Form 3160-3
(August 1999)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
OMB NO. 1004-0136
Expires: November 30, 2000

APPLICATION FOR PERMIT TO DRILL OR REENTER

5. Lease Serial No.: SF-079012

1a. Type of Work: [X] DRILL [ ] REENTER

1b. Type of Well: [ ] Oil Well [X] Gas Well [ ] Other [ ] Single Zone [X] Multiple Zone

6. If Indian, Allotee or Tribe Name:

7. Unit or CA Agreement Name and No.: San Juan 31-6 Unit

2. Name of Operator: Phillips Petroleum Company

8. Lease Name and Well No.: SJ 31-6 Unit #4M

3a. Address: 5525 Highway 64, NBU 3004, Farmington, NM 87401

3b. Phone No. (include area code): 505-599-3454

9. API Well No.: 30-039- 26760

4. Location of Well (Report location clearly and in accordance with any State equirements)*

At surface: Unit J, 1980' FSL & 1627' FEL

At proposed prod. zone: Same as above

10. Field and Pool, or Exploratory: Blanco MV and Basin DK

11. Sec., T., R., M., or Blk. and Survey or Area: Section 4, T30N, R6W

14. Distance in miles and direction from nearest town or post office*: 22 miles NE of Blanco NM

12. County or Parish: Rio Arriba, 13. State: NM

15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drg. unit line, if any): 1627'

16. No. of Acres in lease: 2559.84 acres

17. Spacing Unit dedicated to this well: 320.00 ~~319.84~~ E/2 MV & DK

18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.:

19. Proposed Depth: 7996'

20. BLM/BIA Bond No. on file: ES0048

21. Elevations (Show whether DF, KDB, RT, GL, etc.: 6444' GL

22. Approximate date work will start*: 2nd Qtr 2001

23. Estimated duration: 20 days

JUN 2001
RECEIVED
OIL CON. DIV.
DIST. 3

24. Attachments

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No. 1, shall be attached to this form:

1. Well plat certified by a registered surveyor.
2. A Drilling Plan
3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO shall be filed with the appropriate Forest Service Office).
4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).
5. Operator certification.
6. Such other site specific information and/or plans as may be required by the authorized officer.

25. Signature: Patsy Clugston — Name (Printed/Typed): Patsy Clugston — Date: 5/24/01

Title: Sr. Regulatory/Proration Clerk

Approved by (Signautre): /s/ Lee Otteni — Name (Printed/Typed): — Date: JUN 21

Title: — Office:

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, are attached.

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowlingly 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.

*(Instructions on Reverse)

This action is subject to technical and procedural review pursuant to 43 CFR 3165.3 and appeal pursuant to 43 CFR 3165.4.

NMOCD

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 Department

OIL CONSERVATION DIVISION
2040 South Pacheco
Santa Fe, NM 87505

Form C-102
Revised October 18, 1994
Instructions on back
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

2001 MAY 24 PM 2:22 ☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number	² Pool Code	³ Pool Name
30-039-26760	72319	Blanco Mesaverde

⁴ Property Code	⁵ Property Name	⁶ Well Number
009259	SAN JUAN 31-6 UNIT	4M

⁷ OGRID No.	⁸ Operator Name	⁹ Elevation
017654	PHILLIPS PETROLEUM COMPANY	6444'

¹⁰ Surface Location

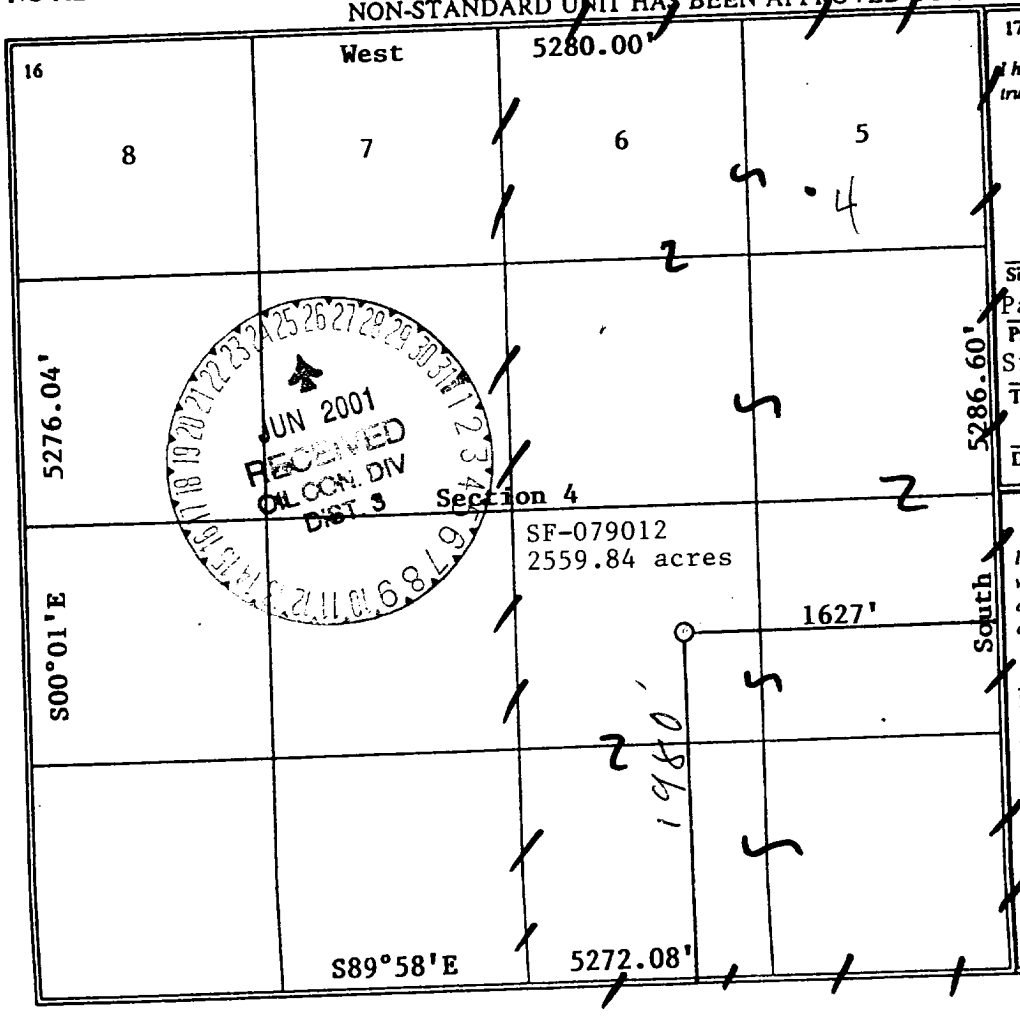
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
J	4	30N	6W		1980'	SOUTH	1627'	EAST	RIO ARRIBA

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
J									

¹² Dedicated Acres	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.
320 E/2	Y	U	

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: Patsy Clugston

Printed Name: Patsy Clugston

Title: Sr. Regulatory/Proration Clerk

Date: 2-26-01

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.

Date of Survey: 01/09/01

Signature and Seal of Professional Surveyer:

JEFFREY P. BROADHURST, JR. NEW MEXICO 11393 REGISTERED PROFESSIONAL SURVEYOR

Certificate Number

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
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☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

1 API Number	2 Pool Code	3 Pool Name
30-039-26760	71599	Basin Dakota

4 Property Code	5 Property Name	6 Well Number
009259	SAN JUAN 31-6 UNIT	4M

7 OGRID No.	8 Operator Name	9 Elevation
017654	PHILLIPS PETROLEUM COMPANY	6444'

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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
J									

12 Dedicated Acres	13 Joint or Infill	14 Consolidation Code	15 Order No.
~~319.04~~ 320 E/2	Y	U	

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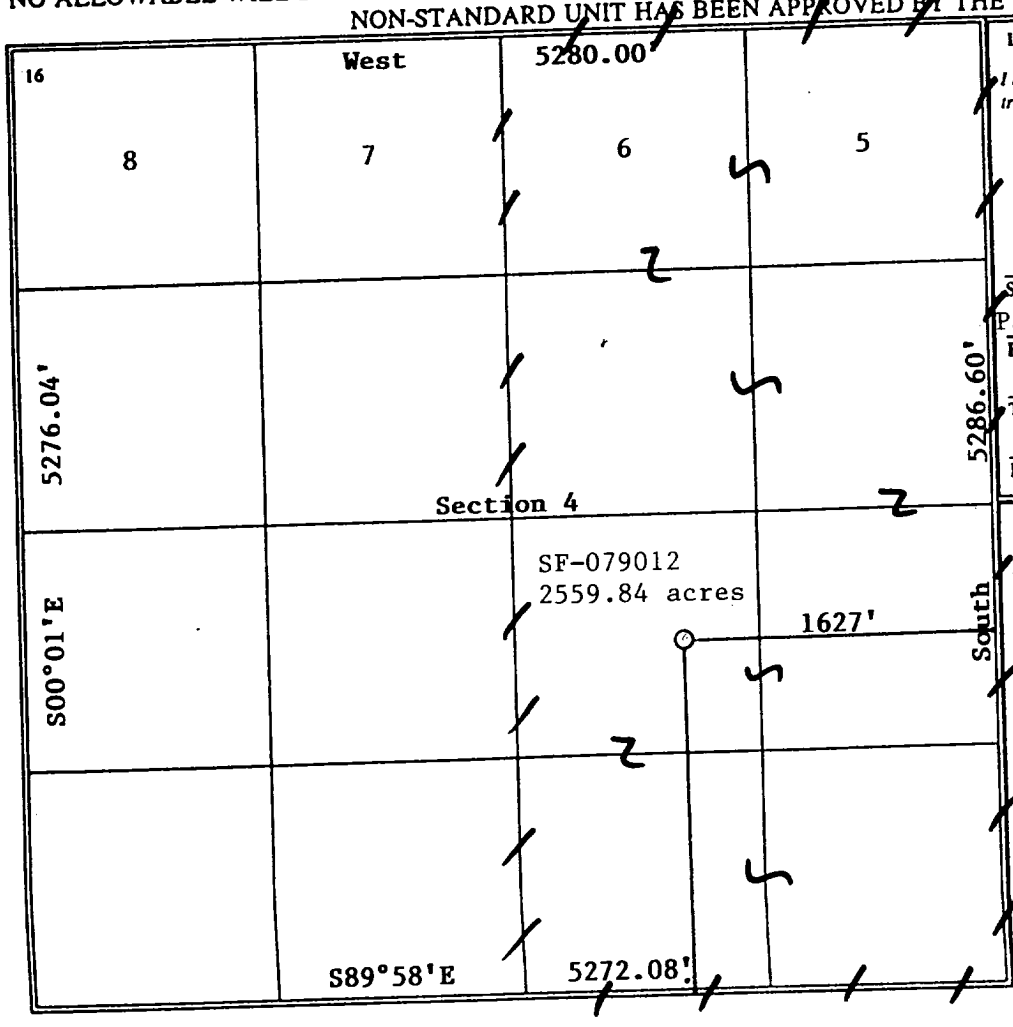

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Patsy Clugston
Signature

Patsy Clugston
Printed Name

Sr. Regulatory/Proration Clerk
Title

2-26-01
Date

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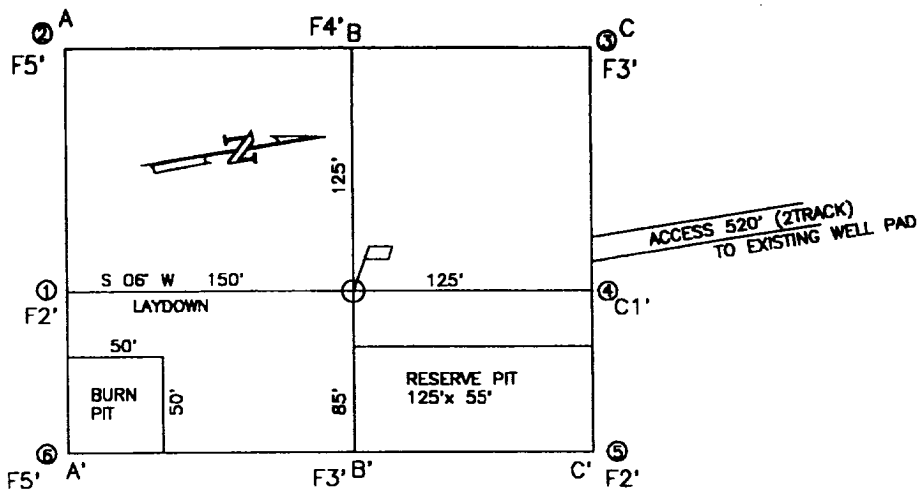
01/09/01
Date of Survey

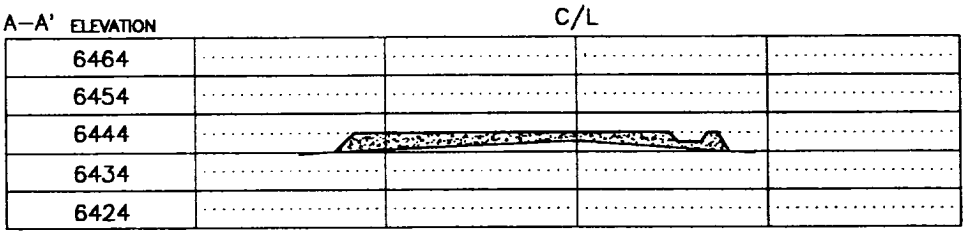
Signature and Seal of Professional Surveyer:

JERRY P. BROADHURST, JR. NEW MEXICO 11393 REGISTERED PROFESSIONAL SURVEYOR

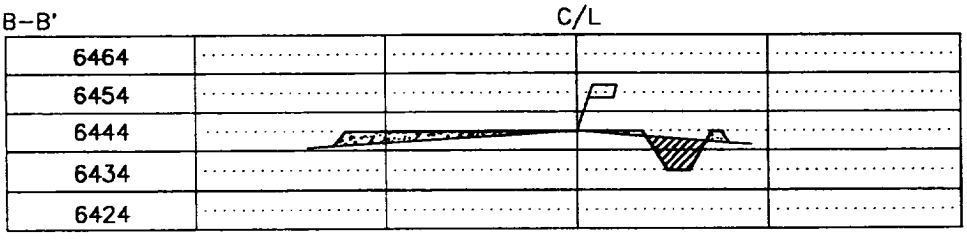
Certificate Number



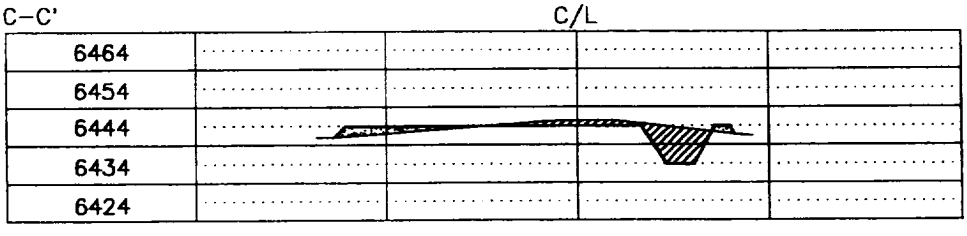
A–A' ELEVATION



B–B'



C–C'



COMPANY: PHILLIPS PETROLEUM CO.

LEASE: SAN JUAN 31–6 UNIT NO. 4M

FOOTAGE: 1980 FSL 1627 FEL UNIT J

SEC. 4 TWN. 30 N RNG. 6 W N.M.P.M.

COUNTY: RIO ARRIBA STATE: N.M.

ELEVATION: 6444

LATITUDE: 36–50–22

LONGITUDE: 107–27–52

PHILLIPS 66

PHILLIPS PETROLEUM CO.
FARMINGTON, NEW MEXICO

SURVEYED: 1/9/01	REV. DATE:	APP. BY
DRAWN BY: K.REA	DATE DRAWN: 1/12/01	FILE NAME: UF112

UNITED FIELD SERVICES INC.

P.O. BOX 3651
FARMINGTON, NM 87499
OFFICE: (505)334–0408

PHILLIPS PETROLEUM COMPANY

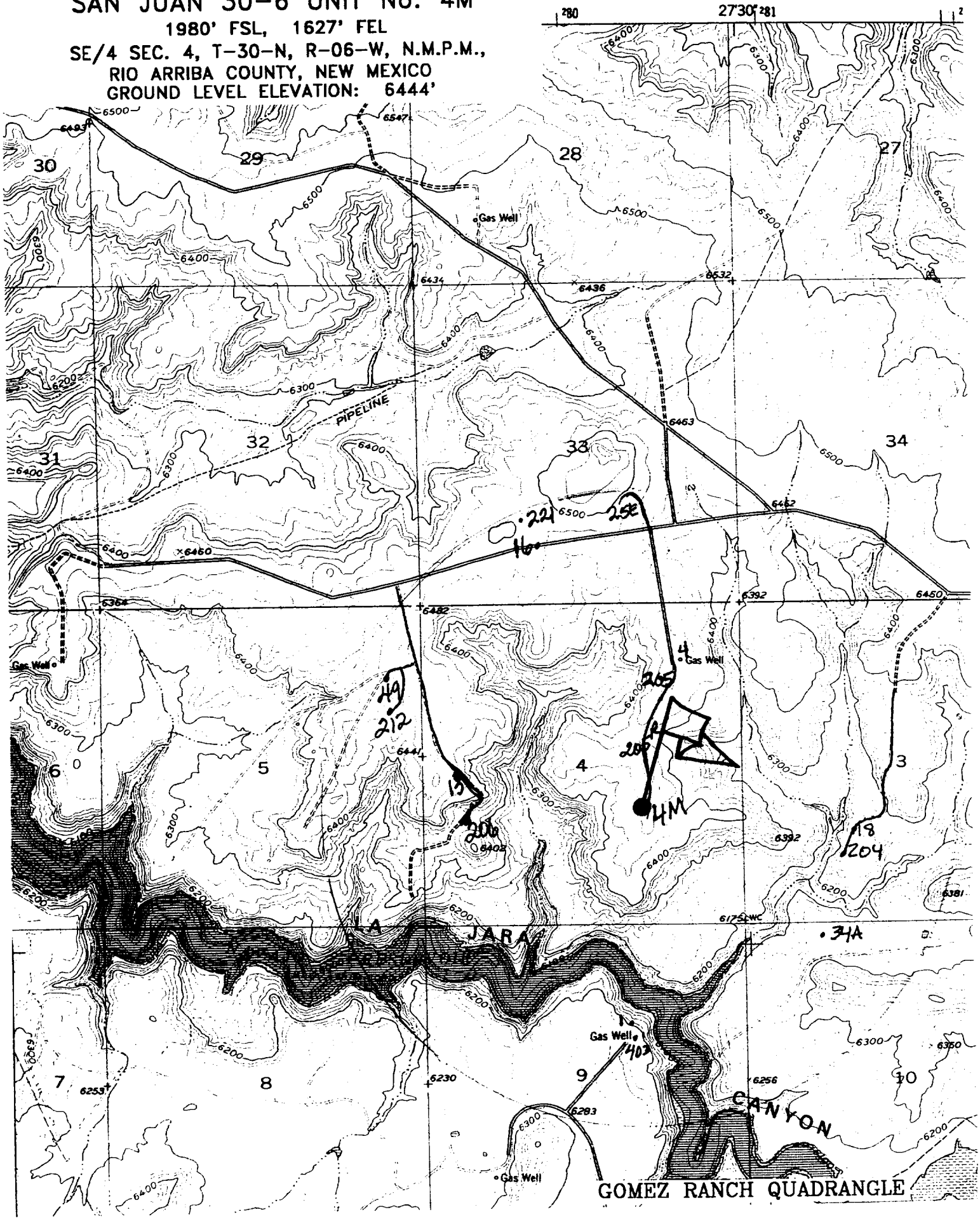
SAN JUAN 30-6 UNIT No. 4M

1980' FSL, 1627' FEL

SE/4 SEC. 4, T-30-N, R-06-W, N.M.P.M.,

RIO ARRIBA COUNTY, NEW MEXICO

GROUND LEVEL ELEVATION: 6444'



PHILLIPS PETROLEUM COMPANY

WELL NAME: San Juan 31-6 Unit #4M MV/DK

DRILLING PROGNOSIS

1. Location of Proposed Well: Unit J, 1980' FSL & 1627' FEL
   Section 4, T30N, R6W

2. Unprepared Ground Elevation: @ 6444' (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 7996'.

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

Naciamento - 1406'	Menefee Fm. - 5356'
Ojo Alamo - 2456'	Pt. Lookout - 5616'
Kirtland Sh - 2579'	Mancos Sh - 5941'
Fruitland Fm. -2945'	Gallup Ss. - 6856'
Pictured Cliffs - 3279'	Greenhorn Ls. - 7666'
Lewis Shale - 3492'	Graneros Sh. - 7731'
Cliff House Ss - 5276'	Dakota Ss - 7846'

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 - 2456' – 2579'
Gas & Water:	Fruitland - 2945' – 3279'
Gas:	Mesaverde - 5276' – 5941'
	Dakota - 7846' - 7996'

8. The proposed casing program is as follows:

Surface String: 9-5/8", 32.3#, H-40 @ 320'
Intermediate String: 7", 20#, J/K-55 @ 3617'
Production String: 4-1/2", 11.6#, I or N-80 @ 7996' (TD)

9. Cement Program:
   Surface String: 158.5 sx Type III cement with 2% bwoc CaCl2 + ¼#/sx Cello-flake mixed at 14.5 ppg with a 1.41 ft3/sx yield w/46.5% H2O or sufficient to circulate to surface – 223 cf.

Note: Cement slurry calculations based on cement to surface with 140% excess hole volume.

Intermediate String: **Lead Cement:** 433.0 sx Type III cement (35:65) POZ with 5#/sx Gilsonite, ¼#/sx Cello-flake, 6% bwoc gel (bentonite), 10#/sx CSE, 3% bwow KCL, 0.4% bwoc FL-25 mixed and 0.02#/sx Static Free mixed at 12.0 ppg with a yield of 2.37 ft3/sx – 1026 cf.

Tail Cement: 50 sx – Type III cement with ¼#/sx Cello-flake and 1% CaCl2 mixed at 14.5 ppg with a 1.40 ft3/sx yield (70 cf).

In the event we encounter fluid loss during drilling operations, a contingency plan for cementing the intermediate casing may require a stage collar. Phillips cannot predict exact volumes. However the 1st stage will be Cl H cement w/5#/sx Gilsonite, 0.25#/sx Cello-flake, 0.3% FL-25 & 2% CaCl2 mixed at 15.2 ppg 1.28 yield. Stage 2 - lead slurry: 65 % Class H & 35% POZ w/6% Bentonite mixed at 12.6 ppg 1.79 cf/sx Tail Slurry - Class H w/2% CaCl2 mixed at 15.6 ppg 1.20 yield. All attempt to be circulated to surface.

Production String

Lead: 343.8 sx Type III (35/65 POZ (Fly Ash) with 6% bwoc Bentonite, 10#/sx CSE, 0.2#/sx Static Free, 1% bwoc FL-52, 0.3% bwoc CD-32, 0.3% bwoc R-3 & 0.25#/sx Cello-Flake mixed at 12.3 ppg with a yield of 2.13 ft3/sx –732cf.

Note: The Production String casing cement is designed to cover openhole section (with 40% excess) and 100' inside the 7" shoe.

Note: Phillips Petroleum continually works to improve the cement slurries on our wells. BJ Services is currently trying to improve what we are using now and before we would use a new cement program it would have to have stronger properties than we are currently using.

Centralizer Program:

Surface: Total four (4) 1 @ 10' above shoe & top of 2nd, 4th & 6th joint

Intermediate: Total seven (7) – 10' above shoe, top of 1st, 2nd, 4th, 6th, & 8th jts & 1 jt. Above surface casing.

Production: None planned.

Turbulators: Total Three (3) – on intermediate casing at 1st jt. Below the Ojo Alamo and next 2 jts up.

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.

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.

drilling\BOPck.lst