

District I  
 Box 1980, Hobbs, NM 88241-1980  
 District II  
 811 South First, Artesia, NM 88210  
 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-1  
 Revised October 18, 199  
 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 30-039-25659	* Pool Code 72319	* Pool Name Blanco Mesaverde
* Property Code 009258	* Property Name SAN JUAN 30-5 UNIT	* Well Number 75-M
* OGRID No. 017654	* Operator Name PHILLIPS PETROLEUM CO.	* Elevation 6403

<sup>10</sup> Surface Location

UT, or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
E	21	30N	5W		1555	NORTH	1095	WEST	RIO ARriba

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

UT, or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
E									
* Dedicated Acres 320	* Joint or Infill Y	* Consolidation Code U	* 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

<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

*R A Allred*  
 Signature  
 R. A. Allred  
 Printed Name  
 Production/Drilling Spvr.  
 Title  
 March 19, 1997  
 Date

<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 belief.

2/18/97  
 Date of Survey  
 HENRY E. BROADHURST  
 Registered Professional Surveyor  
 11273  
 2/14/97  
 Certificate Number

5260.20'

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State of New Mexico  
 Energy, Minerals & Natural Resources Department

Form C-10,  
 Revised October 18, 1994

OIL CONSERVATION DIVISION  
 2040 South Pacheco  
 Santa Fe, NM 87505

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☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

* API Number 30-039-25659	* Pool Code 71599	* Pool Name Basin Dakota
* Property Code 009258	* Property Name SAN JUAN 30-5 UNIT	* Well Number 75-M
* OGRID No. 017654	* Operator Name PHILLIPS PETROLEUM CO.	* Elevation 6403

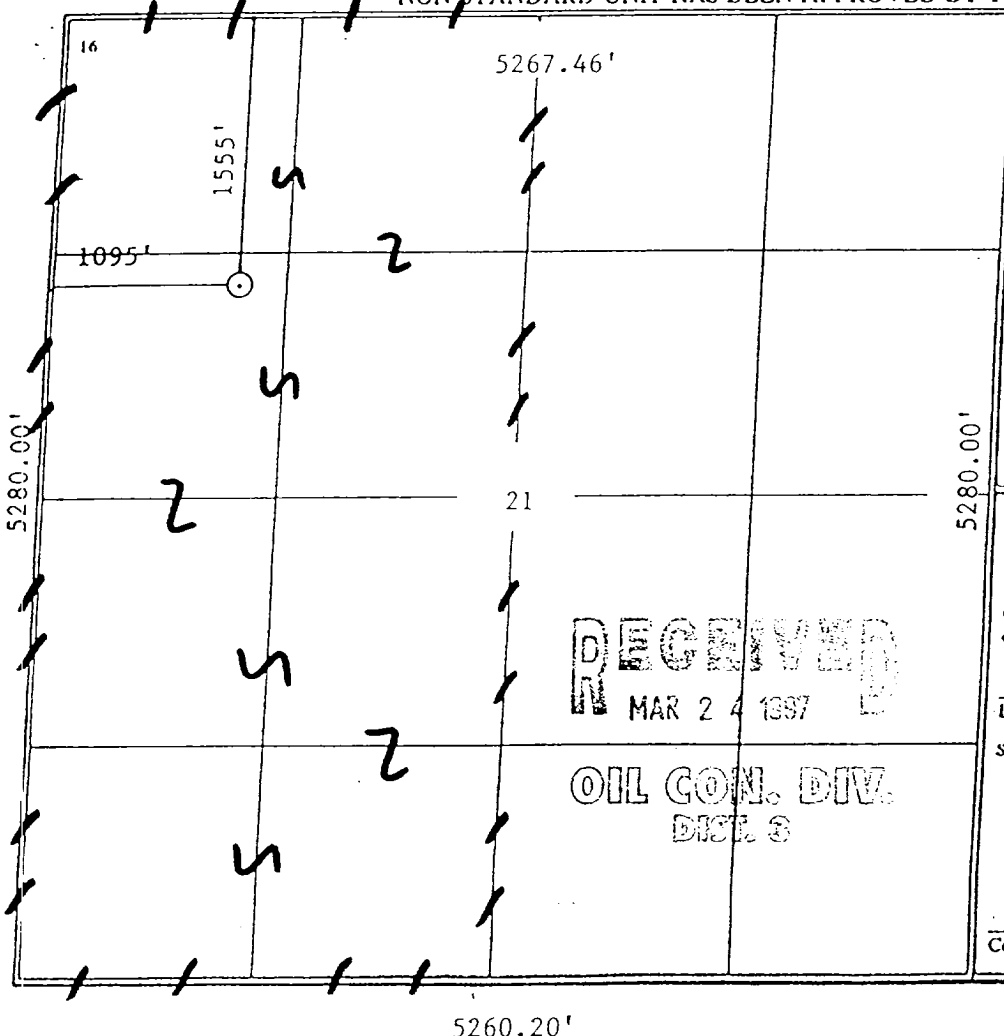
10 Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
E	21	30N	5W		1555	NORTH	1095	WEST	RIO ARriba

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E									
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 R. A. Allred  
 Printed Name  
 Production/Drilling Spvr  
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 Date  
 March 19, 1997

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Date of Survey  
 2/18/97  
 Signature  
 HENRY E. BROADHURST  
 Registered Professional Surveyor  
 Certificate Number  
 11273

PHILLIPS PETROLEUM COMPANY  
5525 HWY 64 NEU 3004  
FARMINGTON, NEW MEXICO 87401

DATE: FEBRUARY 6, 1998

WELL NAME: SAN JUAN 30-5 # 75M  
FORMATION: DAKOTA

TYPE TEST: STATIC GRADIENT

COUNTY: RIO ARriba  
STATE: NEW MEXICO

ELEVATION: BL  
TOTAL DEPTH: 7935'  
PERFORATIONS: 7754' TO 7887'  
TUBING SIZE: 2 3/8 TO 7731'  
CASING SIZE: 4 1/2 TO 7942'  
PACKER:  
OTHER: PRESSURE @ SHUT IN  
CASING 900. TUBING 500

CASING PRESSURE: 1100  
TUBING PRESSURE: 990  
OIL LEVEL:  
WATER LEVEL: 7455'  
TEMPERATURE:  
AMERADA ELEMENT NUMBER: 87977  
RANGE: 0-2500  
WELL STATUS: SHUT IN 24 HRS  
@ 14:00 2-5-98

INDIVIDUAL WELL DATA SHEET

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FLOWING GRADIENT TRAVERSE

DEPTH IN FEET	PRESSURE PSIG	GRADIENT PSI/FOOT
0	987	
2000	1023	0.018
4000	1061	0.019
6000	1094	0.016
7421	1119	0.017
7621	1195	0.380
7821	1277	0.410

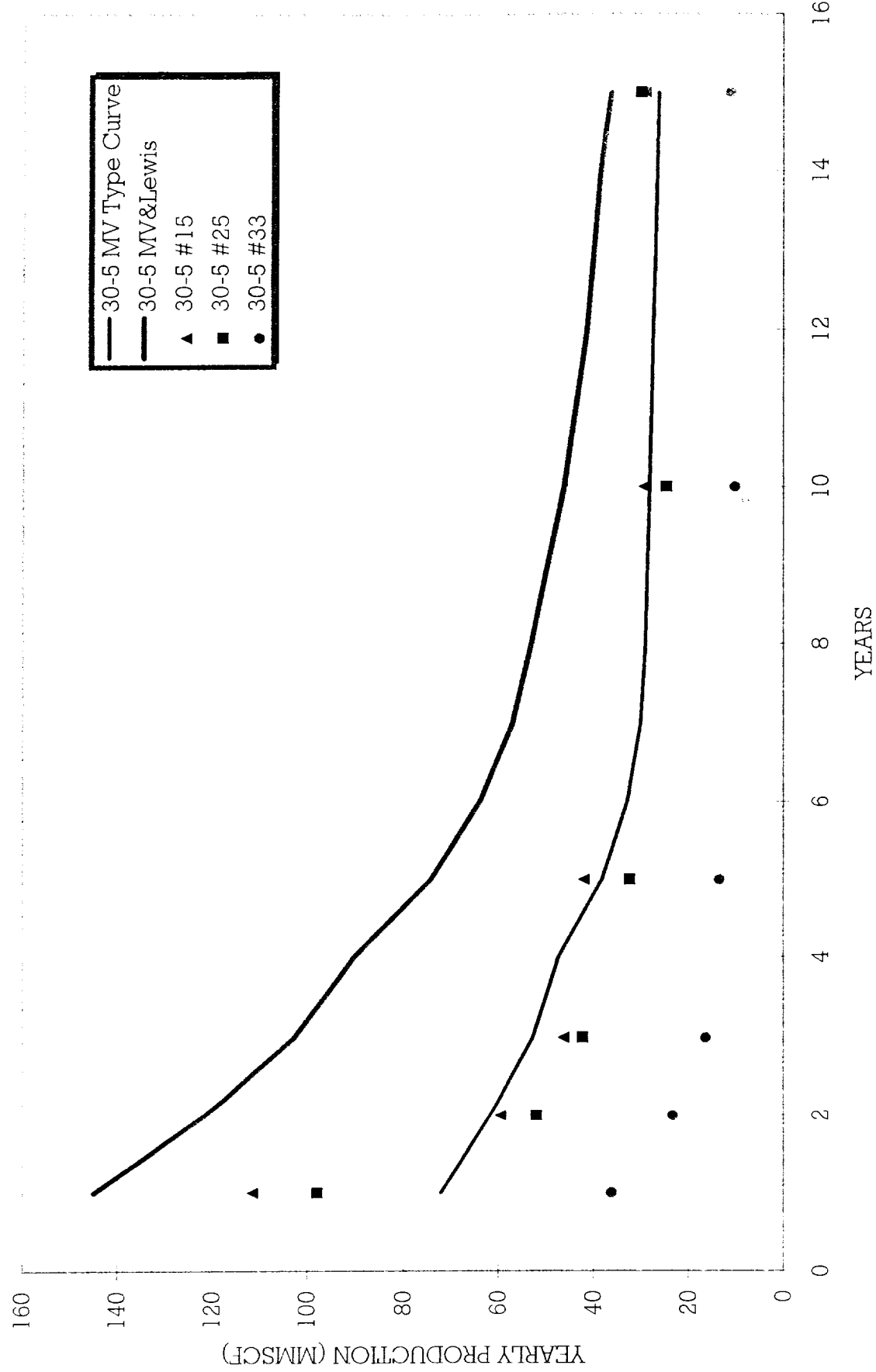
A & H WIRELINE SERVICE INC.  
P. O. BOX 899  
FLORA VISTA, N. MEX. 87415  
OPERATOR: CHARLES HUGHES  
(505) 741-7410

Dakota Production Forecast for 30-5 Unit  
Well #75M

Year	Month	Gas (MCF)
Feb. 98	1	5,135
Mar	2	5,635
Apr	3	5,406
May	4	5,537
Jun	5	5,312
Jul	6	5,441
Aug	7	5,393
Sep	8	5,174
Oct	9	5,299
Nov	10	5,083
Dec	11	5,207
1999	12	5,162
Feb	13	4,621
Mar	14	5,072
Apr	15	4,865
May	16	4,983
Jun	17	4,780
Jul	18	4,897

Initial Rate = 185 MCF/D

# 30-5 UNIT MESAVERDE





# PHILLIPS PETROLEUM COMPANY

FARMINGTON, NEW MEXICO 87401  
5525 HWY. 64 NBU 3004

February 10, 1998

New Mexico Oil & Gas Conservation Div.  
2040 South Pacheco  
Santa Fe, NM 87505-6429

Downhole Commingling Allocation Method  
on the San Juan 30-5 Unit # 75M

Dear Sirs:

Phillips is proposing to utilize the subtraction method on the subject well for approximately six months after actual commingling occurs. After the six month period we will convert to the ratio method as indicated in our commingling application. We believe this will be a more accurate method of allocating production considering that the Dakota interval has been producing for several months and that the production will not be stabilized on the Mesaverde for several months.

## Dakota Production Forecast

February 1998	5,135	March 1998	5,635
April 1998	5,406	May 1998	5,537
June 1998	5,312	July 1998	5,441
August 1998	5,393	September 1998	5,174
October 1998	5,299	November 1998	5,083

For example, if the total volume for September 1998 were 9,980 mcf, then the Dakota would be allocated 5,174 mcf and the Mesaverde 4,806 mcf. And subsequently, the Dakota would be allocated  $5,174/9,980$  or 51.84%. and Mesaverde would be allocated  $(4,806/9,980)$  or 48.16%.

Sincerely,  
PHILLIPS PETROLEUM COMPANY

*Mark W. Stodola*

Mark W. Stodola  
Reservoir Engineer

MS/pc

cc: OCD - Aztec  
BLM - Farmington  
NM Commissioner of Public Lands - Santa Fe



NEW MEXICO ENERGY, MINERALS  
& NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION  
AZTEC DISTRICT OFFICE  
AZTEC NM 87410  
(505) 334-6178 FAX: (505) 334-6170  
[http://nemrdd.state.nm.us/ocd/District III/3district.htm](http://nemrdd.state.nm.us/ocd/District%20III/3district.htm)

GARY E. JOHNSON  
GOVERNOR

Jennifer A. Salisbury  
CABINET SECRETARY

January 6, 1998

Mr Mark W Stodola  
Phillips Petroleum Co  
5525 Hwy 64 NBU 3004  
Farmington NM 87401

Re: San Juan 30-5 Unit #110M, API# 30-039-25658, E-16-30N-05W, DHC

Dear Mr. Stodola:

Your recommended allocation of commingled production using the subtraction method for the referenced well is hereby accepted through the month of June 1998. Beginning in July you will submit a recommended allocation formula based on historical production values.

If you have any questions, please contact me.

Yours truly,

Arnie Busch  
District Geologist/Deputy O&G Inspector

EB/sh

cc. well file



# PHILLIPS PETROLEUM COMPANY

FARMINGTON, NEW MEXICO 87401  
5625 HWY. 64 NBU 3004

December 17, 1997

NM Oil & Gas Conservation Division  
1000 Rio Brazos Rd.  
Aztec, NM 87410

Downhole Commingling Allocation Method  
on the 30-5 Unit #110M

Dear Sirs:

Phillips proposes to utilize the subtraction method through June 1998, and then convert to the ratio method after June 1998. We believe this will be a more accurate method of allocating production considering that the production will not be stabilized on the Mesaverde for several months.

## Dakota Production Forecast

Dec. 1997	6879 mcf
Jan. 1998	6814 mcf
Feb. 1998	6097 mcf
March 1998	6687 mcf
April 1998	6410 mcf
May 1998	6561 mcf
June 1998	6290 mcf

For example, if the total June 1998 were to be 12,290 mcf, then the Dakota would be allocated 6290 mcf and the Mesaverde 6000 mcf. And subsequently, the Dakota would be allocated  $(6290/12,290)$  or 51.18%, and the Mesaverde would be allocated  $(6000/12,290)$  or 48.82%.

Sincerely,

PHILLIPS PETROLEUM COMPANY

Mark W. Stodola  
Reservoir Engineer



Date: 2/10/98

User: MWSTODO

```
Wellzone F0625 02 Yr: 1997 Mth: 05   Property: 650402 SAN JUAN 30-5 DAKOTA UNIT-
Screen: 1 (1-Prod, 2-Inj, 3-Both)      Well No: 000075M
Type: D (T-Total, D-Daily Avg)         Field: 042233 BASIN
Period: M (M-Mnthly, Y-Yrly, C-Cum)    Resvr: 20079 DAKOTA NQ
```

ADJ		PRODUCED			DAYS		WELL			
FLG	DATE	OIL (BBL)	GAS (MCF)	WATER (BBL)	PROD	OP	ST	CL	TY	
	1997-05	0.00	0	0	0.00	0	86	11	2	
	1997-06	0.00	61	0	30.00	30	11	11	2	
	1997-07	0.00	302	0	31.00	31	11	11	2	
	1997-08	0.00	208	0	31.00	31	11	11	2	
	1997-09	0.00	161	0	30.00	30	11	11	2	
*	1997-10	0.00	158	4	31.00	11	11	11	2	
*	1997-11	0.00	128	0	30.00	30	11	11	2	
	1997-12	0.00	136	0	31.00	31	11	11	2	

NO MORE DATA AVAILABLE

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PA1=ICE      PA2=Exit    PF1=Help      PF3=End        PF11=GRAPH
Transfer->   PF7=Backward PF8=Forward    PF4=PREV SCREEN PF12=LOG GRAPH
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## Production Allocation Methodology

### ♦ Adding New Zone to Existing Zone - Initially Subtraction Method followed by Fixed Allocation Method

- Subtraction Method (+/- 1st 12 months)
  - Forecast production rate by month for existing zone utilizing established decline curve for zone
  - Subtract forecasted rate from commingled rate to define new zone rate
  - Utilize subtraction method for +/- 12 months until new zone rate stabilizes, then utilize fixed allocation method with current rates
- Fixed Allocation Method (after Subtraction Method)
  - Utilize forecasted rate from established decline curve for lower zone
  - Calculate upper zone rate by subtracting lower zone rate from commingled rate
  - Lower zone allocation =  $\frac{\text{Lower zone rate}}{\text{Commingled rate}}$
  - Upper zone allocation =  $\frac{(\text{Commingled rate} - \text{Lower zone rate})}{\text{Commingled rate}}$

Attachment

OCD Form C-107A (3/12/96)

Item No. 12 - additional explanation:

Based on water analysis from the Mesaverde and Dakota zones and discussions with the chemical treating/analysis company the water from these two zones are compatible. Lab analysis of the individual waters from both the Mesaverde and Dakota formations resulted in positive scaling indices for barium sulfate. There was a slight increase in the barium sulfate scaling index of the combined waters relative to the scaling index of the individual waters.

None of the waters, combined or individual, had meaningful scaling tendencies and combined with the fact that typical water production from either of these zones in San Juan 30-5 are 0-1 BWPD and no barium sulfate scale has been detected to date, no negative impacts to the formations are anticipated.