



NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

GARY E. JOHNSON
Governor
Jennifer A. Salisbury
Cabinet Secretary

Lori Wrotenbery
Director
Oil Conservation Division

ADMINISTRATIVE ORDER DHC-2795

Burlington Resources Oil & Gas Company
P.O. Box 4289
Farmington, New Mexico 87499

Attention: Ms. Peggy Cole



*Lively No. 18E
API No. 30-045-24581
Unit D, Section 1, Township 26 North, Range 8 West, NMPM,
San Juan County, New Mexico.
Blanco-Mesaverde (Prorated Gas – 72319),
Basin-Dakota (Prorated Gas – 71599) and
Otero-Chacra (Gas – 82329) Pools*

Dear Ms. Cole:

Reference is made to your recent application for an exception to Rule 303.A. of the Division Rules and Regulations to permit the above described well to commingle production from the subject pools in the wellbore.

It appearing that the subject well qualifies for approval for such exception pursuant to the provisions of Rule 303.C., and that reservoir damage or waste will not result from such downhole commingling, and correlative rights will not be violated thereby, you are hereby authorized to commingle the production as described above and any Division Order which authorized the dual completion and required separation of the zones is hereby placed in abeyance.

The maximum amount of gas which may be produced daily from the well shall be determined by Division Rules and Regulations or by the gas allowable for each respective prorated pool as printed in the Division's San Juan Basin Gas Proration Schedule.

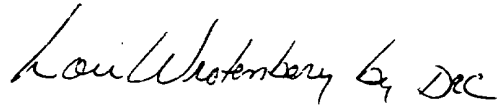
The applicant shall consult with the supervisor of the Aztec District Office of the Division upon completion and testing of the well in order to determine a fixed allocation of production from each of the commingled zones. Upon approval by the Division's Aztec District Office, the applicant shall submit the allocation formula to the Santa Fe Office of the Division.

REMARKS: The operator shall notify the Aztec District Office of the Division upon implementation of the commingling process.

Pursuant to Rule 303.C.(2), the commingling authority granted herein may be rescinded by the Division Director if conservation is not being best served by such commingling.

Approved at Santa Fe, New Mexico on this 8th day of August, 2000.

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION

A handwritten signature in cursive script, appearing to read "Lori Wrotenbery 6, Dec".

LORI WROTENBERY
Director

S E A L

LW/DRC

cc: Oil Conservation Division - Aztec /
Bureau of Land Management-Farmington

District I
1625 N. French Drive, Hobbs, NM 88240

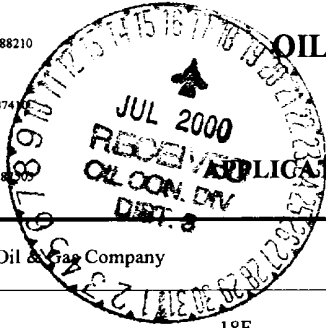
District II
811 South First Street, Artesia, NM 88210

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 ☐ No

APPLICATION FOR DOWNHOLE COMMINGLING

Burlington Resources Oil & Gas Company

PO Box 4289, Farmington, NM 87499

Operator
LIVELY

Address
18E
D 01-26N-08W

San Juan

Lease

Well No.

Unit Letter-Section-Township-Range

County

OGRID No. 14538 Property Code 18182 API No. 30-045-24581 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 (Perforated or Open-Hole Interval)	Will be supplied upon completion	Will be supplied upon completion	6654'-6768'
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)	Current: 571 psi (see attached) Original: 1210 psi (see attached)	Current: 427 psi (see attached) Original: 1235 psi (see attached)	Current: 799 psi (see attached) Original: 2614 psi (see attached)
Oil Gravity or Gas BTU (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. (Note: For new zones with no production history, applicant shall be required to attach production estimates and supporting data.)	Date: Rates:	Date: Rates:	Date: April, 2000 Rates: 918 per month
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 ☐
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

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

¹ API Number 30-045-24581		² Pool Code 71599 82329/72319/		³ Pool Name Basin Dakota Otero Chacra/Blanco Mesaverde/	
⁴ Property Code 18182		⁵ Property Name Lively			⁶ Well Number 18E
⁷ OGRID No. 14538		⁸ Operator Name Burlington Resources Oil & Gas Company			⁹ Elevation 6220' GR

¹⁰ Surface Location

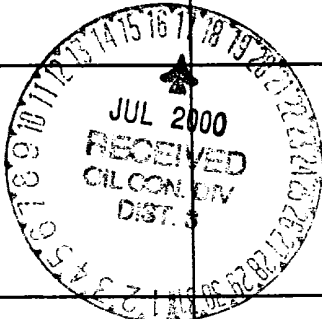
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
D	1	26N	8W		410'	North	750'	West	SJ

¹¹ Bottom Hole Location If Different From Surface

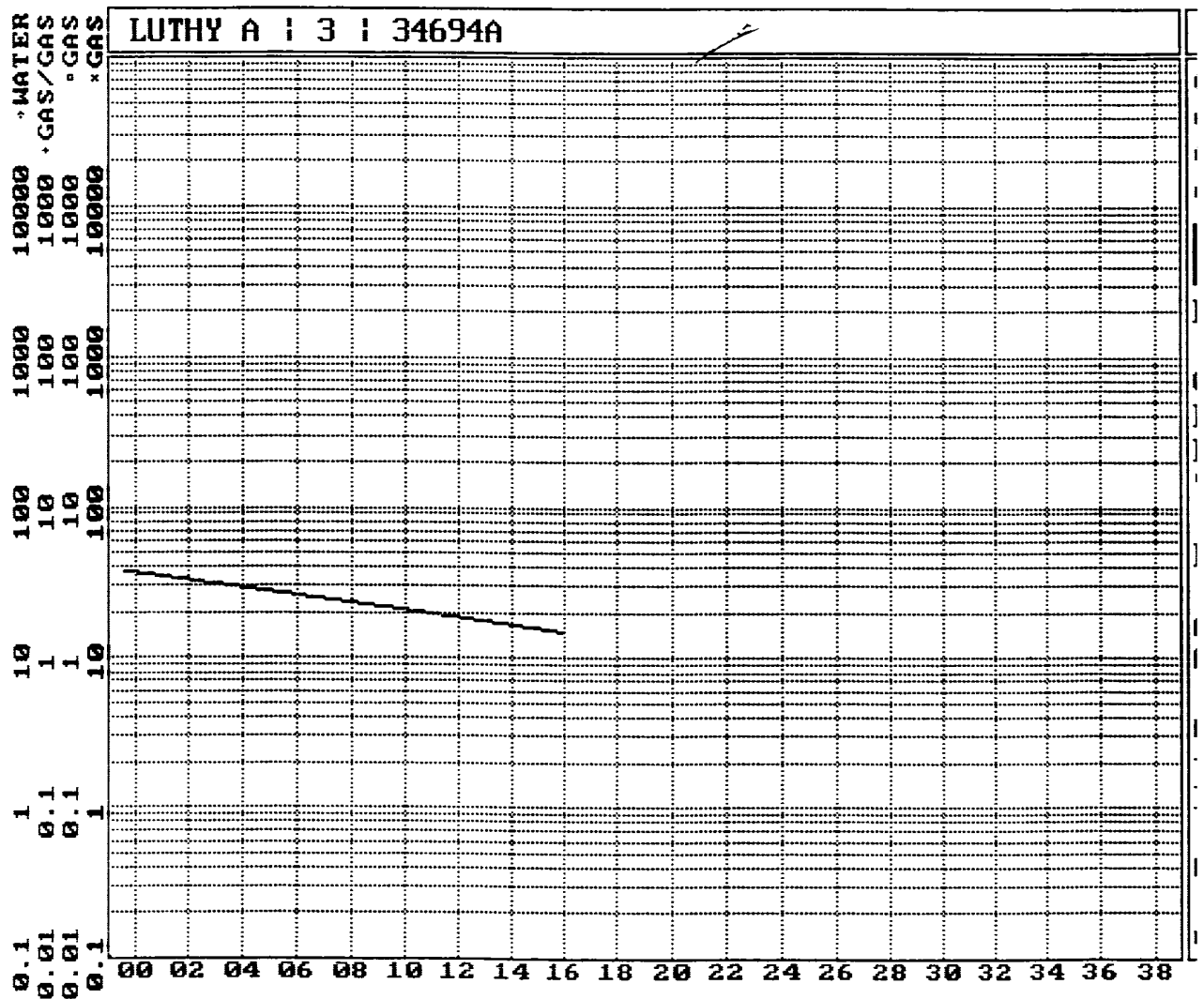
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County

¹² Dedicated Acres Cha-160 MV/DK-W/321.50	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.
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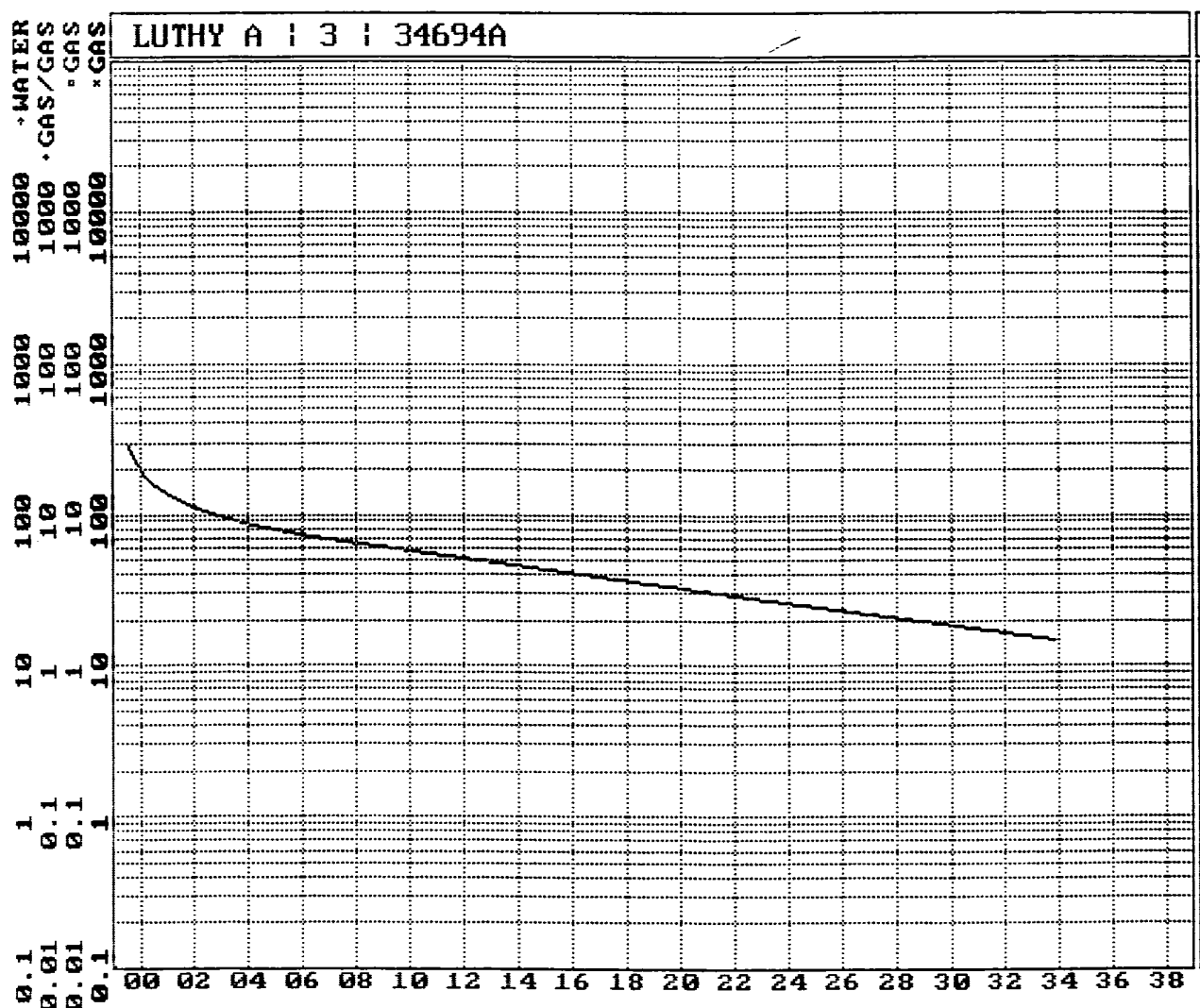
NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED
OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

<div style="position: relative; height: 400px;"> <div style="position: absolute; top: 10px; left: 10px; border: 1px solid black; padding: 2px;">16</div> <div style="position: absolute; top: 10px; right: 10px; transform: rotate(90deg); border: 1px solid black; padding: 2px;">410</div> <div style="position: absolute; top: 50px; left: 50px; font-size: 2em;">750</div> <div style="position: absolute; top: 50%; left: 50%; transform: translate(-50%, -50%);"> <p>Original plat from E.L. Risenhoover 3-28-80</p> </div> <div style="position: absolute; top: 60%; left: 40%;">  </div> </div>	<p>¹⁷ OPERATOR CERTIFICATION</p> <p><i>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief</i></p> <p>Signature <u>Peggy Cole</u> Printed Name Regulatory Administrator Title Date</p>
	<p>¹⁸ SURVEYOR CERTIFICATION</p> <p><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> <p>Date of Survey Signature and Seal of Professional Surveyer:</p>
	<p>Certificate Number</p>

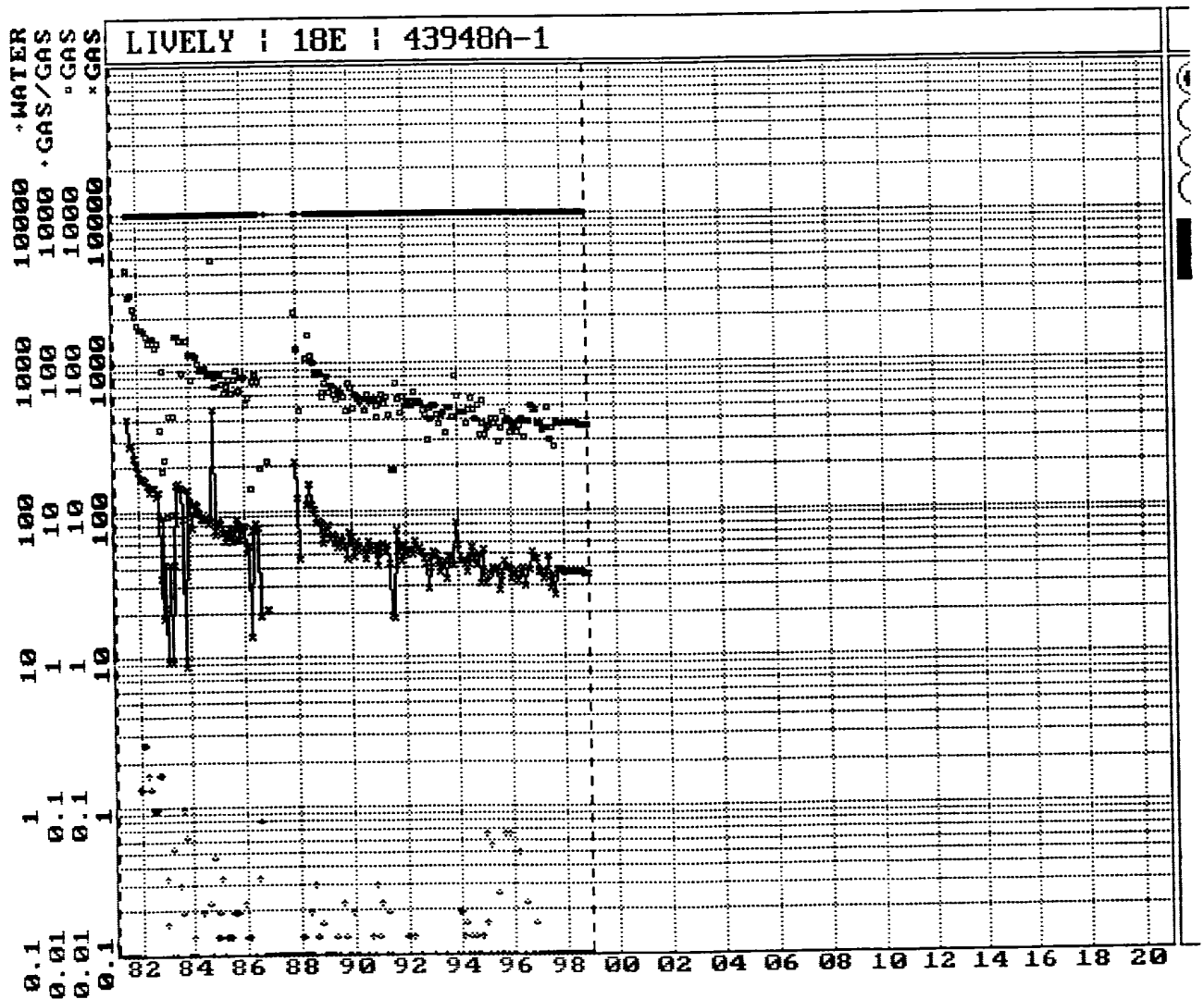
Lively #18E
Expected Production
Chacra Formation



Lively #18E
 Expected Production
 Mesaverde Formation



Lively #18E
Actual Production
Dakota Formation



Lively #18E
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	0.716	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>CH-Original</u>		<u>MV-Original</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 #18E
 Bottom Hole Pressures
 Flowing and Static BHP
 Cullender and Smith Method
 Version 1.0 3/13/94

Dakota	
<u>DK-Current</u>	
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>671</u>
BOTTOMHOLE PRESSURE (PSIA)	<div style="border: 1px solid black; display: inline-block; padding: 2px 10px;">799.1</div>
<u>DK-Original</u>	
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>2130</u>
BOTTOMHOLE PRESSURE (PSIA)	<div style="border: 1px solid black; display: inline-block; padding: 2px 10px;">2614.3</div>

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

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

Property ID: 2111

LIVELY #18E - - 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 #18E

Mesaverde Offset

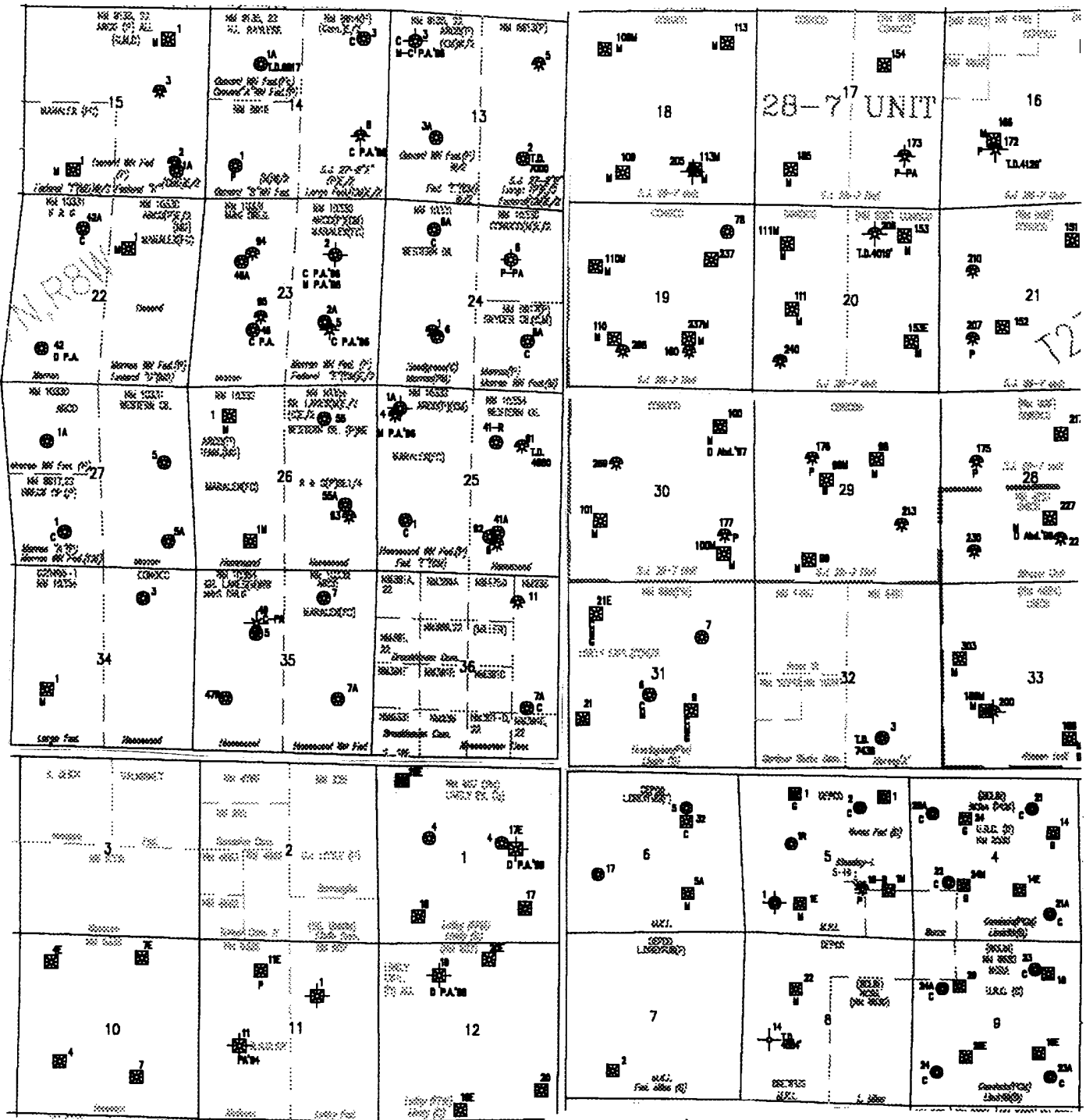
Page No.: 1
Print Time: Tue Feb 09 11:04:27 1999
Property ID: 1131
Property Name: LIVELY | 18E | 43948A-1
Table Name: K:\ARIES\RR99PDP\TEST.DRF

--DATE--	---	CUM_GAS--	M	SIWHP
.....	Mcf.....	Psi.....

03/14/81		0	2130.0
06/01/82		68286	884.0
11/09/82		90289	810.0
10/17/83		113834	859.0
08/09/85		182072	711.0
06/01/88		225577	903.0
05/07/90		273369	671.0

Lively #18E

Dakota Offset



Lively #18E

Dakota / Mesaverde / Chacra

26N - 8W - 01D

DATE IN 12/23/99	SUSPENSE 1/12/00	ENGINEER DC	LOGGED KW	TYPE DHC
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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,

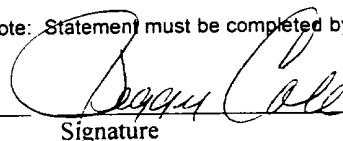
[F] Waivers are Attached

[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



Regulatory/Compliance Administrator

Print or Type Name

Signature

Title

Date