

ABOVE THIS LINE FOR DIVISION USE ONLY

NEW MEXICO OIL CONSERVATION DIVISION

- Engineering Bureau -

2040 South Pacheco, Santa Fe, NM 87505



2487

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]

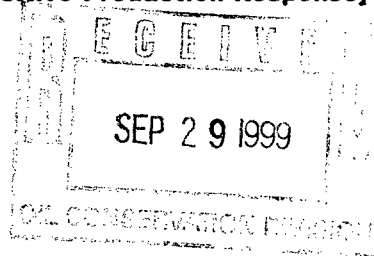
[1] TYPE OF APPLICATION - Check Those Which Apply for [A]

- [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.

Clint Hutchinson
Print or Type Name

Clint L. Hutchinson
Signature

Reservoir Engr.
Title

9/28/99
Date

DISTRICT I

P.O. Box 1980, Hobbs, NM 88241-1980

DISTRICT II

811 South First St., Artesia, NM 88210-2835

DISTRICT III

1000 Rio Brazos Rd, Aztec, NM 87410-1693

State of New Mexico
Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION

2040 S. Pacheco
Santa Fe, New Mexico 87505-6429Form C-107-A
New 3-12-96

APPROVAL PROCESS:

☒ Administrative ☐ Hearing

EXISTING WELLBORE

☒ YES ☐ NO

APPLICATION FOR DOWNHOLE COMMINGLING

Phillips Petroleum Company

5525 Hwy. 64, Farmington, NM 87401

Operator

Address

San Juan 30-5 Unit

71M

D, Sec. 22 30N, 5W

Rio Arriba

Lessee

Well No.

Unit Ltr. - Sec - Twp - Rge

County

Spacing Unit Lease Types: (check 1 or more)

OGRID NO. 017654 Property Code 009258 API NO. 30-039-26029 Federal ☒ State ☐ (and/or) Fee ☐

The following facts are submitted in support of downhole commingling:	Upper Zone	Intermediate Zone	Lower Zone
1. Pool Name and Pool Code	72319 Blanco Mesaverde		71599 Basin Dakota
2. Top and Bottom of Pay Section (Perforations)			
3. Type of production (Oil or Gas)	Gas		Gas
4. Method of Production (Flowing or Artificial Lift)	Flowing		Flowing
5. Bottomhole Pressure	a. (Current)	a.	a.
Oil Zones - Artificial Lift: Estimated Current	1030 (est)		1264
Gas & Oil - Flowing: Measured Current	b. (Original)	b.	b.
All Gas Zones: Estimated Or Measured Original	1294 (est.)		3142
6. Oil Gravity (°API) or Gas BTU Content	1030		990
7. Producing or Shut-In?			Producing
Production Marginal? (yes or no)	Yes		Yes
• If Shut-In, give date and oil/gas/water rates of last production	Date: Rates:	Date: Rates:	Date: Rates:
Note: For new zones with no production history, applicant shall be required to attach production estimates and supporting data			
• If Producing, give date and oil/gas/water rates of recent test (within 60 days)	Date: estimated Rates: 300 mcf/d	Date: Rates:	Date: 8/31/99 Rates: 554 mcf/d
8. Fixed Percentage Allocation Formula - % for each zone	Oil: % Gas: %	Oil: % Gas: %	Oil: % Gas: %

9. If allocation formula is based upon something other than current or past production, or is based upon some other method, submit attachments with supporting data and/or explaining method and providing rate projections or other required data.

10. Are all working, overriding, and royalty interests identical in all commingled zones? ☐ Yes ☒ No
If not, have all working, overriding, and royalty interests been notified by certified mail? ☒ Yes ☐ No
Have all offset operators been given written notice of the proposed downhole commingling? ☒ Yes ☐ No11. Will cross-flow occur? ☒ Yes ☐ No If yes, are fluids compatible, will the formations not be damaged, will any cross-flowed production be recovered, and will the allocation formula be reliable. ☒ Yes ☐ No (If No, attach explanation)12. Are all produced fluids from all commingled zones compatible with each other? ☒ Yes ☐ No13. Will the value of production be decreased by commingling? ☐ Yes ☒ No (If Yes, attach explanation)14. If this well is on, or communitized with, state or federal lands, either the Commissioner of Public Lands or the United States Bureau of Land Management has been notified in writing of this application. ☐ Yes ☐ No

15. NMOCD Reference Cases for Rule 303(D) Exceptions: ORDER NO(S). R-10770

16. ATTACHMENTS:

- C-102 for each zone to be commingled showing its spacing unit and acreage dedication.
- Production curve for each zone for at least one year. (If not available, attach explanation.)
- For zones with no production history, estimated production rates and supporting data.
- Data to support allocation method or formula.
- Notification list of all offset operators.
- Notification list of working, overriding, and royalty interests for uncommon interest cases.
- Any additional statements, data, or documents required to support commingling.

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

SIGNATURE Clinton L. Hutchinson TITLE Reservoir Engr. DATE 9/28/99TYPE OR PRINT NAME Clint Hutchinson TELEPHONE NO. (505) 599-3423

DISTRICT I
P.O. Box 1980, Hobbs, N.M. 88241-1980

State of New Mexico
Encl Minerals & Natural Resources Department

Form C-102
Revised February 21, 1994
Instructions on back

DISTRICT II
P.O. Drawer DD, Artesia, N.M. 88211-0719

OIL CONSERVATION DIVISION

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

DISTRICT III
1000 Rio Brazos Rd., Aztec, N.M. 87410

P.O. Box 2088
Santa Fe, NM 87504-2088

DISTRICT IV
PO Box 2088, Santa Fe, NM 87504-2088

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number	Pool Code 71599	Pool Name Basin Dakota
Property Code 009258	Property Name SAN JUAN 30-5 UNIT	Well Number 71M
GRID No. 017654	Operator Name PHILLIPS PETROLEUM COMPANY	Elevation 6493'

¹⁰ Surface Location

UL or lot no. D	Section 22	Township 30-N	Range 5-W	Lot Idn	Feet from the 824	North/South line NORTH	Feet from the 795	East/West line WEST	County RIO ARriba
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¹¹ Bottom Hole Location If Different From Surface

UL or lot no. D	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
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Dedicated Acres 320 W/2	Joint or Infill I	Consolidation Code U	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

16	N 89-45 E	5266.80'
824'		
795'		
SF-078739		
5280.0'		
N 00-02 E	22	

17 OPERATOR CERTIFICATION

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

Richard Allred
Signature
Richard Allred
Printed Name
Drilling Superintendent
Title
11-23-98
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

Date of Survey
Signature
Seal
Professional Land Surveyor
8894
Certificate Number

DISTRICT I
P.O. Box 1980, Hobbs, N.M. 88241-1980

DISTRICT II
P.O. Drawer DD, Artesia, N.M. 88211-0719

DISTRICT III
1000 Rio Brazos Rd., Aztec, N.M. 87410

DISTRICT IV
PO Box 2088, Santa Fe, NM 87504-2088

State of New Mexico
Minerals & Natural Resources Department

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OIL CONSERVATION DIVISION RECEIVED
P.O. Box 2088
Santa Fe, NM 87504-2088

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

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

*API Number	*Pool Code 72319	*Pool Name Blanco Mesaverde
*Property Code 009258	*Property Name SAN JUAN 30-5 UNIT	*Well Number 71M
*OGRID No. 017654	*Operator Name PHILLIPS PETROLEUM COMPANY	*Elevation 6493'

¹⁰ Surface Location

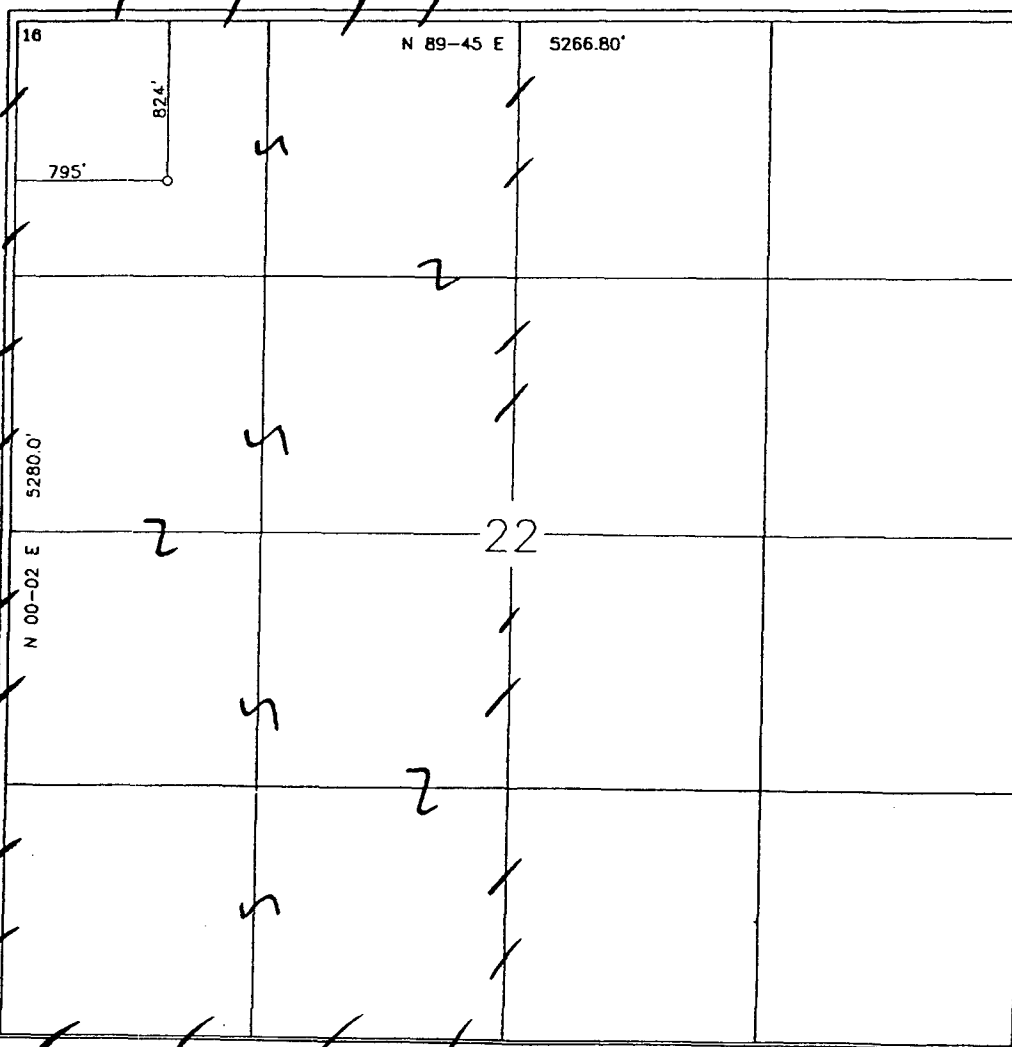
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
D	22	30-N	5-W		824	NORTH	795	WEST	RIO ARRIBA

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
D									

*Dedicated Acres 320 W/2	*Joint or Infill I	*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



17 OPERATOR CERTIFICATION

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

Rd Allred
Signature

Richard Allred
Printed Name

Drilling Superintendent
Title

11-23-98
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

ROY A. RUSH
NEW MEXICO
REGISTERED PROFESSIONAL LAND SURVEYOR
8894
Date of Survey
Signature
Seal
Professional Surveyor
8894
Certificate Number



PHILLIPS PETROLEUM COMPANY

FARMINGTON, NEW MEXICO 87401
5525 HWY. 64 NBU 3004

September 28, 1999

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

Downhole Commingling Allocation Method
On the San Juan 30-5 Unit #71 M

Dear Sirs:

Phillips Petroleum is proposing to utilize the subtraction method on the subject well for approximately twelve months after actual commingling occurs. After the 12th 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 the Dakota interval has been producing for months and that the production will not be stabilized on the Mesaverde for several months.

Dakota Production Forecast

October 1999	17056	November 1999	16283
December 1999	16600	January 2000	16374
February 2000	15117	March 2000	15949
April 2000	15231	May 2000	15532
June 2000	14834	July 2000	15129
August 2000	14930	September 2000	14262

For example, if the total volume for November 1999 were 26,083, then the Dakota would be allocated 16,283 mcf and the Mesaverde 9,800 mcf. And subsequently, the Dakota would be allocated $(16,283/26,083)$ or 62.43 % and the Mesaverde would be allocated $(9,800/26,083)$ or 37.57%.

Sincerely,

PHILLIPS PETROLEUM COMPANY

Clint Hutchinson
Reservoir Engineer

CH/pc

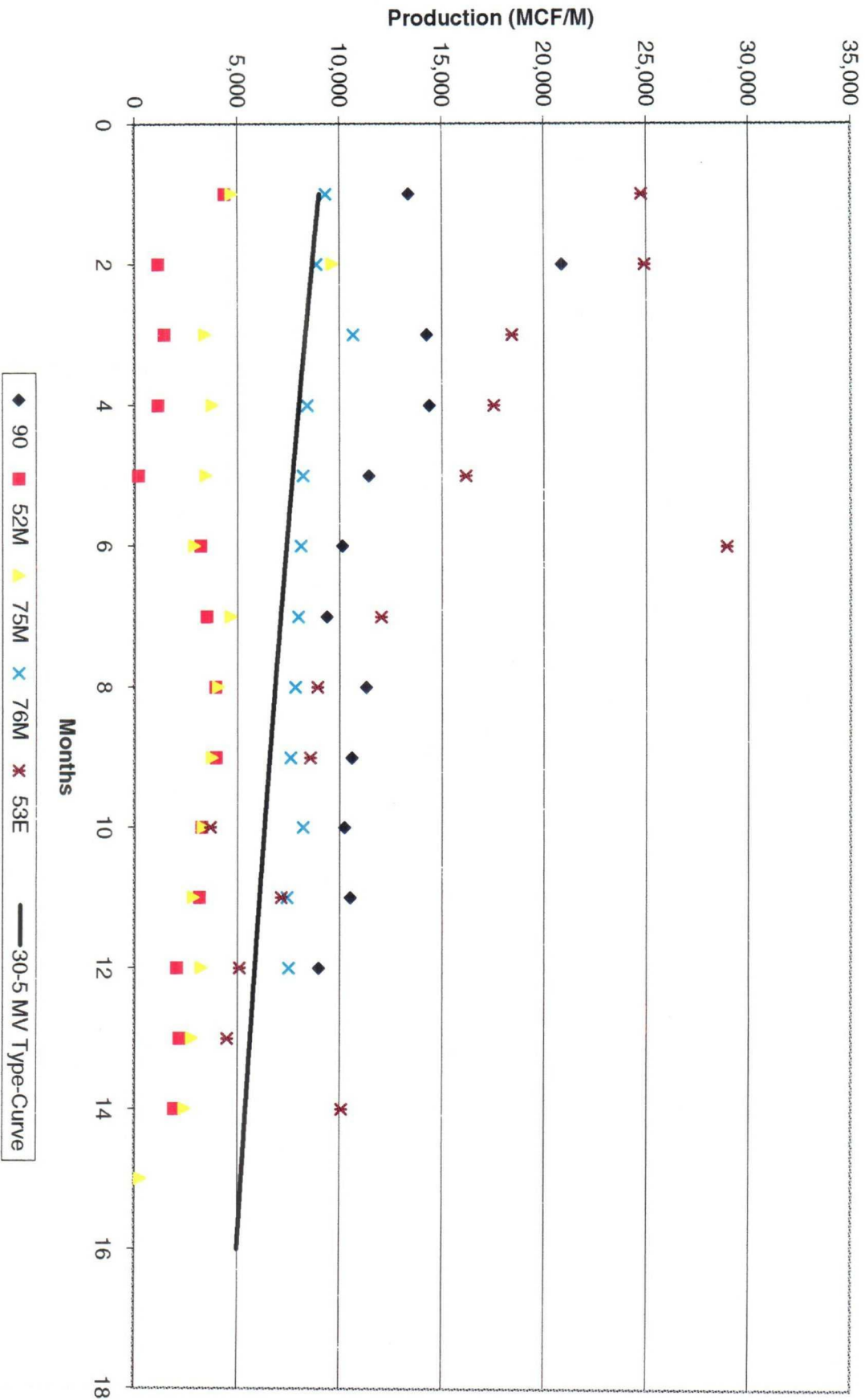
cc: OCD - Aztec
BLM - Farmington
NM Commissioner of Public Lands - Santa Fe

Dakota Production Forecast for 30-5 Unit
Well #71M

Year	Month	Gas (MCF)
Oct-99	1	17056
Nov-99	2	16283
Dec-99	3	16600
Jan-00	4	16374
Feb-00	5	15117
Mar-00	6	15949
Apr-00	7	15231
May-00	8	15532
Jun-00	9	14834
Jul-00	10	15129
Aug-00	11	14930
Sep-00	12	14262
Oct-00	13	14548
Nov-00	14	13898
Dec-00	15	14178
Jan-01	16	13995
Feb-01	17	12486
Mar-01	18	13656

Initial Rate 554 MCF/D

30-5 Unit Mesaverde



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

DATE: SEPTEMBER 21, 1999

WELL NAME: SAN JUAN 30-5 # 71M
FORMATION: DAKOTA

TYPE TEST: STATIC GRADIENT

COUNTY: RIO ARriba
STATE: NEW MEXICO

TOTAL DEPTH: 7959'
PERFS: M.P. @ 7862'
TUBING SIZE: 2 3/8 TO 7874'
CASING SIZE:
PACKER:
OTHER: 1.81 FN @ 7843'
RAN PRESSURE @ 11:00

CASING PRESSURE: 1100
TUBING PRESSURE: 1040
OIL LEVEL:
WATER LEVEL: 7694'
TEMPERATURE:
ELEMENT NO.
ELEMENT RANGE 0 TO 3000

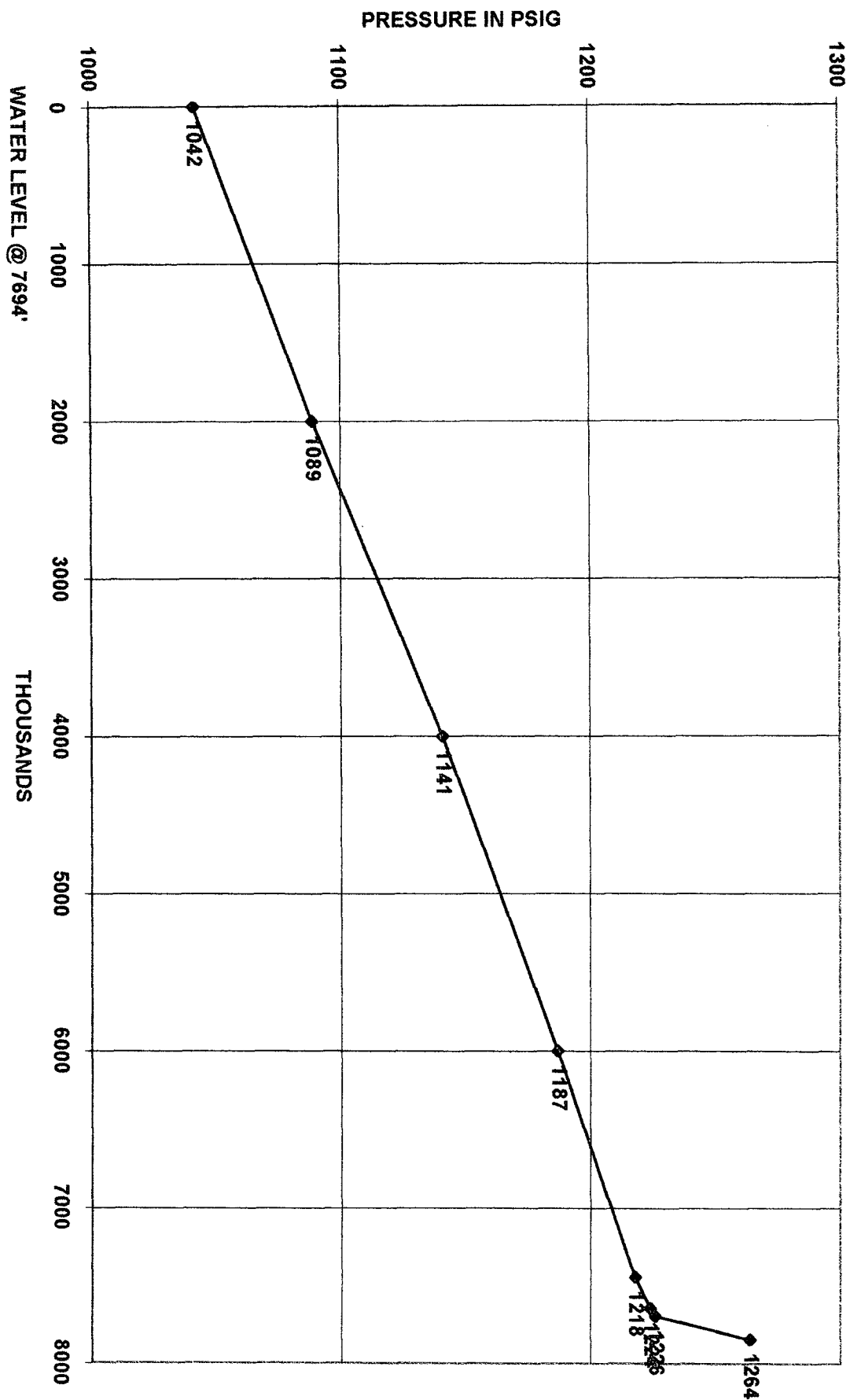
WELL STATUS: SHUT IN

DEPTH IN FEET	PRESSURE PSIG	GRADIENT PSI/FOOT
0	1042	
2000	1089	0.024
4000	1141	0.026
6000	1187	0.023
7443	1218	0.022
7643	1224	0.030
7843	1264	0.200

RAN SLM @

H & H WIRELINE SERVICE INC.
P. O. BOX 899
FLORA VISTA, NEW MEXICO 87415
OPERATOR: CHARLES HUGHES
UNIT NO. T-10

PHILLIPS PETROLEUM SAN JUAN 30-5 # 71M
DATE: SEPTEMBER 21, 1999



M2Y67-01

PARPI - WELLZONE PRODUCTION BROWSE

Date: 9/23/99

MONTHLY TOTALS

User: #W9R

Wellzone F0645 01 Yr: 1999 Mth: 06 Property: 650402 SAN JUAN 30-5 DAKOTA
Screen: 1 (1-Prod, 2-Inj, 3-Both) Well No: 000071M
Type: T (T-Total, D-Daily Avg) Field: 0422 BASIN
Period: M (M-Monthly, Y-Yearly, C-Cumm) Reserv: 20279 DAKOTA NQ

ADJ	FLG DATE	OIL (BBL)	GAS (MCF)	WATER (BBL)	PROD	OP	ST	CL	TY
	* 1999-06	0.00	15,108	118	29.00	28	11	03	2
	* 1999-07	0.00	17,409	40	31.00	31	11	03	2

NO MORE DATA AVAILABLE

PA1=ICE

PF1=Help

PF3=End

PF10=Next Well

PF7=Backward

PF8=Forward

PF11=Prev Well

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 = $\frac{(\text{Commingled rate} - \text{Lower zone rate})}{\text{Commingled rate}}$