

DISTRICT I

P.O. Box 1980, Hobbs, NM 88241-1980

DISTRICT II

811 South First St., Artesia, NM 88210-2835

DISTRICT III

1000 Rio Brazos Rd, Aztec, NM 87410-1693

State of New Mexico
Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION

2040 S. Pacheco
Santa Fe, New Mexico 87505-6429Form C-107-A
New 3-12-96

APPROVAL PROCESS :

☒ Administrative ☐ Hearing

EXISTING WELLBORE

☒ YES ☐ NO

APPLICATION FOR DOWNHOLE COMMINGLING

Burlington Resources Oil & Gas Company

PO Box 42819, Farmington, NM 87499

Operator

Address

Lively

21E

D 31-27N-07W

Rio Arriba

Lease

Well No.

Unit Ltr. - Sec - Twp - Rge

County

Spacing Unit Lease Types: (check 1 or more)

OGRID NO. 14538 Property Code API NO. 30-039-22670 Federal State (and/or) Fee

The following facts are submitted in support of downhole commingling:	Upper Zone	Intermediate Zone	Lower Zone
1. Pool Name and Pool Code	Otero Chacra - 82329	Blanco Mesaverde - 72319	Basin Dakota - 71599
2. Top and Bottom of Pay Section (Perforations)	will be supplied upon completion	will be supplied upon completion	6568-6667
3. Type of production (Oil or Gas)	gas	gas	gas
4. Method of Production (Flowing or Artificial Lift)	flowing	flowing	flowing
5. Bottomhole Pressure Oil Zones - Artificial Lift: Estimated Current Gas & Oil - Flowing: Measured Current All Gas Zones: Estimated or Measured Original	(Current) a. 499 psi (see attachment) (Original) b. 711 psi (see attachment)	a. 612 psi (see attachment) b. 1300 psi (see attachment)	a. 521 psi (see attachment) b. 2361 psi (see attachment)
6. Oil Gravity (API) or Gas BTU Content	BTU 1108	BTU 1324	BTU 1300
7. Producing or Shut-In?	shut in	shut in	shut in
Production Marginal? (yes or no)	no	no	no
* If Shut-In 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:	Date: n/a Rates:	Date: n/a Rates:
* If Producing, give data and oil/gas/water water of recent test (within 60 days)	Date: n/a Rates:	Date: n/a Rates:	Date: n/a Rates:
8. Fixed Percentage Allocation Formula -% for each zone (total of %'s to equal 100%)	Oil: % Gas: % will be supplied upon completion	Oil: % Gas: % will be supplied upon completion	Oil: % Gas: % will be supplied upon completion

9. If allocation formula is based upon something other than current or past production, or is based upon some other method, submit attachments with supporting data and/or explaining method and providing rate projections or other required data.
10. Are all working, overriding, and royalty interests identical in all commingled zones? ☒ Yes ☐ No
If not, have all working, overriding, and royalty interests been notified by certified mail? ☒ Yes ☐ No
Have all offset operators been given written notice of the proposed downhole commingling? ☒ Yes ☐ No
11. Will cross-flow occur? ☒ Yes ☐ No If yes, are fluids compatible, will the formations not be damaged, will any cross-flowed production be recovered, and will the allocation formula be reliable. ☒ Yes ☐ No (If No, attach explanation)
12. Are all produced fluids from all commingled zones compatible with each other? ☒ Yes ☐ No
13. Will the value of production be decreased by commingling? ☐ Yes ☒ No (If Yes, attach explanation)
14. If this well is on, or communitized with, state or federal lands, either the Commissioner of Public Lands or the United States Bureau of Land Management has been notified in writing of this application. ☒ Yes ☐ No
15. NMOC Reference Cases for Rule 303(D) Exceptions: ORDER NO(S). Reference Order
16. 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 all offset operators.
* Notification list of working, overriding, and royalty interests for uncommon interest cases.
* Any additional statements, data, or documents required to support commingling.

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

SIGNATURE Wayne Fletcher TITLE: Production Engineer DATE: 07/27/98TYPE OR PRINT NAME Wayne Fletcher

TELEPHONE NO. (505) 326-9871

District I
PO Box 1930, Hobbs, NM 88241-1930

District II
PO Drawer 00, Artesia, NM 88211-0719

District III
1000 Rio Brazos Rd., Aztec, NM 87410

District IV
PO Box 2089, Santa Fe, NM 87504-2089

State of New Mexico
Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION
PO Box 2088
Santa Fe, NM 87504-2088

Revised February
Instructions
Submit to Appropriate District
State Lease -
Fee Lease -

☐ AMENDED F

WELL LOCATION AND ACREAGE DEDICATION PLAT

'API Number 30-039-22670	'Pool Code 82329 72319/71599	'Pool Name Otero Chacra Blanco Mesaverde/Basin Dakota
'Property Code	'Property Name LIVELY	'Well No. 21E
'OGRID No. 14538	'Operator Name BURLINGTON RESOURCES OIL & GAS COMPANY	'Elevat: 5990

¹⁰ Surface Location

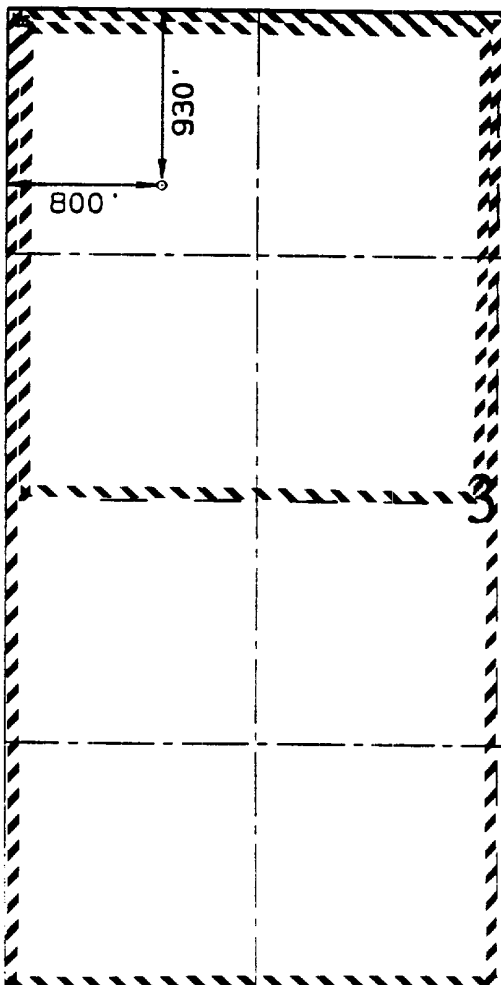
UL or lot no. D	Section 31	Township 27N	Range 7W	Lot 1st 930	Feet from the NORTH	North/South line 800	Feet from the WEST	East/West line AF
--------------------	---------------	-----------------	-------------	----------------	------------------------	-------------------------	-----------------------	----------------------

¹¹ Bottom Hole Location If Different From Surface

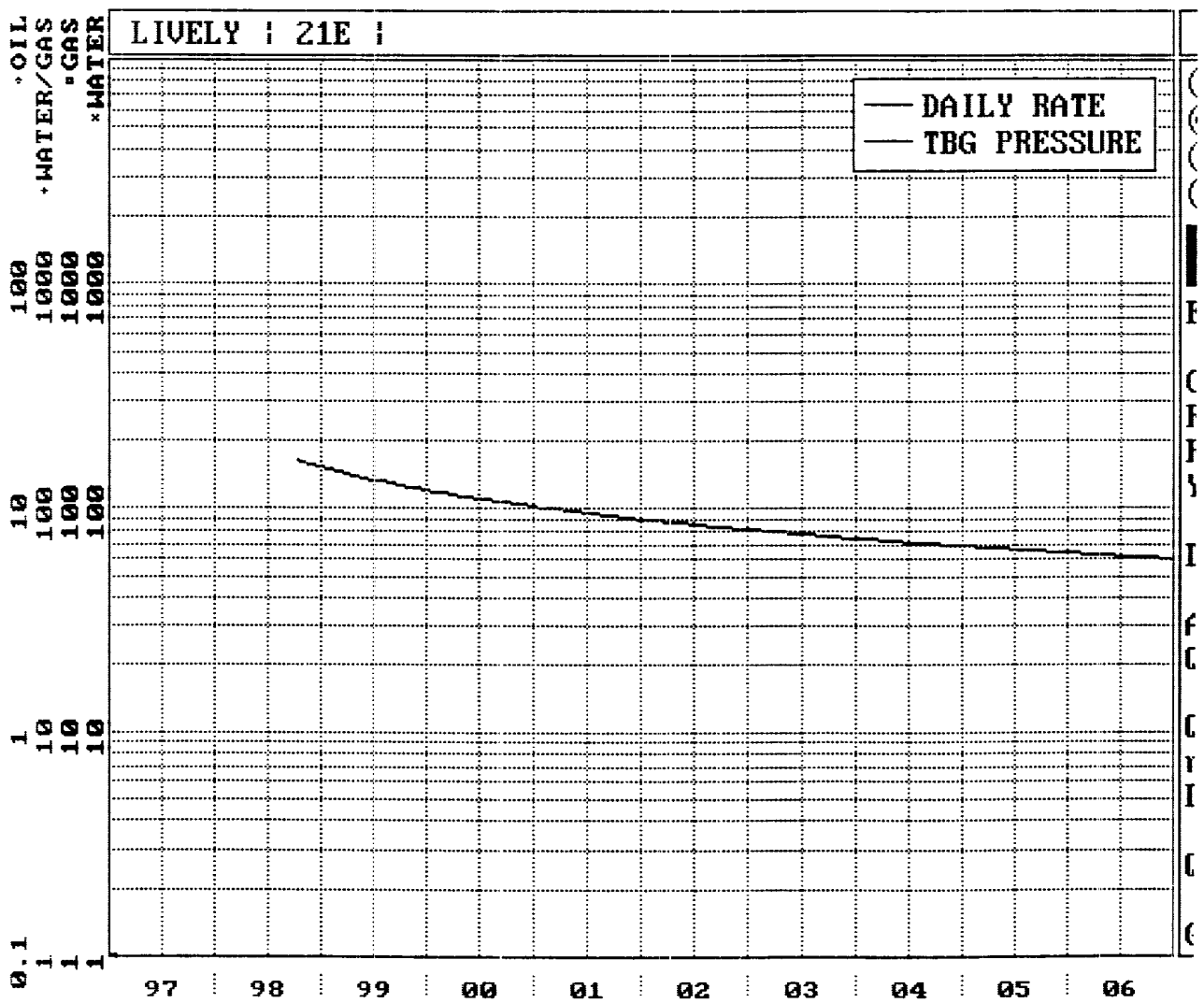
UL or lot no.	Section	Township	Range	Lot 1st	Feet from the	North/South line	Feet from the	East/West line
---------------	---------	----------	-------	---------	---------------	------------------	---------------	----------------

¹² Dedicated Acres Cha-160.6 MV-W/321.60, DK-W/321.60	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.
--	-------------------------------	----------------------------------	-------------------------

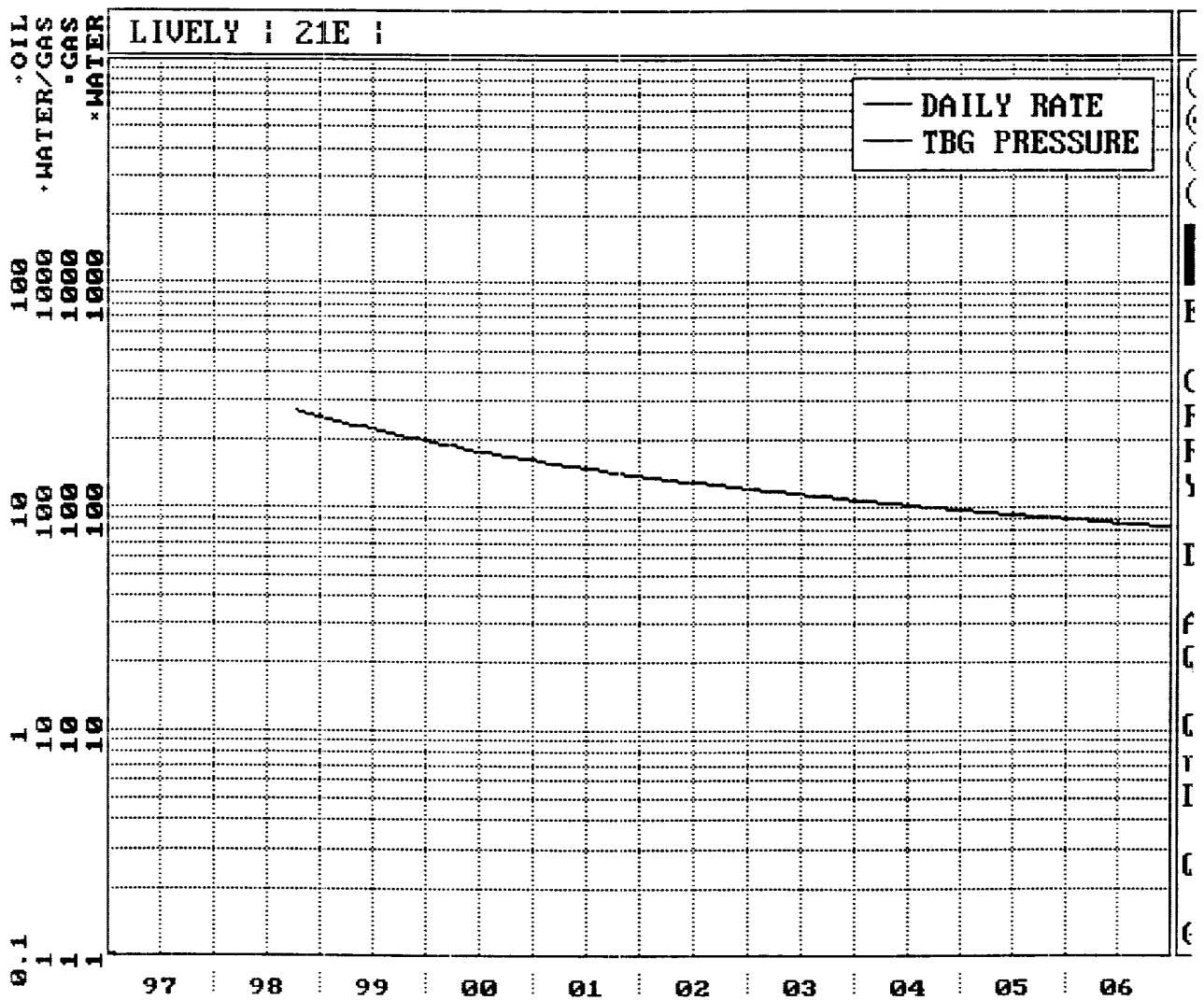
NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

	Not resurveyed, prepared from a plat dated 4-17-80 by Edgar L. Risenhoover.	¹⁷ OPERATOR CERTIFIC I hereby certify that the information contained herein is true and complete to the best of my knowledge.  Signature Peggy Bradfield Printed Name Regulatory Adminis Title 5-20-98 Date
	RECEIVED JUL 30 1998 OIL CON. DIV. DIST. 3	¹⁸ SURVEYOR CERTIFIC I hereby certify that the well location shown was plotted from field notes of actual survey or under my supervision and that the same is correct to the best of my belief. MAY 19 1998 Date of Survey NEALE C. EDWARDS NEW MEXICO 6857 REGISTERED PROFESSIONAL SURVEYOR Certificate Number

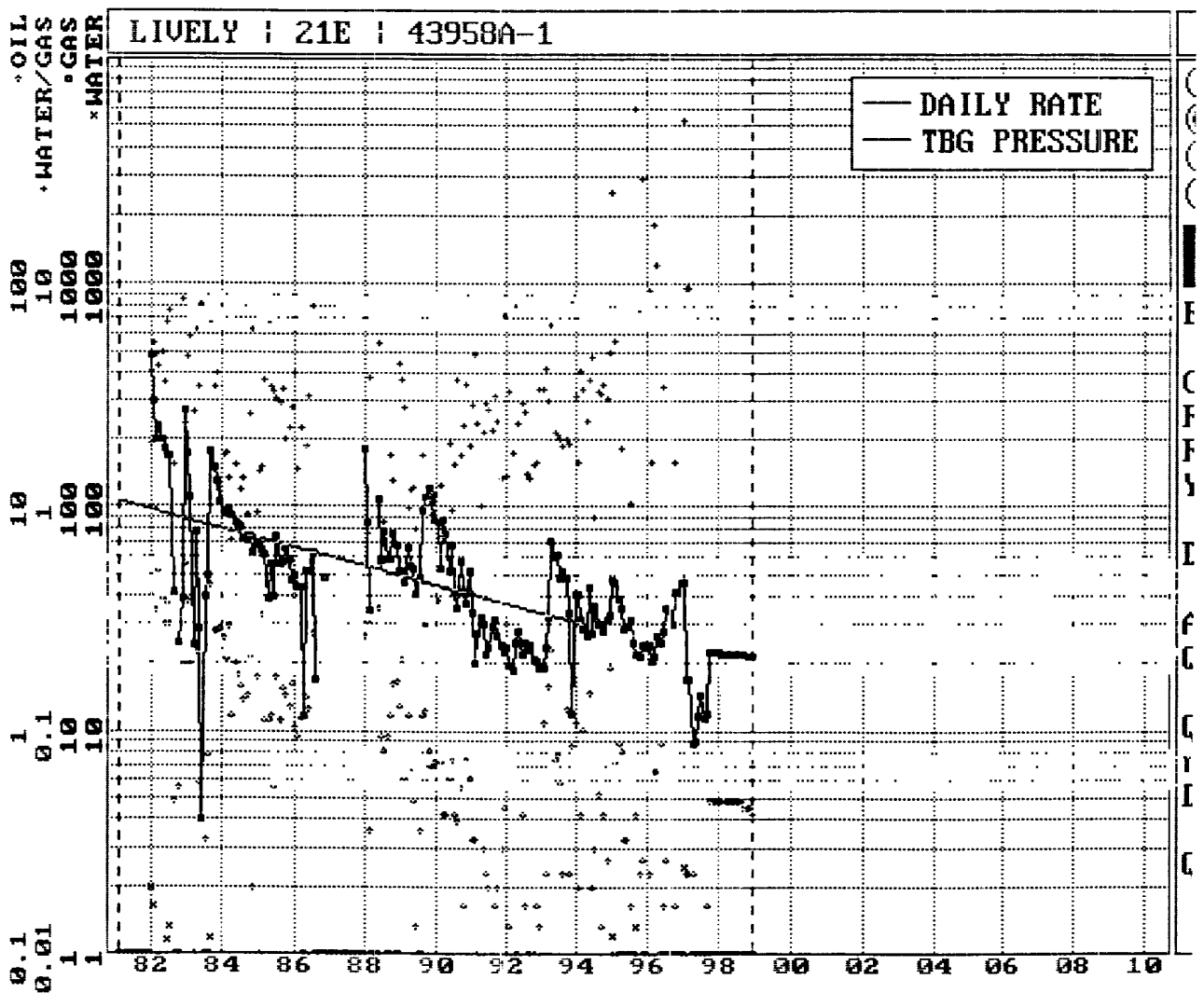
Lively #21E
Expected Production Curve
Chacra



Lively #21E
Expected Production Curve
Blanco Mesaverde



Lively #21E
Actual Production Curve
Basin Dakota



Page No.: 1

Print Time: Thu May 07 09:43:57 1998

Property ID: 2227

Property Name: SAN JUAN 28-7 UNIT	78	49840A-1
-----------------------------------	----	----------

Table Name: Q:\PUBLIC\GENTITY\GDPNOS\TEST.DBF

--DATE-- M SIWHP

..... Psi.....

02/14/57 1084.0 -original

02/26/57 1083.0

05/14/58 826.0

11/22/58 811.0

08/29/59 656.0

08/29/60 638.0

01/21/62 603.0

04/03/62 595.0

04/22/63 582.0

07/21/64 589.0

01/29/65 579.0

10/31/66 584.0

08/07/67 568.0

02/15/68 547.0

12/11/70 571.0

06/15/71 569.0

05/16/72 562.0

10/19/81 535.0

04/06/92 522.0-current

Lively #21E

Mesaverde Offset

Lively #21E
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	<u>0.651</u>	GAS GRAVITY	<u>0.782</u>
COND. OR MISC. (C/M)	<u>C</u>	COND. OR MISC. (C/M)	<u>C</u>
%N2	<u>0.13</u>	%N2	<u>0.64</u>
%CO2	<u>1.35</u>	%CO2	<u>0.44</u>
%H2S	<u>0</u>	%H2S	<u>0</u>
DIAMETER (IN)	<u>1.25</u>	DIAMETER (IN)	<u>2</u>
DEPTH (FT)	<u>3276</u>	DEPTH (FT)	<u>5390</u>
SURFACE TEMPERATURE (DEG F)	<u>60</u>	SURFACE TEMPERATURE (DEG F)	<u>60</u>
BOTTOMHOLE TEMPERATURE (DEG F)	<u>137</u>	BOTTOMHOLE TEMPERATURE (DEG F)	<u>137</u>
FLOWRATE (MCFPD)	<u>0</u>	FLOWRATE (MCFPD)	<u>0</u>
SURFACE PRESSURE (PSIA)	<u>462</u>	SURFACE PRESSURE (PSIA)	<u>522</u>
BOTTOMHOLE PRESSURE (PSIA)	<u>499.0</u>	BOTTOMHOLE PRESSURE (PSIA)	<u>612.0</u>
<u>CH-Original</u>		<u>MV-Original</u>	
GAS GRAVITY	<u>0.651</u>	GAS GRAVITY	<u>0.782</u>
COND. OR MISC. (C/M)	<u>C</u>	COND. OR MISC. (C/M)	<u>C</u>
%N2	<u>0.13</u>	%N2	<u>0.64</u>
%CO2	<u>1.35</u>	%CO2	<u>0.44</u>
%H2S	<u>0</u>	%H2S	<u>0</u>
DIAMETER (IN)	<u>1.25</u>	DIAMETER (IN)	<u>2</u>
DEPTH (FT)	<u>3276</u>	DEPTH (FT)	<u>5390</u>
SURFACE TEMPERATURE (DEG F)	<u>60</u>	SURFACE TEMPERATURE (DEG F)	<u>60</u>
BOTTOMHOLE TEMPERATURE (DEG F)	<u>137</u>	BOTTOMHOLE TEMPERATURE (DEG F)	<u>137</u>
FLOWRATE (MCFPD)	<u>0</u>	FLOWRATE (MCFPD)	<u>0</u>
SURFACE PRESSURE (PSIA)	<u>657</u>	SURFACE PRESSURE (PSIA)	<u>1084</u>
BOTTOMHOLE PRESSURE (PSIA)	<u>711.2</u>	BOTTOMHOLE PRESSURE (PSIA)	<u>1299.8</u>

Company: Burlington Resources
Well: Lively #21-E
Field: Dakota Formation
Engineer:
Gauge Type: Amerada
Gauge Range: 0-3000
Gauge Depth: 6140 ft
Serial No.: 44537

County: Rio Arriba
State: New Mexico
Date: 06/24/1998
Well Type:
Test Type: Static Gradient
Status: Shut-In
File Name: 31970-1

Tubing: 2 3/8" TO 6555
Tubing: TO
Casing: TO
Perfs.: TO

Oil Level
H2O Level

Shut-in BHP	521	@	6140 ft	Shut-in BHT	0 F	@	0 ft
Shut-in WHP	426			Shut-in WHT	0 F		

[Tefteller Incorporated]

#	MD	TVD	PRESSURE	PSI/ft
1	0	0	426.00	
2	2000	2000	452.00	0.013
3	4000	4000	481.00	0.014
4	6100	6100	519.00	0.018
5	6140	6140	521.00	0.050

Set down @ 6150'.

- 4) Amoco Production Co.
Attn: Bruce Zimney
P.O. Box 800
1670 Broadway
Denver, CO 80201
- 5) DEPCO, Inc.
10000 Petroleum Building
Denver, CO 80202
- 6) Western Gas Resources
12200 N. Pecos Street
Denver, CO 80234

27N-07W-31D

