

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 39-26301
		⁶ Well No. 66M

⁷ Surface Location

UL or lot no. E	Section 33	Township 29N	Range 5W	Lot. Idn	Feet from the 2110'	North/South Line North	Feet from the 2110'	East/West line West	County Rio Arriba
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⁸ Proposed Bottom Hole Location If Different From Surface

UL or lot no. E	Section	Township	Range	Lot. Idn	Feet from the	North/South Line	Feet from the	East/West line	County
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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 6549'
¹⁶ Multiple Y	¹⁷ Proposed Depth 7956'	¹⁸ Formation Dakota	¹⁹ Contractor 4 CAT-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	3831'	L-431 sx Type 3	
				T-50 sx Type 3	surface
6-1/4"	4-1/2"	11.6#, N-80	7956'	331 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 the details on the cathodic protection groundbed.

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

Signature:

Printed name:

Patsy Clugston

Title:

Sr. Regulatory/Proration Clerk

OIL CONSERVATION DIVISION

Approved by:

Title: DEPUTY OIL & GAS INSPECTOR, DIST. 3

Approval Date: JAN - 7 2000

Expiration Date: JAN - 7 2001

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☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ APN Number 30-039-26301		² Pool Code 72319		³ Pool Name Blanco Mesaverde	
⁴ Property Code 009256		⁵ Property Name SAN JUAN 29-5 UNIT			⁶ Well Number 66M
⁷ OGRID No. 017654		⁸ Operator Name PHILLIPS PETROLEUM COMPANY			⁹ Elevation 6549'

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
E	33	29N	5W		2110'	NORTH	925'	WEST	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
E									

¹² Dedicated Acres 320 W/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

	<p>¹⁷ OPERATOR CERTIFICATION</p> <p>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief</p> <p><i>Patsy Clugston</i></p> <p>Signature Patsy Clugston</p> <p>Printed Name Sr. Regulatory Clerk</p> <p>Title 1-6-00</p> <p>Date</p>
	<p>¹⁸ SURVEYOR CERTIFICATION</p> <p>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.</p> <p>11/11/99</p> <p>Date of Survey</p> <p>Signature and Seal of Professional Surveyor:</p> <p><i>Henry P. Broadhurst, Jr.</i></p> <p>Certificate Number</p>
	<p>Section 33</p>

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☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-039-26301		² Pool Code 71599	³ Pool Name Basin Dakota
⁴ Property Code 009256	⁴ Property Name SAN JUAN 29-5 UNIT		⁵ Well Number 66M
⁶ OGRID No. 017654	⁷ Operator Name PHILLIPS PETROLEUM COMPANY		⁸ Elevation 6549'

¹⁰ Surface Location

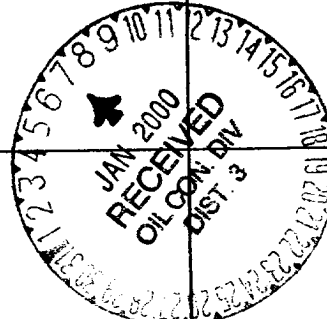
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
E	33	29N	5W		2110'	NORTH	925'	WEST	RIO ARriba

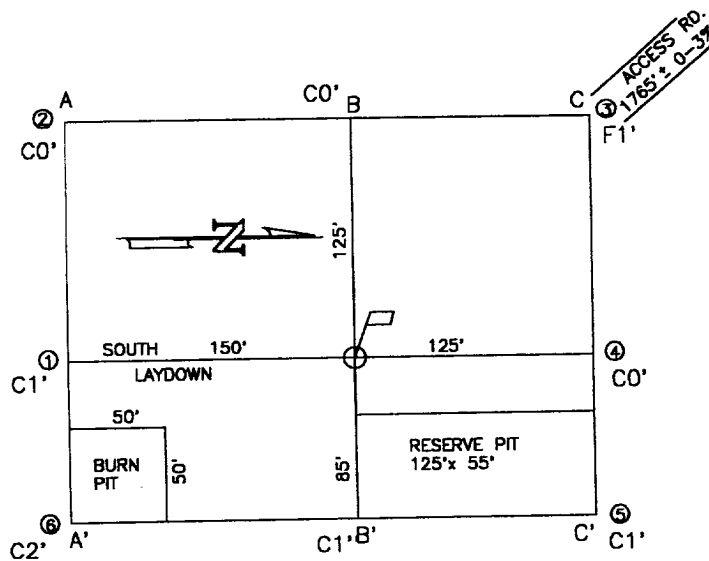
¹¹ Bottom Hole Location If Different From Surface

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<p>16</p> <p>Fee 80 acres</p> <p>5280.00'</p> <p>2110'</p> <p>925'</p> <p>NM-011348A</p> <p>Section 33</p> <p>5280.00'</p> <p>5280.00'</p> <p>N00°01'E</p> <p>Fee</p> <p>NM-011350-A</p> <p>S89°52'E</p> <p>5280.00'</p>		<p>17 OPERATOR CERTIFICATION</p> <p>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief</p> <p><i>Patsy Clugston</i></p> <p>Signature</p> <p>Patsy Clugston</p> <p>Printed Name</p> <p>Sr. Regulatory Clerk</p> <p>Title</p> <p>1-6-2000</p> <p>Date</p>
		<p>18 SURVEYOR CERTIFICATION</p> <p>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.</p> <p>11/11/99</p> <p>Date of Survey</p> <p>Signature and Seal of Professional Surveyor:</p> <p><i>Henry P. Broadhurst, Jr.</i></p> <p>Certificate Number</p> <p>NEW MEXICO</p> <p>REGISTERED PROFESSIONAL SURVEYOR</p>



A-A' ELEVATION C/L

6569				
6559				
6549				
6539				
6529				

B-B' C/L

6569				
6559				
6549				
6539				
6529				

C-C' C/L

6569				
6559				
6549				
6539				
6529				

COMPANY: PHILLIPS PETROLEUM CO.

LEASE: SAN JUAN 29-5 UNIT No. 66M

FOOTAGE: 2110 FNL 925 FWL UNIT E


SEC. 33 TWN. 29 N RNG. 5 W N.M.P.M.

COUNTY: RIO ARRIBA STATE: N.M.

ELEVATION: 6549

LATITUDE: 36-41-01

LONGITUDE: 107-22-05

 PHILLIPS PETROLEUM CO. FARMINGTON, NEW MEXICO		
SURVEYED: 11/11/99	REV. DATE:	APP. BY
DRAWN BY: K.REA	DATE DRAWN: 11/13/99	FILE NAME: UFO10
UNITED FIELD SERVICES INC.		
P.O. BOX 3651 FARMINGTON, NM 87499 OFFICE: (505)334-0408		

PHILLIPS PETROLEUM COMPANY

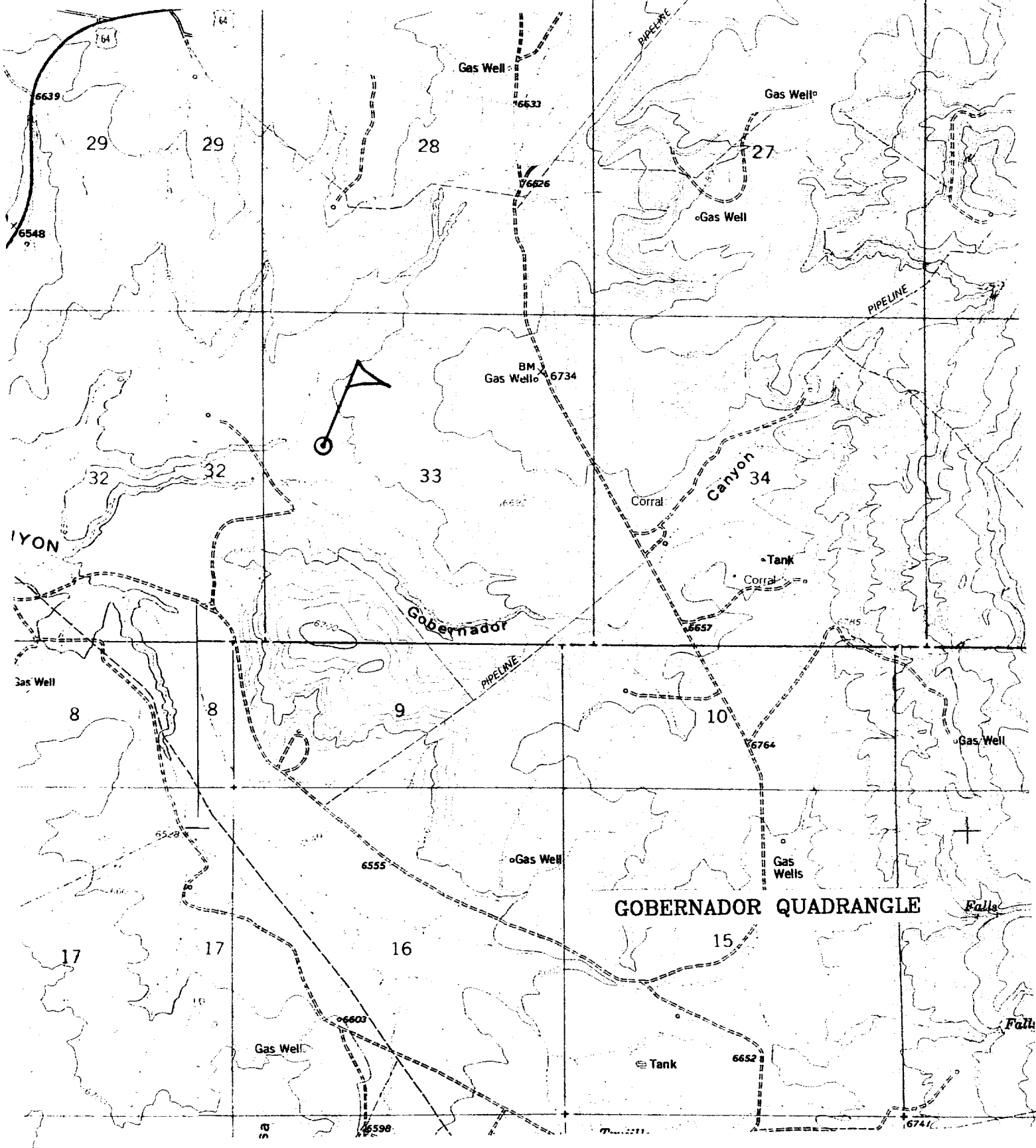
SAN JUAN 29-5 UNIT No. 66M

2110' FNL, 925' FWL

NW/4 SEC. 33, T-29-N, R-05-W, N.M.P.M.,

RIO ARriba COUNTY, NEW MEXICO

GROUND LEVEL ELEVATION: 6549'



San Juan 29-6 Unit #66M (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	1.41	cuft/sk
Excess Cement	100	%

Hole / Casing Annulus Capacity	0.0558	bbl/f	0.3132	cuft/ft
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Cement Required	151.4	sx
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SHOE	320 '	9.625 "	36 ppf,	J-55
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INTERMEDIATE CASING :

Drill Bit Diameter	8.75 "	
Casing Outside Diameter	7 "	6.455
Casing Weight	20	ppf
Casing Grade	J-55	
Shoe Depth	3831 '	
Lead Cement Yield	2.41	cuft/sk
Lead Cement Excess	100	%
Tail Cement Length	234.5 '	
Tail Cement Yield	1.41	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	430.8	sx
Tail Cement Required	50.0	sx

SHOE	3831 '	7 "	20 ppf,	J-55
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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	3631 '	
Shoe Depth	7956 '	
Cement Yield	2.12	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
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SHOE	7956 '	4.5 "	11.6 ppf,	N-80
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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. 66M (Kmv/Kd)**
 Location: **SWNW 33-29N-05W**
 Footage: **2110' FNL & 0925' FWL**
 County/State: **Rio Arriba/New Mexico**

Surveyed GL: **6549** Est (12') KB: **6561**

<u>Formation</u>	<u>Thickness</u>	<u>Depth</u>	<u>Struct. Elev.</u>
San Jose Fm.	1541	Surface	6549
Nacimiento Fm.	1135	1541	5020
Ojo Alamo Ss.	180	2676	3885
Kirtland Sh.	310	2856	3705
Fruitland Fm.	300	3166	3395
Pictured Cliffs Ss.	210	3466	3095
Lewis Sh.	155	3676	2885
<u>Int. Csg. Depth</u>	1455	3831	2730
Cliff House Ss.	75	5286	1275
Menefee Fm.	295	5361	1200
Point Lookout Ss.	290	5656	905
Mancos Sh.	940	5946	615
Gallup Ss.	740	6886	-325
Greenhorn Ls.	60	7626	-1065
Graneros Sh.	120	7686	-1125
Dakota Ss.	150	7806	-1245
<u>Total Depth</u>	NA	7956	-1395

Mechanical Logs: None

Correlation Logs: San Juan 29-5 Unit # 60 (NENE 33-29N-05W)
 San Juan 29-5 Unit # 32 (SESW 29-29N-05W)

Estimated intervals of water, oil and gas:

Water:	Ojo Alamo Ss.	2676-2856
Gas & Water:	Fruitland Fm.	3166-3466
Gas:	Mesaverde Gp.	5286-5946
	Dakota Ss.	7806-7956

John E. Bircher

December 18, 1999

San Juan 29-5 Unit #66M
Fee; - Unit E, 2110' FNL & 925' FWL
Section 33, 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.