

DATE IN 12/30/99	SUSPENSE 1/19/00	ENGINEER DC	LOGGED NV	TYPE DHC
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ABOVE THIS LINE FOR DIVISION USE ONLY

NEW MEXICO OIL CONSERVATION DIVISION  
- Engineering Bureau -

2594

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

DEC 30 1999

[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

Signature

Regulatory/Compliance Administrator

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

Form C-107-A

APPROVAL PROCESS :

☒ Administrative ☐ Hearing

EXISTING WELLBORE

☒ YES ☐ NO

## APPLICATION FOR DOWNHOLE COMMINGLING

BURLINGTON RESOURCES OIL &amp; GAS COMPANY

PO Box 4289, Farmington, NM 87499

Operator

Address

La Jara Canyon

1A

D, 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. 30-039-22044 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 PIC.CLIFFS-77440		BLANCO MESAVERDE-72319
2. Top and Bottom of Pay Section (Perforations)	3556'-3734'		5706'-5957'
3. Type of production (Oil or Gas)	GAS		GAS
4. Method of Production (Flowing or Artificial Lift)	FLOWING		FLOWING
5. Bottomhole Pressure	(Current) a. 476 psia @ 3645'	a.	a. 212.5 psia @ 5832'
Oil Zones - Artificial Lift: Estimated Current Gas & Oil - Flowing: Measured Current All Gas Zones: Estimated or Measured	(Original) b. 1216.7 psia @ 3645'	b.	b. 1148 psia @ 5832'
6. Oil Gravity (°API) or Gas BTU Content	1099 BTU		1054 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	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 data and oil/gas/water of recent test (within 60 days)	Date: 12/14/99 Rates: 58MCF/D, 1-BO/MO, 0-BWD	Date: Rates:	Date: 12/14/99 Rates: 53MCF/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. (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 Mike Haddenham TITLE Operations Engineer DATE 12-29-99TYPE OR PRINT NAME MIKE HADDENHAM TELEPHONE NO. ( 505 ) 326-9577

**NEW MEXICO OIL CONSERVATION COMMISSION**  
**WELL LOCATION AND ACREAGE DEDICATION PLAT**

Form C-102  
 Supersedes C-128  
 Effective 1-4-65

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

Operator <b>SOUTHLAND ROYALTY COMPANY</b>			Lease <b>LA JARA CANYON</b>		Well No. <b>1A</b>
Unit Letter <b>D</b>	Section <b>10</b>	Township <b>29N</b>	Range <b>5W</b>	County <b>RIO ARriba</b>	

Actual Footage Location of Well:

**980** feet from the **North** line and **955** feet from the **West** line

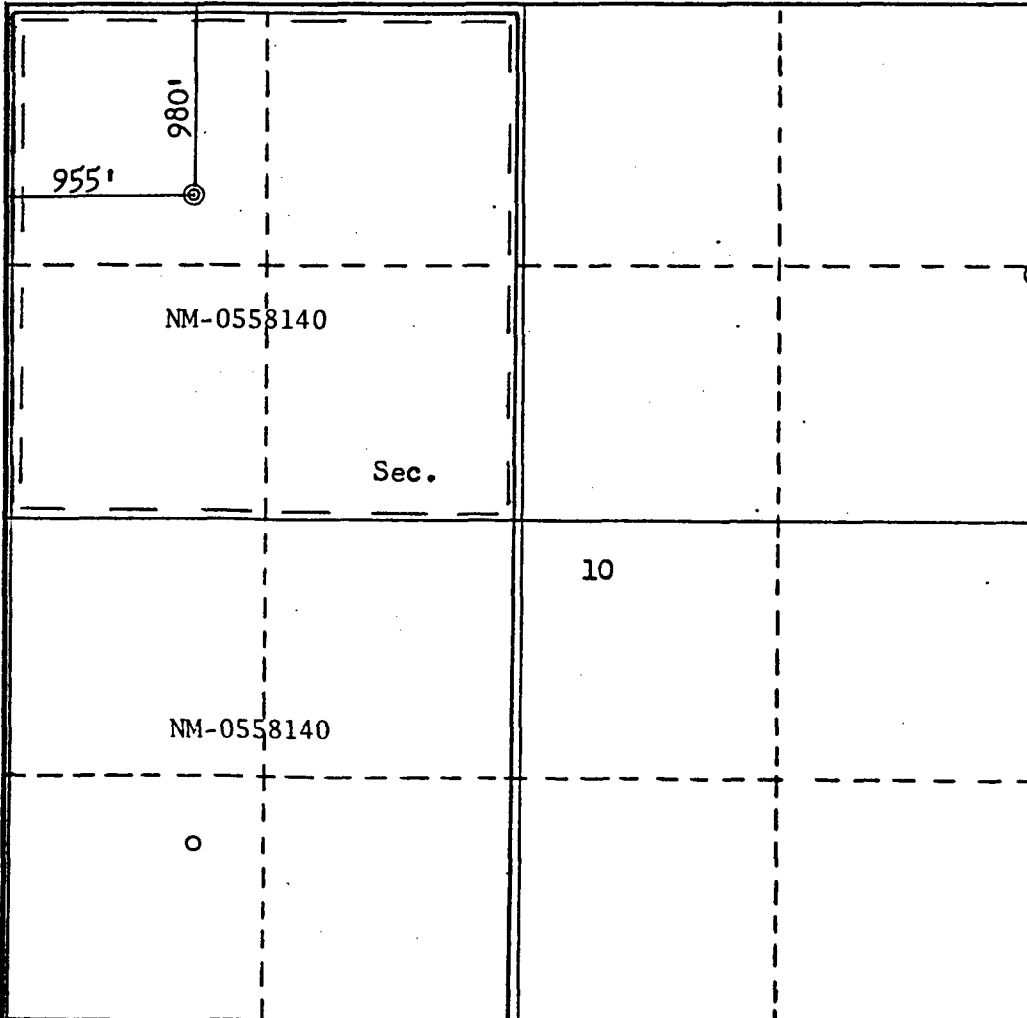
Ground Level Elev. <b>6719</b>	Producing Formation <b>MESA VERDE-Pictured Cliffs</b>	Pool <b>Blanco-Gobernador</b>	Dedicated Acreage: <b>320/160</b> Acres
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1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the 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 *[Signature]*  
 Position  
**District Production Manager**

Company  
**Southland Royalty Company**

Date  
**April 30, 1979 11 1979**

**FARMINGTON DISTRICT**

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  
**February 25, 1979**  
 Registered Professional Engineer  
 and/or Land Surveyor  
*[Signature]*  
**Frederic E. Kerr, Jr.**  
 Certificate No. **3950**

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

<b>Mesaverde</b>		<b>Pictured Cliffs</b>	
<b><u>MV-Current</u></b>		<b><u>PC-Current</u></b>	
GAS GRAVITY	0.611	GAS GRAVITY	0.625
COND. OR MISC. (C/M)	M	COND. OR MISC. (C/M)	M
%N2	0.1	%N2	0.11
%CO2	1.1	%CO2	0.93
%H2S	0	%H2S	0
DIAMETER (IN)	4.052	DIAMETER (IN)	6.366
DEPTH (FT)	5832	DEPTH (FT)	3645
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)	188	SURFACE PRESSURE (PSIA)	438
BOTTOMHOLE PRESSURE (PSIA)	212.5	BOTTOMHOLE PRESSURE (PSIA)	476.0
<b><u>MV-Original</u></b>		<b><u>PC-Original</u></b>	
GAS GRAVITY	0.611	GAS GRAVITY	0.625
COND. OR MISC. (C/M)	M	COND. OR MISC. (C/M)	M
%N2	0.1	%N2	0.11
%CO2	1.1	%CO2	0.93
%H2S	0	%H2S	0
DIAMETER (IN)	4.052	DIAMETER (IN)	6.366
DEPTH (FT)	5832	DEPTH (FT)	3645
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)	1001	SURFACE PRESSURE (PSIA)	1110
BOTTOMHOLE PRESSURE (PSIA)	1148.0	BOTTOMHOLE PRESSURE (PSIA)	1216.7

**Sample Date: 19971201****Hydrocarbon Fractions****Mol % C1: 92.49****Mol % C2: 3.18****Mol % C3: 1.76****Mol % iC4: 0.33****Mol % nC4: 0.51****Mol % iC5: 0.18****Mol % nC5: 0.14****Mol % C6: 0****Mol % C6+: 0.37****Mol % C7: 0****Impurities****Mol % H2: 0****Mol % He: 0****Mol % N2: 0.11****Mol % O2: 0****Mol % H2S: 0****Mol % CO2: 0.93****Test Pressure: 14.73****Test Temperature: 60****Wet BTU Factor (BTU/CF at 14.73): 1079.892****Dry BTU Factor (BTU/CF at 14.73): 1099****Measured Specific Gravity: 0****Calculated Specific Gravity: 0.625**

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**Sample Date: 19930713****Hydrocarbon Fractions****Mol % C1: 92.65****Mol % C2: 3.11****Mol % C3: 1.77****Mol % iC4: 0.35****Mol % nC4: 0.56****Mol % iC5: 0.19****Mol % nC5: 0.16****Mol % C6: 0****Mol % C6+: 0.31****Mol % C7: 0****Impurities****Mol % H2: 0****Mol % He: 0****Mol % N2: 0.12****Mol % O2: 0****Mol % H2S: 0****Mol % CO2: 0.78****Test Pressure: 14.73****Test Temperature: 60****Wet BTU Factor (BTU/CF at 14.73): 1079.892****Dry BTU Factor (BTU/CF at 14.73): 1099****Measured Specific Gravity: 0****Calculated Specific Gravity: 0.623**

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**Sample Date: 19971201****Hydrocarbon Fractions****Mol % C1: 93.29****Mol % C2: 3.26****Mol % C3: 1.35****Mol % iC4: 0.26****Mol % nC4: 0.33****Mol % iC5: 0.1****Mol % nC5: 0.06****Mol % C6: 0****Mol % C6+: 0.15****Mol % C7: 0****Impurities****Mol % H2: 0****Mol % He: 0****Mol % N2: 0.1****Mol % O2: 0****Mol % H2S: 0****Mol % CO2: 1.1****Test Pressure: 14.73****Test Temperature: 60****Wet BTU Factor (BTU/CF at 14.73): 1053.362****Dry BTU Factor (BTU/CF at 14.73): 1072****Measured Specific Gravity: 0****Calculated Specific Gravity: 0.611**

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**Sample Date: 19940901****Hydrocarbon Fractions****Mol % C1: 93.93****Mol % C2: 3.39****Mol % C3: 0.78****Mol % iC4: 0.18****Mol % nC4: 0.16****Mol % iC5: 0.06****Mol % nC5: 0.03****Mol % C6: 0****Mol % C6+: 0.12****Mol % C7: 0****Impurities****Mol % H2: 0****Mol % He: 0****Mol % N2: 0.09****Mol % O2: 0****Mol % H2S: 0****Mol % CO2: 1.26****Test Pressure: 14.73****Test Temperature: 60****Wet BTU Factor (BTU/CF at 14.73): 1035.675****Dry BTU Factor (BTU/CF at 14.73): 1054****Measured Specific Gravity: 0****Calculated Specific Gravity: 0.602**

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STATE OF NEW MEXICO  
ENERGY and MINERALS  
DEPARTMENT

## OIL CONSERVATION DIVISION

This form is not to  
be used for reporting  
packer leakage tests  
in Southeast New Mexico

## NORTHWEST NEW MEXICO PACKER-LEAKAGE TEST

Operator BURLINGTON RESOURCES OIL & GAS CO. Lease LA JARA CANYON Well No. 1ALocation  
of Well: Unit D Sect 10 Twp. 029N Rge. 010W 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 05/28/1999	Length of time shut-in 72 Hours	SI press. psig 438	Stabilized? (Yes or No)
Lower Completion	05/28/1999	120 Hours	188	

## FLOW TEST NO. 1

Commenced at (hour,date)* 05/31/1999		Zone producing (Upper or Lower) UPPER	
TIME (hour,date)	LAPSED TIME SINCE*	PRESSURE	
		Upper Completion	Lower Completion
6/01/199	96 Hours	312	204
6/02/199	120 Hours	127	212

Production rate during test

Oil: \_\_\_\_\_ BOPD based on \_\_\_\_\_ Bbbls. 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 #1A**  
**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	1,807	1		52.67%	100.00%
Mesaverde	1,624	0		47.33%	0.00%
Total	3,431	1		100.00%	100.00%

**Gas Allocation:**

**Pictured Cliffs**      (Total Pictured Cliffs Production)      1,807 MCF  
-----  
(Total Combined Production)      3,431 MCF      = **52.67%**

**Mesaverde**      (Total Mesaverde Production)      1624 MCF  
-----  
(Total Combined Production)      3431 MCF      = **47.33%**

**Oil Allocation:**

**Pictured Cliffs**      (Total Pictured Cliffs Production)      1 Bbl Oil  
-----  
(Total Combined Production)      1 Bbl Oil      = **100.00%**

**Mesaverde**      (Total Mesaverde Production)      0 Bbl Oil  
-----  
(Total Combined Production)      1 Bbl Oil      = **0.00%**



# Cumulative Monthly Well Report

December 1997 -- December 1999

PC

Page No : 1  
Report Number : R\_290  
Last Update :  
Print Date : 12/14/99, 3:36:12 PM

Select By : Completions  
Sort By :

58 mcf/D

Completion	Date	Cur Oil	Cum Oil	Cur Gas	Cum Gas	Cur Wat	Cum Wat
LA JARA CANYON 1A	11/30/1998	1.16	1.16	2,246.72	2,246.72	0.00	0.00
	12/31/1998	2.90	4.05	1,921.30	4,168.02	0.00	0.00
	01/31/1999	0.87	4.92	1,831.11	5,999.13	0.00	0.00
	02/28/1999	3.47	8.40	1,685.66	7,684.79	0.00	0.00
	03/31/1999	4.34	12.74	1,887.97	9,572.76	0.00	0.00
	04/30/1999	4.63	17.37	1,766.29	11,339.05	0.00	0.00
	05/31/1999	1.45	18.82	1,788.53	13,127.58	0.00	0.00
	06/30/1999	14.14	32.96	2,579.01	15,706.59	31.42	31.42
	07/31/1999	0.87	33.83	1,841.90	17,548.49	0.00	31.42
	08/31/1999	1.75	35.58	1,871.31	19,419.80	0.00	31.42
	09/30/1999	1.45	37.03	1,831.97	21,251.77	0.00	31.42
	10/31/1999	0.58	37.61	1,806.60	23,058.37	0.00	31.42
	11/30/1999	0.00	37.61	0.00	23,058.37	0.00	31.42
	12/31/1999	0.00	37.61	0.00	23,058.37	0.00	31.42

# Cumulative Monthly Well Report

December 1997 -- December 1999

Select By : Completions  
Sort By :

MV

53 mcf/d

Page No : 1  
Report Number : R\_290  
Last Update :  
Print Date : 12/14/99, 3:35:38 PM

Completion	Date	Cur Oil	Cum Oil	Cur Gas	Cum Gas	Cur Wat	Cum Wat
LAJARA CANYON 1A	11/30/1998	0.00	0.00	1,250.93	1,250.93	0.00	0.00
	12/31/1998	0.00	0.00	992.13	2,243.06	0.00	0.00
	01/31/1999	0.00	0.00	1,935.24	4,178.30	0.00	0.00
	02/28/1999	0.00	0.00	1,012.72	5,191.02	0.00	0.00
	03/31/1999	0.00	0.00	1,386.24	6,577.26	0.00	0.00
	04/30/1999	0.00	0.00	1,241.14	7,818.40	0.00	0.00
	05/31/1999	0.00	0.00	787.23	8,605.63	0.00	0.00
	06/30/1999	0.00	0.00	1,942.11	10,547.74	0.00	0.00
	07/31/1999	0.00	0.00	1,889.17	12,436.91	0.00	0.00
	08/31/1999	0.00	0.00	1,821.52	14,258.43	0.00	0.00
	09/30/1999	0.00	0.00	1,498.00	15,756.43	0.00	0.00
	10/31/1999	0.00	0.00	1,624.47	17,380.90	0.00	0.00
	11/30/1999	0.00	0.00	0.00	17,380.90	0.00	0.00
	12/31/1999	0.00	0.00	0.00	17,380.90	0.00	0.00



LA JARA CANYON 1A 4204101 (269859964058.008) Data: Jan. 1981-Aug. 1999

Operator: BURLINGTON RESOURCES OG

Field: BLANCO MESAVERDE (PRORATED GAS

Zone:

Type: Gas

Group: None

00PDP Gas1 (Rate-Time)

qi: 1.14467 MMSCF, Jan, 1999

qf: 0.467336 MMSCF, Sep, 2020

di(Exp): 4.048 CTD: 354.045 MMSCF

RR: 187.667 MMSCF Tot: 541.712 MMSCF

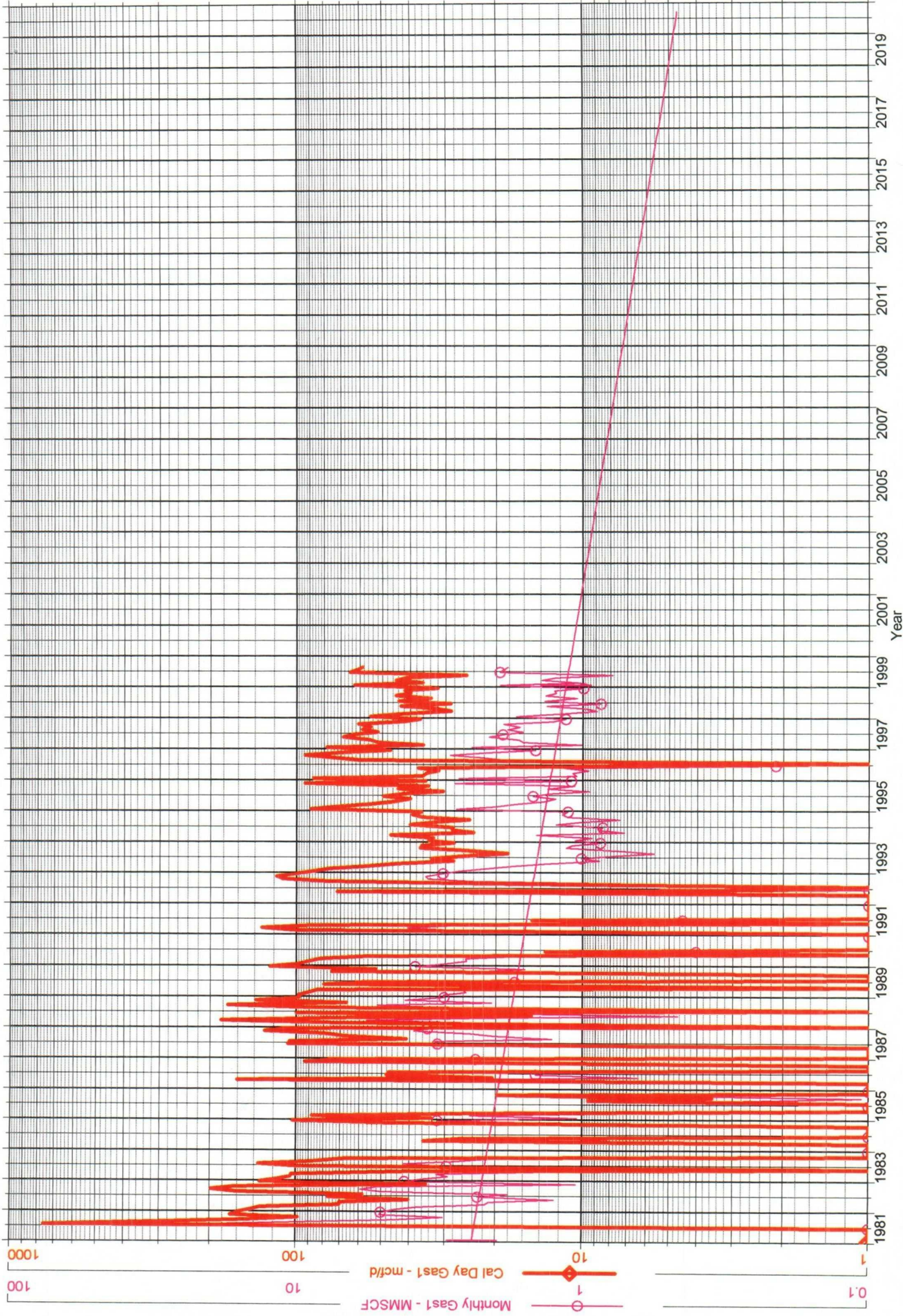
Production Cums

Oil: 0 MSTB

Gas: 354.045 MMSCF

Water: 0.424 MSTB

Cond: 0.514 MSTB





LA JARA CANYON 1A 4204102 (286287818064.563) Data: Jun. 1980-Sep. 1999

Operator: BURLINGTON RESOURCES OG

Field: GOVERNADOR P.C. (GAS)

Zone:

Type: Gas

Group: None

00PDP Gas1 (Rate-Time)

qi: 2.15022 MMSCF, Jan, 1999

qt: 0.29503 MMSCF, Jul, 2041

di(Exp): 4.563 CTD: 598.602 MMSCF

RR: 459.767 MMSCF Tot: 1058.37 MMSCF

Production-Cums  
Oil: 0 MSTB  
Gas: 598.602 MMSCF  
Water: 0.246421 MSTB  
Cond: 0.769031 MSTB

