

DATE IN 9/15/97	SUSPENSE 10/6/97	ENGINEER DC	LOGGED KV	TYPE DHC
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ABOVE THIS LINE FOR DIVISION USE ONLY

NEW MEXICO OIL CONSERVATION DIVISION
- Engineering Bureau -

1694

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]

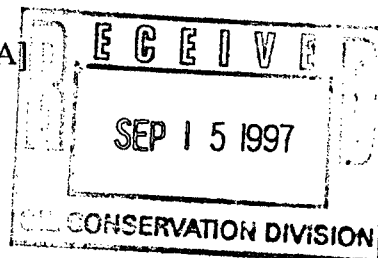
[1] TYPE OF APPLICATION - Check Those Which Apply for [A]

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

Check One Only for [B] and [C]

[B] Commingling - Storage - Measurement
☒ 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 Bradfield

Print or Type Name

Signature

Regulatory/Compliance Administrator

Title

Date

9/12/97

BURLINGTON RESOURCES

SAN JUAN DIVISION

September 12, 1997

SENT FEDERAL EXPRESS

Mr. William LeMay
New Mexico Oil Conservation Division
2040 South Pacheco Street
Santa Fe, New Mexico 87505

Re: Canyon Largo Unit #430
1455'FSL, 1435'FWL Section 14, T-25-N, R-7-W
30-039-25477

Dear Mr. LeMay:

This is a request for administrative approval for downhole commingling the Devils Fork Gallup and Basin Dakota pools in the subject well.

To comply with the New Mexico Oil Conservation Division rules, Burlington Resources Oil & Gas Company is submitting the following for your approval of this commingling:

1. Form C107A - Application for Downhole Commingling;
2. C-102 plat for each zone showing its spacing unit and acreage dedication;
3. Production curves for Gallup and Dakota;
4. Notification list of offset operators - Burlington is the offset operator;
5. Shut in wellhead pressure and calculated down hole pressure of surrounding wells;
6. Nine-section plats for the Gallup and Dakota.

Notification of Gallup and Dakota interest owners is covered under Order R-10786 dated April 3, 1997 attached.

We will consult with the Supervisor of the Aztec District Office of the New Mexico Oil Conservation Division to establish an allocation formula.

Please let me know if you require additional data.

Sincerely,



Peggy Bradfield
Regulatory/Compliance Administrator

xc: Bureau of Land Management - hand delivered

E

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 87505-6429

APPLICATION FOR DOWNHOLE COMMINGLING

Form C-107-A
New 3-12-96

APPROVAL PROCESS :

☒ Administrative ☐ Hearing

EXISTING WELLBORE

☒ YES ☐ NO

Burlington Resources Oil & Gas Company

PO Box 4289, Farmington, NM 87499

Operator

Address

CANYON LARGO UNIT

430

K 14-25N-7W

Rio Arriba

Lease

Well No.

Unit Ltr. - Sec - Twp - Rge

County

Spacing Unit Lease Types: (check 1 or more)

OGRID NO. 14538 Property Code 6886 API NO. 30-039-25477 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	Devils Fork Gallup - 17610		Basin Dakota - 71599
2. Top and Bottom of Pay Section (Perforations)	6040-6513		6932-7114
3. Type of production (Oil or Gas)	gas		gas
4. Method of Production (Flowing or Artificial Lift)	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. 1892 psi (see attachment) (Original) b. 1788 psi (see attachment)	a. b.	a. 1612 psi (see attachment) b. 2557 psi (see attachment)
6. Oil Gravity (°API) or Gas BTU Content	BTU 1305		BTU 1300
7. Producing or Shut-In?	producing		producing
Production Marginal? (yes or no)	yes		yes
* If Shut-In 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: n/a Rates:	Date: Rates:	Date: n/a Rates:
* If Producing, give data and oil/gas/water of recent test (within 60 days)	Date: n/a Rates:	Date: 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: %	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 R-10786

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  TITLE Production Engineer DATE 07/24/97

TYPE OR PRINT NAME Robert L. Goodwin III TELEPHONE NO. (505) 326-9713

State of New Mexico
Energy, Minerals & Natural Resources Department

Form C-10

Revised February 21, 1995

Instructions on back

Submit to Appropriate District Office

State Lease - 4 Copies

Fee Lease - 3 Copies

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

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number		Pool Code	Pool Name
		17610/71599	Devils Fork Gallup/Basin Dakota
Property Code	Property Name		Well Number
6886	Canyon Largo Unit		430
OGRID No.	Operator Name		Elevation
14538	MERIDIAN OIL INC.		6802'

¹⁰ Surface Location

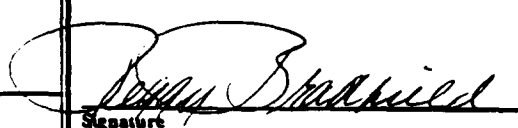
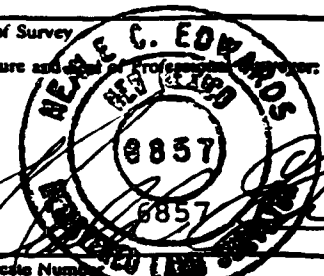
UL or lot no.	Section	Township	Range	Lot Ids	Feet from the	North/South line	Feet from the	East/West line	County
K	14	25 N	7 W		1455	South	1435	West	R.A.

¹¹ Bottom Hole Location If Different From Surface

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

¹² Dedicated Acres	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.
1/320			

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>5223.24'</div> <div>SF-078880</div> <div>14</div> <div>1435'</div> <div>1455'</div> <div>5207.40</div>	¹⁶	¹⁷ OPERATOR CERTIFICATION
		I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.
		<div> Signature Peggy Bradfield Printed Name Regulatory Affairs Title 1-8-95 Date</div>
		¹⁸ 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.
		10-6-94
		Date of Survey
		Signature and Seal of Professional Surveyor
		<div> Certificate Number</div>

DAKOTA

CANYON LARGO UNIT : 430 : 57495A-1

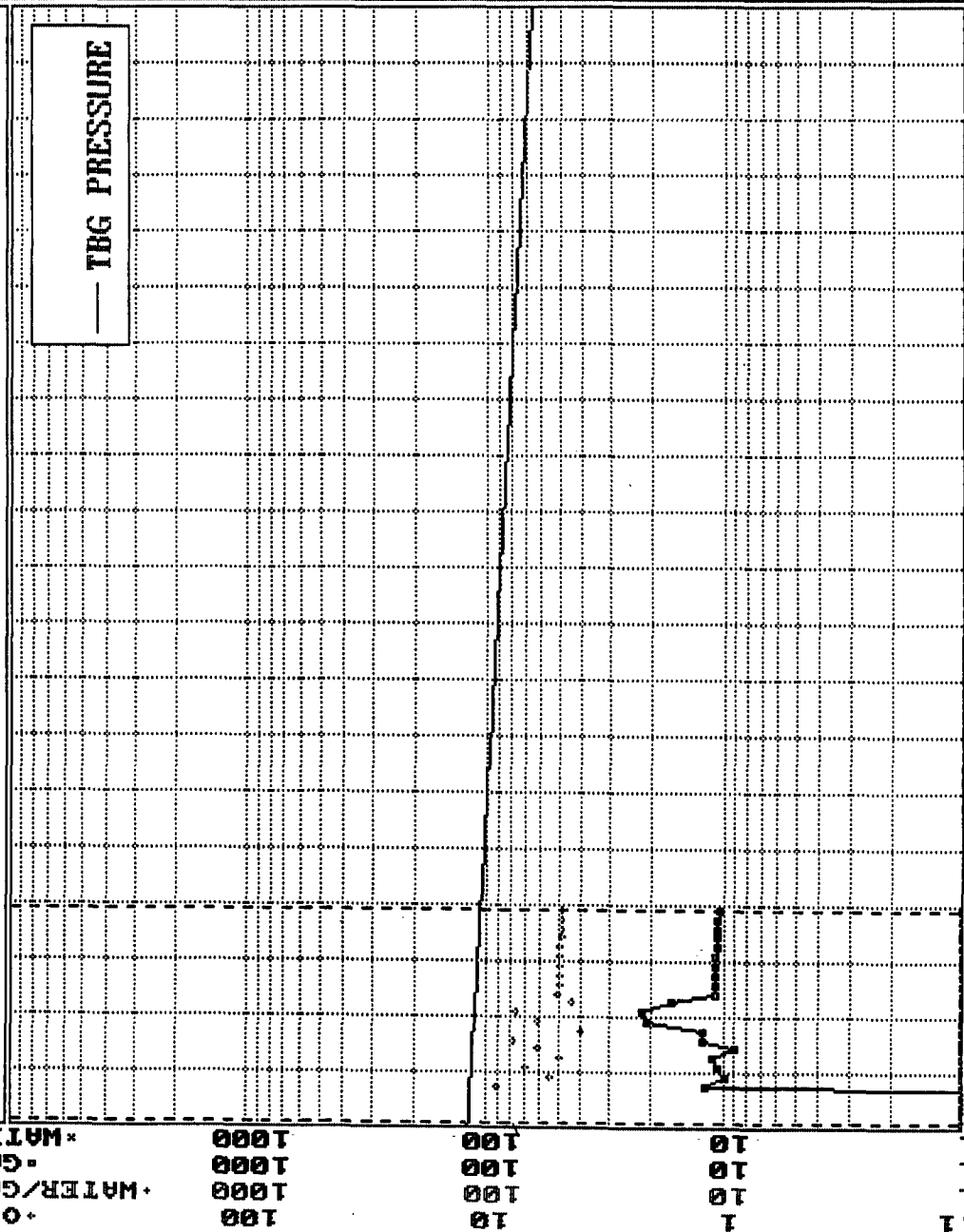
• OIL
• WATER/GAS
• GAS
• WATER

Prop 158 *

- WATER Bbls/d
- GAS Mcf/d
- WATER/GAS
- OIL Bbl/d

RateTime
Semi Log

— TBG PRESSURE



Anticipated Dakota
Production Profile

After

Commingling

Major = GAS

GALLUP

CANYON LARGO UNIT : 430 : 57495B-1

• OIL
• WATER/GAS
• GAS
• WATER

Prop 159 *

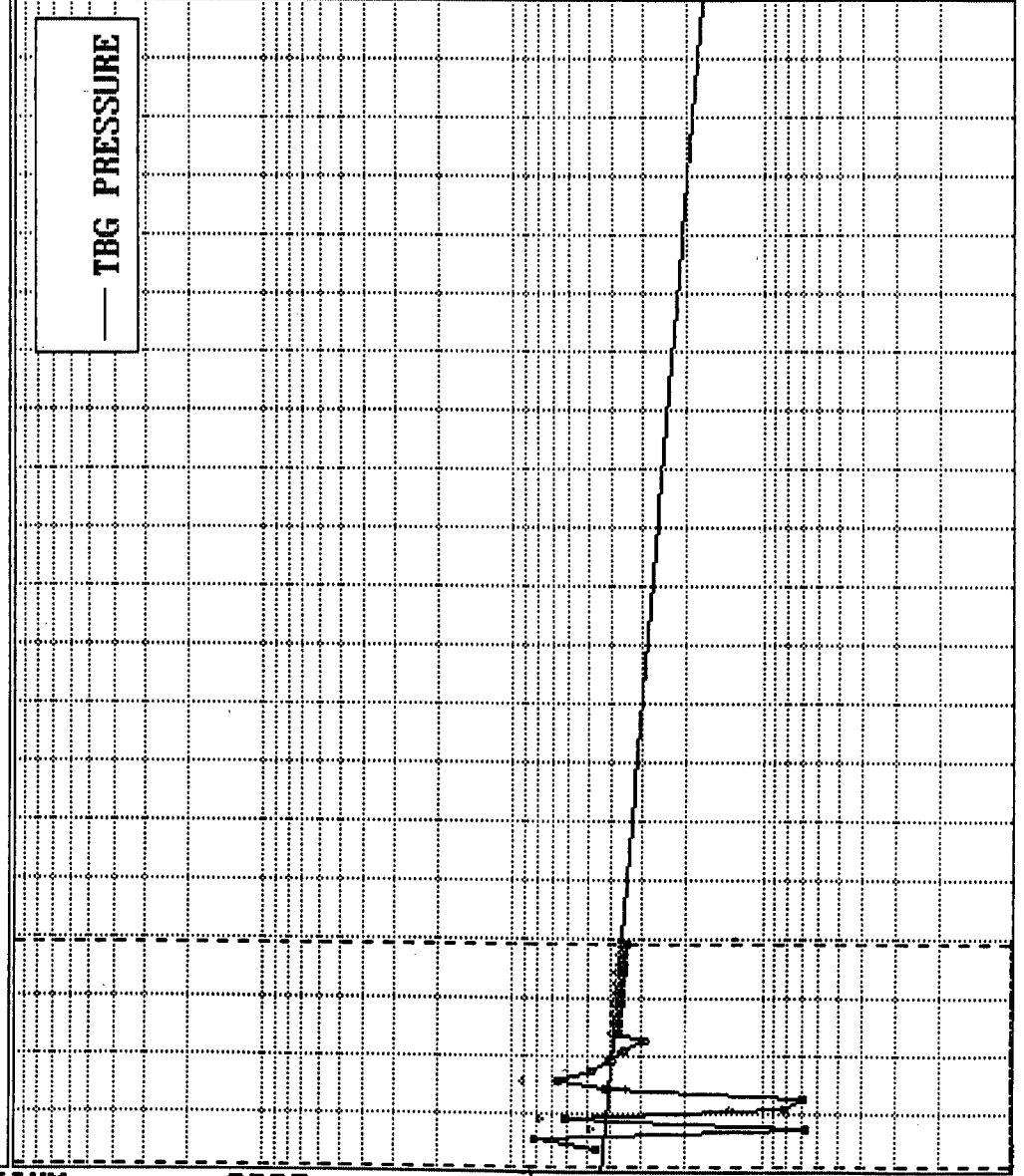
- WATER Bbls/d
- GAS Mcf/d
- WATER/GAS
- OIL Bbl/d

RateTime
Semi Log

— TBG PRESSURE

Anticipated
Gallup
Production Profile
After
Commingling

Major = GAS

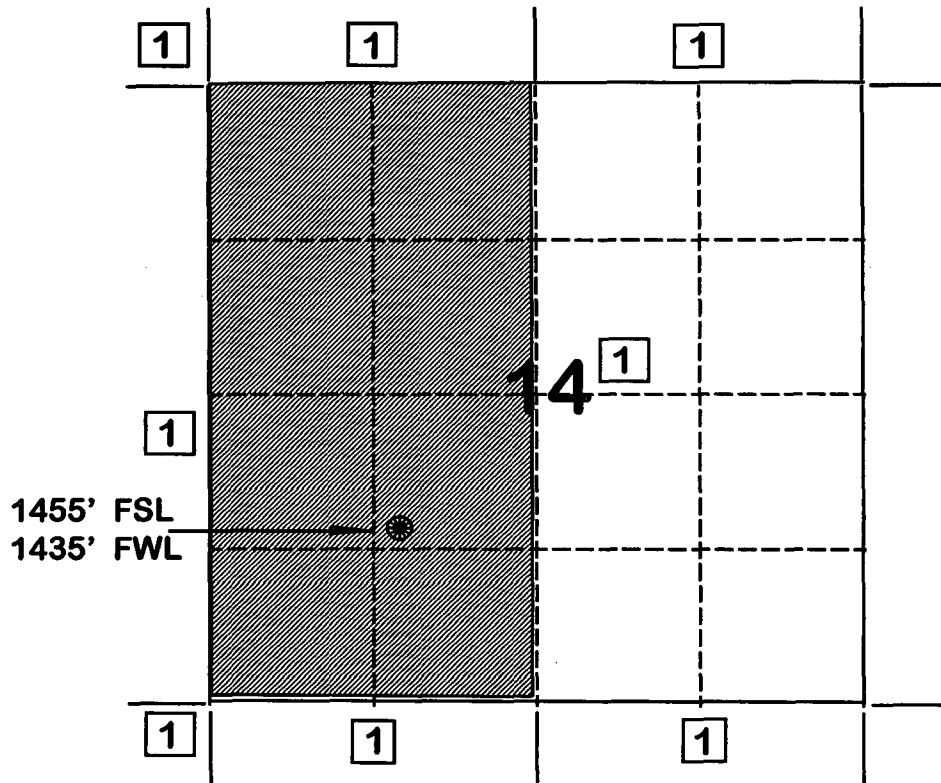


BURLINGTON RESOURCES OIL AND GAS COMPANY

**Canyon Largo Unit #430
OFFSET OPERATOR \ OWNER PLAT**

Gallup/Dakota Formations Commingle Well

Township 25 North, Range 7 West



1) Burlington Resources Oil and Gas Company

01/16/96

17:29

8915 694 7602

TEFTELLER INC.

0018

TEFTELLER INC

Pressure Gradient Report

COMP : MERIDIAN OIL INC WELL : CANYON LARGO UNIT # 430T : 0.0
FIELD : RES : DAKOTA DATUM : 7000.0
DATE : 01/15/1996 STATUS : S.I. HRS : 216.0
TBG : DPTH : END : PKR : S N :
CSG : DPTH : PERFS : 6932-7114 GRAD : 0.260000 T D :

Depth (ft)	Pressure (psig)	Delta P (psi)	Gradient (psi/ft)
0	1988.0		
2000	2126.0	138.0	0.0690
4000	2263.0	137.0	0.0685
6000	2399.0	136.0	0.0680
6600	2453.0	54.0	0.0900
6800	2505.0	52.0	0.2600
7000	2557.0	52.0	0.2600
7000	<u>2557.0</u>	0.0	

REMARKS : TUBING PRESSURE 1988
B.H.T. @ 7000 = 176

TOP OF FLUID @ 6531

Original Dakota BHP

TEFTELLER INC

Pressure Gradient Report

COMP : MERDIAN OIL INC WELL : CANYON LARGO UNIT 430 T : 0.0
 FIELD : RES : DAKOTA DATUM : 7000.0
 DATE : 03/25/1996 STATUS : S.I. HRS : 96.0
 TBG : DPTH : END : PKR : S N : 7018
 CSG : DPTH : PERFS : 5932-7114 GRAD : 0.265000 T D :

Depth (ft)	Pressure (psig)	Delta P (psi)	Gradient (psi/ft)
0	931.0		
2000	993.0	62.0	0.0310
4000	1061.0	68.0	0.0340
6000	1347.0	286.0	0.1430
6600	1506.0	159.0	0.2650
6800	1559.0	53.0	0.2650
7000	1612.0	53.0	0.2650
7000	1612.0	0.0	

REMARKS : TUBING PRESSURE 931
 TOP OF FLUID @ 5056

CSG PRESSURE PKR

Current Dakota BHP

TEFTELLER INC

Pressure Gradient Report

COMP : MERIDIAN OIL INC WELL : CANYON LARGO UNIT # 430T : 0.0
FIELD : RES : GALLUP DATUM : 6400.0
DATE : 01/15/1996 STATUS : S.I. HRS : 216.0
TBG : DPTH : END : PKR : S N :
CSG : DPTH : PERFS : 6040-6513 GRAD : 0.050000 T D :

Depth (ft)	Pressure (psig)	Delta P (psi)	Gradient (psi/ft)
0	1455.0		
2000	1564.0	109.0	0.0545
4000	1668.0	104.0	0.0520
5000	1718.0	50.0	0.0500
6000	1768.0	50.0	0.0500
6200	1778.0	10.0	0.0500
6400	1788.0	10.0	0.0500
6400	1788.0	0.0	

REMARKS : TUBING PRESSURE 1455
B.H.T. @ 6400 = 162

CASING PRESSURE 1511

original GALLUP BHT

TEFTELLER INC

Pressure Gradient Report

COMP : MERDIAN OIL INC WELL : CANYON LARGE UNIT 430 T : 0.0
 FIELD : RES : GALLUP DATUM : 6400.0
 DATE : 03/25/1996 STATUS : S.I. HRS : 96.0
 TBG : DPTH : END : PKR : S N : 6429
 CSG : DPTH : PERFS : 6040-6513 GRAD : 0.290000 T D :

Depth (ft)	Pressure (psig)	Delta P (psi)	Gradient (psi/ft)
0	1283.0		
2000	1371.0	88.0	0.0440
4000	1462.0	91.0	0.0455
5000	1508.0	46.0	0.0460
6200	1834.0	326.0	0.2717
6400	1892.0	58.0	0.2900
6400	1892.0	0.0	

REMARKS : TUBING PRESSURE: 1283
 TOP OF FLUID @ 5094

CSG PRESSURE: 1550
 BHT @ 6400 = 162

Current Gallup BHP

FARMINGTON 1996 MONTHLY PRODUCTION FOR 57495A
 CANYON LARGO UNIT 430
 BASIN DAKOTA (PRORATED GAS) FIELD DAKOTA ZONE

PHS030M1

DAYS			OIL		GAS		GAS					
MO	T	S	ON	PC	PROD	GRV	PC	PROD	ON	BTU	PRESS	WATER PROD
1	2	S					01				15.025	
2	2	S		02			01				15.025	
3	2	F	7	02			01	7	7	1331	15.025	
4	2	F	30	02			01	4	30	1331	15.025	
5	2	F	31	02	283	48.7	01	366	31	1331	15.025	
6	2	F	30	02	168	46.5	01	299	30	1331	15.025	
7	2	F	31	02	209	47.3	01	325	31	1329	15.025	
8	2	F	31	02	151		01	340	31	1329	15.025	
9	2	F	18	02	187	45.4	01	277	18	1329	15.025	
10	2	F	31	02	237	49.9	01	371	31	1230	15.025	
11	2	F	30	02	123		01	371	30	1230	15.025	
12	2	F	31	02	187	49.2	01	644	31	1256	15.025	

PF6 - RETURNS TO ANNUAL DISPLAY
 PF10 - HELP INFORMATION

PF3 - TRANSFER TO UPDATE
 PF9 - DISPLAY MONTHLY INJECTION
 PRS 04/03/97

00/00/00 00:00:00:0

B MY JOB

NUM LU #26

FARMINGTON 1996 MONTHLY PRODUCTION FOR 57495B
 CANYON LARGO UNIT 430
 DEVILS FORK GALLUP (ASSOCIATED FIELD) GALLUP ZONE

PHS030M1

DAYS			OIL		GAS		GAS					
MO	T	S	ON	PC	PROD	GRV	PC	PROD	ON	BTU	PRESS	WATER PROD
1	2	S					01				15.025	
2	2	S		02			01				15.025	
3	2	F	7	02			01	1421	7	1310	15.025	
4	2	F	30	02	245	42.0	01	2467	30	1310	15.025	
5	2	S	30	02	147		01	208	30	1310	15.025	
6	2	F	27	02	239	43.0	01	1852	27	1310	15.025	
7	2	F	31	02	41	39.3	01	253	31	1305	15.025	
8	2	F	31	02	3		01	210	31	1305	15.025	
9	2	F	20	02	106		01	1287	20	1305	15.025	
10	2	F	31	02	277	42.0	01	2007	31	1296	15.025	
11	2	F	30	02	145		01	1489	30	1296	15.025	
12	2	F	31	02	118	43.1	01	1238	31	1256	15.025	

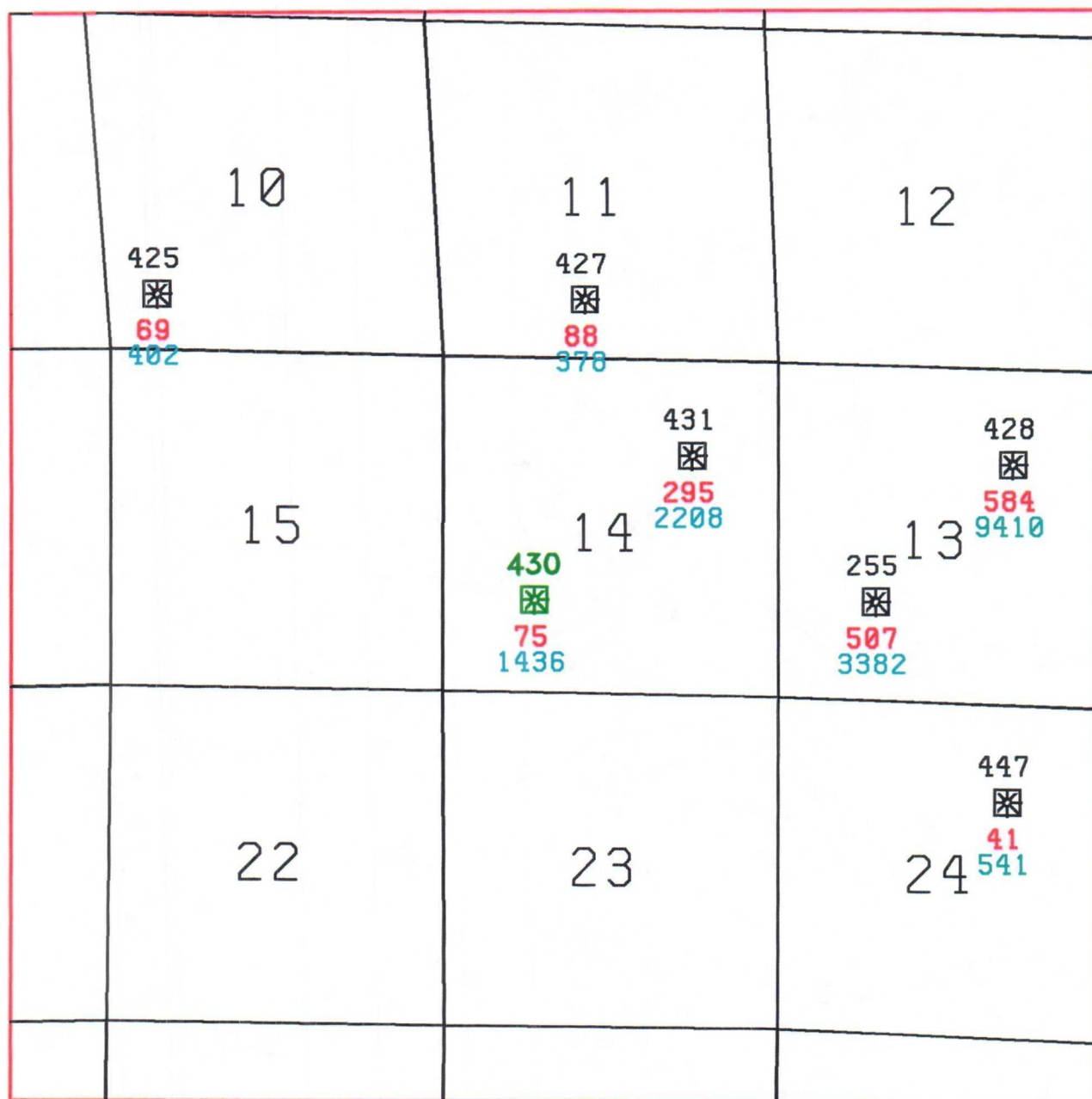
PF6 - RETURNS TO ANNUAL DISPLAY
 PF10 - HELP INFORMATION

PF3 - TRANSFER TO UPDATE
 PF9 - DISPLAY MONTHLY INJECTION
 PRS 07/03/97

00/00/00 00:00:00:0

B MY JOB

NUM LU #26



Well #

 CUM
 EUR

DLA
 7/97

Canyon Largo Unit #430

14K-25N-07W

Dakota

**STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION DIVISION**

**IN THE MATTER OF THE HEARING
CALLED BY THE OIL CONSERVATION
DIVISION FOR THE PURPOSE OF
CONSIDERING:**

**CASE NO. 11685
ORDER NO. R-10786**

**APPLICATION OF BURLINGTON RESOURCES OIL & GAS COMPANY FOR
THE ESTABLISHMENT OF A DOWNHOLE COMMINGLING "REFERENCE
CASE" FOR ITS CANYON LARGO UNIT PURSUANT TO DIVISION RULE 303.E
AND THE ADOPTION OF SPECIAL ADMINISTRATIVE RULES THEREFOR,
RIO ARriba COUNTY, NEW MEXICO.**

ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 8:15 a.m. on January 23, 1997, at Santa Fe, New Mexico, before Examiner David R. Catanach.

NOW, on this 3rd day of April, 1997, the Division Director, having considered the testimony, the record and the recommendations of the Examiner, and being fully advised in the premises,

FINDS THAT:

(1) Due public notice having been given as required by law, the Division has jurisdiction of this cause and the subject matter thereof.

(2) The applicant, Burlington Resources Oil & Gas Company (Burlington), pursuant to the provisions of Division Rule 303.E., seeks to establish a downhole commingling "reference case" to provide exceptions for (a) marginal economic criteria, (b) pressure criteria, (c) allocation formulas and (d) modification of notification rules on a unit-wide basis for downhole commingling of Dakota, Mesaverde, Pictured Cliffs, Chacra, Gallup and Fruitland Coal gas production within existing or future drilled wells within the Canyon Largo Unit, Rio Arriba County, New Mexico.

(3) Division Rule No. 303.E., amended by Order No. R-10470-A, currently states:

CASE NO. 11685
Order No. R-10786
Page -2-

"If sufficient data exists on a lease, pool, formation, geographic area, etc., so as to render it unnecessary to repeatedly provide such data on Form C-107-A, an operator may except any of the various criteria required under Paragraph 303.D. of this rule by establishing a "reference case". The Division, upon its own motion, or by application from an operator, may establish "reference cases" either administratively or by hearing. Upon Division approval of such "reference cases" for specific criteria, subsequent applications to downhole commingle (Form C-107-A) will be required only to cite the Division order number which established such exceptions and shall not be required to submit data for those criteria."

(4) Burlington Resources Oil & Gas Company is the current operator and Merrion Oil & Gas Corporation (Merrion) is the sub-operator of the Gallup formation within the Canyon Largo Unit which encompasses some 49,876 acres in Townships 24 and 25 North, Ranges 6 and 7 West, NMPM, Rio Arriba County, New Mexico.

(5) Within the Canyon Largo Unit, Burlington or Merrion currently operate forty-five (45) Basin-Dakota Gas Pool wells, five (5) Blanco-Mesaverde Gas Pool wells, twenty-eight (28) Otero-Chacra Gas Pool wells, fifty-nine (59) Devils Fork-Gallup Pool wells, one-hundred forty (140) Ballard-Pictured Cliffs and South Blanco-Pictured Cliffs Gas Pool wells, and zero (0) Basin-Fruitland Coal Gas Pool wells.

(6) According to its evidence and testimony, Burlington seeks to:

- a) establish a "reference case" for marginal economic criteria in the Dakota, Mesaverde, Pictured Cliffs, Chacra, Gallup and Fruitland Coal formations whereby these formations and/or pools may be identified as "marginal" on Form C-107-A's subsequently filed for wells within the Canyon Largo Unit. The applicant further proposes that the data provided in the immediate case serve as supplemental data or confirmation that these formations and/or pools should be classified as "marginal";
- b) establish a "reference case" for pressure criteria in the Dakota, Mesaverde, Pictured Cliffs, Chacra, Gallup and Fruitland Coal formations whereby the Division may utilize data provided in the immediate case to verify the pressure data provided on Form C-107-A's subsequently filed for wells within the Canyon Largo Unit;
- c) establish a "reference case" whereby the Division utilizes the data presented in the immediate case to endorse or approve certain methods of allocating production whereby the applicant need not submit additional data or justification when proposing a certain method of allocating production on Form C-107-A's subsequently filed for wells within the Canyon Largo Unit; and,

CASE NO. 11685**Order No. R-10786****Page -3-**

- d) establish a "reference case" or an administrative procedure for authorizing the downhole commingling of existing or future drilled wells within the Canyon Largo Unit without additional notice to each affected interest owner as required by Division Rule No. 303.D.

(7) In support of its request to except marginal economic criteria, the applicant presented geologic and engineering evidence and testimony which indicate that within the Canyon Largo Unit:

- a) in general, the Dakota formation within the Canyon Largo unit should be marginal, however, there is potential for encountering isolated compartmentalized Dakota producing sands which may produce at non-marginal rates;
- b) although there are only a small number of Mesaverde producing wells, there is extensive geologic data regarding the Mesaverde formation within the Canyon Largo Unit. This data indicates that the Mesaverde formation presents limited opportunities within the Canyon Largo Unit and should be considered a marginal reservoir;
- c) the better Pictured Cliffs and Chacra reservoir development lies within the northeast portion of the Canyon Largo Unit. The potential for further development of the Pictured Cliffs and Chacra formations outside this area is limited and both should be considered marginal reservoirs;
- d) there is extensive Gallup development in the southern portion of the Canyon Largo Unit, however remaining potential in the Gallup formation should be considered marginal;
- e) the Basin-Fruitland Coal reservoir within the Canyon Largo Unit is in an under-pressured area of the San Juan Basin and presents limited opportunity;
- f) the average recoverable oil and gas reserves and average initial producing rates from the various formations within the Canyon Largo Unit are summarized as follows:

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Order No. R-10786
Page -4-

<u>FORMATION</u>	<u>AVERAGE ESTIMATED ULTIMATE RECOVERY</u>	<u>AVERAGE INITIAL PRODUCING RATE</u>
Dakota	987 MMCFG	196 MCFGD
Mesaverde	841 MMCFG	262 MCFGD
Pictured Cliffs	678 MMCFG	126 MCFGD
Chacra	1096 MMCFG	320 MCFGD
Gallup	501 MMCFG 44 MBO	76 MCFGD 14 BOPD
Fruitland Coal	NA	NA

(8) The evidence and testimony presented by the applicant indicate that the Dakota, Mesaverde, Pictured Cliffs, Chacra, Gallup and Fruitland Coal formations within the Canyon Largo Unit should be properly classified as "marginal".

(9) In support of its request to except pressure criteria within the Dakota, Mesaverde, Pictured Cliffs, Chacra, Gallup and Fruitland Coal formations within the Canyon Largo Unit, the applicant presented engineering evidence and testimony which indicate that the average shut-in bottomhole pressure at the time of initial development and average current shut-in bottomhole pressure within the subject formations are as follows:

<u>FORMATION</u>	<u>AVERAGE INITIAL SHUT-IN BOTTOMHOLE PRESSURE</u>	<u>AVERAGE CURRENT SHUT-IN BOTTOMHOLE PRESSURE</u>
Dakota	2754 psi	937 psi
Mesaverde	1431 psi	741 psi
Pictured Cliffs	822 psi	255 psi
Chacra	986 psi	280 psi
Gallup	NA	NA
Fruitland Coal	822 psi	822 psi

(10) There is sufficient pressure data available within the Canyon Largo Unit so as to except pressure criteria in the Dakota, Pictured Cliffs, Chacra and Gallup formations, however, there is insufficient data to except pressure criteria in the Fruitland Coal and Mesaverde formations as proposed by the applicant.

(11) The applicant testified that various allocation methods will be utilized for downhole commingled wells within the Canyon Largo Unit depending on the circumstances. Some of the methods and circumstances are described as follows:

- a) the subtraction method will likely be utilized in those instances involving the Basin-Fruitland Coal Gas Pool and in those instances where a zone with a well established decline rate is commingled with a newly completed zone;

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- b) a fixed allocation formula will be utilized in those instances where production history for both zones is available, or in those instances where newly completed zones are tested and stabilized flow rates obtained.

(12) The allocation methods proposed by the applicant are routinely utilized by industry and approved by the Division and therefore, the proposal to except allocation formulas should be approved.

(13) In addition to the above, the applicant proposed utilizing a formula by which the production allocation may be determined by utilizing the BTU content and/or API gravity of the commingled stream.

(14) The proposed formula described in Finding No. (13) above should be used only to verify the results of production allocation derived by the methods described in Finding No. (11) above.

(15) In support of its request to establish a "reference case" or administrative procedure for providing notice within the Canyon Largo Unit the applicant presented evidence and testimony which indicate that:

- a) the interest ownership between two zones within a given wellbore in the Canyon Largo Unit is generally not common;
- b) pursuant to Division Rule No. 303.D., applicant is currently required to notify all interest owners within the Canyon Largo Unit every time a Form C-107-A is submitted to the Division. There are a considerable number of such interest owners within the unit;
- c) providing notice to each interest owner within the Canyon Largo Unit of subsequent downhole comminglings is unnecessary and is an excessive burden on the applicant;
- d) the downhole commingling of wells within the Canyon Largo Unit Area will benefit working, royalty, and overriding royalty interest owners. In addition, the downhole commingling of wells within the Canyon Largo Unit should not violate the correlative rights of any interest owner;
- e) no interest owner appeared at the hearing in opposition to the establishment of a "reference case" or administrative procedure for notice.

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(16) An administrative procedure should be established within the Canyon Largo Unit for obtaining approval for subsequently downhole commingled wells without notice to Unit interest owners, provided however that, all other provisions contained within Division Rule No. 303.C. are complied with.

(17) Approval of the proposed "reference cases" for marginal economic criteria, pressure criteria, allocation formulas and notice will lessen the burden on the applicant insofar as providing the data required pursuant to Division Rule No. 303.D. and Form C-107-A, will provide the applicant a streamlined method for obtaining downhole commingling approvals within the Canyon Largo Unit, and will not violate correlative rights.

IT IS THEREFORE ORDERED THAT:

(1) The application of Burlington Resources Oil & Gas Company to establish a "reference case" for marginal economic criteria and modification of notification rules on a unit-wide basis for downhole commingling of Dakota, Mesaverde, Pictured Cliffs, Chacra, Gallup and Fruitland Coal gas production within existing or future drilled wells within the Canyon Largo Unit, located in portions of Townships 24 and 25 North, Ranges 6 and 7 West, NMPM, Rio Arriba County, New Mexico, is hereby approved.

(2) The application of Burlington Resources Oil & Gas Company to establish a "reference case" for pressure criteria in the Dakota, Pictured Cliffs, Chacra and Gallup formations within the Canyon Largo Unit is hereby approved, provided however that, the portion of the application seeking to establish a "reference case" for pressure criteria in the Fruitland Coal and Mesaverde formations within the Canyon Largo Unit is hereby denied.

(3) Upon filing of Division Form No. C-107-A's for wells subsequently downhole commingled within the Canyon Largo Unit Area, the applicant shall not be required to submit supporting data to justify the classification of the Dakota, Mesaverde, Pictured Cliffs, Chacra, Gallup and Fruitland Coal formations as "marginal", supporting data to verify the Dakota, Pictured Cliffs, Chacra and Gallup pressure information provided, and support or justification for utilizing a given method or formula for allocation of production, provided however, in the event any of the data described above appearing on Form C-107-A appears to be beyond the data range provided in this case, the Division may require the submittal of additional supporting data.

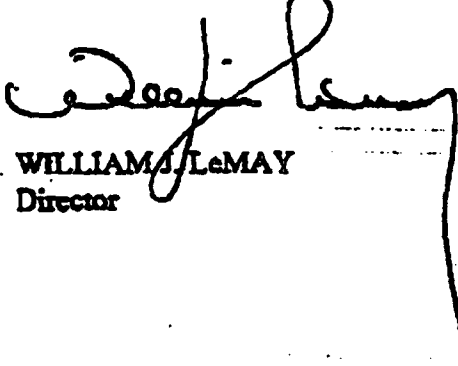
(4) In order to obtain Division authorization to downhole commingle wells within the Canyon Largo Unit, the applicant shall file a Form C-107-A with the Santa Fe and Aztec Offices of the Division. Such application shall contain all the information required under Rule No. 303.D. of the Division Rules and Regulations, provided however that the applicant shall not be required to provide notice to all interest owners within the Canyon Largo Unit of such proposed commingling.

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(5) Jurisdiction of this cause is retained for the entry of such further orders as the Division may deem necessary.

DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION



WILLIAM J. LEMAY
Director

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