

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

<sup>1</sup> Operator name and Address Phillips Petroleum Company 5525 Highway 64, NBU 3004 Farmington, NM 87401		<sup>2</sup> OGRID Number 017654
<sup>4</sup> Property Code 009256	<sup>5</sup> Property Name San Juan 29-3-2 Unit	<sup>3</sup> API Number 30-0 39-26300
		<sup>6</sup> Well No. 60M

<sup>7</sup> Surface Location

UL or lot no.	Section	Township	Range	Lot. Idn	Feet from the	North/South Line	Feet from the	East/West line	County
D	32	29N	5W		880'	North	325	West	Rio Arriba

<sup>8</sup> 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
D									

<sup>9</sup> Proposed Pool 1

Basin Dakota 71599

<sup>10</sup> Proposed Pool 2

Blanco Mesaverde 72319

<sup>11</sup> Work Type Code N	<sup>12</sup> Well Type Code M	<sup>13</sup> Cable/Rotary R	<sup>14</sup> Lease Type Code S	<sup>15</sup> Ground Level Elevation 6487'
<sup>16</sup> Multiple Y	<sup>17</sup> Proposed Depth 7894'	<sup>18</sup> Formation Dakota	<sup>19</sup> Contractor 4CAT - Key Energy	<sup>20</sup> Spud Date Est. Feb 1, 2000

<sup>21</sup> 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	3774'	L-424 sx Type 3	Surface
				T-50 sx Type 3	
6-1/4"	4-1/2"	11.6#, N-80	7894'	331 sx C1 H	**

<sup>22</sup> 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 grounded.

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

Signature:

*Patsy Clugston*

Printed name:

Patsy Clugston

Title:

Sr. Regulatory/Proration Clerk

OIL CONSERVATION DIVISION

Approved by:

*35.2*

Title:

SUPERVISOR DISTRICT # 3

Approval Date:

JAN - 7 2000

Expiration Date:

JAN - 7 2001

OK  
HOLD ON FOR NSL

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☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

<sup>1</sup> API Number 30-039-26300		<sup>2</sup> Pool Code 71599	<sup>3</sup> Pool Name Basin Dakota
<sup>4</sup> Property Code 009256	<sup>5</sup> Property Name SAN JUAN 29-5 UNIT		<sup>6</sup> Well Number 60M
<sup>7</sup> OGRID No. 017654	<sup>8</sup> Operator Name PHILLIPS PETROLEUM COMPANY		<sup>9</sup> Elevation 6487'

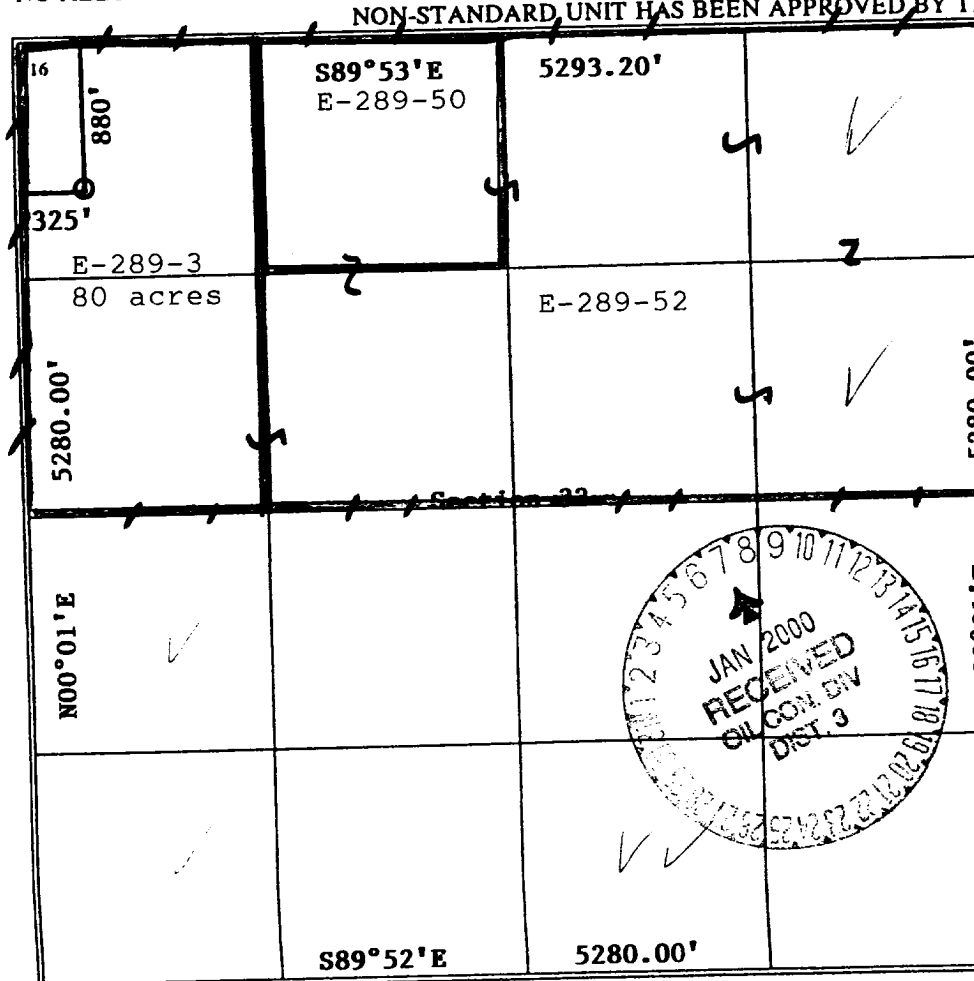
<sup>10</sup> Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
D	32	29N	5W		880'	NORTH	325'	WEST	RIO ARriba

<sup>11</sup> 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
D									
<sup>12</sup> Dedicated Acres 320 N/2		<sup>13</sup> Joint or Infill I	<sup>14</sup> Consolidation Code U		<sup>15</sup> Order No.				

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><sup>17</sup> OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief</p> <p>Signature Patsy Clugston</p> <p>Printed Name Sr. Regulatory/Proration</p> <p>Title January 6, 2000</p> <p>Date</p>
	<p><sup>18</sup> 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</p> <p>11/9/99 Date of Survey</p> <p>Signature and Seal of Professional Surveyor HENRY P. BROOKHURST, JR. NEW MEXICO REGISTERED PROFESSIONAL SURVEYOR 11393</p> <p>Certificate Number</p>

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☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

<sup>1</sup> API Number 30-039-26300		<sup>2</sup> Pool Code 72319	<sup>3</sup> Pool Name Blanco Mesaverde
<sup>4</sup> Property Code 071654	<sup>5</sup> Property Name SAN JUAN 29-5 UNIT		<sup>6</sup> Well Number 60M
<sup>7</sup> OGRID No.	<sup>8</sup> Operator Name PHILLIPS PETROLEUM COMPANY		<sup>9</sup> Elevation 6487'

<sup>10</sup> Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
D	32	29N	5W		880'	NORTH	325'	WEST	RIO ARRIBA

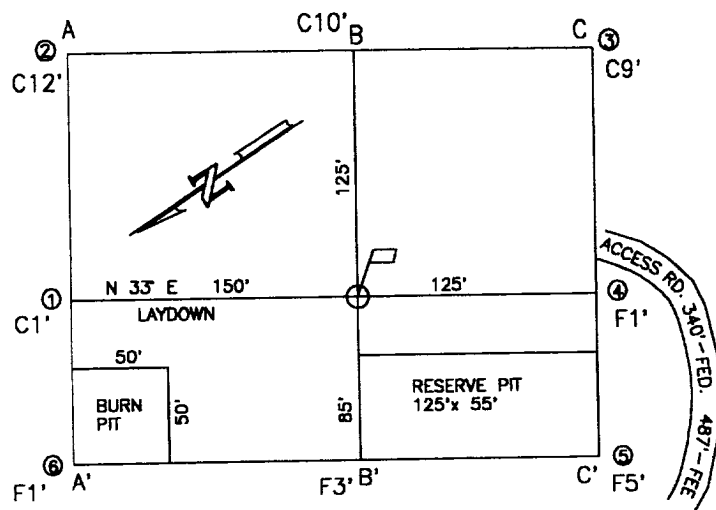
<sup>11</sup> Bottom Hole Location If Different From Surface

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

<sup>12</sup> Dedicated Acres 320 W/2	<sup>13</sup> Joint or Infill I	<sup>14</sup> Consolidation Code U	<sup>15</sup> 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><sup>17</sup> 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>Signature: <i>Patsy Clugston</i></p> <p>Printed Name: Patsy Clugston</p> <p>Title: Sr. Regulatory/Proration</p> <p>Date: 1-6-2000</p>
	<p><sup>18</sup> 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 knowledge and belief</p> <p>Date of Survey: 11/9/99</p> <p>Signature and Seal of Professional Surveyor: <i>Henry P. Broadhurst</i></p> <p>Certificate Number: 11393</p>



A-A' ELEVATION

ELEVATION	C/L
6507	
6497	
6487	
6477	
6467	

B-B'

ELEVATION	C/L
6507	
6497	
6487	
6477	
6467	

C-C'

ELEVATION	C/L
6507	
6497	
6487	
6477	
6467	

COMPANY: PHILLIPS PETROLEUM CO.

LEASE: SAN JUAN 29-5 UNIT No. 60M

FOOTAGE: 880 FNL 325 FWL UNIT D


SEC. 32 TWN. 29 N RNG. 5 W N.M.P.M.

COUNTY: RIO ARRIBA STATE: N.M.

ELEVATION: 6487

LATITUDE: 36-41-13

LONGITUDE: 107-23-17

 <b>PHILLIPS PETROLEUM CO.</b> FARMINGTON, NEW MEXICO		
SURVEYED: 11/11/99	REV. DATE:	APP. BY
DRAWN BY: K.REA	DATE DRAWN: 11/13/99	FILE NAME: UF011
<b>UNITED</b> <b>FIELD SERVICES INC.</b>		
P.O. BOX 3651 FARMINGTON, NM 87499 OFFICE: (505)334-0408		

# PHILLIPS PETROLEUM COMPANY

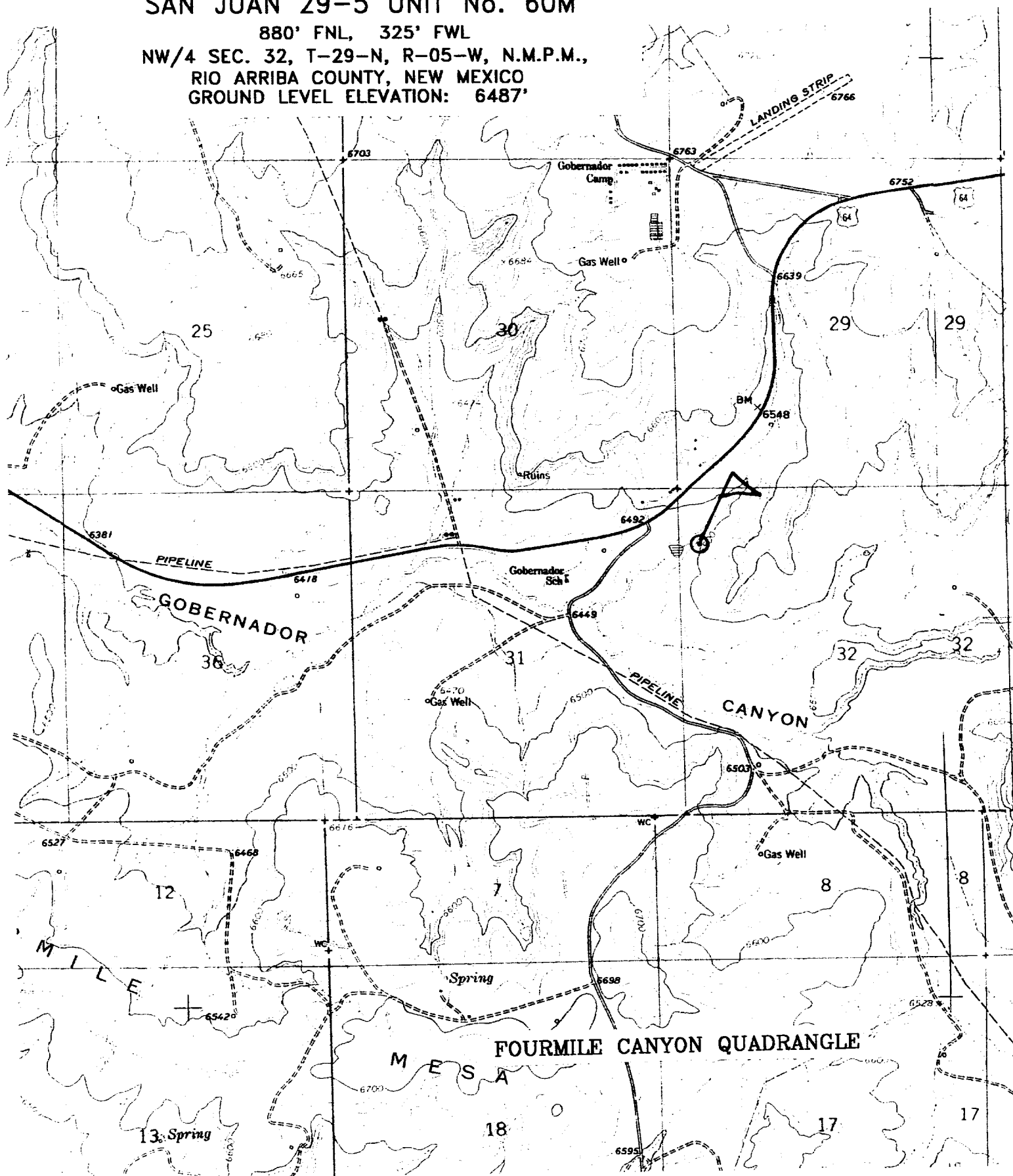
## SAN JUAN 29-5 UNIT No. 60M

880' FNL, 325' FWL

NW/4 SEC. 32, T-29-N, R-05-W, N.M.P.M.,

RIO ARriba COUNTY, NEW MEXICO

GROUND LEVEL ELEVATION: 6487'



**San Juan 29-6 Unit #60M (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	3774 '	
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	423.7 sx
Tail Cement Required	50.0 sx

SHOE	3774 '	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	3574 '	
Shoe Depth	7894 '	
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	330.9 sx
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SHOE	7894 '	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. 60M (Kmv/Kd)**  
 Location: **NWNW 32-29N-05W**  
 Footage: **0880' FNL & 0325' FWL**  
 County/State: **Rio Arriba/New Mexico**

Surveyed GL: **6487** Est (12') KB: **6499**

<b><u>Formation</u></b>	<b><u>Thickness</u></b>	<b><u>Depth</u></b>	<b><u>Struct. Elev.</u></b>
San Jose Fm.	1484	Surface	6487
Nacimiento Fm.	1135	1484	5015
Ojo Alamo Ss.	180	2619	3880
Kirtland Sh.	310	2799	3700
Fruitland Fm.	300	3109	3390
Pictured Cliffs Ss.	210	3409	3090
Lewis Sh.	155	3619	2880
<b><u>Int. Csg. Depth</u></b>	<b>1445</b>	<b>3774</b>	<b>2725</b>
Cliff House Ss.	80	5219	1280
Menefee Fm.	290	5299	1200
Point Lookout Ss.	280	5589	910
Mancos Sh.	945	5869	630
Gallup Ss.	745	6814	-315
Greenhorn Ls.	60	7559	-1060
<b><u>Graneros Sh.</u></b>	<b>125</b>	<b>7619</b>	<b>-1120</b>
Dakota Ss.	150	7744	-1245
<b><u>Total Depth</u></b>	<b>NA</b>	<b>7894</b>	<b>-1395</b>

**Mechanical Logs:** None

**Correlation Logs:** San Juan 29-5 Unit # 59 (SENE 31-29N-05W)  
 San Juan 29-5 Unit # 32 (SESW 29-29N-05W)

**Estimated intervals of water, oil and gas:**

Water:	Ojo Alamo Ss.	2619-2799
Gas & Water:	Fruitland Fm.	3109-3409
Gas:	Mesaverde Gp.	5219-5869
	Dakota Ss.	7744-7894

John E. Bircher

December 18, 1999

**San Juan 29-5 Unit #60M  
E-289-3; Unit D, 880' FNL & 325' FWL;  
Section 32, 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.