

DATE IN 8/24/00	SUSPENSE 9/13/00	ENGINEER DC	LOGGED KV	TYPE DHC
--------------------	---------------------	----------------	--------------	-------------

ABOVE THIS LINE FOR DIVISION USE ONLY

23826440

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]

2815

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

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

AUG 24 2000

Check One Only for [B] and [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

[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] 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

*Peggy Cole*

Regulatory/Compliance Administrator

Print or Type Name

Signature

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 TYPE

Single Well  
 Establish Pre-Approved Pools  
EXISTING WELLBORE  
 Yes  No

APPLICATION FOR DOWNHOLE COMMINGLING

Burlington Resources Oil and Gas 3401 East 30<sup>th</sup> Street, Farmington, New Mexico  
Operator Address

Fifield 4A N - 21 - 30N - 11W San Juan County, New Mexico  
Lease Well No. Unit Letter-Section-Township-Range County

OGRID No. 14538 Property Code 7017 API No. 30-045-29438 Lease Type:  Federal  State  Fee

DATA ELEMENT	UPPER ZONE	INTERMEDIATE ZONE	LOWER ZONE
Pool Name	Wildcat Chacra		Blanco Mesaverde
Pool Code			72319
Top and Bottom of Pay Section (Perforated or Open-Hole Interval)	2942 - 3588'		4075 - 4785'
Method of Production (Flowing or Artificial Lift)	Flowing		Flowing
Bottomhole Pressure <small>(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)</small>	643 psia (Original pressure in the Cooper #11)		1229 psia (From original SI wellhead pressure recorded 7/21/97)
Oil Gravity or Gas BTU <small>(Degree API or Gas BTU)</small>	1196 MMBTU/MMCF (Cooper #11)		1245 MMBTU/MMCF
Producing, Shut-In or New Zone	New Zone		Producing
Date and Oil/Gas/Water Rates of Last Production. <small>(Note: For new zones with no production history, applicant shall be required to attach production estimates and supporting data.)</small>	Date: No Prior Production Rates: 75 MCF/D 0 BCPD	Date: Rates:	Date: April 2000 Rates: 174.6 MCF/D 0.0 BCPD
Fixed Allocation Percentage <small>(Note: If allocation is based upon something other than current or past production, supporting data or explanation will be required.)</small>	Oil Gas Supplied Upon Completion	Oil Gas %	Oil Gas 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

Notified 8-1-00. No objections were received.

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.

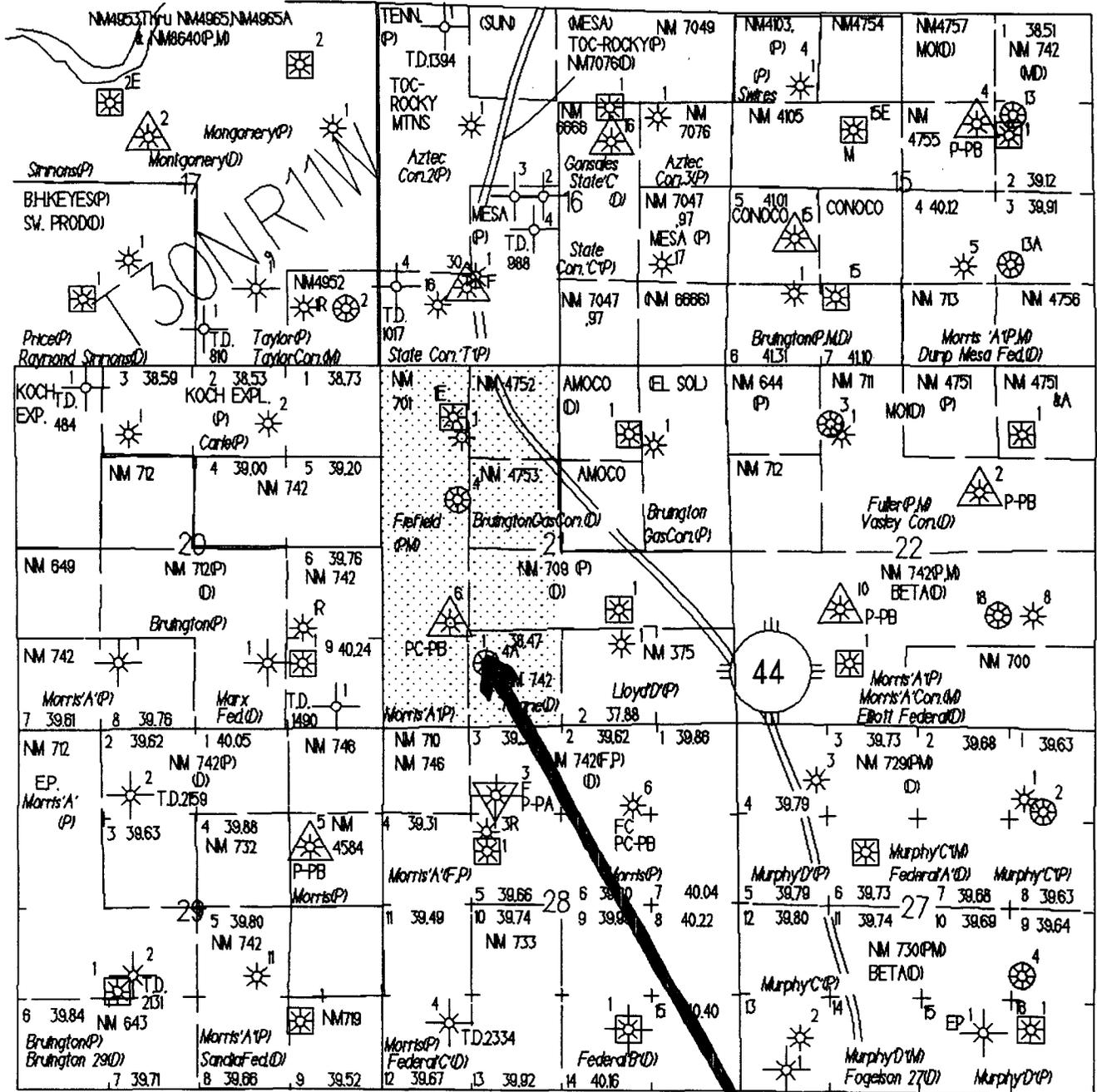
SIGNATURE Lafell Thomas Loveland TITLE Production Engineer DATE 7/31/00

TYPE OR PRINT NAME Lafell Thomas Loveland TELEPHONE NO. (505) 326 - 9700

# FIFIELD #4A WELL

## UNIT N (SESW), SECTION 21, T30N, R11W

### SAN JUAN CO., NEW MEXICO



-  FRUITLAND SAND WELL
-  FRUITLAND COAL WELL
-  PICTURED CLIFFS WELL
-  MESAVERDE WELL
-  DAKOTA WELL
-  GALLUP WELL

FIFIELD #4A WELL

MESAVERDE (INFILL) NEW DRILL WELL

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 30-045-29438		Pool Code 72319/		Pool Name Blanco Mesaverde/WC:30N11W21 Chacra	
Property Code 7017		Property Name Fifield			Well Number 4A
OGRID No. 14538		Operator Name BURLINGTON RESOURCES OIL & GAS COMPANY			Elevation 5811'

<sup>10</sup> Surface Location

UL or lot no.	Section	Township	Range	Lot Ida	Feet from the	North/South line	Feet from the	East/West line	County
N	21	30-N	11-W		990	South	1460	West	S.J.

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

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

<sup>12</sup> Dedicated Acres SW/158.47	<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

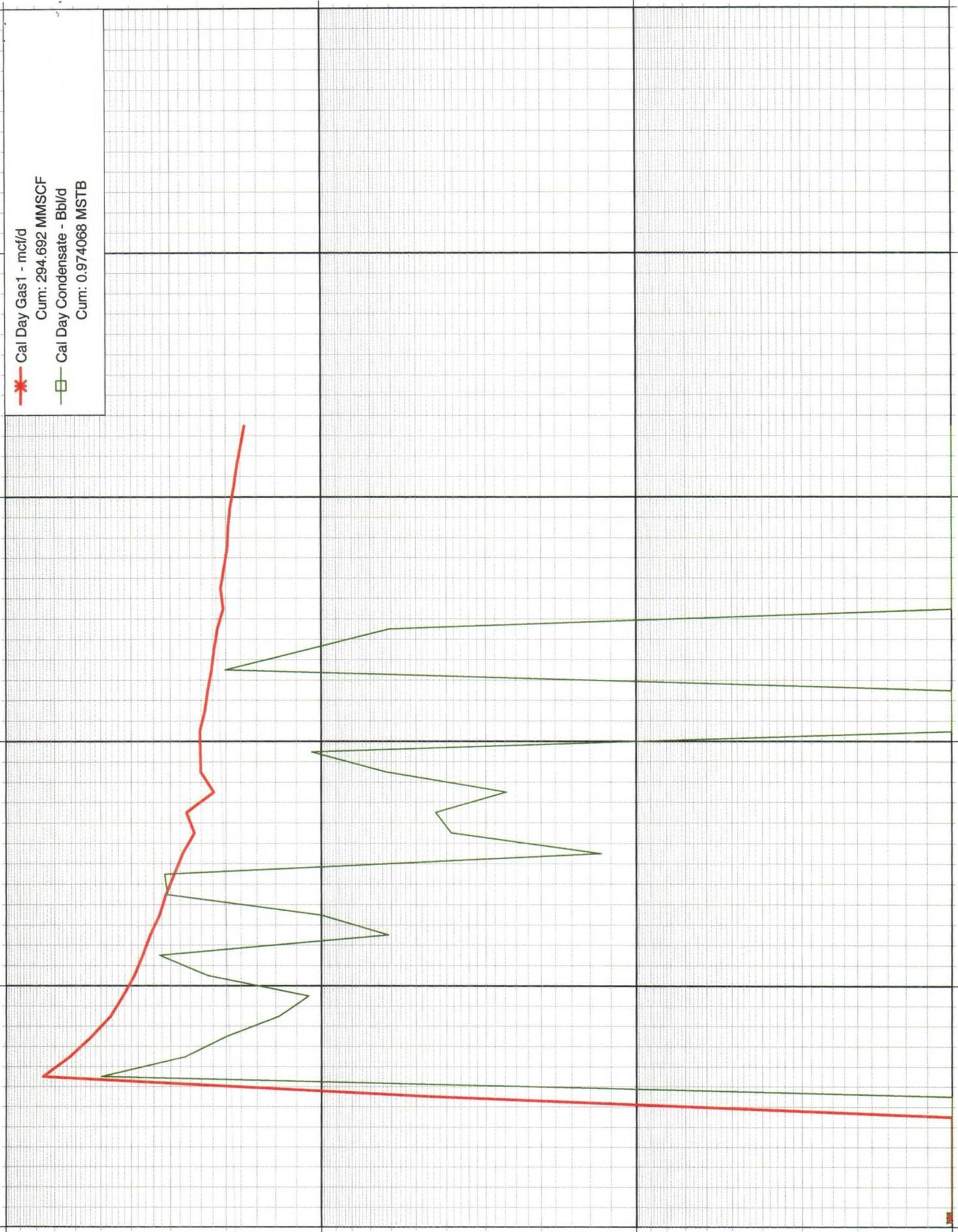
<div data-bbox="77 1032 1055 1744"> <p>16</p> <p>5051.64'</p> <p>5297.16</p> <p>FEE</p> <p>21</p> <p>1460'</p> <p>990'</p> <p>SF 078138</p> <p>2</p> <p>5195.52'</p> </div>	<div data-bbox="1071 1032 1550 1489"> <p><sup>17</sup> OPERATOR CERTIFICATION</p> <p><i>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief</i></p> <p>Signature Peggy Cole</p> <p>Printed Name Regulatory Administrator</p> <p>Title</p> <p>Date</p> </div>
	<div data-bbox="1071 1500 1550 1968"> <p><sup>18</sup> 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>11/05/96</p> <p>Date of Survey</p> <p>Signature and Seal of Professional Surveyor</p> <p>NEALE C. EDWARDS          NEW MEXICO          6857</p> <p>6857</p> <p>Certificate Number</p> </div>

FIFIELD 4A 3367801 (327680384944.643) Data: May. 1996-Apr. 2000

\* Cal Day Gas1 - mcf/d  
Cum: 294,692 MMSCF  
□ Cal Day Condensate - Bbl/d  
Cum: 0.974068 MSTB

1000  
100  
10  
1  
0.1  
0.01  
Cal Day Gas1 - mcf/d  
Cal Day Condensate - Bbl/d

1997 1998 1999 2000 2001  
Year



--BHPCALC--

Calculate BHP and Z-factor from surface shut-in pressure

06/08/00

WELL NAME :           **Fifield #4A (MV)**  
GAS GRAVITY:           **0.62**           % N2           **0.26**  
CONDENSATE (YES=1):    **1**           % CO2          **0.50** %  
RESERVOIR TEMP:        **144** F        % H2S          **0.00** %  
SURFACE TEMP:          **60** F        Pc =          671.58 %  
DEPTH OF ZONE:         **4430** Foot    Tc =          363.37

SURFACE PRES	BHP	Z	BHP/Z
Psia	psia		psia
1104	1,229	0.8887	1,383

(C) Copyright 1990,1993  
by Douglas M Boone  
All Rights Reserved  
Version 3.0

**1092 psig + 11.7 ≈ 1104 psia**

**UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT**

SUBMIT IN **DUPLICATE**  
(See other instructions on reverse side)

FOR APPROVED  
OMB NO. 1004-0137

Expires: December 31, 1991

RECEIVED  
BLM

**WELL COMPLETION OR RECOMPLETION REPORT AND LOG**

1a. TYPE OF WELL: OIL WELL  GAS WELL  DRY  Other  **97 AUG -4 PM 7:08**

b. TYPE OF COMPLETION: NEW WELL  WORK OVER  DEEP-EN  PLUG BACK  DIFF. RESVR  Other  **070 FARMINGTON, NM**

2. NAME OF OPERATOR  
**BURLINGTON RESOURCES OIL & GAS COMPANY**

3. ADDRESS AND TELEPHONE NO.  
**PO BOX 4289, Farmington, NM 87499 (505) 326-9700**

4. LOCATION OF WELL. (Report location clearly and in accordance with any State requirements)\*  
At surface **990°FSL, 1460°FWL.**  
At top prod. interval reported below  
At total depth

5. LEASE DESIGNATION AND SERIAL NO.  
**SF-078138**

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME, WELL NO.  
**Fifield #4A**

9. API WELL NO.  
**30-045-28438**

10. FIELD AND POOL, OR WILDCAT  
**Blanco Mesaverde**

11. SEC., T., R., M., OR BLOCK AND SURVEY OR AREA  
**Sec. 21, T-30-N, R-11-W**

14. PERMIT NO. DATE ISSUED

12. COUNTY OR PARISH  
**San Juan**

13. STATE  
**New Mexico**

15. DATE SPUNDED **5-9-97** 16. DATE T.D. REACHED **5-17-97** 17. DATE COMPL. (Ready to prod.) **7-21-97** 18. ELEVATIONS (DF, RKB, RT, BR, ETC.)\* **5811 GR, 5825 KB** 19. ELEV. CASINGHEAD

20. TOTAL DEPTH, MD & TVD **5120** 21. PLUG, BACK T.D., MD & TVD 22. IF MULTIPLE COMPL., HOW MANY\* 23. INTERVALS DRILLED BY 24. PRODUCTION INTERVAL (S) OF THIS COMPLETION-TOP, BOTTOM, NAME (MD AND TVD)\*  
**4075-4785 Mesaverde** 25. WAS DIRECTIONAL SURVEY MADE

26. TYPE ELECTRIC AND OTHER LOGS RUN  
**HIR, DSN/SDL, AIT, CMR** 27. WAS WELL CORED  
**No**

28. CASING RECORD (Report all strings set in well)

CASING SIZE/GRADE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	TOP OF CEMENT, CEMENTING RECORD	AMOUNT PULLED
9 5/8	32.3#	235	12 1/4	216 cu.ft.	
7	20#	2439	8 3/4	631 cu.ft.	

29. LINER RECORD 30. TUBING RECORD

SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*	SCREEN (MD)	SIZE	DEPTH SET (MD)	PACKER SET (MD)
4 1/2	2252	5070	497 cu.ft.		2 3/8	4514	

31. PERFORATION RECORD (Interval, size and number)  
4075, 4124, 4126, 4181, 4215, 4275, 4292, 4297, 4302, 4313, 4318, 4371, 4383, 4389, 4397, 4478, 4480, 4487, 4491, 4495, 4499, 4520, 4527, 4530, 4534, 4538, 4545, 4549, 4556, 4569, 4605, 4619, 4651, 4657, 4670, 4672, 4678, 4688, 4696, 4705, 4713, 4721, 4753, 4762, 4774.

32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.

DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED
4075-4397	84,966 gal sik wtr, 65,000# 20/40 Ariz sd
4478-4785	128,940 gal sik wtr, 100,000# 20/40 Ariz sd
4785	

33. PRODUCTION

DATE FIRST PRODUCTION **7-21-97** PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump) **Flowing** WELL STATUS (Producing or shut-in) **SI**

DATE OF TEST **7-21-97** HOURS TESTED CHOKER SIZE PRODN FOR TEST PERIOD OIL—BBL GAS—MCF WATER—BBL GAS-OIL RATIO

FLOW. TUBING PRESS. CASING PRESSURE CALCULATED 24-HOUR RATE OIL—BBL GAS—MCF WATER—BBL OIL GRAVITY-API (CORR.)

**SI 1092** **1454 Pitot Gauge**

34. DISPOSITION OF LOGS (Sold, used for fuel, etc.) **To be sold** TEST WITNESSED BY

35. LIST OF ATTACHMENTS  
**None**

36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records

SIGNED *[Signature]* TITLE **Regulatory Administrator** **ACCEPTED FOR RECORD**

\*(See instructions and Spaces for Additional Data on Reverse Side)  
Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department of agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

**OPERATOR**

**FARMINGTON DISTRICT OFFICE**  
BY *[Signature]*

**AUG 12 1997**



Gas Analysis Information

Name: FIFIELD 4A 99427

Analysis Name: [Empty]

Analysis: [Navigation icons] 1:1

Analysis		MDL Fraction	MDL Count
Effective Date	04/01/2000	Hydrogen (H2)	0.00000 0.0000
Sample Date	03/24/2000	Helium (He)	0.00000 0.0000
Pressure Base BTU	14.7300	Nitrogen (N2)	0.00260 0.0000
Wet/Dry	Dry	Carbon Dioxide (CO2)	0.00500 0.0000
Heat Content	1.24500000	Hydrogen Sulphide (H2S)	0.00000 0.0000
Specific Gravity	0.714	Methane (C1)	0.81830 0.0000
Coefficient Factor	0.0000	Ethane (C2)	0.09430 0.0000
Calculation Type <input checked="" type="radio"/> Enter Percentages <input type="radio"/> Enter GPM		Propane (C3)	0.04540 0.0000
Related To O2% 0.00000 Hexane Plus GPM 0.0000 C9% 0.00000		Isobutane (IB4)	0.00930 0.0000
		Butane	0.01120 0.0000
		Isopentane (IP5)	0.00410 0.0000
		Pentane (P5)	0.00290 0.0000
		Hexane (C6)	0.00690 0.0000
		Heptane (C7)	0.00000 0.0000
		Final Totals	Total 1.0000 0.0000

04/01/2000 [Navigation icons] 3:3

--BHPCALC--

Calculate BHP and Z-factor from surface shut-in pressure

06/08/00

WELL NAME : Cooper #11 (Otero Chacra)  
GAS GRAVITY: 0.69 % N2 1.04  
CONDENSATE (YES=1): 1 % CO2 0.19 %  
RESERVOIR TEMP: 117 F % H2S 0.00 %  
SURFACE TEMP: 60 F Pc = 664.65 %  
DEPTH OF ZONE: 3023 Foot Tc = 377.19

SURFACE PRES	BHP	Z	BHP/Z
Psia	psia		psia
594	643	0.9122	705

(C) Copyright 1990,1993  
by Douglas M Boone  
All Rights Reserved  
Version 3.0

**- The Cooper #11 was drilled and completed in the Mesaverde in 1991. Excessive water production led to the decision to plug the Mesaverde in January 1998. At that time, the well was recompleted in the Otero Chacra only, and will serve as an indication of the initial reservoir pressure that will be encountered in this area.**

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

SUBMIT IN DATE  
(See instructions on reverse side)

FOR APPROVED  
OMB NO. 1004-0137

Expires: December 31, 1991

5. LEASE DESIGNATION AND SERIAL NO.  
SF-077317

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME, WELL NO.

Cooper #11

9. WELL NO.  
30-045-28567

10. FIELD AND POOL, OR WILDCAT  
Otero Chacra/Crouch Mesa MV

11. SEC., T., R., M., OR BLOCK AND SURVEY  
OR AREA

Sec. 6, T-29-N, R-11-W

WELL COMPLETION OR RECOMPLETION REPORT AND LOG\*

1a. TYPE OF WELL: OIL WELL  GAS WELL  DRY  Other

d. TYPE OF COMPLETION: NEW WELL  WORK OVER  DEEP-EN  PLUG BACK  DIFF. RESVR  Other

RECEIVED  
BLM  
98 FEB 19 11:08  
070 FARMINGTON, NM

2. NAME OF OPERATOR  
BURLINGTON RESOURCES OIL & GAS COMPANY

3. ADDRESS AND TELEPHONE NO.  
PO BOX 4289, Farmington, NM 87499 (505) 326-9700

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements)\*  
At surface 1140'FSL, 1450'FWL,

At top prod. interval reported below

At total depth

14. PERMIT NO. DATE ISSUED

12. COUNTY OR PARISH  
San Juan

13. STATE  
New Mexico

15. DATE SPUNDED 7-29-91 16. DATE T.D. REACHED 2-6-98 17. DATE COMPL. (Ready to prod.) 2-6-98 18. ELEVATIONS (DF, RKB, RT, BR, ETC.)\* 5755 GR 19. ELEV. CASINGHEAD

20. TOTAL DEPTH, MD & TVD 4759 21. PLUG, BACK T.D., MD & TVD 3198 22. IF MULTIPLE COMPL., HOW MANY\* 23. INTERVALS DRILLED BY 0-4759 24. PRODUCTION INTERVAL (S) OF THIS COMPLETION-TOP, BOTTOM, NAME (MD AND TVD)\* 25. WAS DIRECTIONAL SURVEY MADE

26. TYPE ELECTRIC AND OTHER LOGS RUN CCL-GR 27. WAS WELL CORED No

28. CASING RECORD (Report all strings set in well)

CASING SIZE/GRADE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	TOP OF CEMENT, CEMENTING RECORD	AMOUNT PULLED
8 5/8	24#	224	12 1/4	188 cu.ft.	
4 1/2	10.5#	4759	7 7/8	2830 cu.ft.	

29. LINER RECORD					30. TUBING RECORD		
SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*	SCREEN (MD)	SIZE	DEPTH SET (MD)	PACKER SET (MD)
					2 3/8	3104	

31. PERFORATION RECORD (Interval, size and number)		32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.	
INTERVAL	SIZE	DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED
2819-2829		2819-2894	16,390 gal 30# x-link gel, 130,000# 20/40 Artz sd.
2857-2874		2988-3178	326 bbl 30# x-link gel, 66,694# 20/40 Artz sd, 577,509 SCF
3042-3046		3228-3427	387 bbl 30# x-link ge, 97,000# 20/40 Artz sd - sqzd

33. PRODUCTION  
DATE FIRST PRODUCTION 2-6-98 PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump) Flowing WELL STATUS (Producing or shut-in) SI

DATE OF TEST 2-6-98 HOURS TESTED CHOKE SIZE PROD'N FOR TEST PERIOD OIL-BBL GAS-MCF WATER-BBL GAS-OIL RATIO 190 Pitot Gauge

FLOW, TUBING PRESS. CASING PRESSURE CALCULATED 24-HOUR RATE OIL-BBL GAS-MCF WATER-BBL OIL GRAVITY-API (CORR.) SI 580 SI 582

34. DISPOSITION OF GAS (Solid, liquid, vented, etc.) To be sold TEST WITNESSED BY

35. LIST OF ATTACHMENTS None

36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records

SIGNED [Signature] TITLE Regulatory Administrator DATE 2-17-99 FEB 23 1998

ACCEPTED FOR RECORD

\*(See Instructions and Spaces for Additional Data on Reverse Side)

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

OPERATOR

FARMINGTON DISTRICT OFFICE



Gas Analysis Information

Name: COOPER 11 35333

Analysis Name: [Empty Field]

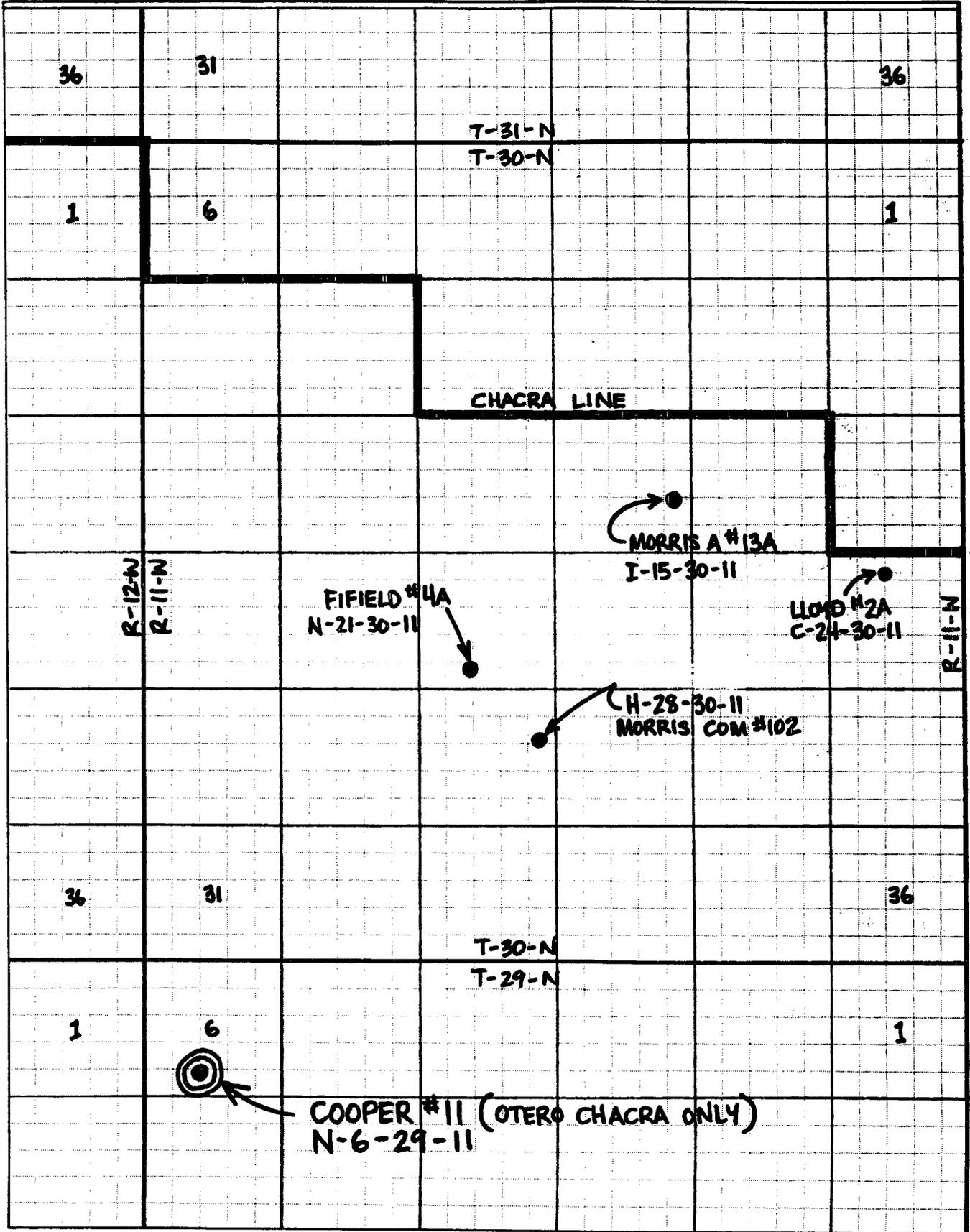
Analysis: [Navigation Buttons] 1:1

Analysis

		MOL Fraction	MOL Count
Effective Date	04/01/2000	Hydrogen (H2)	0.00000 0.0000
Sample Date	04/01/2000	Helium (He)	0.00000 0.0000
Pressure Base BTU	14.7300	Nitrogen (N2)	0.01037 0.0000
Wet/Dry	Dry	Carbon Dioxide (CO2)	0.00188 0.0000
Heat Content	1.19600000	Hydrogen Sulphide (H2S)	0.00000 0.0000
Specific Gravity	0.685	Methane (C1)	0.84948 0.0000
Coefficient Factor	0.0000	Ethane (C2)	0.06742 0.0000
Calculation Type		Propane (C3)	0.04254 0.0000
<input checked="" type="radio"/> Enter Percentages		Isobutane (IB4)	0.00627 0.0000
<input type="radio"/> Enter GPM		Butane	0.01115 0.0000
Related To		Isopentane (IP5)	0.00349 0.0000
O2%	0.00000	Pentane (P5)	0.00294 0.0000
Hexane Plus GPM	0.0000	Hexane (C6)	0.00000 0.0000
C9%	0.00446	Heptane (C7)	0.00000 0.0000
Final Totals		Total	0.9955 0.00000

04/01/2000 [Navigation Buttons] 7:7

LOCATION OF COOPER #11



**INTEREST OWNERS**

**FIFIELD 4A WELL - JUNE 20, 2000**

CATHERINE L FIFIELD  
GARY C TISONE AND  
ETHEL F GARRISON ZENOR  
BUREAU OF LAND MANAGEMENT  
CARL ENGFER  
DOROTHY SWANSON  
CROSS TIMBERS OIL COMPANY  
BYRON FOSTER ROYCE &  
JO ANNE MOSS TRELOAR  
EDWINA PETERSEN TRUSTEE  
ELLIOTT INDUSTRIES  
ELLIOTT-HALL COMPANY  
EARL B SULLIVAN TRUSTEE  
JOSEPH SULLIVAN  
LEWIS SULLIVAN  
KAYLA ANN PERRYMAN  
KIRK GRAVES  
SOUTHWOOD FINANCIAL LLC