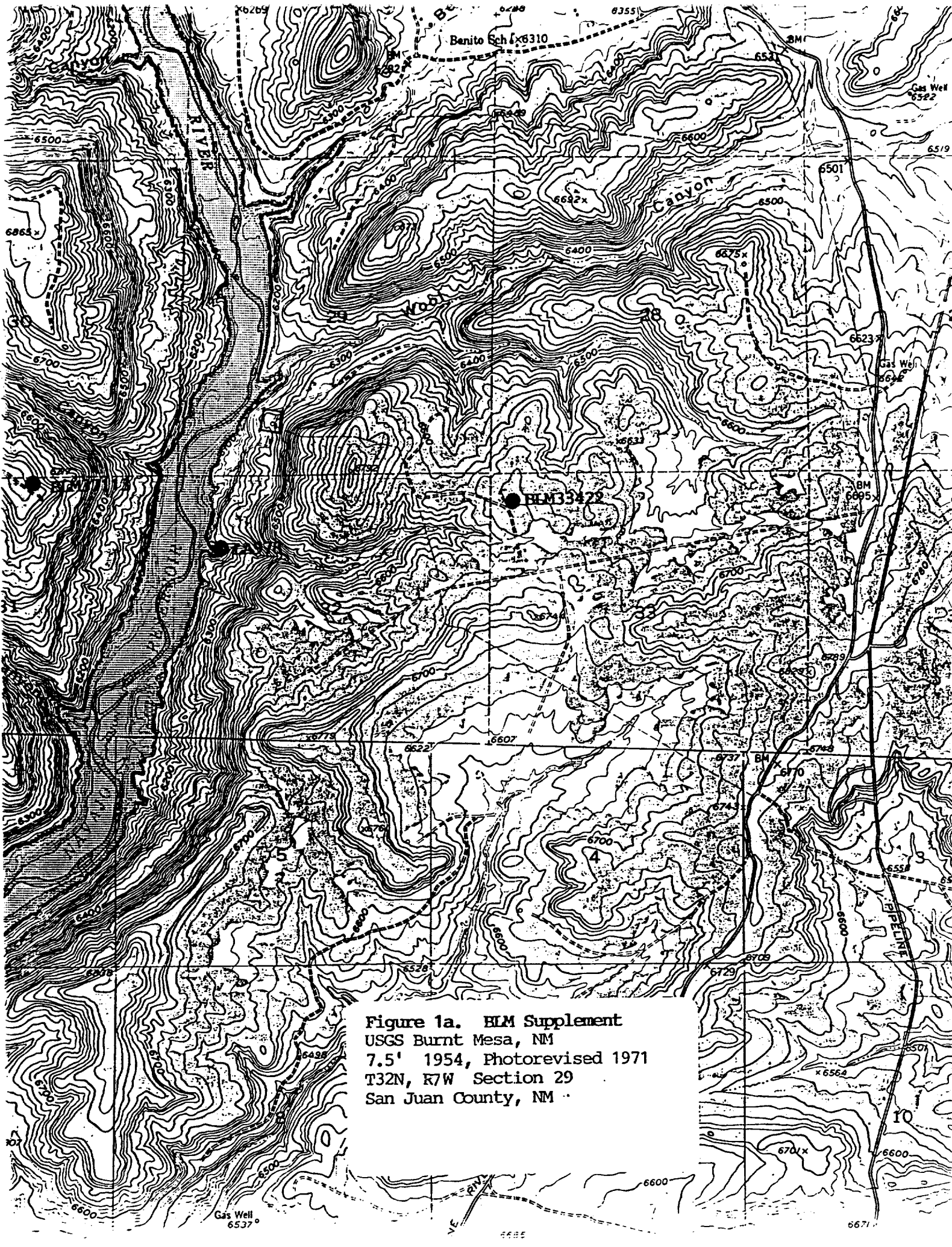


Figure 1a. BLM Supplement
USGS Burnt Mesa, NM
7.5' 1954, Photorevised 1971
T32N, R7W Section 29
San Juan County, NM

ENVIRONMENT

The proposed location is situated on a narrow bench on the east side of the Los Pinos portion of Navajo Reservoir. The confluence of Wool Canyon and the Los Pinos River is 500 ft north, and the confluence of an unnamed canyon and the Los Pinos River is 2000 ft south. In this portion of the river canyon, the narrow benches alternate with steep rocky slopes and small cliffs. Vegetation consists of pinyon, juniper, Gambel oak, sage, mountain mahogany, and sparse grasses.

PROJECT LOCATION AND DESCRIPTION

Project Name: Phillips Petroleum's San Juan 32-7 Unit No. 235 well pad

Legal Description: T32N, R7W, Section 29, SW1/4, SE1/4, SW1/4. The actual footage of the location is 463 FSL, 1568 FWL; San Juan County, New Mexico, (see Fig. 2, well plat)

Elevation: 6318 ft

Map Reference: U.S.G.S. Burnt Mesa, New Mexico, 7.5' (1954, photorevised 1971)

Land Jurisdiction: BLM, Farmington Resource Area

Project Area: The well pad will measure about 287.0 by 126.5 ft. No new access will be needed

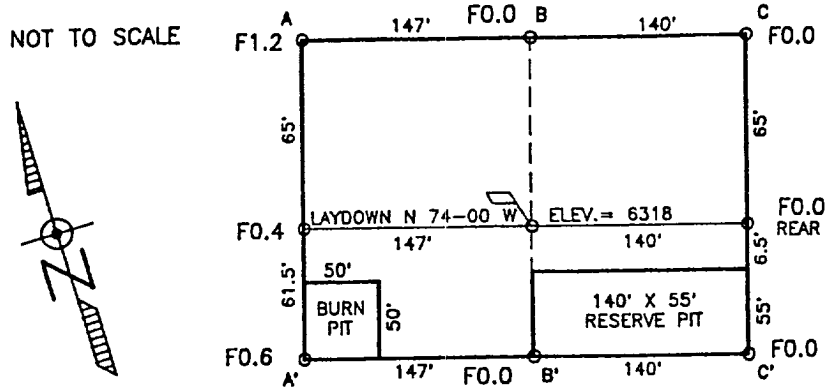
Surveyed Area: A 587.0- by 426.5-ft block (5.8 acres) for the well pad and buffer zone. Total area surveyed: 5.8 acres

Results: No archaeological sites were recorded

RECOMMENDATIONS

No archaeological sites were encountered during this survey and archaeological clearance is recommended for the Phillips San Juan 32-7 No. 235 well pad.

COMPANY: PHILLIPS PETROLEUM
 LEASE: SAN JUAN 32-7 UNIT 235
 FOOTAGE: 463 FSL, 1568 FWL
 SEC.: 29 TWN: T.32 N. RNG: R.7 W. NMPM
 ELEVATION: 6318



A-A' C/L

ELEV.					
6340					
6330					
6320					
6310					
6300					
6290					

B-B' C/L

ELEV.					
6340					
6330					
6320					
6310					
6300					
6290					

C-C' C/L

ELEV.					
6340					
6330					
6320					
6310					
6300					
6290					



Daggett Surveying, Inc.

5039 E. 20th Street, Suite No. 78 Ph. (505) 328-1772
 Farmington, New Mexico 87401

Figure 2. well pad plat.