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# PHILLIPS PETROLEUM COMPANY

FARMINGTON, NEW MEXICO 87401  
5525 HWY. 64 NBU 3004

May 8, 2000

Oil Conservation Division  
State of New Mexico  
2040 South Pacheco  
Santa Fe, New Mexico 87505



Attn: Mr. Michael E. Stogner  
Chief Hearing Officer/Engineer

RE: APPLICATION FOR ADMINISTRATIVE APPROVAL OF UNORTHODOX WELL LOCATION  
SAN JUAN 29-6 UNIT #94M WELL  
W/2 SECTION 16-29N-6W  
RIO ARRIBA COUNTY, NEW MEXICO

Dear Mr. Stogner:

Please find attached, the captioned application, which was returned to our office along with your letter of April 24, 2000. It is my understanding that Mr. Charlie Perrin of the Aztec District Office has met with our Drilling Supervisor, Richard Allred at the location for the captioned well and determined that it will not be possible to move the location to an orthodox location, due to topographical considerations.

Even though our initial intent was to move the location, we hereby re-submit our application for approval of an unorthodox location for the San Juan 29-6 Unit #94M Well. We respectfully ask that along with the original information provided, you please take into account the topographic considerations, which have been concurred with by Mr. Perrin.

We thank you in advance for your cooperation in working with us on this matter.

Very Truly Yours,

S. Scott Prather, CPL  
Senior Landman  
San Juan Area  
(505) 599-3410

cc: J. L Mathis – C40453  
Frank Chavez – OCD, Aztec



**NEW MEXICO ENERGY, MINERALS  
& NATURAL RESOURCES DEPARTMENT**

OIL CONSERVATION DIVISION  
2040 South Pacheco Street  
Santa Fe, New Mexico 87505  
(505) 827-7131

April 24, 2000

**Phillips Petroleum Company  
5525 Highway 64 - NBU 3004  
Farmington, New Mexico 87401**

**Attention: S. Scott Prather**

*Re:* Administrative applications of Phillips Petroleum Company for exceptions to the well location requirements provided within the "*Special Rules and Regulations for the Basin-Dakota (Gas) Pool*", as promulgated by Division Order No. R-10987, as amended, for the San Juan "29-6" Unit Wells No. 81-M, 85-M, 91-M, 94-M, 100-M, and 101-M and San Juan "30-5" Unit No. 48-M.

Dear Mr. Prather:

From conversations with the Aztec district office of the Division, it is my understanding that the above-described seven proposed locations are to be moved and re-staked at standard locations. Therefore, I am returning these applications to you at this time.

Thank you for your cooperation in this matter.

Sincerely,

A handwritten signature in black ink, appearing to read "Michael E. Stogner", written over a horizontal line.

Michael E. Stogner  
Chief Hearing Officer/Engineer

cc: New Mexico Oil Conservation Division - Aztec  
Mr. Steve Salzman - U. S. Bureau of Land Management, Santa Fe  
Mr. Neel McBride - U. S. Bureau of Land Management, Farmington  
U. S. Forest Service - Bloomfield  
Ms. Kathy Valdes, NMOCD - Santa Fe

ABOVE THIS LINE FOR DIVISION USE ONLY

**NEW MEXICO OIL CONSERVATION DIVISION**  
 - Engineering Bureau -  
 2040 South Pacheco, Santa Fe, NM 87505



*1194-11*

**ADMINISTRATIVE APPLICATION COVERSHEET**

THIS COVERSHEET IS MANDATORY FOR ALL ADMINISTRATIVE APPLICATION FOR EXCEPTIONS TO DIVISION RULES AND REGULATIONS WHICH REQUIRE PROCESSING AT THE DIVISION LEVEL IN SANTA FE

**Application Acronyms:**

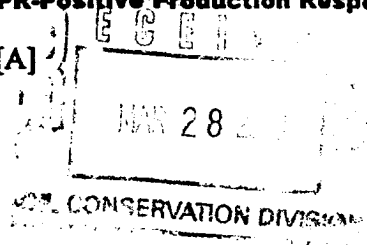
- [NSP-Non-Standard Proration Unit] [NSL-Non-Standard Location]
- [DD-Directional Drilling] [SD-Simultaneous Dedication]
- [DHC-Downhole Commingling] [CTB-Lease Commingling] [PLC-Pool/Lease Commingling]
- [PC-Pool Commingling] [OLS - Off-Lease Storage] [OLM-Off-Lease Measurement]
- [WFX-Waterflood Expansion] [PMX-Pressure Maintenance Expansion]
- [SWD-Salt Water Disposal] [IPI-Injection Pressure Increase]
- [EOR-Qualified Enhanced Oil Recovery Certification] [PPR-Positive Production Response]

**[1] TYPE OF APPLICATION - Check Those Which Apply for [A]**

- [A] Location - Spacing Unit - Directional Drilling
- NSL    NSP    DD    SD

Check One Only for [B] or [C]

- [B] Commingling - Storage - Measurement
- DHC    CTB    PLC    PC    OLS    OLM
- [C] Injection - Disposal - Pressure Increase - Enhanced Oil Recovery
- WFX    PMX    SWD    IPI    EOR    PPR



**[2] NOTIFICATION REQUIRED TO: - Check Those Which Apply, or  Does Not Apply**

- [A]  Working, Royalty or Overriding Royalty Interest Owners
- [B]  Offset Operators, Leaseholders or Surface Owner
- [C]  Application is One Which Requires Published Legal Notice
- [D]  Notification and/or Concurrent Approval by BLM or SLO  
U.S. Bureau of Land Management - Commissioner of Public Lands, State Land Office
- [E]  For all of the above, Proof of Notification or Publication is Attached, and/or,
- [F]  Waivers are Attached

**[3] INFORMATION / DATA SUBMITTED IS COMPLETE - Certification**

I hereby certify that I, or personnel under my supervision, have read and complied with all applicable Rules and Regulations of the Oil Conservation Division. Further, I assert that the attached application for administrative approval is accurate and complete to the best of my knowledge and where applicable, verify that all interest (WI, RI, ORRI) is common. I understand that any omission of data (including API numbers, pool codes, etc.), pertinent information and any required notification is cause to have the application package returned with no action taken.

Note: Statement must be completed by an individual with managerial and/or supervisory capacity.

Scott Prather                      [Signature]                      Supervisor                      3/24/00  
 Print or Type Name                      Signature                      Title                      Date



# PHILLIPS PETROLEUM COMPANY

FARMINGTON, NEW MEXICO 87401  
5525 HWY. 64 NBU 3004

March 23, 2000

Oil Conservation Division  
State of New Mexico  
2040 South Pacheco  
Santa Fe, New Mexico

Attn: Mr. Michael E. Stogner  
Chief Hearing Officer/Engineer

RE: APPLICATION FOR ADMINISTRATIVE APPROVAL OF UNORTHODOX WELL LOCATION  
SAN JUAN 29-6 UNIT #94M WELL  
W/2 SECTION 16-29N-6W  
RIO ARRIBA COUNTY, NEW MEXICO

Dear Mr. Stogner:

Phillips Petroleum Company (Phillips) as Operator of the captioned well, respectfully requests administrative approval of an Unorthodox Well Location for said well.

Phillips proposes to drill the San Juan 29-6 Unit #94M well at a location of 2370' FNL & 1845' FWL of Section 16-29N-6W, Rio Arriba County, New Mexico. This will be a commingled well located in the Basin Dakota and Blanco Mesaverde Pools and will have the W/2 of Section 16 designated as the drillblock for the Mesaverde and as the drillblock for the Dakota. This is an orthodox location for the Mesaverde (as per Order No. R-10987-A) and is an 80 acre infill well for the Mesaverde Pool, however it is not an orthodox location for the Dakota Pool, as currently established.

In the San Juan 29-6 Unit the Mesaverde has been developed on the optional 160 acre basis. Optimal spacing of this 80 acre Mesaverde infill well for the reservoir drainage purposes was the primary reason this location was selected. As demonstrated in the Exhibits presented in conjunction with Case No. 12136 (Phillips' application for downhole commingling) it is unlikely that a stand-alone Dakota well can be drilled on an economic basis. The most viable alternative to recover Dakota reserves is to drill Dakota/Mesaverde commingled wells. Utilization of 80 acre Mesaverde infill wells accomplishes this, however it precludes drilling the well at a standard Dakota location. The drilling of commingled wells also provides the added benefit of less surface disturbance.

For your benefit in reviewing this request, we are providing the following:

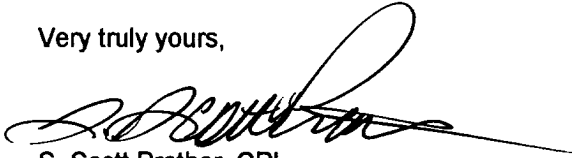
1. Form C-102
2. A topographical plat of the area
3. A nine section plat exhibiting offset operators & affected owner list
4. A plat of this well's location in relation to existing and proposed Mesaverde wells
5. Copies of Exhibits presented in Case 12136, (Order No. 11187 issued)

MR. MICHAEL STOGNER  
APPLICATION FOR ADMINISTRATIVE APPROVAL OF UNORTHODOX WELL LOCATION  
SAN JUAN 29-6 UNIT #94M WELL  
MARCH 21, 2000  
PAGE 2

This drillblock is located within the confines of the San Juan 29-6 Unit. Phillips is the Operator of this unit. The ownership of Dakota offset spacing units to the North, Northwest, West, Southwest and South is different from the Dakota spacing unit for this well and per Rule 104.F notice of this application is required to be sent to all affected persons. All affected persons are being furnished with 3 copies of this application by certified mail and are advised that they must submit objections to this application in writing within twenty (20) days. They may alternately forward an executed waiver to your office, retain one copy for their records and return one copy to our office.

We appreciate and thank you for your attention to this request and should you need additional information or clarification on this matter, please do not hesitate to contact the undersigned.

Very truly yours,



S. Scott Prather, CPL  
Senior Landman  
San Juan Area  
(505) 599-3410

cc: J. L. Mathis (r)C40453  
Frank Chavez-OCD, Aztec  
Offset Owners

\_\_\_\_\_ hereby waives objection to Phillips Petroleum Company's application for a Dakota unorthodox location for the San Juan 29-6 Unit #94M well as proposed above.

By: \_\_\_\_\_

Date: \_\_\_\_\_

**OFFSET AFFECTED OWNERS LIST**

BURLINGTON RESOURCES OIL & GAS COMPANY

Z 464 536 965

VASTAR RESOURCES, INC.

Z 464 536 974

CONOCO, INC.

Z 464 536 975

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

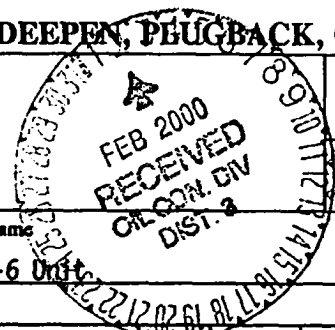
**OIL CONSERVATION DIVISION**  
 2040 South Pacheco  
 Santa Fe, NM 87505

Form C  
 Revised October 18, 1998  
 Instructions on  
 Submit to Appropriate District Office  
 State Lease - 6 Copies  
 Fee Lease - 5 Copies

AMENDED REPOI

**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 009257	<sup>5</sup> Property Name San Juan 29-6 Unit	<sup>3</sup> API Number 30-0 39-260
		<sup>6</sup> Well No. 94M



<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
F	16	29N	6W		2370'	North	1845'	West	Rio Armit

<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
F									

<sup>9</sup> Proposed Pool 1 Basin Dakota 71599	<sup>10</sup> Proposed Pool 2 Blanco Mesaverde 72319
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<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 6527'
<sup>16</sup> Multiple Y	<sup>17</sup> Proposed Depth 7904'	<sup>18</sup> Formation Dakota	<sup>19</sup> Contractor ACAT-Key Energy	<sup>20</sup> Spud Date 1st Qtr 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' *	159 sx Type 3	Surface
8-3/4"	7"	20#, J/K-55	3834'	352 sx Type 3	Surface
				T-100 sx Type 3	
6-1/4"	4-1/2"	11.6#, N-80	7904	246 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 100' above the Cliffhouse Sandstone. Circulation/squeeze cementing will be conducted to isolate the Lewis Shale interval prior to its completion.

See attached details for the cathodic protection for this well.

<sup>23</sup> I hereby certify that the information given above 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	<b>OIL CONSERVATION DIVISION</b>	
	Approved by: <i>[Signature]</i>	
	Title: SUPERVISOR DISTRICT # 3	
	Approval Date: FEB - 2 2000	Expiration Date: FEB - 2

000, Hobbs, NM 88241-1900  
 South West, Artesia, NM 88210  
 Rio Bravo Rd., Aztec, NM 87410  
 South Pacheco, Santa Fe, NM 87505

Energy, Minerals & Natural Resources

**OIL CONSERVATION DIVISION**  
 2040 South Pacheco  
 Santa Fe, NM 87505

Instructions on back  
 Submit to Appropriate District Office  
 State Lease - 4 Copies  
 Fee Lease - 3 Copies

AMENDED REPORT

**WELL LOCATION AND ACREAGE DEDICATION PLAT**

* API Number <b>30-039-26339</b>		* Pool Code <b>72319</b>	* Pool Name <b>Blanco Mesaverde</b>
* Property Code <b>009257</b>	* Property Name <b>SAN JUAN 29-6 UNIT</b>		* Well Number <b>94M</b>
* GRID No. <b>017654</b>	* Operator Name <b>PHILLIPS PETROLEUM COMPANY</b>		* Elevation <b>6527'</b>

**10 Surface Location**

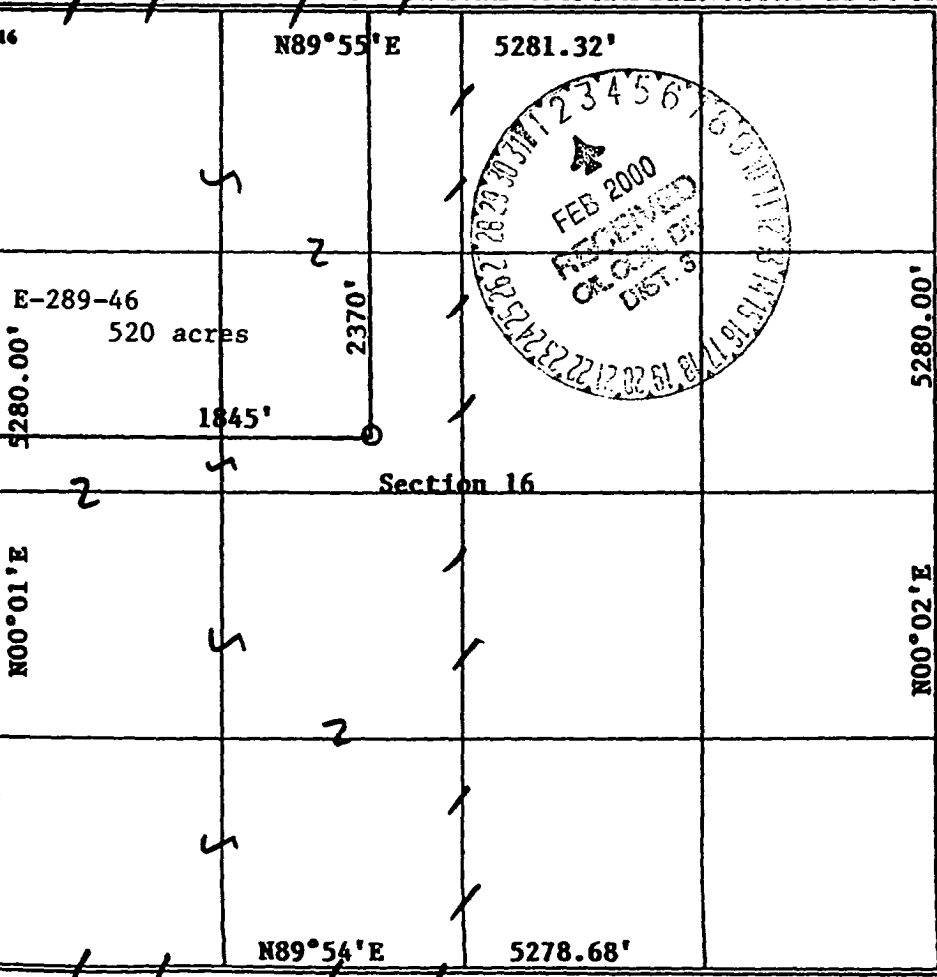
UL or lot no.	Section	Township	Range	Lot Ida	Feet from the	North/South line	Feet from the	East/West line	County
F	16	29N	6W		2370'	NORTH	1845'	WEST	RIO ARRIBA

**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
F									

* Dedicated Acres <b>320 W/2</b>	* Joint or Infill <b>I</b>	* Consolidation Code <b>U</b>	* 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**



**17 OPERATOR CERTIFICATION**  
 I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief

*Patsy Clugston*  
 Signature  
**Patsy Clugston**  
 Printed Name  
**Sr. Regulatory Clerk**  
 Title  
**January 18, 2000**  
 Date

**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.

**11/18/99**  
 Date of Survey  
*[Signature]*  
 Signature and Seal  
  
 Certificate Number



# PHILLIPS PETROLEUM COMPANY

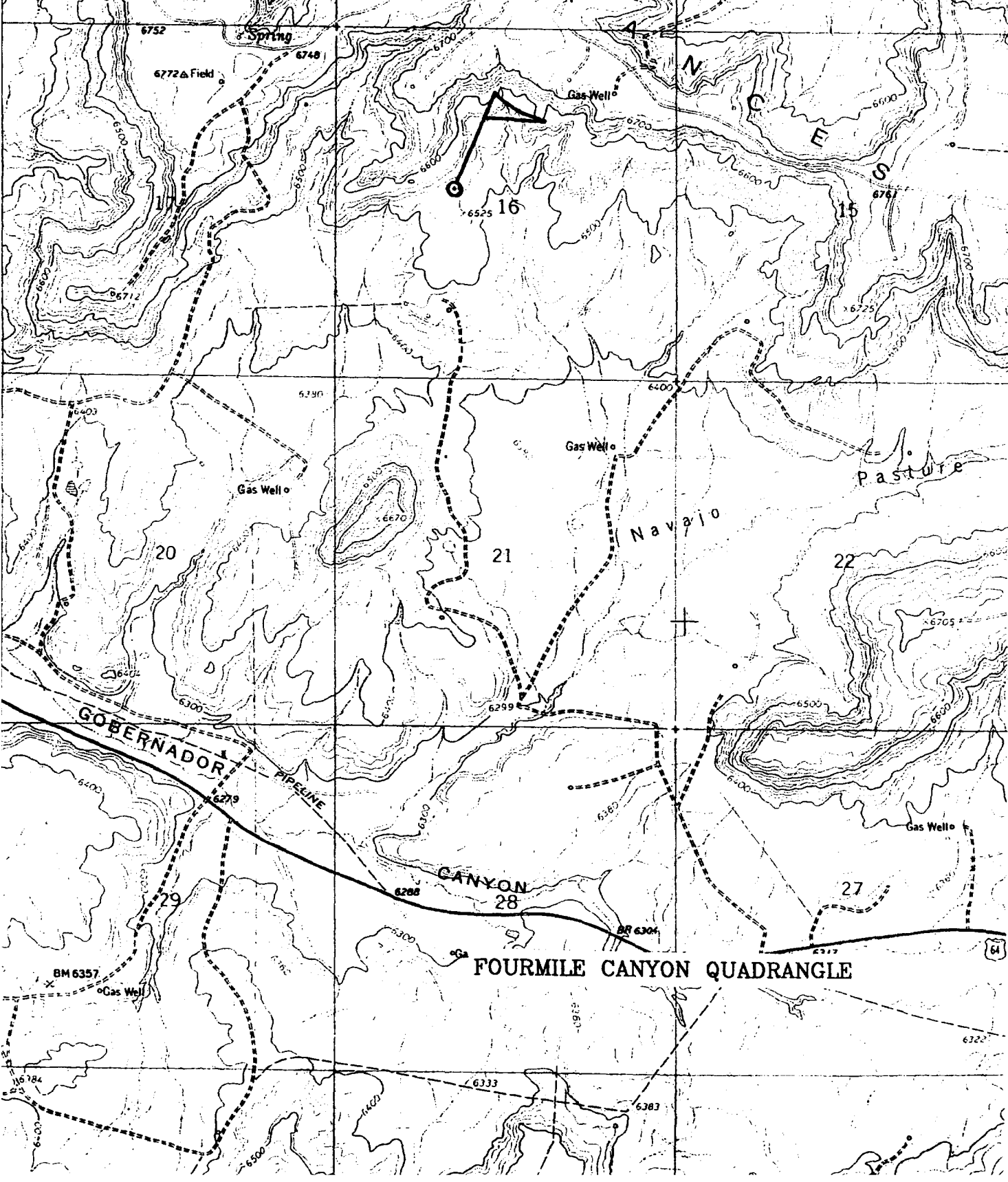
SAN JUAN 29-6 UNIT No. 94M

2370' FNL, 1845' FWL

NW/4 SEC. 16, T-29-N, R-06-W, N.M.P.M.,

RIO ARRIBA COUNTY, NEW MEXICO

GROUND LEVEL ELEVATION: 6527'

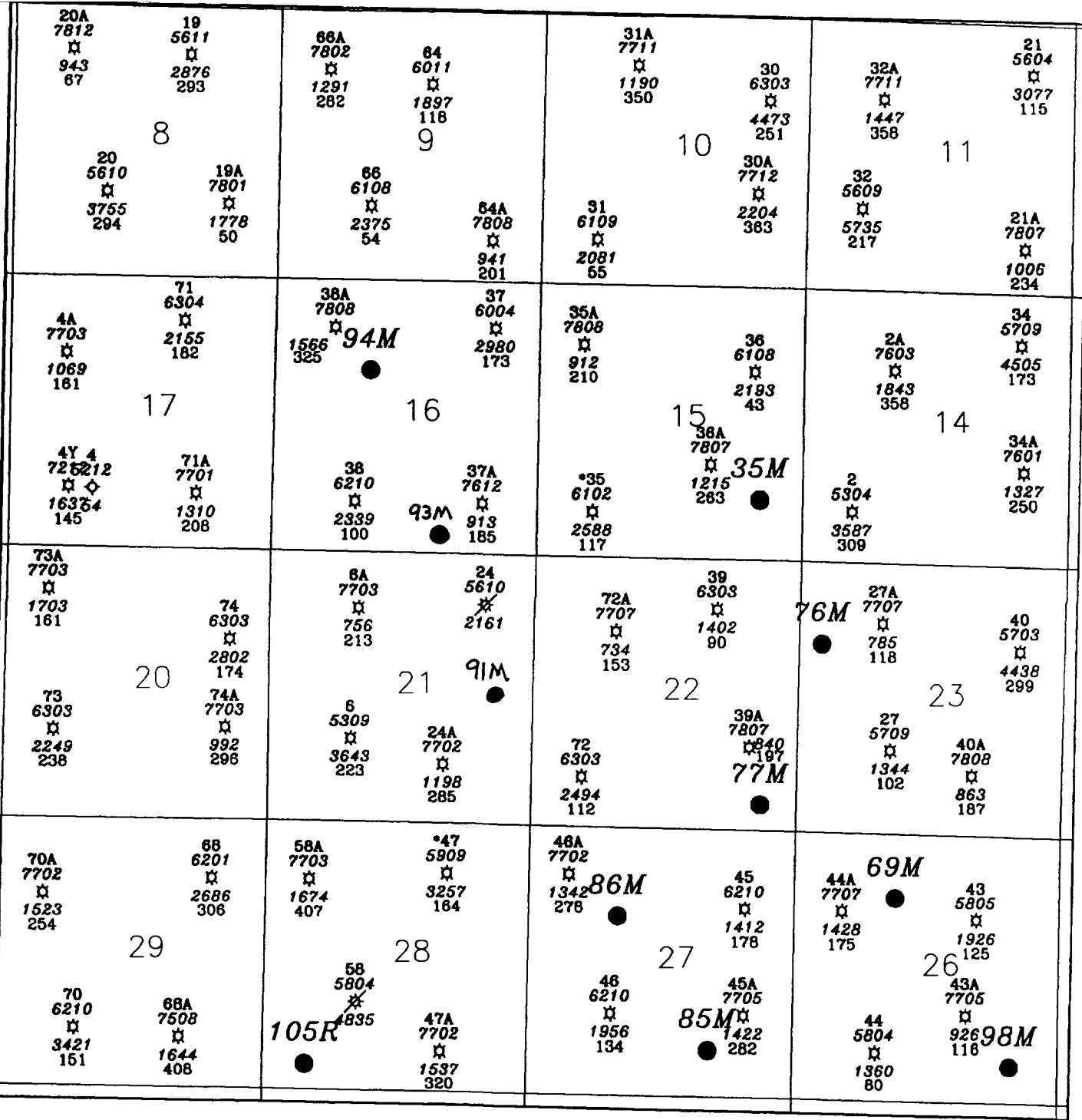


PLAT OF OFFSET OPERATORS TO  
W/2 SECTION 16-29N-6W, RIO ARRIBA COUNTY, NEW MEXICO

	8	Phillips Petroleum Company (100%)	9		10
	17	Phillips Petroleum Company (Burlington Resources, etal)	#94M *	16	15
	20	Phillips Petroleum Company (Burlington Resources, etal)	Phillips Petroleum Company (Burlington Resources)	21	22

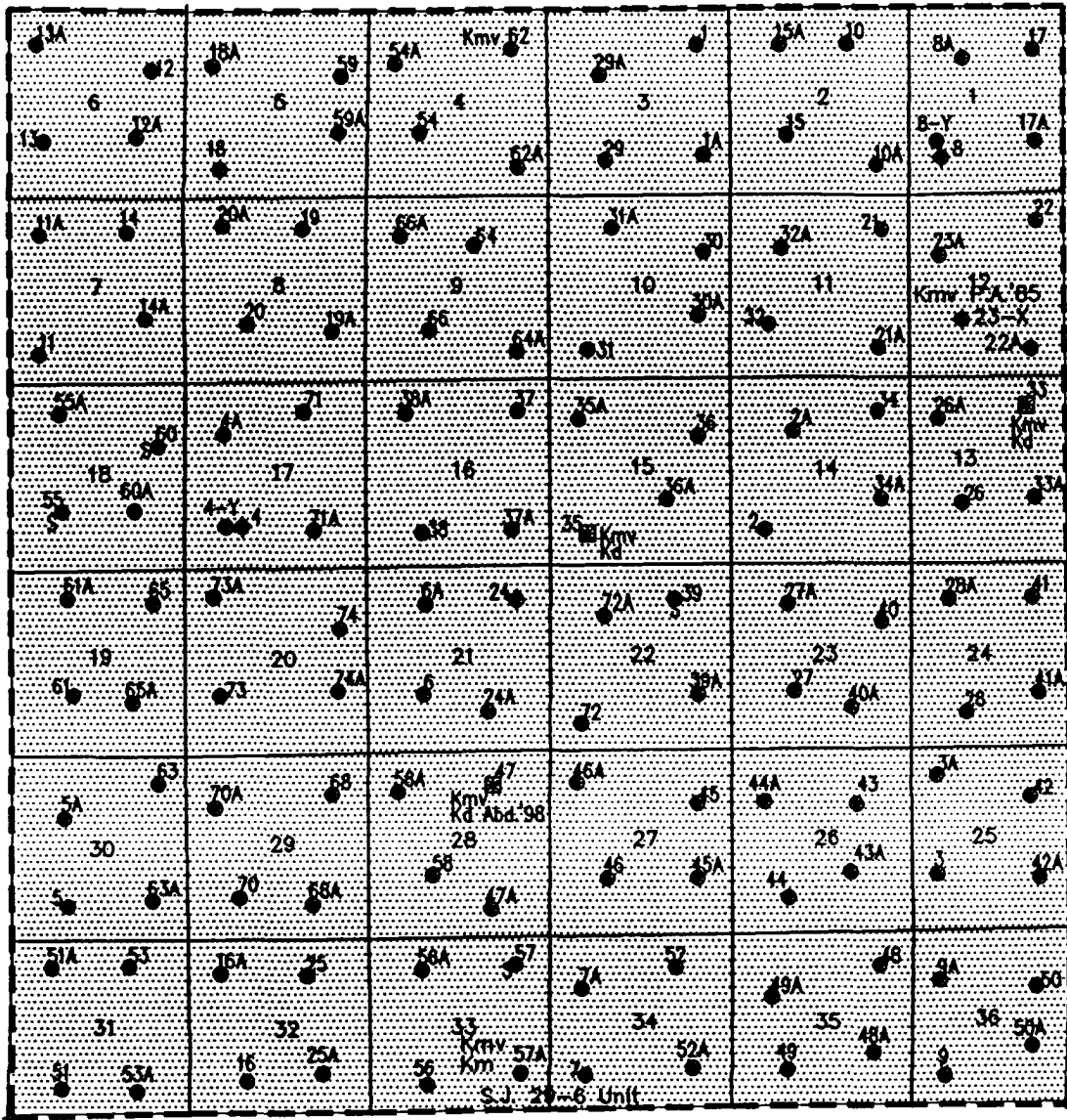
## OFFSET AFFECTED OWNERS LIST

Burlington Resources Oil & Gas Company  
Vastar Resources, Inc.  
Conoco, Inc.



## San Juan 29-6 Unit (Mesaverde)

Blue - First Production Date  
 Red - Cumulative Production (MMCF)  
 Green - Daily Rate (MCF)



R-6-W

T  
29  
N

● MESAVERDE Km — Kch CLIFFHOUSE  
Km MENEFEE  
Kpl POINT LOOKOUT

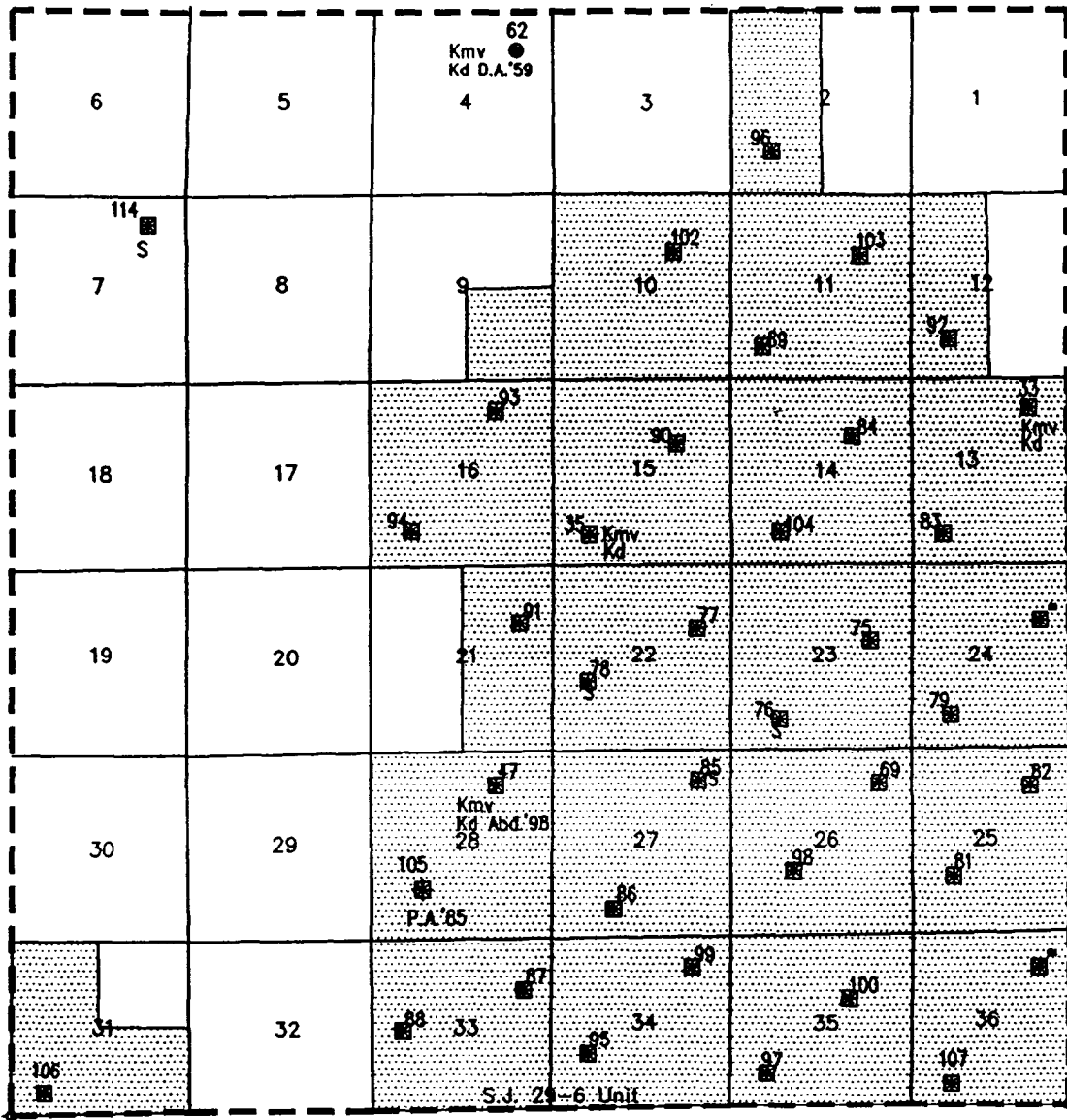
▨ Mesaverde Participating Area  
37th expansion Eff. 11/1/62

PHILLIPS PETR. CO.

**SAN JUAN 29-6 UNIT**  
RIO ARRIBA CO, NM

March 4, 1999

J. Hopkins



R-6-W

■ DAKOTA Kd

▨ Dakota Participating Area  
10th expansion Eff. 7/1/66

PHILLIPS PETR. CO.

SAN JUAN 29-6 UNIT

RIO ARRIBA CO, NM

March 4, 1999

J. Hopkins

# DRILLING AND COMPLETION COSTS CAPITAL EXPENSES (M\$)

## MESAVERDE

## DAKOTA

### SINGLE COMPLETION

	TANGIBLE	INTANGIBLE	TOTAL		TANGIBLE	INTANGIBLE	TOTAL
<b>DRILL &amp; COMPLETE</b>	105.2	339.4	444.6	<b>DRILL &amp; COMPLETE</b>	119.1	362.2	481.3
<b>FACILITIES</b>	22.6	16.4	39.0	<b>FACILITIES</b>	22.6	16.4	39.0
<b>TOTAL</b>	127.8	355.8	483.6	<b>TOTAL</b>	141.7	378.6	520.3

**Two Singles (Dakota + Mesaverde) 1003.9**

### DUAL COMPLETION

	TANGIBLE	INTANGIBLE	TOTAL		TANGIBLE	INTANGIBLE	TOTAL
<b>DRILL &amp; COMPLETE</b>	74.5	330.3	404.8	<b>DRILL &amp; COMPLETE</b>	80.6	362.0	442.6
<b>FACILITIES</b>	22.6	16.4	39.0	<b>FACILITIES</b>	22.6	16.4	39.0
<b>TOTAL</b>	97.1	346.7	443.8	<b>TOTAL</b>	103.2	378.4	481.6

**Dually Completed (Dakota + Mesaverde) 925.4**

### COMMINGLE COMPLETION

	TANGIBLE	INTANGIBLE	TOTAL		TANGIBLE	INTANGIBLE	TOTAL
<b>DRILL &amp; COMPLETE</b>	51.7	284.5	336.2	<b>DRILL &amp; COMPLETE</b>	69.7	280.3	350.0
<b>FACILITIES</b>	11.3	8.2	19.5	<b>FACILITIES</b>	11.3	8.2	19.5
<b>TOTAL</b>	63.0	292.7	355.7	<b>TOTAL</b>	81.0	288.5	369.5

**Commingled Completion (Dakota + Mesaverde) 725.2**

## MESAVERDE OPERATING COSTS (\$/YR)

	SINGLE COMPLETION	DUAL COMPLETION	COMMINGLE COMPLETION
SAN JUAN 29-6 UNIT	7350	6620	5510
SAN JUAN 31-6 UNIT	5540	4990	4160
SAN JUAN 32-7 UNIT	6900	6210	5180
SAN JUAN 32-8 UNIT	6220	5600	4670

## DAKOTA OPERATING COSTS (\$/YR)

	SINGLE COMPLETION	DUAL COMPLETION	COMMINGLE COMPLETION
SAN JUAN 29-6 UNIT	5560	5000	4170
SAN JUAN 31-6 UNIT	5560	5000	4170
SAN JUAN 32-7 UNIT	5500	4950	4130
SAN JUAN 32-8 UNIT	5025	4525	3770



# SAN JUAN 29-6 UNIT

DAKOTA MARGINAL ECONOMICS

