DATE IN 1/13/00 | SUSPENSE 2/2/00 | ENGINEER DC | LOGGED BY KV | TYPE DHC

ABOVE THIS LINE FOR DIVISION USE ONLY

NEW MEXICO OIL CONSERVATION DIVISION

- Engineering Bureau -

2040 South Pacheco, Santa Fe, NM 87505

26024

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]

RECEIVED
JAN 13 2000
OIL CONSERVATION DIVISION

[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.

Mark Stodola	Mark Stodola	Reservoir Engr.	1/11/99
Print or Type Name	Signature	Title	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 87505-6429

APPLICATION FOR DOWNHOLE COMMINGLING

Form C-107-A
New 3-12-96

APPROVAL PROCESS:
X Administrative __Hearing

EXISTING WELLBORE
X YES __ NO

Phillips Petroleum Company (Operator) 5525 Hwy 64, Farmington, NM 87401 (Address)

San Juan 29-6 Unit (Lease) #53 (Well No.) B, Sec. 31, T29N, R6W (Unit Ltr. - Sec - Twp - Rge) Rio Arriba (County)

Spacing Unit Lease Types: (check 1 or more)

OGRID NO. 017654 Property Code 009257 API NO. 30-039-07509 Federal X, 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	72439 S. Blanco PC		72319 Blanco Mesaverde
2. Top and Bottom of Pay Section (Perforations)	3254' - 3380'		4020' - 5514'
3. Type of production (Oil or Gas)	gas		gas
4. Method of Production (Flowing or Artificial Lift)	flowing		flowing
5. Bottomhole Pressure Oil Zones - Artificial Lift: Estimated Current Gas & Oil - Flowing: Measured Current All Gas Zones: Estimated Or Measured Original	a. (Current) 919 psi	a.	a. 372 psi (est.)
	b. (Original) 1200 psi (est.)	b.	b. 1280 psi (est.)
6. Oil Gravity (°API) or Gas BTU Content	1100 btu/scf		1200 btu/scf
7. Producing or Shut-in?	Producing		shut-in
Production Marginal? (yes or no)	yes		yes
• If Shut-In, give date and oil/gas/ water rates of last production Note: For new zones with no production history, applicant shall be required to attach production estimates and supporting data	Date: Rates:	Date: Rates:	Date: 10/30/99 Rates: 163 mcfd, 0 bwpd
• If Producing, give date andoil/gas/ water rates of recent test (within 60 days)	Date: 1/9/00 Rates: 250 mcfd, 0 bopd	Date: Rates:	Date: Rates:
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 X No
If not, have all working, overriding, and royalty interests been notified by certified mail? ___ Yes X No
Have all offset operators been given written notice of the proposed downhole commingling? X Yes ___ No

11. Will cross-flow occur? ___ Yes X 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? X Yes ___ No

13. Will the value of production be decreased by commingling? ___ Yes X 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-11187

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 Mark Stodola TITLE Reservoir Engr. DATE 1/11/00

TYPE OR PRINT NAME Mark Stodola TELEPHONE NO. (505) 599-3455

District I
PO 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

RECEIVED
BLM
99 OCT 26 PM 4:54

Form C-102
Revised October 18, 1994
Instructions on back
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

070 FARMINGTON, NM

1 API Number	2 Pool Code	3 Pool Name
30-039-07509	72439	So. Blanco Pictured Cliffs, Ext.

4 Property Code	5 Property Name	6 Well Number
009257	San Juan 29-6 Unit	53

7 OGRID No.	8 Operator Name	9 Elevation
017654	Phillips Petroleum Company	6428'

10 Surface Location

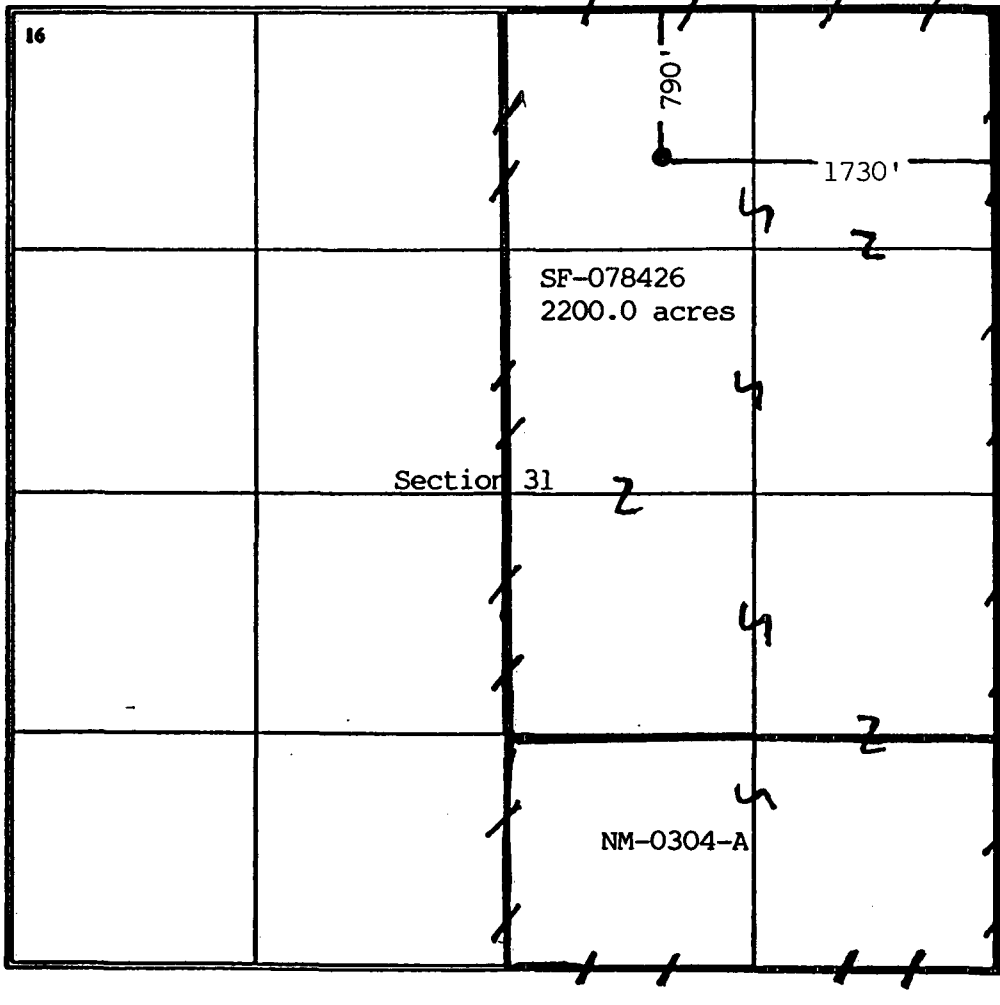
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
B	31	29N	6W		790'	North	1730	East	Rio Arriba

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
B									

12 Dedicated Acres	13 Joint or Infill	14 Consolidation Code	15 Order No.
320 E/2	Y	C	

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

Signature: Patsy Clugston

Patsy Clugston
Printed Name

Regulatory Assistant
Title

October 26, 1999
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.

7-18-56
Date of Survey

Signature and Seal of Professional Surveyer:
See plat signed by
Ernest V. Echohawk
Reg. No. 1545

Certificate Number

NEW MEXICO

OIL CONSERVATION COMMISSION

Form C-128

Well Location and/or Gas Proration Plat RECEIVED BLM Date

93 OCT 26 PM 4:05

070 FARMINGTON NM

Operator Pacific Northwest Pipeline Corporation Lease 29-6 Unit

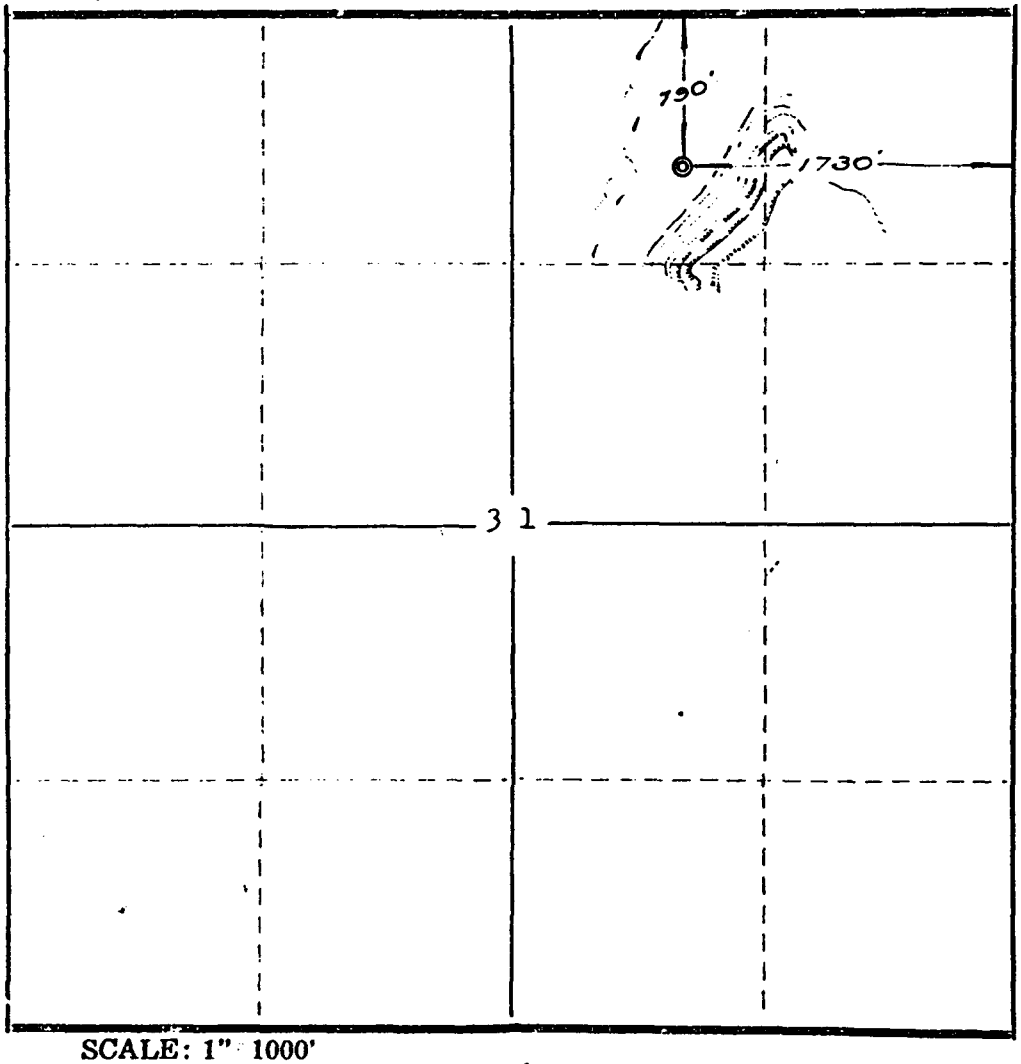
Well No. 53 Section 31 Township 29 North Range 6 West NMPM

Located 790 Feet From North Line, 1730 Feet From East Line,

Rio Arriba County, New Mexico. G. L. Elevation 6428

Name of Producing Formation Blanco Mesaverde Pool Dedicated Acreage

(Note: All distances must be from outer boundaries of Section)



SCALE: 1" 1000'

NOTE

This section of form is to be used for gas wells only.

1. Is this Well a Dual Comp. ? Yes No .
2. If the answer to Question 1 is yes, are there any other dually completed wells within the dedicated acreage? Yes No .

Name

Position

Representing

Address

This is to certify that the above plat was prepa from field notes of actual surveys made by me under my supervision and that the same are true correct to the best of my knowledge and belief.

Date Surveyed July 18, 1956

Ernest V. Echohawk

Reg. Land Surveyor, N. Mex., Reg. No. 1545

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

January 11, 2000

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

Downhole Commingling Allocation Method
on the San Juan 29-6 Unit #53

Dear Sirs:

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

Pictured Cliffs Forecast

February 2000	7,278	March 2000	7,885
April 2000	7,463	May 2000	7,544
June 2000	7,241	July 2000	7,220
August 2000	7,063	September 2000	6,783
October 2000	6,766	November 2000	6,499
December 2000	6,486	January 2001	6,350

For example, if the total volume for March 2000 were 12,938 mcf, then the Pictured Cliffs would be allocated 7,885 mcf and the Mesaverde 5,053 mcf. And subsequently, the Pictured Cliffs would be allocated (7,885/ 12,938) or 60.94%, and Mesaverde would be allocated (5,053/12,938) or 39.06%.

Sincerely,

PHILLIPS PETROLEUM COMPANY

Mark Stodola

Mark W. Stodola
Reservoir Engineer

MS/pc

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

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

DATE: DECEMBER 14, 1999

WELL NAME: SAN JUAN 29-6 # 53
FORMATION: PICTURE CLIFF

TYPE TEST: STATIC GRADIENT

COUNTY: RIO ARRIBA
STATE: NEW MEXICO

TOTAL DEPTH:
PERFS: MID PERF 3317'
TUBING: 2 3/8" TO 3342'
CASING SIZE:
PACKER:
OTHER: 1.81" FN @ 3329'
PRESSURED UP @ 08:45

CASING PRESSURE:
TUBING PRESSURE: 830
OIL LEVEL:
WATER LEVEL:
TEMPERATURE:
ELEMENT NO. 86484
ELEMENT RANGE 0 TO 3000

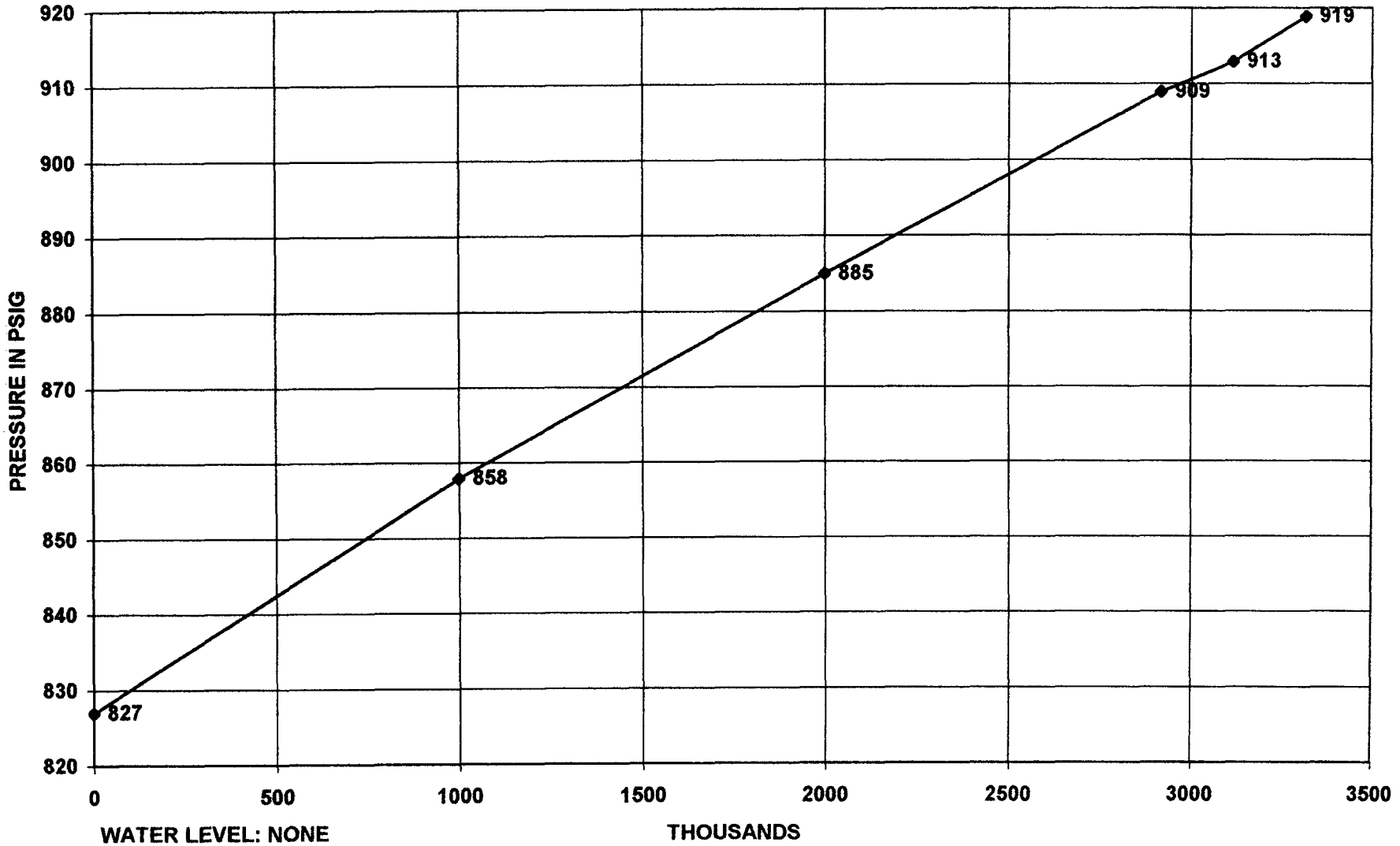
WELL STATUS: SHUT IN

DEPTH IN FEET	PRESSURE PSIG	GRADIENT PSI/FOOT
0	827	
1000	858	0.031
2000	885	0.027
2917	909	0.026
3117	913	0.020
3317	919	0.030

SLM @ 3329'

H & H WIRELINE SERVICE INC.
P. O. BOX 899
FLORA VISTA, NEW MEXICO 87415
OPERATOR: CHARLES HUGHES
UNIT NO. T-11

PHILLIPS PETROLEUM SAN JUAN 29-6 # 53
DATE: DECEMBER 14, 1999



WATER LEVEL: NONE

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

DATE: NOVEMBER 23, 1999

WELL NAME: SAN JUAN 29-6 # 53
FORMATION: MESA VERDE

TYPE TEST: STATIC GRADIENT

COUNTY: RIO ARRIBA
STATE: NEW MEXICO

TOTAL DEPTH: 5645'
PERFS: 5034' TO 5600'
TUBING: 2 3/8 TO 5579'
CASING SIZE:
PACKER:
OTHER:
PRESSURED UP @ 10:45

CASING PRESSURE:
TUBING PRESSURE: 295
OIL LEVEL:
WATER LEVEL: 5389'
TEMPERATURE:
ELEMENT NO. 86484
ELEMENT RANGE 0 TO 3000

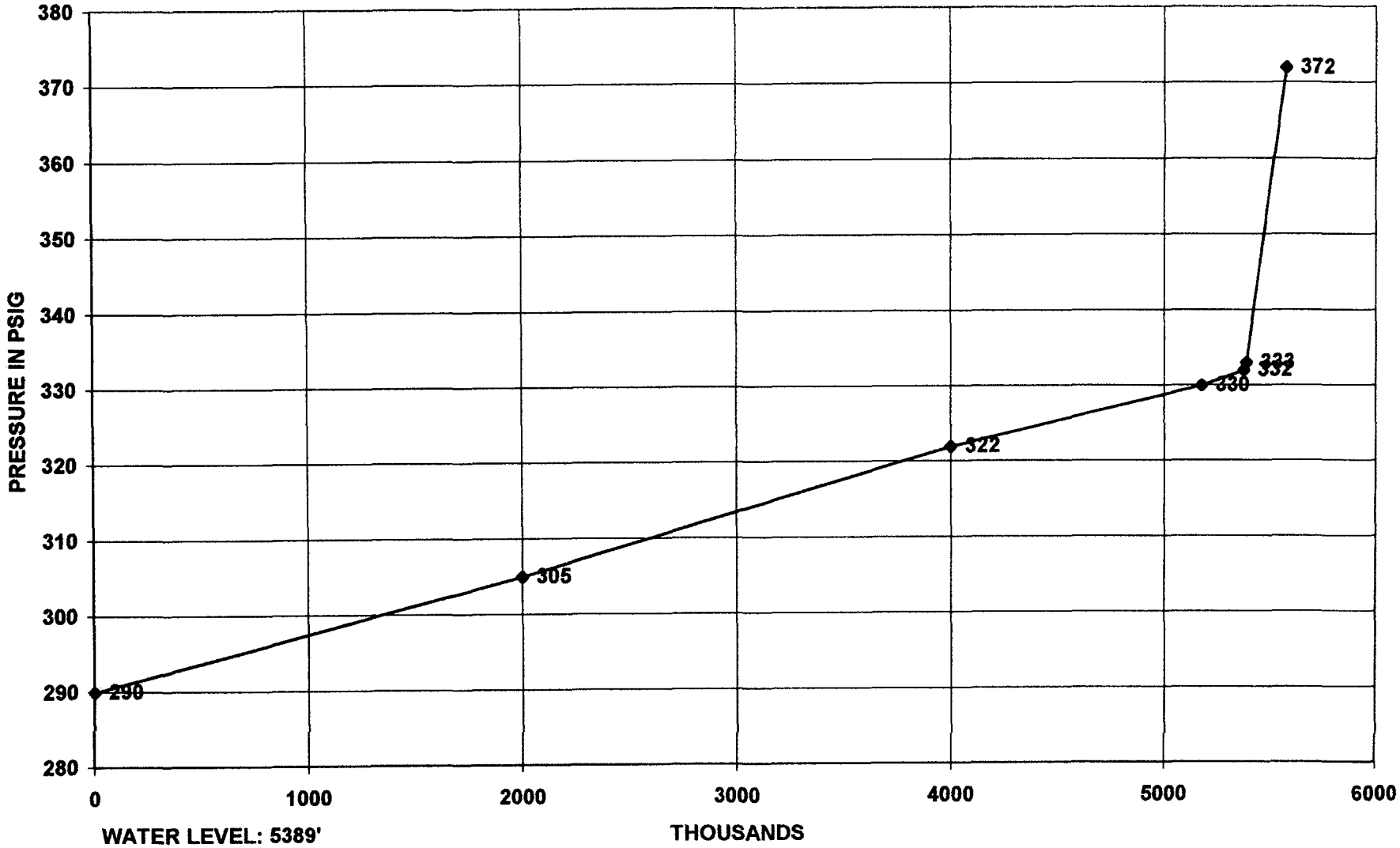
WELL STATUS: SHUT IN

DEPTH IN FEET	PRESSURE PSIG	GRADIENT PSI/FOOT
0	290	
2000	305	0.008
4000	322	0.009
5176	330	0.007
5376	332	0.010
5576	372	0.200

SLM @ 5579'

H & H WIRELINE SERVICE INC.
P. O. BOX 899
FLORA VISTA, NEW MEXICO 87415
OPERATOR: CHARLES HUGHES
UNIT NO. T-11

PHILLIPS PETROLEUM SAN JUAN 29-6 # 53
DATE: NOVEMBER 23, 1999



WATER LEVEL: 5389'

MEP81-01 PARPI - WELLZONE PRODUCTION BROWSE Date: 1/11/00
MONTHLY TOTALS User: MWSTODO

Wellzone F0280 01 Yr: 1999 Mth: 01 Property: 650112 SAN JUAN 29-6 MESA VERDE
Screen: 1 (1-Prod, 2-Inj, 3-Both) Well No: 000053
Type: T (T-Total, D-Daily Avg) Field: 070724 BLANCO
Period: M (M-Mnthly, Y-Yrly, C-Cum) Resvr: 20002 MESAVERDE

ADJ	PRODUCED			DAYS	WELL			
FLG DATE	OIL (BBL)	GAS (MCF)	WATER (BBL)	PROD	OP	ST	CL	TY
* 1999-01	2.92	5,061	7	31.00	31	11	03	2
1999-02	0.73	5,098	0	28.00	28	11	03	2
1999-03	19.64	5,840	0	31.00	31	11	03	2
1999-04	0.00	4,761	0	30.00	30	11	03	2
1999-05	6.53	5,567	0	31.00	31	11	03	2
1999-06	0.00	5,380	0	30.00	30	11	03	2
1999-07	0.00	5,522	0	31.00	31	11	03	2
1999-08	0.00	5,382	0	31.00	31	11	03	2
* 1999-09	0.00	5,404	0	30.00	30	11	03	2
* 1999-10	0.00	5,048	0	31.00	31	11	03	2
* 1999-11	17.41	3,650	0	30.00	30	11	03	2

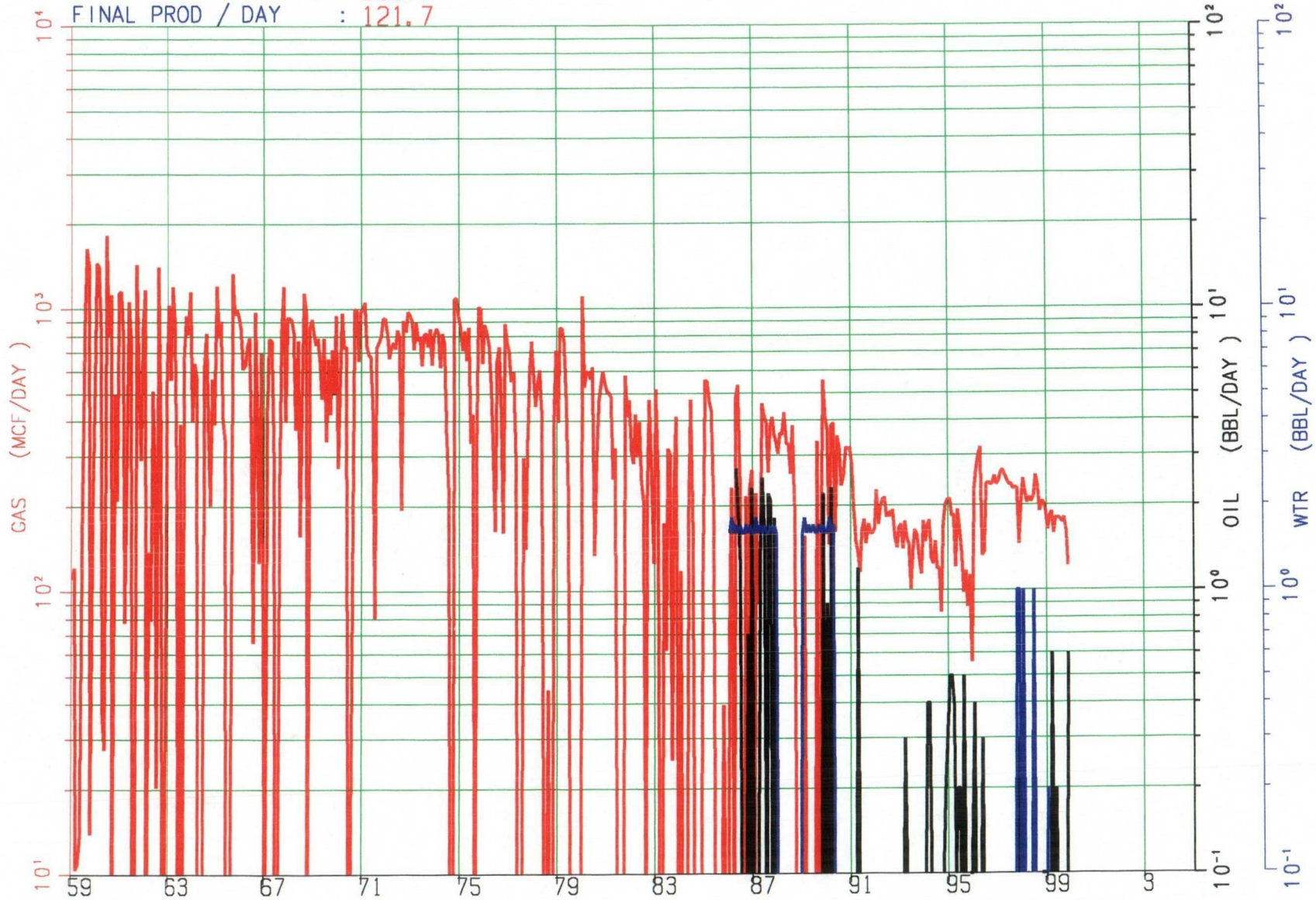
NO MORE DATA AVAILABLE
PA1=ICE PA2=Exit PF1=Help PF3=End PF11=GRAPH
Transfer-> PF7=Backward PF8=Forward PF4=PREV SCREEN PF12=LOG GRAPH

1/59-11/99

INITIAL PROD / DAY : 111.1
REMAINING LIFE : 40.92
0.00
CUM PRODUCTN-MUNITS : 5967.
FINAL PROD / DAY : 121.7

ASSOC. Current Cums

5967. MMCF GAS
1075. BBL OIL
2134. BBL WTR



LEASE- 650112 : SAN JUAN 29-6 MESA VERDE
RESVR- 002 : BLANCO MESAVERDE
WELL - 000053 CUM MMCF= 6166.

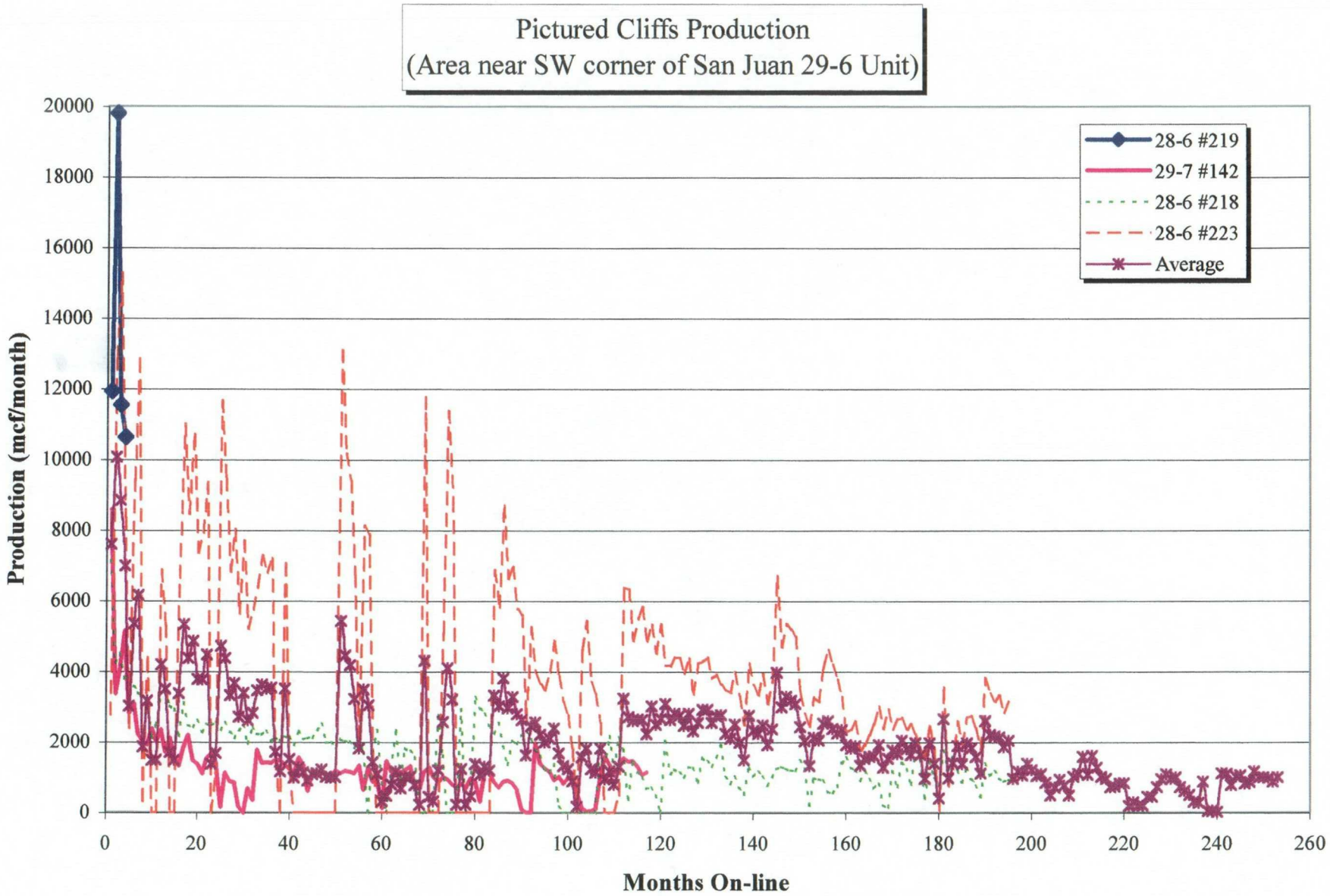
F028001
ZONE-650112002000053 F028001
API-30039075090000 THRU 99/11

MWST 2000/01/11 09:37

San Juan 29-6 #53 Pictured Cliffs Forecast

Initial Production Rate	=	*275*	*MCFD*
Hyperbolic Exponent	=	*0.33*	
Decline Rate	=	*27.360*	%

Month	Days	Cum. Days	Initial q MCFD	Final q MCFD	Average q MCFD	Cum. MCF	***Monthly MCF***
Dec-99	31	31	275	269	272	8,427	***8,427***
Jan-00	31	62	269	263	266	16,662	***8,235***
Feb-00	28	90	263	257	260	23,939	***7,278***
Mar-00	31	121	257	251	254	31,824	***7,885***
Apr-00	30	151	251	246	249	39,288	***7,463***
May-00	31	182	246	241	243	46,831	***7,544***
Jun-00	30	212	241	235	238	54,072	***7,241***
Jul-00	31	243	235	230	233	61,292	***7,220***
Aug-00	31	274	230	225	228	68,355	***7,063***
Sep-00	30	305	225	221	223	75,138	***6,783***
Oct-00	31	336	221	216	218	81,904	***6,766***
Nov-00	30	366	216	212	214	88,403	***6,499***
Dec-00	31	397	212	207	209	94,889	***6,486***
Jan-01	31	428	207	203	205	101,239	***6,350***
Feb-01	28	456	203	199	201	106,860	***5,622***
Mar-01	31	487	199	195	197	112,962	***6,102***
Apr-01	30	518	195	191	193	118,827	***5,865***
May-01	31	549	191	187	189	124,684	***5,857***


Pictured Cliffs Production
(Area near SW corner of San Juan 29-6 Unit)
Production (mcf/month)
Months On-line
28-6 #219
29-7 #142
28-6 #218
28-6 #223
Average
0
2000
4000
6000
8000
10000
12000
14000
16000
18000
20000
0
20
40
60
80
100
120
140
160
180
200
220
240
260

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 = (Commingled rate - Lower zone rate) / Commingled rate