

District I
1625 N. French Drive, Hobbs, NM 88240

District II
811 South First Street, Artesia, NM 88210

District III
1000 Rio Brazos Road, Aztec, NM 87410

District IV
2040 South Pacheco, Santa Fe, NM 87505

State of New Mexico
Energy, Minerals and Natural Resources Department

Form C-107A
Revised May 15, 2000

OIL CONSERVATION DIVISION

2040 South Pacheco
Santa Fe, New Mexico 87505

APPLICATION TYPE

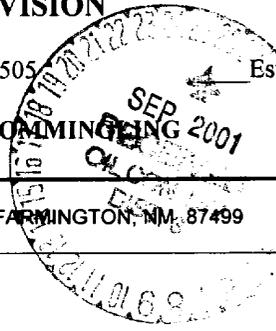
Single Well

Establish Pre-Approved Pools

EXISTING WELLBORE

Yes No

APPLICATION FOR DOWNHOLE COMMINGLING



BURLINGTON RESOURCES OIL & GAS COMPANY

PO BOX 4289, FARMINGTON, NM, 87499

Operator

Address

CAIN

16

M-30-29N-09W

SAN JUAN

Lease

Well No.

Unit Letter-Section-Township-Range

County

OGRID No. 14538

Property Code 18487

API No. 30-045-07794

Lease Type: Federal

State

Fee

DATA ELEMENT	UPPER ZONE	INTERMEDIATE ZONE	LOWER ZONE
Pool Name	OTERO CHACRA	BLANCO MESAVERDE	BASIN DAKOTA
Pool Code	82329	72319	71599
Top and Bottom of Pay Section (Perforated or Open-Hole Interval)	WILL BE SUPPLIED UPON COMPLETION	WILL BE SUPPLIED UPON COMPLETION	6374'-6556'
Method of Production (Flowing or Artificial Lift)	FLOWING	FLOWING	FLOWING
Bottomhole Pressure (Note: Pressure data will not be required if the bottom perforation in the lower zone is within 150% of the depth of the top perforation in the upper zone)	385 PSI - CURRENT 724 PSI - ORIGINAL (see attachment)	463 PSI - CURRENT 1152 PSI - ORIGINAL (see attachment)	621 PSI - CURRENT 2337 PSI - ORIGINAL (see attachment)
Oil Gravity or Gas BTU (Degree API or Gas BTU)	1076	1244	1190
Producing, Shut-In or New Zone	NEW ZONE	NEW ZONE	SHUT IN
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: New Zone Rates: (see attached)	Date: New Zone Rates: (see attached)	Date: 5/31/01 Rates: 14 mcf/d
Fixed Allocation Percentage (Note: If allocation is based upon something other than current or past production, supporting data or explanation will be required.)	Oil % Gas % WILL BE SUPPLIED UPON COMPLETION	Oil % Gas % WILL BE SUPPLIED UPON COMPLETION	Oil % Gas % WILL BE SUPPLIED UPON COMPLETION

ADDITIONAL DATA

Are all working, royalty and overriding royalty interests identical in all commingled zones? Yes No

Are all produced fluids from all commingled zones compatible with each other? Yes No

Will commingling decrease the value of production? Yes No

If this well is on, or communitized with, state or federal lands, has either the Commissioner of Public Lands or the United States Bureau of Land Management been notified in writing of this application? Yes No

NMOCD Reference Case No. applicable to this well: _____

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.

PRE-APPROVED POOLS

If application is to establish Pre-Approved Pools, the following additional information will be required:

List of other orders approving downhole commingling within the proposed Pre-Approved Pools

List of all operators within the proposed Pre-Approved Pools

Proof that all operators within the proposed Pre-Approved Pools were provided notice of this application.

Bottomhole pressure data.

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

SIGNATURE

TITLE

Production Engineer

DATE 08/28/01

tlw

TYPE OR PRINT NAME Sean E. Corrigan

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 Brazos 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-102
 Revised February 21, 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

¹ API Number 30-045-07794		² Pool Code 82329/72319/71599		³ Pool Name Otero Chacra/Blanco Mesaverde/Basin Dakota	
⁴ Property Code 18487		⁵ Property Name Cain			⁶ Well Number 16
⁷ OGRID No. 14538		⁸ Operator Name Burlington Resources Oil & Gas Company, LP			⁹ Elevation 5657' GL

¹⁰ Surface Location

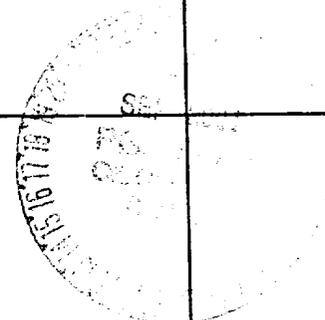
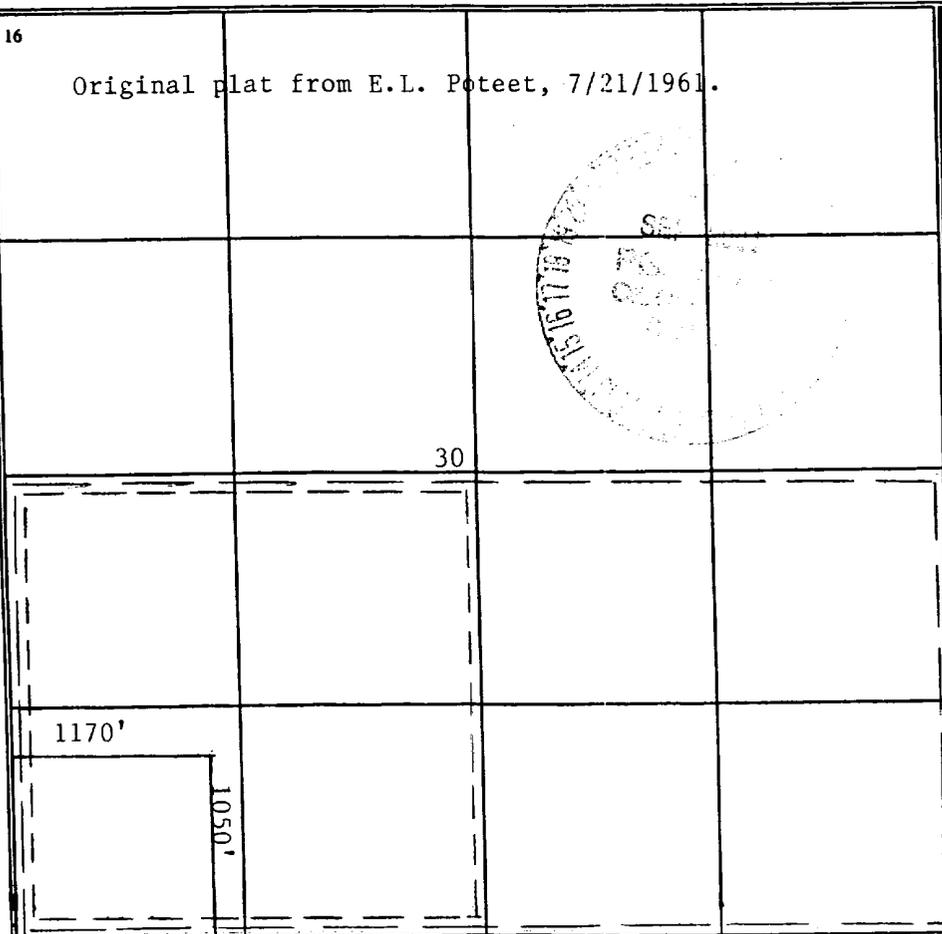
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
M	30	29N	9W		1050	South	1170	West	San Juan

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 Cha: SW/96.69 MV/DK: S/268.42	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 Original plat from E.L. Poteet, 7/21/1961. 	¹⁷ OPERATOR CERTIFICATION <i>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief</i>	
	Signature <u>Peggy Cole</u> Printed Name <u>Regulatory Supervisor</u> Title Date	
	¹⁸ SURVEYOR CERTIFICATION <i>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.</i>	
	Date of Survey Signature and Seal of Professional Surveyer: Certificate Number	

Cain #16
Existing Dakota Well

<u>Well Name</u>	<u>Date</u>	<u>Well Head Pressure</u>
Cain 16	8/26/1961	1,959
Cain 16	6/25/1969	549
Cain 16	5/1/1973	480
Cain 16	4/17/1975	480
Cain 16	7/2/1977	536
Cain 16	5/1/1979	482
Cain 16	9/15/1982	580
Cain 16	8/23/1983	611
Cain 16	6/11/1985	605
Cain 16	5/27/1991	533

Cain #16

Offset Mesaverde Well

<u>WellName</u>	<u>Date</u>	<u>Well Head Pressure</u>
Gerk Gas Com 1	11/19/1958	1,017
Gerk Gas Com 1	6/30/1970	595
Gerk Gas Com 1	4/22/1971	591
Gerk Gas Com 1	5/18/1972	520
Gerk Gas Com 1	4/18/1974	42
Gerk Gas Com 1	5/25/1976	391
Gerk Gas Com 1	3/29/1978	361
Gerk Gas Com 1	5/21/1980	398
Gerk Gas Com 1	5/24/1982	416
Gerk Gas Com 1	6/8/1984	430
Gerk Gas Com 1	4/8/1986	414

Cain #16

Offset Chacra Well

<u>WellName</u>	<u>Date</u>	<u>Well Head Pressure</u>
Hubbell 4	12/9/1974	672
Hubbell 4	5/16/1975	415
Hubbell 4	4/12/1976	381
Hubbell 4	5/9/1977	359

Cain #16
 Bottom Hole Pressures
 Flowing and Static BHP
 Cullender and Smith Method
 Version 1.0 3/13/94

Mesaverde	Dakota																																																
<u>MV-Current</u>	<u>DK-Current</u>																																																
<table style="width: 100%; border-collapse: collapse;"> <tr><td style="width: 80%;">GAS GRAVITY</td><td style="text-align: right; border-bottom: 1px solid black;">0.719</td></tr> <tr><td>COND. OR MISC. (C/M)</td><td style="text-align: right; border-bottom: 1px solid black;">C</td></tr> <tr><td>%N2</td><td style="text-align: right; border-bottom: 1px solid black;">0.31</td></tr> <tr><td>%CO2</td><td style="text-align: right; border-bottom: 1px solid black;">0.82</td></tr> <tr><td>%H2S</td><td style="text-align: right; border-bottom: 1px solid black;">0</td></tr> <tr><td>DIAMETER (IN)</td><td style="text-align: right; border-bottom: 1px solid black;">2.375</td></tr> <tr><td>DEPTH (FT)</td><td style="text-align: right; border-bottom: 1px solid black;">4261</td></tr> <tr><td>SURFACE TEMPERATURE (DEG F)</td><td style="text-align: right; border-bottom: 1px solid black;">60</td></tr> <tr><td>BOTTOMHOLE TEMPERATURE (DEG F)</td><td style="text-align: right; border-bottom: 1px solid black;">137</td></tr> <tr><td>FLOWRATE (MCFPD)</td><td style="text-align: right; border-bottom: 1px solid black;">0</td></tr> <tr><td>SURFACE PRESSURE (PSIA)</td><td style="text-align: right; border-bottom: 1px solid black;">414</td></tr> <tr><td>BOTTOMHOLE PRESSURE (PSIA)</td><td style="text-align: right; border: 1px solid black;">462.7</td></tr> </table>	GAS GRAVITY	0.719	COND. OR MISC. (C/M)	C	%N2	0.31	%CO2	0.82	%H2S	0	DIAMETER (IN)	2.375	DEPTH (FT)	4261	SURFACE TEMPERATURE (DEG F)	60	BOTTOMHOLE TEMPERATURE (DEG F)	137	FLOWRATE (MCFPD)	0	SURFACE PRESSURE (PSIA)	414	BOTTOMHOLE PRESSURE (PSIA)	462.7	<table style="width: 100%; border-collapse: collapse;"> <tr><td style="width: 80%;">GAS GRAVITY</td><td style="text-align: right; border-bottom: 1px solid black;">0.695</td></tr> <tr><td>COND. OR MISC. (C/M)</td><td style="text-align: right; border-bottom: 1px solid black;">C</td></tr> <tr><td>%N2</td><td style="text-align: right; border-bottom: 1px solid black;">0.416</td></tr> <tr><td>%CO2</td><td style="text-align: right; border-bottom: 1px solid black;">1.427</td></tr> <tr><td>%H2S</td><td style="text-align: right; border-bottom: 1px solid black;">0</td></tr> <tr><td>DIAMETER (IN)</td><td style="text-align: right; border-bottom: 1px solid black;">2.375</td></tr> <tr><td>DEPTH (FT)</td><td style="text-align: right; border-bottom: 1px solid black;">6333</td></tr> <tr><td>SURFACE TEMPERATURE (DEG F)</td><td style="text-align: right; border-bottom: 1px solid black;">60</td></tr> <tr><td>BOTTOMHOLE TEMPERATURE (DEG F)</td><td style="text-align: right; border-bottom: 1px solid black;">198</td></tr> <tr><td>FLOWRATE (MCFPD)</td><td style="text-align: right; border-bottom: 1px solid black;">0</td></tr> <tr><td>SURFACE PRESSURE (PSIA)</td><td style="text-align: right; border-bottom: 1px solid black;">533</td></tr> <tr><td>BOTTOMHOLE PRESSURE (PSIA)</td><td style="text-align: right; border: 1px solid black;">620.7</td></tr> </table>	GAS GRAVITY	0.695	COND. OR MISC. (C/M)	C	%N2	0.416	%CO2	1.427	%H2S	0	DIAMETER (IN)	2.375	DEPTH (FT)	6333	SURFACE TEMPERATURE (DEG F)	60	BOTTOMHOLE TEMPERATURE (DEG F)	198	FLOWRATE (MCFPD)	0	SURFACE PRESSURE (PSIA)	533	BOTTOMHOLE PRESSURE (PSIA)	620.7
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Cain #16
 Bottom Hole Pressures
 Flowing and Static BHP
 Cullender and Smith Method
 Version 1.0 3/13/94

Chacra	
<u>CH-Current</u>	
GAS GRAVITY	0.613
COND. OR MISC. (C/M)	C
%N2	0.15
%CO2	1.02
%H2S	0
DIAMETER (IN)	2.375
DEPTH (FT)	3266
SURFACE TEMPERATURE (DEG F)	60
BOTTOMHOLE TEMPERATURE (DEG F)	137
FLOWRATE (MCFPD)	0
SURFACE PRESSURE (PSIA)	359
BOTTOMHOLE PRESSURE (PSIA)	385.3
<u>CH-Original</u>	
GAS GRAVITY	0.613
COND. OR MISC. (C/M)	C
%N2	0.15
%CO2	0.613
%H2S	0
DIAMETER (IN)	2.375
DEPTH (FT)	3266
SURFACE TEMPERATURE (DEG F)	60
BOTTOMHOLE TEMPERATURE (DEG F)	137
FLOWRATE (MCFPD)	0
SURFACE PRESSURE (PSIA)	672
BOTTOMHOLE PRESSURE (PSIA)	723.6

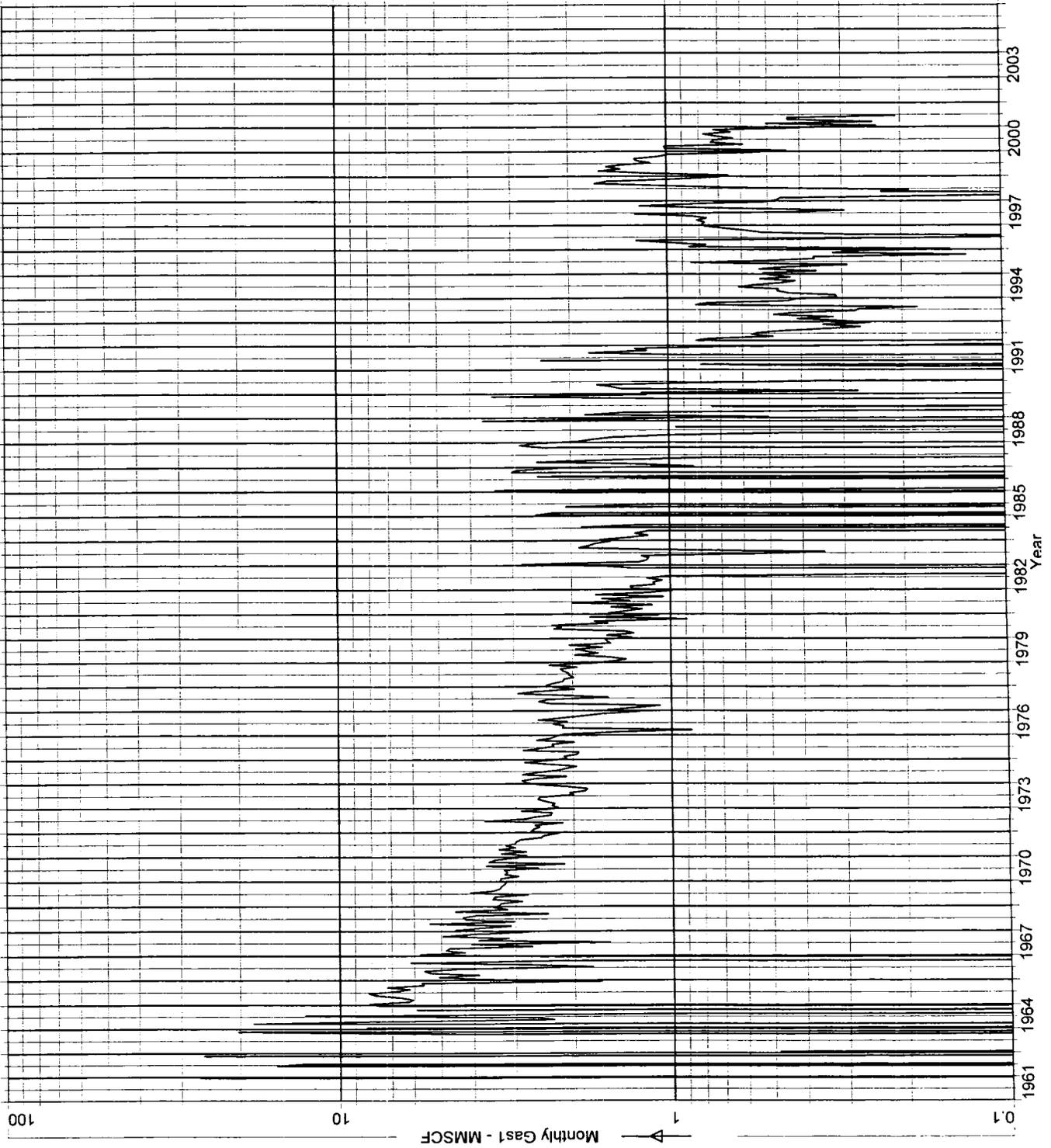
CAIN 16 774101 (245134133750.653) Data: Jan. 1961-Jun. 2001

Operator: BURLINGTON RESOURCES OG CO LP
Field: BASIN DAKOTA (PRORATED GAS)
Zone:
Type: Gas
Group: None

No
Active
Forecast

Production Cums
Oil: 0 MSTB
Gas: 927.08 MMSCF
Water: 0.302512 MSTB
Cond: 9.55049 MSTB

—▲— Monthly Gas 1 - MMSCF
Cum: 927.08 MMSCF



{D23D6EA9-989E-11D5-A613-0090274E637E} Data: Aug.2001-Aug.2001

Operator:

Field:

Zone: *MESAVERDE*

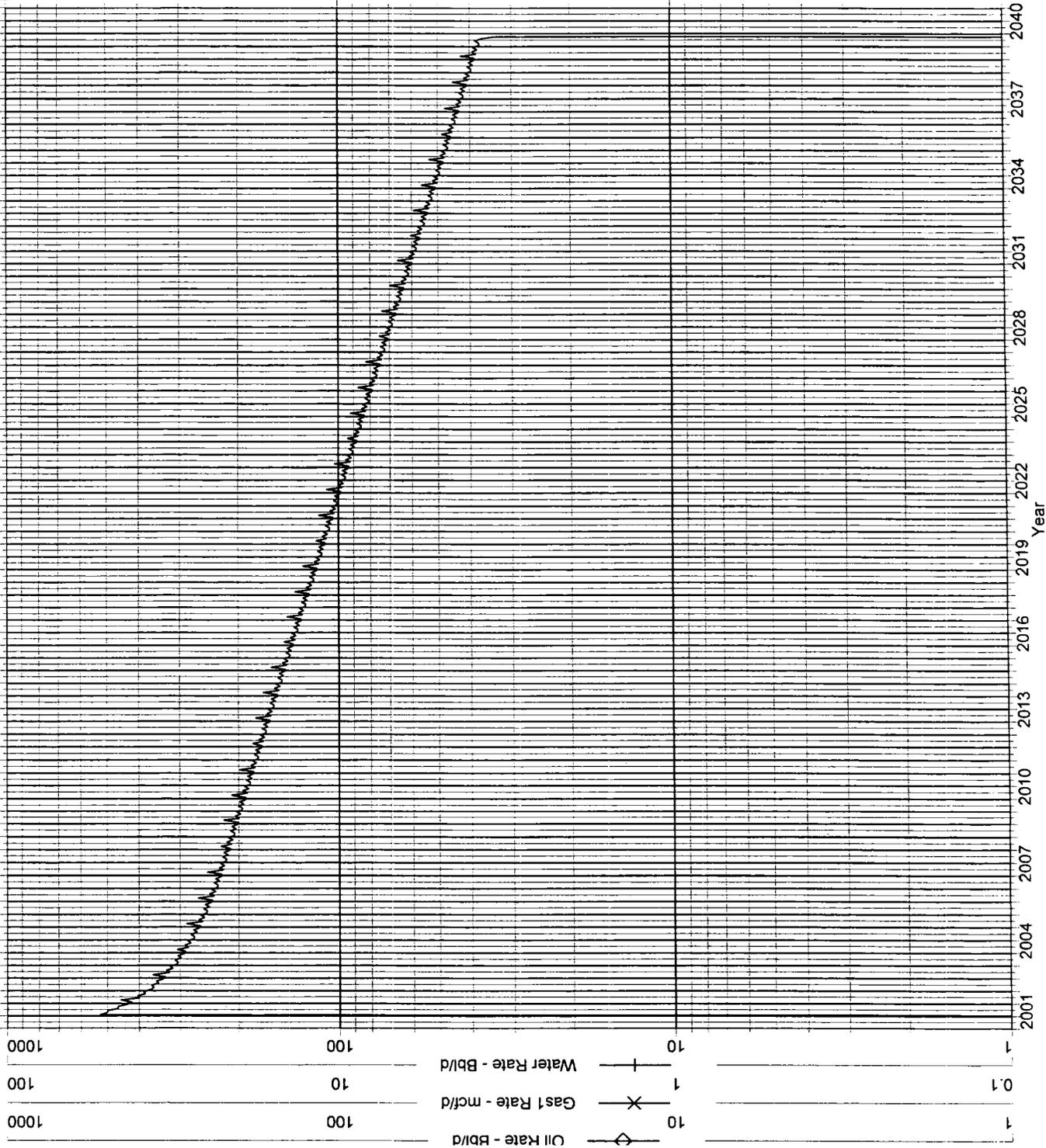
Type: Other

Group: None

No
Active
Forecast

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

Oil Rate - Bbl/d
Cum: 0
Gas Rate - mcf/d
Cum: 0
Water Rate - Bbl/d
Cum: 0



{D23D6EA8-989E-11D5-A613-0090274E637E} Data: Aug.2001-Aug.2001

Operator:

Field:

Zone: CHAC RA

Type: Other

Group: None

No
Active
Forecast

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

Oil Rate - Bbl/d
Cum: 0
Gas1 Rate - mcf/d
Cum: 0
Water Rate - Bbl/d
Cum: 0

