

DATE IN 4/30/97	SUSPENSE 5/20/97	ENGINEER BS	LOGGED N	TYPE DHC
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ABOVE THIS LINE FOR DIVISION USE ONLY

## NEW MEXICO OIL CONSERVATION DIVISION

- Engineering Bureau -

569

### 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]

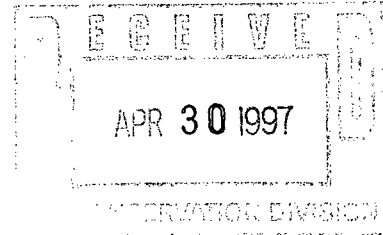
#### [1] TYPE OF APPLICATION - Check Those Which Apply for [A]

[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

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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: Davis #8  
990'FSL, 1650'FEL Section 11, T-31-N, R-12-W, San Juan County, NM  
API #30-045-10857

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 - Burlington is the surrounding operator;
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 87505-6429

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

APPROVAL PROCESS :

X Administrative    Hearing

APPLICATION FOR DOWNHOLE COMMINGLING

EXISTING WELLBORE

X YES    NO

Burlington Resources Oil and Gas

Operator	Davis	#8	O-11-31N-12W	San Juan
Lease		Well No.	Unit Ltr. - Sec - Twp - Rge	County
Spacing Unit Lease Types: (check 1 or more)				
OGRID NO.	14538	Property Code	18509	API NO. 30-045-10857
		Federal	X	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.		7334'-7481'
3. Type of production (Oil or Gas)	Gas		Gas
4. Method of Production (Flowing or Artificial Lift)	Flowing		Flowing
5. Bottomhole Pressure	(Current) a. 508 psi (est.) (offset Davis 1) (see attachment)		a. 641 psi (see attachment)
Oil Zones - Artificial Lift: Estimated Current	(Original) b. 1028 psi (est.) (offset Davis 1) (see attachment)		b. 2340 psi (see attachment)
Gas & Oil - Flowing: Measured Current			
All Gas Zones: Estimated or Measured Original			
6. Oil Gravity (°API) or Gas BTU Content	BTU 1223 (est.) (offset Davis 1)		BTU 1149
7. Producing or Shut-In?	Not completed yet.		Producing
Production Marginal? (yes or no)	Yes		No
* If Shut-In and oil/gas/water rates of last production	Date: N/A Rates:		Date: N/A Rates:
Note: For new zones with no production history, applicant shall be required to attach production estimates and supporting data			
* If Producing, give data and oil/gas/water water of recent test (within 60 days)	Date: Rates:		Date: 3/1/97 Rates: 243 mcf/d 1.8 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? X 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? X Yes    No
11. Will cross-flow occur? X 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. X Yes    No (If No, attach explanation)
12. Are all produced fluids from all commingled zones compatible with each other? X Yes    No
13. Will the value of production be decreased by commingling? Yes    X 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. X 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 4/24/97  
TYPE 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-10  
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 30-045-10857	Pool Code 72319/71599	Pool Name Blanco Mesaverde/Basin Dakota
Property Code 18509	Property Name Davis	Well Number 8
OGRID No. 14538	Operator Name BURLINGTON RESOURCES OIL & GAS COMPANY	Elevation 6353'

<sup>10</sup> Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
0	11	31-N	12-W		990	South	1650	East	S.J.

<sup>11</sup> 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


<sup>12</sup> Dedicated Acres MV-E/305.96 DK-E/305.96	<sup>13</sup> Joint or Infill 96	<sup>14</sup> Consolidation Code	<sup>15</sup> Order No.
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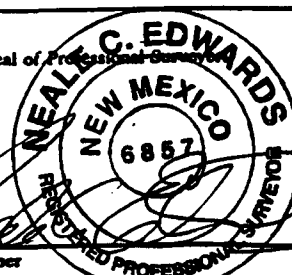
NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

16	4	3	2	1
Not resurveyed, prepared from a plat by Ernest V. Echohawk dated 9-6-62.				
5	6	7	8	
12	11	10	9	
13	14	15	16	

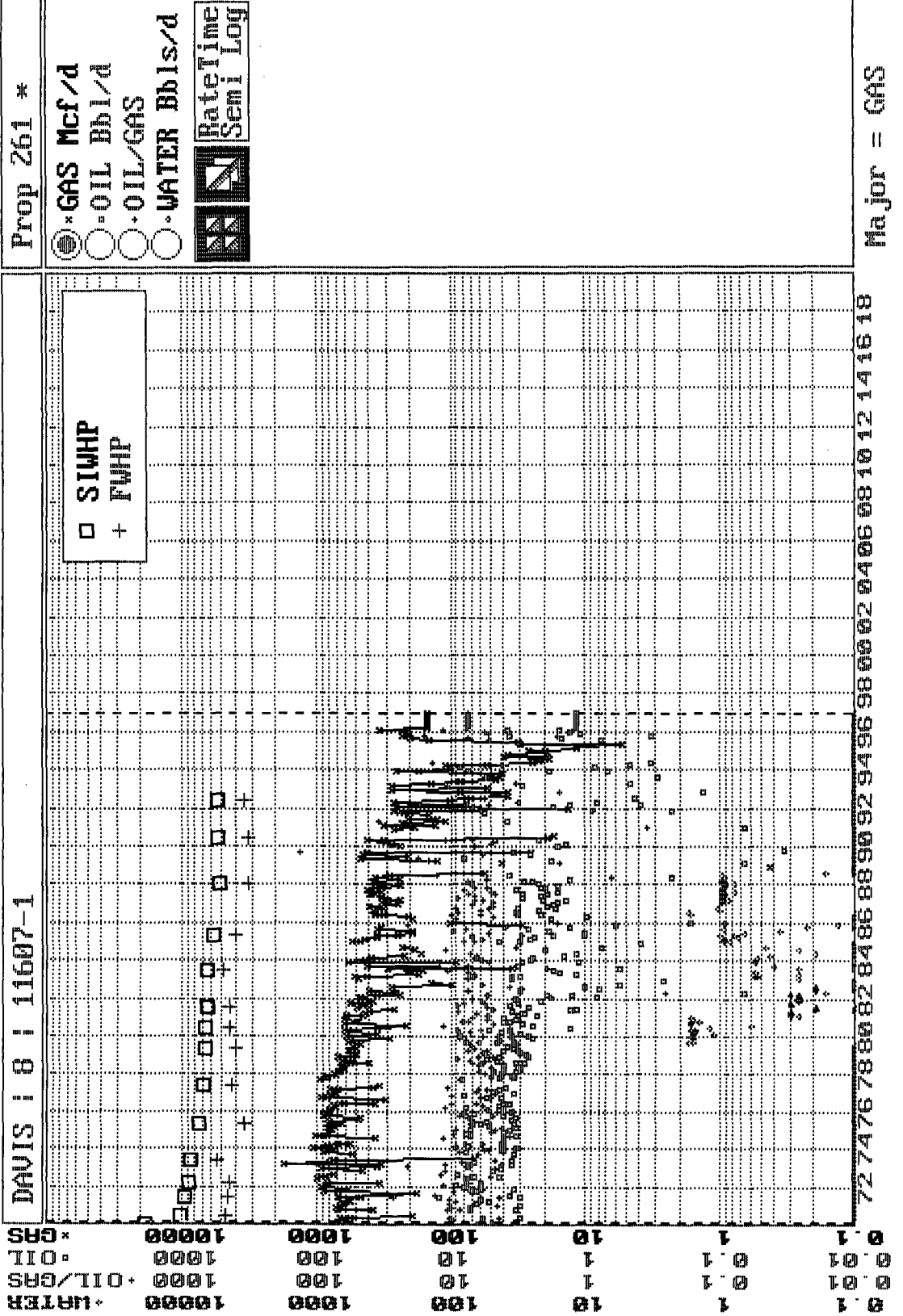
1650'

990'

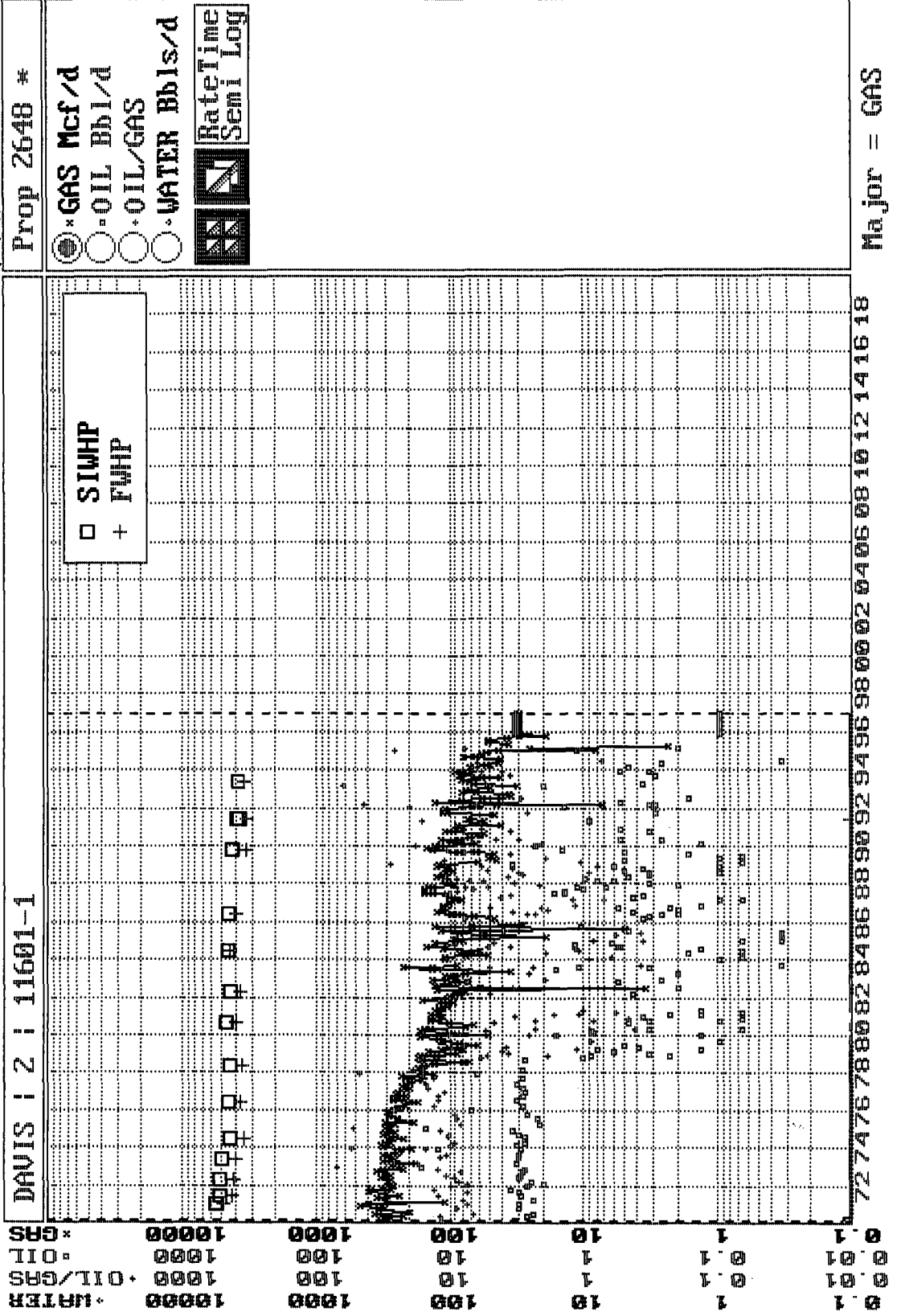
**OPERATOR CERTIFICATION**  
I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.  
  
Signature  
Peggy Bradfield  
Printed Name  
Regulatory Administrator  
Title  
4-28-97  
Date

**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  
  
6857  
Certificate Number

DK



MV

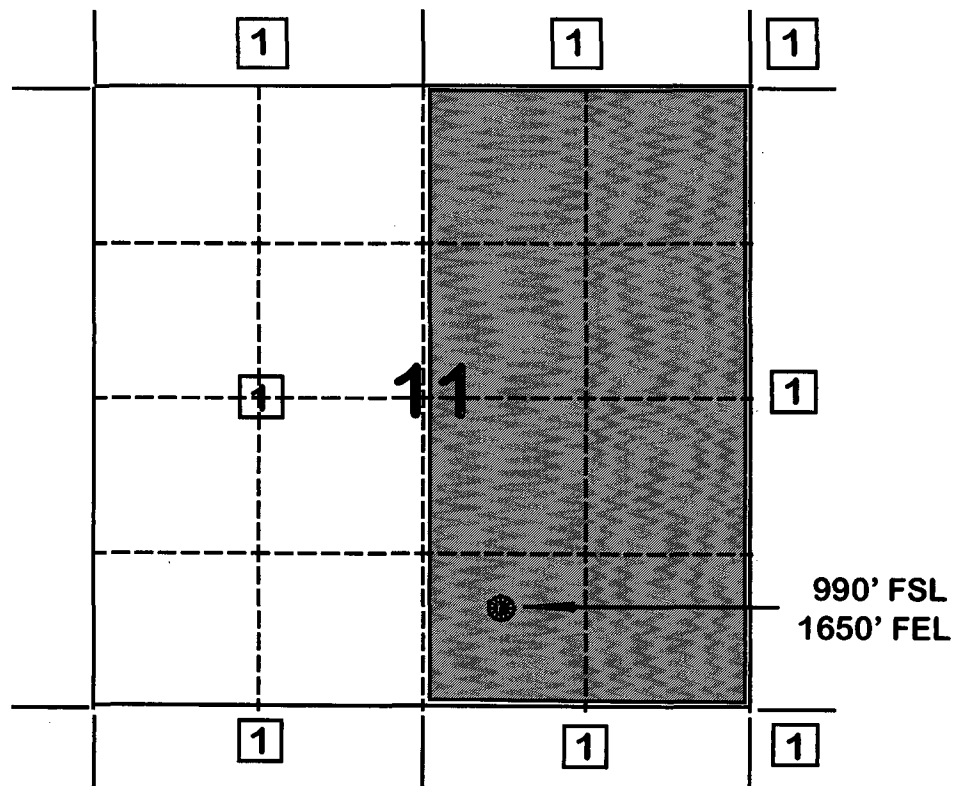


***BURLINGTON RESOURCES OIL AND GAS COMPANY***

**Davis #8  
OFFSET OPERATOR \ OWNER PLAT**

**Mesaverde/Dakota Formations Commingle Well**

**Township 31 North, Range 12 West**



**1) Burlington Resources Oil and Gas Company Successor to Meridian Oil Inc.**

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

VERSION 10/3/13/94

GAS GRAVITY	0.69
COND. OR MISC. (C/M)	C
%N2	0.23
%CO2	2.15
%H2S	0
DIAMETER (IN)	2.4
DEPTH (FT)	7594
SURFACE TEMPERATURE (DEG F)	60
BOTTOMHOLE TEMPERATURE (DEG F)	200
FLOWRATE (MCFPD)	0
SURFACE PRESSURE (PSIA)	535
BOTTOMHOLE PRESSURE (PSIA)	641.2

DAVIS #8 DAKOTA - (CURRENT )



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

VERSION 1.0 3/13/94

GAS GRAVITY	0.69
COND. OR MISC. (C/M)	C
%N2	0.23
%CO2	2.15
%H2S	0
DIAMETER (IN)	2.4
DEPTH (FT)	7594
SURFACE TEMPERATURE (DEG F)	60
BOTTOMHOLE TEMPERATURE (DEG F)	200
FLOWRATE (MCFPD)	0
SURFACE PRESSURE (PSIA)	1899
BOTTOMHOLE PRESSURE (PSIA)	2340.4

DAVIS #8 DAKOTA - (ORIGINAL )

Organize Data ScreenGraph Economics Report Plot Utility Quit  
 Browsing: DAVIS | 8 | Property No.: 31  
 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
10/13/62	0	1899.0
06/12/70	1291125	1022.0
05/26/71	1454557	969.0
03/18/72	1642969	881.0
06/02/73	1914311	857.0
04/18/75	2332362	756.0
05/17/77	2834672	703.0
05/02/79	3245554	662.0
06/24/80	3448503	662.0
07/24/81	3621016	652.0
06/08/83	3825443	647.0
04/25/85	3983159	588.0
01/12/88	4254644	527.0
06/07/90	4406434	539.0
06/02/92	4509260	535.0

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

Organize Data ScreenGraph Economics Report Plot Utility Quit  
 Browsing: DAVIS | 8 | Property No.: 31  
 Table(T): TEST/M,P,H,E,T,Z,C,A,O,D,N,1,2,3,B,U,S Rec: 15/15/1231  
 Item: 2/3/33 Name: DATE Type: Date Len: 8/27/203

--DATE--	---CUM GAS--	M SIWHP
	Mcf	Psi
10/13/62	0	1899.0
06/12/70	1291125	1022.0
05/26/71	1454557	969.0
03/18/72	1642969	881.0
06/02/73	1914311	857.0
04/18/75	2332362	756.0
05/17/77	2834672	703.0
05/02/79	3245554	662.0
06/24/80	3448503	662.0
07/24/81	3621016	652.0
06/08/83	3825443	647.0
04/25/85	3983159	588.0
01/12/88	4254644	527.0
06/07/90	4406434	539.0
06/02/92	4509260	535.0

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	0.71
COND. OR MISC. (C/M)	C
%N2	0.83
%CO2	0.94
%H2S	0
DIAMETER (IN)	2.4
DEPTH (FT)	5470
SURFACE TEMPERATURE (DEG F)	60
BOTTOMHOLE TEMPERATURE (DEG F)	150
FLOWRATE (MCFPD)	0
SURFACE PRESSURE (PSIA)	442
BOTTOMHOLE PRESSURE (PSIA)	508.2

DAVIS #2 MESAVERDE - (ANTICIPATED )  
DAVIS #1 MESAVERDE - (CURRENT)

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

VERSION 1.0 5/13/94

GAS GRAVITY	0.71
COND. OR MISC. (C/M)	C
%N2	0.83
%CO2	0.94
%H2S	0
DIAMETER (IN)	2.4
DEPTH (FT)	5470
SURFACE TEMPERATURE (DEG F)	60
BOTTOMHOLE TEMPERATURE (DEG F)	150
FLOWRATE (MCFPD)	0
SURFACE PRESSURE (PSIA)	884
BOTTOMHOLE PRESSURE (PSIA)	1028.4

DAVIS #2 MESAVERDE - (ANTICIPATED )  
DAVIS #1 MESAVERDE - (ORIGINAL)

OFFSET INFO  
FOR DAVIS

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

State: 30 Lease Name: DAVIS  
Prod: 2 County Name: SAN JUAN  
Ident: 31N12W11E00MV Reservoir Name: MESAVERDE  
District: 4 Operator Name: BURLINGTON RES O&G CO  
Location: 11E 31N 12W Field Name: BLANCO (MESAVERDE)  
Retrieval code: 251,045,31N12W11E00MV Well: 1 Total Depth: 5404  
Gas Gath: SUG Status: ACT Upper Perf: 5048  
API No: 1093100 Comp Date: 194912 Lower Perf: 5310

Date	Cum to Test	WHSIP	BHP	P/Z	BDWtr	BDCnd	WHFlw	Poten	MC	Pt	Z	FAC
19491207	0	884	1010	1131	0	0	0	396	C	2	93.000	
19701119	1,865,022	484	548	584	0	0	444	391	C	2	39.000	
19710418	1,929,718	545	618	663	0	0	402	455	C	2	32.000	
19720418	2,108,823	516	585	625	0	0	408	694	C	2	36.000	
19730602	2,266,661	538	610	654	0	0	391	334	C	2	33.000	
19740602	2,404,666	453	513	544	0	0	333	404	C	2	43.000	
19760618	2,668,337	461	522	554	0	0	361	240	C	2	42.000	
19780503	2,865,861	433	490	519	0	0	337	243	C	2	45.000	
19800816	3,000,716	496	562	599	0	0	645	204	C	2	38.000	
19820408	3,069,418	490	555	591	0	0	385	105	C	2	39.000	

B MY JOB LU #20

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

State: 30 Lease Name: DAVIS  
Prod: 2 County Name: SAN JUAN  
Ident: 31N12W11E00MV Reservoir Name: MESAVERDE  
District: 4 Operator Name: BURLINGTON RES O&G CO  
Location: 11E 31N 12W Field Name: BLANCO (MESAVERDE)  
Retrieval code: 251,045,31N12W11E00MV Well: 1 Total Depth: 5404  
Gas Gath: SUG Status: ACT Upper Perf: 5048  
API No: 1093100 Comp Date: 194912 Lower Perf: 5310

Date	Cum to Test	WHSIP	BHP	P/Z	BDWtr	BDCnd	WHFlw	Poten	MC	Pt	Z	FAC
19840627	3,154,714	492	557	594	0	0	444	98	C	2	38.000	
19860610	3,213,116	486	551	587	0	0	380	120	C	2	39.000	
19891026	3,345,804	454	514	545	0	0	296	232	C	2	43.000	
19910528	3,399,675	442	500	530	0	0	339	86	C	2	44.000	
19930504	3,444,902	442	500	530	0	0	326	63	C	2	0.944	

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

B MY JOB

LU #20

FARMINGTON

1997 MONTHLY PRODUCTION FOR 11607

PHS030M1

DAVIS 8

BASIN DAKOTA (PRORATED GAS) FIELD

DAKOTA ZONE

MO	T	S	ON	PC	PROD	GRV	PC	PROD	ON	BTU	PRESS	WATER	PROD	C
1	2	F	31	02	51		01	7002	31	1149	15.025			
2	2	F	28	02	50		01	6811	28	1149	15.025			
3														
4														
5														
6														
7														
8														
9														
10														
11														
12														

1.8 bopd

243 mcf/d

PF6 - RETURNS TO ANNUAL DISPLAY

PF3 - TRANSFER TO UPDATE

PF10 - HELP INFORMATION

PF9 - DISPLAY MONTHLY INJECTION

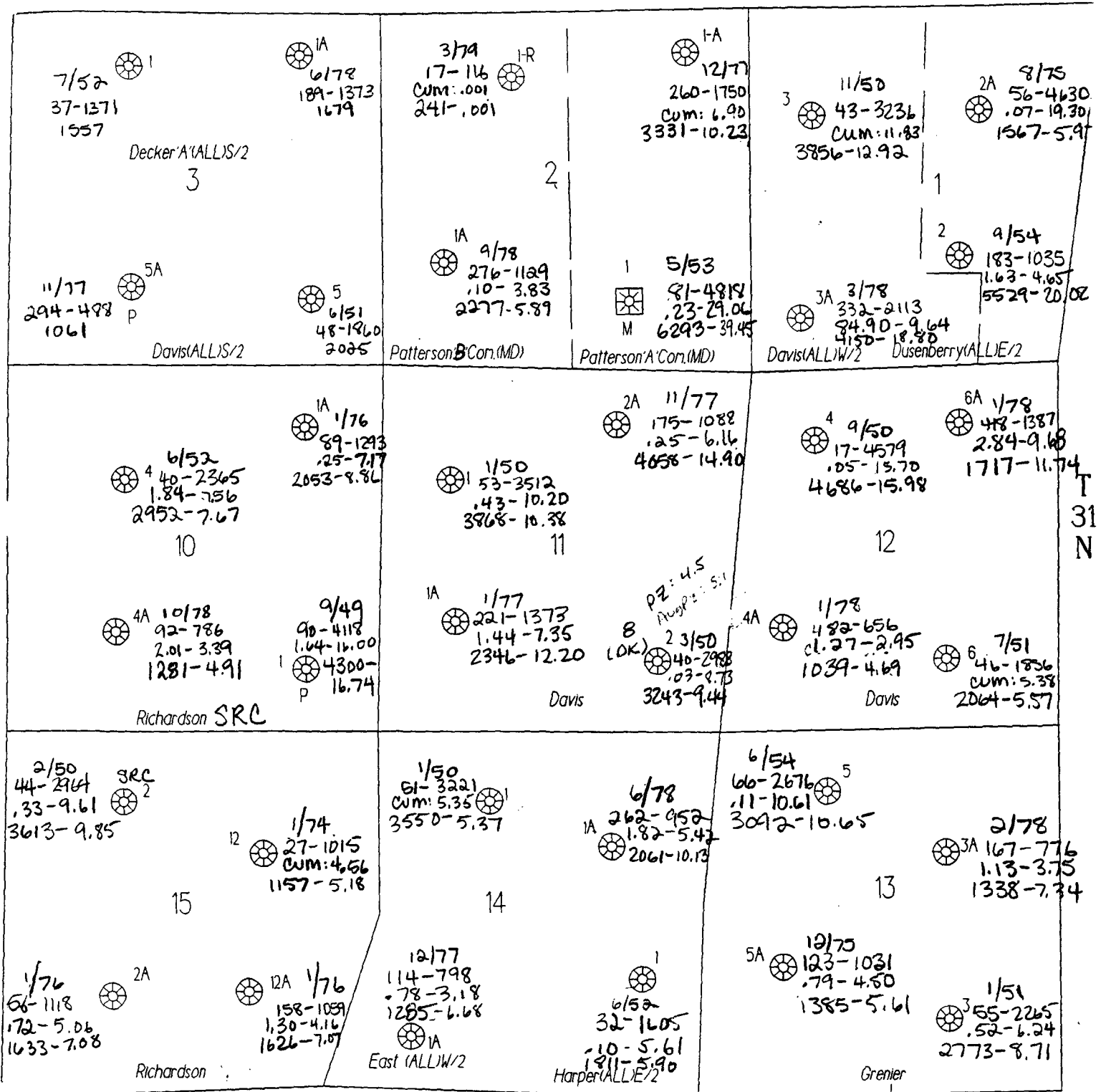
00/00/00 00:00:00:0

PRS 04/03/97

B MY JOB

NUM LU #29

DAVIS #8, 2, 1  
SECTION 11, R31N, R12W  
BLANCO MESAVERDE



R-12-W