

DATE IN 2/24/97	SUSPENSE 3/17/97	ENGINEER BS	LOGGED KV	TYPE DHC
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ABOVE THIS LINE FOR DIVISION USE ONLY

**NEW MEXICO OIL CONSERVATION DIVISION**  
- Engineering Bureau -

1513

**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]

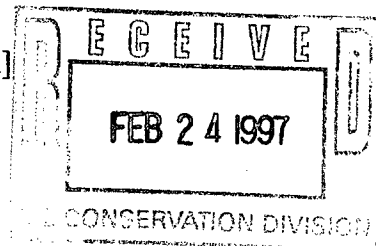
**[1] TYPE OF APPLICATION - Check Those Which Apply for [A]**

[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

2-20-97

# **BURLINGTON RESOURCES**

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SAN JUAN DIVISION

February 18, 1997

SENT FEDERAL EXPRESS

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

Re: Sheets #4  
1100'FSL, 1530'FEL Section 28, T-31-N, R-9-W, San Juan County, NM  
API #30-045-24297

Dear Mr. LeMay:

This is a request for administrative approval for downhole commingling the Blanco Pictured Cliffs and Basin Dakota in the subject well. This well was originally drilled as a Pictured Cliffs/Dakota dual; it is intended to commingle.

To comply with the New Mexico Oil Conservation Division rules, Burlington Resources Oil & Gas 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 Pictured Cliffs and Dakota for at least one year;
4. Notification list of offset operators;
5. Shut in wellhead pressure and calculated down hole pressure;
6. Nine-section plats for the Dakota and Pictured Cliffs

If you are a working, overriding or royalty interest owner in either of the above described pools, you are being notified of this application as a requirement of the New Mexico Oil Conservation Division Rule #303C. Burlington, as operator, believes this application will be in the best interest of all owners. If you have no objection to this commingling application, you do not have to respond to this notification. Upon establishment of production from this well, you will receive your proportionate share of revenues from the pool in which you own an interest according to the proposed allocation formula.

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  
encs.

xc: Bureau of Land Management

## 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 &amp; Gas Company

PO Box 4289, Farmington, NM 87499

Operator	Address
Sheets	4 O 28-31-9 San Juan
Lease	Well No. Unit Ltr. - Sec - Twp - Rge County
Spacing Unit Lease Types: (check 1 or more)	
OGRID NO. 14538 Property Code 7504 API NO. 30-045-24297 Federal <input checked="" type="checkbox"/> 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	Pictured Cliffs - 72359		Basin Dakota - 71599
2. Top and Bottom of Pay Section (Perforations)	3047-3070		7372-7574
3. Type of production (Oil or Gas)	gas		gas
4. Method of Production (Flowing or Artificial Lift)	flowing		flowing
5. Bottomhole Pressure	(Current) a. 709 psi (see attachment)	a.	a. 773 psi (see attachment)
Oil Zones - Artificial Lift: Estimated Current	(Original) b. 1068 psi (see attachment)	b.	b. 1847 psi (see attachment)
Gas & Oil - Flowing: Measured Current			
All Gas Zones: Estimated or Measured Original			
6. Oil Gravity (°API) or Gas BTU Content	BTU 1139		BTU 1017
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	Date: n/a Rates:	Date: 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: 12-96 Rates: 6 mcf/d; 0 bopd	Date: Rates:	Date: 12-96 Rates: 10 mcf/d; 0 bopd
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. 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 2/17/97

TYPE OR PRINT NAME Mary Ellen Lutey TELEPHONE NO. ( 505 ) 326-9700

All distances must be from the outer boundaries of the Section

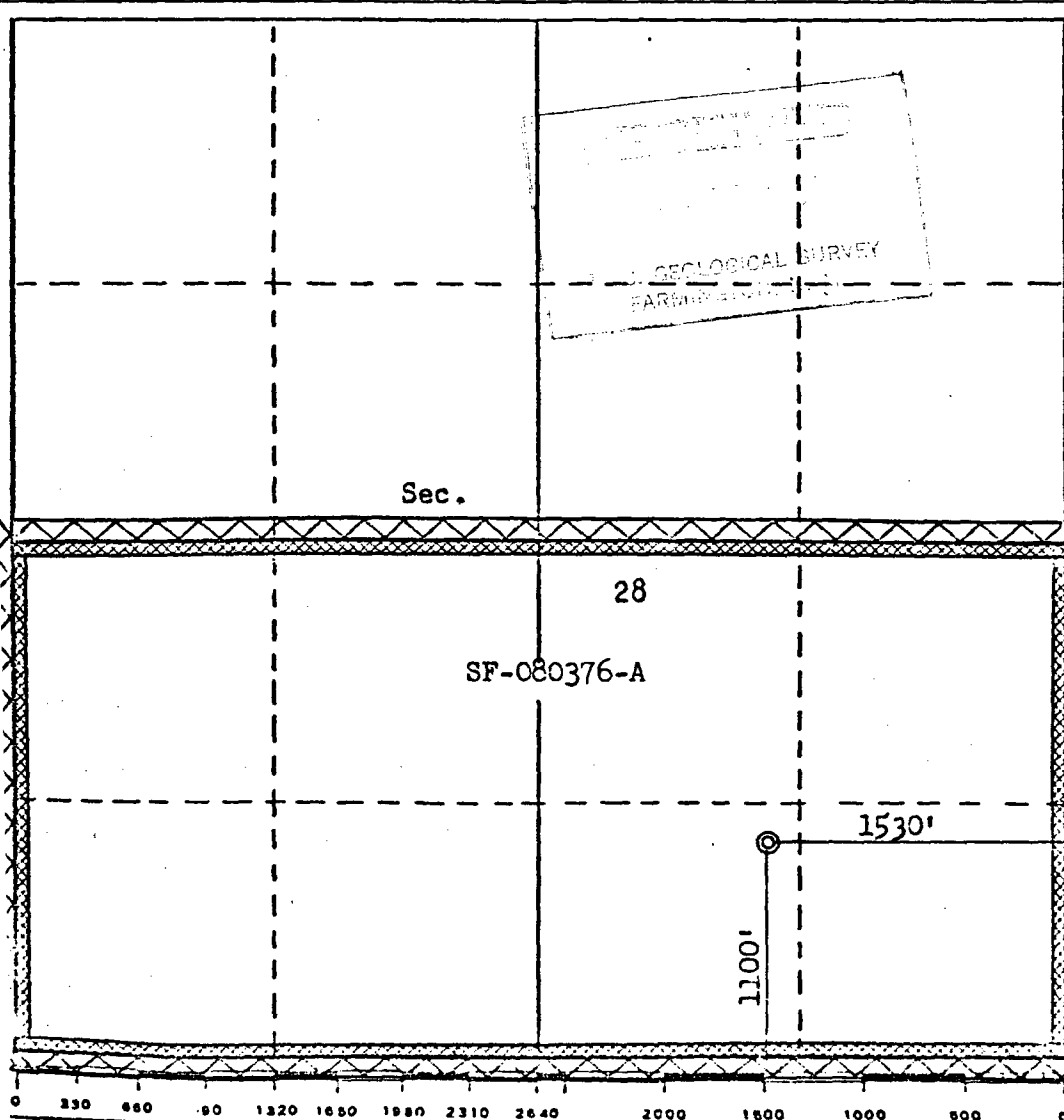
Operator <b>EL PASO NATURAL GAS COMPANY</b>			Lease <b>SHEETS (SF-080376-A)</b>		Well No. <b>4 (10)</b>
Init Letter <b>0</b>	Section <b>28</b>	Township <b>31N</b>	Range <b>9W</b>	County <b>San Juan</b>	
Actual Footage Location of Well: <b>1100</b> feet from the <b>South</b> line and <b>1530</b> feet from the <b>East</b> line					
Ground Level Elev. <b>6191</b>	Producing Formation <b>DAKOTA - CLIFFS</b>	Pool <b>BLANCO PICTURED CLIFFS EXT. BASIN DAKOTA</b>		Dedicated Acreage: <b>159.82 &amp; 318.02 Acres</b>	

1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
3. If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consolidated by communitization, unitization, force-pooling, etc?

☐ Yes ☐ No If answer is "yes," type of consolidation \_\_\_\_\_

If answer is "no," list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.) \_\_\_\_\_

No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interests, has been approved by the Commission.



CERTIFICATION

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

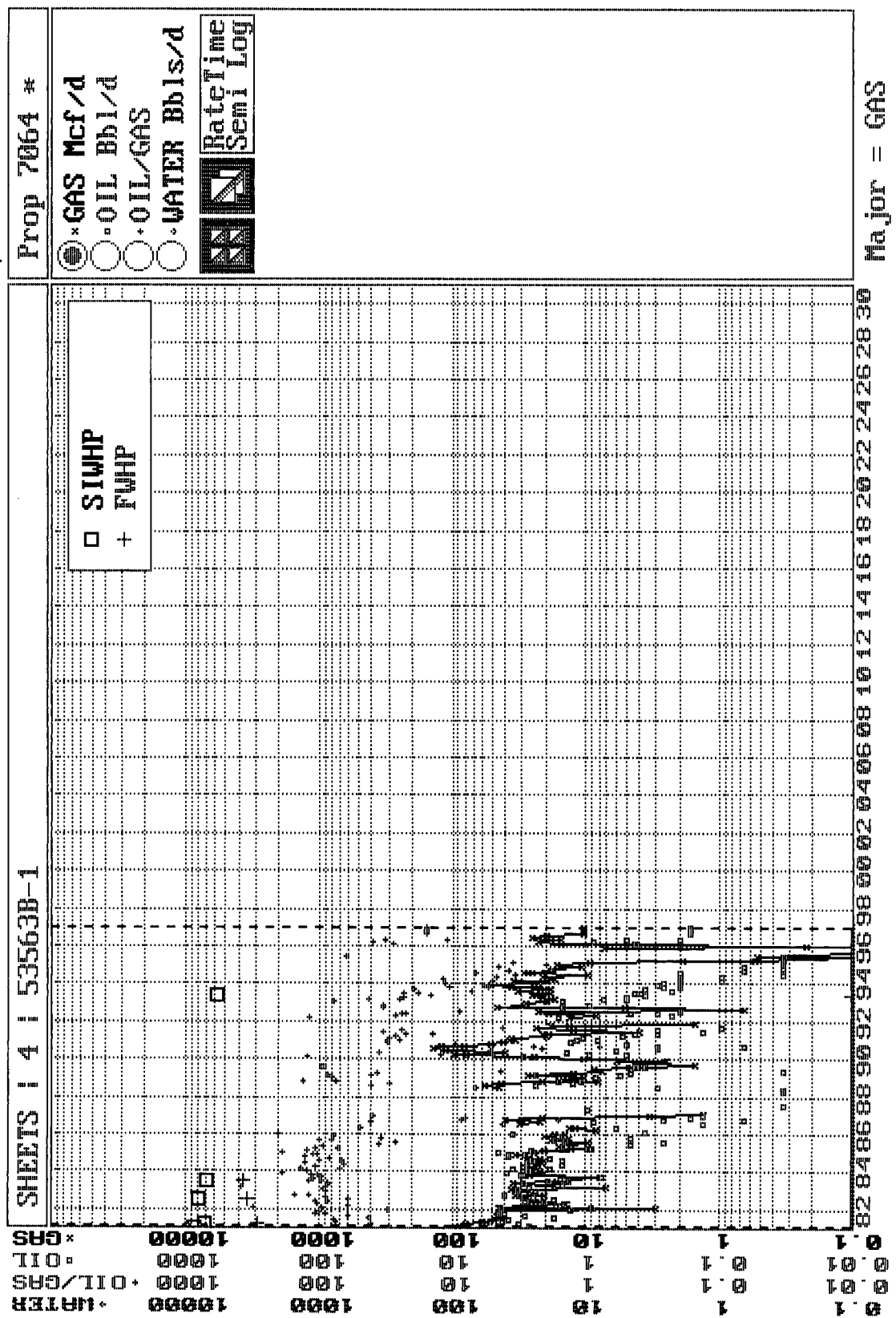
*A. G. Duce*

Name  
**Drilling Clerk**  
Position  
**El Paso Natural Gas Co.**  
Company  
**March 26, 1980**  
Date

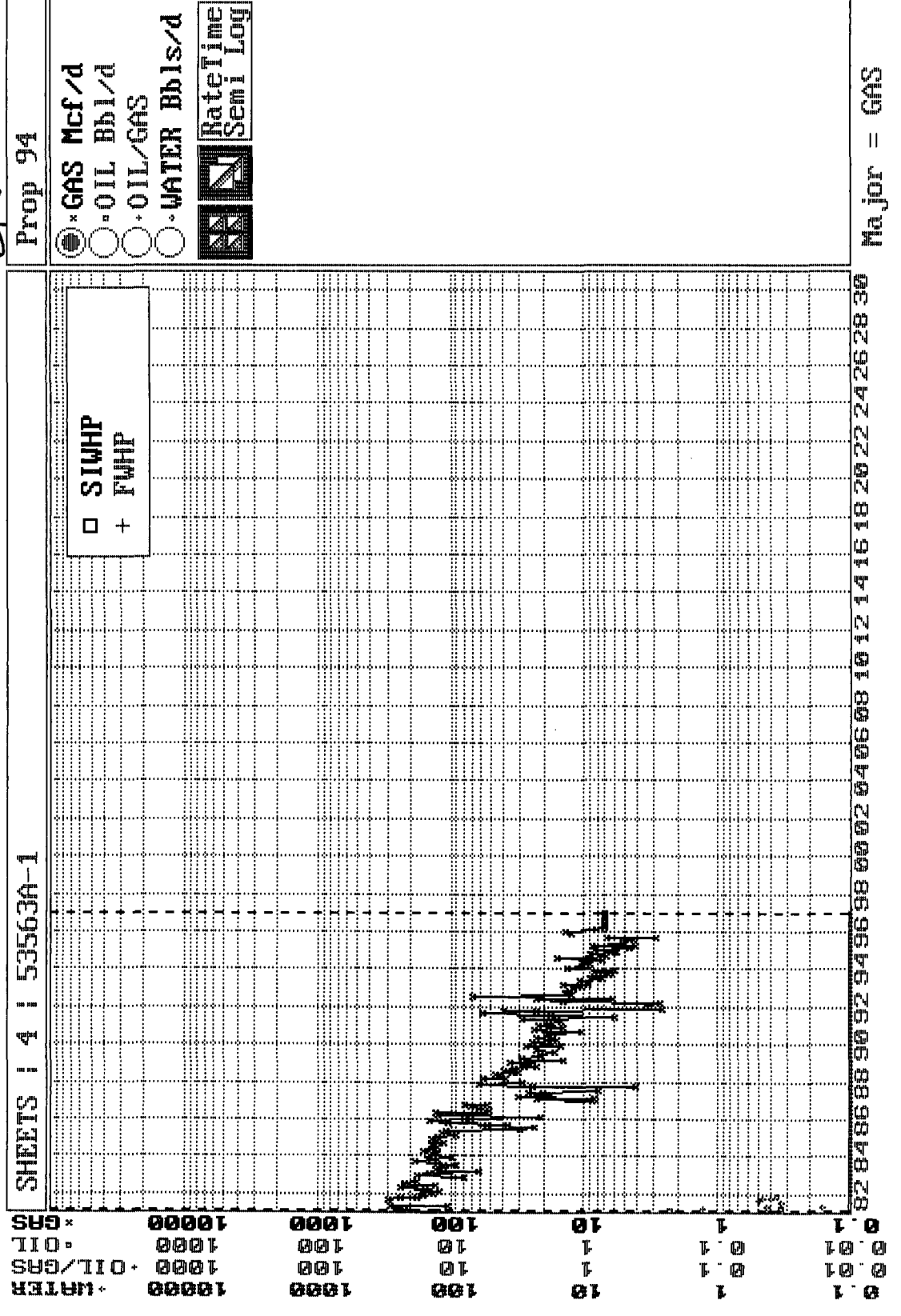
I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.

Date Surveyed  
**February 12, 1980**  
Registered Professional Engineer and/or Land Surveyor  
*Fred B. Kerr Jr.*  
**Fred B. Kerr Jr.**  
Certificate No. **3950**

PC



DK

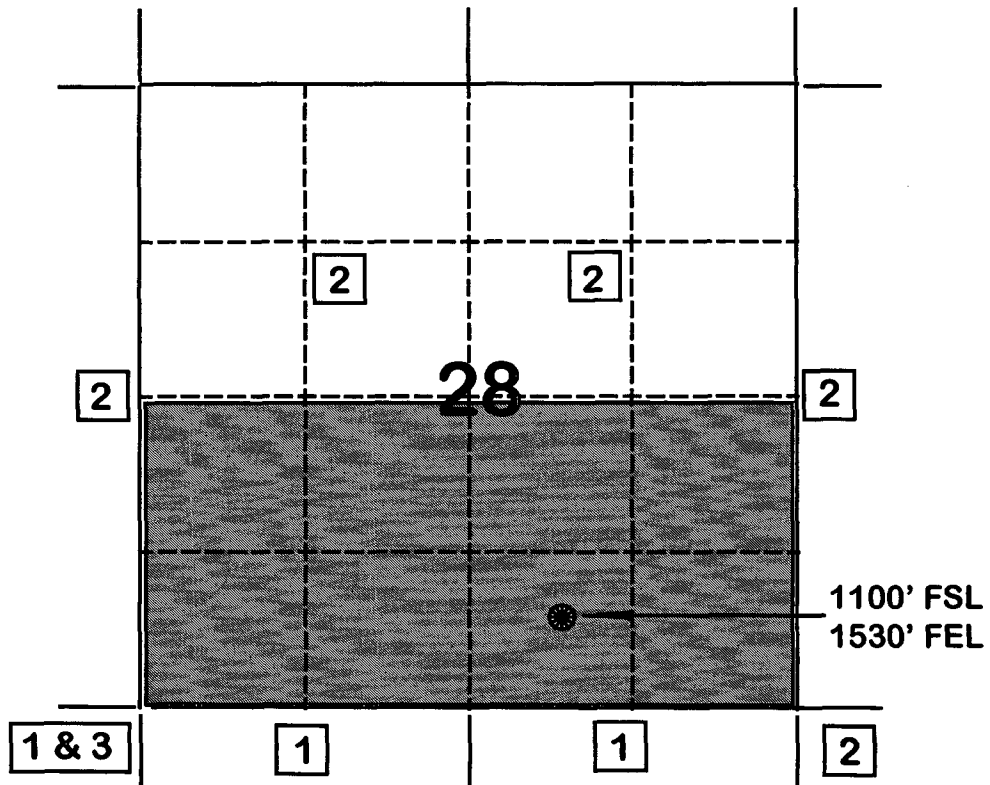


***BURLINGTON RESOURCES OIL AND GAS COMPANY***

**Sheets #4  
OFFSET OPERATOR \ OWNER PLAT**

**Pictured Cliffs (SE/4)/Dakota (S/2) Formations Commingle Well**

**Township 31 North, Range 9 West**



- 1) Burlington Resources Oil and Gas Company Successor to Meridian Oil Inc.
- 2) Amoco Production Company  
Attn: Bruce Zimney  
P.O. Box 800  
Denver, CO 80201
- 3) Conoco Inc.  
10 Desta Drive, Suite 100W  
Midland, TX 79705-4500

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

VERSION 1.0 3/13/94

GAS GRAVITY	0.61
COND. OR MISC. (C/M)	C
%N2	0.17
%CO2	3.39
%H2S	0
DIAMETER (IN)	2.4
DEPTH (FT)	7596
SURFACE TEMPERATURE (DEG F)	60
BOTTOMHOLE TEMPERATURE (DEG F)	200
FLOWRATE (MCFPD)	0
SURFACE PRESSURE (PSIA)	659
BOTTOMHOLE PRESSURE (PSIA)	773.0

SHEETS #4 DAKOTA - (CURRENT )



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

VERSION 1.0 3/13/94

GAS GRAVITY	0.61
COND. OR MISC. (C/M)	C
%N2	0.17
%CO2	3.39
%H2S	0
DIAMETER (IN)	2.4
DEPTH (FT)	7596
SURFACE TEMPERATURE (DEG F)	60
BOTTOMHOLE TEMPERATURE (DEG F)	200
FLOWRATE (MCFPD)	0
SURFACE PRESSURE (PSIA)	1554
BOTTOMHOLE PRESSURE (PSIA)	1847.0

SHEETS #4 DAKOTA - (ORIGINAL )

State: 30 Lease Name: SHEETS  
 Prod: 2 County Name: SAN JUAN  
 Ident: 31N09W28000DK Reservoir Name: DAKOTA  
 District: 4 Operator Name: BURLINGTON RES O&G CO  
 Location: 280 31N 9W Field Name: BASIN (DAKOTA)  
 Retrieval code: 251,045,31N09W28000DK Well: 4 Total Depth: 7596  
 Gas Gath: MOI Status: ACT Upper Perf: 0  
 API No: 2429700 Comp Date: 000000 Lower Perf: 0

Date	Cum to Test	WHSIP	BHP	P/Z	BDWtr	BDCnd	WHFlw	Poten	MC	Pt	Z	FAC
19810304	11,547	1554	ORIGINAL	0	0	0	292	257		2	0.000	
19820628	100,949	1006		0	0	0	455	307		2	0.000	
19830713	143,442	756		0	0	0	365	153		2	0.000	
19851209	244,783	804		0	0	0	380	96		2	0.000	
19880331	279,591	659	CURRENT	0	0	0	346	37		2	0.000	
***** Bottom of data *****												

B MY JOB

LU #14

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

VERSION 1.0 3/13/94

GAS GRAVITY	0.67
COND. OR MISC. (C/M)	C
%N2	0.2
%CO2	1.93
%H2S	0
DIAMETER (IN)	1.25
DEPTH (FT)	7596
SURFACE TEMPERATURE (DEG F)	60
BOTTOMHOLE TEMPERATURE (DEG F)	110
FLOWRATE (MCFPD)	0
SURFACE PRESSURE (PSIA)	583
BOTTOMHOLE PRESSURE (PSIA)	708.6

SHEETS #4 PICTURED CLIFFS - (CURRENT )

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

VERSION 1.0 3/13/94

GAS GRAVITY	0.67
COND. OR MISC. (C/M)	C
%N2	0.2
%CO2	1.93
%H2S	0
DIAMETER (IN)	1.25
DEPTH (FT)	7596
SURFACE TEMPERATURE (DEG F)	60
BOTTOMHOLE TEMPERATURE (DEG F)	110
FLOWRATE (MCFPD)	0
SURFACE PRESSURE (PSIA)	869
BOTTOMHOLE PRESSURE (PSIA)	1067.7

SHEETS #4 PICTURED CLIFFS - (ORIGINAL )

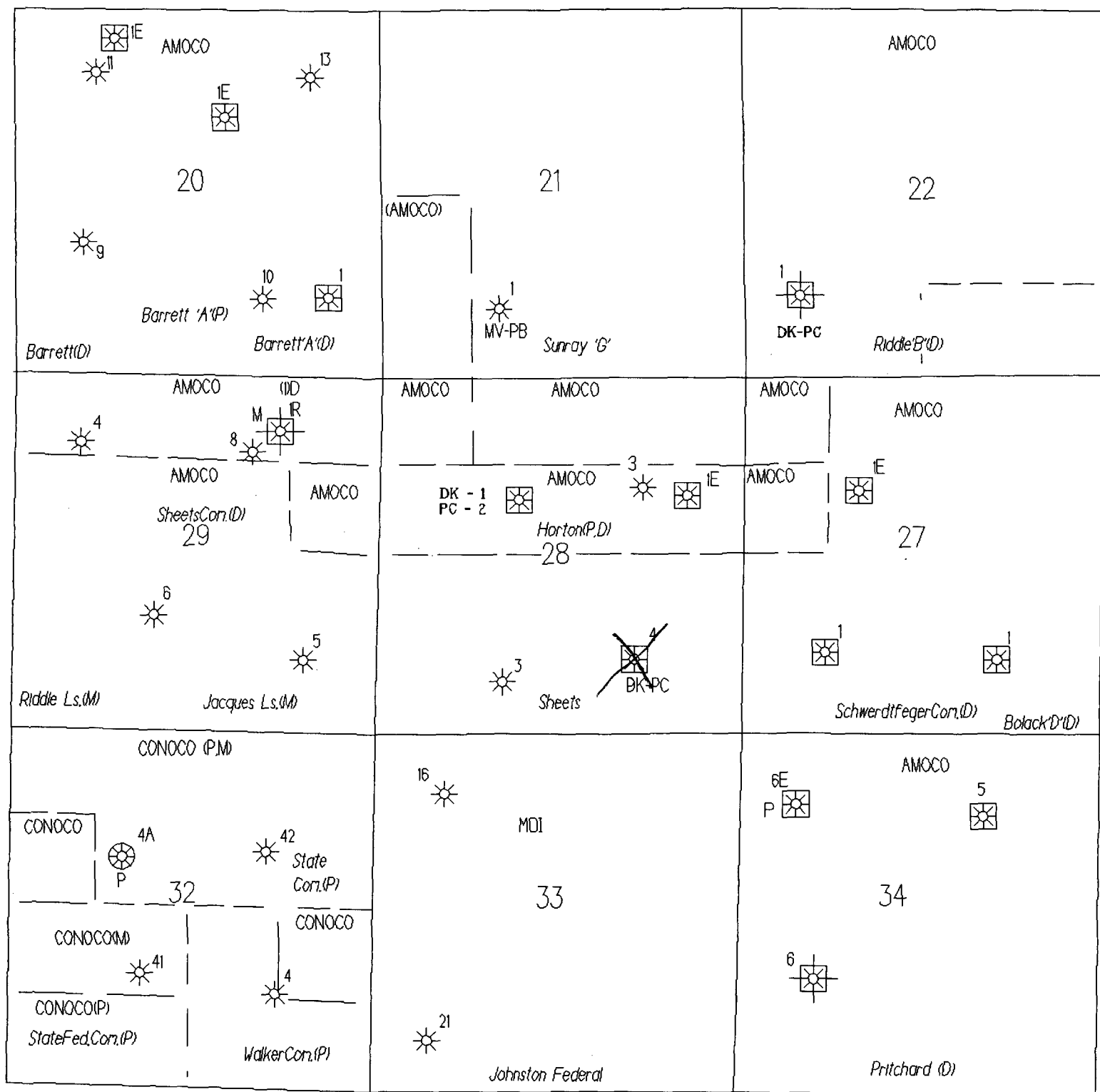
PC

Organize Data ScreenGraph Economics Report Plot Utility Quit  
Browsing: SHEETS | 4 | 53563B-1 Property No.: 7064  
Table(T): TEST/M,P,H,E,T,Z,C,A,O,D,N,1,2,3,B,U,S Rec: 1/5/103224  
Item: 2/3/33 Name: DATE Type: Date Len: 8/27/203

--DATE--	---CUM_GAS--	M SIWHP
	Mcf	Psi
10/02/80	0	869.0 ORIGINAL
03/04/81	9276	726.0
06/28/82	26372	806.0
07/13/83	34390	709.0
05/19/93	108595	583.0 CURRENT

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

SHEETS #4  
SECTION 28, T31N, T09W  
DAKOTA/PICTURED CLIFFS



FARMINGTON

1996 MONTHLY PRODUCTION FOR 53563A

PHS030M1

SHEETS

4

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					01	422	31	999	15.025			
2	2	F					01	249	29	999	15.025			
3	2	F					01	407	31	999	15.025			
4	2	F					01	352	30	999	15.025			
5	2	F					01	545	31	999	15.025			
6	2	F					01	653	30	999	15.025			
7	2	F					01	379	28	999	15.025			
8	2	F					01	392	31	995	15.025			
9	2	F					01	616	30	995	15.025			
10	2	F					01	933	31	995	15.025			
11	2	F					01	784	30	995	15.025			
12	2	F					01	10 mcf 0	314	31	995	15.025		

PF6 - RETURNS TO ANNUAL DISPLAY

PF3 - TRANSFER TO UPDATE

PF10 - HELP INFORMATION

PF9 - DISPLAY MONTHLY INJECTION

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PRS 02/05/97

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NUM LU #27

FARMINGTON

1996 MONTHLY PRODUCTION FOR 53563B

PHS030M1

SHEETS

4

BLANCO PICTURED CLIFFS (GAS) FIELD

PICTURED CLIFFS ZONE

			DAYS =====		OIL =====		=====		GAS =====					
MO	T	S	ON	PC	PROD	GRV	PC	PROD	ON	BTU	PRESS	WATER	PROD	C
1	2	F	31	02			01	3	31		15.025			
2	2	F	29	02	13		01	472	29	1119	15.025			
3	2	F	31	02	27		01	697	31	1119	15.025			
4	2	F	30	02	15		01	477	30	1119	15.025			
5	2	F	31	02	6		01	555	31	1119	15.025			
6	2	F	30	02			01	763	30	1119	15.025			
7	2	F	26	02			01	606	26	1119	15.025			
8	2	F	31	02			01	584	31	1108	15.025			
9	2	F	30	02			01	1257	30	1108	15.025			
10	2	F	31	02			01	29	31	1106	15.025			
11	2	F	23	02			01	104	23	1106	15.025			
12	2	F	31	02			01	6 mcf 0	198	31	1106	15.025		

PF6 - RETURNS TO ANNUAL DISPLAY

PF3 - TRANSFER TO UPDATE

PF10 - HELP INFORMATION

PF9 - DISPLAY MONTHLY INJECTION

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

PRS 02/05/97

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NUM LU #27