

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

___X___ YES ___ NO

RECEIVED
OIL CON. DIST. 3
DEC 12 1999

APPLICATION FOR DOWNHOLE COMMINGLING

BURLINGTON RESOURCES OIL & GAS COMPANY

PO BOX 4289, FARMINGTON, NM 87499

Operator

Address

JOHNSTON A (Page 1 of 2)

13M

F 36-27N-06W

RIO ARRIBA

Lease

Well No.

Unit Ltr. - Sec - Twp - Rge

County

Spacing Unit Lease Types: (check 1 or more)

GRID NO. 14538 Property Code 7200 API NO. 30-039-26086 Federal ___X___, 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 MESAVERDE - 72319	GALLUP	BASIN DAKOTA - 71599
2. Top and Bottom of Pay Section (Perforations)	WILL BE SUPPLIED UPON COMPLETION	WILL BE SUPPLIED UPON COMPLETION	WILL BE SUPPLIED UPON COMPLETION
3. Type of production (Oil or Gas)	GAS	GAS	GAS
4. Method of Production (Flowing or Artificial Lift)	FLOWING	FLOWING	FLOWING
5. Bottomhole Pressure Oil Zones - Artificial Lift: Gas & Oil - Flowing: All Gas Zones: Estimated Current Measured Current Estimated Or Measured Original	a. (Current) 463 psi (see attachment) b. (Original) 1242 psi (see attachment)	a. (Current) 809 psi (see attachment) b. (Original) 1303 psi (see attachment)	a. (Current) 1020 psi (see attachment) b. (Original) 3220 psi (see attachment)
6. Oil Gravity (EAPI) or Gas BTU Content	BTU 1167	BTU 1191	BTU 1090
7. Producing or Shut-In?	SHUT-IN	SHUT-IN	SHUT-IN
Production Marginal? (yes or no)	NO	NO	YES
* If Shut-In, give date and oil/gas/water rates of last production	Date: N/A Rates:	Date: N/A Rates:	Date: N/A Rates:
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)	Date: N/A Rates:	Date: N/A Rates:	Date: N/A Rates:
8. Fixed Percentage Allocation Formula - % for each zone (total of %'s to equal 100%)	Oil: % Gas: % WILL BE SUPPLIED UPON COMPLETION	Oil: % Gas: % WILL BE SUPPLIED UPON COMPLETION	Oil: % Gas: % 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 ___X___ No
If not, have all working, overriding, and royalty interests been notified by certified mail? ___X___ Yes ___ No

11. Will cross-flow occur? ___X___ 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. ___X___ Yes ___ No (If No, attach explanation)

12. Are all produced fluids from all commingled zones compatible with each other? ___X___ Yes ___ No

13. Will the value of production be decreased by commingling? ___ Yes ___X___ 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. ___X___ 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

Wayne Fletcher

TITLE

PRODUCTION ENGINEER

DATE:

12-10-99

TYPE OR PRINT NAME

B. WAYNE FLETCHER

TELEPHONE NO. 505-326-9700

DISTRICT I
1629 N. French Dr., Hobbs, NM 88240
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811 South First St., Artesia, NM 88210
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Energy, Minerals and Natural Resources Department
OIL CONSERVATION DIVISION
2040 S. Pacheco
Santa Fe, New Mexico 87505-6429

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Operator

Address

JOHNSTON A (Page 2 of 2)

13M

P 36-27N-06W

RIO ARRIBA

Lease

Well No.

Unit Ltr. - Sec - Twp - Rge

County

Spacing Unit Lease Types: (check 1 or more)

OGRID NO. 14538 Property Code 7200 API NO. 30-039-26086 Federal X, State, (and/or) Fee

The following facts are submitted in support of downhole commingling: 1. Pool Name and Pool Code	Upper Zone Otero CHACRA - 82329	Intermediate Zone	Lower Zone
2. Top and Bottom of Pay Section (Perforations)	WILL BE SUPPLIED UPON COMPLETION		
3. Type of production (Oil or Gas)	GAS		
4. Method of Production (Flowing or Artificial Lift)	FLOWING		
5. Bottomhole Pressure Oil Zones - Artificial Lift: Gas & Oil - Flowing: All Gas Zones: Estimated Current Measured Current Estimated Or Measured Original	a. (Current) 379 psi (see attachment) b. (Original) 955 psi (see attachment)		
6. Oil Gravity (I:API) or Gas B.U Content	BTU 1201		
7. Producing or Shut-In?	SHUT-IN		
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)	NO Date: N/A Rates: Date: N/A Rates:	Date: N/A Rates: Date: N/A Rates:	Date: N/A Rates: Date: N/A Rates:
8. Fixed Percentage Allocation Formula -% for each zone (total of %'s to equal 100%)	Oil: % Gas: % WILL BE SUPPLIED UPON COMPLETION	Oil: % Gas: % WILL BE SUPPLIED UPON COMPLETION	Oil: % Gas: % 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 ___X___ No
If not, have all working, overriding, and royalty interests been notified by certified mail? X Yes ___ No
11. Will cross-flow occur? ___X___ 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. ___X___ Yes ___ No (If No, attach explanation)
12. Are all produced fluids from all commingled zones compatible with each other? ___X___ Yes ___ No
13. Will the value of production be decreased by commingling? ___ Yes ___X___ 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. ___X___ 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.)
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* 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

Wayne Fletcher

TITLE

PRODUCTION ENGINEER

DATE:

12-10-99

TYPE OR PRINT NAME

B. WAYNE FLETCHER

TELEPHONE NO. 505-326-9700

District I
PO Box 1931, Hobbs, NM 88241-1980

State of New Mexico
Energy, Minerals & Natural Resources Department

Form O-102
Revised February 21, 1994
Instructions on back
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

District II
PO Drawer 12, Artesia, NM 88211-0719

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

District III
1000 Rio Arriba Rd., Aztec, NM 87410

District IV
PO Box 2088, Santa Fe, NM 87504-2088

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number 30-039-25970 24086	Pool Code 96976/71599 82329/72319/	Pool Name WC:27N6W36F Gallup/Basin Dakota Otero Chacra/Blanco Mesaverde
Process Code 7200	Property Name JOHNSTON A	Well Number 13M
OGPS No. 14538	Operator Name BURLINGTON RESOURCES OIL & GAS COMPANY	Elevation 6550

10 Surface Location

UL or Lot No. C	Section 36	Township 27N	Range 6W	Lot 100	Feet from the 950	North/South line SOUTH	Feet from the 1670	East/West line EAST	County RIO ARriba
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11 Bottom Hole Location If Different From Surface

UL or Lot No.	Section	Township	Range	Lot 100	Feet from the	North/South line	Feet from the	East/West line	County
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12 Registered Name Cha&Gal-160 MV&DK-W/320	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	5276.70'	17 OPERATOR CERTIFICATION
5342.04'	36	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 Administrator
		Title
5279.34'	1670'	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 me or under my supervision and that the same is true and correct to the best of my belief.
		NOVEMBER 19, 1998
2629.44'	2671.02'	Date of Survey
		Signature and Seal of Professional Surveyor
		NEALE C. EDWARDS NEW MEXICO 6857
		Certification Number

BURLINGTON
RESOURCES

SAN JUAN DIVISION
3535 East 30th Street: (87402-8801)
P.O. BOX 4289
Farmington, New Mexico 87499-4289

BURLINGTON
RESOURCES

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P.O. BOX 4289
Farmington, New Mexico 87499-4289

Robert Beamon
2603 Augusta, Suite 1050
Houston, TX 77057

x

Walter Lundell
2450 Fondren, Suite 304
Houston, TX 77063

BURLINGTON
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Johnston A #13M
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>	
GAS GRAVITY	0.691	GAS GRAVITY	0.653
COND. OR MISC. (C/M)	C	COND. OR MISC. (C/M)	C
%N2	0.27	%N2	0.13
%CO2	1.35	%CO2	1.17
%H2S	0	%H2S	0
DIAMETER (IN)	2	DIAMETER (IN)	2.375
DEPTH (FT)	5338	DEPTH (FT)	7543
SURFACE TEMPERATURE (DEG F)	60	SURFACE TEMPERATURE (DEG F)	60
BOTTOMHOLE TEMPERATURE (DEG F)	137	BOTTOMHOLE TEMPERATURE (DEG F)	198
FLOWRATE (MCFPD)	0	FLOWRATE (MCFPD)	0
SURFACE PRESSURE (PSIA)	449	SURFACE PRESSURE (PSIA)	741
BOTTOMHOLE PRESSURE (PSIA)	513.5	BOTTOMHOLE PRESSURE (PSIA)	882.1
<u>MV-Original</u>		<u>DK-Original</u>	
GAS GRAVITY	0.691	GAS GRAVITY	0.653
COND. OR MISC. (C/M)	C	COND. OR MISC. (C/M)	C
%N2	0.27	%N2	0.13
%CO2	1.35	%CO2	1.17
%H2S	0	%H2S	0
DIAMETER (IN)	2	DIAMETER (IN)	2.375
DEPTH (FT)	5338	DEPTH (FT)	7543
SURFACE TEMPERATURE (DEG F)	60	SURFACE TEMPERATURE (DEG F)	60
BOTTOMHOLE TEMPERATURE (DEG F)	137	BOTTOMHOLE TEMPERATURE (DEG F)	198
FLOWRATE (MCFPD)	0	FLOWRATE (MCFPD)	0
SURFACE PRESSURE (PSIA)	1084	SURFACE PRESSURE (PSIA)	2439
BOTTOMHOLE PRESSURE (PSIA)	1258.9	BOTTOMHOLE PRESSURE (PSIA)	2956.2

Johnston A #13M
Bottom Hole Pressures
Flowing and Static BHP
Cullender and Smith Method
Version 1.0 3/13/94

Chacra		Gallup	
<u>CH-Current</u>		<u>GP-Current</u>	
GAS GRAVITY	0.682	GAS GRAVITY	0.704
COND. OR MISC. (C/M)	C	COND. OR MISC. (C/M)	C
%N2	0.35	%N2	0.25
%CO2	0.25	%CO2	0.115
%H2S	0	%H2S	0
DIAMETER (IN)	2.875	DIAMETER (IN)	2.375
DEPTH (FT)	3639	DEPTH (FT)	6707
SURFACE TEMPERATURE (DEG F)	60	SURFACE TEMPERATURE (DEG F)	60
BOTTOMHOLE TEMPERATURE (DEG F)	137	BOTTOMHOLE TEMPERATURE (DEG F)	137
FLOWRATE (MCFPD)	0	FLOWRATE (MCFPD)	0
SURFACE PRESSURE (PSIA)	347	SURFACE PRESSURE (PSIA)	676
BOTTOMHOLE PRESSURE (PSIA)	379.1	BOTTOMHOLE PRESSURE (PSIA)	808.7
<u>CH-Original</u>		<u>GP-Original</u>	
GAS GRAVITY	0.682	GAS GRAVITY	0.704
COND. OR MISC. (C/M)	C	COND. OR MISC. (C/M)	C
%N2	0.35	%N2	0.25
%CO2	0.25	%CO2	0.115
%H2S	0	%H2S	0
DIAMETER (IN)	2.875	DIAMETER (IN)	2.375
DEPTH (FT)	3639	DEPTH (FT)	6707
SURFACE TEMPERATURE (DEG F)	60	SURFACE TEMPERATURE (DEG F)	60
BOTTOMHOLE TEMPERATURE (DEG F)	137	BOTTOMHOLE TEMPERATURE (DEG F)	137
FLOWRATE (MCFPD)	0	FLOWRATE (MCFPD)	0
SURFACE PRESSURE (PSIA)	867	SURFACE PRESSURE (PSIA)	1072
BOTTOMHOLE PRESSURE (PSIA)	955.2	BOTTOMHOLE PRESSURE (PSIA)	1302.7

Johnston A #13M

Chacra Offset

<u>Well Name</u>	<u>Date</u>	<u>Pressure</u>
JOHNSTON A 15	12/27/72	867
JOHNSTON A 15	03/19/73	623
JOHNSTON A 15	08/05/74	431
JOHNSTON A 15	06/05/75	412
JOHNSTON A 15	06/02/77	347

Page No.: 1
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 Property Name: SAN JUAN 28-6 UNIT | 70 | 53435A
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 :::::McF:::::Psi:::::

03/26/57	0	1084.0
05/03/57	0	1037.0
10/14/58	212000	921.0
03/13/59	257000	922.0
10/06/60	604000	787.0
12/20/61	797000	779.0
04/09/62	845000	745.0
03/19/63	957000	725.0
04/06/64	1051000	694.0
09/24/65	1229000	651.0
04/12/66	1274000	659.0
03/22/67	1337000	679.0
09/17/68	1439000	615.0
07/18/69	1491190	647.0
03/30/70	1537962	641.0
06/29/71	1613518	622.0
07/25/72	1679216	527.0
05/18/73	1725499	616.0
07/24/74	1782518	515.0
06/03/76	1863053	572.0
08/09/77	1930676	464.0
05/26/78	2020901	394.0
05/29/80	2141225	445.0
05/11/82	2203862	451.0
06/11/84	2254725	472.0
08/19/86	2301069	462.0
05/09/89	2340149	486.0
05/20/91	2362616	492.0
06/08/91	2362857	504.0
06/09/93	2389974	449.0

Johnston A #13M

Mesaverde Offset

Johnston A #13M

Gallup Offset

<u>Well Name</u>	<u>Date</u>	<u>Pressure</u>
JICARILLA 150 1E	09/11/84	1072
JICARILLA 150 1E	04/23/86	962
JICARILLA 150 1E	10/21/87	817
JICARILLA 150 1E	01/13/88	817
JICARILLA 150 1E	04/15/93	675

Page No.: 1

Print Time: Tue Nov 23 10:09:22 1999

Property ID: 1705

Property Name: Johnston A #13M 28-6 UNIT | 110 | 50657A

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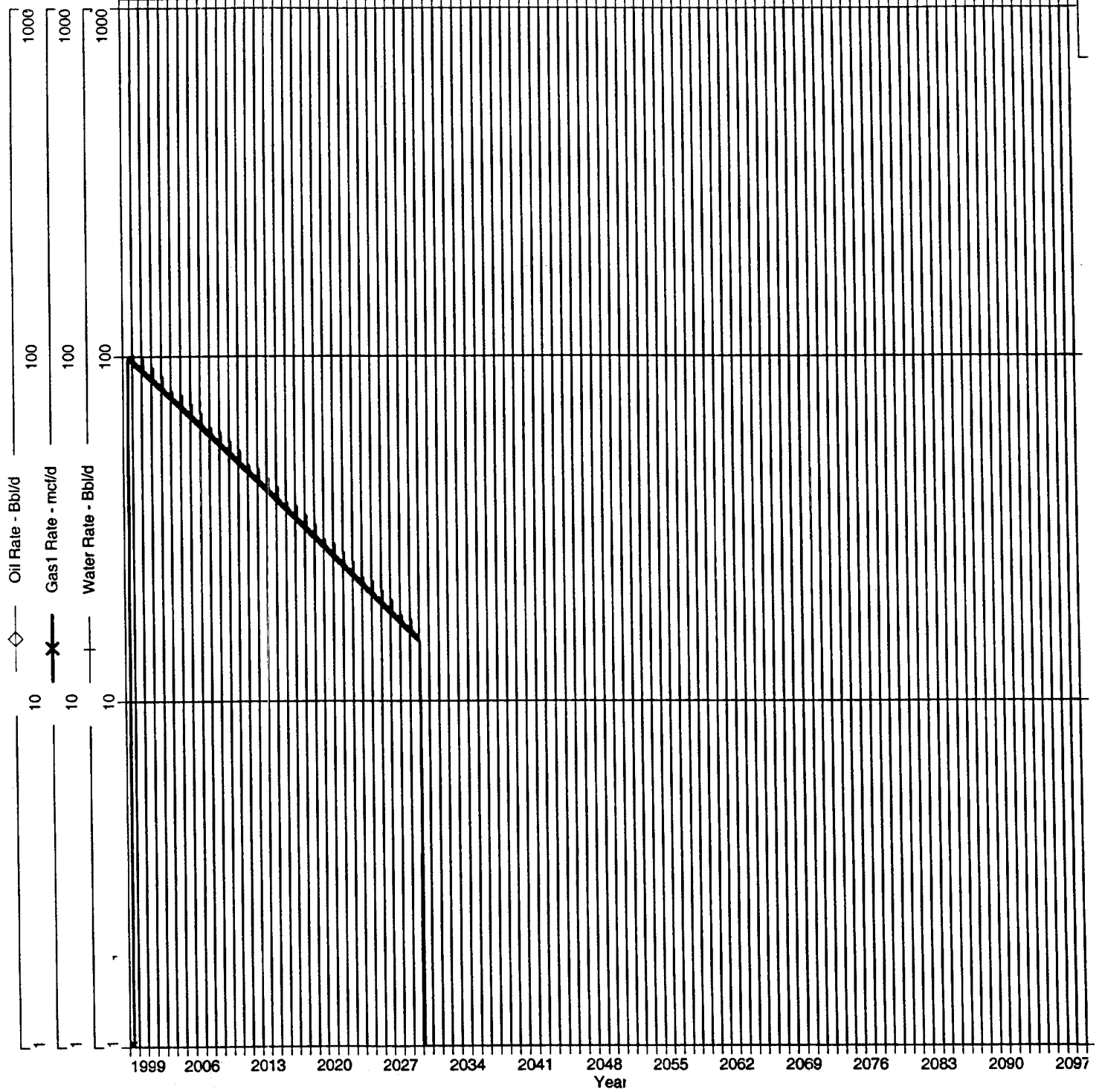
--DATE-- ---CUM GAS-- M SIWHP
Mcf Psi

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12/12/62	0	2438.0
02/23/63	30000	1740.0
04/06/64	133000	1281.0
09/24/65	295000	822.0
04/12/66	352000	806.0
03/22/67	437000	830.0
04/01/68	519000	756.0
06/18/70	680492	652.0
06/29/71	746835	919.0
08/20/71	756000	807.0
07/25/72	811943	909.0
05/18/73	867918	887.0
05/16/75	995538	740.0
06/06/77	1112724	745.0
06/11/79	1221474	628.0
08/03/81	1330050	731.0
10/11/83	1421274	776.0
09/19/85	1515084	731.0
04/04/88	1603776	820.0
04/23/90	1686469	819.0
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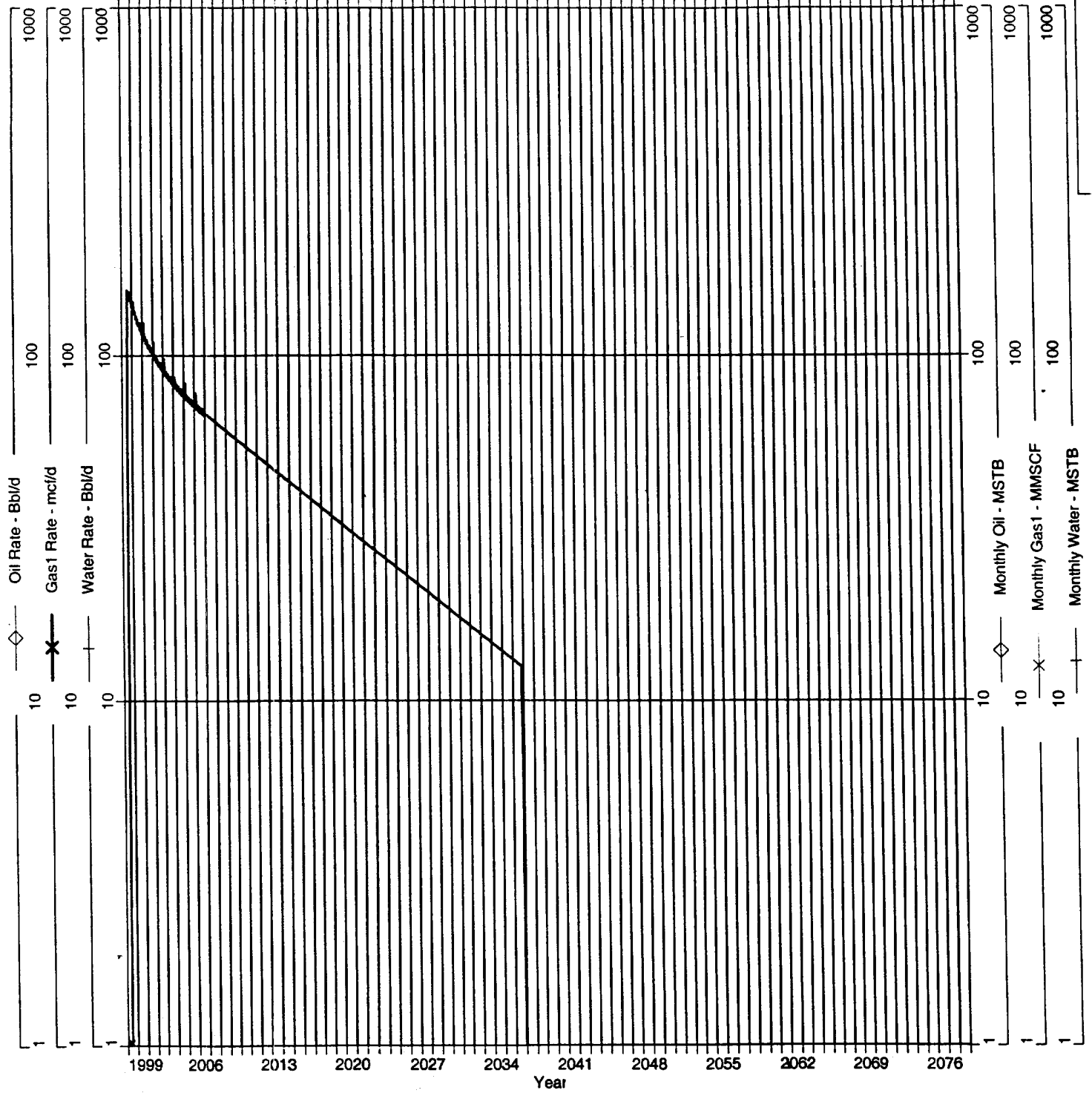
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Dakota Offset

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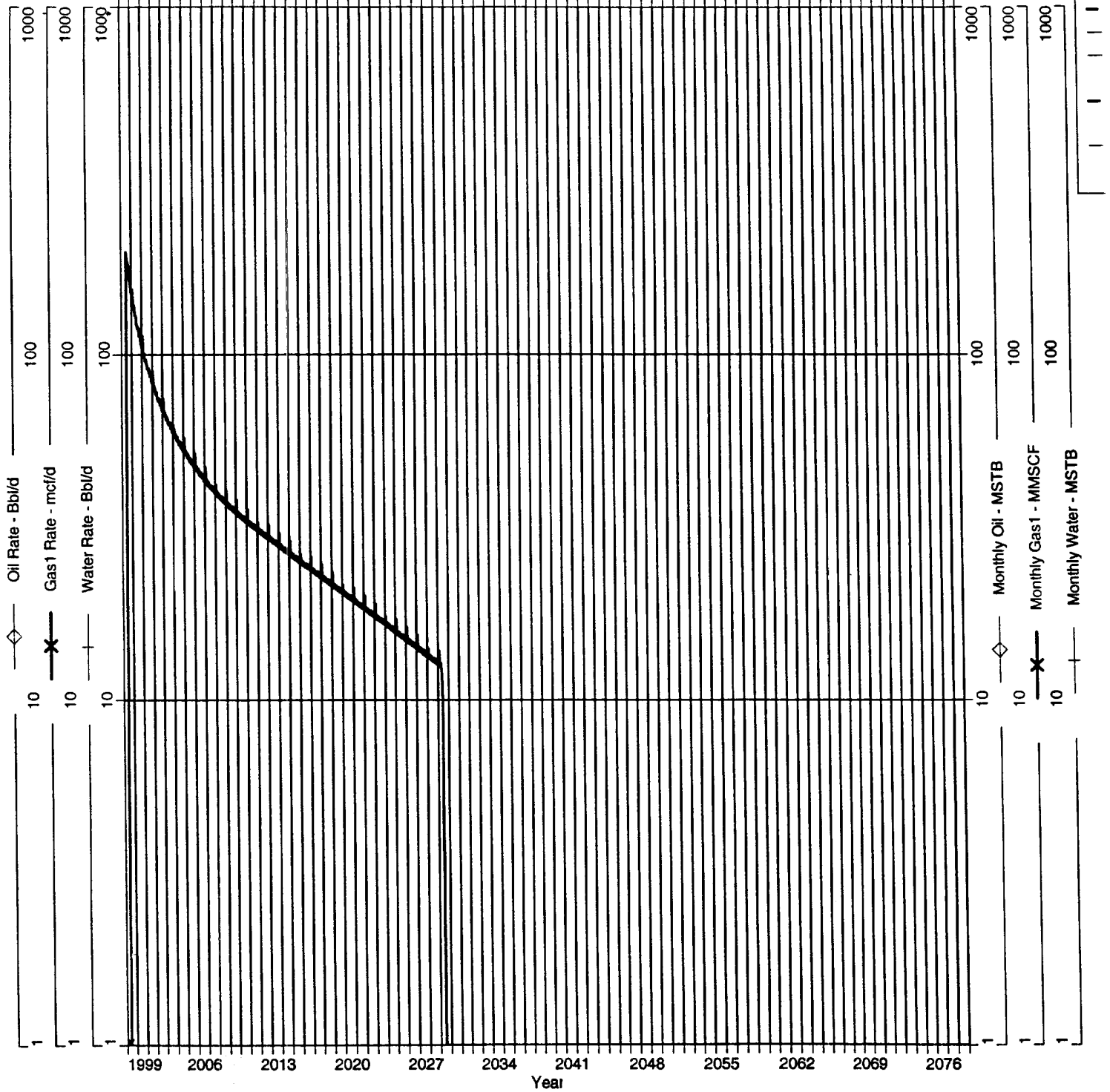


Johnston A #13M
Expected Production
Chacra Formation



Johnston A #13M
 Expected Production
 Mesaverde Formation

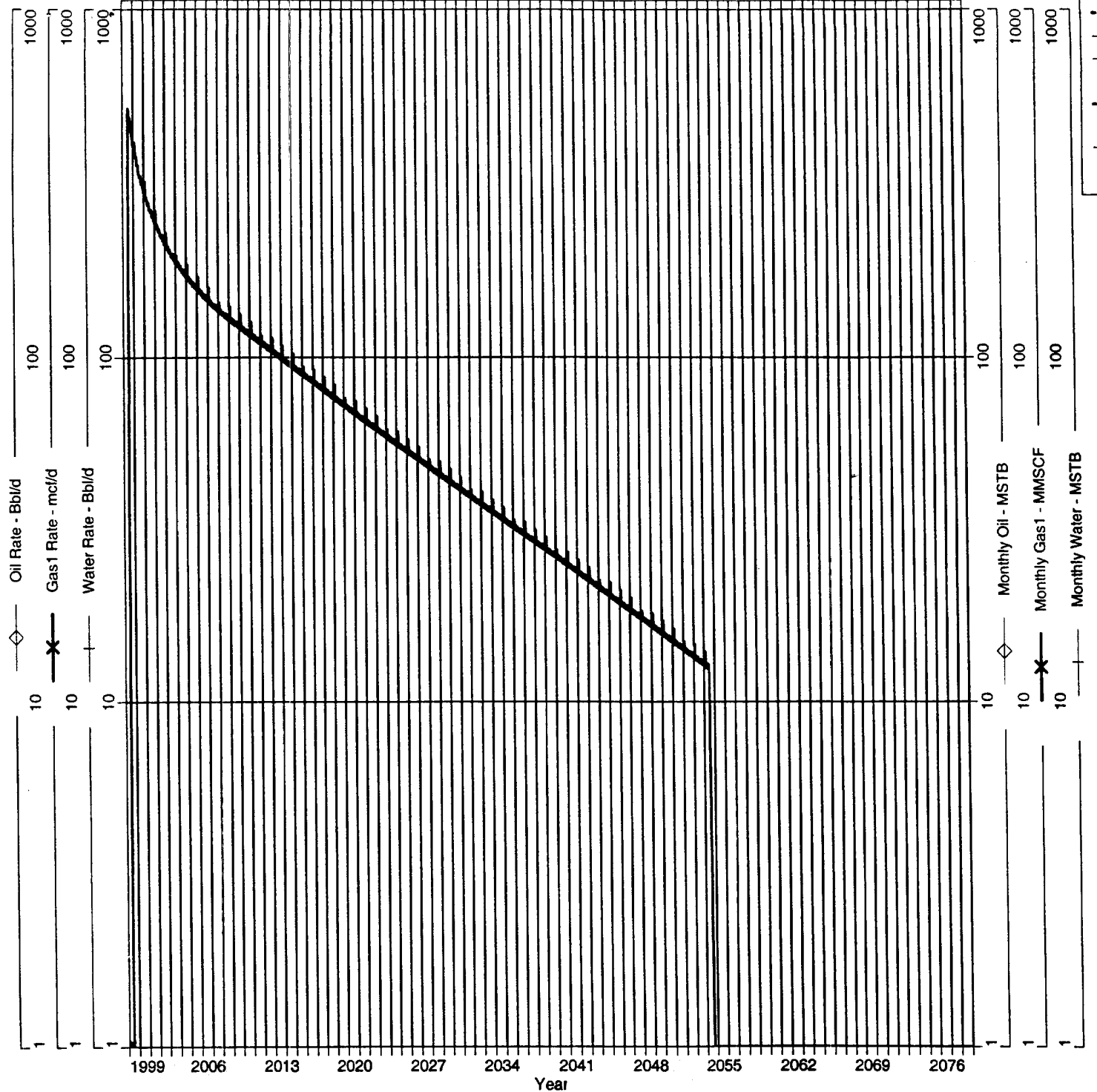
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Johnston A #13M

Expected Production

Gallup Formation



Johnston A #13M

Expected Production

Dakota Formation

