

ABOVE THIS LINE FOR DIVISION USE ONLY

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



2978

**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]

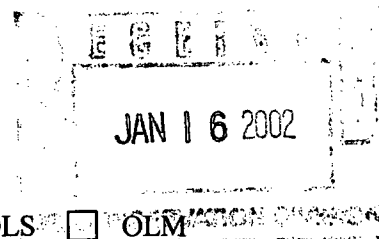
[B] Commingling - Storage - Measurement

☒ DHC ☐ CTB ☐ PLC ☐ PC ☐ OLS ☐ OLM

[C] Injection - Disposal - Pressure Increase - Enhanced Oil Recovery

☐ WFX ☐ PMX ☐ SWD ☐ IPI ☐ EOR ☐ PPR

[D] Other: Specify \_\_\_\_\_



[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

1-15-02  
Date

peggy@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 FOR DOWNHOLE COMMINGLING

APPLICATION TYPE  
Single Well  
Establish Pre-Approved Pools  
EXISTING WELLBORE  
X Yes No

|  |                    |                                    |                                 |
|--|--------------------|------------------------------------|---------------------------------|
| BURLINGTON RESOURCES OIL & GAS COMPANY |                    | PO BOX 4289, FARMINGTON, NM 87499  |                                 |
| Operator                               |                    | Address                            |                                 |
| Nye Federal                            | 1M                 | E-08-29N-10W                       | SAN JUAN                        |
| Lease                                  | Well No.           | Unit Letter-Section-Township-Range | County                          |
| OGRID No. 14538                        | Property Code 7367 | API No. 30-045-30798               | 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<br>(Perforated or Open-Hole Interval)   | WILL BE SUPPLIED UPON COMPLETION                             | WILL BE SUPPLIED UPON COMPLETION                             | WILL BE SUPPLIED UPON COMPLETION                             |
| Method of Production<br>(Flowing or Artificial Lift)  | FLOWING  | FLOWING  | FLOWING  |
| Bottomhole Pressure<br>(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)    | 475 PSI – CURRENT<br>1214 PSI – ORIGINAL<br>(see attachment) | 764 PSI - CURRENT<br>1605 PSI – ORIGINAL<br>(see attachment) | 568 PSI – CURRENT<br>2475 PSI – ORIGINAL<br>(see attachment) |
| Oil Gravity or Gas BTU<br>(Degree API or Gas BTU)   | 1192   | 1237   | 1285   |
| Producing, Shut-In or New Zone  | New Zone   | New Zone   | New Zone   |
| Date and Oil/Gas/Water Rates of Last Production.<br>(Note: For new zones with no production history, applicant shall be required to attach production estimates and supporting data.) | Date:<br><br>Rates:  | Date:<br><br>Rates:  | Date:<br><br>Rates:  |
| Fixed Allocation Percentage<br>(Note: If allocation is based upon something other than current or past production, supporting data or explanation will be required.)                  | Oil % Gas %<br>WILL BE SUPPLIED UPON COMPLETION              | Oil % Gas %<br>WILL BE SUPPLIED UPON COMPLETION              | Oil % Gas %<br>WILL BE SUPPLIED UPON COMPLETION              |

ADDITIONAL DATA

Are all working, royalty and overriding royalty interests identical in all commingled zones? Yes X No  
If not, have all working, royalty and overriding royalty interest owners been notified by certified mail? Yes 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:

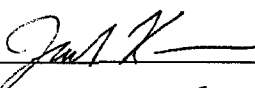
Attachments:  
C-102 for each zone to be commingled showing its spacing unit and acreage dedication.  
Production curve for each zone for at least one year. (If not available, attach explanation.)  
For zones with no production history, estimated production rates and supporting data.  
Data to support 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          |  | TITLE               | Production Engineer | DATE | 1/11/02 |
| TYPE OR PRINT NAME | JACK KEANE  | 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

|                             |  |   |  |  |                     |
|-----------------------------|--|---|--|--|---------------------|
| *API Number<br>30-045-30798 |  | *Pool Code<br>72319/71599/82329                             |  | *Pool Name<br>Blanco Mesaverde/Basin Dakota/Otero Chacra |                     |
| *Property Code<br>7367      |  | *Property Name<br>NYE FEDERAL                               |  |  | *Well Number<br>1M  |
| *GRID No.<br>14538          |  | *Operator Name<br>BURLINGTON RESOURCES OIL & GAS COMPANY LP |  |  | *Elevation<br>5747' |

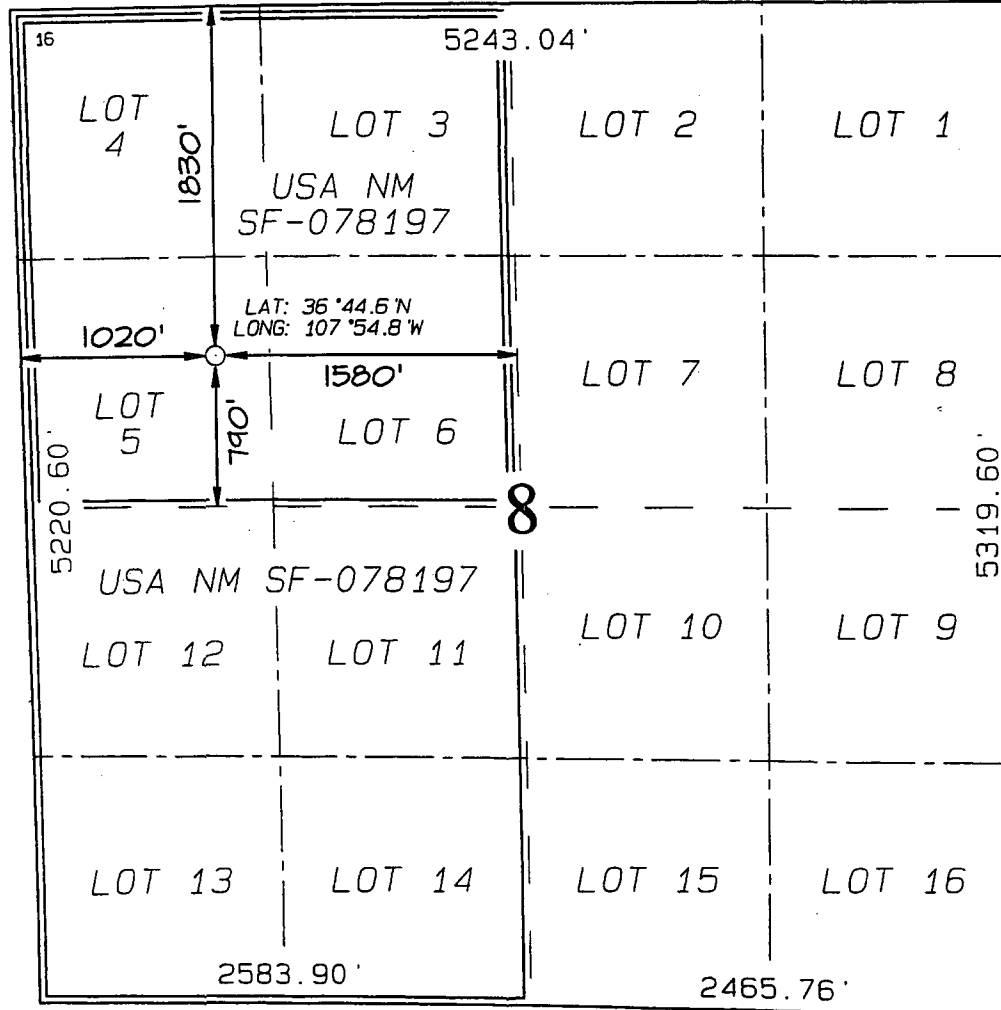
<sup>10</sup> Surface Location

| UL or lot no. | Section | Township | Range | Lot Idn | Feet from the | North/South line | Feet from the | East/West line | County   |
|---------------|---------|----------|-------|---------|---------------|------------------|---------------|----------------|----------|
| E             | 8       | 29N      | 10W   |         | 1830          | NORTH            | 1020          | WEST           | SAN JUAN |

<sup>11</sup> 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 |
|--|---------|-------------------------------|-------|----------------------------------|---------------|-------------------------|---------------|----------------|--------|
|  |         |                               |       |                                  |               |                         |               |                |        |
| <sup>12</sup> Dedicated Acres<br>MV/DK: W/312.94<br>Cha: NW/157.28 |         | <sup>13</sup> Joint or Infill |       | <sup>14</sup> Consolidation Code |               | <sup>15</sup> Order No. |               |                |        |

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



<sup>17</sup> OPERATOR CERTIFICATION

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

*Peggy Cole*  
Signature

Peggy Cole  
Printed Name

Regulatory Supervisor  
Title

Date  
1-15-02

<sup>18</sup> SURVEYOR CERTIFICATION

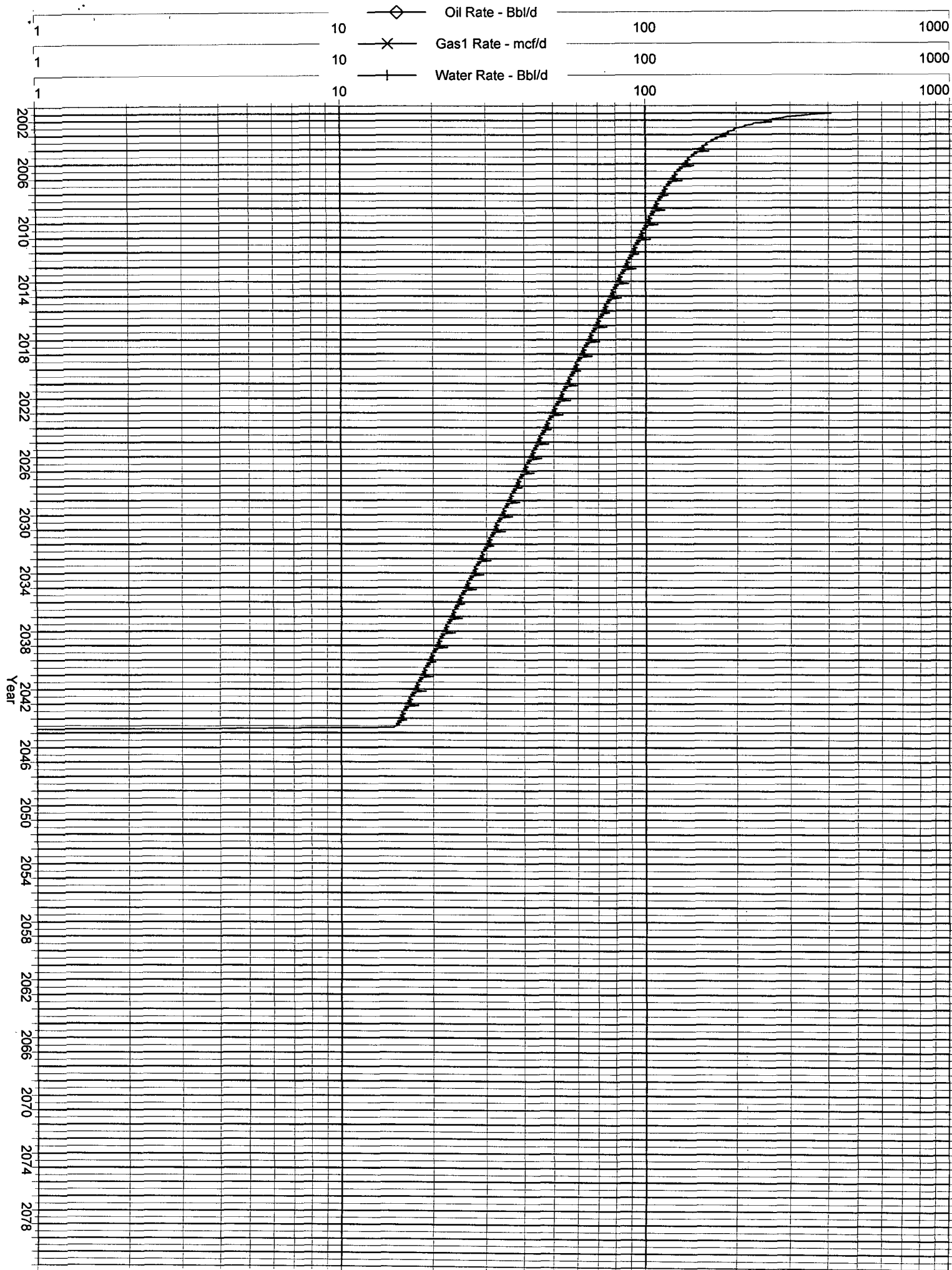
I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.

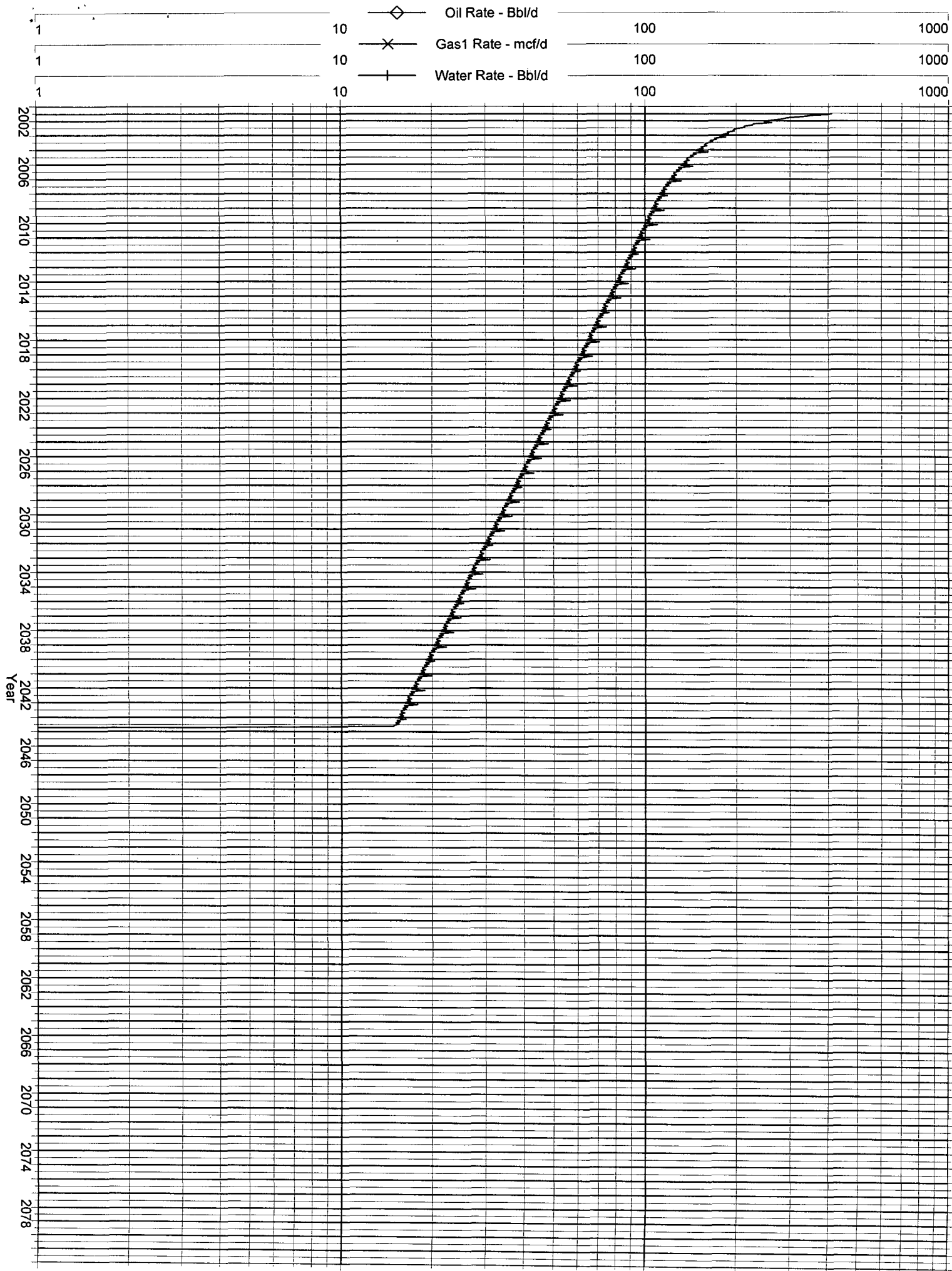
JUNE 12, 2001

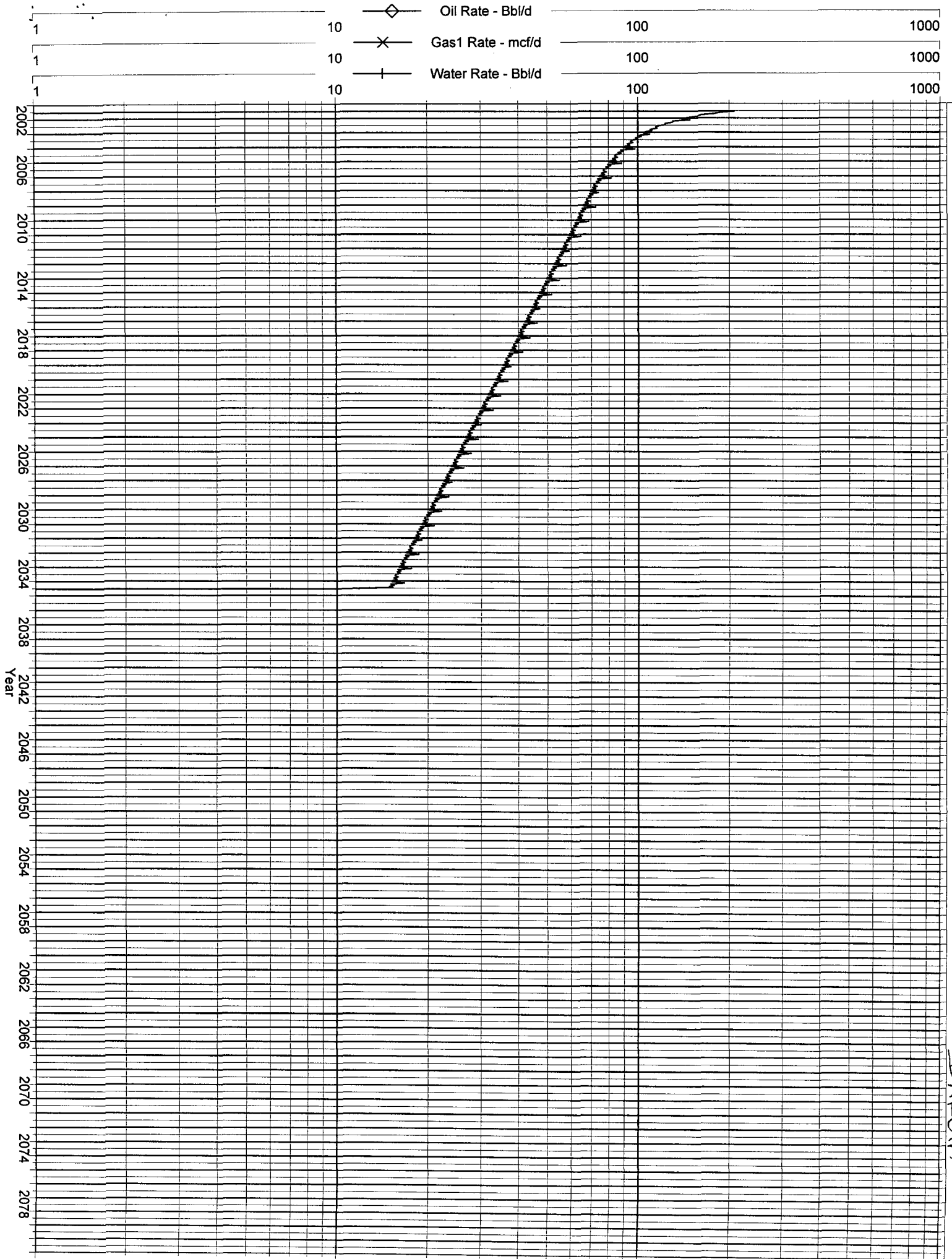
Date of Survey

Signature and Seal of Professional Surveyor

NEALE C. EDWARDS  
NEW MEXICO  
6857  
Certificate Number  
6857







**Ross Federal #1**  
 Bottom Hole Pressures  
 Flowing and Static BHP  
 Cullender and Smith Method  
 Version 1.0 3/13/94

| <b>Chacra</b>                  |        | <b>Mesaverde</b>               |        |
|--------------------------------|--------|--------------------------------|--------|
| <u><b>CH-Current</b></u>       |        | <u><b>MV-Current</b></u>       |        |
| GAS GRAVITY                    | 0.702  | GAS GRAVITY                    | 0.711  |
| COND. OR MISC. (C/M)           | C      | COND. OR MISC. (C/M)           | C      |
| %N2                            | 0.243  | %N2                            | 0.37   |
| %CO2                           | 1.885  | %CO2                           | 0.54   |
| %H2S                           | 0      | %H2S                           | 0      |
| DIAMETER (IN)                  | 2.88   | DIAMETER (IN)                  | 2.375  |
| DEPTH (FT)                     | 3349   | DEPTH (FT)                     | 4598   |
| 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)        | 436    | SURFACE PRESSURE (PSIA)        | 680    |
| BOTTOMHOLE PRESSURE (PSIA)     | 474.8  | BOTTOMHOLE PRESSURE (PSIA)     | 763.7  |
| <u><b>CH-Original</b></u>      |        | <u><b>MV-Original</b></u>      |        |
| GAS GRAVITY                    | 0.702  | GAS GRAVITY                    | 0.711  |
| COND. OR MISC. (C/M)           | C      | COND. OR MISC. (C/M)           | C      |
| %N2                            | 0.243  | %N2                            | 0.37   |
| %CO2                           | 1.885  | %CO2                           | 0.54   |
| %H2S                           | 0      | %H2S                           | 0      |
| DIAMETER (IN)                  | 2.88   | DIAMETER (IN)                  | 2.375  |
| DEPTH (FT)                     | 3349   | DEPTH (FT)                     | 4598   |
| 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)        | 1103   | SURFACE PRESSURE (PSIA)        | 1412   |
| BOTTOMHOLE PRESSURE (PSIA)     | 1213.5 | BOTTOMHOLE PRESSURE (PSIA)     | 1604.9 |

**Ross Federal #1**  
Bottom Hole Pressures  
Flowing and Static BHP  
Cullender and Smith Method  
Version 1.0 3/13/94

| <b>Dakota</b>                  |        |
|--------------------------------|--------|
| <b><u>DK-Current</u></b>       |        |
| GAS GRAVITY                    | 0.74   |
| COND. OR MISC. (C/M)           | C      |
| %N2                            | 0.31   |
| %CO2                           | 0.49   |
| %H2S                           | 0      |
| DIAMETER (IN)                  | 1.25   |
| DEPTH (FT)                     | 6525   |
| SURFACE TEMPERATURE (DEG F)    | 60     |
| BOTTOMHOLE TEMPERATURE (DEG F) | 137    |
| FLOWRATE (MCFPD)               | 0      |
| SURFACE PRESSURE (PSIA)        | 475    |
| BOTTOMHOLE PRESSURE (PSIA)     | 568.0  |
| <b><u>DK-Original</u></b>      |        |
| GAS GRAVITY                    | 0.74   |
| COND. OR MISC. (C/M)           | C      |
| %N2                            | 0.31   |
| %CO2                           | 0.49   |
| %H2S                           | 0      |
| DIAMETER (IN)                  | 1.25   |
| DEPTH (FT)                     | 6525   |
| SURFACE TEMPERATURE (DEG F)    | 60     |
| BOTTOMHOLE TEMPERATURE (DEG F) | 137    |
| FLOWRATE (MCFPD)               | 0      |
| SURFACE PRESSURE (PSIA)        | 1979   |
| BOTTOMHOLE PRESSURE (PSIA)     | 2475.1 |



# BURLINGTON RESOURCES

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

Re: Nye Federal #1M  
SWNW, Section 8, T-29-N, R-10-W  
30-045-30798  
San Juan County, New Mexico

Gentlemen:

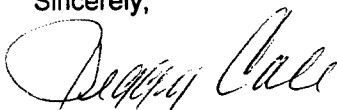
The above referenced well is a Chacra/Mesaverde/Dakota commingle. Attached is a copy of the allocation for the commingling of the subject well completed on May 2, 2002. DHC-2978 was issued for this well.

|      |            |     |
|------|------------|-----|
| Gas: | Chacra     | 15% |
|      | Mesa Verde | 55% |
|      | Dakota     | 30% |

|      |            |     |
|------|------------|-----|
| Oil: | Chacra     | 15% |
|      | Mesa Verde | 55% |
|      | Dakota     | 30% |

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

Nye Federal 1M  
(Mesaverde/Dakota/Chacra) Commingle  
Unit E, 8-T29N-R10W  
San Juan County, New Mexico

Allocation Formula Method:

Separator test from Mesaverde = 1163 MCFD & 0 BO

Separator test from Dakota = 617 MCFD & 0 BO

Separator test from Chacra = 311 MCFD & 0 BO

GAS:

$$\frac{(MV) 1163 \text{ MCFD}}{(MV/ CH/ DK) 2091 \text{ MCFD}} = (MV) \% \text{ Mesaverde 55\%}$$

$$\frac{(DK) 617 \text{ MCFD}}{(MV/ CH/ DK) 2091 \text{ MCFD}} = (DK) \% \text{ Dakota 30\%}$$

$$\frac{(CH) 311 \text{ MCFD}}{(MV/ CH/ DK) 2091 \text{ MCFD}} = (CH) \% \text{ Chacra 15\%}$$

OIL:

$$\frac{(MV) 0 \text{ BO}}{(MV/ CH/ DK) 0 \text{ BO}} = (MV) \% \text{ Mesaverde 55\%}$$

$$\frac{(DK) 0 \text{ BO}}{(MV/ CH/ DK) 0 \text{ BO}} = (DK) \% \text{ Dakota 30\%}$$

$$\frac{(CH) 0 \text{ BO}}{(MV/ CH/ DK) 0 \text{ BO}} = (CH) \% \text{ Chacra 15\%}$$



# United States Department of the Interior

## BUREAU OF LAND MANAGEMENT

Farmington Field Office  
1235 La Plata Highway, Suite A  
Farmington, New Mexico 87401

IN REPLY REFER TO:  
NMSF 077648, et al. (wc)

3162.7 (07100)

May 21, 2002

Ms. Peggy Cole  
Burlington Resources  
PO Box 4289  
Farmington, NM 87499

RE: Accept downhole commingling applications and allocation factors

Dear Ms. Cole:

The following wells were reviewed for downhole commingling. After reviewing the production history for these wells, we concur with the allocation factors established in your application. The effective date is the date that downhole commingling actually occurs. The wells and the approved allocation factors are listed below.

| Well Name       | Lease     | Location           | API#       | Formation Allocation | Formation Allocation | Formation Allocation |
|-----------------|-----------|--------------------|------------|----------------------|----------------------|----------------------|
| Davis #8E       | SF 077648 | Sec 11, T31N, R12W | 3004523759 | NA                   | MV gas 52%           | DK gas 48%           |
|                 |           |                    |            |                      | Oil 0%               | Oil 100%             |
| Davis #9E       | SF 077648 | Sec 12, T31N, R12W | 3004523982 | PC gas 5%            | MV gas 72%           | DK gas 23%           |
|                 |           |                    |            | Oil 0%               | Oil 0%               | Oil 100%             |
| Nye SRC #13     | SF 078198 | Sec 12, T30N, R11W | 3004509757 | NA                   | MV gas 65%           | DK gas 35%           |
|                 |           |                    |            |                      | Oil 0%               | Oil 100%             |
| Nye Federal #1M | SF 078197 | Sec 8, T29N, R10W  | 3004530798 | CH gas 15%           | MV gas 55%           | DK gas 30%           |
|                 |           |                    |            | Oil 15%              | Oil 55%              | Oil 30%              |

If you have any questions, please contact Adrienne Garcia at (505) 599-6358 or the undersigned with this office at (505) 599-6367.

Sincerely,

/s/ Jim Lovato

Jim Lovato  
Team Lead, Petroleum Management Team

cc: NMOCD, Santa Fe, NM  
NMOCD, Aztec, NM