

District I
PO Box 1980, Hobbs, NM 88241-1980
District II
811 S. 1st Street, Artesia, NM 88210-2834
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-101
Revised October 18, 1994
Instructions on back
Submit to Appropriate District Office
State Lease - 6 Copies
Fee Lease - 5 Copies

☐ AMENDED REPORT

APPLICATION FOR PERMIT TO DRILL, RE-ENTER, DEEPEN, PLUGBACK, OR ADD A ZONE

¹ Operator name and Address Phillips Petroleum Company 5525 Highway 64, NBU 3004 Farmington, NM 87401		² OGRID Number 017654
⁴ Property Code 009256	⁵ Property Name San Juan 29-5 Unit	³ API Number 30-0 39-26299 ⁶ Well No. 70M

⁷ Surface Location

UL or lot no.	Section	Township	Range	Lot. Idn	Feet from the	North/South Line	Feet from the	East/West line	County
0	28	29N	5W		280'	South	2355'	East	Rio Arriba

⁸ Proposed 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
0									

⁹ Proposed Pool 1

Blanco Mesaverde 72319

¹⁰ Proposed Pool 2

Basin Dakota 71599

¹¹ Work Type Code N	¹² Well Type Code M	¹³ Cable/Rotary R	¹⁴ Lease Type Code P	¹⁵ Ground Level Elevation 6650'
¹⁶ Multiple Y	¹⁷ Proposed Depth 8057'	¹⁸ Formation Dakota	¹⁹ Contractor 4CAT-Key Energy	²⁰ Spud Date Est. Feb 1, 2000

²¹ Proposed Casing and Cement Program

Hole Size	Casing Size	Casing weight/foot	Setting Depth	Sacks of Cement	Estimated TOC
12-1/4"	9-5/8"	36#, J/K-55	320'*	151 sx Type 3	surface
8-3/4"	7"	20#, J/K-55	3932'	1-443 sx Type 3	
				T-50 sx Type 3	surface
6-1/4"	4-1/2"	11.6#, N-80	8057'	331.3 sx C1 H	**

²² Describe the proposed program. If this application is to DEEPEN or PLUG BACK give the data on the present productive zone and proposed new productive zone. Describe the blowout prevention program, if any. Use additional sheets if necessary

* The surface casing will be set at a minimum of 320', but could be set deeper if required to maintain hole stability.

** The cement for the 4-1/2" casing is designed to cover the open hole section with 60% excess.

See attached for details on the cathodic protection groundbed we will be drilling on location.

²³ I hereby certify that the information given above is true and complete to the best of my knowledge and belief.

Signature:

Printed name:

Title:

Sr. Regulatory/Proration Clerk

OIL CONSERVATION DIVISION

Approved by:

Title: SUPERVISOR DISTRICT # 3

Approval Date: JAN - 7 2000

Expiration Date: JAN - 7 2001

District I
 (N) Box 1900, Hobbs, NM 88241-1900
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 111 South First, Artesia, NM 88210
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 Revised October 18, 1994
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☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

1 API Number 30-039-26299		2 Pool Code 72319		3 Pool Name Blanco Mesaverde	
4 Property Code 009256		5 Property Name SAN JUAN 29-5 UNIT			6 Well Number 70M
7 OGRID No. 017654		8 Operator Name PHILLIPS PETROLEUM COMPANY			9 Elevation 6650'

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
0	28	29N	5W		280'	SOUTH	2355'	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
0									

12 Dedicated Acres 320 E/2	13 Joint or Infill I	14 Consolidation Code U	15 Order No.
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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 5280.00' N00°01'E	S89°52'E	5281.32'	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 Sr. Regulatory Clerk Title 1-6-00 Date
	Section 28		
	Fee 320 acres	Fee	
	S89°51'E	280' 5287.92'	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. 11/17/99 Date of Survey Signature and Seal of Registered Professional Surveyor HENRY P. BROADHURST, R.S. NEW MEXICO 11393 Certificate Number

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☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-039-26299		² Pool Code 71599	³ Pool Name Basin Dakota
⁴ Property Code 009256	⁵ Property Name SAN JUAN 29-5 UNIT		⁶ Well Number 70M
⁷ OGRID No. 017654	⁸ Operator Name PHILLIPS PETROLEUM COMPANY		⁹ Elevation 6650'

¹⁰ Surface Location

UL or lot no.	Section	Township	Range	Lot Ida	Feet from the	North/South line	Feet from the	East/West line	County
0	28	29N	5W		280'	SOUTH	2355'	EAST	RIO ARriba

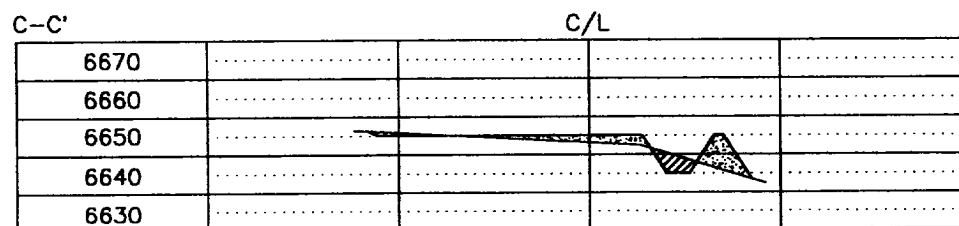
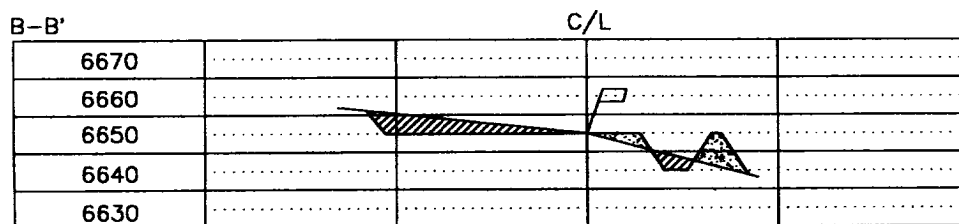
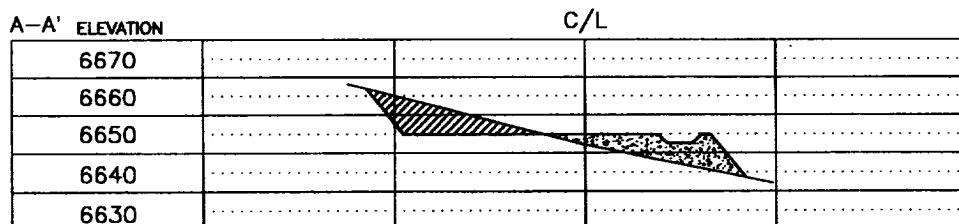
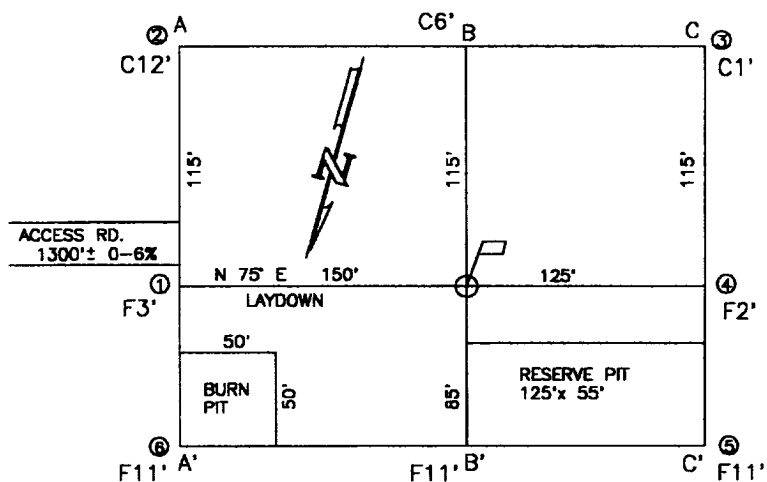
¹¹ Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Ida	Feet from the	North/South line	Feet from the	East/West line	County
0									

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

	S89°52'E 5281.32' Fee Fee Section 28	¹⁷ OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief Signature Printed Name Patsy Clugston Title Sr. Regulatory Clerk Date 1-6-00	
	5280.00'	FEE 320 acres	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 11/17/99 Signature and Seal of Professional Surveyor
	N00°01'E	S89°51'E 280' 5287.92' 2355'	Certificate Number



COMPANY: PHILLIPS PETROLEUM CO.

LEASE: SAN JUAN 29-5 UNIT No. 70M

FOOTAGE: 280 FSL 2355 FEL UNIT 0

SEC. 28 TWN. 29 N RNG. 5 W N.M.P.M.

COUNTY: RIO ARRIBA STATE: N.M.

ELEVATION: 6650

LATITUDE: 36-41-24

LONGITUDE: 107-21-40

 PHILLIPS PETROLEUM CO. FARMINGTON, NEW MEXICO		
SURVEYED: 11/17/99	REV. DATE:	APP. BY
DRAWN BY: K.REA	DATE DRAWN: 11/20/99	FILE NAME: UF016
 UNITED FIELD SERVICES INC.		P.O. BOX 3651 FARMINGTON, NM 87499 OFFICE: (505)334-0408

PHILLIPS PETROLEUM COMPANY

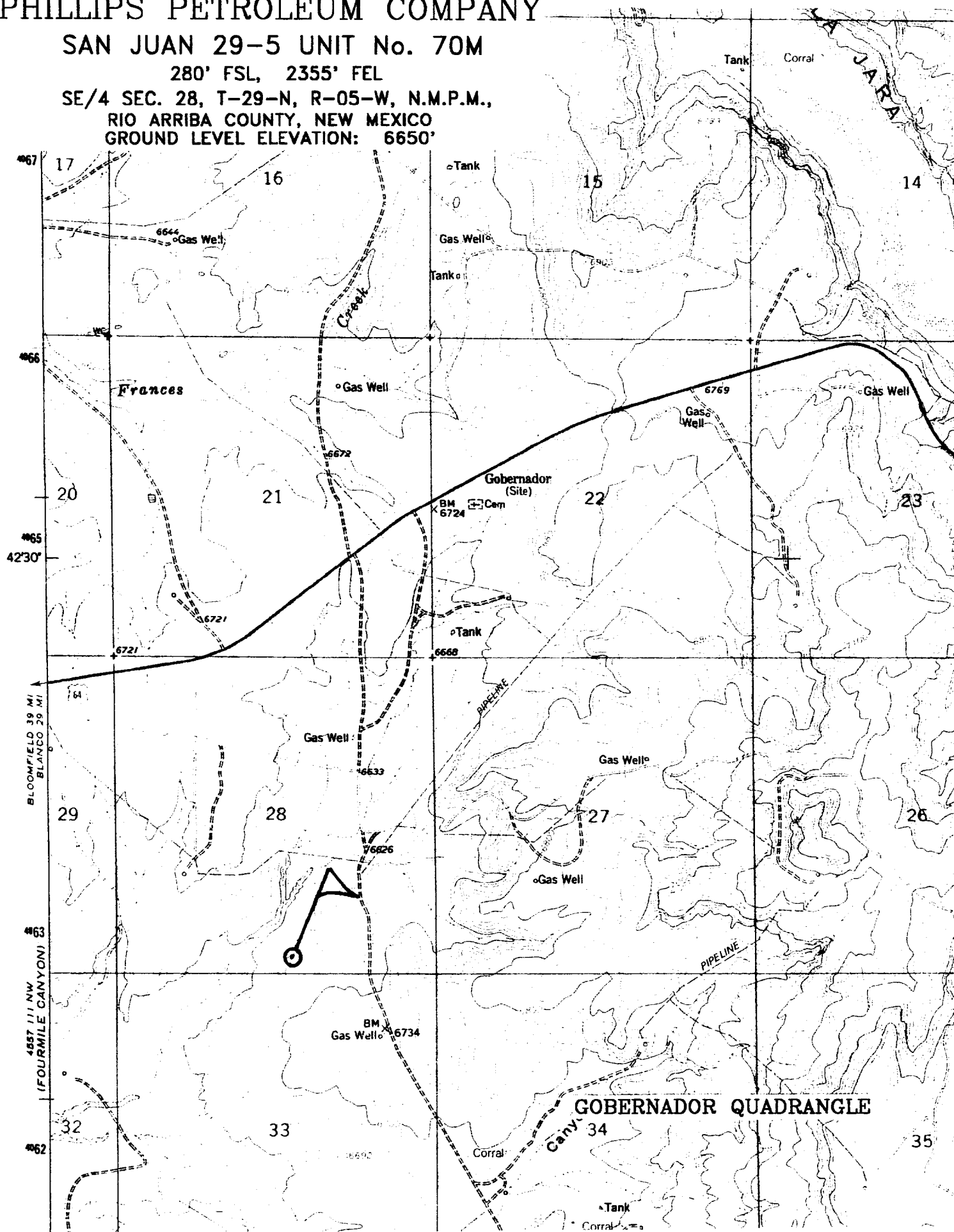
SAN JUAN 29-5 UNIT No. 70M

280' FSL, 2355' FEL

SE/4 SEC. 28, T-29-N, R-05-W, N.M.P.M.,

RIO ARRIBA COUNTY, NEW MEXICO

GROUND LEVEL ELEVATION: 6650'



San Juan 29-6 Unit #70M (DK/MV)

SURFACE CASING :

Drill Bit Diameter	12.25 "	
Casing Outside Diameter	9.625 "	8.913
Casing Weight	36	ppf
Casing Grade	J-55	
Shoe Depth	320 '	
Cement Yield	141	cuft/sk
Excess Cement	100	%

Hole / Casing Annulus Capacity 0.0558 bbl/f 0.3132 cuft/ft

Cement Required 151.4 sx

SHOE 320 ', 9.625 ", 36 ppf, J-55

INTERMEDIATE CASING :

Drill Bit Diameter	8.75 "	
Casing Outside Diameter	7 "	6.455
Casing Weight	20	ppf
Casing Grade	J-55	
Shoe Depth	3932 '	
Lead Cement Yield	241	cuft/sk
Lead Cement Excess	100	%
Tail Cement Length	234.5 '	
Tail Cement Yield	141	cuft/sk
Tail Cement Excess	100	%

Casing / Casing Annulus Capacity 0.0296 bbl/f 0.1660 cuft/ft

Hole / Casing Annulus Capacity 0.0268 bbl/f 0.1503 cuft/ft

Casing Capacity 0.0405 bbl/f 0.2272 cuft/ft

Lead Cement Required 443.4 sx

Tail Cement Required 50.0 sx

SHOE 3932 ', 7 ", 20 ppf, J-55

PRODUCTION CASING :

Drill Bit Diameter	6.25 "	
Casing Outside Diameter	4.5 "	4.000
Casing Weight	11.6	ppf
Casing Grade	N-80	
Top of Cement	3732 '	
Shoe Depth	8057 '	
Cement Yield	212	cuft/sk
Cement Excess	60	%

Casing / Casing Annulus Capacity 0.0208 bbl/f 0.1168 cuft/ft

Hole / Casing Annulus Capacity 0.0183 bbl/f 0.1026 cuft/ft

Casing Capacity 0.0155 bbl/f 0.0872 cuft/ft

Cement Required 331.3 sx

SHOE 8057 ', 4.5 ", 11.6 ppf, N-80

GEOLOGIC PROGNOSIS

Company: **Phillips Petroleum Company**
 Project: **2000 Drilling Plan**
 Area: **San Juan 29-5 Unit**

 Operator: **Phillips Petroleum Company**
 Well Name: **San Juan 29-5 Unit No. 70M (Kmv/Kd)**
 Location: **SWSE 28-29N-05W**
 Footage: **0280' FSL & 2355' FEL**
 County/State: **Rio Arriba/New Mexico**

Surveyed GL: **6650** Est (12') KB: **6662**

<u>Formation</u>	<u>Thickness</u>	<u>Depth</u>	<u>Struct. Elev.</u>
San Jose Fm.	1642	Surface	6650
Nacimiento Fm.	1135	1642	5020
Ojo Alamo Ss.	180	2777	3885
Kirtland Sh.	310	2957	3705
Fruitland Fm.	300	3267	3395
Pictured Cliffs Ss.	210	3567	3095
Lewis Sh.	155	3777	2885
<u>Int. Csg. Depth</u>	1460	3932	2730
Cliff House Ss.	80	5392	1270
Menefee Fm.	295	5472	1190
Point Lookout Ss.	285	5767	895
Mancos Sh.	935	6052	610
Gallup Ss.	745	6987	-325
Greenhorn Ls.	60	7732	-1070
Graneros Sh.	115	7792	-1130
Dakota Ss.	150	7907	-1245
Total Depth	NA	8057	-1395

Mechanical Logs: DIL from surface casing to TD;
 CNL/FDC over intervals of interest

Correlation Logs: San Juan 29-5 Unit # 65 (SWSW 28-29N-05W)
 San Juan 29-5 Unit # 32 (SESW 29-29N-05W)

Estimated intervals of water, oil and gas:

Water:	Ojo Alamo Ss.	2777-2957
Gas & Water:	Fruitland Fm.	3267-3567
Gas:	Mesaverde Gp.	5392-6052
	Dakota Ss.	7907-8057

San Juan 29-5 Unit #70M
Fee; - Unit O, 280' FSL & 2355' FEL
Section 28, T29N, R5W; Rio Arriba 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.