DATE 3/26/03	SUSPENSE NA	ENGINEER WVJ	LOGGED IN KV	TYPE DHC	APP NO. pKRV0308628268

ABOVE THIS LINE FOR DIVISION USE ONLY

NEW MEXICO OIL CONSERVATION DIVISION
- Engineering Bureau -
1220 South St. Francis Drive, Santa Fe, NM 87505

ADMINISTRATIVE APPLICATION CHECKLIST

THIS CHECKLIST IS MANDATORY FOR ALL ADMINISTRATIVE APPLICATIONS FOR EXCEPTIONS TO DIVISION RULES AND REGULATIONS WHICH REQUIRE PROCESSING AT THE DIVISION LEVEL IN SANTA FE

Application Acronyms:

[NSL-Non-Standard Location] [NSP-Non-Standard Proration Unit] [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 - Simultaneous Dedication
☐ NSL ☐ NSP ☐ SD

Check One Only for [B] or [C]

[B] Commingling - Storage - Measurement
☒ DHC ☐ CTB ☐ PLC ☐ PC ☐ OLS ☐ OLM

[C] Injection - Disposal - Pressure Increase - Enhanced Oil Recovery
☐ WFX ☐ PMX ☐ SWD ☐ IPI ☐ EOR ☐ PPR

[D] Other: Specify _____

MAR 26 2003

[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] ☒ 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] **SUBMIT ACCURATE AND COMPLETE INFORMATION REQUIRED TO PROCESS THE TYPE OF APPLICATION INDICATED ABOVE.**

[4] **CERTIFICATION:** I hereby certify that the information submitted with this application for administrative approval is **accurate** and **complete** to the best of my knowledge. I also understand that **no action** will be taken on this application until the required information and notifications are submitted to the Division.

Note: Statement must be completed by an individual with managerial and/or supervisory capacity.

Peggy Cole	Peggy Cole	Regulatory Supv.	3-25-03
Print or Type Name	Signature	Title	Date

pcole@br-inc.com
e-mail Address

District I
1625 N. French Drive, Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy, Minerals and Natural Resources Department

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, New Mexico 87505

APPLICATION FOR DOWNHOLE COMMINGLING

Form C-107A
Revised May 15, 2000

APPLICATION TYPE
___Single Well
___Establish Pre-Approved Pools
EXISTING WELLBORE
_Y_ Yes ___No

BURLINGTON RESOURCES OIL & GAS COMPANY **PO BOX 4289, FARMINGTON, NM 87499**

Operator		Address	
Navajo Indian B	**#5M**	**E-30-27N-8W**	**San Juan**
Lease	Well No.	Unit Letter-Section-Township-Range	County

OGRID No. 14538 Property Code 7350 API No. 30-045-23639 Lease Type: X Federal ___State ___Fee

DATA ELEMENT	UPPER ZONE	INTERMEDIATE ZONE	LOWER ZONE
Pool Name	UNDESIGNATED GAS OTERO CHACRA	Pro Gas BLANCO MESAVERDE	Pro Gas BASIN DAKOTA
Pool Code	82329	72319	71599
Top and Bottom of Pay Section (Perforated or Open-Hole Interval)	WILL BE SUPPLIED UPON COMPLETION	4289'-4580'	6381'-6609'
Method of Production (Flowing or Artificial Lift)	NEW ZONE	ARTIFICIAL LIFT PLUNGER	ARTIFICIAL LIFT PLUNGER
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)	Original 1027 psi From Brookhaven Com #7A offset (see attachment)	Original 946 psi Current 281 psi	Original 2534 psi Current 980 psi
Oil Gravity or Gas BTU (Degree API or Gas BTU)	BTU 1309	BTU 1287	BTU 1287
Producing, Shut-In or New Zone	New Zone	Producing	Producing
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: N/A Rates: See Attachment	Date: 12/31/02 Rates: 16 Mcfd	Date: 12/31/02 Rates: 39 Mcfd
Fixed Allocation Percentage (Note: If allocation is based upon something other than current or past production, supporting data or explanation will be required.)	WILL BE SUPPLIED UPON COMPLETION	WILL BE SUPPLIED UPON COMPLETION	WILL BE SUPPLIED UPON COMPLETION

ADDITIONAL DATA

Are all working, royalty and overriding royalty interests identical in all commingled zones? Yes _X_ No_____

Are all produced fluids from all commingled zones compatible with each other? Yes _X_ No_____

Will commingling decrease the value of production? Yes_____ No_X_

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 _X_ 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 J. Tom Loveland TITLE SR. RESERVOIR ENGINEER DATE 3/25/03
nxo
TYPE OR PRINT NAME L. Tom Loveland TELEPHONE NO. (505) 326-9700

District I
1625 N. French Dr., Hobbs, NM 88240
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State of New Mexico
Energy, Minerals and Natural Resources

Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

Form C-102

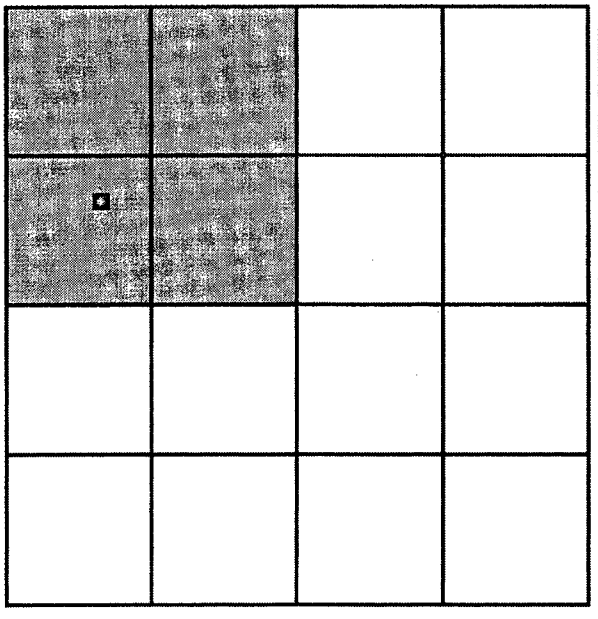
WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number	Pool Name	Pool Code
	OTERO CHACRA (GAS)	82329
Property Code	**Property Name**	**Well No.**
7350	NAVAJO INDIAN B	005M
OGRID No.	**Operator Name**	**Elevation**
14538	Burlington Resources Oil and Gas Company	6063

Surface And Bottom Hole Location

UL or Lot	Section	Township	Range	Lot Idn	Feet From	N/S Line	Feet From	E/W Line	County
E	30	27N	08W		1745	N	870	W	San Juan

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.
160.6			



OPERATOR CERTIFICATION

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

Electronically Signed By:

Title:

Date:

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.

Electronically Signed By: James P Leese

Date of Survey: 5/31/1979

Certificate Number: 1463

District I
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State of New Mexico
Energy, Minerals and Natural Resources

Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

Form C-102

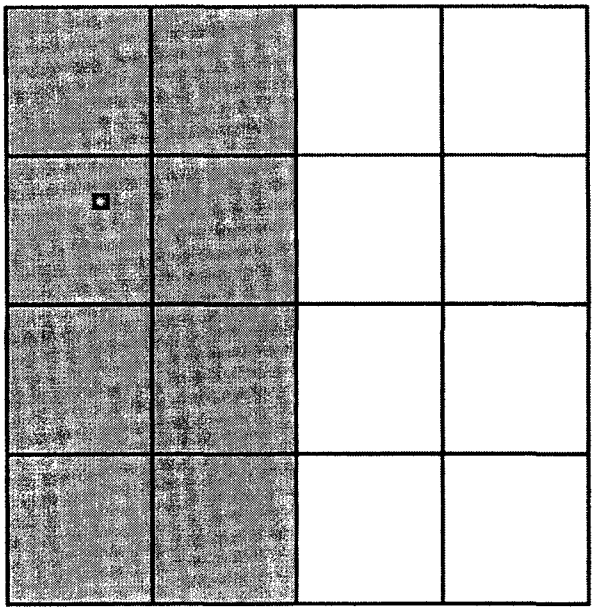
WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number	Pool Name	Pool Code
	BLANCO-MESAVERDE (PRORATED GAS)	72319
Property Code	**Property Name**	**Well No.**
7350	NAVAJO INDIAN B	005M
OGRID No.	**Operator Name**	**Elevation**
14538	Burlington Resources Oil and Gas Company	6063

Surface And Bottom Hole Location

UL or Lot	Section	Township	Range	Lot Idn	Feet From	N/S Line	Feet From	E/W Line	County
E	30	27N	08W		1745	N	870	W	San Juan

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.
320.8			



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Date:

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State of New Mexico
Energy, Minerals and Natural Resources

Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

Form C-102

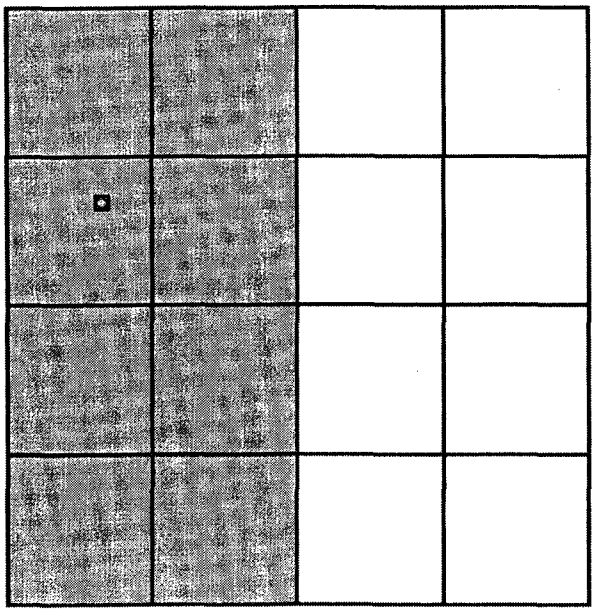
WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number	Pool Name	Pool Code
	BASIN DAKOTA (PRORATED GAS)	71599
Property Code	**Property Name**	**Well No.**
7350	NAVAJO INDIAN B	005M
OGRID No.	**Operator Name**	**Elevation**
14538	Burlington Resources Oil and Gas Company	6063

Surface And Bottom Hole Location

UL or Lot	Section	Township	Range	Lot Idn	Feet From	N/S Line	Feet From	E/W Line	County
E	30	27N	08W		1745	N	870	W	San Juan

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.
320.8			



OPERATOR CERTIFICATION

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Date:

SURVEYOR CERTIFICATION

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Electronically Signed By: James P Leese

Date of Survey: 5/31/1979

Certificate Number: 1463

Navajo Indian B #5M
Bottom Hole Pressures
Flowing and Static BHP
Cullender and Smith Method

Version 1.0 1/14/98

Chacra

CH-Current

GAS GRAVITY	0
COND. OR MISC. (C/M)	C
%N2	0
%CO2	0
%H2S	0
DIAMETER (IN)	0
DEPTH (FT)	0
SURFACE TEMPERATURE (DEG F)	60
BOTTOMHOLE TEMPERATURE (DEG F)	0
FLOWRATE (MCFPD)	0
SURFACE PRESSURE (PSIA)	0
BOTTOMHOLE PRESSURE (PSIA)	#DIV/0!

CH-Original

GAS GRAVITY	0.757
COND. OR MISC. (C/M)	C
%N2	0.0066
%CO2	0.0043
%H2S	0
DIAMETER (IN)	5.5
DEPTH (FT)	3164
SURFACE TEMPERATURE (DEG F)	60
BOTTOMHOLE TEMPERATURE (DEG F)	95.8
FLOWRATE (MCFPD)	0
SURFACE PRESSURE (PSIA)	925
BOTTOMHOLE PRESSURE (PSIA)	1027.4

Mesaverde

MV-Current

GAS GRAVITY	0.752
COND. OR MISC. (C/M)	C
%N2	0.01
%CO2	0.0103
%H2S	0
DIAMETER (IN)	5.5
DEPTH (FT)	4435
SURFACE TEMPERATURE (DEG F)	60
BOTTOMHOLE TEMPERATURE (DEG F)	124.7
FLOWRATE (MCFPD)	0
SURFACE PRESSURE (PSIA)	249
BOTTOMHOLE PRESSURE (PSIA)	280.6

MV-Original

GAS GRAVITY	0.759
COND. OR MISC. (C/M)	C
%N2	0.41
%CO2	1.17
%H2S	0
DIAMETER (IN)	5.5
DEPTH (FT)	4435
SURFACE TEMPERATURE (DEG F)	60
BOTTOMHOLE TEMPERATURE (DEG F)	124.7
FLOWRATE (MCFPD)	0
SURFACE PRESSURE (PSIA)	825
BOTTOMHOLE PRESSURE (PSIA)	945.8

Navajo Indian B #5M
Bottom Hole Pressures
Flowing and Static BHP
Cullender and Smith Method

Version 1.0 1/14/98

Dakota

DK-Current

GAS GRAVITY	0.752
COND. OR MISC. (C/M)	C
%N2	0.0051
%CO2	0.0103
%H2S	0
DIAMETER (IN)	2.375
DEPTH (FT)	6495
SURFACE TEMPERATURE (DEG F)	60
BOTTOMHOLE TEMPERATURE (DEG F)	154.7
FLOWRATE (MCFPD)	0
SURFACE PRESSURE (PSIA)	809
BOTTOMHOLE PRESSURE (PSIA)	979.6

Current

GAS GRAVITY	0
COND. OR MISC. (C/M)	C
%N2	0.00
%CO2	0
%H2S	0
DIAMETER (IN)	0
DEPTH (FT)	0
SURFACE TEMPERATURE (DEG F)	60
BOTTOMHOLE TEMPERATURE (DEG F)	0
FLOWRATE (MCFPD)	0
SURFACE PRESSURE (PSIA)	0
BOTTOMHOLE PRESSURE (PSIA)	#DIV/0!

DK-Original

GAS GRAVITY	0.759
COND. OR MISC. (C/M)	C
%N2	0.41
%CO2	1.17
%H2S	0
DIAMETER (IN)	2.375
DEPTH (FT)	6495
SURFACE TEMPERATURE (DEG F)	60
BOTTOMHOLE TEMPERATURE (DEG F)	154.7
FLOWRATE (MCFPD)	0
SURFACE PRESSURE (PSIA)	2028
BOTTOMHOLE PRESSURE (PSIA)	2534.2

Original

GAS GRAVITY	0
COND. OR MISC. (C/M)	C
%N2	0.00
%CO2	0
%H2S	0
DIAMETER (IN)	0
DEPTH (FT)	0
SURFACE TEMPERATURE (DEG F)	60
BOTTOMHOLE TEMPERATURE (DEG F)	0
FLOWRATE (MCFPD)	0
SURFACE PRESSURE (PSIA)	0
BOTTOMHOLE PRESSURE (PSIA)	#DIV/0!

Navajo Indian B #5M - SICP/Z Data

Zone: Mesaverde

Date	SICP (psig)	Chromatograph Used	Z-Factor	SICP/Z (psig)	Cum Qg (MMCF)	Slope	Y Intercept
8/27/1980	825	10/1/2002	0.8983	918	0	N/A	918
6/7/1983	883	10/1/2002	0.8919	990	1.058	67.69365	918
11/21/1985	801	10/1/2002	0.901	889	8.457	-3.475135	918
3/31/1988	801	10/1/2002	0.901	889	13.314	-2.207392	918
???	110	N/A	1	110	138.2167	-5.848797	918
						↓	↓
12/31/2002	???	10/1/2002	???	262	112.234	-5.848797	918

Z-Factor = 0.95
SICP (psig) = 249

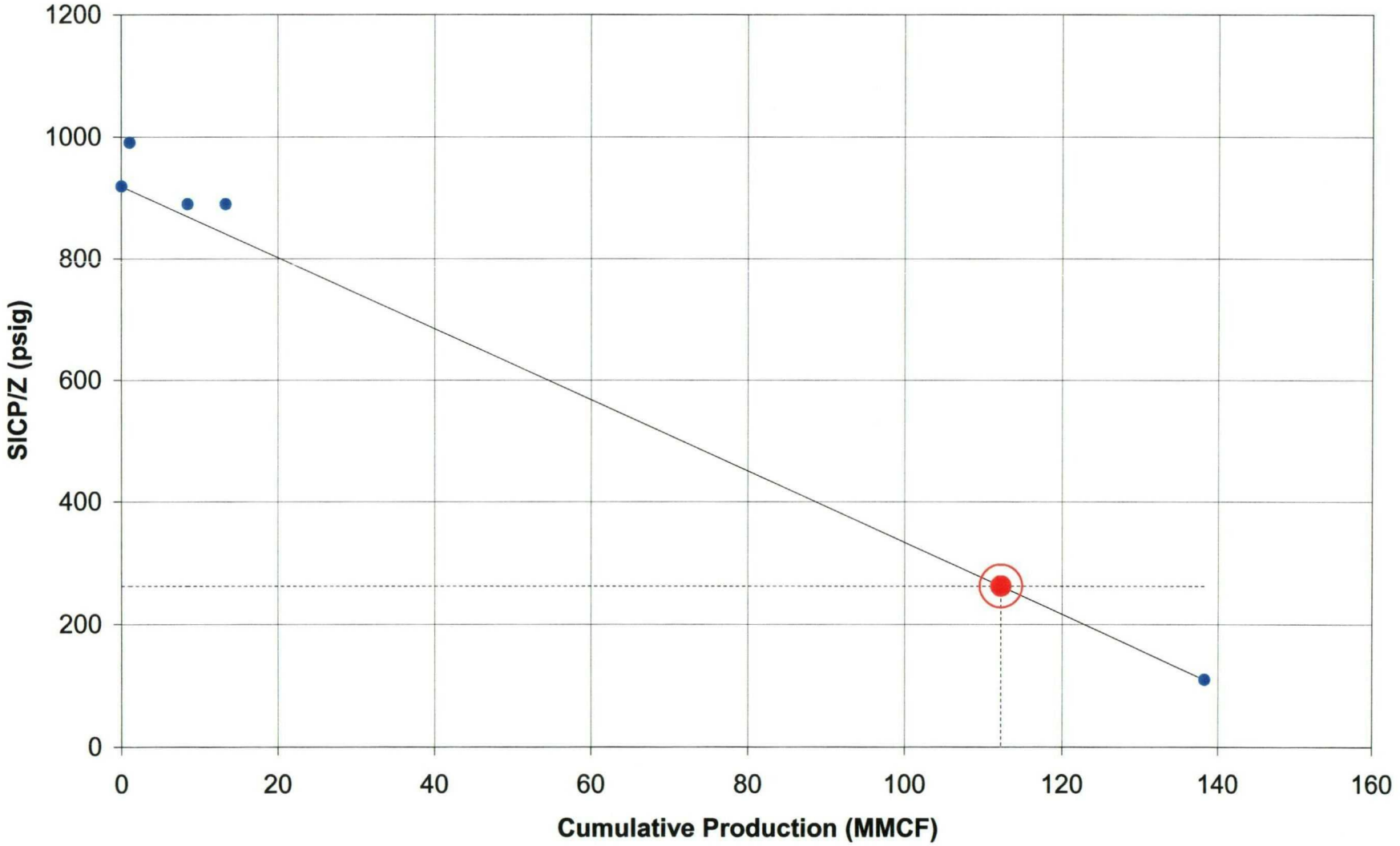
Zone: Dakota

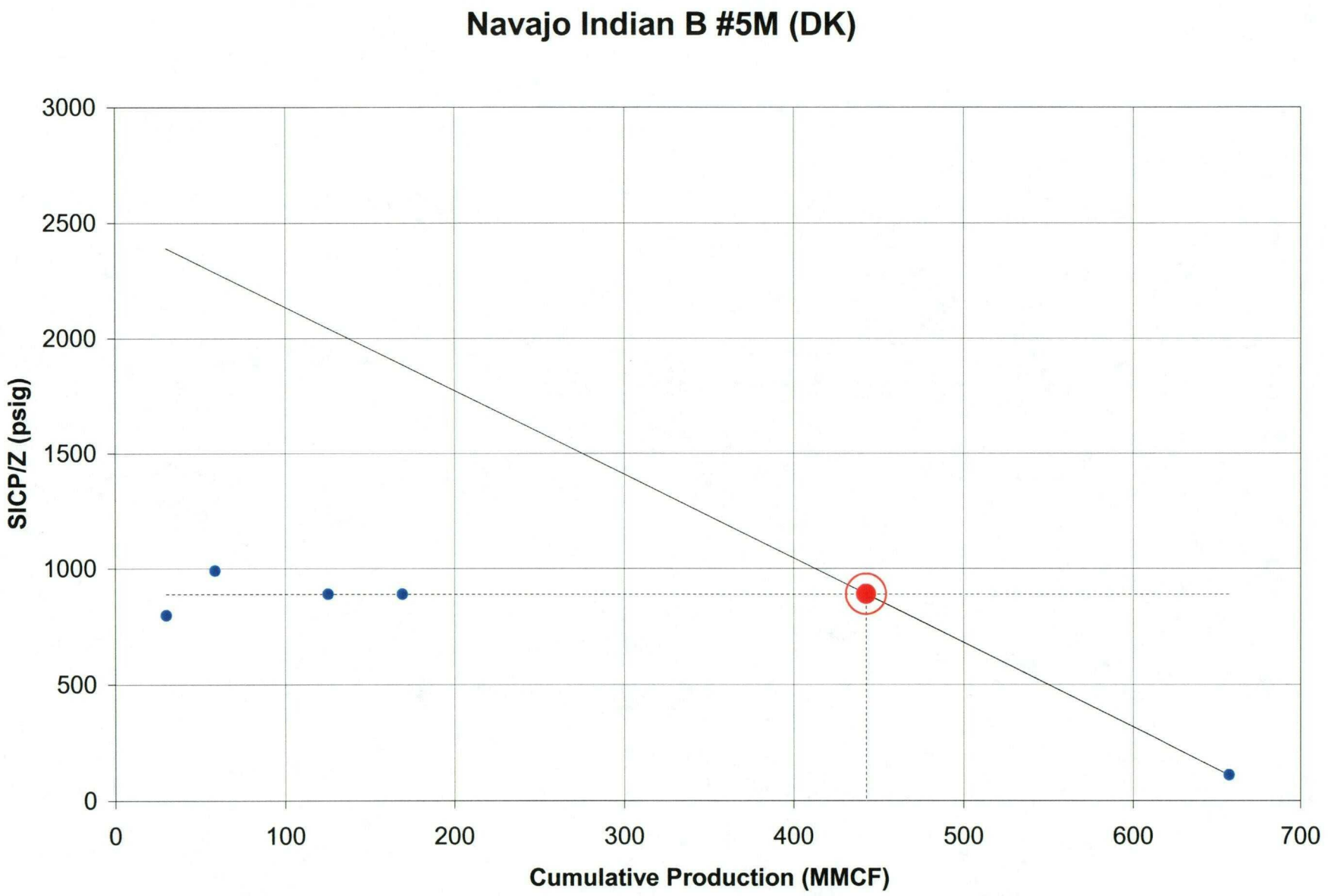
Date	SICP (psig)	Chromatograph Used	Z-Factor	SICP/Z (psig)	Cum Qg (MMCF)	Slope	Y Intercept
8/27/1980	2028	10/1/2002	0.8115	2499	0	N/A	2499
5/21/1982	725	10/1/2002	0.9096	797	29.882	-56.95811	2499
6/7/1983	883	10/1/2002	0.8919	990	58.663	-25.72413	2499
11/21/1985	801	10/1/2002	0.901	889	125.298	-12.84987	2499
3/31/1988	801	10/1/2002	0.901	889	169.041	-9.524693	2499
???	110	N/A	1	110	657.1528	-3.635495	2499
						↓	↓
12/31/2002	???	10/1/2002	???	889	442.8	-3.635495	2499

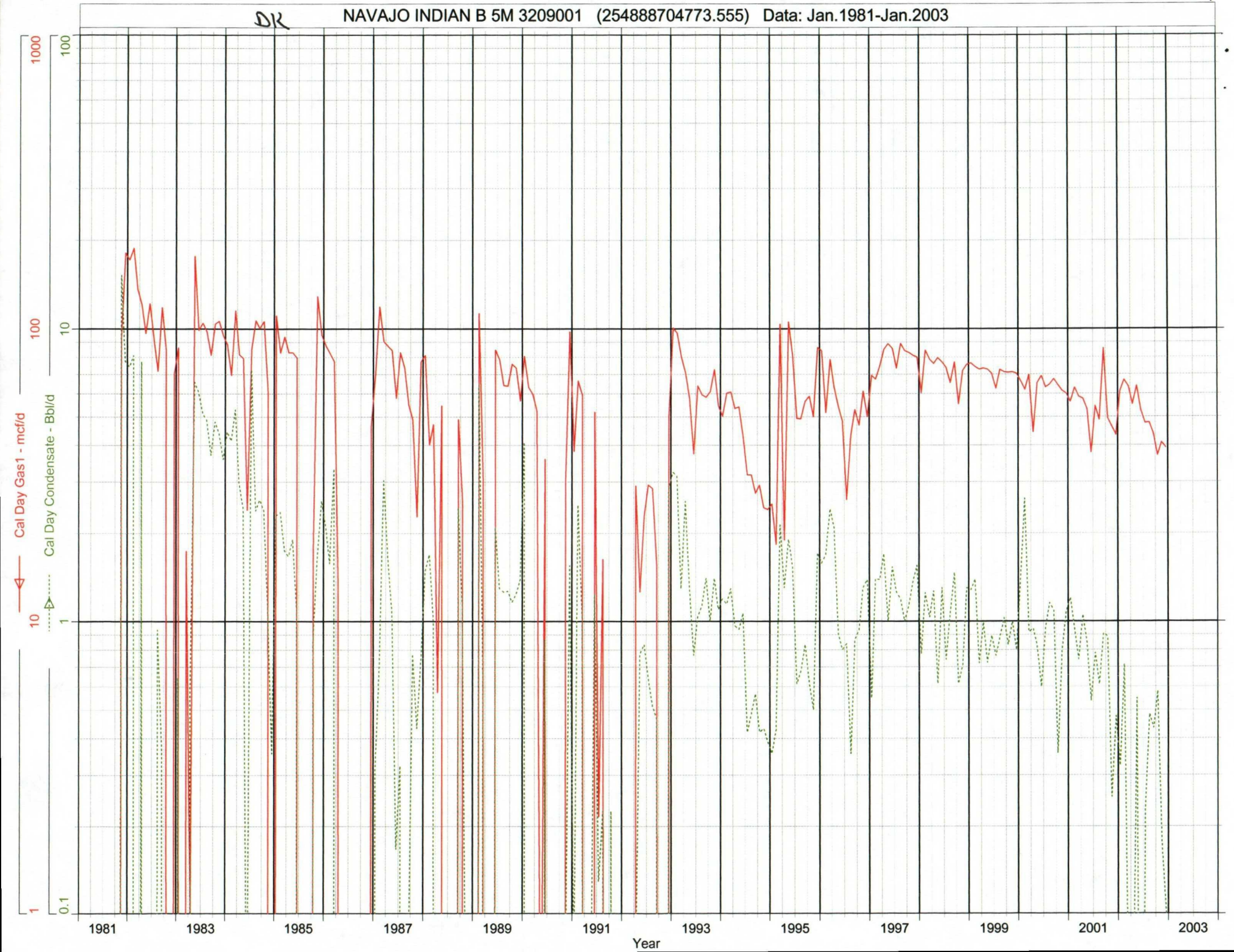
Z-Factor = 0.91
SICP (psig) = 809

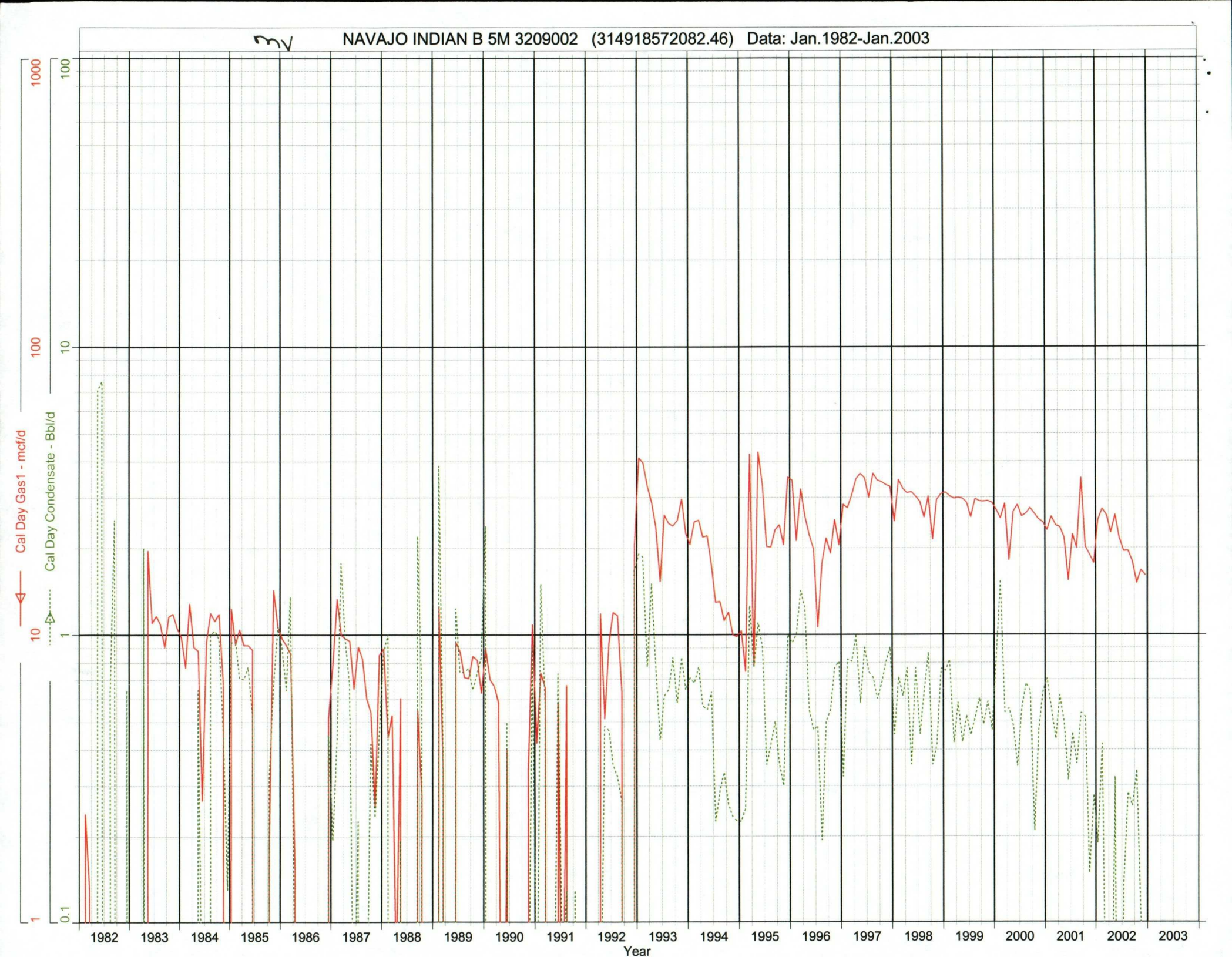
NOTE: THESE ARE ESTIMATES OF THE CURRENT RESERVOIR PRESSURE IN EACH ZONE. IT IS REALIZED THAT THE NEAR-WELLBORE PRESSURES FOR EACH ZONE SHOULD BE SIMILAR, DUE TO THEIR COMMINGLED STATUS.

Navajo Indian B #5M (MV)




Navajo Indian B #5M (DK)
SICP/Z (psig)
3000
2500
2000
1500
1000
500
0
0
100
200
300
400
500
600
700
Cumulative Production (MMCF)


DR
NAVAJO INDIAN B 5M 3209001 (254888704773.555) Data: Jan.1981-Jan.2003
Cal Day Gas1 - mcf/d
Cal Day Condensate - Bbl/d
1000
100
10
1
100
10
1
0.1
1981
1983
1985
1987
1989
1991
1993
1995
1997
1999
2001
2003
Year


NAVAJO INDIAN B 5M 3209002 (314918572082.46) Data: Jan.1982-Jan.2003
Cal Day Gas1 - mcf/d
Cal Day Condensate - Bbl/d
1000
100
10
1
100
10
1
0.1
1982
1983
1984
1985
1986
1987
1988
1989
1990
1991
1992
1993
1994
1995
1996
1997
1998
1999
2000
2001
2002
2003
Year

BURLINGTON RESOURCES

Lewis Implementation Team

Memorandum

TO: **New Mexico Oil Conservation Division**

FROM: **Lewis Implementation Team, Burlington Resources**

DATE: **December 2, 2002**

RE: **2003 Chacra Recompletion Program Expected Production**

Chacra-only production from 73 wells completed after 1970 was normalized and forecasted to result in the production model presented in Table 1. A graphical representation of this normalized production forecast is shown in the attached Figure 1. These wells are located in or near the Chacra Fairway in T-27-N, R-08-W; T-27-N, R-09-W; T-28-N, R-08-W; T-28-N, R-09-W; T-28-N, R-10-W; T-28-N, R-11-W; T-29-N, R-09-W; T-29-N, R-10-W; and T-29-N, R-11-W. Actual results from the individual payadds will certainly vary, but this production model represents the average results that should be achieved. Further delineation in the area will be made in 2003.

Table 1: 2003 Chacra production model.

Decline Type	Hyp to Exp
Initial Incremental Rate (MCF/D)	260
Initial Decline (%/yr, effective)	62
Final Decline (%/yr, effective)	1.6
Final Incremental Rate (MCF/D)	15
Hyperbolic Exponent, n	2.0
EUR (MMCF)	496

Figure 1. Graphical representation of the 2003 Chacra production model.