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R-6-W

MESAVERDE      Kmv {
 

Kch
Km
Kpl

 CLIFFHOUSE  
 MENEFEЕ  
 POINT LOOKOUT

PHILLIPS PETR. CO.

SAN JUAN 29-6 UNIT

RIO ARRIBA CO, NM

March 4, 1999

J. Hopkins

## MESAVERDE FORMATION

	INITIAL		CURRENT		PROJECTED	PROJECTED
	WHSIP (PSI)	BHSIP (PSI)	WHSIP (PSI)	BHSIP (PSI)	Qi (MCFD)	EUR (BCF)
<b>SAN JUAN 29-6 UNIT</b>	1067	1280	417	500	363	0.74
<b>SAN JUAN 31-6 UNIT</b>	1083	1300	446	536	315	0.69
<b>SAN JUAN 32-7 UNIT</b>	1133	1360	482	578	204	0.61
<b>SAN JUAN 32-8 UNIT</b>	1125	1350	538	646	345	0.69

## DAKOTA FORMATION

	INITIAL		CURRENT		PROJECTED	PROJECTED
	WHSIP (PSI)	BHSIP (PSI)	WHSIP (PSI)	BHSIP (PSI)	Qi (MCFD)	EUR (BCF)
<b>SAN JUAN 29-6 UNIT</b>	2608	3130	703	844	277	1.23
<b>SAN JUAN 31-6 UNIT</b>	2761	3313	1050	1260	335	1.69
<b>SAN JUAN 32-7 UNIT</b>	2658	3190	755	906	243	0.83
<b>SAN JUAN 32-8 UNIT</b>	2658	3190	876	1051	145	0.76

# 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
<b>Two Singles (Dakota + Mesaverde)</b>					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
<b>Dually Completed (Dakota + Mesaverde)</b>					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
<b>Commingled Completion (Dakota + Mesaverde)</b>					725.2		

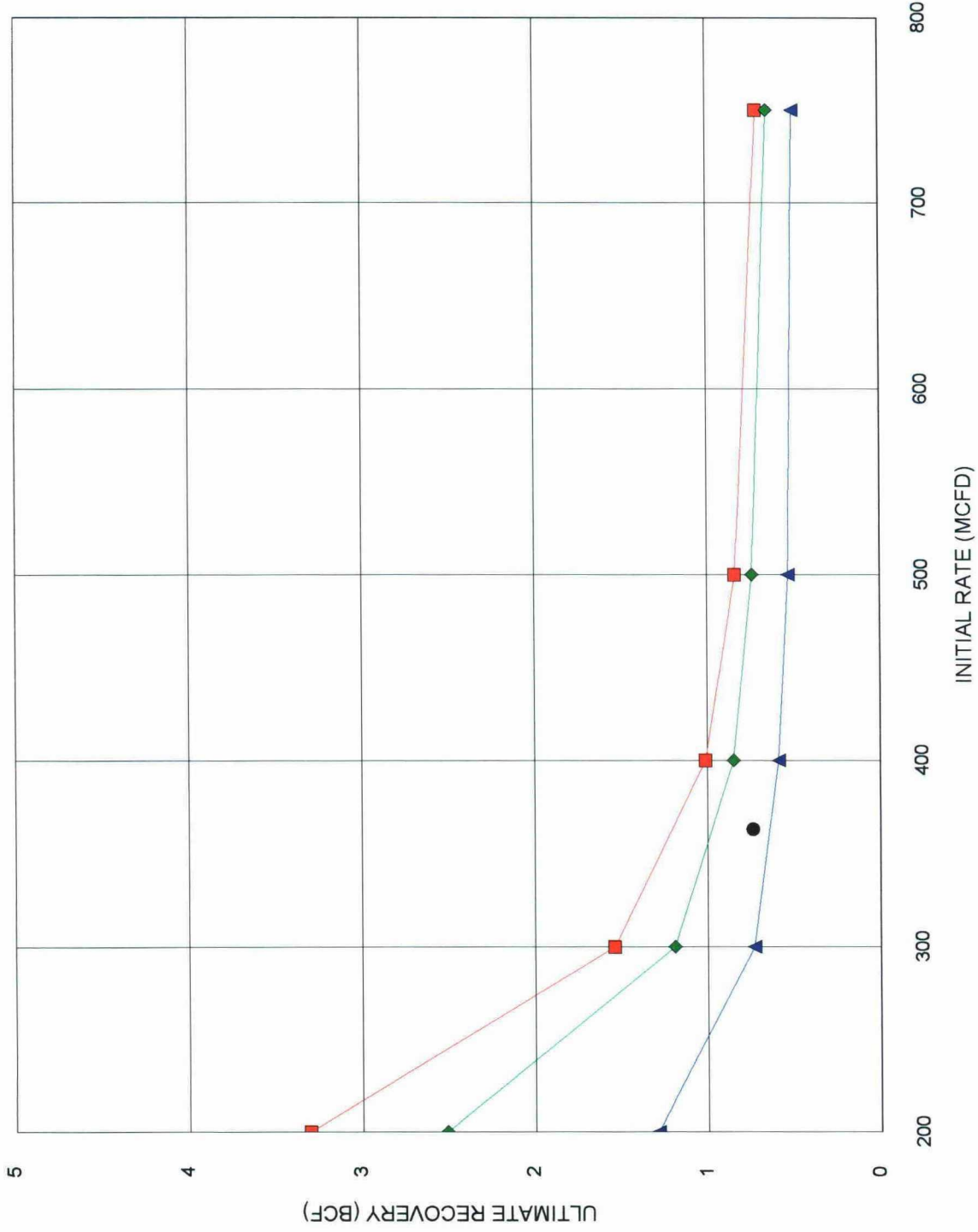
## MESAVERDE OPERATING COSTS (\$/YR)

	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**  
 MESAVERDE MARGINAL ECONOMICS



- Single 20% AARR
- ◆ Dual 20% AARR
- ▲ Commingle 20% AARR
- Projected 29-6 MV Well