3/25/03	SUSPENSE NA	ENGINEER WVJ	LOGGED IN KW	TYPE DHC	pKRV0308627582

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

RECEIVED
MAR 25 2003

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

[D] Other: Specify _____

[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.	3-24-03
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

Jicarilla 153 | **#10E** | **N-26-26N-5W** | **Rio Arriba**

Lease | Well No. | Unit Letter-Section-Township-Range | County

OGRID No. __14538__ Property Code__16579__ API No.__30-039-22418____Lease Type: __X__Federal ____State ____Fee

DATA ELEMENT	UPPER ZONE (UNDESIGNATED)	INTERMEDIATE ZONE (Pro Gas)	LOWER ZONE (Pro Gas)
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	4707'-5382'	7194'-7430'
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 449 psi From Jicarilla 150 #12 offset (see attachment)	Original 1349 psi Current 330 psi	Original 2706 psi Current 1470 psi
Oil Gravity or Gas BTU (Degree API or Gas BTU)	BTU 1240 From Jicarilla 150 #12 offset	BTU 1252	BTU 1252
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)	45 Date: 12/31/02 Rates: 22 Mcfd	Date: 12/31/02 Rates: 105 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 L. Tom Loveland TITLE SENIOR RESERVOIR ENG DATE 3/24/03
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

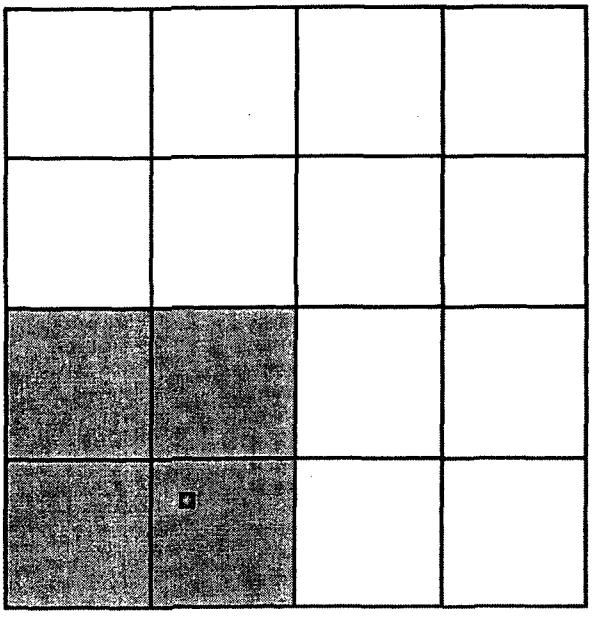
WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number	Pool Name	Pool Code
30-039-22418	OTERO CHACRA (GAS)	82329
Property Code	**Property Name**	**Well No.**
16579	JICARILLA 153	010E
OGRID No.	**Operator Name**	**Elevation**
14538	Burlington Resources Oil and Gas Company	6571

Surface And Bottom Hole Location

UL or Lot	Section	Township	Range	Lot Idn	Feet From	N/S Line	Feet From	E/W Line	County
N	26	26N	05W		925	S	1657	W	Rio Arriba

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.
160			



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: Peggy Cole

Title:

Date: 1-14-03

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 Leese

Date of Survey: 2/6/1980

Certificate Number: 1463

District I
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Energy, Minerals and Natural Resources

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

Form C-102

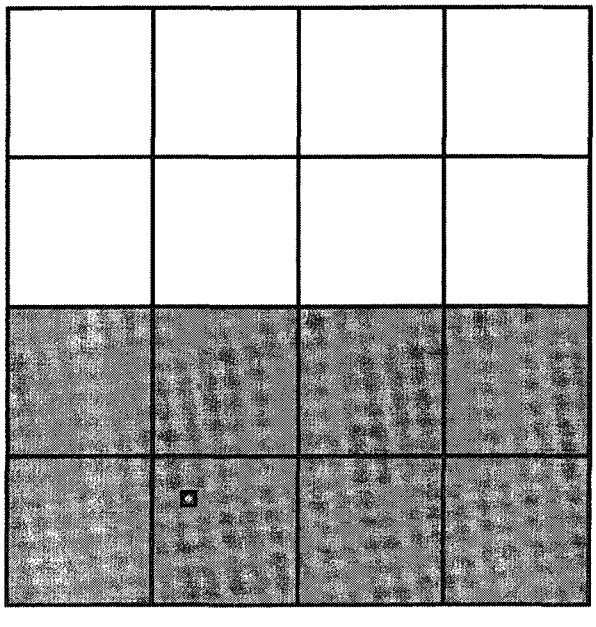
WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number	Pool Name	Pool Code
30-039-22418	BLANCO-MESAVERDE (PRORATED GAS)	72319
Property Code	**Property Name**	**Well No.**
16579	JICARILLA 153	010E
OGRID No.	**Operator Name**	**Elevation**
14538	Burlington Resources Oil and Gas Company	6571

Surface And Bottom Hole Location

UL or Lot	Section	Township	Range	Lot Idn	Feet From	N/S Line	Feet From	E/W Line	County
N	26	26N	05W		925	S	1657	W	Rio Arriba

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.
320			



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Date:

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Energy, Minerals and Natural Resources

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

Form C-102

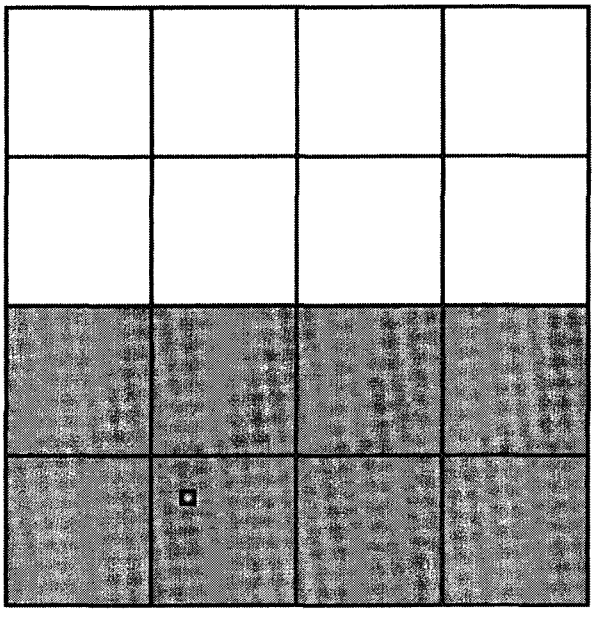
WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number	Pool Name	Pool Code
30-039-22418	BASIN DAKOTA (PRORATED GAS)	71599
Property Code	**Property Name**	**Well No.**
16579	JICARILLA 153	010E
OGRID No.	**Operator Name**	**Elevation**
14538	Burlington Resources Oil and Gas Company	6571

Surface And Bottom Hole Location

UL or Lot	Section	Township	Range	Lot Idn	Feet From	N/S Line	Feet From	E/W Line	County
N	26	26N	05W		925	S	1657	W	Rio Arriba

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.
320			



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Date:

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Electronically Signed By: James Leese

Date of Survey: 2/6/1980

Certificate Number: 1463

Jicarilla 153 #10E
Bottom Hole Pressures
Flowing and Static BHP
Cullender and Smith Method
Version 1.0 1/14/98

Chacra		Mesaverde	
CH-Current		**MV-Current**	
GAS GRAVITY	0	GAS GRAVITY	0.721
COND. OR MISC. (C/M)	C	COND. OR MISC. (C/M)	C
%N2	0	%N2	0.00
%CO2	0	%CO2	0.0059
%H2S	0	%H2S	0
DIAMETER (IN)	0	DIAMETER (IN)	4.5
DEPTH (FT)	0	DEPTH (FT)	5045
SURFACE TEMPERATURE (DEG F)	0	SURFACE TEMPERATURE (DEG F)	60
BOTTOMHOLE TEMPERATURE (DEG F)	0	BOTTOMHOLE TEMPERATURE (DEG F)	123.4
FLOWRATE (MCFPD)	0	FLOWRATE (MCFPD)	0
SURFACE PRESSURE (PSIA)	0	SURFACE PRESSURE (PSIA)	289
BOTTOMHOLE PRESSURE (PSIA)	#DIV/0!	BOTTOMHOLE PRESSURE (PSIA)	329.5
CH-Original		**MV-Original**	
GAS GRAVITY	0.719	GAS GRAVITY	0.6983
COND. OR MISC. (C/M)	C	COND. OR MISC. (C/M)	C
%N2	0.00573	%N2	0.38
%CO2	0.00865	%CO2	0.38
%H2S	0	%H2S	0
DIAMETER (IN)	7	DIAMETER (IN)	4.5
DEPTH (FT)	1959	DEPTH (FT)	5045
SURFACE TEMPERATURE (DEG F)	60	SURFACE TEMPERATURE (DEG F)	60
BOTTOMHOLE TEMPERATURE (DEG F)	92.7	BOTTOMHOLE TEMPERATURE (DEG F)	123.4
FLOWRATE (MCFPD)	0	FLOWRATE (MCFPD)	0
SURFACE PRESSURE (PSIA)	425	SURFACE PRESSURE (PSIA)	1162
BOTTOMHOLE PRESSURE (PSIA)	448.5	BOTTOMHOLE PRESSURE (PSIA)	1349.2

Jicarilla 153 #10E
Bottom Hole Pressures
Flowing and Static BHP
Cullender and Smith Method
Version 1.0 1/14/98

Dakota		Dakota	
DK-Current		**DK-Current**	
GAS GRAVITY	0.721	GAS GRAVITY	0
COND. OR MISC. (C/M)	C	COND. OR MISC. (C/M)	C
%N2	0.00363	%N2	0.00
%CO2	0.0059	%CO2	0
%H2S	0	%H2S	0
DIAMETER (IN)	2.375	DIAMETER (IN)	0
DEPTH (FT)	7312	DEPTH (FT)	0
SURFACE TEMPERATURE (DEG F)	60	SURFACE TEMPERATURE (DEG F)	0
BOTTOMHOLE TEMPERATURE (DEG F)	151.9	BOTTOMHOLE TEMPERATURE (DEG F)	0
FLOWRATE (MCFPD)	0	FLOWRATE (MCFPD)	0
SURFACE PRESSURE (PSIA)	1180	SURFACE PRESSURE (PSIA)	0
BOTTOMHOLE PRESSURE (PSIA)	1470.3	BOTTOMHOLE PRESSURE (PSIA)	#DIV/0!
DK-Original		**DK-Original**	
GAS GRAVITY	0.6472	GAS GRAVITY	0
COND. OR MISC. (C/M)	C	COND. OR MISC. (C/M)	C
%N2	0.256	%N2	0.00
%CO2	0.599	%CO2	0
%H2S	0	%H2S	0
DIAMETER (IN)	2.375	DIAMETER (IN)	0
DEPTH (FT)	7312	DEPTH (FT)	0
SURFACE TEMPERATURE (DEG F)	60	SURFACE TEMPERATURE (DEG F)	0
BOTTOMHOLE TEMPERATURE (DEG F)	151.9	BOTTOMHOLE TEMPERATURE (DEG F)	0
FLOWRATE (MCFPD)	0	FLOWRATE (MCFPD)	0
SURFACE PRESSURE (PSIA)	2217	SURFACE PRESSURE (PSIA)	0
BOTTOMHOLE PRESSURE (PSIA)	2705.7	BOTTOMHOLE PRESSURE (PSIA)	#DIV/0!

Jicarilla 153 #10E - SICP/Z Data

Zone: Mesaverde

Date	SICP (psig)	Chromatograph Used	Z-Factor	SICP/Z (psig)	Cum Qg (MMCF)	Slope	Y Intercept
12/1/1980	1162	10/1/2002	0.8698	1336	0	N/A	1336
5/16/1981	985	10/1/2002	0.8864	1111	18.799	-11.95291	1336
7/24/1982	833	10/1/2002	0.9019	924	61.74	-6.678548	1336
3/31/1983	771	10/1/2002	0.9085	849	74.025	-6.582745	1336
7/24/1984	786	10/1/2002	0.9069	867	84.024	-5.584721	1336
2/18/1986	760	10/1/2002	0.9097	835	91.355	-5.478617	1336
11/29/1989	816	10/1/2002	0.9037	903	136.605	-3.169611	1336
???	94	N/A	1	94	266.7302	-4.656163	1336
						↓	↓
12/31/2002	???	N/A	???	295	223.659	-4.656163	1336

Z-Factor = 0.98
SICP (psig) = 289

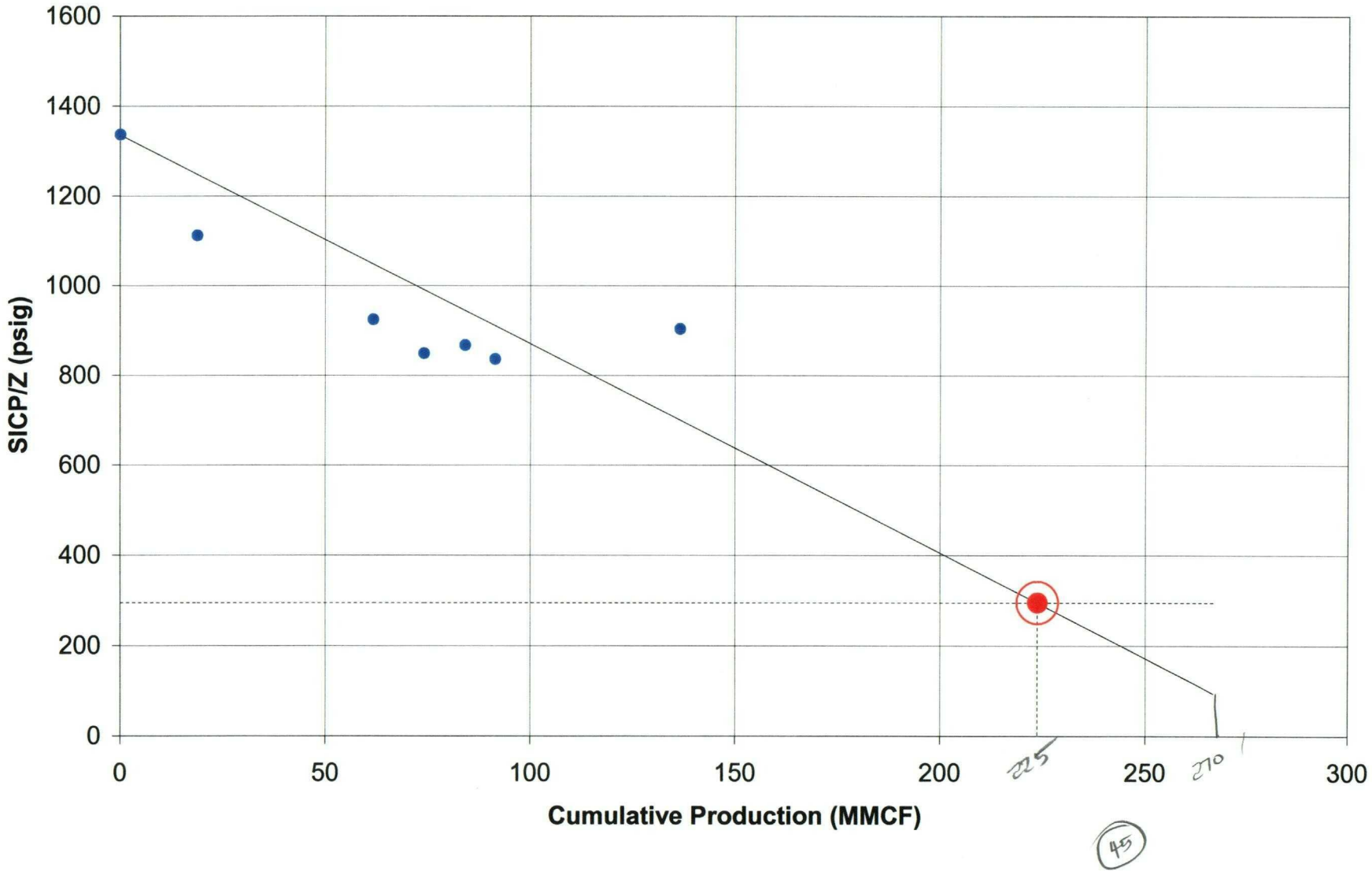
Zone: Dakota

Date	SICP (psig)	Chromatograph Used	Z-Factor	SICP/Z (psig)	Cum Qg (MMCF)	Slope	Y Intercept
11/24/1980	2217	10/1/2002	0.8171	2713	0	N/A	2713
7/24/1982	1026	10/1/2002	0.8824	1163	164.031	-9.45258	2713
3/31/1983	996	10/1/2002	0.8853	1125	216.833	-7.324585	2713
11/5/1985	1094	10/1/2002	0.876	1249	352.07	-4.159388	2713
6/15/1988	828	10/1/2002	0.9024	918	495.243	-3.625899	2713
11/2/1990	1009	10/1/2002	0.884	1141	543.706	-2.890995	2713
3/29/1992	902	10/1/2002	0.8947	1008	584.234	-2.918514	2713
???	94	N/A	1	94	1848.449	-1.417001	2713
						↓	↓
12/31/2002	???	N/A	???	1255	1028.79	-1.417001	2713

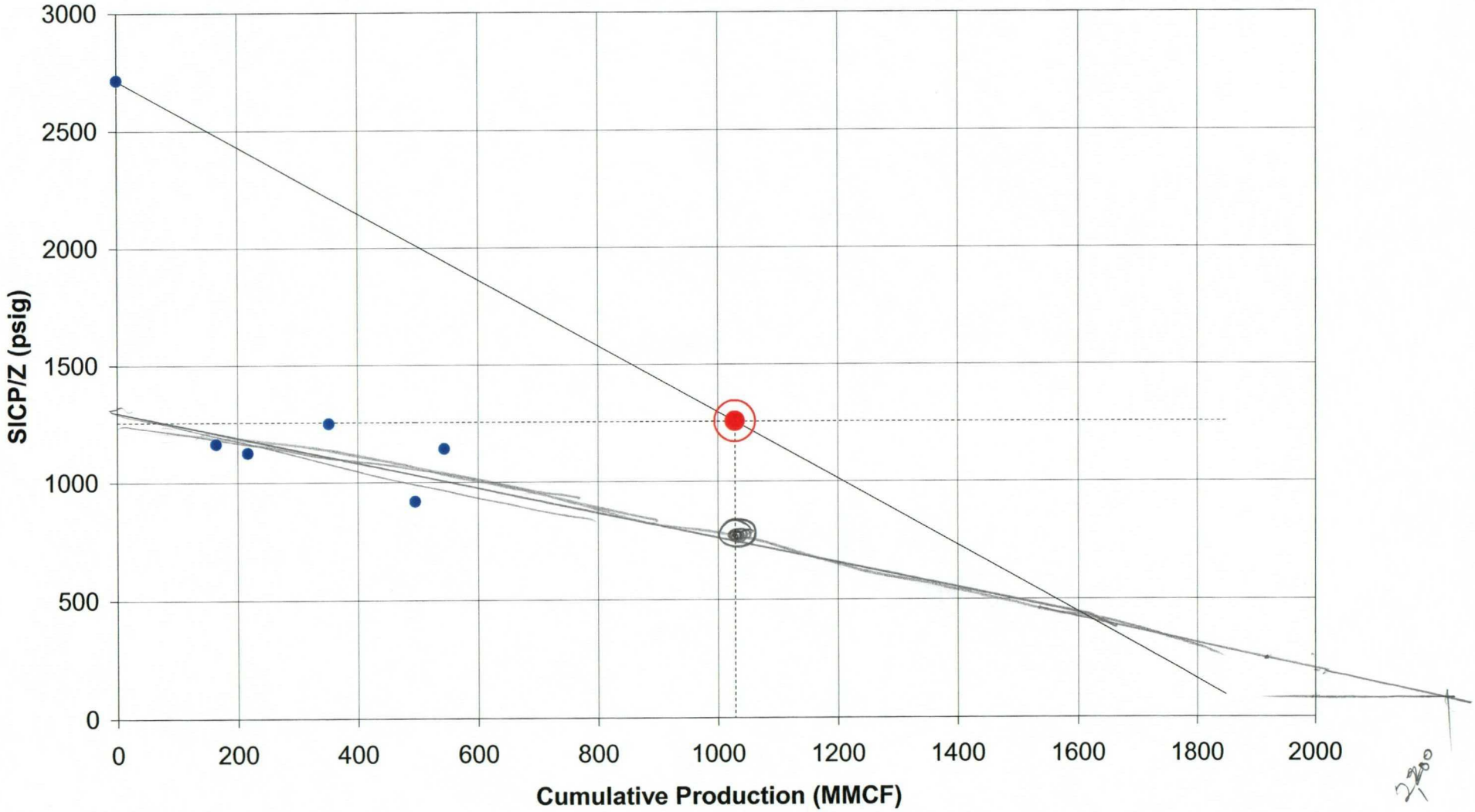
Z-Factor = 0.94
SICP (psig) = 1180

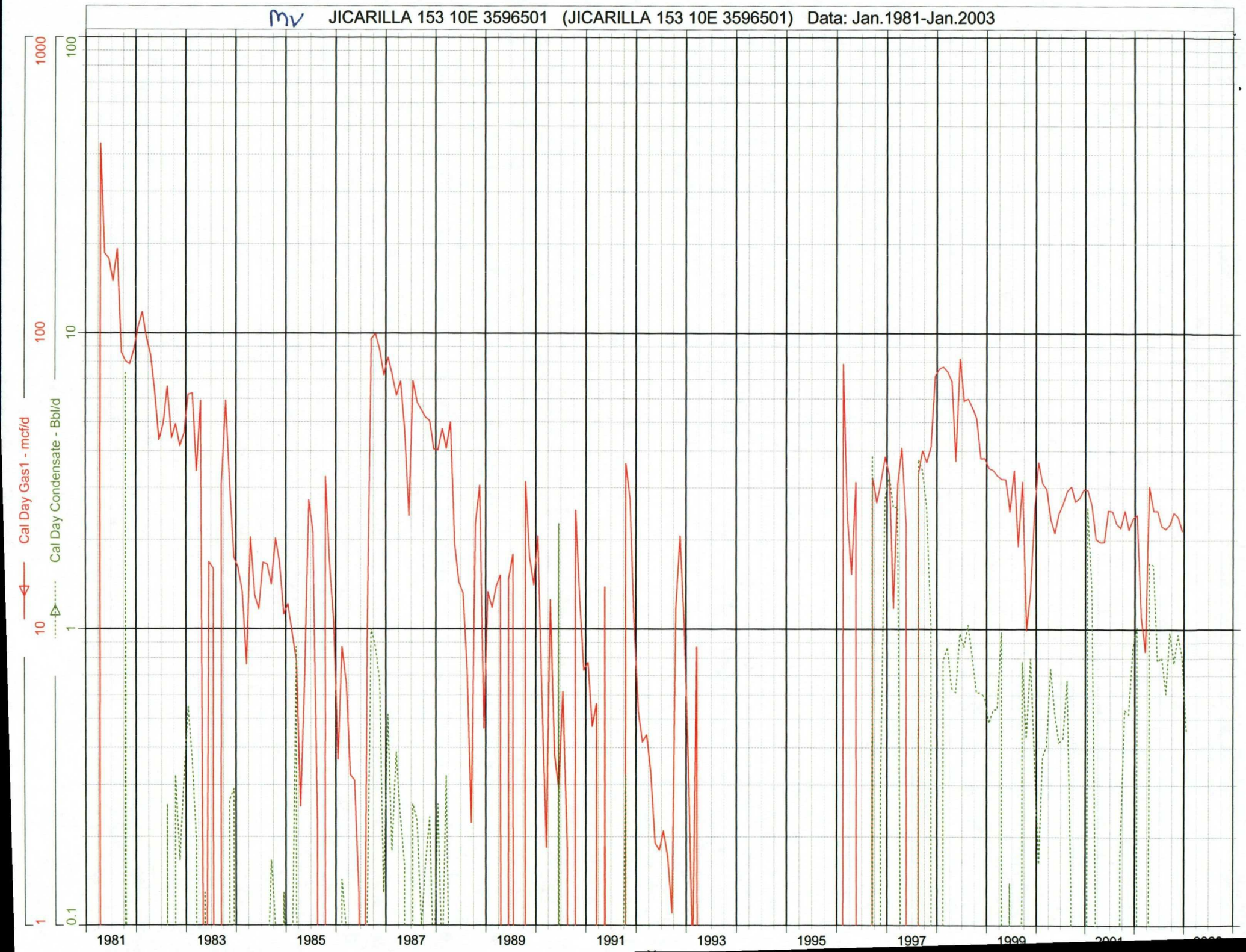
NOTE: THESE ARE ESTIMATES OF THE CURRENT RESERVOIR PRESSURE IN EACH ZONE. IT IS REALIZED THAT THE NEAR-WELLBORE PRESSURES FOR EACH ZONE SHOULD BE SIMILAR, DUE TO THEIR COMMINGLED STATUS.

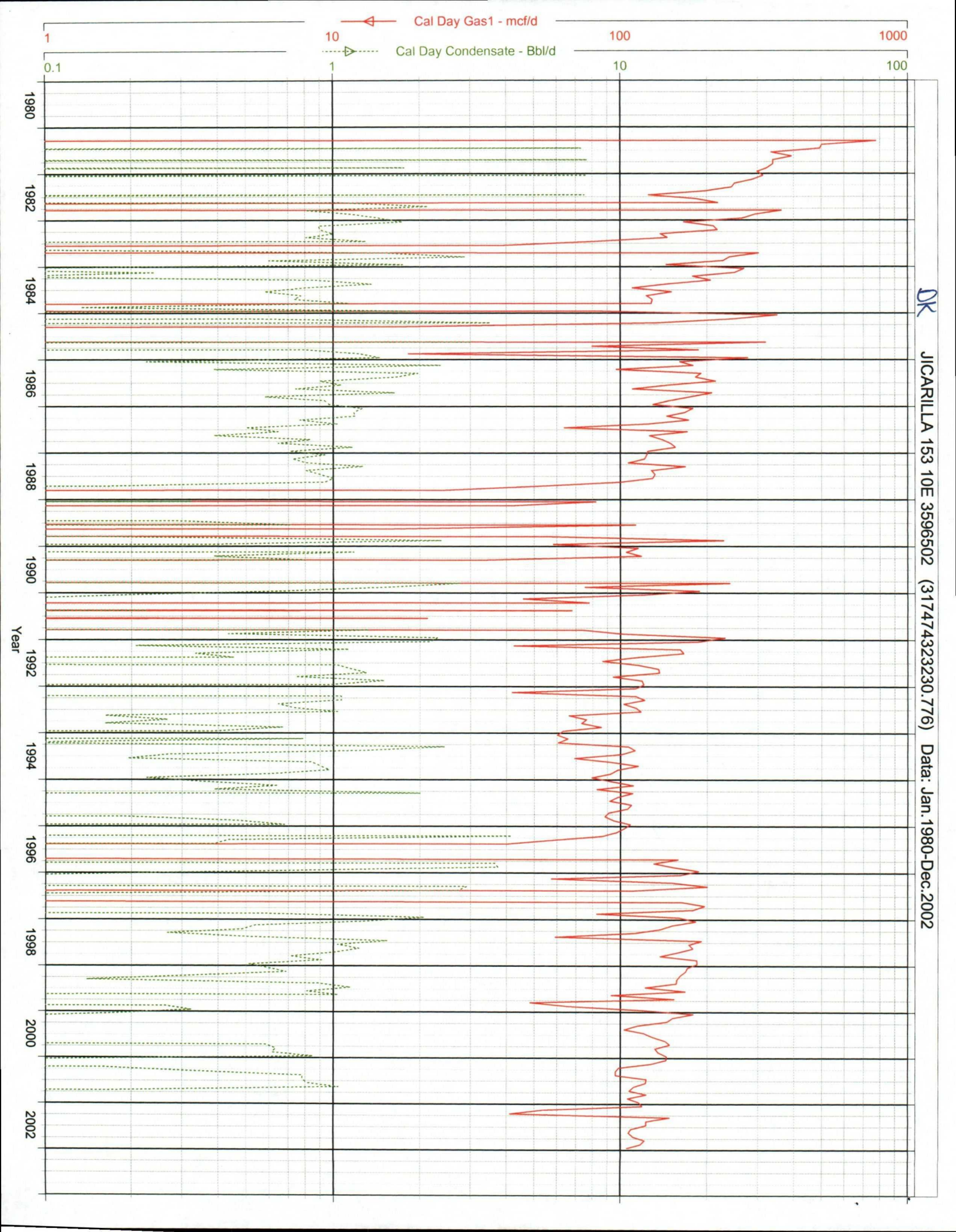
Jicarilla 153 #10E (MV)



Jicarilla 153 #10E (DK)




JICARILLA 153 10E 3596501 (JICARILLA 153 10E 3596501) Data: Jan.1981-Jan.2003
Cal Day Gas1 - mcf/d
Cal Day Condensate - Bbl/d
1000
100
10
1
0.1
100
10
1
1981
1983
1985
1987
1989
1991
1993
1995
1997
1999


Cal Day Gas1 - mcf/d
1
10
100
1000
Cal Day Condensate - Bbl/d
0.1
1
10
100
1980
1982
1984
1986
1988
1990
1992
1994
1996
1998
2000
2002
Year
JICARILLA 153 10E 3596502 (317474323230.776) Data: Jan.1980-Dec.2002

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.