

**BURLINGTON
RESOURCES**

SAN JUAN DIVISION

September 30, 1996

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

DEC 1390
10/21/96
RECEIVED

OCT 1 1996

Oil Conservation Division

Re: San Juan 32-9 Unit #13
1650'FNL, 1650'FEL Section 14, T-31-N, R-10-W, San Juan County, NM
API #30-045-10761

Dear Mr. LeMay:

This is a request for administrative approval for downhole commingling the Blanco Pictured Cliffs and Blanco Mesa Verde pools in the subject well. This is currently a Mesa Verde well; it is planned to add the Pictured Cliffs.

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. Production curve for the Mesa Verde 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 Pictured Cliffs and Mesa Verde.

Notification of Pictured Cliffs and Mesa Verde interest owners is covered under Case #11601 before the New Mexico Oil Conservation Division.

The allocation formula will be based off actual flow rates from the Pictured Cliffs and Mesa Verde formations.

Please let me know if you require additional data.

Sincerely,



Peggy Bradfield
Regulatory/Compliance Administrator

encs.

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

APPLICATION FOR DOWNHOLE COMMINGLING

EXISTING WELLBORE

☒ YES ☐ NO

Burlington Resources Oil & Gas Company

PO Box 4289, Farmington, NM 87499

Operator

Address

San Juan 32-9 Unit

13

G-14-31N-10W

San Juan

Lease

Well No.

Unit Ltr. - Sec - Twp - Rge

County

Spacing Unit Lease Types: (check 1 or more)

OGRID NO. 14538 Property Code 7473 API NO. 30-045-10761 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 Pictured Cliffs - 72359		Blanco Mesaverde - 72319
2. Top and Bottom of Pay Section (Perforations)	proposed 3134-3158'		4891-5465'
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. 444 psi (see attachment - from offset well San Juan 32-9 Unit #86) (Original) b. 1006 psi (see attachment - from offset well San Juan 32-9 Unit #86)	a. b.	a. 439 psi (calc - see attachment) b. 1268 psi (calc - see attachment)
6. Oil Gravity ($^{\circ}$ API) or Gas BTU Content	BTU 1110		BTU 1170
7. Producing or Shut-In?	recompletion		producing
Production Marginal? (yes or no)	yes		no
* If Shut-In and oil/gas/water rates of last production Note: For new zones with no production history, applicant shall be required to attach production estimates and supporting data	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: Rates: will be supplied upon completion	Date: Rates:	Date: 7-99 Rates: 83 MCF/D 0 BOPD
8. Fixed Percentage Allocation Formula - % for each zone (total of %'s to equal 100%)	Will be supplied when completed		Will be supplied when completed

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). Order to be issued - Case 11601

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 Peggy Bradfield TITLE Regulatory Administrator DATE 9-25-96

TYPE OR PRINT NAME Peggy Bradfield TELEPHONE NO. (505) 326-9700

District I
O Box 1988, Hobbs, NM 88241-1988
District II
O Drawer DD, Artesia, NM 88211-0719
District III
O 800 Rio Bravo Rd., Aztec, NM 87410
District IV
O Box 2088, Santa Fe, NM 87504-2088

State of New Mexico
Energy, Minerals & Natural Resources Department

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

Form C-102
Revised February 21, 1994
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 30-045-10761		Pool Code 72359/72319		Pool Name Blanco Pictured Cliffs/Blanco Mesaverde	
Property Code 7473		Property Name San Juan 32-9 Unit			Well Number 13
OGRID No. 14538		Operator Name MERIDIAN OIL INC.			Elevation 6322'

10 Surface Location

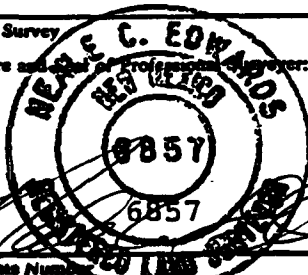
UL or lot no. G	Section 14	Township 31 N	Range 10 W	Lot Idn	Feet from the 1650	North/South line North	Feet from the 1650	East/West line East	County S.J.
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11 Bottom Hole Location If Different From Surface

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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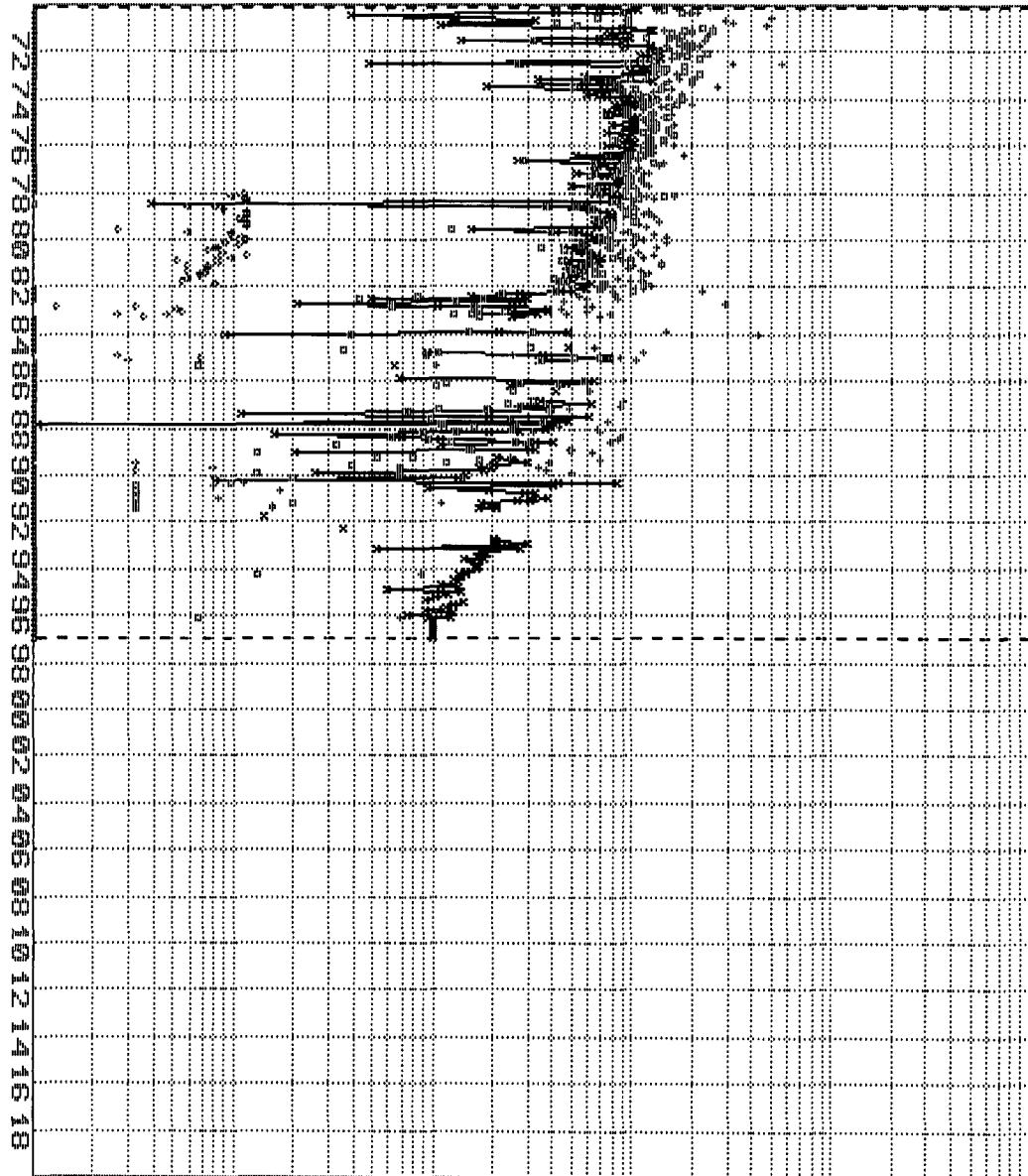
12 Dedicated Acres E/320-160	13 Joint or Infill	14 Consolidation Code	15 Order No.
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NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED
OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

16 Not resurveyed, prepared from a plat dated 2-13-53 by C. O. Walker.				17 OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief Signature Nancy Oltmanns - for Printed Name Regulatory Administrator Title 7-2-96 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. 7-1-96 Date of Survey Signature and Seal of Professional Surveyor:  Certificate Number			
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0.1	1	10	100	1000	* WATER
0.01	0.1	1	10	100	* OIL/GAS
0.01	0.1	1	10	100	* OIL
1	10	100	1000	10000	* GAS

SAN JUAN 32-9 UNIT : 13 : 69848-1 WJ



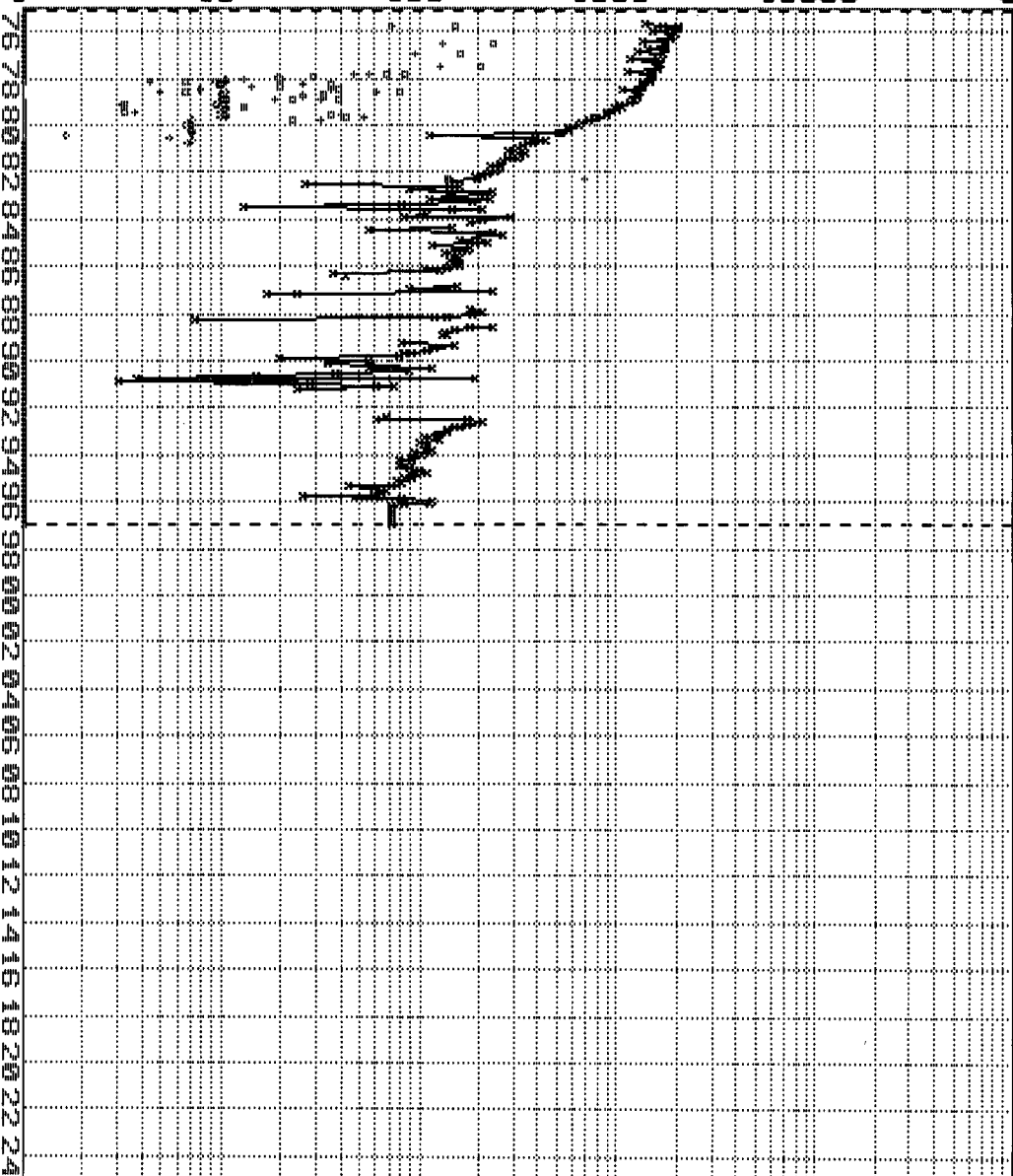
Prop 34 *

- ☒ * GAS Mcf/d
 - ☐ * OIL Bbl/d
 - ☐ * OIL/GAS
 - ☐ * WATER Bbls/d
- Rate Time
Semi Log

Major = GAS

0.1	1	10	100	1000	• WATER
0.01	0.1	1	10	100	• OIL/GAS
0.01	0.1	1	10	100	• OIL
1	10	100	1000	10000	• GAS

SAN JUAN 32-9 UNIT : 86 : 69980-1 *pc*



Prop 7008 *

☒ • GAS Mcf/d
☐ • OIL Bbl/d
☐ • OIL/GAS
☐ • WATER Bbls/d

☒ RateTime
☐ Semi Log

Major = GAS

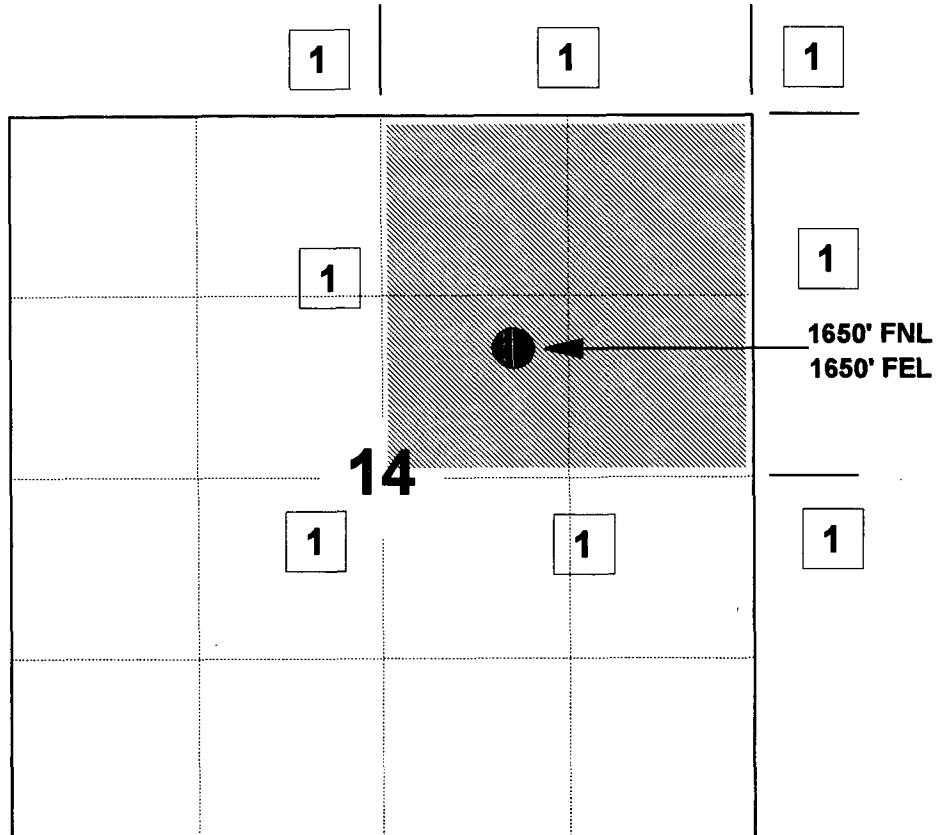
MERIDIAN OIL INC

SAN JUAN 32-9 UNIT #13

OFFSET OPERATOR \ OWNER PLAT

Mesaverde / Pictured Cliffs Formations Commingle Well

Township 31 North, Range 10 West



1) Meridian Oil Inc.

Pictured Cliffs Formation

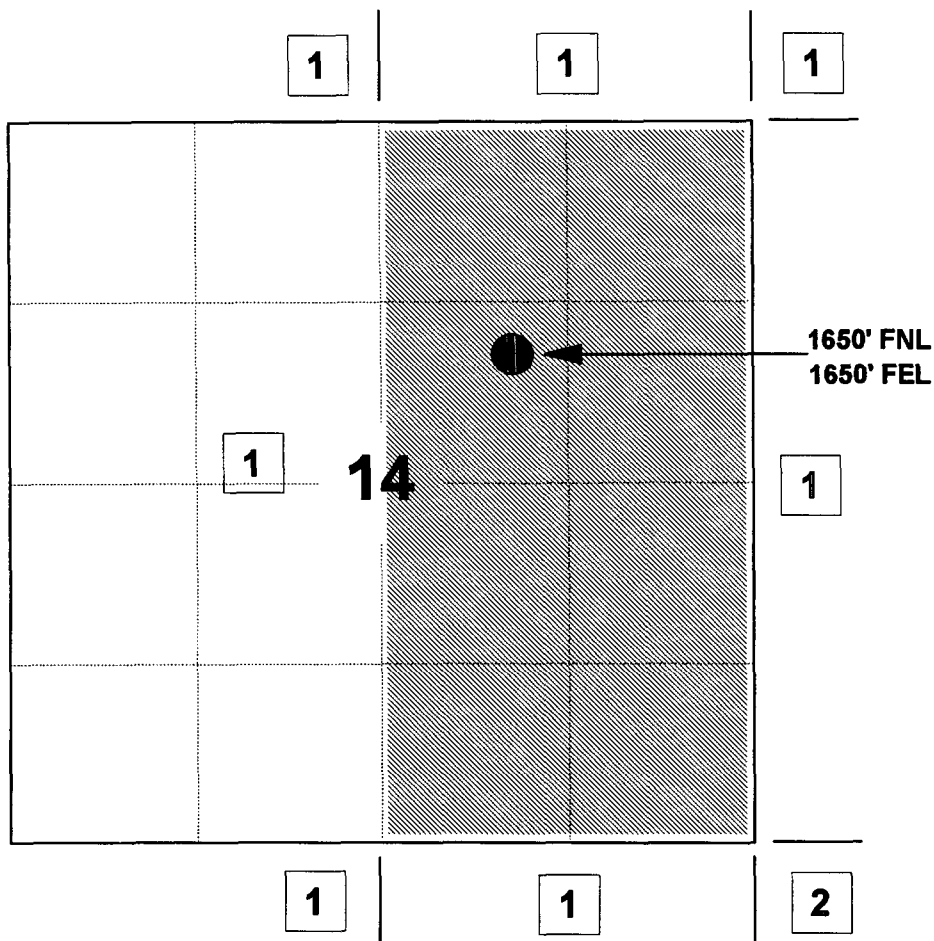
MERIDIAN OIL INC

SAN JUAN 32-9 UNIT #13

OFFSET OPERATOR \ OWNER PLAT

Mesaverde / Pictured Cliffs Formations Commingle Well

Township 31 North, Range 10 West



1) Meridian Oil Inc.

2) Amoco Production Company

PO Box 800, Denver, CO 80201

Mesaverde Formation

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

VERSION 1.0 3/13/94

GAS GRAVITY	0.69
COND. OR MISC. (C/M)	C
%N2	0.22
%CO2	1.34
%H2S	0
DIAMETER (IN)	2.441
DEPTH (FT)	5490
SURFACE TEMPERATURE (DEG F)	60
BOTTOMHOLE TEMPERATURE (DEG F)	150
FLOWRATE (MCFPD)	0
SURFACE PRESSURE (PSIA)	1090
BOTTOMHOLE PRESSURE (PSIA)	1268.1

SAN JUAN 32-9 UNIT #13 MV - (ORIGINAL)

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

VERSION 1.0 3/13/94

GAS GRAVITY	<u>0.69</u>
COND. OR MISC. (C/M)	<u>C</u>
%N2	<u>0.22</u>
%CO2	<u>1.34</u>
%H2S	<u>0</u>
DIAMETER (IN)	<u>2.441</u>
DEPTH (FT)	<u>5490</u>
SURFACE TEMPERATURE (DEG F)	<u>60</u>
BOTTOMHOLE TEMPERATURE (DEG F)	<u>150</u>
FLOWRATE (MCFPD)	<u>0</u>
SURFACE PRESSURE (PSIA)	<u>384</u>
BOTTOMHOLE PRESSURE (PSIA)	439.2

SAN JUAN 32-9 UNIT #13 MV - (CURRENT)

Organize Data ScreenGraph Economics Report Plot Utility Quit
 Editing: SAN JUAN 32-9 UNIT | 13 | 69848-1 Property No.: 34
 Table(T): TEST/M,P,H,T,Z,C,A,O,D,1,2,3,B,U,S Rec: 1/34/583
 Item: 17/32/33 Name: M_SIWHP Type: Numeric Len: 7/197/203 Dec: 1

OIL RATE	GAS RATE	WTR RATE	WHT	M FWHP-	M FBHP-	M SIWHP	M SIBHP	C FWHP-
██████████	██████████	██████████	████	████Psi████	████Psi████	████Psi████	████Psi████	██████████
« 0		0		0.0		1090.0	1239.0	»
«						1044.0		»
«						990.0		»
«						1004.0		»
«						905.0		»
«						908.0		»
«						855.0		»
«						826.0		»
«						792.0		»
«						784.0		»
«						762.0		»
«						741.0		»
«						731.0		»
«						717.0		»
«						701.0		»

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

Organize Data ScreenGraph Economics Report Plot Utility Quit
 Editing: SAN JUAN 32-9 UNIT | 13 | 69848-1 Property No.: 34
 Table(T): TEST/M,P,H,T,Z,C,A,O,D,1,2,3,B,U,S Rec: 34/34/583
 Item: 21/32/33 Name: C_SIWHP Type: Numeric Len: 7/197/203 Dec: 1

WTR RATE	WHT	M FWHP-	M FBHP-	M SIWHP	M SIBHP	C FWHP-	C FBHP-	C SIWHP
██████████	████	████Psi████	████Psi████	████Psi████	████Psi████	██████████	██████████	██████████
▲ 0		442.0		609.0	686.0			»
« 0		376.0		574.0	646.0			»
« 0		362.0		567.0	638.0			»
« 0		328.0		546.0	614.0			»
« 0		313.0		538.0	605.0			»
« 0		290.0		502.0	565.0			»
« 0		322.0		481.0	541.0			»
« 0		336.0		478.0	537.0			»
« 0		298.0		465.0	523.0			»
« 0		340.0		463.0	520.0			»
« 0		331.0		454.0	510.0			»
«				420.0				»
« 0		387.0		432.0	485.0			»
«				374.0				»
« 0		247.0		384.0	431.0			»

F1=Help F3=PrvProp F5=PrvTbl F7=InsRcd F9=Utils Alt+TableLtr=Change Table
 F2=Jump F4=NxtProp F6=NxtTbl F8=DelRcd F10=Exit Shift+<- ->=Fast Tbl R & L

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

VERSION 1.0 3/13/94

GAS GRAVITY	<u>0.66</u>
COND. OR MISC. (C/M)	<u>C</u>
%N2	<u>0.42</u>
%CO2	<u>1.45</u>
%H2S	<u>0</u>
DIAMETER (IN)	<u>1.25</u>
DEPTH (FT)	<u>3258</u>
SURFACE TEMPERATURE (DEG F)	<u>60</u>
BOTTOMHOLE TEMPERATURE (DEG F)	<u>110</u>
FLOWRATE (MCFPD)	<u>0</u>
SURFACE PRESSURE (PSIA)	<u>923</u>
BOTTOMHOLE PRESSURE (PSIA)	1006.7

SAN JUAN 32-9 UNIT #13 PC - (ORIGINAL)

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

VERSION 1.0 3/13/94

GAS GRAVITY	<u>0.66</u>
COND. OR MISC. (C/M)	<u>C</u>
%N2	<u>0.42</u>
%CO2	<u>1.45</u>
%H2S	<u>0</u>
DIAMETER (IN)	<u>1.25</u>
DEPTH (FT)	<u>3258</u>
SURFACE TEMPERATURE (DEG F)	<u>60</u>
BOTTOMHOLE TEMPERATURE (DEG F)	<u>110</u>
FLOWRATE (MCFPD)	<u>0</u>
SURFACE PRESSURE (PSIA)	<u>332</u>
BOTTOMHOLE PRESSURE (PSIA)	<u>443.9</u>

SAN JUAN 32-9 UNIT #13 PC - (CURRENT)
Offset well - San Juan 32-9 Unit #86

Organize Data ScreenGraph Economics Report Plot Utility Quit
 Browsing: SAN JUAN 32-9 UNIT | 86 | 69980-1 Property No.: 7008
 Table(T): TEST/M,P,H,E,T,Z,C,A,O,D,N,1,2,3,B,U,S Rec: 1/8/102778
 Item: 13/32/33 Name: WTR_RATE Type: Numeric Len: 8/197/203 Dec: 0

WTR RATE	WHT	M FWHP-	M FBHP-	M SIWHP	M SIBHP	C FWHP-	C FBHP-	C SIWHP
██████████	████	██Psi██	██Psi██	██Psi██	██Psi██	██████████	██████████	██████████
« 0		0.0		923.0	995.0			»
« 0		289.0		871.0	938.0			»
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« 0		260.0		661.0	711.0			»
« 0		317.0		431.0	462.0			»
« 0		327.0		377.0	404.0			»
« 0		307.0		383.0	411.0			»
«				332.0				»

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

SECTION 14, T31N, R10W

