

BURLINGTON RESOURCES

SAN JUAN DIVISION

March 12, 1997

SENT FEDERAL EXPRESS

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

Re: San Juan 28-6 Unit #104M
790'FNL, 1815'FWL, Section 8, T-27-N, R-6-W, Rio Arriba County, NM
API # 30-039-25629

Dear Mr. LeMay:

This is a request for administrative approval for downhole commingling the Blanco Mesa Verde and Basin Dakota pools in the subject well. This is a new drill Mesa Verde/Dakota well for the 1997 Program.

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. Expected production curve for both Mesa Verde and Dakota;
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 covered under Order R-10696 dated November 12, 1996.

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

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 87410-1893

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 :
 Administrative Hearing
EXISTING WELLBORE
 YES NO

APPLICATION FOR DOWNHOLE COMMINGLING

Burlington Resources Oil & Gas Company **PO Box 4289, Farmington, NM 87499**

Operator San Juan 28-6 Unit	Address 104M	Unit Ltr. - Sec - Twp - Rge F 08-27-6	County Rio Arriba
Lease	Well No.	Unit Ltr. - Sec - Twp - Rge	County
Spacing Unit Lease Types: (check 1 or more)			
OGRID NO. <u>14538</u> Property Code <u>7462</u> API NO. <u>30-039-25629</u> 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	Blanco Mesaverde - 72319		Basin Dakota - 71599
2. Top and Bottom of Pay Section (Perforations)	will be supplied upon completion		will be supplied upon completion
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. 456 psi (see attachment)	a.	a. 739 psi (see attachment)
	(Original) b. 1274 psi (see attachment)	b.	b. 3221 psi (see attachment)
6. Oil Gravity (°API) or Gas BTU Content	BTU 1173		BTU 1083
7. Producing or Shut-In?	shut in		shut in
Production Marginal? (yes or no)	no		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: Rates:	Date: n/a Rates:
* If Producing, give data and oil/gas/water of recent test (within 60 days)	Date: n/a Rates:	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 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). Reference R-10696 attached
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 Sean Woolverton TITLE Production Engineer DATE 3/12/97

TYPE OR PRINT NAME Sean Woolverton TELEPHONE NO. (505) 326-9700

#0. Hobbs, NM 88241-1980
 District III
 1000 Mio Brazos Rd., Aztec, NM 87410
 District IV
 PO Box 2088, Santa Fe, NM 87504-2088

State of New Mexico
 Energy, Minerals & Natural Resources Department

Form C-102
 Revised February 21, 1994

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

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 30-039-	Pool Code 72319/71599	Pool Name Blanco Mesaverde/Basin Dakota
Property Code 7462	Property Name San Juan 28-6 Unit	Well Number 104M
OGRID No. 14538	Operator Name BURLINGTON RESOURCES OIL & GAS COMPANY	Elevation 6184'

10 Surface Location

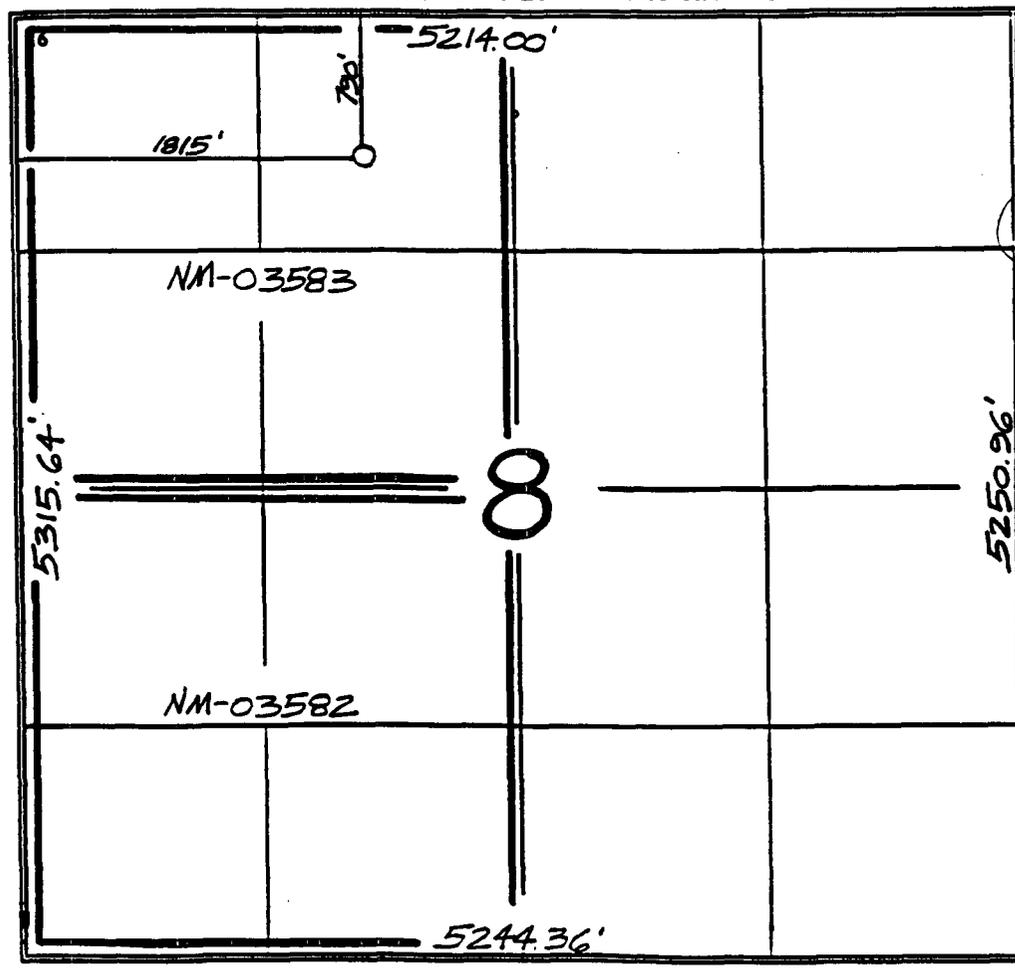
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
C	8	27-N	6-W		790	North	1815	West	R.A.

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

12 Dedicated Acres MV-W/320 DK-W/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.

RECEIVED
 BLM
 16 PM
 BURLINGTON, NM

Signature: *Peggy Bradford*
 Printed Name: Peggy Bradford
 Title: Regulatory Administrator
 Date: 1-14-97

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.

Date of Survey: 11/7/96
 Signature and Seal of Professional Surveyor: *Neal C. Edwards*
 Certificate Number: 6857

NEAL C. EDWARDS
 NEW MEXICO
 6857
 REGISTERED PROFESSIONAL SURVEYOR

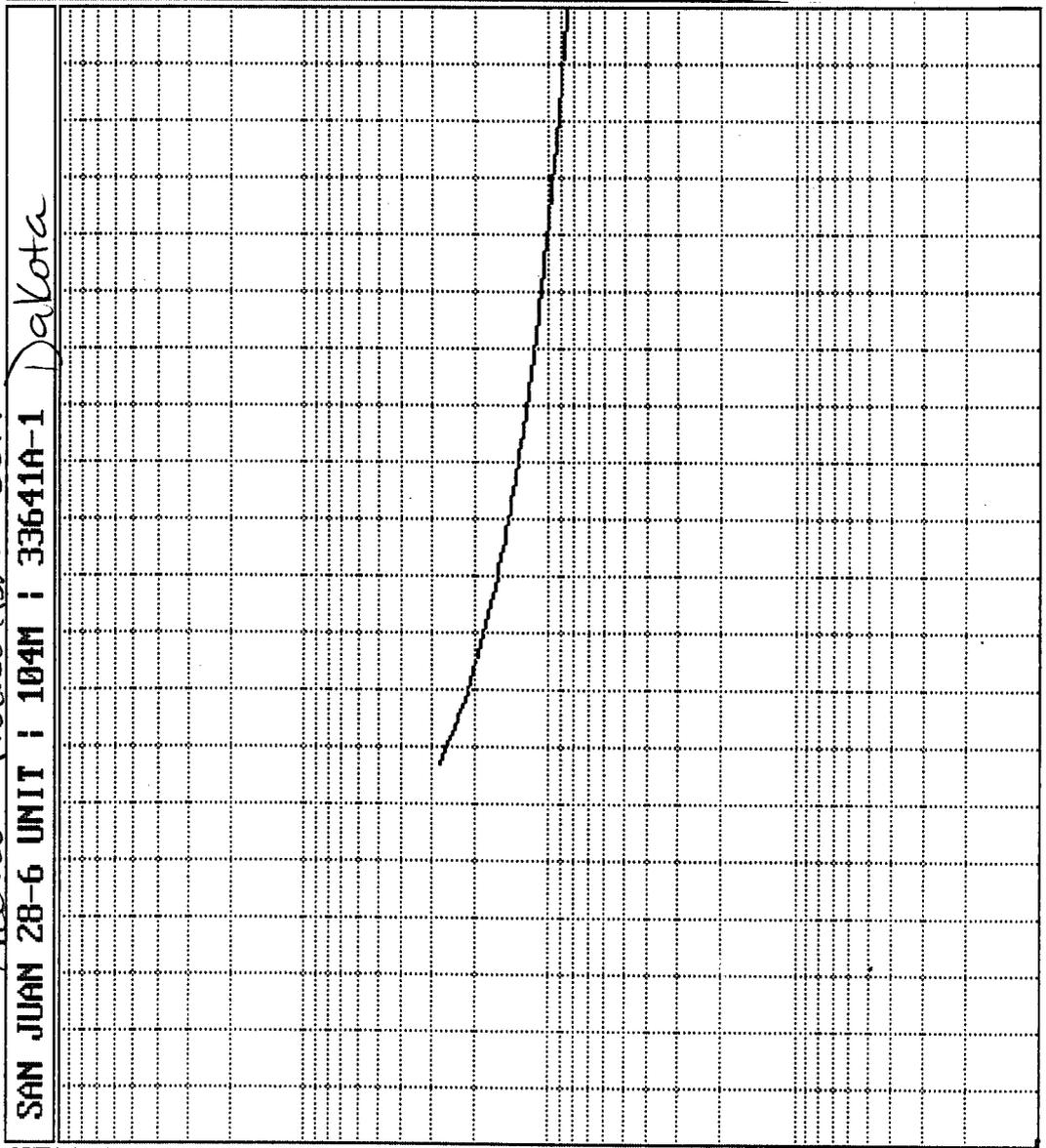
Expected Production Curve

SAN JUAN 28-6 UNIT : 104M : 33641A-1 Dakota

Prop 255

- WATER Bbls/d
- GAS Mcf/d
- WATER/GAS
- OIL Bbl/d

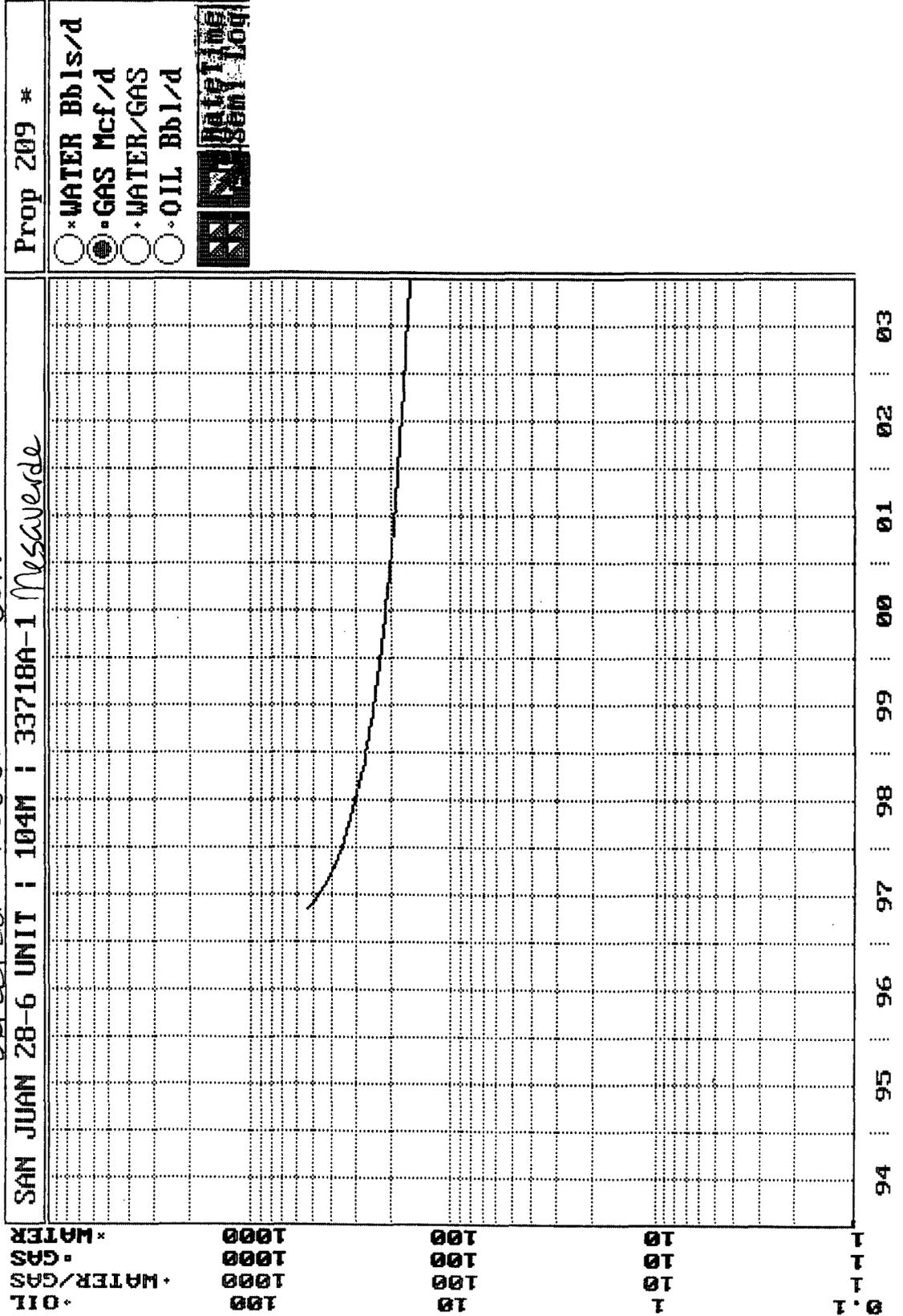
Rate Time



1000
 1000
 1000
 1000
 100
 10
 10
 10
 1
 1
 1
 0

94 | 95 | 96 | 97 | 98 | 99 | 00 | 01 | 02 | 03

Expected Production Curve

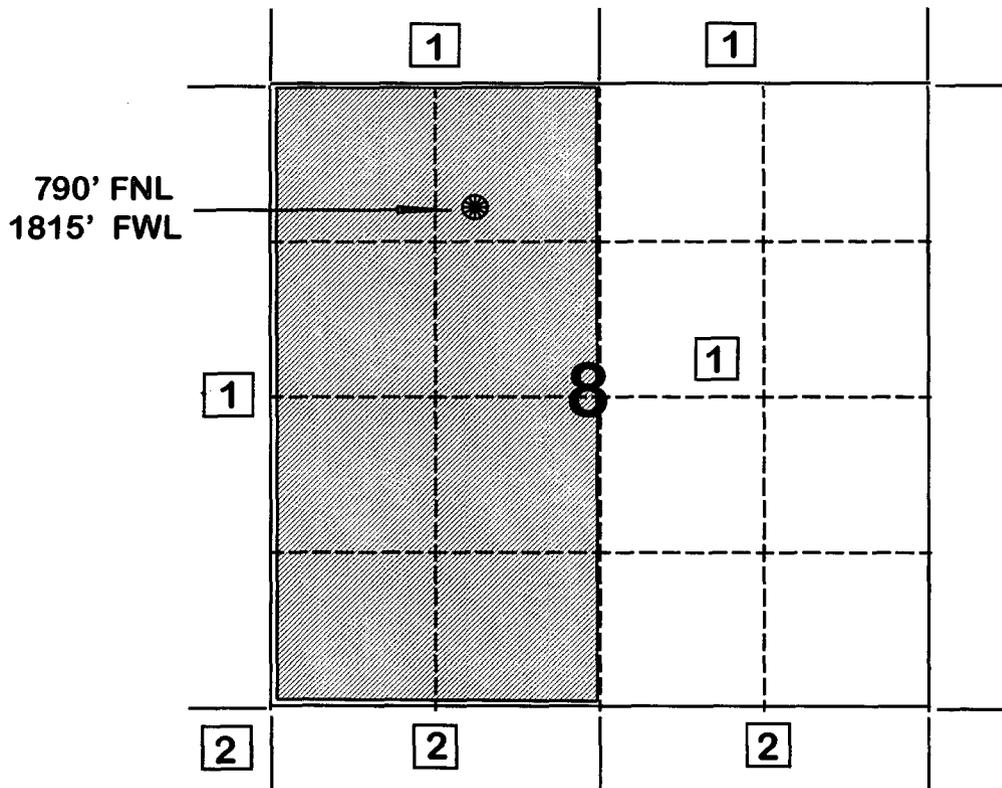


BURLINGTON RESOURCES OIL AND GAS COMPANY

**San Juan 28-6 Unit #104M
OFFSET OPERATOR \ OWNER PLAT**

Mesaverde/Dakota Formations Commingle Well

Township 27 North, Range 6 West



- 1) Burlington Resources Oil and Gas Company
- 2) UNOCAL Corp.
1004 North Big Spring, Suite 300
Midland, TX 79702

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

VERSION 1.0 3/13/94

GAS GRAVITY	0.631
COND. OR MISC. (C/M)	C
%N2	0.18
%CO2	1.12
%H2S	0
DIAMETER (IN)	1.5
DEPTH (FT)	7312
SURFACE TEMPERATURE (DEG F)	60
BOTTOMHOLE TEMPERATURE (DEG F)	200
FLOWRATE (MCFPD)	0
SURFACE PRESSURE (PSIA)	630
BOTTOMHOLE PRESSURE (PSIA)	739.0

SAN JUAN 28-6 UNIT #104 DAKOTA -CURRENT

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

VERSION 1.0 3/13/94

GAS GRAVITY	0.631
COND. OR MISC. (C/M)	C
%N2	0.18
%CO2	1.12
%H2S	0
DIAMETER (IN)	1.5
DEPTH (FT)	7312
SURFACE TEMPERATURE (DEG F)	60
BOTTOMHOLE TEMPERATURE (DEG F)	200
FLOWRATE (MCFPD)	0
SURFACE PRESSURE (PSIA)	2701
BOTTOMHOLE PRESSURE (PSIA)	3221.3

SAN JUAN 28-6 UNIT #104 DAKOTA - ORIGINAL

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

VERSION 1.0 3/13/94

GAS GRAVITY	<u>0.689</u>
COND. OR MISC. (C/M)	<u>C</u>
%N2	<u>0.27</u>
%CO2	<u>0.97</u>
%H2S	<u>0</u>
DIAMETER (IN)	<u>2</u>
DEPTH (FT)	<u>5153</u>
SURFACE TEMPERATURE (DEG F)	<u>60</u>
BOTTOMHOLE TEMPERATURE (DEG F)	<u>150</u>
FLOWRATE (MCFPD)	<u>0</u>
SURFACE PRESSURE (PSIA)	<u>402</u>
BOTTOMHOLE PRESSURE (PSIA)	<u>456.1</u>

SAN JUAN 28-6 UNIT #53 MESAVERDE - CURRENT

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

VERSION 1.0 3/13/94

GAS GRAVITY	<u>0.689</u>
COND. OR MISC. (C/M)	<u>C</u>
%N2	<u>0.27</u>
%CO2	<u>0.97</u>
%H2S	<u>0</u>
DIAMETER (IN)	<u>2</u>
DEPTH (FT)	<u>5153</u>
SURFACE TEMPERATURE (DEG F)	<u>60</u>
BOTTOMHOLE TEMPERATURE (DEG F)	<u>150</u>
FLOWRATE (MCFPD)	<u>0</u>
SURFACE PRESSURE (PSIA)	<u>.1105</u>
BOTTOMHOLE PRESSURE (PSIA)	<u>1273.8</u>

SAN JUAN 28-6 UNIT #53 MESAVERDE - ORIGINAL

Page No.: 5

Print Time: Tue Mar 04 08:51:21 1997

Property ID: 4036

Property Name: SAN JUAN 28-6 UNIT | 53 | 49689A-1

Table Name: K:\ARIES\RR97PDP\TEST.DBF

SJ 28-6 # 104M
Mesaverde Offset

--DATE-- ---CUM GAS-- M SIWHP
Mcf Psi

09/30/56	0	1105.0	← original
10/11/56	0	1104.0	
04/24/57	34000	997.0	
09/06/58	387000	811.0	
03/14/59	554000	757.0	
10/06/60	782000	743.0	
12/20/61	887000	708.0	
04/09/62	921000	696.0	
05/07/63	994000	686.0	
05/08/64	1057000	672.0	
05/03/65	1114000	653.0	
06/07/66	1179000	637.0	
06/02/67	1238000	609.0	
10/17/68	1292000	611.0	
10/16/70	1350431	573.0	
07/07/71	1393361	537.0	
05/30/72	1437838	524.0	
05/09/73	1495132	330.0	
07/23/74	1572134	455.0	
04/23/76	1645183	452.0	
05/10/78	1741593	410.0	
06/16/80	1821951	427.0	
05/01/93	1978071	402.0	← Current

Page No.: 1
Print Time: Tue Mar 04 08:30:33 1997
Property ID: 1824
Property Name: SAN JUAN 28-6 UNIT | 104 | 44078A-1
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SJ 28-6 #104m
Dakota Offset

--DATE-- ---CUM GAS-- M SIWHP
.....Mcf.....Psi

05/31/79	0	2701.0	← original
06/07/79	0	2702.0	
10/02/79	65278	1802.0	
06/16/80	201030	1088.0	
07/06/81	337441	936.0	
11/02/83	530394	935.0	
12/10/85	681863	781.0	
08/31/88	826077	749.0	
04/09/90	906114	791.0	
07/28/92	1011593	630.0	← current

