

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

BURLINGTON RESOURCES OIL & GAS COMPANY
OperatorPO Box 4289, Farmington, NM 87499
Address

La Jara Canyon

1R

M, Sec. 10, T29N, R05W

Rio Arriba

Lease

Well No.

Unit Ltr. - Sec - Twp - Rge

County

Spacing Unit Lease Types: (check 1 or more)

OGRID NO. 14538 Property Code 18566 API NO. 30-039-23054 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	GOB PICTURED CLIFFS-77440		BLANCO MESAVERDE-72319
2. Top and Bottom of Pay Section (Perforations)	3609'-3744'		5674'-5974'
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	(Current) a. 430 psia @ 3671' (Original) b. 941.0 psia @ 3671'		a. 476.1 psia @ 5824' b. 1297.2 psia @ 5824'
6. Oil Gravity (API) or Gas BTU Content	1107 BTU		1084 BTU
7. Producing or Shut-In?	PRODUCING		PRODUCING
Production Marginal? (yes or no)	YES		YES
* If Shut-In 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: Rates:
* If Producing, give data and oil/gas/water of recent test (within 60 days)	Date: 12/14/99 Rates: 76MCF/D, 3-BO/MO, 0-BWD	Date: Rates:	Date: 12/14/99 Rates: 51MCF/D, 0-BOP, 0-BWD
8. Fixed Percentage Allocation Formula -% for each zone (total of %'s to equal 100%)	Oil: Gas: Will supply after commingling	Oil: Gas: Will supply after commingling	Oil: Gas: Will supply after 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 ☐ No
If not, have all working, overriding, and royalty interests been notified by certified mail? ☐ 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. (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 Mike Haddenham TITLE Operations Engineer DATE 12-29-99TYPE OR PRINT NAME MIKE HADDENHAM TELEPHONE NO. (505) 326-9577

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

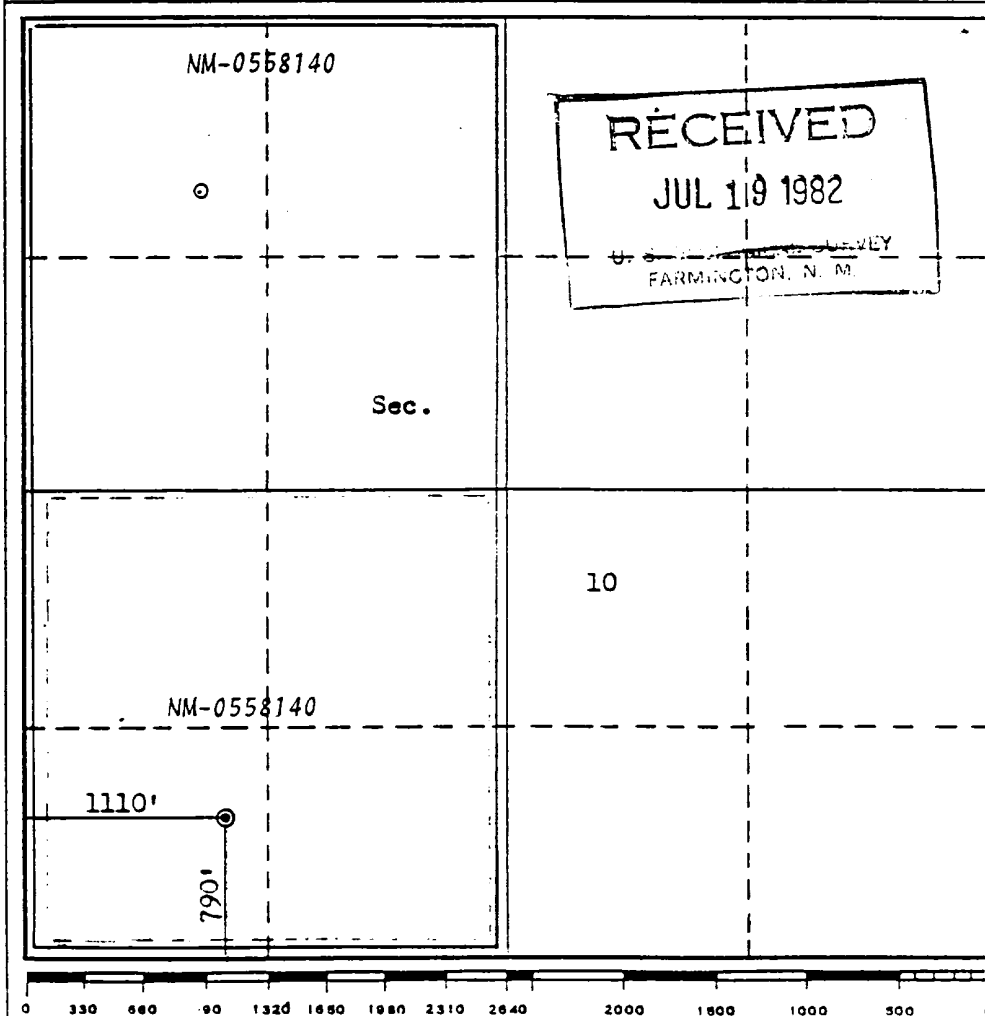
Operator SOUTHLAND ROYALTY COMPANY			Lease LA JARA <i>Canyon</i>		Well No. 1R
Unit Letter M	Section 10	Township 29N	Range 5W	County Rio Arriba	
Actual Footage Location of Well: 790 feet from the South line and 1110 feet from the West line					
Ground Level Elev. 6773	Producing Formation Pictured Cliffs/Mesaverde		Pool Gobernador/Blanco		Dedicated Acreage: 320 Acres

1. Outline the acreage dedicated to the subject well by colored pencil or hatchure 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.

R. E. Fielder

Name

R. E. Fielder

Position

District Engineer

Company

Southland Royalty Company

Date

July 15, 1982

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

June 24, 1982

Registered Professional Engineer and/or Land Surveyor

Fred B. Kerr Jr.
Fred B. Kerr Jr.

Certificate No.

3950

LA JARA CANYON #1R
Bottom Hole Pressures
Flowing and Static BHP
Cullender and Smith Method
Version 1.0 3/13/94

Mesaverde		Pictured Cliffs	
<u>MV-Current</u>		<u>PC-Current</u>	
GAS GRAVITY	0.626	GAS GRAVITY	0.636
COND. OR MISC. (C/M)	M	COND. OR MISC. (C/M)	M
%N2	0.1	%N2	0.13
%CO2	1.32	%CO2	1
%H2S	0	%H2S	0
DIAMETER (IN)	4.052	DIAMETER (IN)	6.366
DEPTH (FT)	5824	DEPTH (FT)	3671
SURFACE TEMPERATURE (DEG F)	60	SURFACE TEMPERATURE (DEG F)	60
BOTTOMHOLE TEMPERATURE (DEG F)	140	BOTTOMHOLE TEMPERATURE (DEG F)	120
FLOWRATE (MCFPD)	0	FLOWRATE (MCFPD)	0
SURFACE PRESSURE (PSIA)	418	SURFACE PRESSURE (PSIA)	395
BOTTOMHOLE PRESSURE (PSIA)	476.1	BOTTOMHOLE PRESSURE (PSIA)	430.0
<u>MV-Original</u>		<u>PC-Original</u>	
GAS GRAVITY	0.626	GAS GRAVITY	0.636
COND. OR MISC. (C/M)	M	COND. OR MISC. (C/M)	M
%N2	0.1	%N2	0.13
%CO2	1.32	%CO2	1
%H2S	0	%H2S	0
DIAMETER (IN)	4.052	DIAMETER (IN)	6.366
DEPTH (FT)	5824	DEPTH (FT)	3671
SURFACE TEMPERATURE (DEG F)	60	SURFACE TEMPERATURE (DEG F)	60
BOTTOMHOLE TEMPERATURE (DEG F)	140	BOTTOMHOLE TEMPERATURE (DEG F)	120
FLOWRATE (MCFPD)	0	FLOWRATE (MCFPD)	0
SURFACE PRESSURE (PSIA)	1124	SURFACE PRESSURE (PSIA)	859
BOTTOMHOLE PRESSURE (PSIA)	1297.2	BOTTOMHOLE PRESSURE (PSIA)	941.0

Sample Date: 19980701

Hydrocarbon Fractions

Mol % C1: 91.19

Mol % C2: 3.87

Mol % C3: 2.07

Mol % iC4: 0.4

Mol % nC4: 0.59

Mol % iC5: 0.2

Mol % nC5: 0.17

Mol % C6: 0

Mol % C6+: 0.38

Mol % C7: 0

Impurities

Mol % H2: 0

Mol % He: 0

Mol % N2: 0.13

Mol % O2: 0

Mol % H2S: 0

Mol % CO2: 1

Test Pressure: 14.73

Test Temperature: 60

Wet BTU Factor (BTU/CF at 14.73): 1094.632

Dry BTU Factor (BTU/CF at 14.73): 1114

Measured Specific Gravity: 0

Calculated Specific Gravity: 0.636

Sample Date: 19970401

Hydrocarbon Fractions

Mol % C1: 91.17

Mol % C2: 3.75

Mol % C3: 1.99

Mol % iC4: 0.37

Mol % nC4: 0.56

Mol % iC5: 0.25

Mol % nC5: 0.22

Mol % C6: 0

Mol % C6+: 0.3

Mol % C7: 0

Impurities

Mol % H2: 0

Mol % He: 0

Mol % N2: 0.32

Mol % O2: 0

Mol % H2S: 0

Mol % CO2: 1.07

Test Pressure: 14.73

Test Temperature: 60

Wet BTU Factor (BTU/CF at 14.73): 1087.753

Dry BTU Factor (BTU/CF at 14.73): 1107

Measured Specific Gravity: 0

Calculated Specific Gravity: 0.635

Sample Date: 19980701

Hydrocarbon Fractions

Mol % C1: 91.66
Mol % C2: 4.46
Mol % C3: 1.25
Mol % iC4: 0.3
Mol % nC4: 0.28
Mol % iC5: 0.13
Mol % nC5: 0.08
Mol % C6: 0
Mol % C6+: 0.42
Mol % C7: 0

Impurities

Mol % H2: 0
Mol % He: 0
Mol % N2: 0.1
Mol % O2: 0
Mol % H2S: 0
Mol % CO2: 1.32

Test Pressure: 14.73

Test Temperature: 60

Wet BTU Factor (BTU/CF at 14.73): 1071.049

Dry BTU Factor (BTU/CF at 14.73): 1090

Measured Specific Gravity: 0

Calculated Specific Gravity: 0.626

Sample Date: 19970401

Hydrocarbon Fractions

Mol % C1: 91.22
Mol % C2: 4.55
Mol % C3: 1.33
Mol % iC4: 0.3
Mol % nC4: 0.31
Mol % iC5: 0.16
Mol % nC5: 0.1
Mol % C6: 0
Mol % C6+: 0.24
Mol % C7: 0

Impurities

Mol % H2: 0
Mol % He: 0
Mol % N2: 0.52
Mol % O2: 0
Mol % H2S: 0
Mol % CO2: 1.27

Test Pressure: 14.73

Test Temperature: 60

Wet BTU Factor (BTU/CF at 14.73): 1064.171

Dry BTU Factor (BTU/CF at 14.73): 1083

Measured Specific Gravity: 0

Calculated Specific Gravity: 0.625

OIL CONSERVATION DIVISION

API # 30-039-23054

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Revised 10/01/78

NORTHWEST NEW MEXICO PACKER-LEAKAGE TEST

Operator BURLINGTON RESOURCES OIL & GAS CO. Lease LA JARA CANYON Well No. 1RLocation of Well: Unit M Sect 10 Twp. 029N Rge. 005W County RIO ARRIBA

	NAME OF RESERVOIR OR POOL	TYPE OF PROD. (Oil or Gas)	METHOD OF PROD. (Flow or Art. Lift)	PROD. MEDIUM (Tbg. or Csg.)
Upper Completion	PICTURED CLIFFS	Gas	Flow	Tubing
Lower Completion	MESAVERDE	Gas	Flow	Tubing

PRE-FLOW SHUT-IN PRESSURE DATA

Upper Completion	Hour, date shut-in	Length of time shut-in	SI press. psig	Stabilized? (Yes or No)
	05/28/1999	120 Hours	395	
Lower Completion	05/28/1999	72 Hours	418	

FLOW TEST NO. 1

Commenced at (hour,date)*		05/31/1999		Zone producing (Upper or Lower)		LOWER
TIME	LAPSED TIME	PRESSURE		PROD. ZONE	REMARKS	
(hour,date)	SINCE*	Upper Completion	Lower Completion	TEMP		
6/01/199	96 Hours	399	311		Turned MV on.	
6/02/199	120 Hours	406	193		MV flowed 82 MCF.	
					MV flowed 61. Turned on PC.	

Production rate during test

Oil: _____ BOPD based on _____ Bbls. in _____ Hours. _____ Grav. _____ GOR _____

Gas: _____ MCFPD: Tested thru (Orifice or Meter): _____

MID-TEST SHUT-IN PRESSURE DATA

Upper Completion	Hour, date shut-in	Length of time shut-in	SI press. psig	Stabilized? (Yes or No)
Lower Completion	Hour, date shut-in	Length of time shut-in	SI press. psig	Stabilized? (Yes or No)

(Continue on reverse side)

La Jara Canyon #1R
Sec. 10, T29N R05W
Rio Arriba County, New Mexico

Production Allocation Based On Cumulative Production Through 12/99

	Cumulative Production		% Allocation	
	MCF/Mo.	Bbl Oil/Mo.	% Gas	% Oil
Pictured Cliffs	2,318	3	59.85%	100.00%
Mesaverde	1,555	0	40.15%	0.00%
Total	3,872	3	100.00%	100.00%

Gas Allocation:

	(Total Pictured Cliffs Production)	2,318 MCF	
Pictured Cliffs	-----		= 59.85%
	(Total Combined Production)	3,872 MCF	

	(Total Mesaverde Production)	1554.86 MCF	
Mesaverde	-----		= 40.15%
	(Total Combined Production)	3872.45 MCF	

Oil Allocation:

	(Total Pictured Cliffs Production)	3 Bbl Oil	
Pictured Cliffs	-----		= 100.00%
	(Total Combined Production)	3 Bbl Oil	

	(Total Mesaverde Production)	0 Bbl Oil	
Mesaverde	-----		= 0.00%
	(Total Combined Production)	3 Bbl Oil	

Cumulative Monthly Well Report

December 1997 -- December 1999

Select By : Completions
Sort By :

MV 51/10 009

Page No : 1
Report Number : R_290
Last Update :
Print Date : 12/14/99, 3:42:21 PM

Completion	Date	Cur Oil	Cum Oil	Cur Gas	Cum Gas	Cur Wat	Cum Wat
LA JARA CANYON IR	11/30/1998	0.00	0.00	1,968.56	1,968.56	0.00	0.00
	12/31/1998	0.00	0.00	1,819.56	3,788.12	0.00	0.00
	01/31/1999	0.00	0.00	1,801.91	5,590.03	0.00	0.00
	02/28/1999	0.00	0.00	1,705.84	7,295.87	0.00	0.00
	03/31/1999	0.00	0.00	1,979.36	9,275.23	0.00	0.00
	04/30/1999	0.00	0.00	1,891.13	11,166.36	0.00	0.00
	05/31/1999	0.00	0.00	1,583.29	12,749.65	0.00	0.00
	06/30/1999	0.00	0.00	2,039.16	14,788.81	0.00	0.00
	07/31/1999	0.00	0.00	2,175.43	16,964.24	0.00	0.00
	08/31/1999	0.00	0.00	1,947.99	18,912.23	0.00	0.00
	09/30/1999	0.00	0.00	1,825.44	20,737.67	0.00	0.00
	10/31/1999	0.00	0.00	1,554.86	22,292.53	0.00	0.00
	11/30/1999	0.00	0.00	0.00	22,292.53	0.00	0.00
	12/31/1999	0.00	0.00	0.00	22,292.53	0.00	0.00

Cumulative Monthly Well Report

December 1997 -- December 1999

Select By : Completions
Sort By :

pc 7/6/00

Page No : 1
Report Number : R_290
Last Update :
Print Date : 12/14/99, 3:42:48 PM

Completion	Date	Cur Oil	Cum Oil	Cur Gas	Cum Gas	Cur Wat	Cum Wat
LA JARA CANYON TR	11/30/1998	1.16	1.16	2,318.61	2,318.61	0.00	0.00
	12/31/1998	1.45	2.60	2,031.32	4,349.93	0.00	0.00
	01/31/1999	6.66	9.26	2,199.94	6,549.87	0.00	0.00
	02/28/1999	0.00	9.26	1,964.65	8,514.52	0.00	0.00
	03/31/1999	3.18	12.44	2,208.76	10,723.28	0.00	0.00
	04/30/1999	4.63	17.07	2,092.10	12,815.38	0.00	0.00
	05/31/1999	2.03	19.10	1,862.70	14,678.08	0.00	0.00
	06/30/1999	6.35	25.45	2,795.02	17,473.10	0.58	0.58
	07/31/1999	2.60	28.04	2,575.42	20,048.52	0.87	1.46
	08/31/1999	3.76	31.81	1,964.65	22,013.17	0.00	1.46
	09/30/1999	2.60	34.41	2,467.58	24,480.75	0.00	1.46
	10/31/1999	2.89	37.31	2,317.59	26,798.34	0.00	1.46
	11/30/1999	4.63	41.94	0.00	26,798.34	0.00	1.46
	12/31/1999	0.00	41.94	0.00	26,798.34	0.00	1.46

LA JARA CANYON 1R 4204301 (286296671276.549) Data: Jan. 1983-Sep. 1999

Operator: BURLINGTON RESOURCES OG

Field: GOBERNADOR P.C. (GAS)

Zone:

Type: Gas

Group: None

UOPDP Gas1 (Rate-Time)

qi: 2.6982 MMSCF, Jan. 1999

qt: 0.285881 MMSCF, May. 2040

di(Exp): 5.28 CTD: 657.13 MMSCF

RR: 512.492 MMSCF Tot: 1169.62 MMSCF

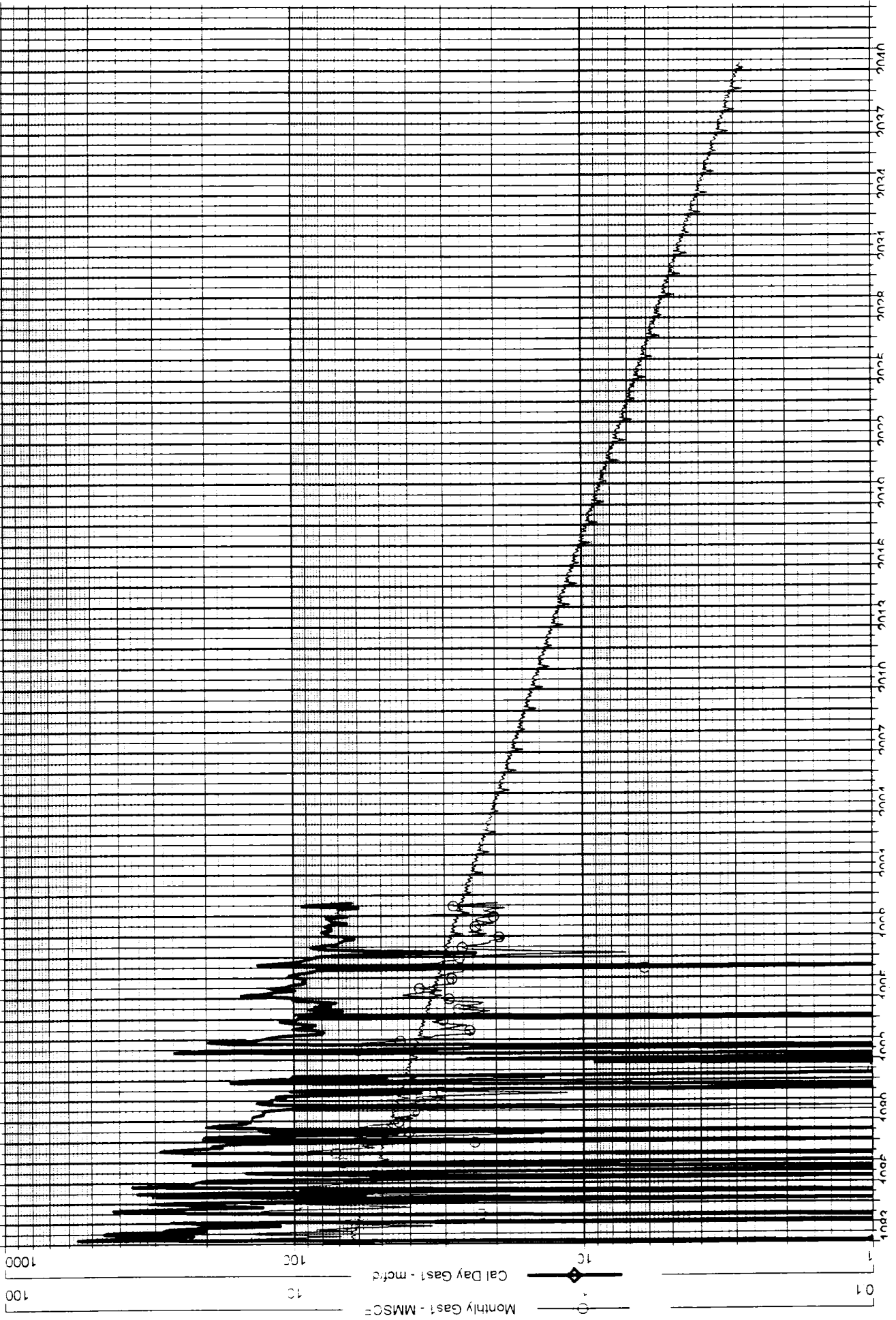
Production Cumis

Oil: 0 MSTB

Gas: 657.13 MMSCF

Water: 0.081456 MSTB

Cond: 0.682411 MSTB



LA JARA CANYON 1R 4204302 (269866608326.07) Data: Jan.1975-Aug.1999

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

00PDP Gas1 (Rate-Time)
 qi: 1.67133 MMSCF, Jan. 1999
 qf: 0.469358 MMSCF, Mar. 2017
 di(Exp): 6.724 CTD: 396.291 MMSCF
 RR: 194.149 MMSCF Tot: 590.44 MMSCF

Production Cums
 Oil: 0 MSTB
 Gas: 396.291 MMSCF
 Water: 0.139 MSTB
 Cond: 0.014 MSTB

