

29769

|                 |                 |             |           |          |
|-----------------|-----------------|-------------|-----------|----------|
| DATE IN 7/17/00 | SUSPENSE 8/7/00 | ENGINEER DC | LOGGED KN | TYPE DHC |
|-----------------|-----------------|-------------|-----------|----------|

ABOVE THIS LINE FOR DIVISION USE ONLY

## NEW MEXICO OIL CONSERVATION DIVISION

- Engineering Bureau -

## ADMINISTRATIVE APPLICATION COVERSHEET

THIS COVERSHEET IS MANDATORY FOR ALL ADMINISTRATIVE APPLICATIONS FOR EXCEPTIONS TO DIVISION RULES AND REGULATIONS

## Application Acronyms:

[NSP-Non-Standard Proration Unit] [NSL-Non-Standard Location]  
 [DD-Directional Drilling] [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 - Directional Drilling  
 NSL NSP DD SD

Check One Only for [B] and [C]

[B] Commingling - Storage - Measurement

X DHC CTB PLC PC OLS OLM

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

WFX PMX SWD IPI EOR PPR

## [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] X 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] INFORMATION / DATA SUBMITTED IS COMPLETE - Statement of Understanding

I hereby certify that I, or personnel under my supervision, have read and complied with all applicable Rules and Regulations of the Oil Conservation Division. Further, I assert that the attached application for administrative approval is accurate and complete to the best of my knowledge and where applicable, verify that all interest (WI, RI, ORRI) is common. I understand that any omission of data, information or notification is cause to have the application package returned with no action taken.

Note: Statement must be completed by an individual with supervisory capacity.

Peggy Cole

Print or Type Name

Signature

Regulatory/Compliance Administrator

Title

Date

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  
☒ Yes ☐ No

Burlington Resources Oil & Gas Company PO Box 4289, Farmington, NM 87499

Operator Address  
LIVELY 18 M 01-26N-08W San Juan

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

OGRID No. 14538 Property Code 18182 API No. 30-045-21326 Lease Type: ☒ 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                                     | 6472'-6652'  |
| 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)    | Current: 571 psi (see attached)<br>Original: 1210 psi (see attached) | Current: 427 psi (see attached)<br>Original: 1235 psi (see attached) | Current: 782 psi (see attached)<br>Original: 2938 psi (see attached) |
| Oil Gravity or Gas BTU<br>(Degree API or Gas BTU)   | 1182   | 1304   | 1181   |
| Producing, Shut-In or New Zone  | New Zone   | New Zone   | Producing  |
| 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>Rates:  | Date:<br>Rates:  | Date: April, 2000<br>Rates: 1,012 per month                          |
| 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>% %<br>will be supplied upon completion                   | Oil Gas<br>% %<br>will be supplied upon completion                   | Oil Gas<br>% %<br>will be supplied upon completion                   |

ADDITIONAL DATA

Are all working, royalty and overriding royalty interests identical in all commingled zones? Yes ☒ 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 ☒ No ☐

Will commingling decrease the value of production? Yes ☐ No ☒  
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 ☒ 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 Wayne Fletcher TITLE Sr. Prod. Eng. DATE 7/14/00  
nco  
TYPE OR PRINT NAME Wayne Fletcher TELEPHONE NO. (505) 326-9700

☐ AMENDED REPORT

# WELL LOCATION AND ACREAGE DEDICATION PLAT

|                              |  |   |  |   |                        |
|------------------------------|--|---|--|---|------------------------|
| 1 API Number<br>30-045-21326 |  | 2 Pool Code<br>71599<br>82329/72319/                      |  | 3 Pool Name<br>Basin Dakota<br>Otero Chacra/Blanco Mesaverde/ |                        |
| 4 Property Code<br>18182     |  | 5 Property Name<br>Lively                                 |  |   | 6 Well Number<br>18    |
| 7 OGRID No.<br>14538         |  | 8 Operator Name<br>Burlington Resources Oil & Gas Company |  |   | 9 Elevation<br>6140'GR |

### <sup>10</sup> Surface Location

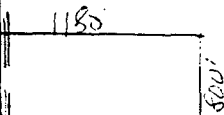
| UL or lot no. | Section | Township | Range | Lot Idn | Feet from the | North/South line | Feet from the | East/West line | County |
|---------------|---------|----------|-------|---------|---------------|------------------|---------------|----------------|--------|
| M             | 1       | 26N      | 8W    |         | 800'          | South            | 1180          | West           | SJ     |

<sup>11</sup> Bottom Hole Location If Different From Surface

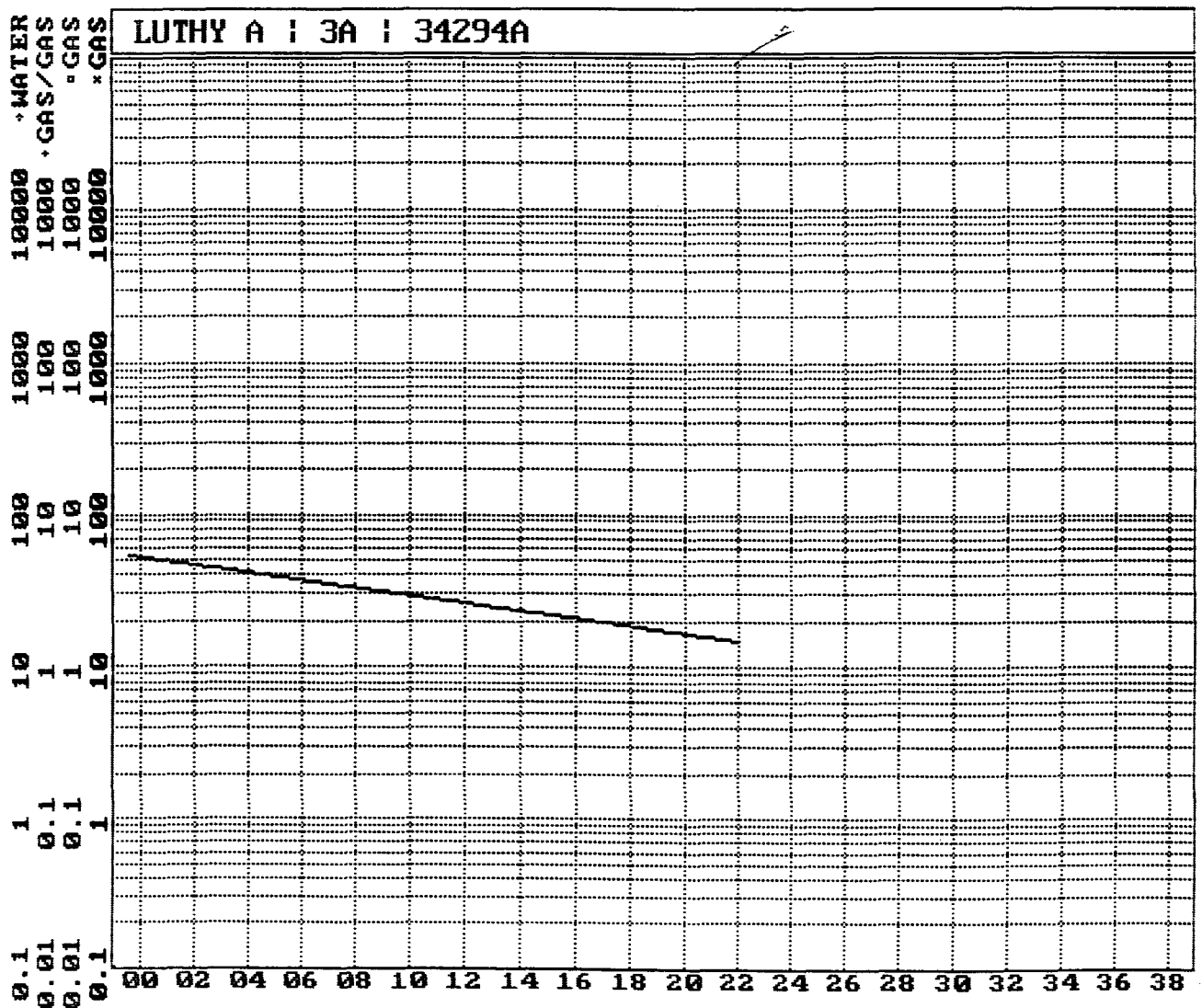
| UL or lot no. | Section | Township | Range | Lot Idn | Feet from the | North/South line | Feet from the | East/West line | County |
|---------------|---------|----------|-------|---------|---------------|------------------|---------------|----------------|--------|
|---------------|---------|----------|-------|---------|---------------|------------------|---------------|----------------|--------|

|  |                               |                                  |                         |
|--|-------------------------------|----------------------------------|-------------------------|
| <sup>12</sup> Dedicated Acres<br>Cha-160<br>MV/DK-W/321.50 | <sup>13</sup> Joint or Infill | <sup>14</sup> Consolidation Code | <sup>15</sup> Order No. |
|--|-------------------------------|----------------------------------|-------------------------|

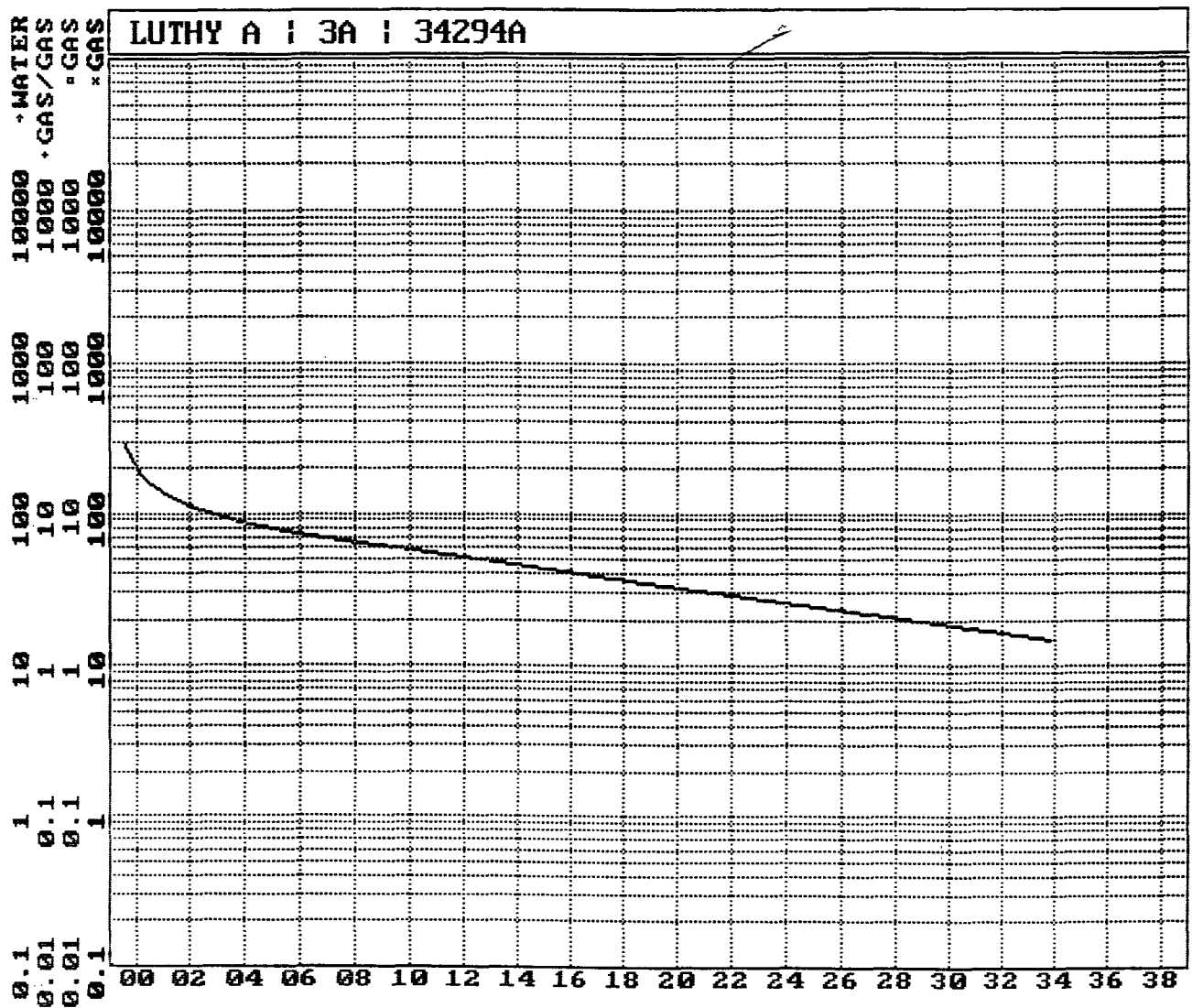
**NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED  
OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION**

|  |  |   |  |  |
|--|--|---|--|--|
| <b>16</b>  |  |   |  | <b>17 OPERATOR CERTIFICATION</b><br><i>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief</i>  |
|  |  | Original plat from<br>E.V.Echohawk 8-9-73 |  | Signature _____<br><u>Peggy Cole</u><br>Printed Name _____<br><u>Regulatory Administrator</u><br>Title _____<br>Date _____   |
|  |  |   |  | <b>18 SURVEYOR CERTIFICATION</b><br><i>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.</i> |
|  <p>1185'</p> <p>800'</p> |  |   |  | Date of Survey _____<br>Signature and Seal of Professional Surveyer: _____<br>Certificate Number _____   |

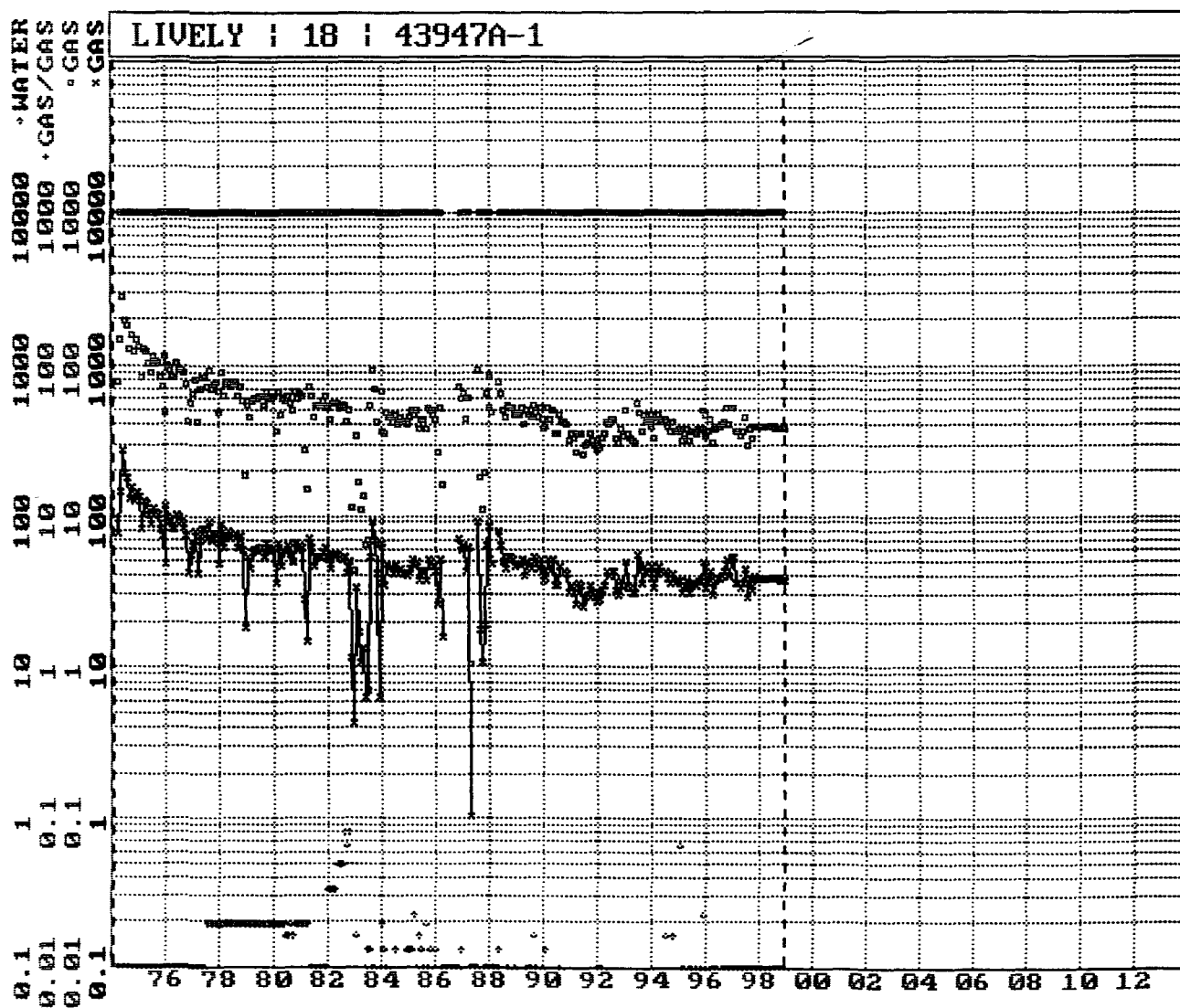
Lively #18  
Expected Production  
Chacra Formation



Lively #18  
Expected Production  
Mesaverde Formation



Lively #18  
Actual Production  
Dakota Formation



**Lively #18**

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                    | 0.716  | GAS GRAVITY                    | 0.769  |
| COND. OR MISC. (C/M)           | C      | COND. OR MISC. (C/M)           | C      |
| %N2                            | 0.82   | %N2                            | 0.6    |
| %CO2                           | 0.37   | %CO2                           | 0.45   |
| %H2S                           | 0      | %H2S                           | 0      |
| DIAMETER (IN)                  | 2.375  | DIAMETER (IN)                  | 2.375  |
| DEPTH (FT)                     | 4310   | DEPTH (FT)                     | 4888   |
| 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)        | 509    | SURFACE PRESSURE (PSIA)        | 372    |
| BOTTOMHOLE PRESSURE (PSIA)     | 570.5  | BOTTOMHOLE PRESSURE (PSIA)     | 426.5  |
| <u><b>CH-Original</b></u>      |        | <u><b>MV-Original</b></u>      |        |
| GAS GRAVITY                    | 0.716  | GAS GRAVITY                    | 0.769  |
| COND. OR MISC. (C/M)           | C      | COND. OR MISC. (C/M)           | C      |
| %N2                            | 0.82   | %N2                            | 0.6    |
| %CO2                           | 0.37   | %CO2                           | 0.45   |
| %H2S                           | 0      | %H2S                           | 0      |
| DIAMETER (IN)                  | 2.375  | DIAMETER (IN)                  | 2.375  |
| DEPTH (FT)                     | 4310   | DEPTH (FT)                     | 4888   |
| 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)        | 1066   | SURFACE PRESSURE (PSIA)        | 1053   |
| BOTTOMHOLE PRESSURE (PSIA)     | 1209.9 | BOTTOMHOLE PRESSURE (PSIA)     | 1234.7 |

**Lively #18**  
**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                    | <u>0.699</u>   |
| COND. OR MISC. (C/M)           | <u>C</u>   |
| %N2                            | <u>0.63</u>  |
| %CO2                           | <u>1.04</u>  |
| %H2S                           | <u>0</u>   |
| DIAMETER (IN)                  | <u>1.25</u>  |
| DEPTH (FT)                     | <u>6575</u>  |
| SURFACE TEMPERATURE (DEG F)    | <u>60</u>  |
| BOTTOMHOLE TEMPERATURE (DEG F) | <u>137</u>   |
| FLOWRATE (MCFPD)               | <u>0</u>   |
| SURFACE PRESSURE (PSIA)        | <u>657</u>   |
| BOTTOMHOLE PRESSURE (PSIA)     | <div style="border: 1px solid black; display: inline-block; padding: 2px 10px;">782.1</div>  |
| <b><u>DK-Original</u></b>      |  |
| GAS GRAVITY                    | <u>0.699</u>   |
| COND. OR MISC. (C/M)           | <u>C</u>   |
| %N2                            | <u>0.63</u>  |
| %CO2                           | <u>1.04</u>  |
| %H2S                           | <u>0</u>   |
| DIAMETER (IN)                  | <u>1.25</u>  |
| DEPTH (FT)                     | <u>6575</u>  |
| SURFACE TEMPERATURE (DEG F)    | <u>60</u>  |
| BOTTOMHOLE TEMPERATURE (DEG F) | <u>137</u>   |
| FLOWRATE (MCFPD)               | <u>0</u>   |
| SURFACE PRESSURE (PSIA)        | <u>2398</u>  |
| BOTTOMHOLE PRESSURE (PSIA)     | <div style="border: 1px solid black; display: inline-block; padding: 2px 10px;">2938.0</div> |



SAN JUAN 28-7 UNIT #240 - - 43931A

Print Time: Tue Jun 13 09:00:05 2000

Property ID: 2111

---

**LIVELY #18 - - CHACRA OFFSET**

| <u>Date</u> | <u>MCF</u> | <u>PSI</u> |
|-------------|------------|------------|
| 8/5/75      | 0          | 1,066      |
| 11/25/75    | 7,441      | 748        |
| 5/11/76     | 34,986     | 613        |
| 6/23/77     | 77,537     | 433        |
| 8/21/79     | 141,696    | 404        |

\* Page No.: 1  
 Print Time: Tue Feb 09 10:27:16 1999  
 Property ID: 3252  
 Property Name: LUTHY A | 4 | 54425A-1  
 Table Name: K:\ARIES\RR99PDP\TEST.DBF

--DATE-- ---CUM GAS-- M SIWHP  
 :::::McF:::::Psi:::::

|          |        |        |
|----------|--------|--------|
| 01/20/86 | 0      | 1053.0 |
| 05/17/86 | 11527  | 834.0  |
| 12/15/87 | 130040 | 604.0  |
| 03/15/88 | 147939 | 484.0  |
| 07/12/89 | 202583 | 653.0  |
| 09/29/90 | 247501 | 510.0  |
| 06/21/91 | 284878 | 433.0  |
| 12/16/91 | 308334 | 421.0  |
| 07/06/93 | 379995 | 372.0  |

Lively #18

Mesaverde Offset

Page No.: 1  
Print Time: Tue Feb 09 11:04:33 1999  
Property ID: 1130  
Property Name: LIVELY | 18 | 43947A-1  
Table Name: K:\ARIES\RR99PDP\TEST.DBF

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

|          |        |        |
|----------|--------|--------|
| 02/09/74 | 0      | 2398.0 |
| 05/25/74 | 6823   | 1712.0 |
| 05/22/75 | 60672  | 1032.0 |
| 04/22/76 | 91141  | 932.0  |
| 05/11/77 | 120819 | 932.0  |
| 05/01/79 | 169599 | 857.0  |
| 11/09/82 | 238516 | 773.0  |
| 10/17/83 | 249154 | 833.0  |
| 08/09/85 | 277765 | 813.0  |
| 08/31/88 | 315998 | 709.0  |
| 05/07/90 | 346556 | 657.0  |

Lively #18

Existing Dakota



|                  |                  |             |           |          |
|------------------|------------------|-------------|-----------|----------|
| DATE IN 12/23/99 | SUSPENSE 1/12/00 | ENGINEER DC | LOGGED MW | TYPE DHC |
|------------------|------------------|-------------|-----------|----------|

ABOVE THIS LINE FOR DIVISION USE ONLY

**NEW MEXICO OIL CONSERVATION DIVISION**  
- Engineering Bureau -

**ADMINISTRATIVE APPLICATION COVERSHEET**

THIS COVERSHEET IS MANDATORY FOR ALL ADMINISTRATIVE APPLICATIONS FOR EXCEPTIONS TO DIVISION RULES AND REGULATIONS

**Application Acronyms:**

[NSP-Non-Standard Proration Unit] [NSL-Non-Standard Location]  
[DD-Directional Drilling] [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]

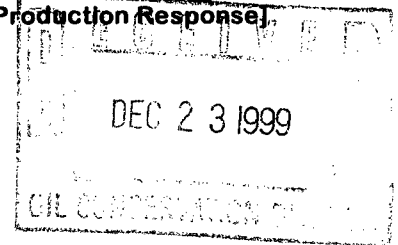
**[1] TYPE OF APPLICATION - Check Those Which Apply for [A]**

[A] Location - Spacing Unit - Directional Drilling  
NSL NSP DD SD

Check One Only for [B] and [C]

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

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



**[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] X 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] INFORMATION / DATA SUBMITTED IS COMPLETE - Statement of Understanding**

I hereby certify that I, or personnel under my supervision, have read and complied with all applicable Rules and Regulations of the Oil Conservation Division. Further, I assert that the attached application for administrative approval is accurate and complete to the best of my knowledge and where applicable, verify that all interest (WI, RI, ORRI) is common. I understand that any omission of data, information or notification is cause to have the application package returned with no action taken.

Note: Statement must be completed by an individual with supervisory capacity.

Peggy Cole

Print or Type Name

Signature

Regulatory/Compliance Administrator

Title

Date