

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

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

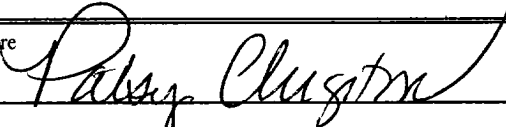
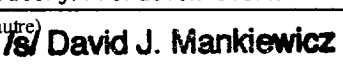
APPLICATION FOR PERMIT TO DRILL OR REENTER

1a. Type of Work <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No. NMSF0078995	
1b. Type of Well <input type="checkbox"/> Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other <input checked="" type="checkbox"/> Single Zone <input type="checkbox"/> Multiple Zone		6. If Indian, Allottee or Tribe Name	
2. Name of Operator Phillips Petroleum Company		7. Unit or CA Agreement Name and No. NMNM78421C	
3a. Address 5525 Highway 64, NBU 3004, Farmington, NM 87401		8. Lease Name and Well No. SJ 31-6 Unit #229R	
3b. Phone No. (include area code) 505-599-3454		9. API Well No. 30-039-26963	
4. Location of Well (Report location clearly and in accordance with any State requirements)* At surface Unit K. (NESW/4) 1902' FSL & 1772' FWL At proposed prod. zone Same as above		10. Field and Pool, or Exploratory Basin Fruitland Coal	
14. Distance in miles and direction from nearest town or post office* 22 miles NE of Blanco, NM		11. Sec., T., R., M., or Blk. and Survey or Area K Section 28, T31N, R6W	
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drg. unit line, if any) 1772'	16. No. of Acres in lease 2560.0 acres	17. Spacing Unit dedicated to this well 320 acres W/2	
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.	19. Proposed Depth 3349'	20. BLM/BIA Bond No. on file ES0048	
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 6484' GL	22. Approximate date work will start* 3rd Qtr 2002	23. Estimated duration 30 days	

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 	Name (Printed/Typed) Patsy Clugston	Date 3/27/02
Title Sr. Regulatory/Proration Clerk		
Approved by (Signature) 	Name (Printed/Typed) David J. Mankiewicz	Date JUL - 1
Title	Office	

Application approval does not warrant or certify that the applicant holds legal or equitable title in 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 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.

*(Instructions on Reverse)

DRILLING OPERATIONS AUTHORIZED ARE
SUBJECT TO COMPLIANCE WITH ATTACHED
GENERAL REQUIREMENTS

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-10
Revised October 18, 199
Instructions on bac
Submit to Appropriate District Office
State Lease - 4 Copy
Fee Lease - 3 Copy

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

APN Number 30039-26963		Pool Code 71629	Pool Name Basin Fruitland Coal
Property Code 009259	Property Name SAN JUAN 31-6 UNIT		Well Number 229R
GRID No. 017654	Operator Name PHILLIPS PETROLEUM COMPANY		Elevation 6484'

Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
K	28	31N	6W		1902'	SOUTH	1772'	WEST	RIO ARriba

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
K									

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.
320 W/2	J	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

16		N89°57'E	5276.04'	17 OPERATOR CERTIFICATION	
5280.00'		Section 28		I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief	
				Signature <i>Patsy Clugston</i>	
				Printed Name Patsy Clugston	
				Title Sr. Regulatory/Proration Clerk	
Date 10-8-01		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 knowledge and belief	
N00°01'E		1772'	SF-078995 2560 acres	Date of Survey 9/5/01	
N00°01'E		1902'	N89°59'E	Signature and Seal of Professional Surveyor <i>[Signature]</i>	
5281.32'				Certificate Number	

PHILLIPS PETROLEUM COMPANY

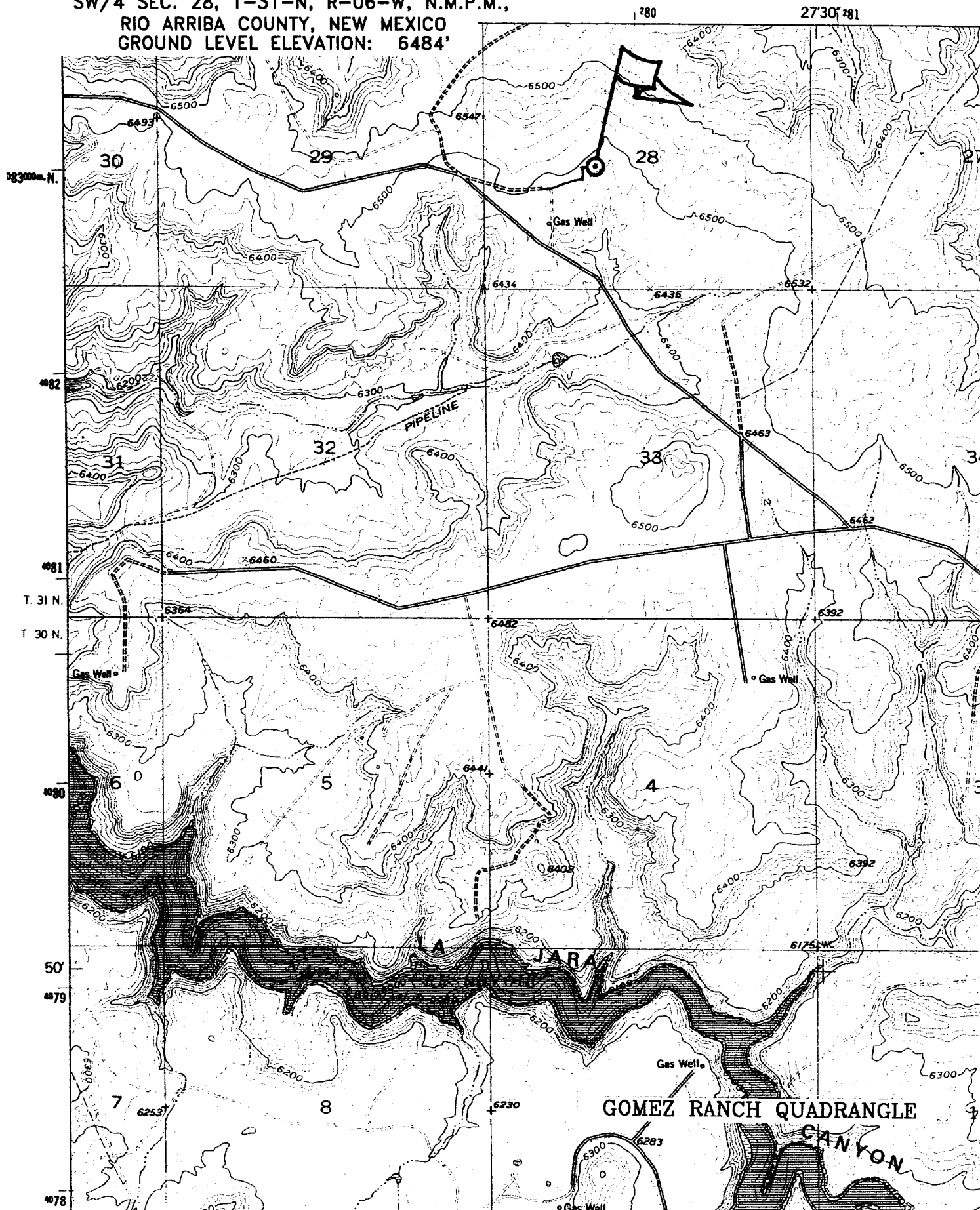
SAN JUAN 31-6 UNIT No. 229R

1902' FSL, 1772' FWL

SW/4 SEC. 28, T-31-N, R-06-W, N.M.P.M.,

RIO ARriba COUNTY, NEW MEXICO

GROUND LEVEL ELEVATION: 6484'



PHILLIPS PETROLEUM COMPANY

WELL NAME: San Juan 31-6 Unit #229R

Note the 31-6 Unit #229 well is currently being used as a Pressure Observation Well.

DRILLING PROGNOSIS

1. Location of Proposed Well: Unit K, 1902' FSL & 1772' FWL
Section 28, T31N, R6W
2. Unprepared Ground Elevation: @ 6484'
3. The geological name of the surface formation is San Jose.
4. Type of drilling tools will be rotary.
5. Proposed drilling depth is 3349'.
6. The estimated tops of important geologic markers are as follows:

<u>Nacimiento - 924'</u>	
<u>Ojo Alamo - 2414'</u>	<u>Base of Coal - 3344'</u>
<u>Kirtland - 2534'</u>	<u>Picture Cliffs - 3434'</u>
<u>Fruitland - 3054'</u>	<u>Interm. Casing - 3104'</u>
<u>Top of Coal - 3124'</u>	<u>T. D. - 3349'</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 - 2414' - 2534'</u>
Oil:	<u>none</u>
Gas:	<u>Fruitland Coal - 3124' - 3344'</u>
Gas & Water:	<u>Fruitland Coal - 3124' - 3344'</u>
8. The proposed casing program is as follows:

Surface String: 9-5/8", 32.3#, H-40 @ 200' *
Intermediate String: 7", 20#, J/K-55 @ 3104'
Production Liner: 5-1/2", 15.5# J/K-55 @ 3084' - 3349' (see details below)

* The surface casing will be set at a minimum of 200', but could be set deeper if required to maintain hole stability.
9. Cement Program:

Surface String: 102.7 sx Type III cement. Cement to surface w/110% excess of casing/hole annulus volume w/Type III cement + 2% bwoc Calcium Chloride + 0.25#/sx Cello-flake + 60.6% Fresh water (14.5 ppg). (1.41 cf/sx yield = 145 cf)

9. Cement program: (continued from Page 1)

Intermediate String: **Lead Cement:** 352.5 sx Type III cement. Cement to surface - 110% excess casing/hole annular volume w/ Type III cement + 0.25#/sx Cello-flake + 5#/sx Gilsonite + 6% bwoc Bentonite + 10#/sx CSE + 3% bwow KCL + 0.4% bwoc FL-25 mixed + 0.02#/sx static free mixed at 12.0 ppg. (2.52 cf/sx yield = 888.3cf)

Tail: 50 sx Type III cement + 0.25#/sx Cello-flake + 1% Calcium Chloride mixed at 14.5 ppg. (1.40 cf/sx yield = 70 cf)

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 be use a new cement program it would have to have stronger properties than we are currently using.

Centralizer Program:

Surface: Total four (4) - 10' above shoe and top of 2nd, 3rd, & 4th jts.

Intermediate: Total seven (7) - 10' above shoe and top of 1st, 2nd, 4th, 6th, 8th, & 1st jt. into shoe.

Turbulators: Total three (3) - one at 1st jt below Ojo Alamo and next 2 jts up.

Liner :

- If the coal is cleated a 5 1/2" 15.5# liner will be run in the open hole without being cemented.
- If the coal is not cleated, a 4-1/2" 11.6# liner will be run & cemented. The well will then be completed by fracture stimulation.

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 - fresh water w/polymer sweeps. Bentonite as required for viscosity.
Below Intermediate - air drilled.
12. The testing, logging, and coring programs are as follows:
D.S.T.s or cores:
Logs: Mud logs only

San Juan 31-6 Unit #229R

SURFACE CASING :

Drill Bit Diameter	12.25 "	
Casing Outside Diameter	9.625 "	8.989
Casing Weight	32.3 ppf	
Casing Grade	H-40	
Shoe Depth	200 '	30 '
Cement Yield	1.41 cuft/sk	
Excess Cement	110 %	

Casing Capacity	0.0785 bbl/ft	0.4407 cuft/ft
Hole / Casing Annulus Capacity	0.0558 bbl/ft	0.3132 cuft/ft

Cement Required 102.7 sx

SHOE 200 ', 9.625 ", 32.3 ppf, H-40

INTERMEDIATE CASING :

Drill Bit Diameter	8.75 "	
Casing Outside Diameter	7 "	6.455
Casing Weight	20 ppf	
Casing Grade	K-55	
Shoe Depth	3104 '	
Lead Cement Yield	2.52 cuft/sk	
Lead Cement Excess	110 %	
Tail Cement Length	200 '	30 '
Tail Cement Yield	1.4 cuft/sk	
Tail Cement Excess	110 %	

Casing Capacity	0.0405 bbl/ft	0.2272 cuft/ft
Casing / Casing Annulus Capacity	0.0309 bbl/ft	0.1734 cuft/ft
Hole / Casing Annulus Capacity	0.0268 bbl/ft	0.1503 cuft/ft

Lead Cement Required 352.5 sx
Tail Cement Required 50.0 sx

LINER TOP 3084 '

SHOE 3104 ', 7 ", 20 ppf, K-55

LINER BOTTOM 3349 '

BOP AND RELATED EQUIPMENT CHECK LIST

2M 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.