NEW MEXICO ENERGY, MINERALS
& NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION
2040 South Pacheco Street
Santa Fe, New Mexico 87505
(505) 827-7131

May 21, 1998

Phillips Petroleum Company
c/o W. Thomas Kellahin
P. O. Box 2265
Santa Fe, New Mexico 87504-2265

Administrative Order NSL-4039

Dear Mr. Kellahin:

Reference is made to the following: (i) Phillips Petroleum Company's ("Phillips") original application filed by Mr. S. Scott Prather in Farmington, New Mexico on January 16, 1998; (ii) the New Mexico Oil Conservation Division's ("Division") response by letter dated January 21, 1998 from Mr. Michael E. Stogner, Engineer returning the original application as incomplete; (iii) your resubmittal of this application on behalf of Phillips dated March 12, 1998; (iv) Mr. Stogner's second response by letter dated March 18, 1998; and, (v) your letter with attachments dated May 20, 1998: all concerning Phillips' request to drill its San Juan "32" Federal 28 Well No. 2 at an unorthodox gas well location within the Blanco-Mesaverde Pool 911 feet from the South line and 519 feet from the West line (Lot 13/Unit M) of Section 28, Township 32 North, Range 9 West, NMPM, San Juan County, New Mexico. Lots 3, 4, 5, 6, 11, 12, 13, and 14 (W/2 equivalent) of said Section 28 are to be dedicated to said well in order to form a standard 317.78-acre gas spacing and proration unit for said pool.

By the authority granted me under the provisions of Rule **2(d)** of the "*General Rules for the Prorated Gas Pools of New Mexico/Special Rules and Regulations for the Blanco-Mesaverde Pool,*" as promulgated by Division Order No. R-8170, as amended, the above-described unorthodox gas well location is hereby approved.

Sincerely,

Lori Wrotenbery
Director

LW/MES/kv

cc: New Mexico Oil Conservation Division - Aztec
U.S. Bureau of Land Management - Farmington
S. Scott Prather, Phillips Petroleum Company - Farmington

PHILLIPS PETROLEUM COMPANY
FARMINGTON, NEW MEXICO 87401
5525 HWY. 64 NBU 3004

March 10, 1998

State of New Mexico
Oil Conservation Division
2040 South Pacheco
Santa Fe, NM 87505

ATTN: MR. MICHAEL E. STOGNER
CHIEF HEARING OFFICER/ENGINEER

RE: REQUEST FOR ADMINISTRATIVE APPROVAL OF UNORTHODOX WELL LOCATION
SAN JUAN 32 FED 28 #2 MV WELL
SAN JUAN COUNTY, NEW MEXICO
PHILLIPS G. F. 28350

Dear Mr. Stogner:

Thank you for your letter of January 21, 1998, in which you advise of the need on our part to furnish additional information and data to support our request for administrative approval of an unorthodox location for the San Juan 32 Fed. 28 #2 well.

In support of this request, Phillips Petroleum Company (Phillips) offers the following information:

Phillips' original application made reference to topographical concerns. In more detail, these concerns are related to surface terrain factors and an effort to minimize surface use. The surface terrain is such that to build a drillpad at an orthodox location of 790' from the West line would require a cut into a 35 to 40 foot high embankment to level the location. Not only would this have a negative economic impact on our well costs, but, it is our belief that the BLM would deem this as unacceptable.

It is our understanding that this area is of major concern to the BLM. This is evidenced by the fact that an offset operator received eighteen (18) pages of Special Stipulations from the BLM prior to drilling their well in Section 34-32N-9W in the latter part of 1997.

Additionally, we are planning on drilling a coal seam well from this same drillpad location. Said well will be directionally drilled to an orthodox bottomhole location. Our application for the coal seam well has been submitted and determined to meet the provisions of the current directional drilling rules for District Authorization (as per your letter dated February 2, 1998). By using the same drillpad for both wells, this will reduce the amount of surface disturbance for the wells and associated water and gas lines.

In view of these facts, Phillips Petroleum Company respectfully requests that you reconsider our request for administrative approval of an unorthodox location for the San Juan 32 Fed 28 #2 MV Well to be drilled at a location of 911 feet FSL and 519 feet FWL of Section 28-32N-9W.

In addition to the above noted information we are providing the following:

1. A nine section plat which shows offset operations
2. A topographical plat of the area
3. A form C-102 for the subject well
4. An APD packet for the subject well (note that this well is located in the Blanco Mesaverde Field)

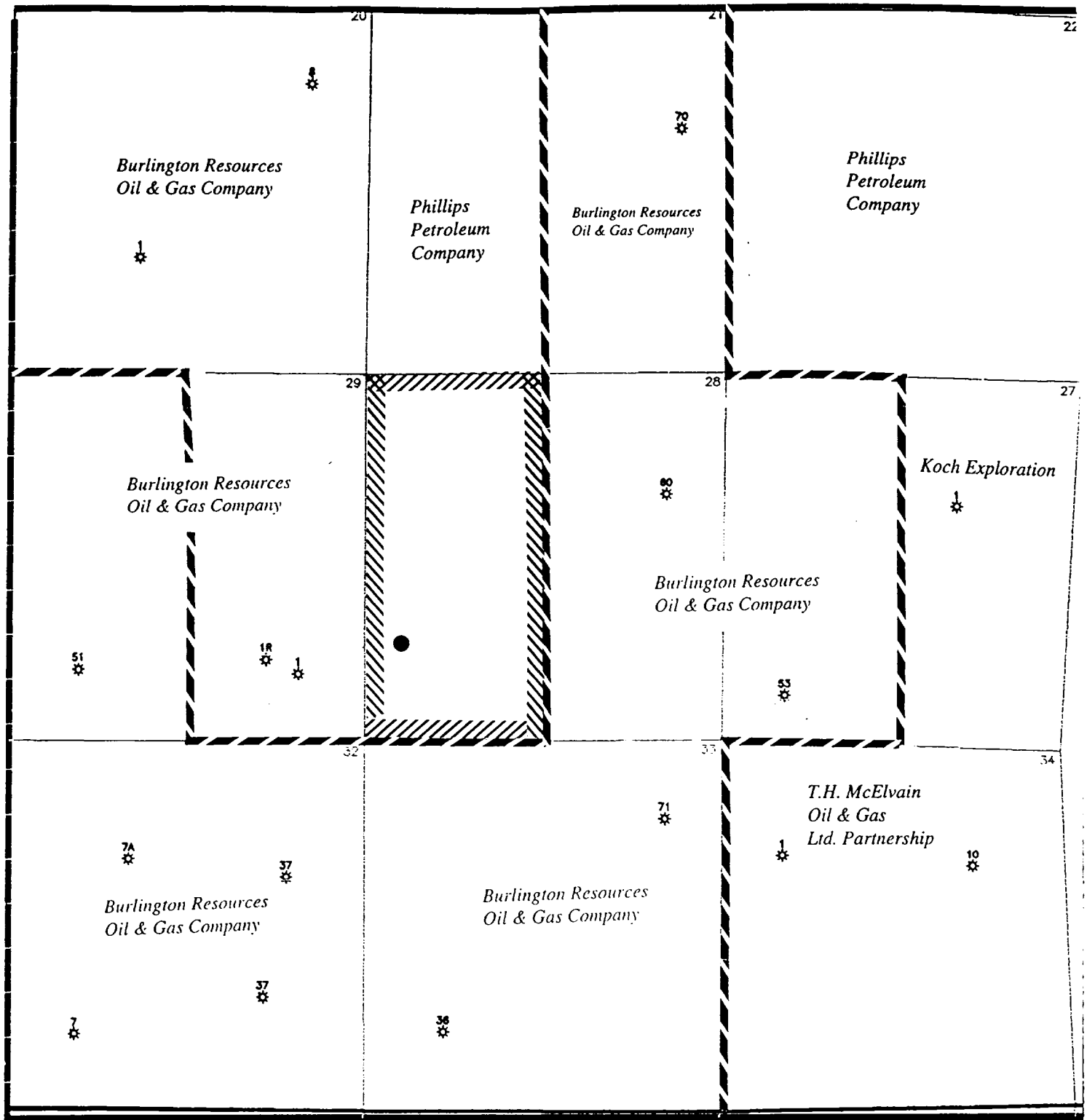
The offset operators have been furnished with a copy of this correspondence and accompanying data by certified letter.

Thank you for your consideration of this request and should you need additional information or clarification on this matter, please do not hesitate to contact the undersigned.

Very truly yours,

S. Scott Prather, CPL
Senior Landman
San Juan Basin
(505) 599-3410

cc: J. L. Mathis - G. F. 28350
Ernie Busch - OCD, Aztec
Burlington Resources Oil & Gas Company
T. H. McElvain Oil & Gas Limited Partnership
Koch Exploration



San Juan 32-9
Unit Boundary

Phillips
Petroleum
Company
Drillblock

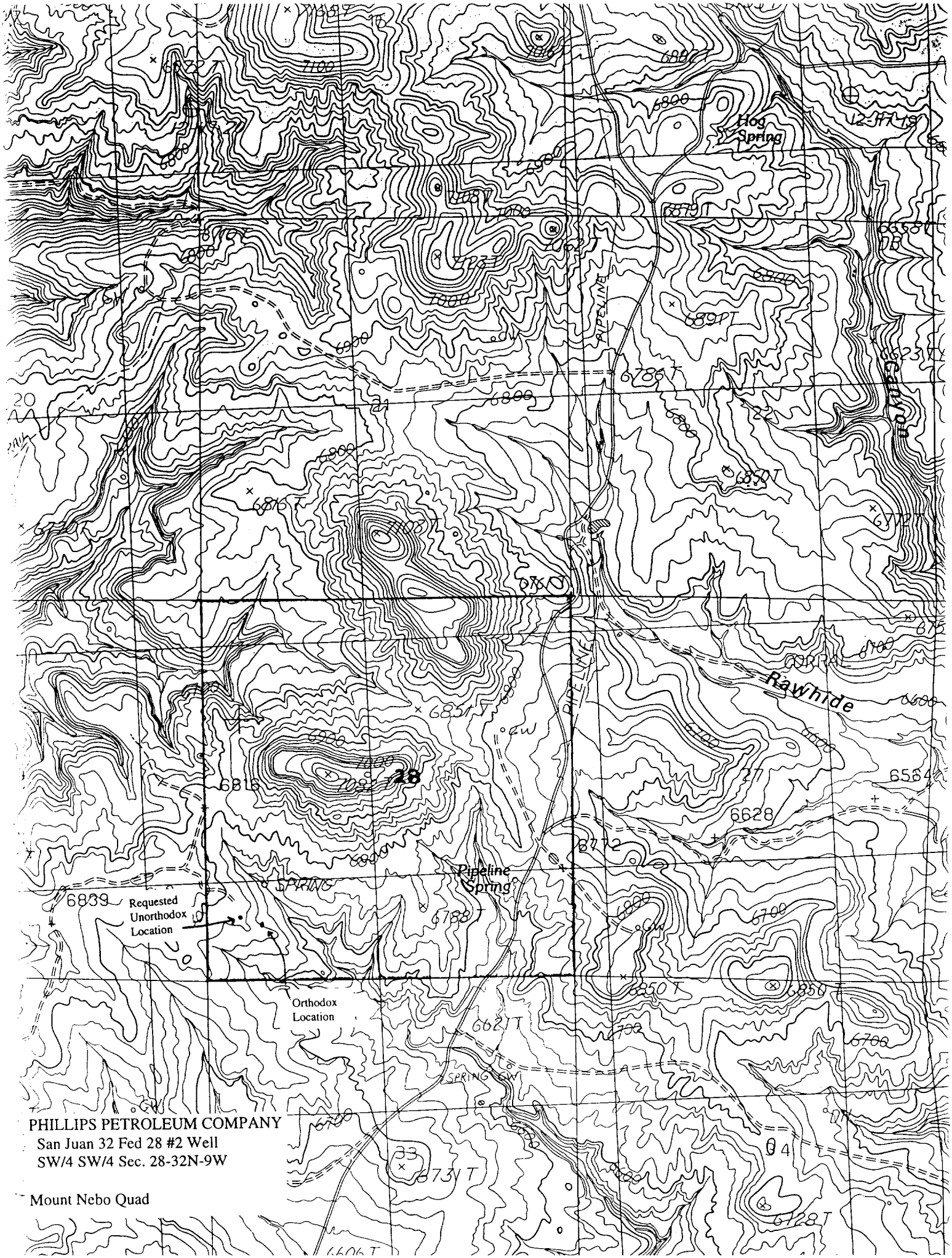
Phillips Petroleum Company

AREA Owner Data

COUNTY _____ STATE _____ JOB P7410369 USR00235

SCALE 1" = 2000 FEET

SCALE (FEET)



PHILLIPS PETROLEUM COMPANY
San Juan 32 Fed 28 #2 Well
SW/4 SW/4 Sec. 28-32N-9W

Mount Nebo Quad

PO Box 1980, Hobbs, NM 88241-1980
District II
811 South First, Artesia, NM 88210
District III
1000 Rio Brazos Rd., Aztec, NM 87410
District IV
2040 South Pacheco, Santa Fe, NM 87505

State of New Mexico
Energy, Minerals & Natural Resources De[illegible]ment

OIL CONSERVATION DIVISION
2040 South Pacheco
Santa Fe, NM 87505

Form C-1
Revised October 18, 19
Instructions on ba
Submit to Appropriate District Offi
State Lease - 4 Copi
Fee Lease - 3 Copi

☐ AMENDED REPOR

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number	² Pool Code	³ Pool Name
	72319	Blanco Mesaverde

⁴ Property Code	⁵ Property Name	⁶ Well Number
007473	SAN JUAN 32 FED 28	2

⁷ OGRID No.	⁸ Operator Name	⁹ Elevation
017654	PHILLIPS PETROLEUM COMPANY	6781'

¹⁰ Surface Location

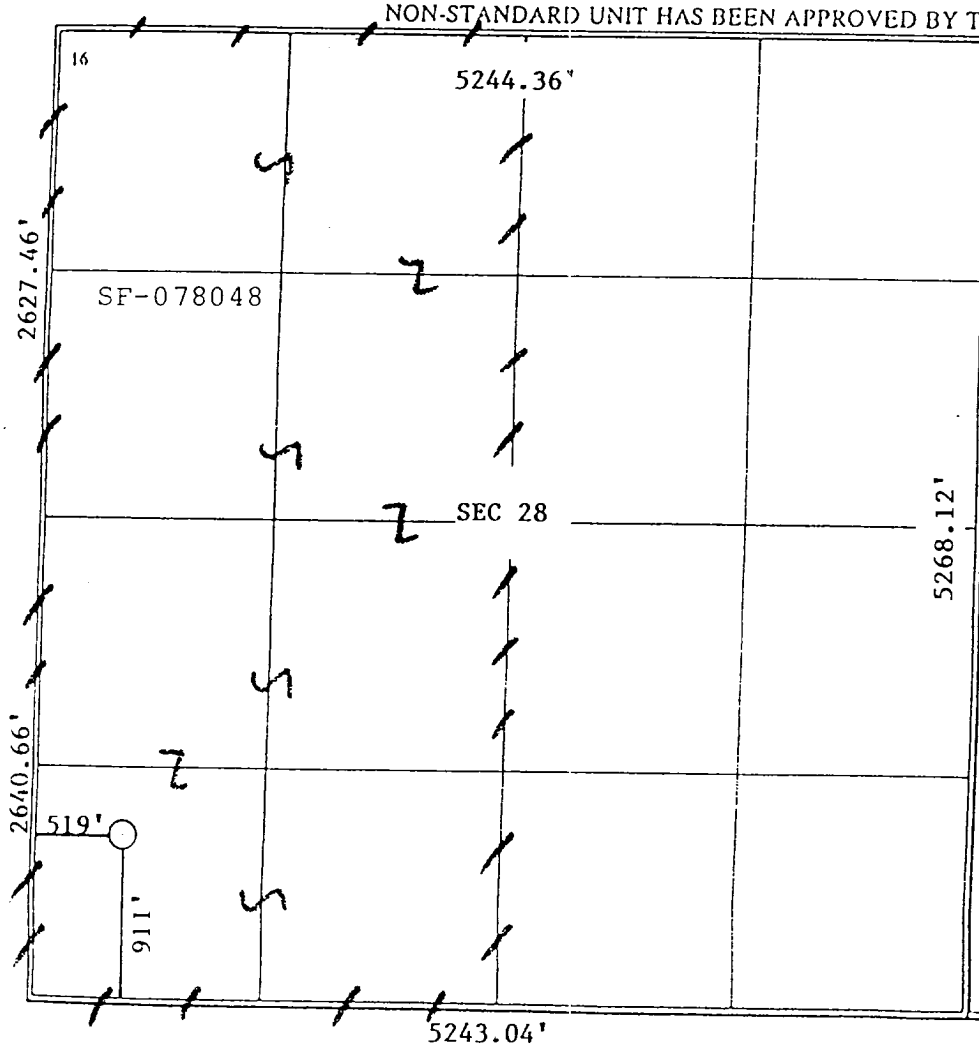
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
M	28	32N	9W		911'	SOUTH	519'	WEST	SAN JUAN

¹¹ Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
M									

¹² Dedicated Acres	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.
317.78	N	None	

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION



¹⁷ OPERATOR CERTIFICATION

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

Signature
Richard A. Allred
Printed Name
Drilling Superintendent
Title
January 2, 1998
Date

¹⁸ 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 belief.

11/19/97
Date of Survey

Signature and Seal of Professional Surveyer:

HENRY P. BROADHURST JR. NEW MEXICO 11393 REGISTERED PROFESSIONAL SURVEYOR

Certificate Number

Form 3160-3
(July 1992)

SUBMIT IN TRIPLICATE*
(Other instructions on reverse side)

FORM APPROVED
OMB NO. 1004-0136
Expires: February 28, 1995

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR DEEPEN

5. LEASE DESIGNATION AND SERIAL NO.: SF-079048

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

1a. TYPE OF WORK: DRILL [X] DEEPEN [ ]

7. UNIT AGREEMENT NAME: San Juan 32 Fed 28

b. TYPE OF WELL: OIL WELL [ ] GAS WELL [X] OTHER — SINGLE ZONE [X] MULTIPLE ZONE [ ]

8. FARM OR LEASE NAME, WELL NO.: SJ 32 Fed 28 #2 MV

2. NAME OF OPERATOR: Phillips Petroleum Company

9. API WELL NO.: 30-045-

3. ADDRESS AND TELEPHONE NO.: 5525 Highway 64, NBU 3004, Farmington, NM 87401 505-599-3454

10. FIELD AND POOL, OR WILDCAT: Blanco Mesaverde

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*)
At surface: Unit M, 911' FSL & 519' FWL,
At proposed prod. zone: Same as above

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA: Sec. 28, T32N, R9W

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*: 13 miles Northwest of Aztec, NM

12. COUNTY OR PARISH: San Juan

13. STATE: NM

15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any): 519'

16. NO. OF ACRES IN LEASE: 2080.00

17. NO. OF ACRES ASSIGNED TO THIS WELL: 317.78 W/2

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

19. PROPOSED DEPTH: 6500'

20. ROTARY OR CABLE TOOLS: Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.): Unprepared ground level - 6781'

22. APPROX. DATE WORK WILL START*: March 1, 1998

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	GRADE, SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
12-1/4"	9-5/8"	36#, J/K-55	+/- 350'	170 sx Cl B
8-3/4"	7"	20#, J/K-55	4100'	L-400 sx 65/35 POZ; T-150 sx Cl B
6-1/4"	4-1/2"	10.5# J-55	3900' - 6500'	L-325 sx 50/50 POZ; T-25 sx Cl B *

* Cement for the surface and intermediate casing will be circulated to the surface. The 4-1/2" casings' cement is designed to cover openhole section (with 30% excess) & 100' inside the 7" shoe (with 10% excess).

See the Drilling Prognosis for details on the cement and mud programs.

See attached for details on BOP Equipment and Cathodic Protection.

See attached survey for details on the access road.

The pipeline company has not been selected to date. As soon as details are worked out, the pipeline survey will be submitted.

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen, 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 Tracy Clugston TITLE Regulatory Assistant DATE 1-7-98

(This space for Federal or State office use)

PERMIT NO. _____ APPROVAL DATE _____

Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

CONDITIONS OF APPROVAL, IF ANY:

APPROVED BY _____ TITLE _____ DATE _____

*See Instructions On Reverse Side

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

District I
PO Box 1980, Hobbs, NM 88241-1980
District II
811 South First, Artesia, NM 88210
District III
1000 Rio Brazos Rd., Aztec, NM 87410
District IV
2040 South Pacheco, Santa Fe, NM 87505

State of New Mexico
Energy, Minerals & Natural Resources De ent

OIL CONSERVATION DIVISION
2040 South Pacheco
Santa Fe, NM 87505

Form C-1
Revised October 18, 19
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State Lease - 4 Cop.
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☐ AMENDED REPOR

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007473	SAN JUAN 32 FED 28	2

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017654	PHILLIPS PETROLEUM COMPANY	6781'

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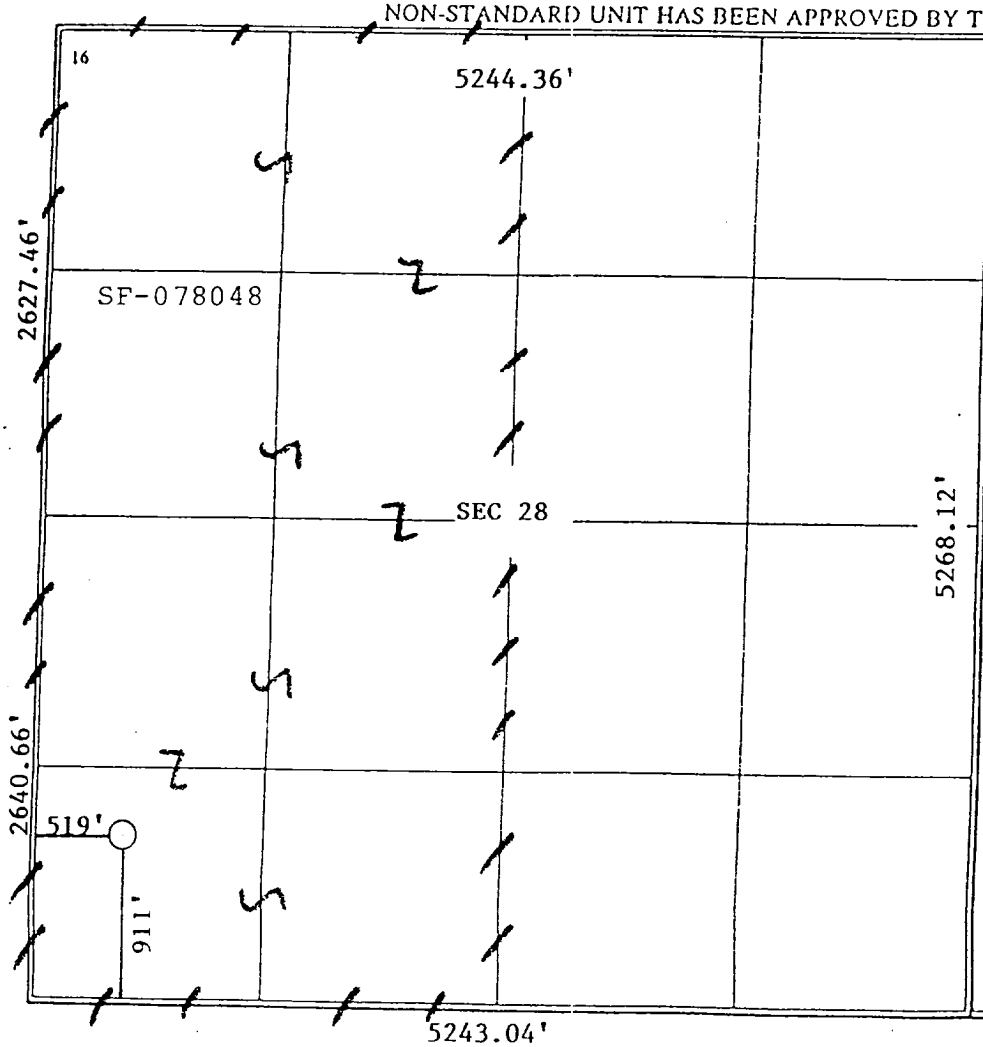
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
M									

¹² Dedicated Acres	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.
317.78	N	None	

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION



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

Signature
Richard A. Allred
Printed Name
Drilling Superintendent
Title
January 2, 1998
Date

¹⁸ SURVEYOR CERTIFICATION

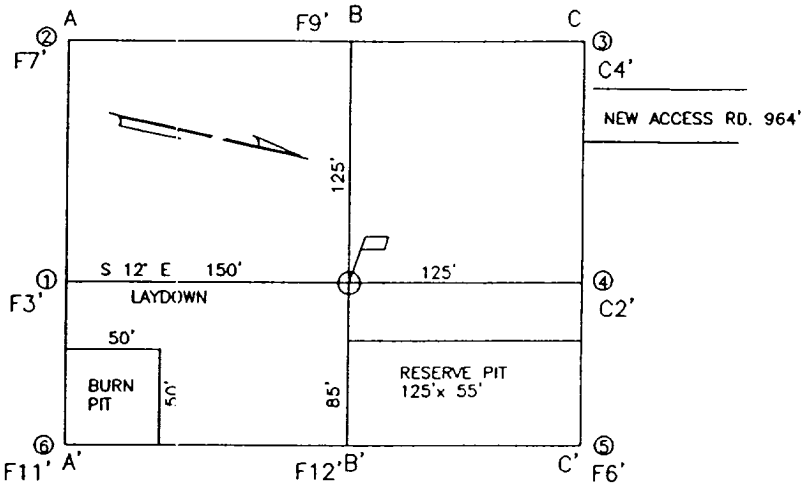
I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.

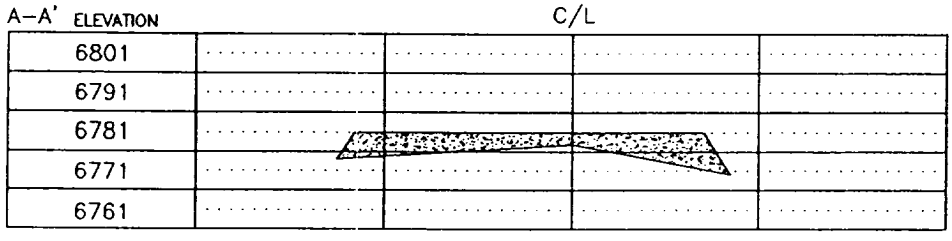
11/19/97
Date of Survey

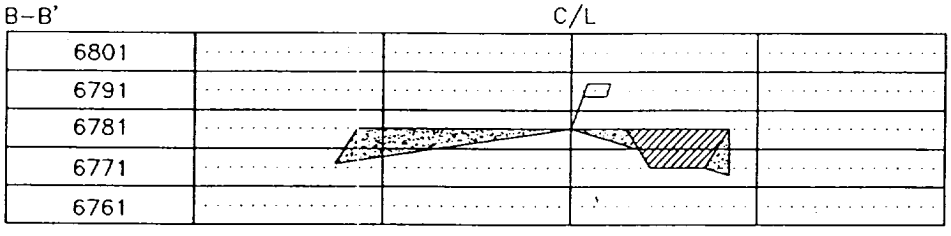
Signature and Seal of Professional Surveyer:

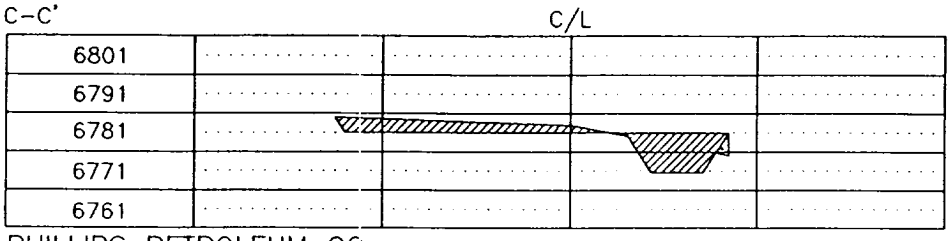
HENRY P. BROADHURST, JR. NEW MEXICO 11123 REGISTERED PROFESSIONAL SURVEYOR

Certificate Number









COMPANY: PHILLIPS PETROLEUM CO.

LEASE: SAN JUAN 32 FED 28 #2MV

FOOTAGE: 911 FSL 519 FWL

SEC. 28 TWN. 32 N RNG. 9 W N.M.P.M.

COUNTY, SAN JUAN STATE, N.M.

ELEVATION: 6781

LATITUDE: 36-57-04

LONGITUDE: 107-47-30

PHILLIPS PETROLEUM CO.
FARMINGTON, NEW MEXICO

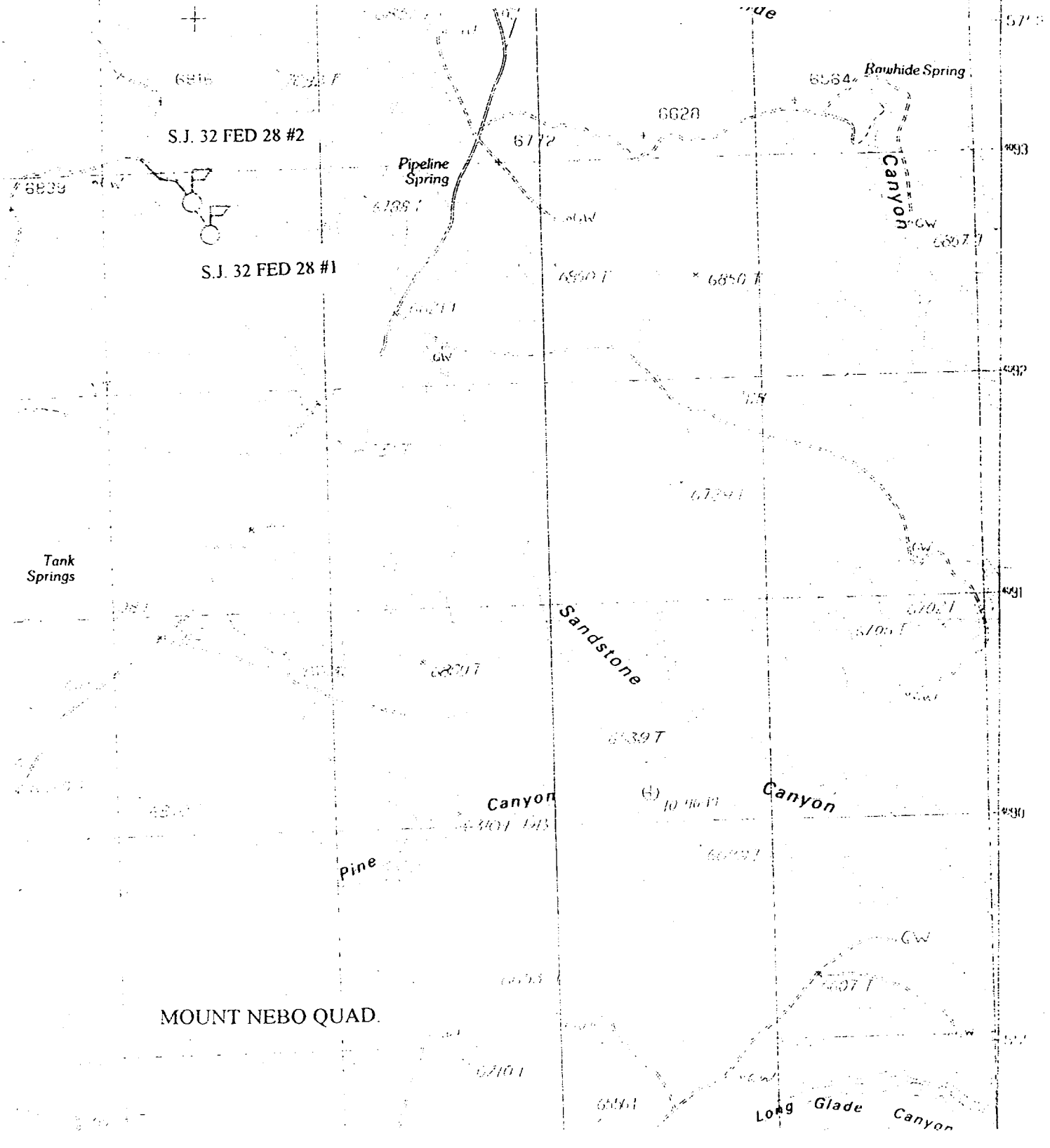
SURVEYED: 11/19/97	REV. DATE: 12/22/97	APP. BY H.B.
DRAWN BY: S.B.	DATE DRAWN: 12/03/97	FILE NAME: P28#2CF

UNITED FIELD SERVICES INC.

P.O. BOX 3651
FARMINGTON, NM 87499
OFFICE: (505)325-5319

PHILLIPS PETROLEUM CO.
SAN JUAN 32 FED 28 UNIT #1
SW/4 SW/4 SEC.28, T.32 N., R.9 W., N.M.P.M.,
SAN JUAN COUNTY, NEW MEXICO

PHILLIPS PETROLEUM CO.
SAN JUAN 32 FED 28 UNIT #2
SW/4 SW/4 SEC.28, T.32 N., R.9 W., N.M.P.M.,
SAN JUAN COUNTY, NEW MEXICO



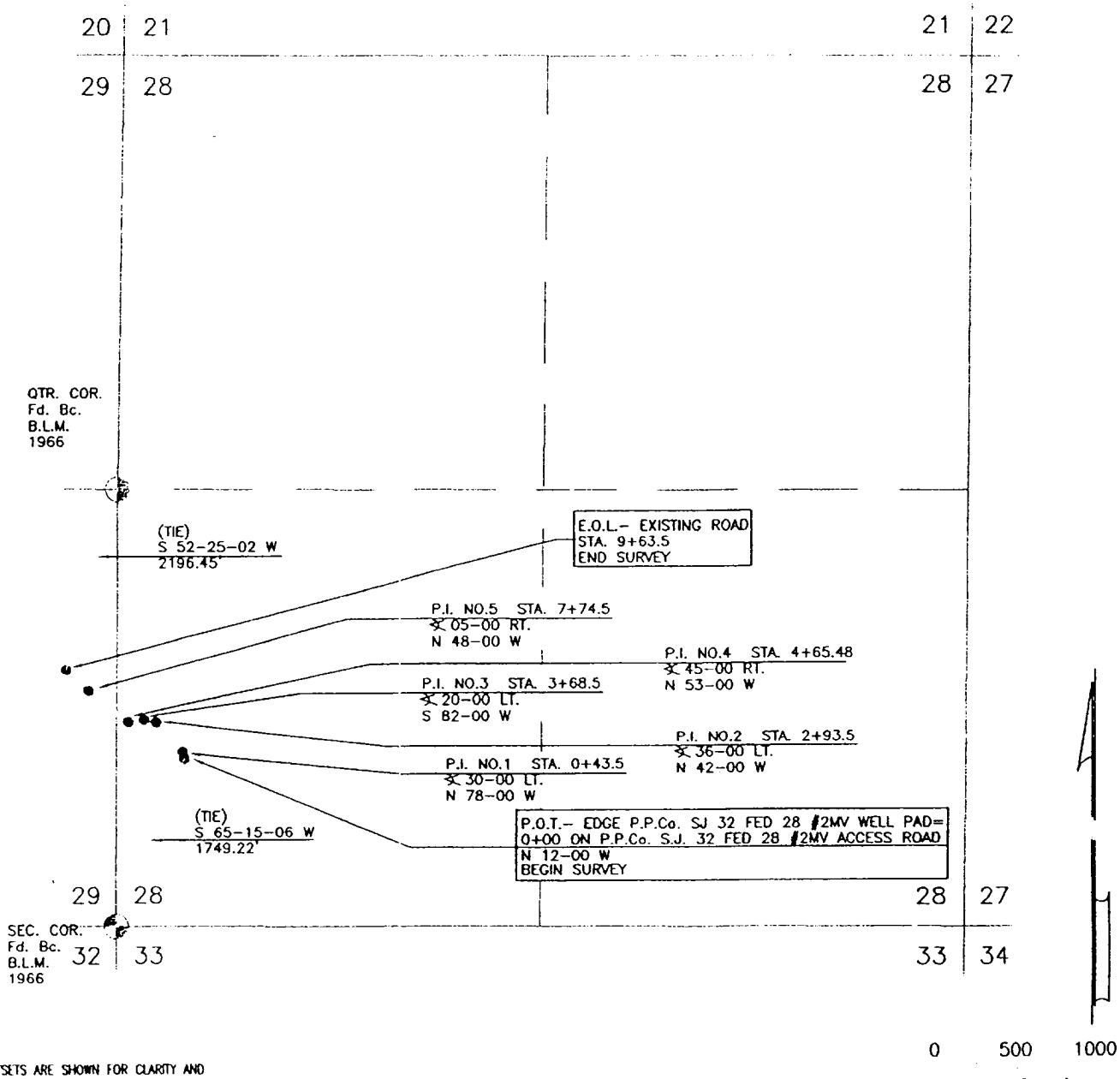
MOUNT NEBO QUAD.

A SURVEY FOR

PHILLIPS PETROLEUM CO.

SAN JUAN 32 FED 28 #2MV ACCESS ROAD

SW/4 SEC.28, SE/4 SEC.29, T.32 N., R.9 W., N.M.P.M.,
SAN JUAN COUNTY, NEW MEXICO



1. OFFSETS ARE SHOWN FOR CLARITY AND ARE NOT TO SCALE.

2. BASIS OF BEARING: SOLAR OBSERVATION

OWNERSHIP	FOOTAGE	FT/RODS
B.L.M.	0+00 TO 9+63.5	963.5/ 58.39

I, HENRY P. BROADHURST, JR. A DULY QUALIFIED LAND SURVEYOR LICENSED UNDER THE LAWS OF THE STATE OF NEW MEXICO, DO HEREBY CERTIFY THAT THIS PLAT CORRECTLY REPRESENTS A SURVEY MADE BY ME OR UNDER MY DIRECT SUPERVISION AND THAT THIS SURVEY MEETS THE AMENDED MINIMUM STANDARDS FOR LAND SURVEYING IN NEW MEXICO.

HENRY P. BROADHURST, JR. DATE
STATE OF NEW MEXICO PLS #11393

PHILLIPS PETROLEUM CO.
FARMINGTON, NEW MEXICO

SURVEYED: 11/19/97	REV. DATE: 12/22/97	APP. BY H.B.
DRAWN BY: S.B.	DATE DRAWN: 12/2/97	FILE NAME: P329282

UNITED FIELD SERVICES INC.

P.O. BOX 3651
FARMINGTON, NM 87499
OFFICE: (505)325-5319

SURFACE USE PLAN

Phillips Petroleum Company, San Juan 32 Fed 28, Well No. 2 MV, SW/4 SW/4, Section 28, T32N, R9W, San Juan County, New Mexico. (Federal Lease No. SF-079048).

This plan is to accompany "Application for Permit to Drill" the subject well which is located approximately 13 miles northwest of Aztec, 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 Aztec, NM on US 550 and go north 4 miles. Turn right on Hart Canyon Rd., go 6 ½ miles then left on Arkansas Loop Rd 7 miles. Turn left (west) 1 ½ miles turn right (north) ½ mile, turn right (east) ¼ mile to location.

2. **Planned Access Roads:**
   A. The access road is shown on the attached map. 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 the well site.
   E. Gates, Cattleguards, Fences: As required
   F. Proposed Road: 964' of new access is needed.
   G. Drainage: As needed, 3:1 cut & fill slopes.

3. **Location of Existing Wells:** #226, NE/4 of Sec. 32, T32N, R9W
   #37, NE/4 of Sec. 32, T32N, R9W
   #283, sw/4 of Sec. 33, T32N, R9W
   #1, SE/4 of Sec. 29, T32N, R9W (P&A- 1992)

4. **Location 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. The condensate tank 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. 2 MV is to run from a measurement point to a point on the access road which is approximately 1/5th a mile away.

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

6. **Source of Construction Materials:**

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

7. **Methods for Handling Waste Disposal:**

A. A Conventional Drilling System will be used. 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 backfilled and leveled as soon as practical.

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 application 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, and reserve pit. Location will be 275' X 210'.

10. **Plans for Restoration of Surface:**

Pit will be filled and leveled as soon as practical. If well is productive, drilling pad will remain as well service pad. If dry hole, the pad will be ripped and re-seeded per regulations. Reserve 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
E. Ponds and Streams: See Archaeological Survey
F. Water Wells: No water wells are located in Section ___
G. Residences and Buildings: There are no occupied residences or buildings within one quarter of a mile of the proposed well location.

11. **Other Information:** (cont.)

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 Representives:** Field personnel who can be contacted concerning compliance of the Surface Use Plan" is as follows:

Drilling and Production

W. D. Jaap	or	R. A. Allred
5525 Hwy. 64		5525 Hwy. 64
Farmington, NM 87401		Farmington, NM 87401
Phone: 505-599-3485		Phone: 505-599-3403

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.

R. A. Allred
Typed or Printed Name

R A Allred
Signature

1-6-98
Date

98drill\32fed28#2sup

PHILLIPS PETROLEUM COMPANY

WELL NAME: San Juan 32 Fed 28 Well No. 2 MV

DRILLING PROGNOSIS

1. Location of Proposed Well: Unit M, 911' FSL & 519' FWL
Section 28, T32N, R9W, San Juan County, NM

2. Unprepared Ground Elevation: @ 6781' (unprepared).

3. The geological name of the surface formation is San Jose.

4. Type of drilling tools will be rotary.

5. Proposed drilling depth is 6500'.

6. The estimated tops of important geologic markers are as follows:

Ojo Alamo -	2010'	Cliff House -	5600'
Fruitland -	3250'	Pt. Lookout -	5695'
Pictured Cliffs -	3660'	Greenhorn -	6500' (TD)
Lewis Shale -	3860'		

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 - 2010- 2120'
Gas & Water:	Fruitland - 3400' - 3650'
Gas:	Mesaverde - 5600' - TD

8. The proposed casing program is as follows:

Surface String: 9-5/8", 36#, J/K-55 @ 350'
Intermediate String: 7", 20#, J/K-55 @ 4100'
Production String: 4-1/2", 10.5#, J-55 @ 3900' - TD

9. Cement Program:
Surface String: 170 sx Cl "B" with 2% $CaCl_2$ + 1/4#/sx Cello-Flake:
15.6 ppg, 1.2 cu. ft/sx yield . (204 cf) 5.23 gal H_2O sx. or sufficient to circulate to surface.

Intermediate String: **Lead Cement:** 400 sx. 65/35 (Cl "B"/POZ) with 5#/sx Gilsonite & 1/4 #/sx Cello-Flake & 12#/sx gel; 12 ppg, 2.2 cu. ft/sx yield, (880 cf) 11.9 gal H2O sx.

Tail: 150 sx.(+/-) Cl "B" with ¼ #/sx Cello-Flake, 5# sx Gilsonite, & 0.3% FL-62 & 2% $CaCl_2$; 15.6 ppg, 1.2 cu. ft./sx yield (180 cf); 4.7 gal H2O sx. or quantity sufficient to circulate cement to surface.

Centralizer Program:

Surface: Total three (3) - one at shoe & one at 2nd & 6th Jts.

Intermediate: Total seven (7) - one at shoe, 2 @ jt 3 - 7 and opposite significant formations per geologist.

Turbulators: Total Three (3) - one at 1 jt below Ojo Alamo; 2 & 3 next 2 jts up.

Production String:

1st Stage: Lead 325 sx (+/-) 50/50 (Cl "B"/POZ) with 4# /sx Gel, ¼#/sx Celloflake, 3% FL-52, 2% KCl, 8#/sx Hi-seal @ 13 ppg & 1.5 ft3/sx. (487.5 cf)

Tail 25 sx (+/-) Class B w/ ¼#/sx CelloFlake.; yield 1.18ft3/sx (28cf)

2nd Stage: Lead _____

Tail _____

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. Drilling Mud Prognosis: Surface - spud mud on surface casing.
Intermediate - water w/Polymer sweeps.
Below Intermediate - air drilled.

12. The testing, logging, and coring programs are as follows:
D.S.T.s or cores: _____
Logs: GR-CAL-FDC-CNL - Temperature - DIL

13. Anticipated no abnormal pressures or temperatures to be encountered or any other potential hazards such as Hydrogen Sulfide Gas. Low risk H_2S equipment will be used.

Estimated Bottomhole pressures:
Fruitland - 600 psi
Mesaverde - 1300 psi

14. The anticipated starting date is approximately March 1, 1998 with duration of drilling / completion operations for approximately 20 days thereafter.

98drill\32fed28#2mvprg

SJ 32 Fed 28 #2 MV
SF-079048; Unit M, 911' FSL & 519' FWL
Section 28, T32N, R9W; San Juan County, NM

Cathodic Protection

Phillips proposes to drill a cathodic protection deep well groundbed for the subject well. Will drill a 6-7/8" hole to an anticipated minimum depth of 300' (maximum depth of 500'). Cement plugs will not be used unless more than one water zone is encountered. Prior drilling history for the area indicates only one zone to that depth. If more than one water zone is encountered, notification will be made and details of cement and casing will be provided.

All drilling activity will remain on existing well pad and "Tierra Dynamic Company" of Farmington will be doing the drilling for Phillips.

BOP AND RELATED EQUIPMENT CHECK LIST

3M SYSTEM:

2 hydr. rams (pipe & blind) or hydr. ram and annular with blind ram on bottom

Kill Line (2-inch minimum)

1 kill line valve (2-inch minimum)

1 choke line valve

2 chokes (refer to diagram in attachment 1) on choke manifold

Upper kelly cock valve in open position with handle available

Safety valve (in open position) and subs to fit all drill strings in use (with handle available)

Pressure gauged on choke manifold

2 inch minimum choke line

Fill-up line above the uppermost preventer

The BOPs will be pressure tested according to Onshore Order #2 III, A 1 and 30% safety factor.

ATTACHMENT 1

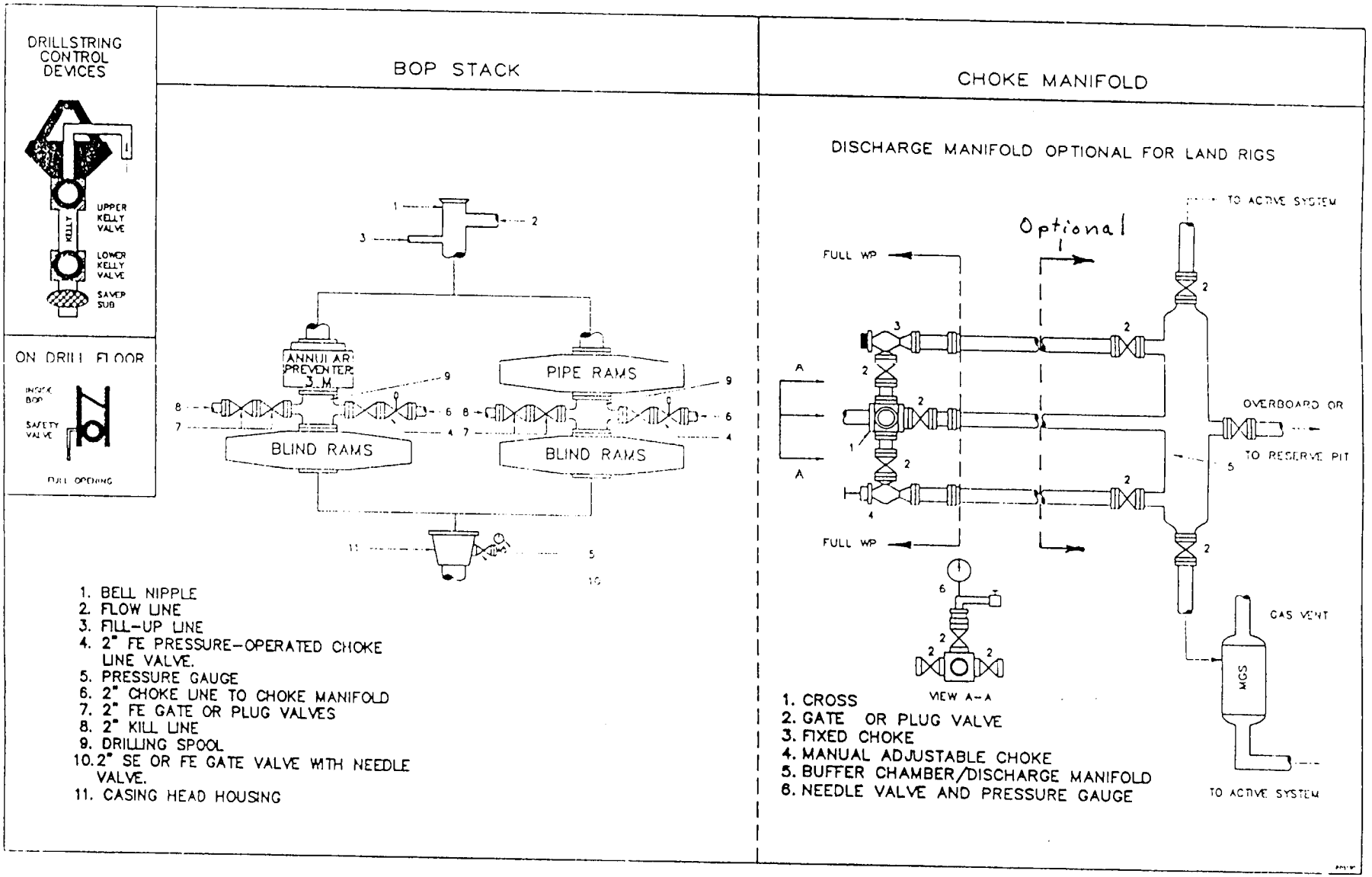


Fig. 2.4. Class 2 BOP and Choke Manifold.

2.8 TESTING BLOWOUT PREVENTER EQUIPMENT

2.8.1 Pressure Test Frequency

All rams, annulars, valves, choke and kill lines, choke manifold, kelly valves, and safety valves should be pressure tested at the following frequencies:

1. On installation of blowout preventers.

2. After setting casing and before drilling cement.

3. Every 7 days or on first trip out of hole after 7 days since previous pressure test.

4. After any component of the blowout preventer assembly is disassembled, replaced, or repaired (this includes lines, valves, or choke manifold). In this case, the component changed may be the only component tested.

5. Any time the Wellsite Supervisor requests testing.

6. In addition to the above tests, **subsea BOPs** shall be tested on test stump, prior to installation or reinstallation of the blowout preventer assembly. Operating chambers are to be tested in addition to all pipe rams, valves etc.

2.8.2 Function Test Frequency

Surface BOPS

All rams, annulars, valves, and other items specified below, should be function-tested at the following intervals:

1. On initial installation from all control panels.

2. After each trip out of hole alternating between driller's and remote control panel but not more than once every twenty-four (24) hours. Close pipe/blind rams only.

   NOTE: Pipe rams will only be closed with pipe in the hole.

Sub-Surface BOPs

All rams, pipe ram locks, fail-safe valves, or other subsea items specified below should be function-tested at the following intervals:

1. Prior to running the assembled blowout preventer stack, function test all components with both control pods from the driller's and remote control panels.

2. After initial installation of the blowout preventer stack or after any control components have been repaired or replaced. Function test all components, except wellhead connector, using both control pods from the driller's and remote control panels.

3. Blind/shear rams each trip out of the hole alternating between the driller's and remote control panels.

   NOTE: Do not leave blind/shear rams closed while out of the hole.

2.8.3 Test Pressures

The following Tables 2.3 and 2.4 shall be used to identify which test is appropriate and at what pressure shall be applied for surface and subsea BOPs.

Table 2.3
SURFACE BOPE PRESSURE TEST

TEST	INTERVAL
Low Pressure	Test to 200-300 psi prior to each high pressure test.
Initial Installation	Test all rams, annulars, valves, choke manifold, kelly valves, and safety valves to the lesser of the following pressures. • Rated working pressure of the component in the blowout preventer assembly with the exception of annular preventer which is to be tested to 70% of the rated working pressure. • The API rated casing burst pressure of the last casing to be utilized in the well with the BOP assembly being tested. • Rated working pressure of the casing head. • If "Cup Tester" is used, do not exceed 80% of the API rated burst pressure of the casing.
Repair	Repaired or replaced components are to be tested to the same pressures used in the Initial Test.
Subsequent Test and After Setting Casing	Test all rams, annulars, valves, choke and kill lines, choke manifold, kelly valves, and safety valves, to the lesser of the following pressures. • 50% of the rated working pressure of the component to be tested. • 80% of the API rating of the casing burst pressure then in the well. • Test blind rams during internal casing pressure test. (Refer to drilling program for test pressures.)
Accumulator and BOP Operating Chambers	Test to the manufacturer's rated working pressure, with a fluid that meets or exceeds the manufacturer's recommended practices. Test the accumulator for time to pump up to specifications. A accumulator performance test as per Section 2.8.7 should be performed on initial installation and subsequently as deemed necessary.

Table 2.4
SUBSURFACE BOPE PRESSURE TEST

TEST	INTERVAL
Low Pressure	Test to 200-300 psi prior to each high pressure test.
Test Stump	Test all rams, annulars, fail-safe valves, operating chambers, choke manifold, kelly valves, and safety valves to the lesser of the following pressures. • Rated working pressure of the component in the blowout preventer assembly with the exception of annular preventer which is to be tested to 70% of the rated working pressure. • The API rated casing burst pressure of the last casing to be utilized in the well with the BOP assembly being tested.
Initial Installation	Test connector seal, choke line, and kill line to that pressure specified for testing the pipe rams during the stump test. Test remainder of the BOP stack to that pressure specified during weekly tests.
Repair Test	Same as Stump Test. Surface component repairs or replacements can be tested separately.
Subsequent Test and After Setting Casing	Test all rams, annulars, fail-safe valves, choke and kill lines, choke manifold, kelly valves, and safety valves, to the lesser of the following pressures: • 50% of the rated working pressure of the component to be tested. • 80% of the API rating of the casing burst pressure then in the well. • Test blind rams during internal casing pressure test. (Refer to drilling program for test pressures).

NOTE: When testing Subsea BOPs, the actuating pressure on the ramlocks should be bled prior to testing the rams. In a drive-off situation there would be no pressure on these wedgelocks. Wedgelocks do not always work, and wear could result in loss of ability to hold pressure.

2.8.4 Blowout Preventer Test Practices

All pressure tests shall be witnessed by Wellsite Supervisor on location. Charts shall be certified by the Wellsite Supervisor. All tests shall be recorded on Phillips' Daily Drilling Report, the IADC Report, and the Phillips BOP Test Form. A reproducible copy of the Phillips BOP Test Forms can be found in Chapter 9.

Drilling Contractor form can be acceptable if comparable to the Phillips BOP form.

Hold all low-pressure tests for three minutes and high pressure tests for ten minutes or until the Wellsite Supervisor is satisfied that there are no leaks.

The following items should be addressed:

1. Prior to testing, all lines and valves will be thoroughly flushed to ensure that the system is clear. Test all opening and closing control lines to 1500 psi and inspect for leaks.

2. If necessary, run a stand of drill collars below the test plug to properly seat the test tool.

3. Precautions should be taken to avoid pressuring the casing below the test tool.

4. The running string is to be full of fluid (or antifreeze solution) for immediate indication of test tool leakage.

5. All pipe rams, blind/shear rams, blind rams, annular preventers, valves, fail-safe valves, choke and kill lines are to be tested at the frequencies and pressures outlined in this section.

6. Drillpipe safety valve and lower and upper kelly valves, inside BOP are to be tested from below at pressures and frequencies outlined in this section.

7. Test fluids are to be bled back to pump unit in a safe manner.

WATER SUPPLY SOURCE
Surface Use Plan

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, T29N, R9W.
2. 29-6 Waterhole in Unit L, Section 28, T29N, R6W.
3. Navajo Reservoir, SW NW SE Section 14, T30N, R7W.
4. Sims Mesa (SJ #14) NW SW Section 35, T31N, R7W.
5. La Jara Water Hole, Unit M, Section 11, T30N, R6W.
6. Pine River
7. City of Ignacio, CO.
8. Produced Water
9. City of Aztec, NM.