

DATE IN 10/19/99	SUSPENSE 11/8/99	ENGINEER DC	LOGGED BY [Signature]	TYPE DHC
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ABOVE THIS LINE FOR DIVISION USE ONLY

NEW MEXICO OIL CONSERVATION DIVISION

- Engineering Bureau -

2040 South Pacheco, Santa Fe, NM 87505



2509

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

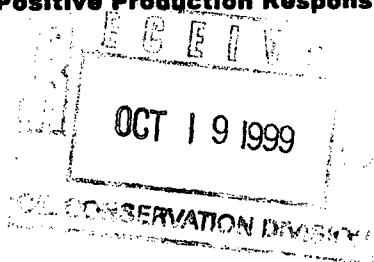
Check One Only for [B] or [C]

[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.

Print or Type Name

Signature

Title

Date

DISTRICT I
1625 N. French Dr., Hobbs, NM 88240
DISTRICT II
811 South First St., Artesia, NM 88210
DISTRICT III
1000 Rio Brazos Rd, Aztec, NM 87410
DISTRICT IV
2040 S. Pacheco, Santa Fe, NM 87505

State of New Mexico
Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION

2040 S. Pacheco
Santa Fe, New Mexico 87505-6429

Form C-107-A
Revised August 1999

APPROVAL PROCESS:

☒ Administrative ☐ Hearing

EXISTING WELLBORE

☒ YES ☐ NO

APPLICATION FOR DOWNHOLE COMMINGLING

Burlington Resources Oil and Gas

Operator **Grenier** Address **4 D-7-31N-11W San Juan**
Lease Well No. Unit Ltr. - Sec - Twp - Rge County
Spacing Unit Lease Types: (check 1 or more)
OGRID NO. **14538** Property Code **18530** API NO. **30-045-10949** 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	Blanco Pictured Cliffs- 72359		Blanco Mesaverde - 72319
2. Top and Bottom of Pay Section (Perforations)	2906-2929		5140-5242
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: Gas & Oil - Flowing: All Gas Zones: Estimated Or Measured Original	a. (Current) 238 psi (see attachment)	a.	a. 425 psi (see attachment)
	b. (Original) 875 psi (see attachment)	b.	b. 1265 psi (see attachment)
6. Oil Gravity (EAPI) or Gas BTU Content	BTU 1195		BTU 1247
7. Producing or Shut-In?	Producing		Producing
Production Marginal? (yes or no) * 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 * If Producing, give date and oil/gas/water rates of recent test (within 60 days)	Yes		Yes
	Date: Rates:	Date: Rates:	Date: Rates:
	Date: 9/2/99 Rates: 18 mcf/d	Date: Rates:	Date: 9/2/99 Rates: 94 mcf/d
8. Fixed Percentage Allocation Formula - % for each zone (total of %'s to equal 100%)	Will be supplied upon completion.		Will be supplied upon completion.

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
11. 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 ☐ No
13. 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). _____
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 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 Mary Ellen Lutey TITLE PRODUCTION ENGINEER DATE 10-8-99
TYPE OR PRINT NAME Mary Ellen Lutey TELEPHONE NO. (505) 326-9700

NEW MEXICO OIL CONSERVATION COMMISSION
WELL LOCATION AND ACREAGE DEDICATION PLAT

Form C-102
Supersedes C-128
Effective 1-1-65

All distances must be from the outer boundaries of the Section.

Operator Aztec Oil & Gas Co.			Lease Grenier		Well No. 4
Unit Letter D	Section 7	Township 31N	Range 11W	County San Juan	

Actual Footage Location of Well:

990 feet from the North line and 990 feet from the West line	
Ground Level Elev: 6296 GL	Producing Formation Pictured Cliffs
Pool Blanco Pictured Cliffs	Dedicated Acreage: 158.90 Acres

1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
3. If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consolidated by communitization, unitization, force-pooling, etc?

☐ Yes ☐ No If answer is "yes," type of consolidation _____

If answer is "no," list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.) _____

No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interests, has been approved by the Commission.



CERTIFICATION

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

Name
John H. Watkins

Position
Office Manager

Company
Aztec Oil & Gas Co.

Date
October 30, 1970

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 knowledge and belief.

Date Surveyed

Registered Professional Engineer and/or Land Surveyor

Certificate No.

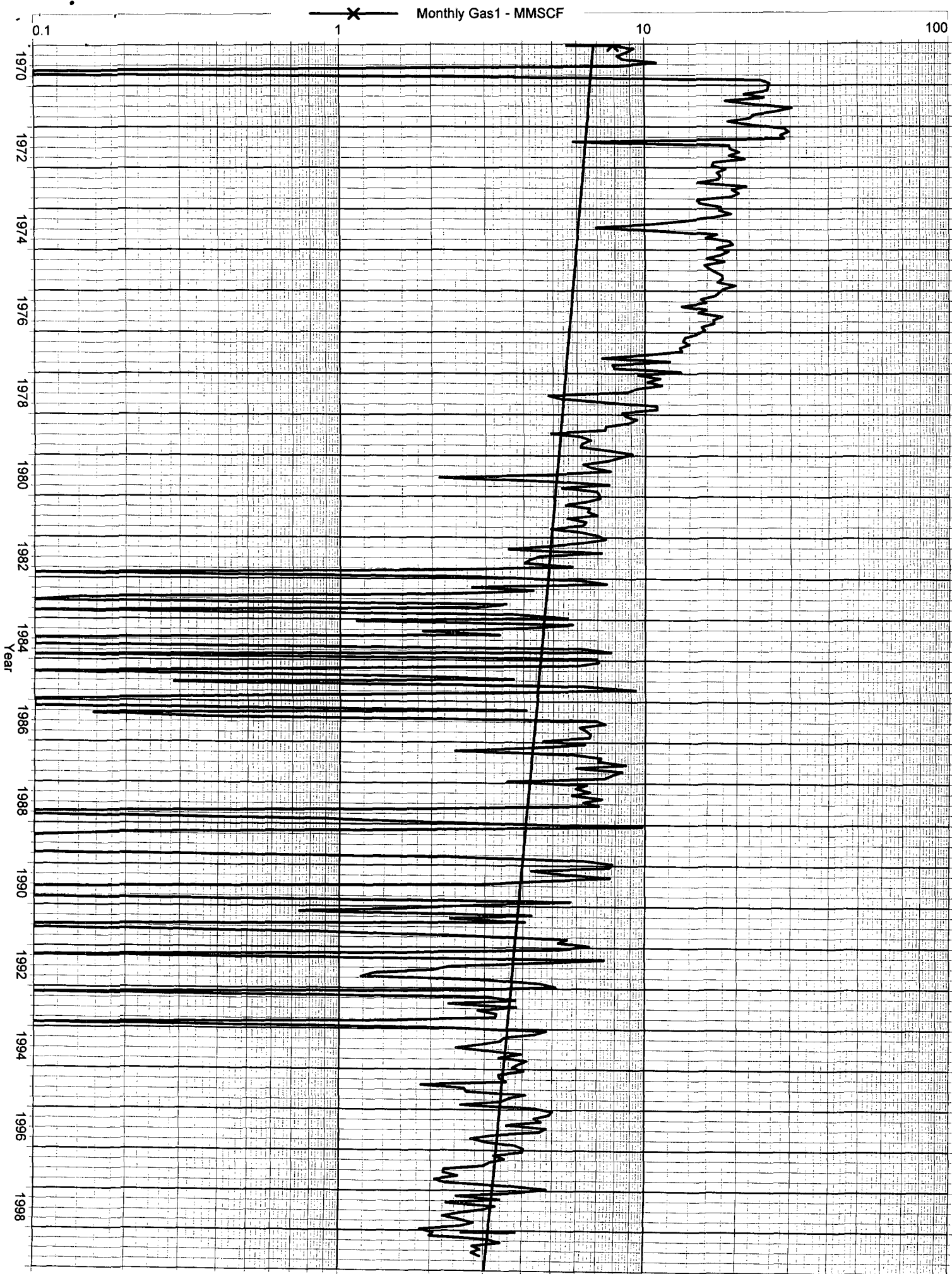
0 330 660 990 1320 1650 1980 2310 2640 2000 1500 1000 500 0

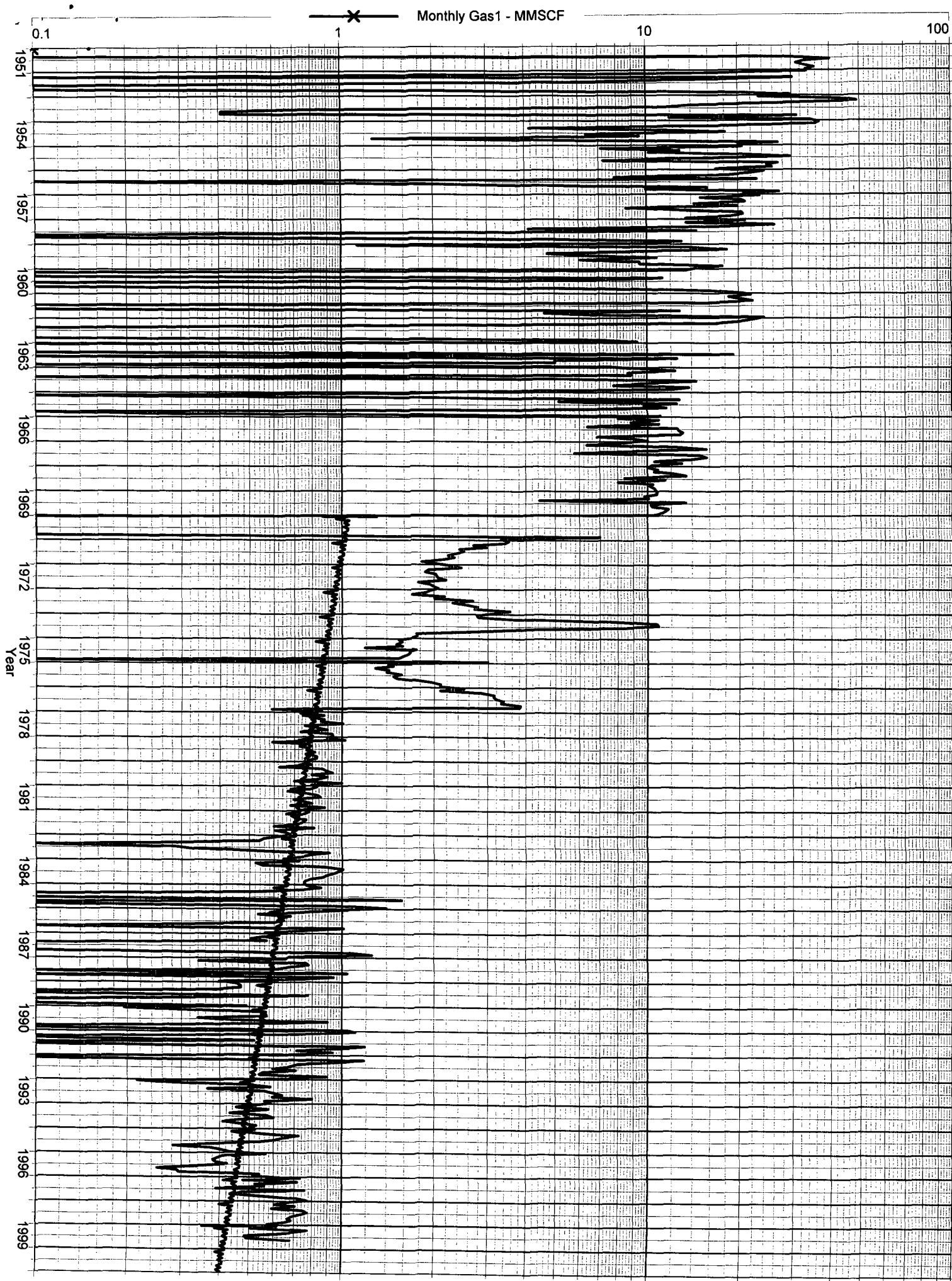
		year	month	day	wh psi	cum prod	
PC	GRENIER 4/2562501	1970		8	8	796	original
	GRENIER 4	1971		1	10	572	
	GRENIER 4	1972		4	18	510	
	GRENIER 4	1973		5	2	434	
	GRENIER 4	1974		8	2	400	
	GRENIER 4	1976		8	2	325	
	GRENIER 4	1978		1	2	369	
	GRENIER 4	1978		1	10	357	
	GRENIER 4	1980		8	16	360	
	GRENIER 4	1982		4	16	346	
	GRENIER 4	1984		5	30	360	
						210	
						3080.97	current estimate from P/Z data
MV	GRENIER 4/2562502	1951		6	2	1,073.00	original
	GRENIER 4	1970		10	26	682	
	GRENIER 4	1971		5	18	594	
	GRENIER 4	1972		5	26	547	
	GRENIER 4	1973		5	2	549	
	GRENIER 4	1974		6	2	434	
	GRENIER 4	1978		5	18	412	
	GRENIER 4	1980		8	24	491	
	GRENIER 4	1982		4	16	445	
	GRENIER 4	1984		5	30	464	
	GRENIER 4	1986		4	2	508	
	GRENIER 4	1990		2	14	383	
	GRENIER 4	1991		5	15	393	
	GRENIER 4	1991		5	29	405	
	GRENIER 4	1993		6	30	382	
						360	
						2668.35	current estimate from P/Z data

Grenier #4
Bottom Hole Pressures
Flowing and Static BHP
Cullender and Smith Method
Version 1.0 1/14/98

Pictured Cliffs		Mesaverde	
<u>PC-Current</u>		<u>MV-Current</u>	
GAS GRAVITY	<u>0.682</u>	GAS GRAVITY	<u>0.723</u>
COND. OR MISC. (C/M)	<u>M</u>	COND. OR MISC. (C/M)	<u>M</u>
%N2	<u>0.25</u>	%N2	<u>0.29</u>
%CO2	<u>0.53</u>	%CO2	<u>0.96</u>
%H2S	<u>0</u>	%H2S	<u>0</u>
DIAMETER (IN)	<u>5.5</u>	DIAMETER (IN)	<u>1.5</u>
DEPTH (FT)	<u>2918</u>	DEPTH (FT)	<u>5191</u>
SURFACE TEMPERATURE (DEG F)	<u>60</u>	SURFACE TEMPERATURE (DEG F)	<u>60</u>
BOTTOMHOLE TEMPERATURE (DEG F)	<u>113</u>	BOTTOMHOLE TEMPERATURE (DEG F)	<u>155</u>
FLOWRATE (MCFPD)	<u>0</u>	FLOWRATE (MCFPD)	<u>0</u>
SURFACE PRESSURE (PSIA)	<u>222</u>	SURFACE PRESSURE (PSIA)	<u>372</u>
BOTTOMHOLE PRESSURE (PSIA)	<u>238.4</u>	BOTTOMHOLE PRESSURE (PSIA)	<u>425.1</u>
<u>PC-Original</u>		<u>MV-Original</u>	
GAS GRAVITY	<u>0.682</u>	GAS GRAVITY	<u>0.723</u>
COND. OR MISC. (C/M)	<u>M</u>	COND. OR MISC. (C/M)	<u>M</u>
%N2	<u>0.25</u>	%N2	<u>0.29</u>
%CO2	<u>0.53</u>	%CO2	<u>0.96</u>
%H2S	<u>0</u>	%H2S	<u>0</u>
DIAMETER (IN)	<u>5.5</u>	DIAMETER (IN)	<u>1.5</u>
DEPTH (FT)	<u>2918</u>	DEPTH (FT)	<u>5191</u>
SURFACE TEMPERATURE (DEG F)	<u>60</u>	SURFACE TEMPERATURE (DEG F)	<u>60</u>
BOTTOMHOLE TEMPERATURE (DEG F)	<u>113</u>	BOTTOMHOLE TEMPERATURE (DEG F)	<u>155</u>
FLOWRATE (MCFPD)	<u>0</u>	FLOWRATE (MCFPD)	<u>0</u>
SURFACE PRESSURE (PSIA)	<u>808</u>	SURFACE PRESSURE (PSIA)	<u>1085</u>
BOTTOMHOLE PRESSURE (PSIA)	<u>875.0</u>	BOTTOMHOLE PRESSURE (PSIA)	<u>1264.7</u>

NY





265587052018.191 GREENIER 4 (265587052018.191) Date: Jun. 1951-Jun. 1999

Operator: BURLINGTON RESOURCES OG
Field: BLANCO MESAVERDE (PRORATED GAS)

Zone:
Type: Gas
Group: None

P/Z FC 1 (P/Z Analysis)

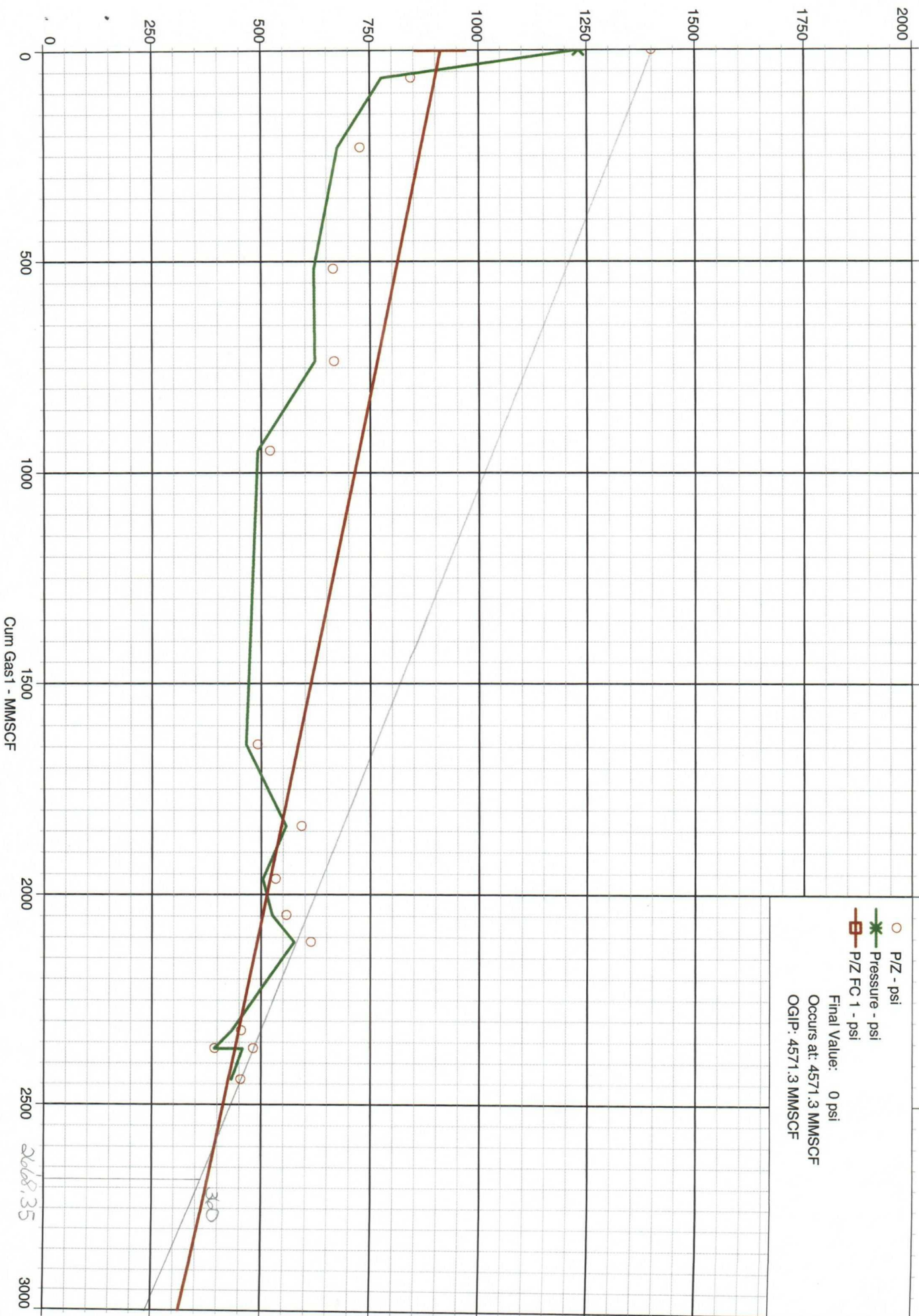
Based On: P/Z

Vs: Cum Gas 1

Final Value: 0 psi

Occurs at: 4571.3 MMSCF

Production Cums
Oil: 0 MSTB
Gas: 2668.35 MMSCF
Water: 0.821001 MSTB
Cond: 11.8613 MSTB



282994802791.761 GRENIER 4 (282994802791.761) Data: Jan.1951-Jun.1999

Operator: BURLINGTON RESOURCES OG
Field: BLANCO PICTURED CLIFFS (GAS)
Zone:
Type: Gas
Group: None

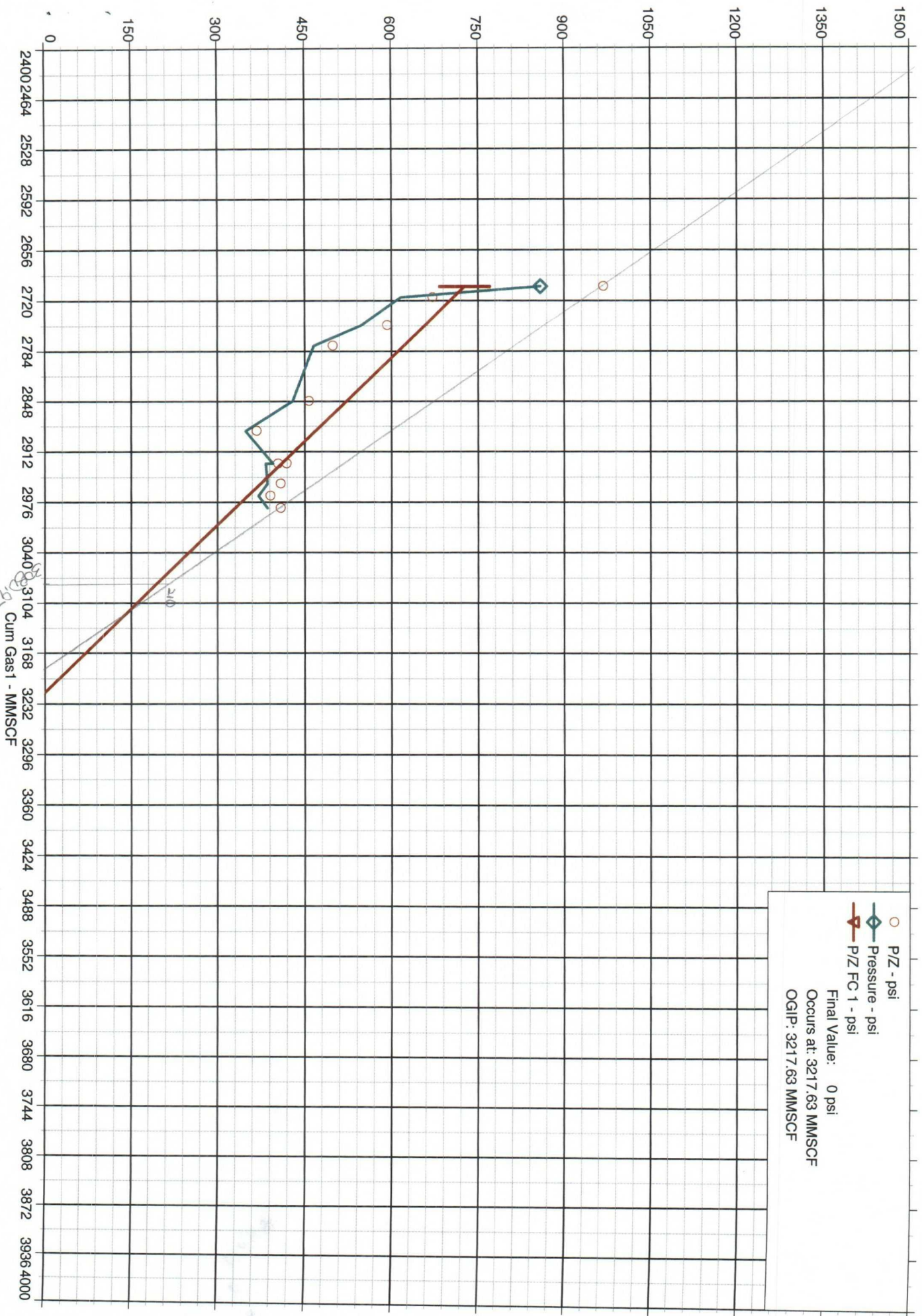
P/Z FC 1 (P/Z Analysis)

Based On: P/Z

Vs: Cum Gas1

Final Value: 0 psi
Occurs at: 3217.63 MMSCF

Production Cums
Oil: 0 MSTB
Gas: 3080.97 MMSCF
Water: 0.586 MSTB
Cond: 6.122 MSTB



Monthly Prod History (DM)

Tuesday, September 01, 1998 Through Tuesday, August 31, 1999

Select By : Completions

Pressure Base : None
Units :
Rounded (y/n) : No

Page No : 1
Report Number : R_027
Print Date : 09/23/1999, 1:33:24 P

Sort By :

PROD MO.	TY	ST	PM	DAYS ON	PROD	OIL	SOL	PROD	GAS SOLD	INJ	PROD	WATER INJ	SUPP
Well: GRENIER 4													
10/98	PG	P	FL	0	70.11		0.00	0	0		0		0.00
11/98	PG	P	FL	0	27.95		0.00	2,525	0		0		0.00
12/98	PG	P	FL	31	0.00		0.00	1,853	0		0		0.00
10/98	PG	P	FL	0	0.00		0.00	0	0		0		0.00
11/98	PG	P	FL	0	0.00		0.00	648	0		0		0.00
12/98	PG	P	FL	31	0.00		0.00	573	0		0		0.00
Totals :	1998				98.06		0.00	5,598.94	0.00		0.00		0.00
01/99	PG	P	FL	0	19.80		0.00	2,048	0		0		0.00
02/99	PG	P	FL	28	16.30		0.00	1,996	0		0		0.00
03/99	PG	P	FL	31	11.64		0.00	3,096	0		0		0.00
04/99	PG	P	FL	30	31.73		0.00	3,401	0		0		0.00
05/99	PG	P	FL	31	9.14		184.88	2,765	0		0		0.00
06/99	PG	P	FL	30	12.88		0.00	2,927	0		0		0.00
07/99	PG	P	FL	31	1.17		0.00	2,749	0		0		0.00
08/99	PG	P	FL	31	0.00		0.00	2,923	0		0		0.00
01/99	PG	P	FL	31	0.00		0.00	615	0		0		0.00
02/99	PG	P	FL	28	0.00		0.00	503	0		0		0.00
03/99	PG	P	FL	31	0.00		0.00	771	0		0		0.00
04/99	PG	P	FL	30	0.00		0.00	707	0		0		0.00
05/99	PG	P	FL	31	0.00		0.00	614	0		0		0.00
06/99	PG	P	FL	30	0.00		0.00	484	0		0		0.00
07/99	PG	P	FL	31	0.00		0.00	490	0		0		0.00
08/99	PG	P	FL	31	0.00		0.00	679	0		0		0.00
Totals :	1999				102.66		184.88	26,767.91	0.00		0.00		0.00
Totals GRENIER 4					200.72		184.88	32,366.85	0.00		0.00		0.00