

DATE IN. 4/30/97	SUSPENSE 5/20/97	ENGINEER BS	LOGGED MV	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]

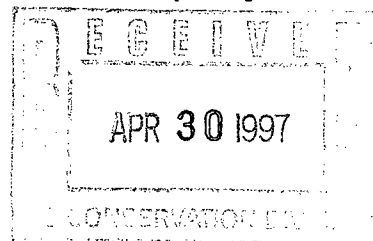
[1] TYPE OF APPLICATION - Check Those Which Apply for [A]

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

Check One Only for [B] and [C]

[B] Commingling - Storage - Measurement
☒ 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

4-28-97

BURLINGTON RESOURCES

SAN JUAN DIVISION

April 24, 1997

SENT FEDERAL EXPRESS

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

Re: Grenier #17
990'FNL, 990'FWL Section 6, T-31-N, R-11-W, San Juan County, NM
API #30-045-11698

Dear Mr. LeMay:

This is a request for administrative approval for downhole commingling the Blanco Mesa Verde and Basin Dakota in the subject well. This well was originally drilled as a Dakota; it is intended to add the Mesa Verde and commingle.

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 curve for Dakota and expected production curve for the Mesa Verde;
4. Notification list of offset operators;
5. Shut in wellhead pressure and calculated down hole pressure of surrounding wells;
6. Nine-section plats for the Mesa Verde and Dakota.

Notification of Mesa Verde and Dakota interest owners is unnecessary, as all interests are identical.

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

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

APPLICATION FOR DOWNHOLE COMMINGLING

EXISTING WELLBORE

☒ YES ☐ NO

Burlington Resources Oil and Gas

Operator

Grenier

Address

#17

D-6-31N-11W

San Juan

Lease

Well No.

Unit Ltr. - Sec - Twp - Rge

County

Spacing Unit Lease Types: (check 1 or more)

OGRID NO. 14538 Property Code 18532 API NO. 30-045-11698 Federal ☒ , State ☐ Fee ☒

The following facts are submitted in support of downhole commingling:	Upper Zone	Intermediate Zone	Lower Zone
1. Pool Name and Pool Code	Mesaverde - 72319		Dakota - 71599
2. Top and Bottom of Pay Section (Perforations)	Will be supplied upon completion.		7524'-7671'
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. 407 psi (est.) (offset Grenier #1) (see attachment)		a. 848 psi (see attachment)
	(Original) b. 1181 psi (est.) (offset Grenier #1) (see attachment)		b. 2505 psi (see attachment)
6. Oil Gravity (°API) or Gas BTU Content	BTU 1238 (est.) (offset Grenier #1)		BTU 1102
7. Producing or Shut-In?	Not completed yet.		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: N/A Rates:
	Date: 3/1/97 Rates:		Date: 3/1/97 Rates: 140 mcf/d .36 bopd
8. Fixed Percentage Allocation Formula - % for each zone (total of %'s to equal 100%)	Will be supplied upon completion.		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 ☐ No11. 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 ☐ No13. 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. NMOCD Reference Cases for Rule 303(D) Exceptions: ORDER NO(S) _____

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 Mary Ellen Lutey TITLE Production Engineer DATE 4/24/97TYPE OR PRINT NAME Mary Ellen Lutey 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-1
Revised February 21, 1997
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 30-045-11698		Pool Code 72319/71599		Pool Name Blanco Mesaverde/Basin Dakota	
Property Code 18530		Property Name Grenier			Well Number 17
OGRID No. 14538		Operator Name BURLINGTON RESOURCES OIL & GAS COMPANY			Elevation 6450'

10 Surface Location

UL or lot no. D	Section 6	Township 31-N	Range 11-W	Lot Idn	Feet from the 990	North/South line North	Feet from the 990	East/West line West	County S.J.
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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
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12 Dedicated Acres MV-W/310, 92 DK-W/310, 92	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

990'		990'		Not resurveyed, prepared from a plat by Ernest V. Echohawk dated 3-26-66.	
990'		990'		6	

17 OPERATOR CERTIFICATION

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

Peggy Bradfield
Signature
Peggy Bradfield
Printed Name
Regulatory Administrator
Title
4-28-97
Date

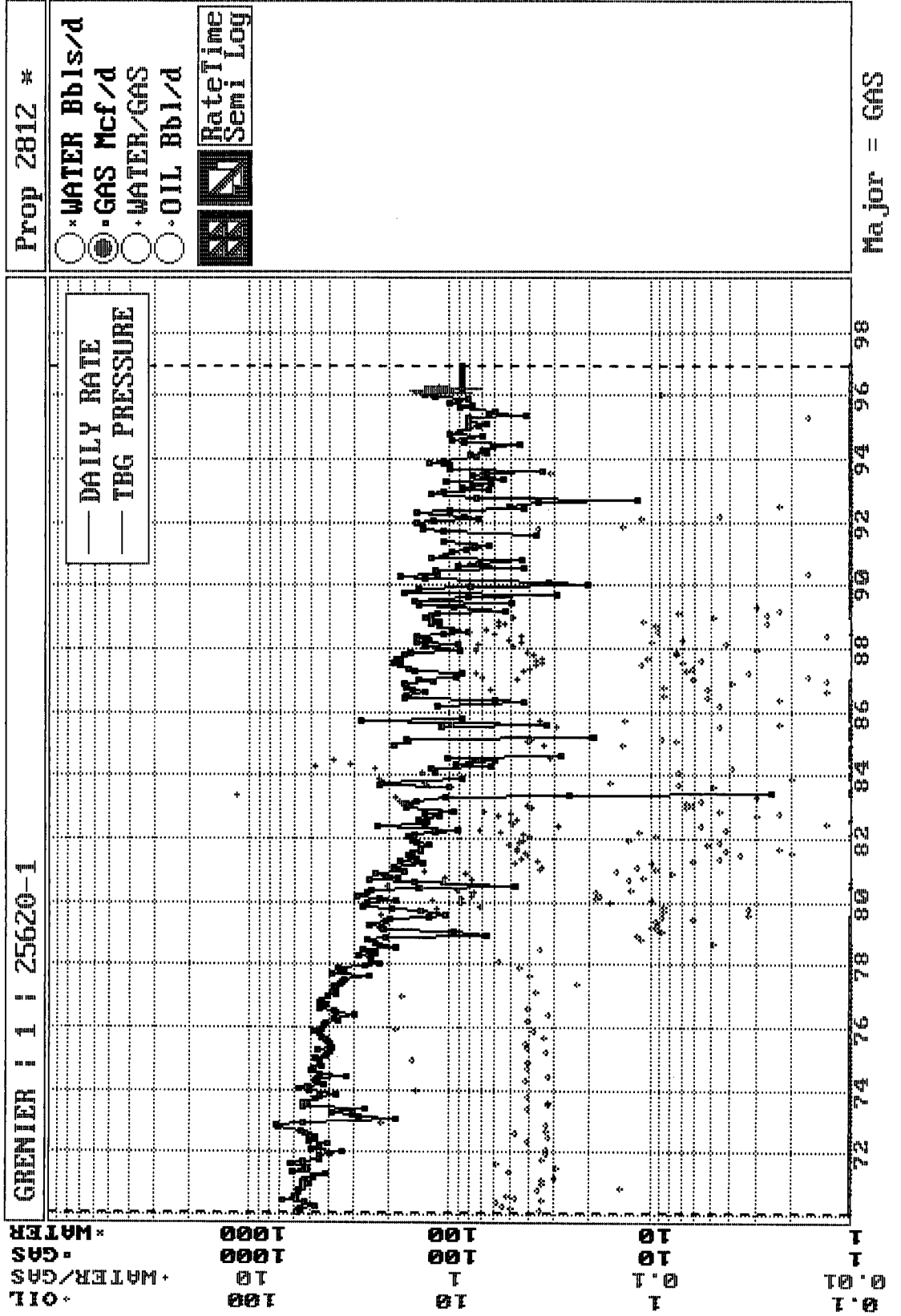
18 SURVEYOR CERTIFICATION

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.

4/24/97

Date of Survey
Signature and Seal of Professional Surveyor

NEALE C. EDWARDS
NEW MEXICO
6857
6857
Certificate Number

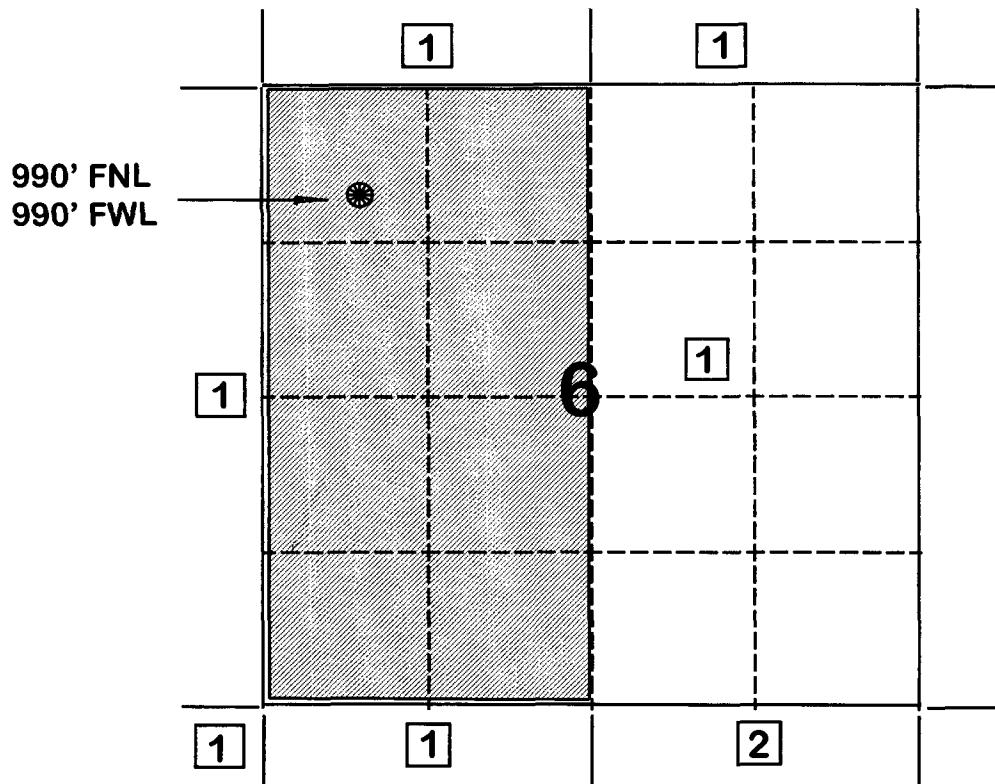


BURLINGTON RESOURCES OIL AND GAS COMPANY

**Grenier #17
OFFSET OPERATOR \ OWNER PLAT**

Mesaverde/Dakota Formations Commingle Well

Township 31 North, Range 11 West



- 1) Burlington Resources Oil and Gas Company Successor to Meridian Oil Inc.
- 2) Kimbark Oil & Gas Company
1660 Lincoln St #2700
Denver, CO 80264

FARMINGTON

1997 MONTHLY PRODUCTION FOR 25639

PHS030M1

GRENIER 17

BASIN DAKOTA (PRORATED GAS) FIELD

DAKOTA ZONE

		DAYS		OIL				GAS							
MO	T S	ON	PC	PROD	GRV	PC	PROD	ON	BTU	PRESS	WATER	PROD	C		
1	2 F	31	02	11		01	4891	31	1102	15.025					
2	2 F	28	02	10		01	3907	28	1102	15.025					
3															
4															
5															
6															
7															
8															
9															
10															
11															
12															

• 36 bopd

140 mcf/d

PF6 - RETURNS TO ANNUAL DISPLAY

PF3 - TRANSFER TO UPDATE

PF10 - HELP INFORMATION

PF9 - DISPLAY MONTHLY INJECTION

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

PRS 04/03/97

B MY JOB

NUM LU #29

**FLOWING AND STATIC BHP
CULLENDER AND SMITH METHOD**

VERSION 1.0 3/13/94

GAS GRAVITY	0.66
COND. OR MISC. (C/M)	C
%N2	0.11
%CO2	2.54
%H2S	0
DIAMETER (IN)	2.4
DEPTH (FT)	7710
SURFACE TEMPERATURE (DEG F)	60
BOTTOMHOLE TEMPERATURE (DEG F)	200
FLOWRATE (MCFPD)	0
SURFACE PRESSURE (PSIA)	709
BOTTOMHOLE PRESSURE (PSIA)	847.8

GRENIER #17 DAKOTA - (CURRENT)

**FLOWING AND STATIC BHP
CULLENDER AND SMITH METHOD**

VERSION 1.0 3/13/94

GAS GRAVITY	0.66
COND. OR MISC. (C/M)	C
%N2	0.11
%CO2	2.54
%H2S	0
DIAMETER (IN)	2.4
DEPTH (FT)	7710
SURFACE TEMPERATURE (DEG F)	60
BOTTOMHOLE TEMPERATURE (DEG F)	200
FLOWRATE (MCFPD)	0
SURFACE PRESSURE (PSIA)	2052
BOTTOMHOLE PRESSURE (PSIA)	2504.9

GRENIER #17 DAKOTA - (ORIGINAL)

Organize Data ScreenGraph Economics Report Plot Utility Quit

Browsing: GRENIER | 17 | 25639-1

Property No.: 22

Table(T): TEST/M,P,H,E,T,Z,C,A,O,D,N,1,2,3,B,U,S Rec: 1/15/1231

Item: 2/3/33 Name: DATE Type: Date Len: 8/27/203

--DATE--	---CUM GAS--	M SIWHP
	Mcf	Psi
06/20/66	0	2052.0
06/12/70	1050795	1067.0
04/30/71	1236666	999.0
03/18/72	1390308	933.0
05/02/73	1671244	874.0
04/18/75	2038965	788.0
05/17/77	2392907	716.0
05/02/79	2635955	752.0
05/01/80	2734456	778.0
09/01/81	2862478	788.0
08/24/83	2954027	782.0
05/29/85	3032789	767.0
03/22/88	3122976	729.0
06/07/90	3190121	699.0
04/28/92	3226505	709.0

F1=Help F3=PrvPro F5=PrvTbl F7=Calcu F9=Utils Alt+TableLtr=Change Table
F2=Jump F4=NxtPro F6=NxtTbl F8=Print F10=Exit Shift+<- ->=Fast Tbl R & L

**FLOWING AND STATIC BHP
CULLENDER AND SMITH METHOD**

VERSION 1.0 3/13/94

GAS GRAVITY	0.72
COND. OR MISC. (C/M)	C
%N2	0.11
%CO2	1
%H2S	0
DIAMETER (IN)	2.4
DEPTH (FT)	5706
SURFACE TEMPERATURE (DEG F)	60
BOTTOMHOLE TEMPERATURE (DEG F)	150
FLOWRATE (MCFPD)	0
SURFACE PRESSURE (PSIA)	985
BOTTOMHOLE PRESSURE (PSIA)	1160.8

GRENIER #17 MESAVERDE - (ANTICIPATED)

GRENIER #1 MESAVERDE - (ORIGINAL)

**FLOWING AND STATIC BHP
CULLENDER AND SMITH METHOD**

VERSION 1.0 3/13/94

GAS GRAVITY	<u>0.72</u>
COND. OR MISC. (C/M)	<u>C</u>
%N2	<u>0.11</u>
%CO2	<u>1</u>
%H2S	<u>0</u>
DIAMETER (IN)	<u>2.4</u>
DEPTH (FT)	<u>5706</u>
SURFACE TEMPERATURE (DEG F)	<u>60</u>
BOTTOMHOLE TEMPERATURE (DEG F)	<u>150</u>
FLOWRATE (MCFPD)	<u>0</u>
SURFACE PRESSURE (PSIA)	<u>352</u>
BOTTOMHOLE PRESSURE (PSIA)	<div>407.2</div>

GRENIER #17 MESAVERDE - (ANTICIPATED)
GRENIER #1 MESAVERDE - (CURRENT)

----- DWIGHTS TEST DATA REPORT ----- Row 1 to 10 of 15
 COMMAND ==> SCROLL ==> PAGE

State: 30 Lease Name: GRENIER
 Prod: 2 County Name: SAN JUAN
 Ident: 31N11W06000MV Reservoir Name: MESAVERDE
 District: 4 Operator Name: BURLINGTON RES O&G CO
 Location: 60 31N 11W Field Name: BLANCO (MESAVERDE)
 Retrieval code: 251,045,31N11W06000MV Well: 1 Total Depth: 5706
 Gas Gath: SUG Status: ACT Upper Perf: 5410
 API No: 1100500 Comp Date: 195104 Lower Perf: 5524

Date	Cum to Test	WHSIP	BHP	P/Z	BDWtr	BDCnd	WHFlw	Poten	MC	Pt	Z	FAC
19510401	0	985	1134	1274	0	0	0	2420	C	2	90.000	
19700418	1,676,176	690	790	858	0	0	561	604	C	2	21.000	
19710418	1,876,573	561	640	684	0	0	452	513	C	2	35.000	
19720418	2,054,358	561	640	684	0	0	454	473	C	2	35.000	
19730502	2,234,559	541	617	658	0	0	455	365	C	2	37.000	
19740602	2,420,820	473	539	571	0	0	378	491	C	2	44.000	
19780518	2,979,740	472	538	570	0	0	370	256	C	2	44.000	
19800824	3,143,877	495	564	599	0	0	401	243	C	2	42.000	
19820417	3,242,175	467	532	563	0	0	438	69	C	2	45.000	
19840529	3,328,237	464	528	559	0	0	410	123	C	2	45.000	

B MY JOB LU #13

----- DWIGHTS TEST DATA REPORT ----- Row 11 to 15 of 15
 COMMAND ==> SCROLL ==> PAGE

State: 30 Lease Name: GRENIER
 Prod: 2 County Name: SAN JUAN
 Ident: 31N11W06000MV Reservoir Name: MESAVERDE
 District: 4 Operator Name: BURLINGTON RES O&G CO
 Location: 60 31N 11W Field Name: BLANCO (MESAVERDE)
 Retrieval code: 251,045,31N11W06000MV Well: 1 Total Depth: 5706
 Gas Gath: SUG Status: ACT Upper Perf: 5410
 API No: 1100500 Comp Date: 195104 Lower Perf: 5524

Date	Cum to Test	WHSIP	BHP	P/Z	BDWtr	BDCnd	WHFlw	Poten	MC	Pt	Z	FAC
19860402	3,369,739	451	514	543	0	0	420	81	C	2	47.000	
19890609	3,520,457	429	488	514	0	0	320	92	C	2	49.000	
19910529	3,587,509	387	440	461	0	0	354	99	C	2	54.000	
19930629	3,648,567	367	417	436	0	0	328	80	C	2	0.956	
19951002	3,712,674	352	400	418	0	0	311	107	C	2	0.958	

***** Bottom of data *****

B MY JOB

LU #13

