

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

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

**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]

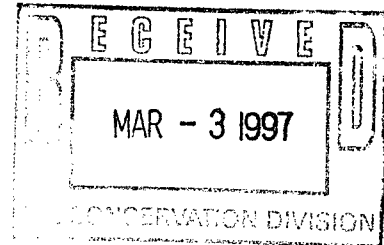
**[1] TYPE OF APPLICATION - Check Those Which Apply for [A]**

[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

Regulatory/Compliance Administrator

Print or Type Name

Signature

Title

Date

2-27-97

# **BURLINGTON RESOURCES**

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SAN JUAN DIVISION

February 20, 1997

SENT FEDERAL EXPRESS

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

Re: Sanchez #3E  
1530'FSL, 1620'FEL Section 34, T-30-N, R-10-W, San Juan County, NM  
API #30-045-25058

Dear Mr. LeMay:

This is a request for administrative approval for downhole commingling the Blanco Mesa Verde and the Basin Dakota in the subject well. This well was originally drilled as a Mesa Verde/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 Mesa Verde 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 Mesa Verde and Dakota

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 87505-6429

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

Sanchez

3E

J 34-30-10

San Juan

Lease

Well No.

Unit Ltr. - Sec - Twp - Rge

County

Spacing Unit Lease Types: (check 1 or more)

OGRID NO. 14538 Property Code 7475 API NO. 30-045-25058 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	Blanco Mesaverde - 72319		Basin Dakota - 71599
2. Top and Bottom of Pay Section (Perforations)	4163-5045'		6854-7002'
3. Type of production (Oil or Gas)	gas		gas
4. Method of Production (Flowing or Artificial Lift)	flowing		flowing
5. Bottomhole Pressure	(Current) a. 965 psi (see attachment)	a.	a. 947 psi (see attachment)
Oil Zones - Artificial Lift: Estimated Current Gas & Oil - Flowing: Measured Current All Gas Zones: Estimated or Measured Original	(Original) b. 1253 psi (see attachment)	b.	b. 2056 psi (see attachment)
6. Oil Gravity (°API) or Gas BTU Content	BTU 1232		BTU 1162
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 of recent test (within 60 days)	Date: 12-96 Rates: 71 mcf/d; 0.09 bopd	Date: Rates:	Date: 12-96 Rates: 156 mcf/d; 0.09 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

## OIL CONSERVATION DIVISION

STATE OF NEW MEXICO  
ENERGY AND MINERALS DEPARTMENTP. O. BOX 2088  
SANTA FE, NEW MEXICO 87501Form C-102  
Revised 10-1-79

All distances must be from the outer boundaries of the Section.

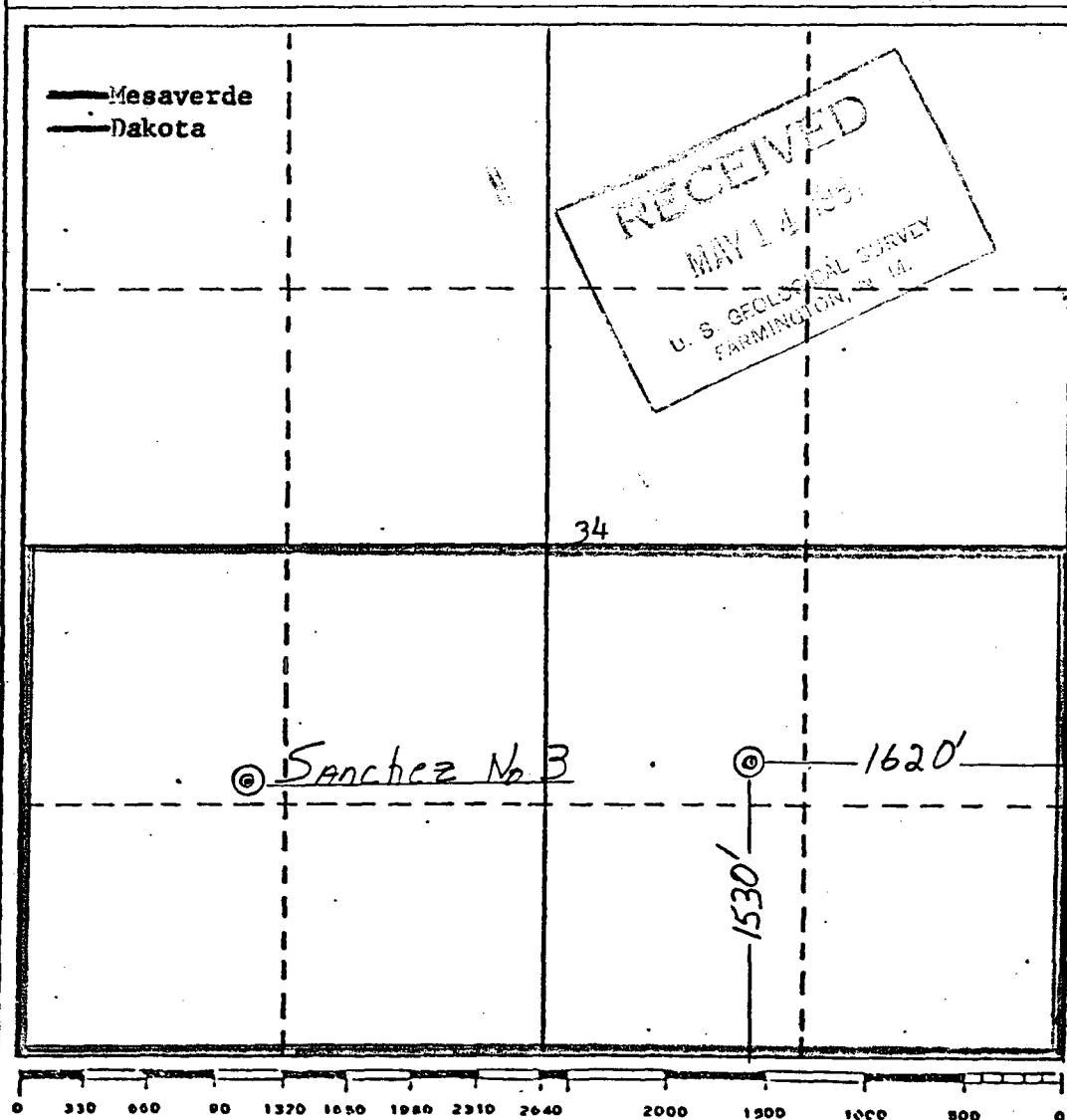
Operator <b>SUPRON ENERGY CORPORATION</b>			Lease <b>SANCHEZ</b>		Well No. <b>3E</b>
Unit Letter <b>J</b>	Section <b>34</b>	Township <b>30 NORTH</b>	Range <b>10 WEST</b>	County <b>SAN JUAN</b>	
Actual Footage Location of Well: <b>1530</b> feet from the <b>SOUTH</b> line and <b>1620</b> feet from the <b>EAST</b> line					
Ground Level Elev. <b>6005</b>	Producing Formation <b>Dakota Mesaverde</b>	Pool <b>Basin Blanco</b>	Dedicated Acreage: <b>S<math>\frac{1}{2}</math> 316.84</b> Acres		

1. Outline the acreage dedicated to the subject well by colored pencil or hatchure 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 Division



## CERTIFICATION

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

*Rudy D. Motto*  
Name

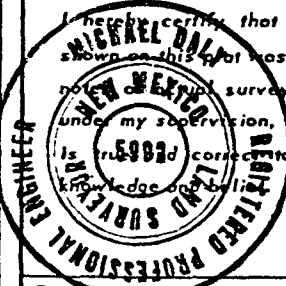
**Rudy D. Motto**  
Position

**Area Superintendent**  
Company

**SUPRON ENERGY CORPORATION**  
Date

**May 11, 1981**

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



Date surveyed

**March 20, 1981**

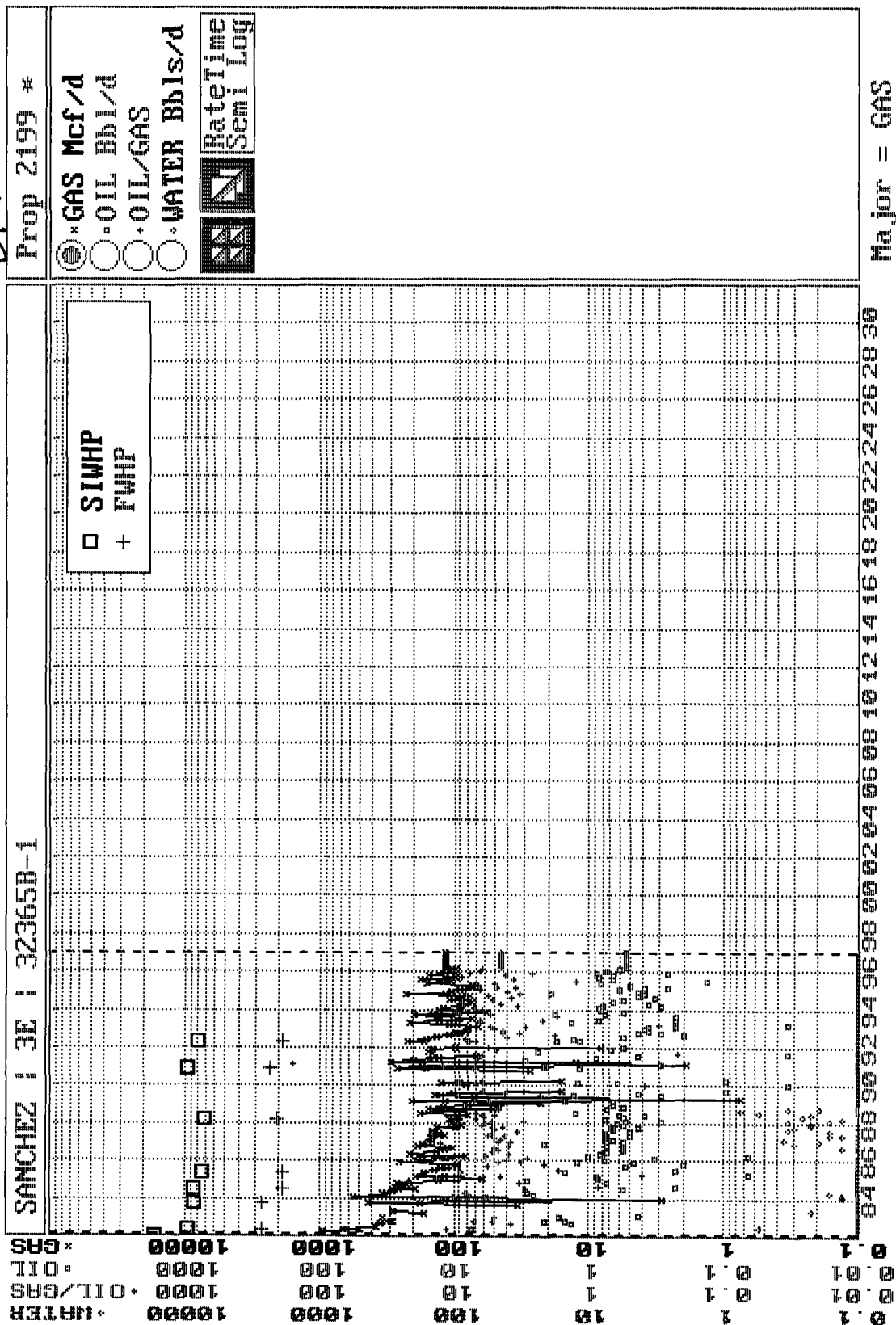
Registered Professional Engineer  
and/or Land Surveyor

*Michael Daly*  
**Michael Daly**

Certificate No.

**5992**

DK



**SANCHEZ : 3E : 32365A-1**

Prop 4877 \*

● GAS Mcf/d  
 ○ OIL Bbl/d  
 ○ OIL/GAS  
 ○ WATER Bbls/d

RateTime  
 Semi Log

□ SIWHP  
 + FWHP

10000  
1000  
100  
10  
1  
0.1  
0.01  
0.001

0 2 4 6 8 10 12 14 16 18 20 22 24 26

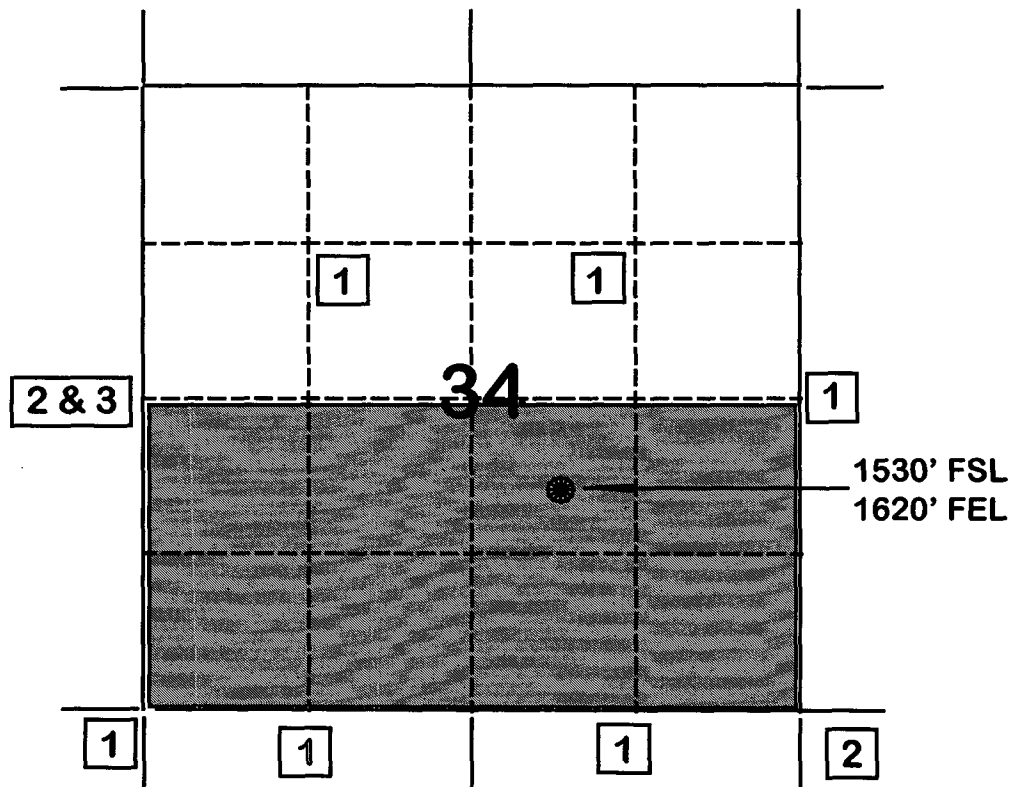
84 86 88 90 92 94 96 98 00 02 04 06 08 10 12 14 16 18 20 22 24 26 28 30

Major = GAS

04 00 00 30 32 34 36 38 00 02 04 06 08 10 12 14 16 18 20 22 24 26 28 30

**Sanchez #3E**  
**OFFSET OPERATOR \ OWNER PLAT**

**Township 30 North, Range 10 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	0.68
COND. OR MISC. (C/M)	C
%N2	0.22
%CO2	1.9
%H2S	0
DIAMETER (IN)	2.4
DEPTH (FT)	7100
SURFACE TEMPERATURE (DEG F)	60
BOTTOMHOLE TEMPERATURE (DEG F)	200
FLOWRATE (MCFPD)	0
SURFACE PRESSURE (PSIA)	797
BOTTOMHOLE PRESSURE (PSIA)	947.2

SANCHEZ #3E DAKOTA - (CURRENT )



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

VERSION 10/3/13/94

GAS GRAVITY	0.68
COND. OR MISC. (C/M)	C
%N2	0.22
%CO2	1.9
%H2S	0
DIAMETER (IN)	2.4
DEPTH (FT)	7100
SURFACE TEMPERATURE (DEG F)	60
BOTTOMHOLE TEMPERATURE (DEG F)	200
FLOWRATE (MCFPD)	0
SURFACE PRESSURE (PSIA)	1700
BOTTOMHOLE PRESSURE (PSIA)	2055.5

SANCHEZ #3E DAKOTA - (ORIGINAL )

Organize Data ScreenGraph Economics Report Plot Utility

OK

Quit

Browsing: SANCHEZ | 3E | 32365B-1

Property No.: 2199

Table(T): TEST/M,P,H,E,T,Z,C,A,O,D,N,1,2,3,B,U,S Rec: 1/8/103224

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

--DATE--	---CUM GAS--	M SIWHP
	Mcf	Psi
09/01/81	0	1700.0
04/19/82	44373	953.0
10/11/83	160165	872.0
06/19/84	227045	853.0
06/03/85	292412	749.0
03/05/88	427424	734.0
11/29/90	497222	944.0
04/29/92	554045	797.0

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	0.7
COND. OR MISC. (C/M)	C
%N2	0.53
%CO2	0.59
%H2S	0
DIAMETER (IN)	2.4
DEPTH (FT)	7100
SURFACE TEMPERATURE (DEG F)	60
BOTTOMHOLE TEMPERATURE (DEG F)	150
FLOWRATE (MCFPD)	0
SURFACE PRESSURE (PSIA)	797
BOTTOMHOLE PRESSURE (PSIA)	964.6

SANCHEZ #3E MESAVERDE - (CURRENT )

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

VERSION 10.3/13/94

GAS GRAVITY	0.7
COND. OR MISC. (C/M)	C
%N2	0.53
%CO2	0.59
%H2S	0
DIAMETER (IN)	2.4
DEPTH (FT)	7100
SURFACE TEMPERATURE (DEG F)	60
BOTTOMHOLE TEMPERATURE (DEG F)	150
FLOWRATE (MCFPD)	0
SURFACE PRESSURE (PSIA)	1027
BOTTOMHOLE PRESSURE (PSIA)	1252.9

SANCHEZ #3E MESAVERDE - (ORIGINAL )

MV

Organize Data ScreenGraph Economics Report Plot Utility Quit  
 Browsing: SANCHEZ | 3E | 32365A-1 Property No.: 4877  
 Table(T): TEST/M,P,H,E,T,Z,C,A,O,D,N,1,2,3,B,U,S Rec: 1/8/103224  
 Item: 2/3/33 Name: DATE Type: Date Len: 8/27/203

--DATE--	---CUM GAS--	M SIWHP
	Mcf	Psi
09/09/81	0	1027.0
04/09/83	136134	648.0
04/04/84	198754	681.0
04/23/86	296998	591.0
02/14/90	478708	804.0
07/15/91	554360	622.0
10/21/91	560316	610.0
03/22/93	595575	797.0

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 F2=Jump F4=NxtPro F6=NxtTbl F8=Print F10=Exit Shift+<- ->=Fast Tbl R & L

FARMINGTON 1996 MONTHLY PRODUCTION FOR 32365A PHS030M1  
 SANCHEZ 3E  
 BLANCO MESAVERDE (PRORATED GAS FIELD) MESAVERDE ZONE

DAYS			OIL			GAS								
MO	T	S	ON	PC	PROD	GRV	PC	PROD	ON	BTU	PRESS	WATER	PROD	C
1	2	F	29	02			01	1432	29	1222	15.025			
2	2	F	29	02	10		01	1331	29	1222	15.025			
3	2	F	31	02	8		01	1334	31	1222	15.025			
4	2	F	30	02		42.5	01	1460	30	1222	15.025			
5	2	F	26	02	2		01	1215	26	1222	15.025			
6	2	F	30	02	268	36.4	01	4520	30	1210	15.025			
7	2	F	31	02	23		01	7119	31	1210	15.025			
8	2	F	31	02	9		01	3977	31	1210	15.025			
9	2	F	30	02			01	2849	30	1210	15.025			
10	2	F	31	02			01	2457	31	1210	15.025			
11	2	F	30	02			01	2596	30	1210	15.025			
12	2	F	31	02	0.09 BOPD	3	01	156 mcf	31	1210	15.025			

PF6 - RETURNS TO ANNUAL DISPLAY PF3 - TRANSFER TO UPDATE  
 PF10 - HELP INFORMATION PF9 - DISPLAY MONTHLY INJECTION  
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B MY JOB NUM LU #11

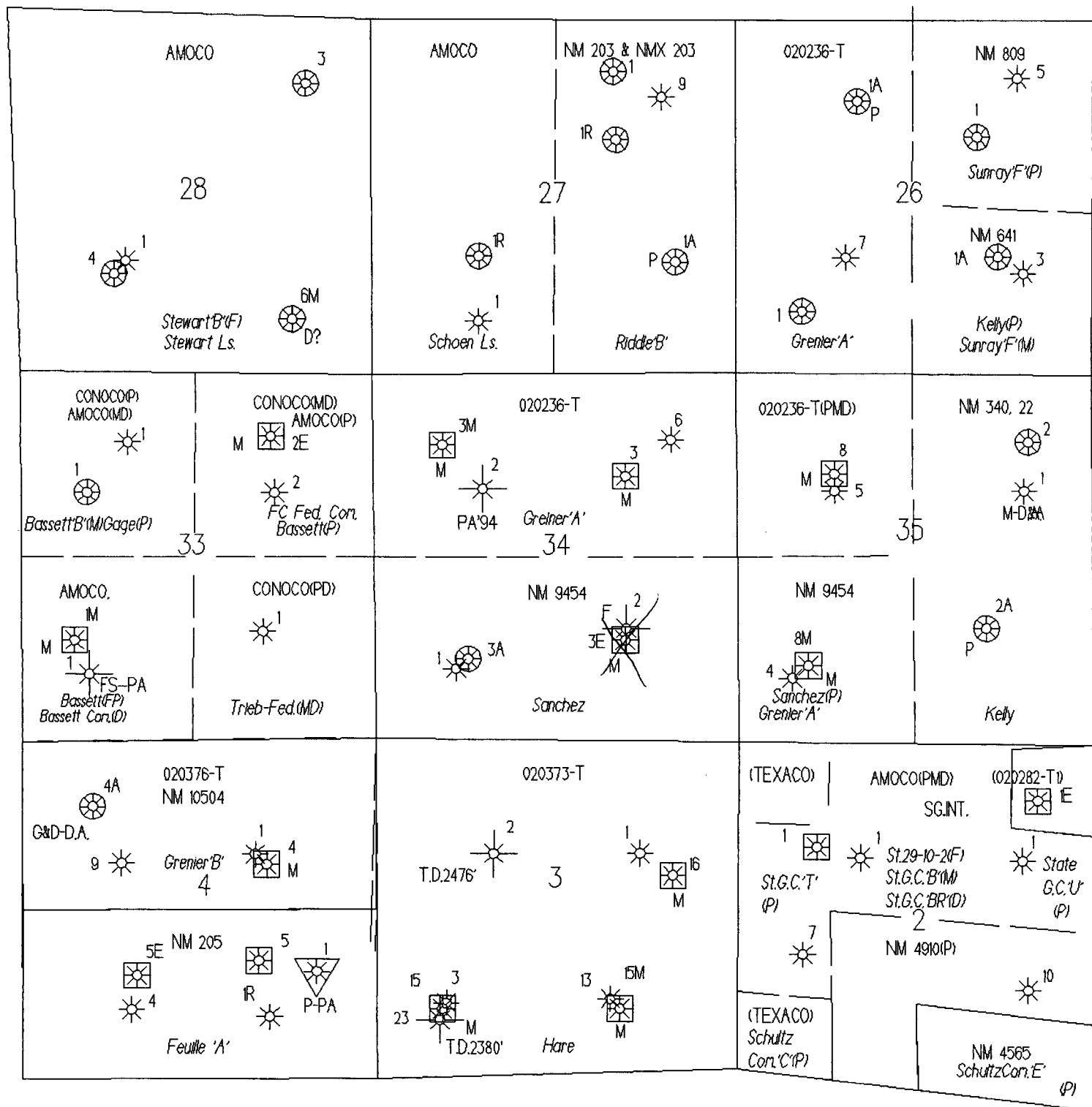
FARMINGTON 1996 MONTHLY PRODUCTION FOR 32365B PHS030M1  
 SANCHEZ 3E  
 BASIN DAKOTA (PRORATED GAS) FIELD DAKOTA ZONE

DAYS			OIL			GAS								
MO	T	S	ON	PC	PROD	GRV	PC	PROD	ON	BTU	PRESS	WATER	PROD	C
1	2	F	31	02	22		01	3419	31	1141	15.025			
2	2	F	29	02	18		01	2945	29	1141	15.025			
3	2	F	31	02		56.3	01	2672	31	1137	15.025			
4	2	F	30	02	17		01	2263	30	1137	15.025			
5	2	F	28	02	22		01	5676	28	1137	15.025			
6	2	F	23	02	15		01	3509	23	1137	15.025			
7	2	F	31	02	17		01	2888	31	1137	15.025			
8	2	F	31	02	9		01	2842	31	1137	15.025			
9	2	F	30	02	8		01	2627	30	1150	15.025			
10	2	F	31	02	13		01	3066	31	1150	15.025			
11	2	F	30	02	7		01	2331	30	1150	15.025			
12	2	F	31	02	0.09 BOPD	3	01	71 mcf	31	1150	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

B MY JOB NUM LU #11

SANCHEZ #3E  
SECTION 34, T30N, R10W  
MESAVERDE - PICTURED CLIFFS



T 30 N

T 29 N