

DATE IN 3/17/97	SUSPENSE 4/7/97	ENGINEER BS	LOGGED RW	TYPE DHC
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ABOVE THIS LINE FOR DIVISION USE ONLY

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

1498

**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]

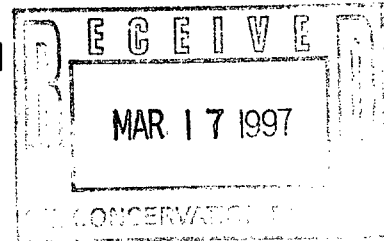
**[1] TYPE OF APPLICATION - Check Those Which Apply for [A]**

[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

3-13-97

# BURLINGTON RESOURCES

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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 87410-1693

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 :

☒ Administrative ☐ Hearing

EXISTING WELLBORE

☐ YES ☐ NO

APPLICATION FOR DOWNHOLE COMMINGLING

Burlington Resources Oil & Gas Company

PO Box 4289, Farmington, NM 87499

Operator

Address

San Juan 28-6 Unit

104M

F 08-27-6

Rio Arriba

Lease

Well No.

Unit Ltr. - Sec - Twp - Rge

County

Spacing Unit Lease Types: (check 1 or more)

OGRID NO. 14538 Property Code 7462 API NO. 30-039-25629 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)	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)  (Original) b. 1274 psi (see attachment)	a.  b.	a. 739 psi (see attachment)  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

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

District III  
1000 Mio Brazos Rd., Aztec, NM 87410  
District IV  
PO Box 2088, Santa Fe, NM 87504-2088

☐ 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

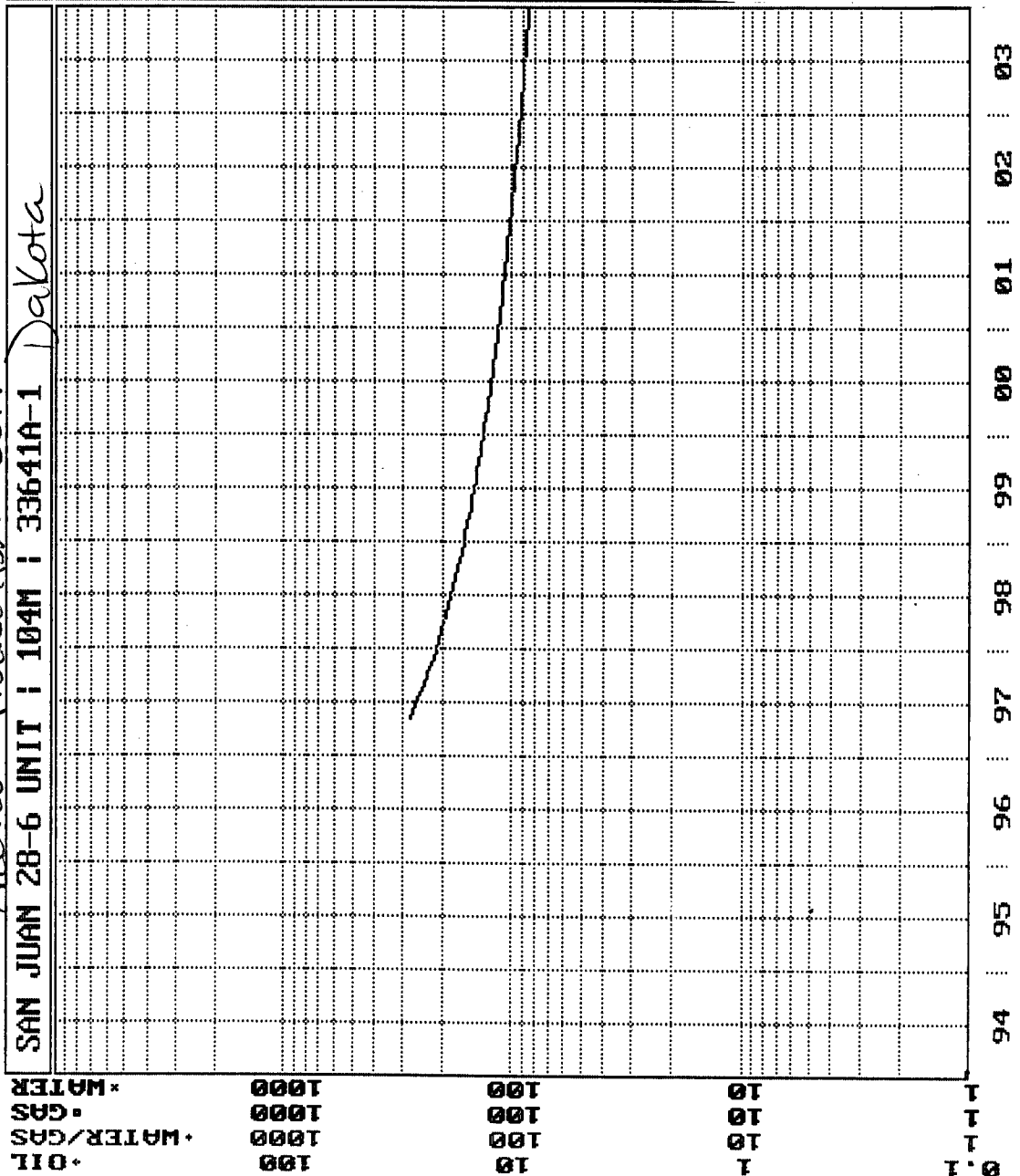
12 Dedicated Acres MV-W/320 DK-W/320	13 Joint or Infill	14 Consolidation Code	15 Order No.
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NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED  
OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

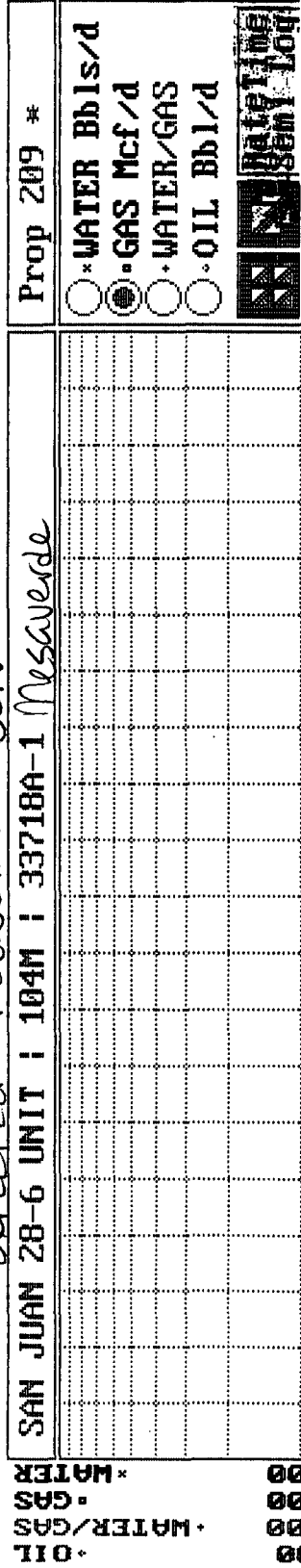
	<p>17 OPERATOR CERTIFICATION</p> <p>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.</p> <p>Signature: <i>Peggy Bradford</i> Printed Name: Peggy Bradford Title: Regulatory Administrator Date: 1-14-97</p>
	<p>18 SURVEYOR CERTIFICATION</p> <p>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.</p> <p>Date of Survey: 11/7/96</p> <p>Signature and Seal of Professional Surveyor: <i>Neale C. Edwards</i> Certificate Number: 6857</p>

# Expected Production Curve

SAN JUAN 28-6 UNIT : 104M : 33641A-1		Dakota	
Prop 255		<input type="radio"/> WATER Bbls/d <input checked="" type="radio"/> GAS Mcf/d <input type="radio"/> WATER/GAS <input type="radio"/> OIL Bbl/d	
<input type="checkbox"/> OIL <input type="checkbox"/> WATER/GAS <input type="checkbox"/> GAS <input type="checkbox"/> WATER		<input checked="" type="checkbox"/> Rate Time <input type="checkbox"/> Rate Cum <input type="checkbox"/> Rate Day	



# Expected Production Curve

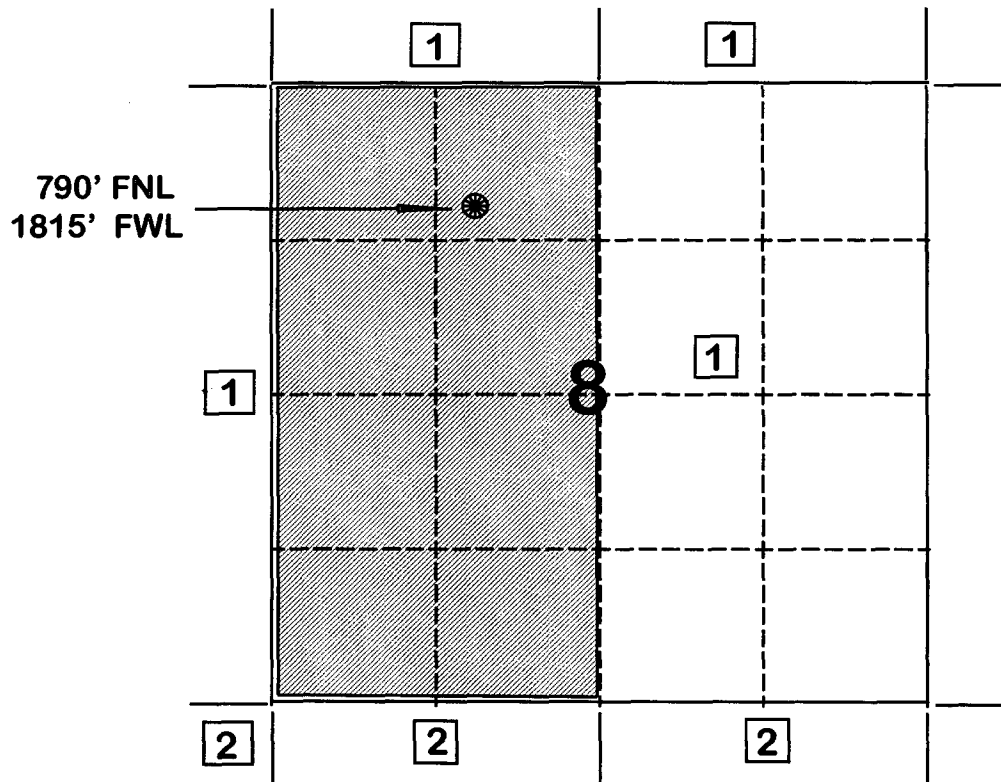


***BURLINGTON RESOURCES OIL AND GAS COMPANY***

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

SAN JUAN 28-6 UNIT #53 MESAVERDE - CURRENT

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

VERSION 1.0 3/13/94

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

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

SJ 28-6 #104 m  
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

