

ABOVE THIS LINE FOR DIVISION USE ONLY

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



2980

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

JAN 23 2002

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 _____

[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
 Print or Type Name

Peggy Cole
 Signature

Reg. Supr.
 Title

1-21-02
 Date

pcole@br-inc.com
 e-mail Address

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 X No

APPLICATION FOR DOWNHOLE COMMINGLING

BURLINGTON RESOURCES OIL & GAS COMPANY

PO BOX 4289, FARMINGTON, NM 87499

Operator

Address

KELLY

4M

G-35-30N-10W

SAN JUAN

Lease

Well No.

Unit Letter-Section-Township-Range

County

OGRID No. 14538 Property Code 7218 API No. 30-045-30403 Lease Type: X 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	WILL BE SUPPLIED UPON COMPLETION
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)	390 PSI – CURRENT 733 PSI – ORIGINAL (see attachment)	602 PSI - CURRENT 950 PSI – ORIGINAL (see attachment)	705 PSI – CURRENT 1359 PSI – ORIGINAL (see attachment)
Oil Gravity or Gas BTU (Degree API or Gas BTU)	1223	1237	1126
Producing, Shut-In or New Zone	New Zone	New Zone	New Zone
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: Rates:	Date: Rates:	Date: Rates:
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?
If not, have all working, royalty and overriding royalty interest owners been notified by certified mail?

Yes _____ No X _____
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.
- Notification list of working, royalty and overriding royalty interests for uncommon interest cases.
- 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 Kelly A. Sutton TITLE Production Engineer DATE 01/14/02

TYPE OR PRINT NAME Kelly Sutton TELEPHONE NO. (505) 326-9700

<p>16</p>	<p>FD B.L.M. BC 1967</p> <p>N 89°58'42" W 2610.2' (M)</p> <p>FD B.L.M. BC 1967</p> <p>1730'</p> <p>2846.3' (M)</p>	<p>17 OPERATOR CERTIFICATION</p> <p>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief</p>
	<p>LAT. 36°46.3'N</p> <p>LONG. 107°51.1'W</p> <p>1895'</p> <p>S 0°04'11" W</p>	<p><i>Peggy Cole</i></p> <p>Signature</p> <p>Peggy Cole</p> <p>Printed Name</p> <p>Regulatory Supervisor</p> <p>Title</p> <p><i>1-21-02</i></p> <p>Date</p>
<p>35</p>	<p>USA NM-04240</p> <p>FD B.L.M. BC 1967</p>	<p>18 SURVEYOR CERTIFICATION</p> <p>I hereby certify that the well location shown on this plot 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.</p> <p><i>8-29-02</i></p> <p>Date of Survey</p> <p>Signature and Seal of Professional Surveyor:</p> <p><i>[Signature]</i></p> <p>8894</p> <p>Certificate Number</p>

Kelly #4M
 Bottom Hole Pressures
 Flowing and Static BHP
 Cullender and Smith Method
 Version 1.0 3/13/94

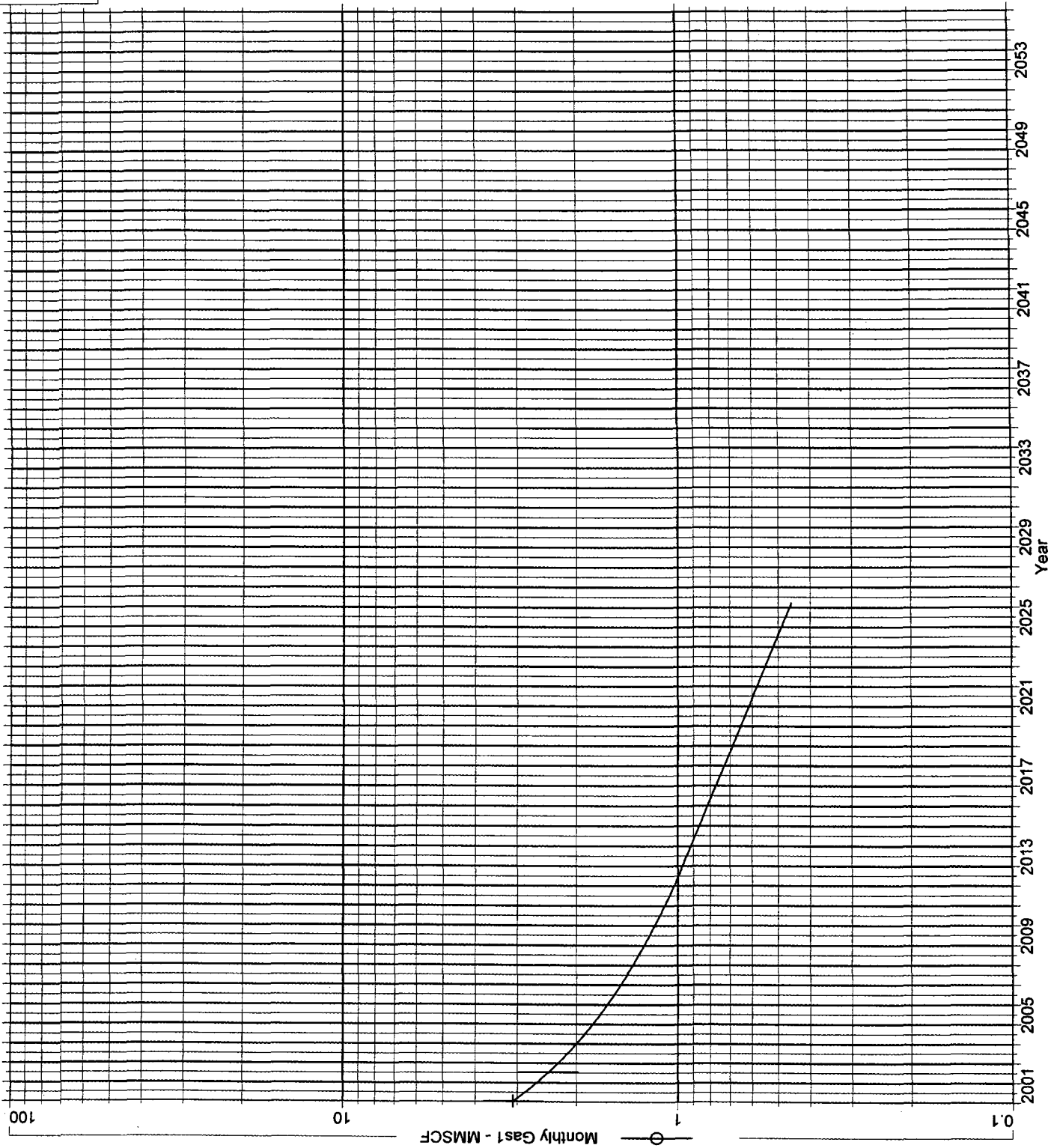
Dakota	
<u>DK-Current</u>	
GAS GRAVITY	0.704
COND. OR MISC. (C/M)	C
%N2	0.763
%CO2	0.725
%H2S	0
DIAMETER (IN)	2.375
DEPTH (FT)	7074
SURFACE TEMPERATURE (DEG F)	60
BOTTOMHOLE TEMPERATURE (DEG F)	198
FLOWRATE (MCFPD)	0
SURFACE PRESSURE (PSIA)	592
BOTTOMHOLE PRESSURE (PSIA)	704.9
<u>DK-Original</u>	
GAS GRAVITY	0.704
COND. OR MISC. (C/M)	C
%N2	0.763
%CO2	0.725
%H2S	0
DIAMETER (IN)	2.375
DEPTH (FT)	7074
SURFACE TEMPERATURE (DEG F)	60
BOTTOMHOLE TEMPERATURE (DEG F)	198
FLOWRATE (MCFPD)	0
SURFACE PRESSURE (PSIA)	1125
BOTTOMHOLE PRESSURE (PSIA)	1358.5

Kelly #4M
Bottom Hole Pressures
Flowing and Static BHP
Cullender and Smith Method
Version 1.0 3/13/94

Chacra		Mesaverde	
<u>CH-Current</u>		<u>MV-Current</u>	
GAS GRAVITY	0.704	GAS GRAVITY	0.715
COND. OR MISC. (C/M)	C	COND. OR MISC. (C/M)	C
%N2	0.451	%N2	0.666
%CO2	0.665	%CO2	0.636
%H2S	0	%H2S	0
DIAMETER (IN)	2.875	DIAMETER (IN)	1.5
DEPTH (FT)	3266	DEPTH (FT)	7140
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)	359	SURFACE PRESSURE (PSIA)	498
BOTTOMHOLE PRESSURE (PSIA)	389.8	BOTTOMHOLE PRESSURE (PSIA)	601.5
<u>CH-Original</u>		<u>MV-Original</u>	
GAS GRAVITY	0.704	GAS GRAVITY	0.715
COND. OR MISC. (C/M)	C	COND. OR MISC. (C/M)	C
%N2	0.451	%N2	0.666
%CO2	0.665	%CO2	0.636
%H2S	0	%H2S	0
DIAMETER (IN)	2.875	DIAMETER (IN)	1.5
DEPTH (FT)	3266	DEPTH (FT)	7140
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)	672	SURFACE PRESSURE (PSIA)	778
BOTTOMHOLE PRESSURE (PSIA)	733.1	BOTTOMHOLE PRESSURE (PSIA)	949.7

KELLY 4M CH (KELLY 4M CH) Data: 0- 0- .0

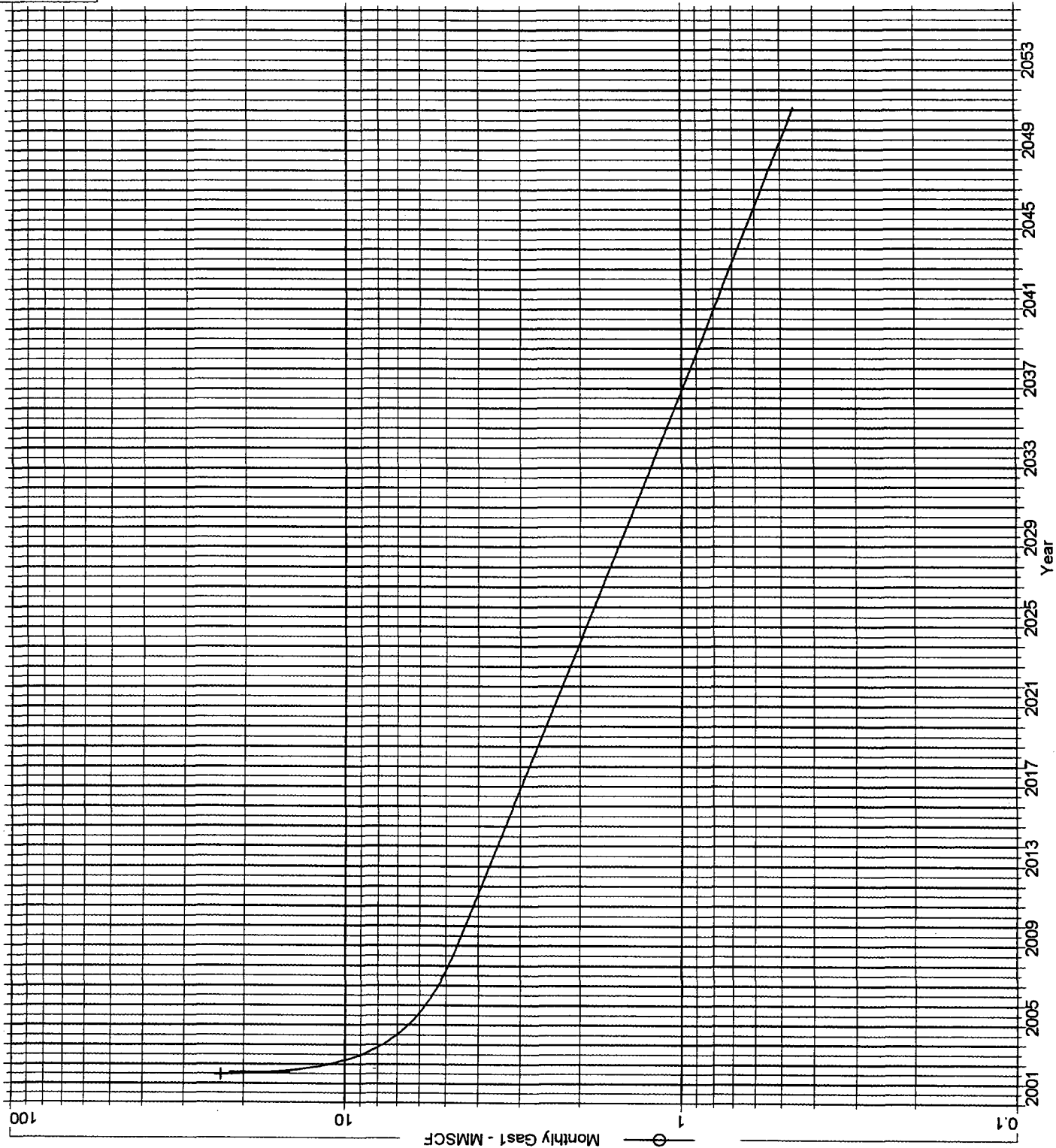
Production Cums
 Oil: 0 MSTB
 Gas: 0 MMSCF
 Water: 0 MSTB
 Cond: 0 MSTB



—○— Monthly Gas1 - MMSCF
 —+— MVIM - MMSCF
 versus time
 Qi: 2.435 MMSCF, Jul, 2002
 Qf: 0.456702 MMSCF, Mar, 2026
 Di:(Hyp->Exp) : 12.6
 n: 1

KELLY 4M MV (KELLY 4M MV) Data: 0- .0

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

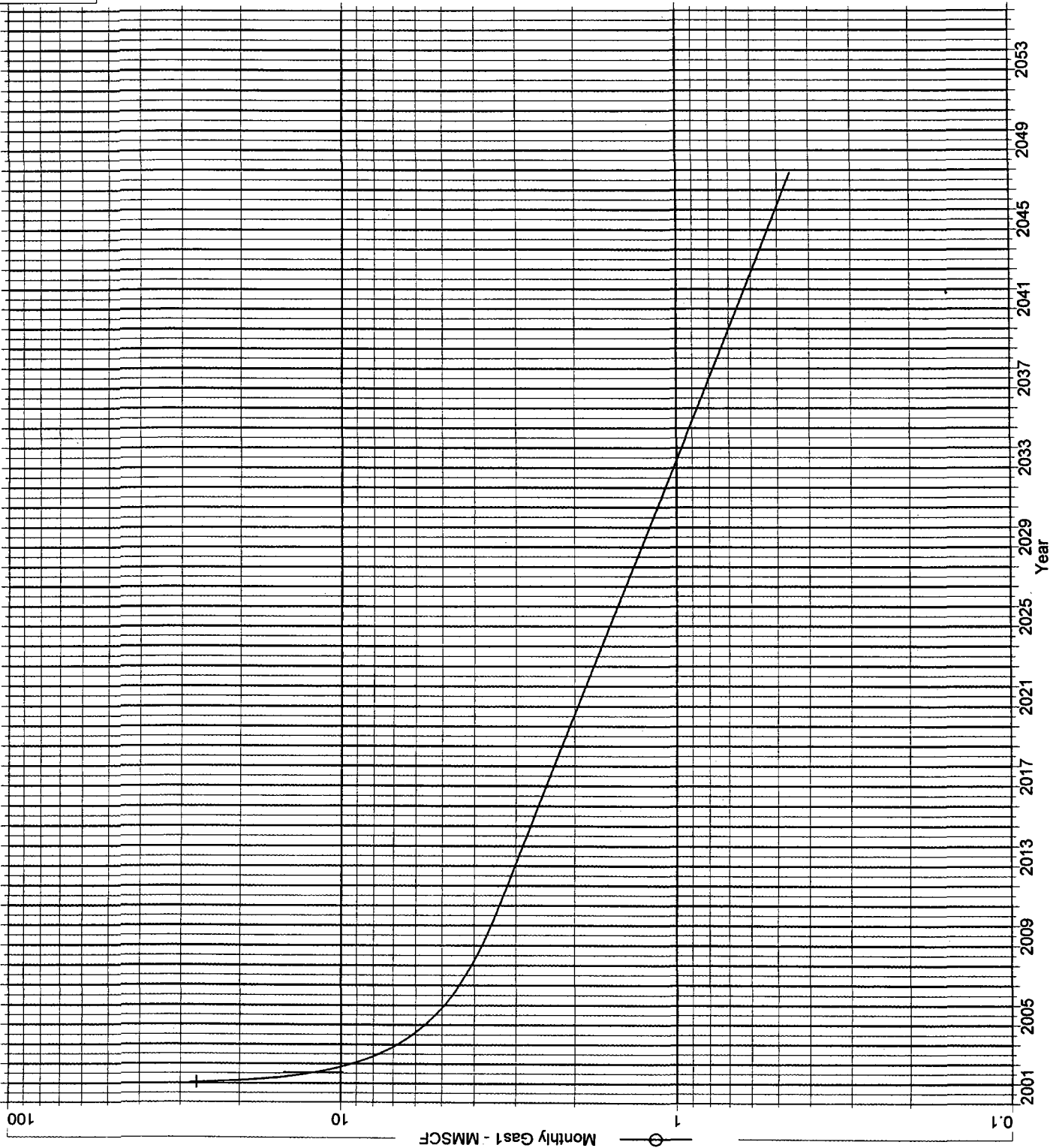


—○— Monthly Gas1 - MMSCF
 —+— MVIM - MMSCF
 versus time
 Qi: 19.7844 MMSCF, Jul, 2002
 Qf: 0.456585 MMSCF, Feb, 2051
 Di:(Hyp->Exp) : 55
 n: 2.7

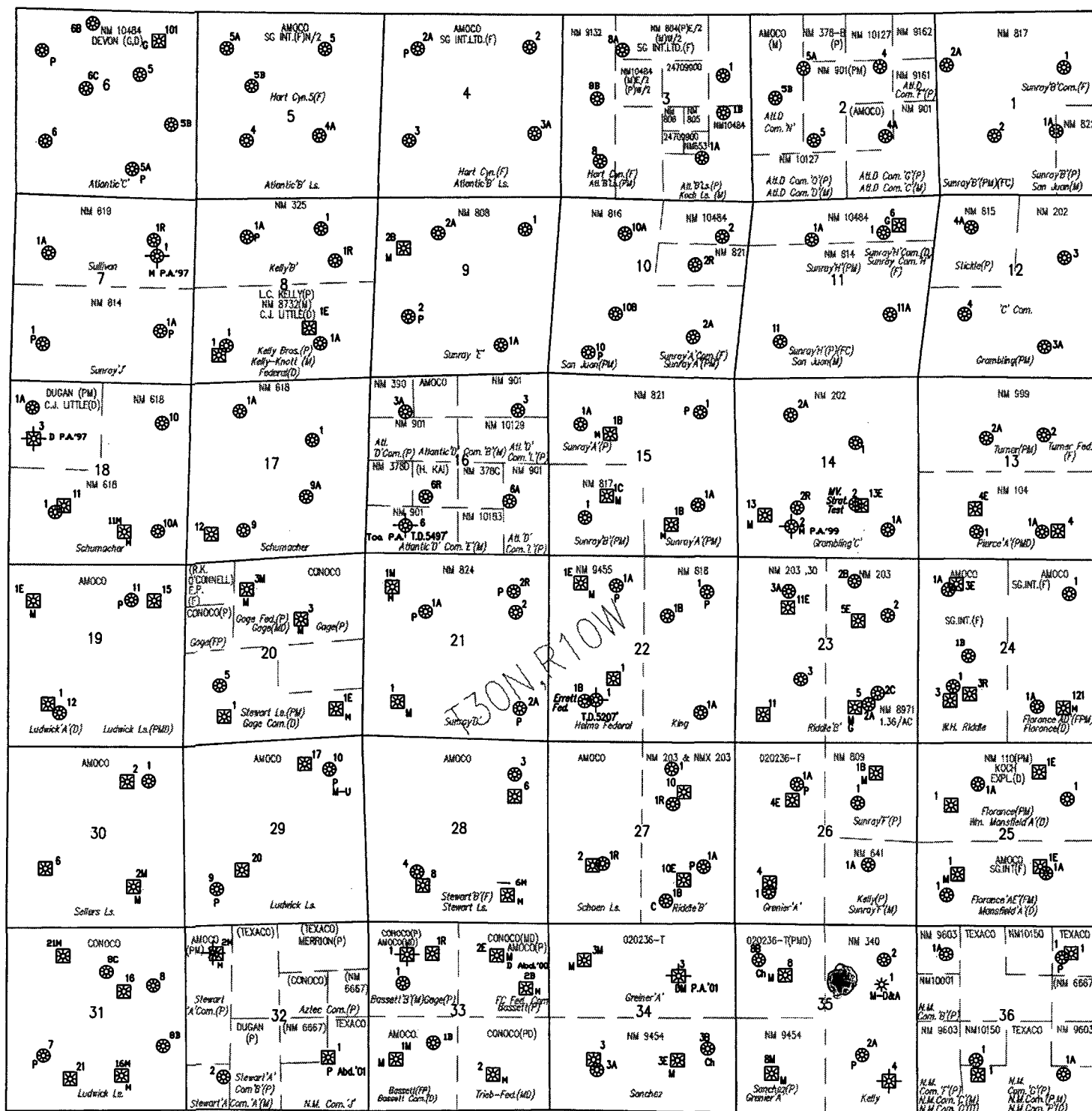
KELLY 4M DK (KELLY 4M DK) Data: .0- .0

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

Monthly Gas1 - MMSCF
— MVIM - MMSCF
versus time
Qi: 12.4794 MMSCF, Jul, 2002
Qf: 0.457003 MMSCF, Nov, 2047
Di:(Hyp->Exp) : 38
n: 2.1



Chacra / Mesaverde / Dakota



INTEREST OWNERS

Kelly 4M Well

ANN JONES
ANN LOCKIE
ANNA CELIA HOWELL HILTON
BEN HOWELL LANGFORD
BHCH MINERAL LTD
BRUCE H C HILL
BUREAU OF LAND MANAGEMENT
DONNA MELLENTHIN
ELIZABETH H LUND TRUSTEE ELIZABETH H LUND ROYALTY TRUST
ELIZABETH J TURNER CALLOWAY
EMILIE M HARDIE ROYALTY TRUST
EMILY D GRAMBLING
FLORENCIA EXPLORATION INC
FREDERICK EUGENE TURNER
J GLENN TURNER JR
JANE HARDIE TRUSTEE WILLIAM B HARDIE SR ROYALTY TR
JOHN A GRAMBLING
JOHN LEE TURNER
JOSEPH C JASTRZEMBSKI
JPMORGAN CHASE BANK TRUSTEE MARY FRANCES TURNER JR TRUST
JPMORGAN CHASE BANK TRUSTEE HOWELL GRANDCHILDRENS TRUST
JPMORGAN CHASE BANK-TRUSTEE BEN R HOWELL TRUST
MABELLE BRAMHALL TRUSTEE MABELLE H SOWERS ROYALTY TRUST
NANCY O MABE SUCC TRUSTEE LUCILE O QUIGLEY TRUST
PATRICIA G HARVEY
R H FEUILLE
RICHARD PARKER LANGFORD

Kelly 4M Well

SCHULTZ HENRIETTA TR

SCHULTZ MANAGEMENT L

THORNTON HARDIE III TRUSTEE MARY ELIZABETH HARDIE ROY TRST

WILLIAM G WEBB

BURLINGTON RESOURCES

New Mexico Oil Conservation Division
1000 Rio Brazos Road
Aztec, New Mexico 87410

Re: Kelly #4M
SWNE, Section 35, T-30-N, R-10-W
30-045-30403
San Juan County, New Mexico

Gentlemen:

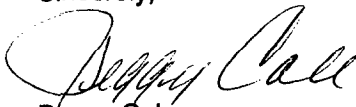
The above referenced well is a Chacra/Mesaverde/Dakota commingle. Attached is a copy of the allocation for the commingling of the subject well completed on May 2, 2002. DHC-2980 was issued for this well.

Gas:	Chacra	8%
	Mesa Verde	31%
	Dakota	61%

Oil:	Chacra	8%
	Mesa Verde	31%
	Dakota	61%

These percentages are based upon isolated flow test from the Mesaverde, Dakota and Chacra during completion operations. Oil was not present during flow test operations. For that reason, oil percentages are based upon gas allocation and are provided in the event this wellbore begins producing oil at some point in the future. Please let me know if you have any questions.

Sincerely,



Peggy Cole
Regulatory Supervisor

Xc: NMOCD – Santa Fe
Bureau of Land Management

PRODUCTION ALLOCATION FORMULA USING WELL TEST INFORMATION

Kelly 4M
(Mesaverde/Dakota/Chacra) Commingle
Unit G, 35-T30N-R10W
San Juan County, New Mexico

Allocation Formula Method:

Separator test from Mesaverde = 604 MCFD & 0 BO

Separator test from Dakota = 1212 MCFD & 0 BO

Separator test from Chacra = 149 MCFD & 0 BO

GAS:

$$\frac{(MV) 604 \text{ MCFD}}{(MV/ CH/ DK) 1965 \text{ MCFD}} = (MV) \% \text{ Mesaverde 31\%}$$

$$\frac{(DK) 1212 \text{ MCFD}}{(MV/ CH/ DK) 1965 \text{ MCFD}} = (DK) \% \text{ Dakota 61\%}$$

$$\frac{(CH) 149 \text{ MCFD}}{(MV/ CH/ DK) 1965 \text{ MCFD}} = (CH) \% \text{ Chacra 8\%}$$

OIL:

$$\frac{(MV) 0 \text{ BO}}{(MV/ CH/ DK) 0 \text{ BO}} = (MV) \% \text{ Mesaverde 31\%}$$

$$\frac{(DK) 0 \text{ BO}}{(MV/ CH/ DK) 0 \text{ BO}} = (DK) \% \text{ Dakota 61\%}$$

$$\frac{(CH) 0 \text{ BO}}{(MV/ CH/ DK) 0 \text{ BO}} = (CH) \% \text{ Chacra 8\%}$$