

DATE IN 3/21/00	SUSPENSE 4/10/00	ENGINEER DC	LOGGED KW	TYPE DHC
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ABOVE THIS LINE FOR DIVISION USE ONLY

NEW MEXICO OIL CONSERVATION DIVISION
- Engineering Bureau -

2705

ADMINISTRATIVE APPLICATION COVERSHEET

THIS COVERSHEET IS MANDATORY FOR ALL ADMINISTRATIVE APPLICATIONS FOR EXCEPTIONS TO DIVISION RULES AND REGULATIONS

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]

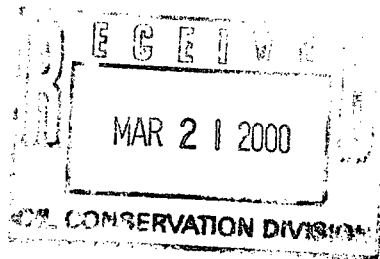
[1] TYPE OF APPLICATION - Check Those Which Apply for [A]

- [A] Location - Spacing Unit - Directional Drilling
NSL NSP DD SD

Check One Only for [B] and [C]

- [B] Commingling - Storage - Measurement
X 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] X 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 - Statement of Understanding

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, information or notification is cause to have the application package returned with no action taken.

Note: Statement must be completed by an individual with supervisory capacity.

Peggy Cole

Print or Type Name

Peggy Cole
Signature

Regulatory/Compliance Administrator

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

APPLICATION FOR DOWNHOLE COMMINGLING

Form C-107-A
Revised March 17, 1999

APPROVAL PROCESS:

☒ Administrative ☐ Hearing

EXISTING WELLBORE

☒ YES ☐ NO

BURLINGTON RESOURCES OIL & GAS COMPANY

PO Box 4289, Farmington, NM 87499

Operator

Address

Zachry

40

I, Sec 10, T28N, R10W

San Juan

Lease

Well No.

Unit Ltr. - Sec - Twp - Rge

County

Spacing Unit Lease Types: (check 1 or more)

OGRID NO. 14538 Property Code 7654 API NO. 30-045-2546900 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 Mesa Verde - 72319		Armenta Gallup - 2290
2. Top and Bottom of Pay Section (Perforations)	3859' - 4554'		5464' - 6006'
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 Current Measured Current Estimated Or Measured Original	(Current) a. 168 psia @ 4206' (Original) b. 1355 psia @ 4206'	a. b.	a. 656 psia @ 5735' b. 2952 psia @ 5735'
6. Oil Gravity (EAPI) or Gas BTU Content	1358 BTU		1000 BTU
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: 04/30/95 Rates: 52 MCFD, 0 BOD, 0 BWD
* If Producing, give date and oil/gas/water rates of recent test (within 60 days)	Date: 12/31/99 Rates: 10 MCFD 0 BOD, 0 BWD	Date: Rates:	Date: Rates:
8. Fixed Percentage Allocation Formula -% for each zone (total of %'s to equal 100%)	Oil: Gas: Will supply for commingling	Oil: % Gas: %	Oil: Gas: Will supply for commingling

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 ☐ 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).

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.
- * 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

TITLE Operations Engineer

DATE 03/15/00

TYPE OR PRINT NAME Joe A. Michetti

TELEPHONE NO. (505) 326-9700

District I
PO Box 1980, Hobbs, NM 88241-1980
District II
PO Drawer DD, Artesia, NM 88211-0719
District III
1000 Rio Huerfano Rd., Aztec, NM 87410
District IV
PO Box 2088, Santa Fe, NM 87504-2088

State of New Mexico
Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION
PO Box 2088
Santa Fe, NM 87504-2088

Form C-1
Revised February 21, 19
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 30-045-25469		Pool Code 72319	Pool Name Blanco Mesaverde
Property Code 7654	Property Name Zachry		Well Number 40
OGRID No. 14538	Operator Name MERIDIAN OIL INC.		Elevation 5737'

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
I	10	28N	10W		1650	South	720	East	San Juan

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

12 Dedicated Acres All 259.20	13 Joint or Infill	14 Consolidation Code	15 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 Not resurveyed, prepared from a plat dated 8-2-82 by James P. Leese.	17 OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief. Signature Peggy Bradfield Printed Name Regulatory Affairs Title 6-13-95 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 or under my supervision, and that the same is true and correct to the best of my belief. 6-7-95 Date of Survey Signature and Seal of Surveyor HENRY C. EDWARDS 0857 6857 Certificate Number	

ZACHRY 40 3241001 (237528504704.085) Date: Jan. 1983-Nov. 1999

Operator: BURLINGTON RESOURCES OIL GAS CO
Field: ARMENTA GALLUP

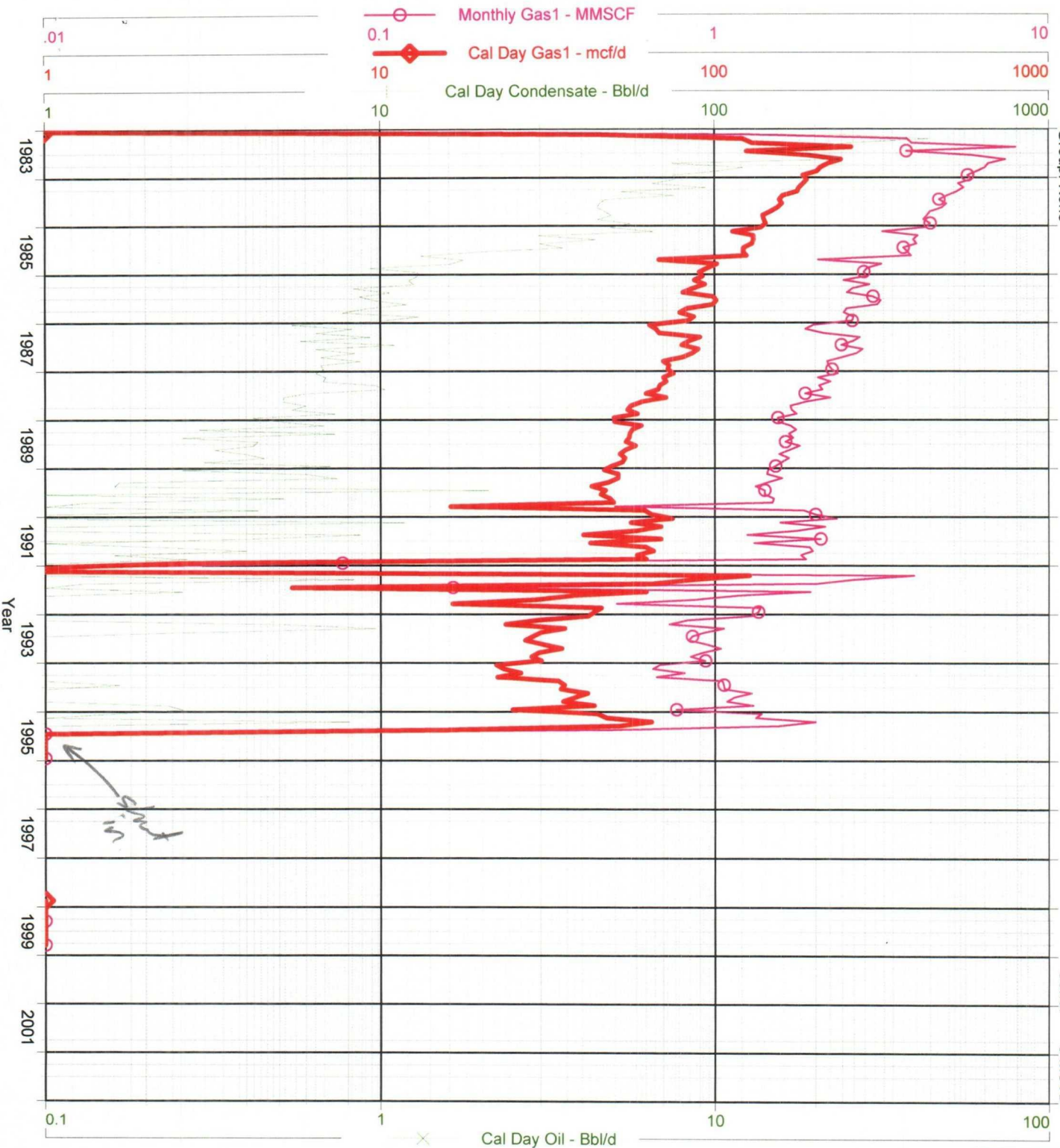
Zone:

Type: Oil

Group: None

No
Active
Forecast

Production Cums
Oil: 10.978 MSTB
Gas: 345.867 MMSCF
Water: 0.308 MSTB
Cond: 0 MSTB



Monthly Gas1 - MMSCF
Cum: 345.867 MMSCF

Cal Day Gas1 - mcf/d
Cum: 345.867 MMSCF

Cal Day Condensate - Bbl/d
Cum: 0 MSTB

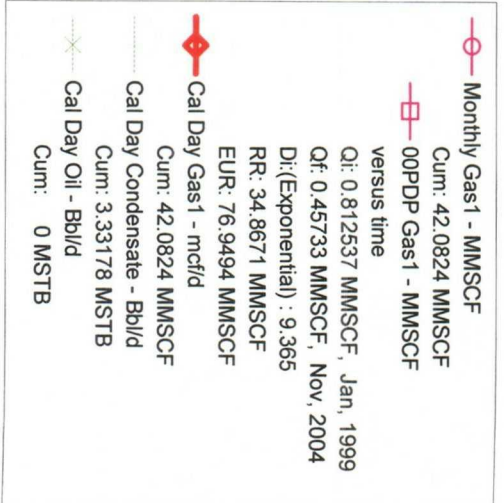
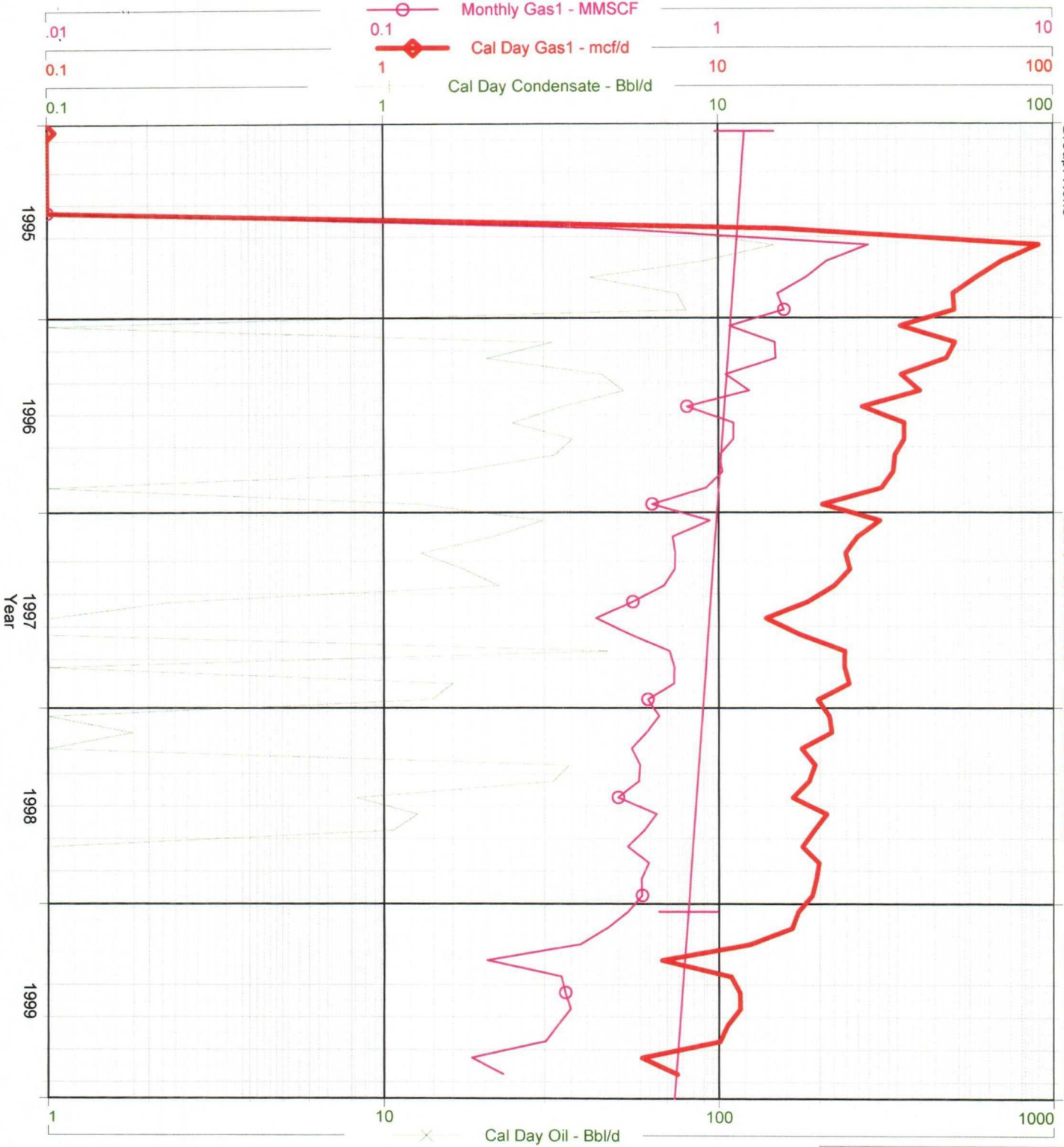
Cal Day Oil - Bbl/d
Cum: 10.978 MSTB

MV/cu - cumulative
res in well.
Current Prod.
MV = 4.6 MCFD
GL = 17.3 MCFD

Operator: BURLINGTON RESOURCES OIL GAS CO
Field: BLANCO MESAVERDE (PRORATED GAS)
Zone:
Type: Gas
Group: None

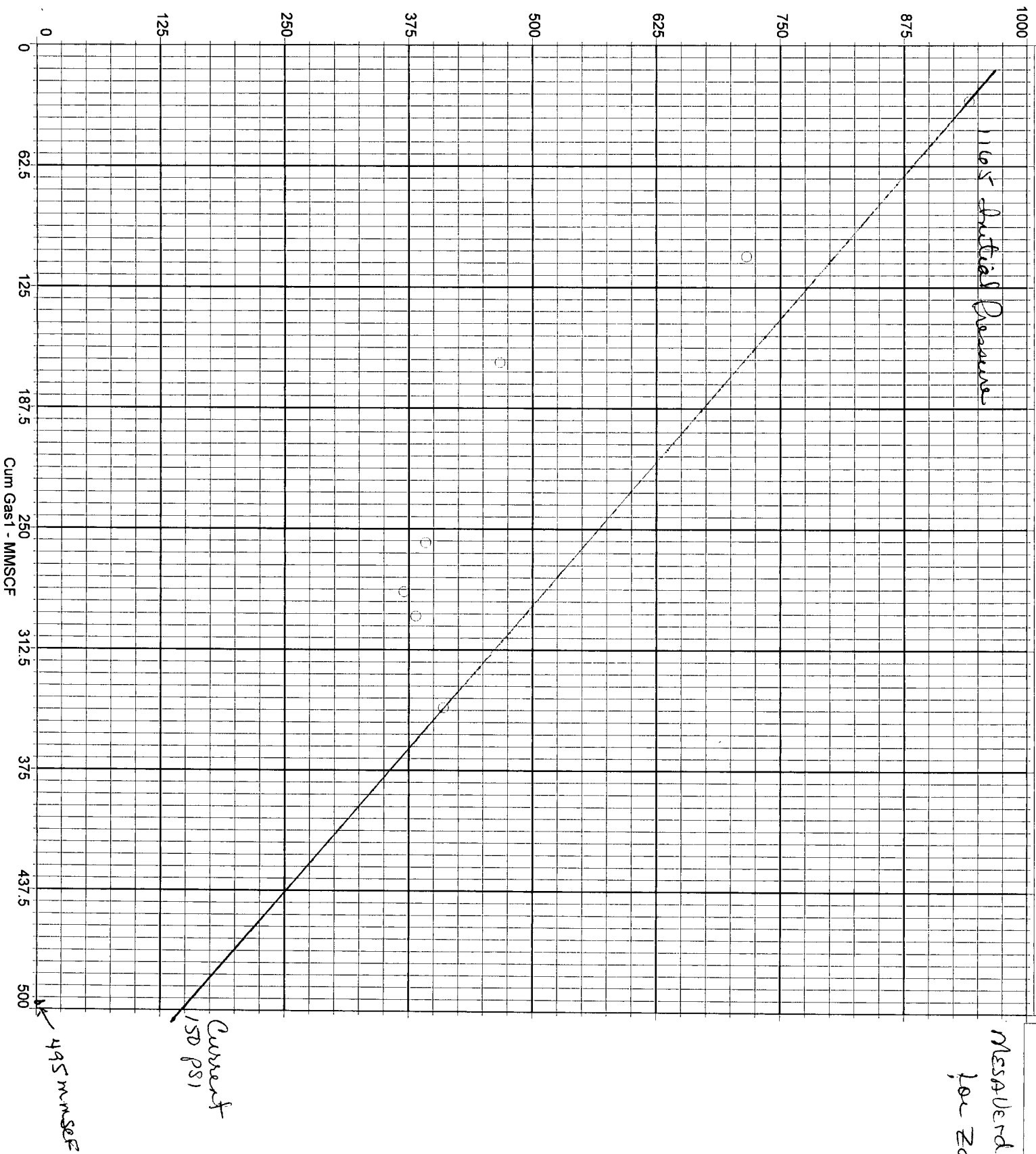
00PDP Gas1 (Rate-Time)
qi: 0.812537 MMSCF, Jan, 1999
qt: 0.45733 MMSCF, Nov, 2004
di(Exp): 9.365 CTD: 42.0824 MMSCF
RR: 34.8671 MMSCF Tot: 76.9494 MMSCF

Production Cums
Oil: 0 MSTB
Gas: 42.0824 MMSCF
Water: 0 MSTB
Cond: 3.33178 MSTB



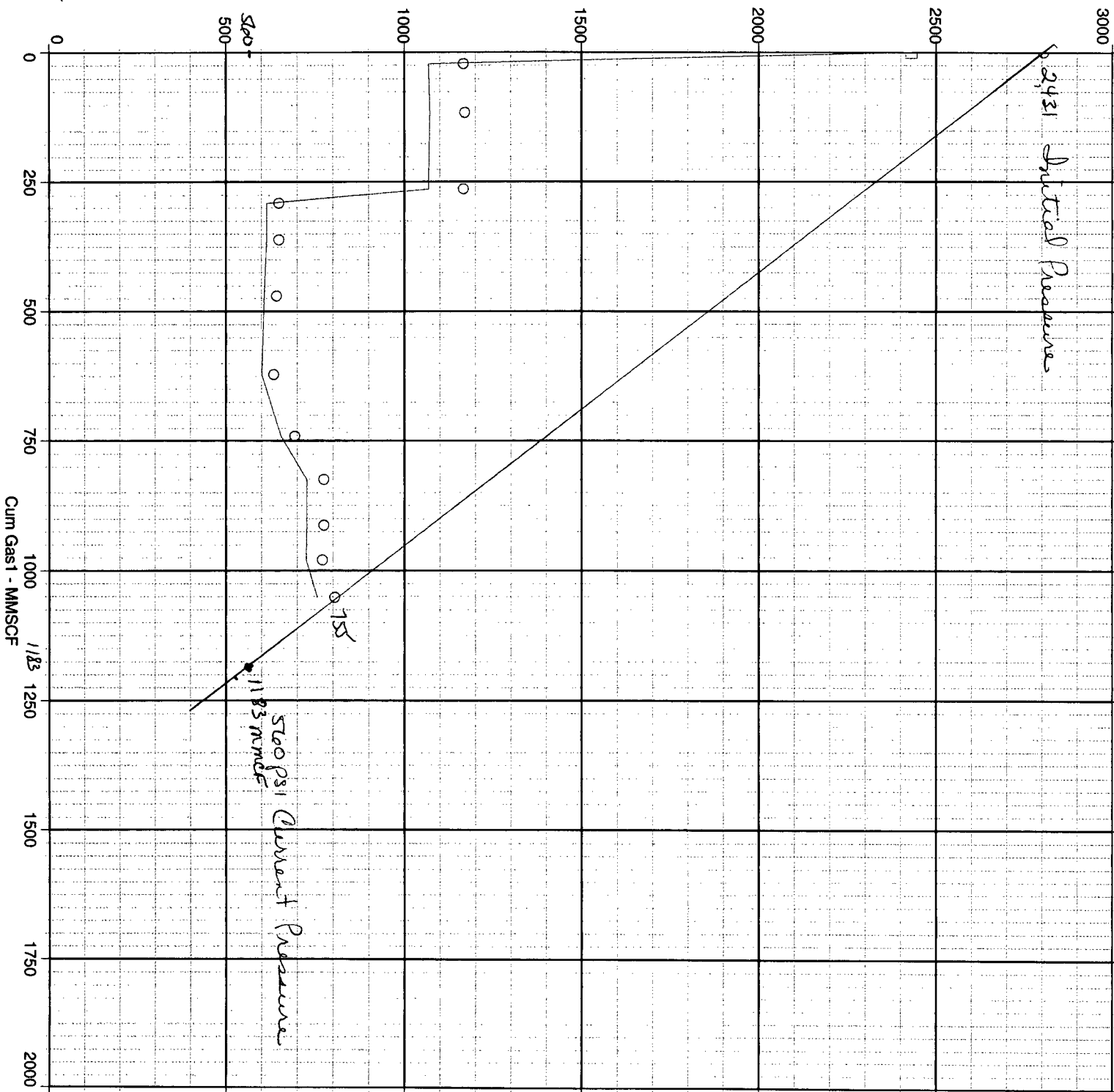
○ P/Z - psi

Mesa Verde Offset well
for Zachry 40



Cum Gas1 - MMSCF

○ P/Z - psi
 — Pressure - psi
 Grilling Offset well
 for Zaekuy 40



Zachry 40
Bottom Hole Pressures
Flowing and Static BHP
Cullender and Smith Method
Version 1.0 3/13/94

Mesaverde		Gallup	
<u>MV-Current</u>		<u>GL-Current</u>	
GAS GRAVITY	0.767	GAS GRAVITY	0.73
COND. OR MISC. (C/M)	M	COND. OR MISC. (C/M)	M
%N2	0.48	%N2	1.20
%CO2	0.38	%CO2	0.69
%H2S	0	%H2S	0
DIAMETER (IN)	6.969	DIAMETER (IN)	4.892
DEPTH (FT)	4206	DEPTH (FT)	5735
SURFACE TEMPERATURE (DEG F)	60	SURFACE TEMPERATURE (DEG F)	60
BOTTOMHOLE TEMPERATURE (DEG F)	114	BOTTOMHOLE TEMPERATURE (DEG F)	133
FLOWRATE (MCFPD)	0	FLOWRATE (MCFPD)	0
SURFACE PRESSURE (PSIA)	150	SURFACE PRESSURE (PSIA)	560
BOTTOMHOLE PRESSURE (PSIA)	168.2	BOTTOMHOLE PRESSURE (PSIA)	656.5
<u>MV-Original</u>		<u>GL-Original</u>	
GAS GRAVITY	0.767	GAS GRAVITY	0.73
COND. OR MISC. (C/M)	M	COND. OR MISC. (C/M)	M
%N2	0.48	%N2	1.20
%CO2	0.38	%CO2	0.69
%H2S	0	%H2S	0
DIAMETER (IN)	6.969	DIAMETER (IN)	4.892
DEPTH (FT)	4206	DEPTH (FT)	5735
SURFACE TEMPERATURE (DEG F)	60	SURFACE TEMPERATURE (DEG F)	60
BOTTOMHOLE TEMPERATURE (DEG F)	114	BOTTOMHOLE TEMPERATURE (DEG F)	133
FLOWRATE (MCFPD)	0	FLOWRATE (MCFPD)	0
SURFACE PRESSURE (PSIA)	1165	SURFACE PRESSURE (PSIA)	2431
BOTTOMHOLE PRESSURE (PSIA)	1355.0	BOTTOMHOLE PRESSURE (PSIA)	2951.7

Cumulative Monthly Well Report

September 1998 -- February 2000

Select By : Completions
Sort By :

Page No : 1
Report Number : R_290
Last Update :
Print Date : 02/16/2000, 9:51:00

Completion	Date	Cur Oil	Cum Oil	Cur Gas	Cum Gas	Cur Wat	Cum Wat
ZACHRY 40 <i>Meade Leade</i>	10/31/1998	105.42	105.42	0.00	0.00	0.00	0.00
	11/30/1998	0.00	105.42	585.50	585.50	0.00	0.00
	12/31/1998	0.00	105.42	588.25	1,173.75	0.00	0.00
	01/31/1999	13.70	119.12	534.25	1,708.00	0.00	0.00
	02/28/1999	0.00	119.12	463.00	2,171.00	0.00	0.00
	03/31/1999	0.00	119.12	384.25	2,555.25	0.00	0.00
	04/30/1999	1.82	120.94	202.50	2,757.75	0.00	0.00
	05/31/1999	0.00	120.94	337.25	3,095.00	0.00	0.00
	06/30/1999	0.00	120.94	346.50	3,441.50	0.00	0.00
	07/31/1999	0.00	120.94	359.25	3,800.75	0.00	0.00
	08/31/1999	0.00	120.94	329.25	4,130.00	0.00	0.00
	09/30/1999	0.00	120.94	302.50	4,432.50	0.00	0.00
	10/31/1999	0.00	120.94	182.25	4,614.75	0.00	0.00
	11/30/1999	0.00	120.94	225.62	4,840.37	0.00	0.00
	12/31/1999	0.42	121.36	301.18	5,141.55	0.00	0.00
	01/31/2000	0.00	121.36	0.00	5,141.55	0.00	0.00
	02/29/2000	0.00	121.36	0.00	5,141.55	0.00	0.00

Cumulative Monthly Well Report

September 1998 -- February 2000

Select By : Completions
Sort By :

Page No : 1
Report Number : R_290
Last Update :
Print Date : 02/15/2000, 9:51:33

Completion	Date	Cur Oil	Cum Oil	Cur Gas	Cum Gas	Cur Wat	Cum Wat
ZACHRY 40	10/31/1998	0.00	0.00	0.00	0.00	0.00	0.00
Gallup	11/30/1998	0.00	0.00	0.00	0.00	0.00	0.00
	12/31/1998	0.00	0.00	0.00	0.00	0.00	0.00
	01/31/1999	0.00	0.00	0.00	0.00	0.00	0.00
	02/28/1999	0.00	0.00	0.00	0.00	0.00	0.00
	03/31/1999	0.00	0.00	0.00	0.00	0.00	0.00
	04/30/1999	0.00	0.00	0.00	0.00	0.00	0.00
	05/31/1999	0.00	0.00	0.00	0.00	0.00	0.00
	06/30/1999	0.00	0.00	0.00	0.00	0.00	0.00
	07/31/1999	0.00	0.00	0.00	0.00	0.00	0.00
	08/31/1999	0.00	0.00	0.00	0.00	0.00	0.00
	09/30/1999	0.00	0.00	0.00	0.00	0.00	0.00
	10/31/1999	0.00	0.00	0.00	0.00	0.00	0.00
	11/30/1999	0.00	0.00	0.00	0.00	0.00	0.00
	12/31/1999	0.00	0.00	0.00	0.00	0.00	0.00
	01/31/2000	0.00	0.00	0.00	0.00	0.00	0.00
	02/29/2000	0.00	0.00	0.00	0.00	0.00	0.00

Zachry 40
Unit I, Sec. 10, T28N R10W
San Juan County, New Mexico

Production Allocation Based On Cumulative Production Through 11/99

	Cumulative Production		% Allocation	
	MMSCF	MSTB	% Gas	% Oil
Gallup	346	11	89%	77%
Mesa Verde	42	3	11%	23%
Total	388	14	100%	100%

Gas Allocation:

Gallup (Total Gallup Production) 346 MCF

(Total Combined Production) 388 MCF = 89%

Mesa Verde (Total Mesa Verde Production) 42.0824 MCF

(Total Combined Production) 387.9494 MCF = 11%

Oil Allocation:

Gallup (Total Gallup Production) 11 Bbl Oil

(Total Combined Production) 14 Bbl Oil = 77%

Mesa Verde (Total Mesa Verde Production) 3 Bbl Oil

(Total Combined Production) 14 Bbl Oil = 23%