

DATE IN 9/23/98	SUSPENSE 10/13/98	ENGINEER DC	LOGGED BY RW	TYPE DHC
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ABOVE THIS LINE FOR DIVISION USE ONLY

NEW MEXICO OIL CONSERVATION DIVISION

- Engineering Bureau -

2040 South Pacheco, Santa Fe, NM 87505



2/16

ADMINISTRATIVE APPLICATION COVERSHEET

THIS COVERSHEET IS MANDATORY FOR ALL ADMINISTRATIVE APPLICATION FOR EXCEPTIONS TO DIVISION RULES AND REGULATIONS WHICH REQUIRE PROCESSING AT THE DIVISION LEVEL IN SANTA FE

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] or [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

SEP 23 1998

[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 - Certification

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 (including API numbers, pool codes, etc.), pertinent information and any required notification is cause to have the application package returned with no action taken.

Note: Statement must be completed by an individual with managerial and/or supervisory capacity.

Print or Type Name

Signature

Title

Date

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 & Gas Company

PO Box 4289, Farmington, NM 87499

Operator

Address

San Juan 28-5 Unit

61E

E 18-28N-05W

Rio Arriba

Lease

Well No.

Unit Ltr. - Sec - Twp - Rge

County

Spacing Unit Lease Types: (check 1 or more)

OGRID NO. 14538 Property Code 7460 API NO. 30-039-23837 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	Wildcat Munoz Canyon Gallup - 96767		Basin Dakota - 71599
2. Top and Bottom of Pay Section (Perforations)	7325' - 7570'		7879' - 8070'
3. Type of production (Oil or Gas)	gas		gas
4. Method of Production (Flowing or Artificial Lift)	flowing		flowing
5. Bottomhole Pressure	(Current) a. 2885	a.	a. 1580
Oil Zones - Artificial Lift: Estimated Current	(Original) b. 2885	b.	b. 3347
Gas & Oil - Flowing: Measured Current			
All Gas Zones: Estimated or Measured Original			
6. Oil Gravity (^o API) or Gas BTU Content	BTU 1136		BTU 1050
7. Producing or Shut-In?	producing		Shut-in
Production Marginal? (yes or no)	yes		no
* If Shut-In and oil/gas/water rates of last production	Date: n/a Rates:	Date: Rates:	Date: n/a Rates: 0/1112/0
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: n/a Rates: 114 MCF/D	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 ☒ 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). R-10695

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 Jennifer Dobson TITLE Production Engineer DATE 08-17-98TYPE OR PRINT NAME Jennifer Dobson TELEPHONE NO. (505) 326-9700

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

57 DEC -2 PM 1:38
SANTA FE, NEW MEXICO, NM

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number 30-039-23837		Pool Code 96767/71599	Pool Name WC:Munoz Canyon Gallup/Basin Dakota
Property Code 7460	Property Name SAN JUAN 28-5 UNIT		Well Number 61E
GRID No. 14538	Operator Name BURLINGTON RESOURCES OIL & GAS COMPANY		Elevation 6713'

¹⁰ Surface Location

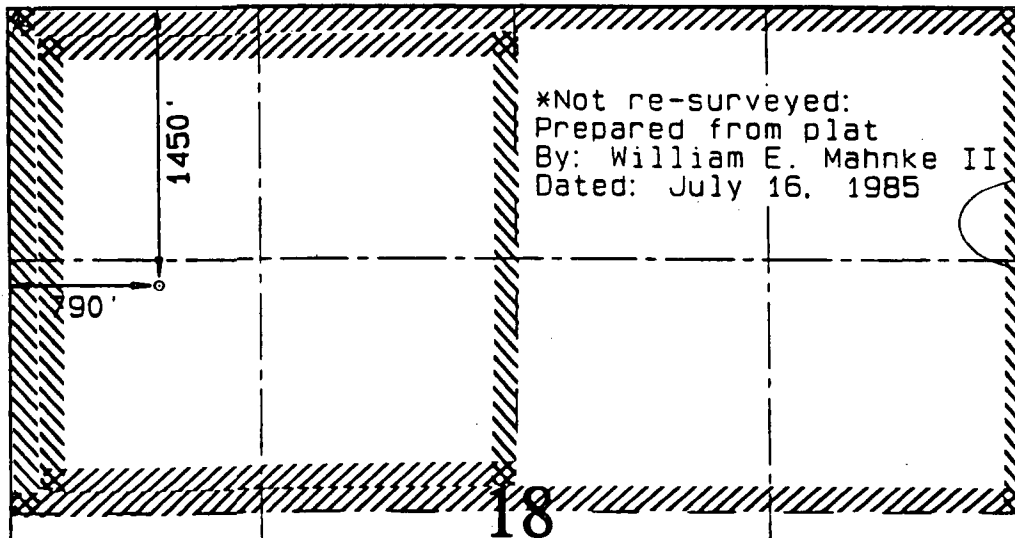
UL or lot no. E	Section 18	Township 28N	Range 5W	Lot Idn	Feet from the 1450	North/South line North	Feet from the 790	East/West line West	County RIO ARriba
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¹¹ Bottom Hole Location If Different From Surface

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 Gal - 160 DK - N/320	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



¹⁷ OPERATOR CERTIFICATION
I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief

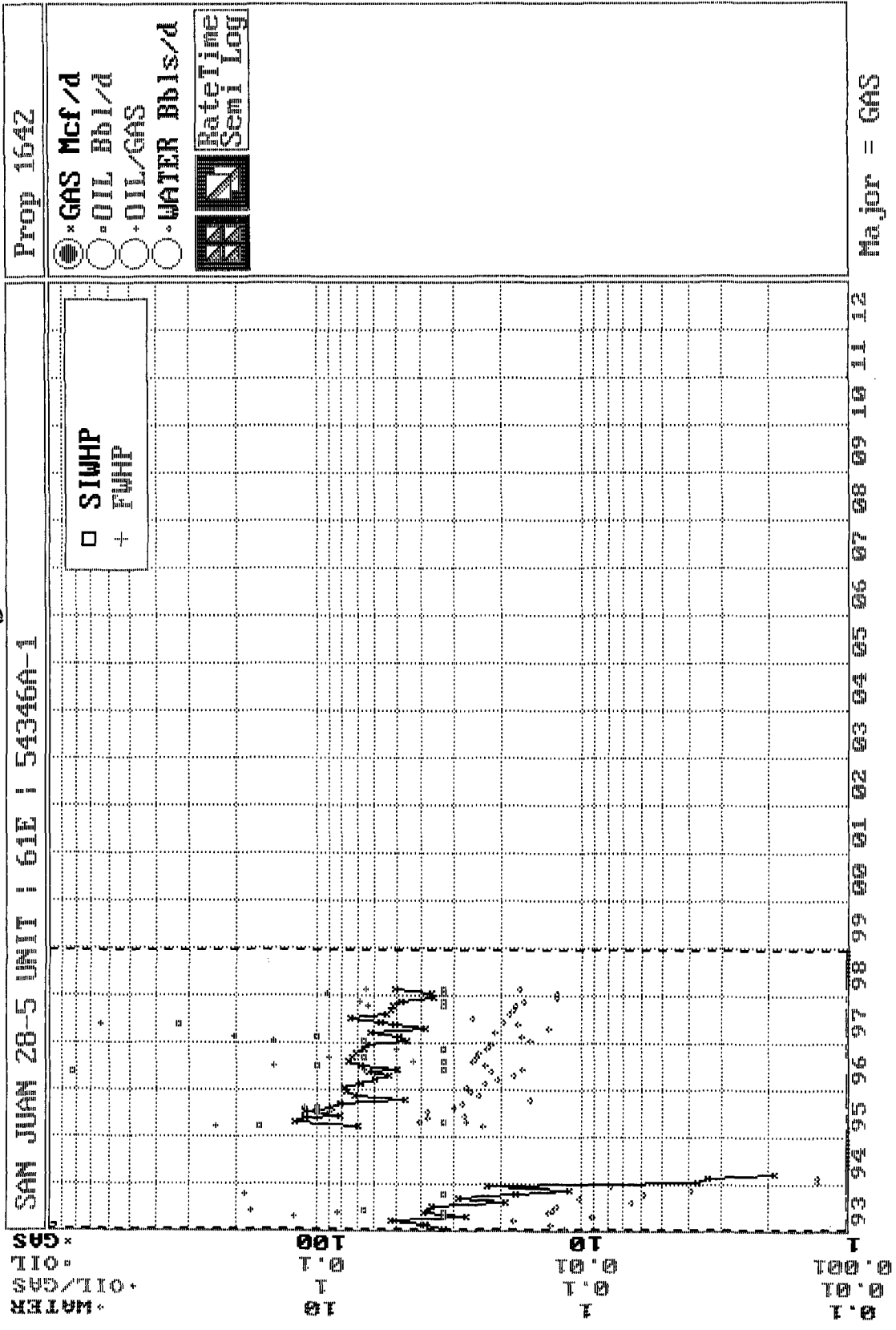
Peggy Bradfield
Signature
Peggy Bradfield
Printed Name
Regulatory Administrator
Title
12-2-97
Date

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.

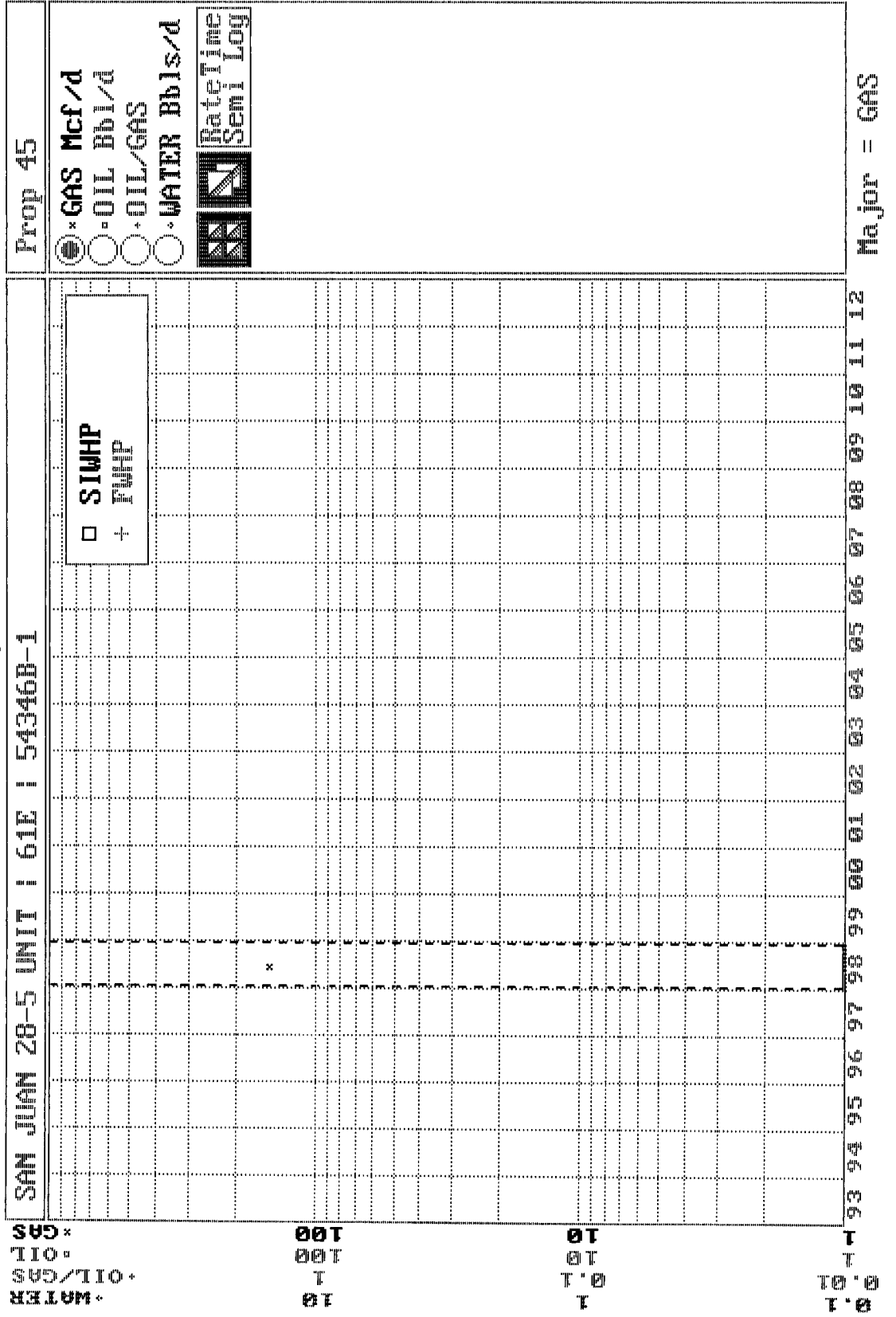
NOVEMBER 20, 1997
Date of Survey

Signature and Seal
NEALE C. EDWARDS
6857
Certificate Number

OK



dy



SJ 28-5 #61E
Bottom Hole Pressures
Cullender and Smith Method
Version 1.0 3/13/94

Dakota	
<u>DK-Current</u>	
GAS GRAVITY	<u>0.586</u>
COND. OR MISC. (C/M)	<u>C</u>
%N2	<u>0.1</u>
%CO2	<u>1.56</u>
%H2S	<u>0</u>
DIAMETER (IN)	<u>1.5</u>
DEPTH (FT)	<u>8025</u>
SURFACE TEMPERATURE (DEG F)	<u>60</u>
BOTTOMHOLE TEMPERATURE (DEG F)	<u>148</u>
FLOWRATE (MCFPD)	<u>91</u>
SURFACE PRESSURE (PSIA)	<u>1314</u>
BOTTOMHOLE PRESSURE (PSIA)	<div style="border: 1px solid black; display: inline-block; padding: 2px 10px;">1579.8</div>

<u>DK-Original</u>	
GAS GRAVITY	<u>0.586</u>
COND. OR MISC. (C/M)	<u>C</u>
%N2	<u>0.1</u>
%CO2	<u>1.56</u>
%H2S	<u>0</u>
DIAMETER (IN)	<u>1.5</u>
DEPTH (FT)	<u>8025</u>
SURFACE TEMPERATURE (DEG F)	<u>60</u>
BOTTOMHOLE TEMPERATURE (DEG F)	<u>148</u>
FLOWRATE (MCFPD)	<u>91</u>
SURFACE PRESSURE (PSIA)	<u>2775</u>
BOTTOMHOLE PRESSURE (PSIA)	<div style="border: 1px solid black; display: inline-block; padding: 2px 10px;">3347.3</div>

Parent DK
well

Page No.: 1

Print Time: Thu Aug 20 16:40:52 1998

Property ID: 1641

Property Name: SAN JUAN 28-5 UNIT | 61 | 50690A-1

Table Name: Q:\PUBLIC\GENTITY\GDPNOS\TEST.DBF

--DATE--	---CUM GAS--	M FWHP-	M FBHP-	M SIWHP	M SIBHP
*****	*****Mcf*****	****Psi****	****Psi****	****Psi****	****Psi****
12/02/62	0	0.0	<i>orig</i>	<u>2775.0</u>	3275.0
03/01/63	0			2774.0	
05/05/63	31000			1896.0	
01/24/64	65000			1735.0	
06/21/65	220000			1293.0	
03/05/66	308000			1293.0	
05/23/66	326000			1143.0	
05/26/67	422000			1041.0	
05/20/68	514000			983.0	
08/19/69	608102			1139.0	
06/19/70	694492	463.0		817.0	955.0
06/22/71	765117	567.0		1024.0	1200.0
06/07/72	831033	377.0		1177.0	1382.0
07/23/73	894511	527.0		1141.0	1339.0
04/15/75	1005119	253.0		1010.0	1183.0
06/15/77	1135349	390.0		1002.0	1174.0
10/04/79	1262425	332.0		916.0	1072.0
08/12/81	1357805	322.0		885.0	1035.0
09/28/83	1447829	340.0		1024.0	1200.0
09/05/85	1541516	323.0		948.0	1110.0
10/04/88	1637548	361.0		952.0	1114.0
04/22/90	1683664	385.0		1042.0	1221.0
09/28/92	1742674	311.0	<i>Current</i>	<u>1314.0</u>	1545.0

REQUESTED RECORD NOT FOUND (NEXT RECORD DISPLAYED)

Parent DK

OPR008M1 0092

0008 CHROMATOGRAPH TEST MAIN SCREEN

17:38:31.7 08/20/98

FUNCTION (A,C,D,I) I ** DATA AT TEST PRESSURE UNLESS NOTED **
MP NUMBER 73511 SAN JUAN 28-5 UNIT 61
EFFECTIVE DATE 19960701
REGION CD 42 SAN JUAN
MP TYPE CODE 10 GAS METER - WELLHEAD SALES

SAMPLE TYPE CODE (GAS, LIQ, BTU) GAS ----- BTU/CF -----
SAMPLE DATE 19960605 --- (AT 14.73 PSIG) --
SAMPLE LINE PRESSURE (PSIG) _____ WET 1005.214 DRY 1023.000
SAMPLE LINE TEMPERATURE (DEG F) _____
TEST DATE _____ ----- BTU/CF -----
TEST PRESSURE (PSIG) _14.730 WET _1005.214 DRY _1023.000
TEST TEMPERATURE (DEG F) 60 VAPOR FACTOR _____
TEST LIFE (MONTHS) _6
TESTER SOURCE BA NUMBER 098795 EL PASO FIELD SERVICES
TEST PURPOSE CODE _____

03=DETAIL SCR 04=MP-NM BRWS 06=MP/DS LST 07=MP/WN LST
11=PREV SCR 12=MAIN MENU 20=NEXT REC
21=REFRESH SCR 22=PREV MENU 24=HELP PA1=TERMINATE _____

Parent DK

OPR008M2 0092

0008 CHROMATOGRAPH GAS SAMPLE DETAIL

17:38:44.2 08/20/98

	MOL %	GPM (AT 14.73)
HYDROGEN	_____	
HELIUM	_____	
NITROGEN	__0.10	
OXYGEN	_____	
HYDROGEN SULFIDE	_____	
CARBON DIOXIDE	__1.56	
METHANE	__95.91	
ETHANE	__1.94	0.5190
PROPANE	__0.26	0.0717
ISO-BUTANE	__0.08	0.0262
N-BUTANE	__0.05	0.0158
ISO-PENTANE	__0.03	0.0110
N-PENTANE	__0.01	0.0036
HEXANE	_____	
HEXANE PLUS	__0.06	0.0262
HEPTANE PLUS	_____	
TOTALS	100.00	0.6735

** DATA AT 14.730 PSIG UNLESS NOTED **

MP NUMBER 73511

EFFECTIVE DATE 19960701

-- GASOLINE CONTENT (GPM) --

26/70 GASOLINE _____

100% PROPANE _____

EXCESS BUTANES _____

TOTAL

----- SPECIFIC GRAVITY -----

CALCULATED _0.5860

MEASURED _____

SULPHUR GRAINS / 100 CU FT _____

03=MAIN SCREEN

24=HELP

PA1=TERMINATE

08/05/98

LAND WELL REPORT

APPROVED 03/04/98

LWR210NL

INQUIRY

COMPANY OWNERSHIP

<WELLSTAT>

WELL: 54346A

SAN JUAN 28-5 UNI

61E

=====

OWNER	PROD	INTEREST %	I-TYPE	TRUST	EVENT	AUTH	INIT	REVISED
21 BROG	ALL	49.460484	NWI		CUR	DOU	WMB	06/23/98
21 BROG	ALL	70.276500	GW		CUR	DOU	WMB	06/23/98
21 BROG	ALL	0.031030	ORI		CUR	DOU		
21 BROG	ALL	9.985493	NPI		CUR	DOU		

TOTAL COMPANY NET/GROSS REVENUE INTEREST: NET: OIL 59.477007 GAS 59.477007

GROSS: OIL 70.276500 GAS 70.276500

** CONTAINS OWNERSHIP REMARKS **

BLOCK POSTING:

=====

PF17=PRIOR PF18=REASON PF20=TOP PF21=RMKS PF11=BACK PF12=MENU PF24=HELP

08/05/98

GENERAL INFORMATION -1-

LWM211NL
<LANDWELL>

DP NUMBER: 54346A *JK* RECORD TYPE: W PUD XREF:
PROPERTY : 007970400
WELL NAME: SAN JUAN 28-5 UNIT 61E
FORMATION: 0115 DAKOTA
OPERATOR : 999021 04 BURLINGTON RESOURCES O&G CO
WELL TYPE: 2 GAS WELL STATUS: 78 TEMPORARILY ABANDONED STATUS DATE: 980513

COMPANY : 21 DIST: 42 FARMINGTON ST/CNTY: NM 039 RIO ARRIBA
SECTION : 18 TWN : 028N RNG: 005W UNIT LTR: E SW/4 NW/4
SPACING : 320.0 TRACT: BLK:
LOCATION : 1450'FNL, 790'FWL

SPUD DATE: 09/19/85
DRLG COMP: 09/27/85
WELL COMP: 10/23/85

TOTAL DEPTH: 8094
TOP PERF : 7879
BOTTOM PERF: 8070

1ST OIL PROD: 11/06/85
1ST GAS PROD: 11/06/85

OIL NET REV: 59.477007
OIL WELL WI: 70.276500
GAS NET REV: 59.477007
GAS WELL WI: 70.276500

PFXX=DETAILS

PF12=MENU

PF24=HELP

08/05/98

COMPANY OWNERSHIP

LWM220NL
<LANDWELL>

WELL: 54346A SAN JUAN 28-5 UNI 61E FORM: DAKOTA

=====

OWNER	PROD	INTEREST %	I-TYPE	TRUST	EVENT	AUTH	INIT	REVISED
-----	----	-----	-----	-----	-----	-----	-----	-----
21 BROG	ALL	49.460484	NWI		CUR	DOU	WMB	06/23/98
21 BROG	ALL	70.276500	GWI		CUR	DOU	WMB	06/23/98
21 BROG	ALL	0.031030	ORI		CUR	DOU		
21 BROG	ALL	9.985493	NPI		CUR	DOU		

ENTER= NEXT PF12=MENU PF15=ACQ MENU PF17=PRIOR PF18=REASON PF19=SOLD YR

08/05/98

LAND WELL REPORT

APPROVED 03/04/98

LWR210NL

INQUIRY

COMPANY OWNERSHIP

<WELLSTAT>

WELL: 54346B

SAN JUAN 28-5 UNI

61E

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=====
OWNER      PROD  INTEREST %  I-TYPE  TRUST  EVENT  AUTH  INIT  REVISED
-----
21 BROG    ALL    20.625000  NPI          CUR    FW    LKD    03/03/98
21 BROG    ALL    61.875000  NWI          CUR    FW    LKD    03/03/98
21 BROG    ALL    100.000000  GWI          CUR    FW    LKD    03/03/98
```

TOTAL COMPANY NET/GROSS REVENUE INTEREST: NET: OIL 82.500000 GAS 82.500000

GROSS: OIL 100.000000 GAS 100.000000

** NO OWNERSHIP REMARKS **

BLOCK POSTING:

=====

PF17=PRIOR PF18=REASON PF20=TOP PF21=RMKS PF11=BACK PF12=MENU PF24=HELP

08/05/98

GENERAL INFORMATION -1-

LWM211NL
<LANDWELL>

DP NUMBER: 54346B *cl* RECORD TYPE: W PUD XREF:

PROPERTY : 071854301

WELL NAME: SAN JUAN 28-5 UNIT 61E

FORMATION: 0230 GALLUP

OPERATOR : 999021 04 BURLINGTON RESOURCES O&G CO

WELL TYPE: 2 GAS WELL STATUS: 00 FLOWING STATUS DATE: 980601

COMPANY : 20 DIST: 42 FARMINGTON ST/CNTY: NM 039 RIO ARRIBA

SECTION : 18 TWN : 028N RNG: 005W UNIT LTR: E SW/4 NW/4

SPACING : TRACT: BLK:

LOCATION : 1450' FNL, 790' FWL

TOTAL DEPTH: 8094

SPUD DATE: 09/19/85

TOP PERF : 7325

DRLG COMP: 09/27/85

BOTTOM PERF: 7570

WELL COMP: 05/18/98

OIL NET REV: 82.500000

1ST OIL PROD: 00/00/00

OIL WELL WI: 100.000000

1ST GAS PROD: 06/01/98

GAS NET REV: 82.500000

GAS WELL WI: 100.000000

PFXX=DETAILS

PF12=MENU

PF24=HELP

REQUESTED RECORD NOT FOUND (NEXT RECORD DISPLAYED)

OPR008M1 3006

0008 CHROMATOGRAPH TEST MAIN SCREEN

12:25:23.7 08/05/98

FUNCTION (A,C,D,I) I ** DATA AT TEST PRESSURE UNLESS NOTED **
MP NUMBER 95509 SAN JUAN 28-5 UNIT 61E
EFFECTIVE DATE 19970101
REGION CD 42 SAN JUAN
MP TYPE CODE 10 GAS METER - WELLHEAD SALES

SAMPLE TYPE CODE (GAS,LIQ,BTU) GAS ----- BTU/CF -----
SAMPLE DATE 19961211 --- (AT 14.73 PSIG) ---
SAMPLE LINE PRESSURE (PSIG) _____ WET 1031.744 DRY 1050.000
SAMPLE LINE TEMPERATURE (DEG F) _____
TEST DATE _____ ----- BTU/CF -----
TEST PRESSURE (PSIG) 14.730 WET 1031.744 DRY 1050.000
TEST TEMPERATURE (DEG F) 60 VAPOR FACTOR _____
TEST LIFE (MONTHS) 6
TESTER SOURCE BA NUMBER 098795 EL PASO FIELD SERVICES
TEST PURPOSE CODE _____

03=DETAIL SCR 04=MP-NM BRWS 06=MP/DS LST 07=MP/WN LST
11=PREV SCR 12=MAIN MENU 20=NEXT REC
21=REFRESH SCR 22=PREV MENU PA1=TERMINATE _____

	MOL %	GPM (AT 14.73)
HYDROGEN	_____	
HELIUM	_____	
NITROGEN	___0.13	
OXYGEN	_____	
HYDROGEN SULFIDE	_____	
CARBON DIOXIDE	___1.68	
METHANE	___93.84	
ETHANE	___2.97	0.7945
PROPANE	___0.67	0.1847
ISO-BUTANE	___0.20	0.0654
N-BUTANE	___0.15	0.0473
ISO-PENTANE	___0.09	0.0329
N-PENTANE	___0.05	0.0181
HEXANE	_____	
HEXANE PLUS	___0.22	0.0960
HEPTANE PLUS	_____	
TOTALS	100.00	1.2389

** DATA AT 14.730 PSIG UNLESS NOTED **

MP NUMBER	95509
EFFECTIVE DATE	19970101

-- GASOLINE CONTENT (GPM) --	
26/70	GASOLINE _____
100%	PROPANE _____
EXCESS	BUTANES _____
TOTAL	

----- SPECIFIC GRAVITY -----	
CALCULATED	___0.6060
MEASURED	_____

SULPHUR GRAINS / 100 CU FT _____

03=MAIN SCREEN

24=HELP

PA1=TERMINATE

Calley

FDG055M4 1153

WELL PRODUCTION 8/8'S VOLUME

07/22/98 17:18:31

START OF DATA

DP NO: 54346B

DATE: 980720 (YYMMDD FORMAT)

SAN JUAN 28-5 UNIT

61E

SCROLL FORWARD BY DATE: _

S

E	DATE	HOURS	-OIL PRODN-	-GAS PRODN-	-WATER PRODN-			
L	PRODUCED	ON	(BOPD	BOPM)	(MCFD	MCFM)	(BWPD	BWPM)
-	07/20/98	24.0	0.00	0.00	100	2252	0.00	0.00
-	07/19/98	24.0	0.00	0.00	97	2152	0.00	0.00
-	07/18/98	24.0	0.00	0.00	114	2055	0.00	0.00
-	07/17/98	24.0	0.00	0.00	112	1941	0.00	0.00
-	07/16/98	24.0	0.00	0.00	233	1829	0.00	0.00
-	07/15/98	24.0	0.00	0.00	0	1596	0.00	0.00
-	07/14/98	24.0	0.00	0.00	23	1596	0.00	0.00
-	07/13/98	24.0	0.00	0.00	114	1573	0.00	0.00
-	07/12/98	24.0	0.00	0.00	108	1459	0.00	0.00
-	07/11/98	24.0	0.00	0.00	108	1351	0.00	0.00
-	07/10/98	24.0	0.00	0.00	114	1243	0.00	0.00

ENTER I UNDER SEL FOR MAINTENANCE

PF6=NRI PF10=BROWSE MENU PF11=INQ/UPDATE MENU
PF12=MAIN MENU ENTER=BACKWARDS PF24=HELP

FDG055M4 1153

WELL PRODUCTION 8/8'S VOLUME

07/22/98 17:18:42

DP NO: 54346B

DATE: 980709 (YYMMDD FORMAT)

SAN JUAN 28-5 UNIT

61E

SCROLL FORWARD BY DATE: _

S

E	DATE	HOURS	-OIL PRODN-	-GAS PRODN-	-WATER PRODN-			
L PRODUCED	ON	(BOPD	BOPM)	(MCFD	MC FM)	(BWPD	BWPM)	
—	07/09/98	24.0	0.00	0.00	123	1129	0.00	0.00
—	07/08/98	24.0	0.00	0.00	106	1006	0.00	0.00
—	07/07/98	24.0	0.00	0.00	132	900	0.00	0.00
—	07/06/98	24.0	0.00	0.00	128	768	0.00	0.00
—	07/05/98	24.0	0.00	0.00	116	640	0.00	0.00
—	07/04/98	24.0	0.00	0.00	122	524	0.00	0.00
—	07/03/98	24.0	0.00	0.00	131	402	0.00	0.00
—	07/02/98	24.0	0.00	0.00	136	271	0.00	0.00
—	07/01/98	24.0	0.00	0.00	135	135	0.00	0.00
—	06/30/98	24.0	0.00	0.00	136	4750	0.00	0.00
—	06/29/98	24.0	0.00	0.00	132	4614	0.00	0.00

ENTER I UNDER SEL FOR MAINTENANCE

PF12=MAIN MENU	PF6=NRI	PF10=BROWSE MENU	PF11=INQ/UPDATE MENU
	ENTER=BACKWARDS		PF24=HELP

FDG055M4 1153

WELL PRODUCTION 8/8'S VOLUME

07/22/98 17:18:07

DP NO: 54346A

DATE: 980526 (YYMMDD FORMAT)

SAN JUAN 28-5 UNIT

61E

SCROLL FORWARD BY DATE: _

S

E	DATE	HOURS	-OIL PRODN-	-GAS PRODN-	-WATER PRODN-
L PRODUCED	ON	(BOPD	BOPM)	(MCFD	MCFM)
				(BWPD	BWPM)
-	05/26/98	0.0	0.00	0.00	0 13173 0.00 0.00
-	05/25/98	0.0	0.00	0.00	0 13173 0.00 0.00
-	05/24/98	0.0	0.00	0.00	0 13173 0.00 0.00
-	05/23/98	0.0	0.00	0.00	0 13173 0.00 0.00
-	05/22/98	0.0	0.00	0.00	278 13173 0.00 0.00
-	05/21/98	0.0	0.00	0.00	1073 12895 0.00 0.00
-	05/20/98	0.0	0.00	0.00	1081 11822 0.00 0.00
-	05/19/98	0.0	0.00	0.00	1096 10741 0.00 0.00
-	05/18/98	0.0	0.00	0.00	1112 9645 0.00 0.00
-	05/17/98	0.0	0.00	0.00	1134 8533 0.00 0.00
-	05/16/98	0.0	0.00	0.00	1159 7399 0.00 0.00

ENTER I UNDER SEL FOR MAINTENANCE

PF6=NRI PF10=BROWSE MENU PF11=INQ/UPDATE MENU
 PF12=MAIN MENU ENTER=BACKWARDS PF24=HELP

Company: BURLINGTON RESOURCES
Well: SAN JUAN 28-5 #61-E
Field: GALLUP FORMATION
Engineer:
Gauge Type: AMERADA
Gauge Range: 0-3000
Gauge Depth: 7500 ft
Serial No.: 44537

County: RIO ARRIBA
State: NEW MEXICO
Date: 05/28/1998
Well Type:
Test Type: STATIC GRADIENT
Status: SHUT-IN
File Name: 31928-2

Tubing: 1 1/2" TO 7578
Tubing: TO
Casing: TO
Perfs.: 7325-7570
Shut-in Time 192 hrs

Oil Level
H2O Level 6919 ft

Shut-in BHP 2885 @ 7500 ft Shut-in BHT 0 F @ 0 ft
Shut-in WHP 2165 Shut-in WHT 0 F

[Tefteller Incorporated]

#	MD	TVD	PRESSURE	PSI/ft
1	0	0	2165.00	
2	2000	2000	2313.00	0.074
3	4000	4000	2457.00	0.072
4	6000	6000	2594.00	0.068
5	7100	7100	2728.00	0.122
6	7300	7300	2807.00	0.395
7	7500	7500	2885.00	0.390



2030 AFTON PLACE
FARMINGTON, N.M. 87401
(505) 325-6622

ANALYSIS NO. BUR80752
CUST. NO. 52100- 15730

WELL/LEASE INFORMATION

CUSTOMER NAME BURLINGTON RESOURCES
WELL NAME SAN JUAN 28-5 #61E
COUNTY/ STATE
LOCATION
FIELD
FORMATION GALLUP
CUST.STN.NO.

SOURCE
PRESSURE 285 PSIG
SAMPLE TEMP 70.6 DEG.F
WELL FLOWING N/A
DATE SAMPLED 6/16/98
SAMPLED BY STEVE ADAMS
FOREMAN/ENGR. LARY BYARS

REMARKS

ANALYSIS

COMPONENT	MOLE %	GPM**	B.T.U.*	SP.GR *
NITROGEN	4.292	0.0000	0.00	0.0415
CO2	0.786	0.0000	0.00	0.0119
METHANE	81.256	0.0000	822.55	0.4501
ETHANE	8.523	2.2799	151.17	0.0885
PROPANE	2.804	0.7728	70.71	0.0427
I-BUTANE	0.680	0.2224	22.16	0.0136
N-BUTANE	0.703	0.2217	22.99	0.0141
I-PENTANE	0.366	0.1339	14.68	0.0091
N-PENTANE	0.177	0.0641	7.11	0.0044
HEXANE PLUS	0.413	0.1802	21.23	0.0133
TOTAL	100.000	3.8750	1,132.60	0.6893

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

** @ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z) 1.0029
BTU/CU.FT (DRY) CORRECTED FOR (1/Z) 1,135.9
BTU/CU.FT (WET) CORRECTED FOR (1/Z) 1,116.1
REAL SPECIFIC GRAVITY 0.6912

ANALYSIS RUN AT 14.730 PSIA & 60 DEGREES F

DRY BTU @ 14.650 1,129.7
DRY BTU @ 14.696 1,133.3
DRY BTU @ 14.730 1,135.9
DRY BTU @ 15.025 1,158.6

CYLINDER # 335-5
CYLINDER PRESSURE 255 PSIG
DATE RUN 6/17/98
ANALYSIS RUN BY DAVE MARTIN

DATE: August 03, 1998

NAME: SAN JUAN 28-5 UNIT 61E

FORM: DAKOTA

LOCATION
UNIT: E
SEC: 18
TWN: 28N
RNG: 5W

<p>[12]</p>	<p>[7]</p> <p>12/85 * San Juan 28-5 Unit 79E 89/444 (97) 0/0</p>	<p>12/85 * San Juan 28-5 Unit 85E 101/477 (97) 0/0</p> <p>[8] 4/71 * San Juan 28-5 Unit 85 162/2885 (97) 0/0</p>
<p>8/67 * San Juan 28-6 Unit 106 129/2004 (97) [13] 0/0</p> <p>11/61 * San Juan 28-6 Unit 100 145/3367 (97) 0/1</p>	<p>11/85 * San Juan 28-5 Unit 61E 52/256 (97) 0/0</p> <p>[18]</p> <p>12/62 * San Juan 28-5 Unit 61 91/1973 (97) 0/0</p> <p>7/59 * San Juan 28-5 Unit 34 83/2690 (97) 0/4</p> <p>11/85 * San Juan 28-5 Unit 34E 92/550 (97) 0/0</p>	<p>9/68 * San Juan 28-5 Unit 75 73/1404 (97) [17] 0/0</p> <p>12/68 * San Juan 28-5 Unit 33 0/2298 (88) 0/0</p>
<p>1/95 * San Juan 28-6 Unit 99M 125/153 (97) [24] 0/0</p> <p>9/65 * San Juan 28-6 Unit 99 106/2103 (97) 0/0</p> <p>6/71 * San Juan 28-6 Unit 152 131/1700 (97) 0/0</p>	<p>7/82 * San Juan 28-5 Unit 57M 119/829 (97) 0/1 [19]</p> <p>11/59 * San Juan 28-5 Unit 35M 131/40 (97) 0/0</p> <p>12/62 * San Juan 28-5 Unit 57 0/1822 (97) 0/0</p> <p>11/85 * San Juan 28-5 Unit 54E 140/966 (97) 0/0</p> <p>11/62 * San Juan 28-5 Unit 63 247/4876 (97) 0/1</p>	<p>[20] 11/85 * San Juan 28-5 Unit 63E 95/327 (97) 0/0</p> <p>12/62 * San Juan 28-5 Unit 54 113/1598 (97) 0/0</p>

T
28
N

LEGEND

COMPLETION DATE

WELL NAME
MCF/D-CUM(MMF)
BOP/D-CUM(MBO)

R-6-W

R-5-W

DATE: August 03, 1998

NAME: SAN JUAN 28-5 UNIT 61E

FORM: GALLUP

LOCATION

UNIT: E
SEC: 18
TWN: 28N
RNG: 5W

[12]	[7]	[8]
[13]	San Juan 28-5 Unit 61E 5/98 *	[18] [17]
[24]	[19]	[20]

T
28
N

R-6-W

R-5-W

LEGEND

COMPLETION DATE

WELL NAME

MCF/D-CUM(MMF)

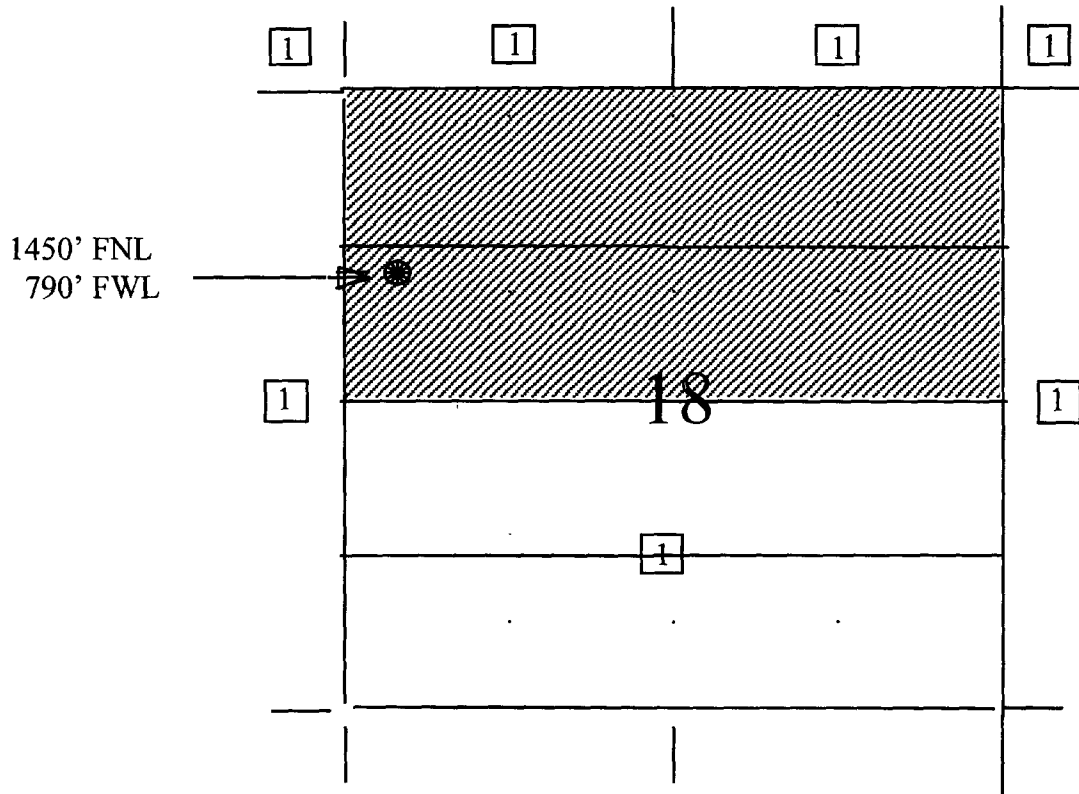
BOP/D-CUM(MBO)

BURLINGTON RESOURCES OIL AND GAS COMPANY

**San Juan 28-5 Unit #61E
OFFSET OPERATOR \ OWNER PLAT
Downhole Commingle**

Dakota (N/2) / Gallup (NW/4) Formations Well

Township 28 North, Range 5 West



1) Burlington Resources

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. 11627
ORDER NO. R-10695

APPLICATION OF BURLINGTON RESOURCES
OIL & GAS COMPANY FOR THE ESTABLISHMENT
OF A DOWNHOLE COMMINGLING "REFERENCE
CASE" FOR ITS SAN JUAN 28-5 UNIT PURSUANT
TO DIVISION RULE 303.E. AND THE ADOPTION
OF SPECIAL ADMINISTRATIVE RULES THEREFOR,
~~SAN JUAN~~ COUNTY, NEW MEXICO.

Rio ARRIBA

ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 8:15 a.m. on October 17 and November 7, 1996, at Santa Fe, New Mexico, before Examiners David R. Catanach and Michael E. Stogner, respectively.

NOW, on this 12th day of November, 1996, 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, Fruitland Coal and Pictured Cliffs gas production within existing or future drilled wells within the San Juan 28-5 Unit, San Juan County, New Mexico.

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

"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) The applicant is the current operator of the San Juan 28-5 Unit which encompasses some 17,399 acres in Township 28 North, Range 5 West, NMPM, San Juan County, New Mexico.

(5) Within the San Juan 28-5 Unit, the applicant currently operates sixty-seven (67) Basin-Dakota Gas Pool wells, seventy-one (71) Blanco-Mesaverde Gas Pool wells, sixteen (16) Gobernador-Pictured Cliffs, Oso-Pictured Cliffs and Tapacito-Pictured Cliffs Gas Pool wells, and nineteen (19) 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 and Pictured Cliffs formations whereby these formations and/or pools may be identified as "marginal" on Form C-107-A's subsequently filed for wells within the San Juan 28-5 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 and Pictured Cliffs 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 San Juan 28-5 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 San Juan 28-5 Unit; and,
- d) establish a "reference case" or an administrative procedure for authorizing the downhole commingling of existing or future drilled wells within the San Juan 28-5 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 indicates that within the San Juan 28-5 Unit:

- a) the structure and thickness of the Dakota and Pictured Cliffs formations are very consistent;
- b) the average recoverable Dakota and Pictured Cliffs gas reserves underlying an undeveloped drill block are approximately 1,258 MMCFG and 77 MMCFG, respectively;
- c) the average initial producing rate for a newly drilled or recompleted Dakota and Pictured Cliffs gas well is approximately 276 MCFGD and 136 MCFGD, respectively; and,
- d) the estimated ultimate gas recoveries and initial producing rates from the Dakota and Pictured Cliffs formations are insufficient to justify drilling stand alone wells and/or dually completed wells to recover such gas reserves.

(8) The evidence and testimony presented by the applicant indicates that the Dakota and Pictured Cliffs formations within the San Juan 28-5 Unit should be properly classified as "marginal".

(9) In support of its request to except pressure criteria within the Dakota and Pictured Cliffs formations within the San Juan 28-5 Unit, the applicant presented engineering evidence and testimony which indicates that:

- a) the average shut-in bottomhole pressure within the Dakota and Pictured Cliffs formations at the time of initial development were approximately 3,149 psi and 1,143 psi, respectively; and,
- b) the average current shut-in bottomhole pressure within the Dakota and Pictured Cliffs formations are approximately 1,059 psi and 714 psi, respectively.

(10) There is sufficient pressure data available within the San Juan 28-5 Unit so as to except pressure criteria as proposed by the applicant.

(11) The applicant testified that various allocation methods will be utilized for downhole commingled wells within the San Juan 28-5 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;
- 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 support of its request to establish a "reference case" or administrative procedure for providing notice within the San Juan 28-5 Unit the applicant presented evidence and testimony which indicates that:

- a) the interest ownership between two zones within a given wellbore in the San Juan 28-5 Unit is generally not common;
- b) pursuant to Division Rule No. 303.D., applicant is currently required to notify all interest owners within the San Juan 28-5 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 San Juan 28-5 Unit of subsequent downhole comminglings is unnecessary and is an excessive burden on the applicant;
- d) the downhole commingling of wells within the San Juan 28-5 Unit Area will benefit working, royalty, and overriding royalty interest owners. In addition, the downhole commingling of wells within the San Juan 28-5 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.

(14) An administrative procedure should be established within the San Juan 28-5 Unit for obtaining approval for subsequent 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.

(15) 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 San Juan 28-5 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 (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, Fruitland Coal and Pictured Cliffs gas production within existing or future drilled wells within the San Juan 28-5 Unit, San Juan County, New Mexico, is hereby approved.

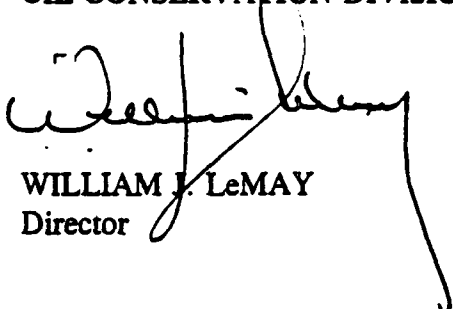
(2) Upon filing of Division Form No. C-107-A's for wells subsequently downhole commingled within the San Juan 28-5 Unit Area, the applicant shall not be required to submit supporting data to justify the classification of the Pictured Cliffs and Dakota formations as "marginal", supporting data to verify the Pictured Cliffs and Dakota 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.

(3) In order to obtain Division authorization to downhole commingle wells within the San Juan 28-5 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.C. of the Division Rules and Regulations, provided however that the applicant shall not be required to provide notice to all interest owners within the San Juan 28-5 Unit of such proposed commingling.

(4) 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

S E A L