

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 :
X Administrative ___Hearing

APPLICATION FOR DOWNHOLE COMMINGLING

EXISTING WELLBORE
X_ YES ___ NO

Burlington Resources Oil and Gas

Operator
San Juan 32-9 Unit
Lease
Well No.
Unit Ltr. - Sec - Twp - Rge
Address
#24
A-5-31N-09W
County
San Juan
Spacing Unit Lease Types: (check 1 or more)
OGRID NO. 14538 Property Code 7473 API NO. 30-045-11098 Federal X_ State Fee X_

The following facts are submitted in support of downhole commingling:	Upper Zone	Intermediate Zone	Lower Zone
1. Pool Name and Pool Code	Pictured Cliffs - 72359		Mesaverde - 72319
2. Top and Bottom of Pay Section (Perforations)	Will be supplied upon completion.		5462'-5945'
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. 567 psi (est.) (offset SJ 32-9 #94) (see attachment) (Original) b. 817 psi (est.) (offset SJ 32-9 #94) (see attachment)		a. 594 psi (see attachment) b. 1127 psi (see attachment)
6. Oil Gravity (°API) or Gas BTU Content	BTU 1131 (est.) (offset SJ 32-9 #94)		BTU 1046
7. Producing or Shut-In?	Not completed yet.		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: N/A Rates:
* If Producing, give data and oil/gas/water water of recent test (within 60 days)	Date: Rates:		Date: 3/1/97 Rates: 130 mcf/d .21 bopd
8. Fixed Percentage Allocation Formula -% for each zone (total of %'s to equal 100%)	Will be supplied upon completion.		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 ___X No
If not, have all working, overriding, and royalty interests been notified by certified mail? ___Yes ___X No
Have all offset operators been given written notice of the proposed downhole commingling? ___X Yes ___No
11. Will cross-flow occur? ___X 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. ___X Yes ___ No (If No, attach explanation)
12. Are all produced fluids from all commingled zones compatible with each other? ___X Yes ___ No
13. Will the value of production be decreased by commingling? ___ Yes ___X 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. ___X Yes ___ No
15. NMOCD Reference Cases for Rule 303(D) Exceptions: ORDER NO(S). ___R-10692 (see attachment)___
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 all 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 4/24/97

TYPE OR PRINT NAME Mary Ellen Lutey TELEPHONE NO. (505) 326-9700

District I
PO Box 1980, Hobbs, NM 88241-1980
District II
PO Drawer 00, Artesia, NM 88211-0719
District III
1000 Rio Hondo Rd., Aztec, NM 87410
District IV
PO 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

For
Revised February
Instruction
Submit to Appropriate District
State Lease -
Fee Lease -

☐ AMENDED

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number 30-045-11098	Pool Code 72359/72319	Pool Name Blanco Pictured Cliffs/Blanco Mesave
Property Code 7473	Property Name San Juan 32-9 Unit	Well No. 24
OGRID No. 14538	Operator Name BURLINGTON RESOURCES OIL & GAS COMPANY	Elevation 6694

¹⁰ Surface Location

UL or lot no.	Section	Township	Range	Lot Ida	Feet from the	North/South line	Feet from the	East/West line	Cont
A	5	31-N	9-W		990	North	990	East	S.J

¹¹ Bottom Hole Location If Different From Surface

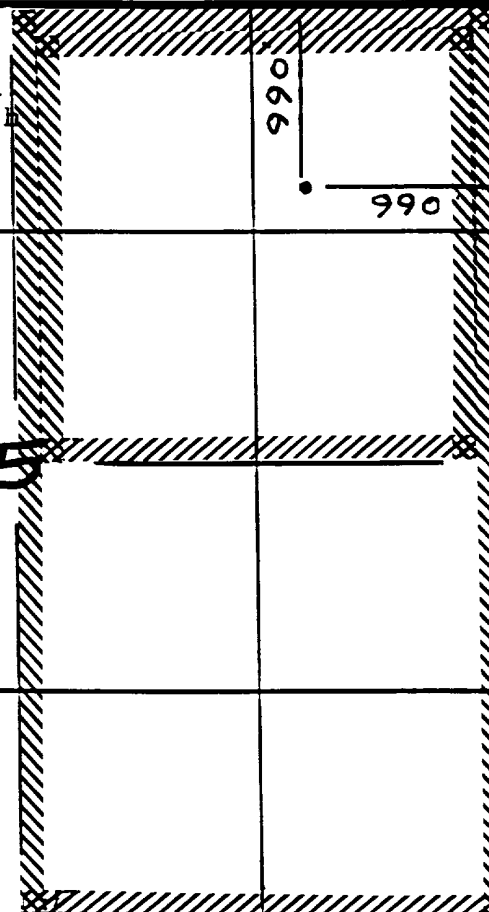

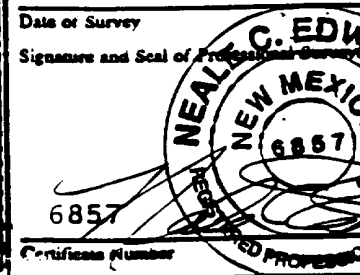
UL or lot no.	Section	Township	Range	Lot Ida	Feet from the	North/South line	Feet from the	East/West line	Cont

¹² Dedication Agency ¹³ Joint or Infill ¹⁴ Consolidation Code ¹⁵ Order No.

PC-158.37

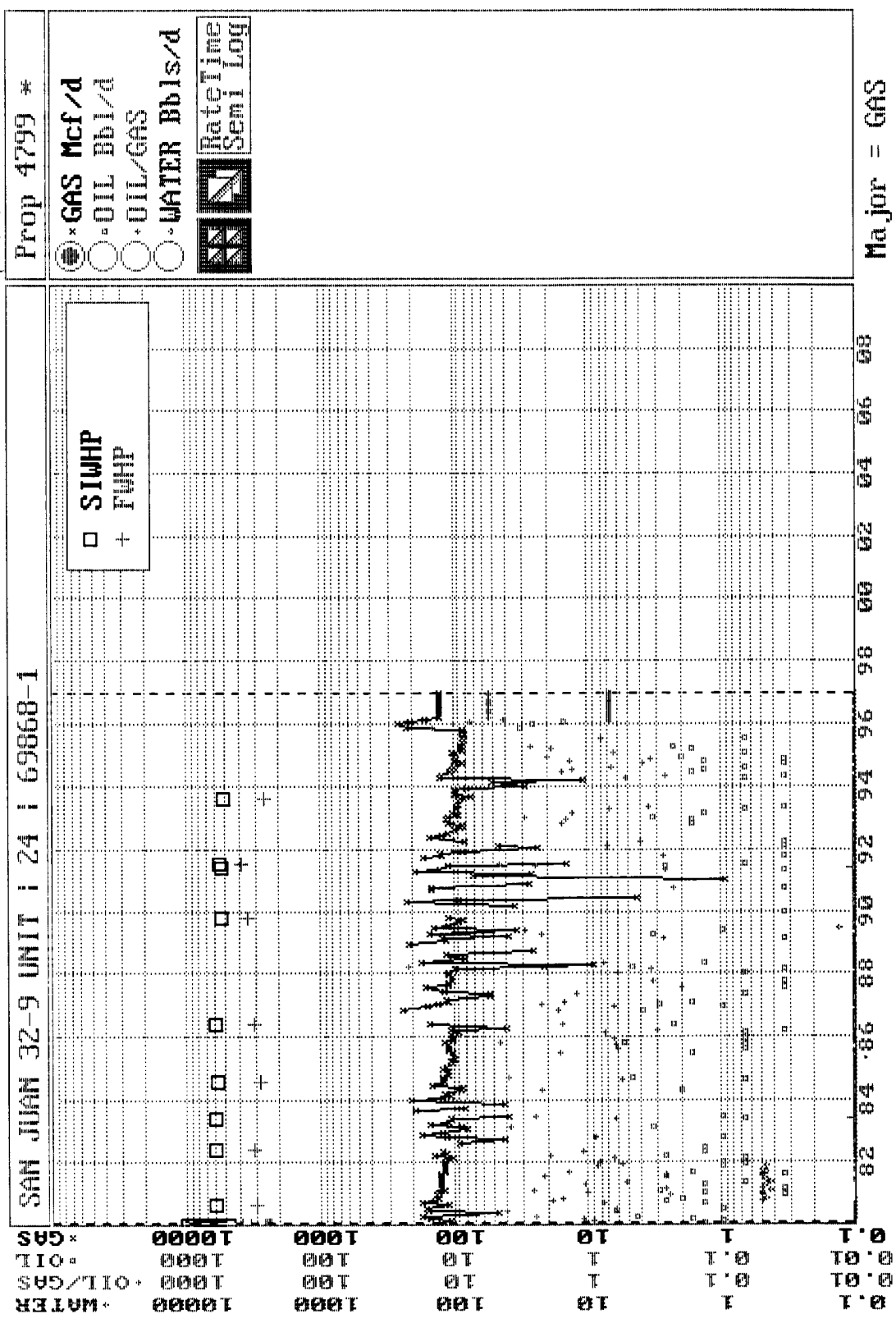
MY-E/316.70

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

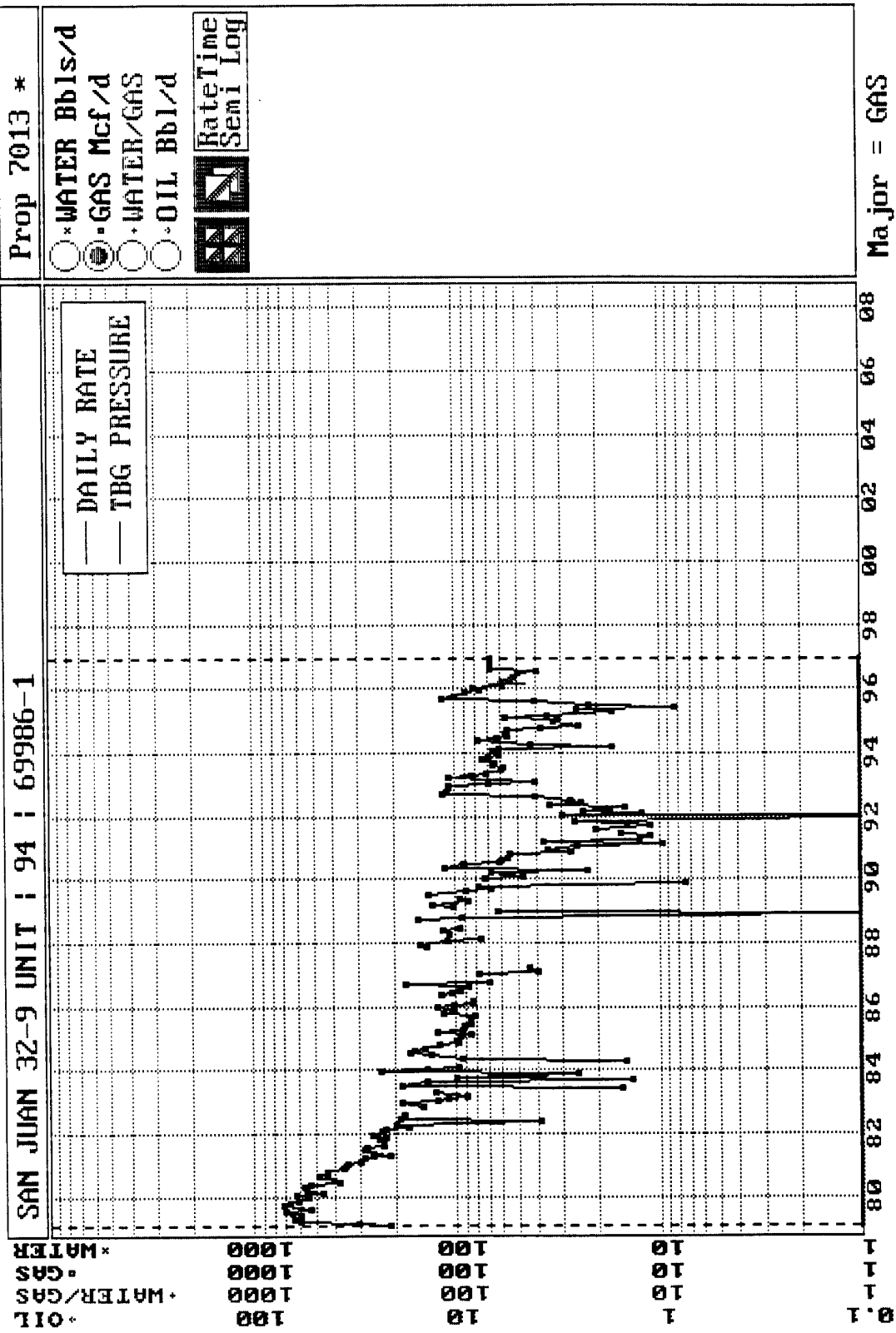
16 Not resurveyed, prepared from a plat by C.U. Walsh dated 3-7-56.		17 OPERATOR CERTIFICATE I hereby certify that the information contained herein is true and complete to the best of my knowledge.  Signature Peggy Bradfield Printed Name Regulatory Administrator Title 4-28-97 Date
		18 SURVEYOR CERTIFICATE I hereby certify that the well location shown was plotted from field notes of actual survey or under my supervision, and that the same is correct to the best of my belief. 4/24/97 Date of Survey  Signature and Seal of Professional Surveyor 6857 Certificate Number

RECEIVED
APR 29 1997
OIL CON. DIV.
DIST. 3

VIV



CC 57561

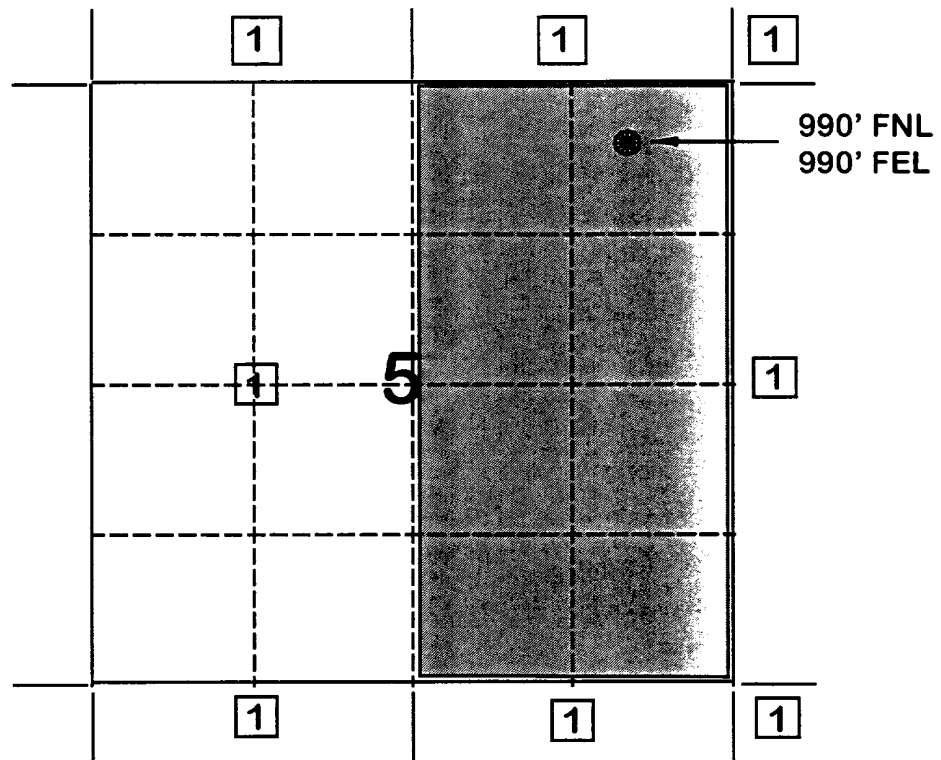


BURLINGTON RESOURCES OIL AND GAS COMPANY

**San Juan 32-9 Unit #24
OFFSET OPERATOR \ OWNER PLAT**

Mesaverde (E/2)/Pictured Cliffs (NE/4) Formations Commingle Well

Township 31 North, Range 9 West



1) Burlington Resources Oil and Gas Company Successor to Meridian Oil Inc.

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

GAS GRAVITY	0.63
COND. OR MISC. (C/M)	C
%N2	0.12
%CO2	1.92
%H2S	0
DIAMETER (IN)	2.4
DEPTH (FT)	5945
SURFACE TEMPERATURE (DEG F)	60
BOTTOMHOLE TEMPERATURE (DEG F)	150
FLOWRATE (MCFPD)	0
SURFACE PRESSURE (PSIA)	519
BOTTOMHOLE PRESSURE (PSIA)	593.5

SAN JUAN 32-9 UNIT #24 MESAVERDE - (CURRENT)

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

4/22/2009 10:33 AM

GAS GRAVITY	0.63
COND. OR MISC. (C/M)	C
%N2	0.12
%CO2	1.92
%H2S	0
DIAMETER (IN)	2.4
DEPTH (FT)	5945
SURFACE TEMPERATURE (DEG F)	60
BOTTOMHOLE TEMPERATURE (DEG F)	150
FLOWRATE (MCFPD)	0
SURFACE PRESSURE (PSIA)	977
BOTTOMHOLE PRESSURE (PSIA)	1127.2

SAN JUAN 32-9 UNIT #24 MESAVERDE - (ORIGINAL)

MV

Organize Data ScreenGraph Economics Report Plot Utility Quit
 Browsing: SAN JUAN 32-9 UNIT | 24 | 69868-1 Property No.: 4799
 Table(T): TEST/M,P,H,E,T,Z,C,A,O,D,N,1,2,3,B,U,S Rec: 1/34/103224
 Item: 2/3/33 Name: DATE Type: Date Len: 8/27/203

--DATE--	---CUM GAS--	M SIWHP
	Mcf	Psi
07/08/54	0	977.0
12/07/54	13000	925.0
09/08/55	53000	892.0
05/08/56	113000	793.0
11/16/57	285000	743.0
04/14/58	331000	726.0
05/14/59	442000	724.0
05/14/60	535000	585.0
05/13/61	616000	602.0
06/18/62	685000	678.0
01/04/63	712000	628.0
08/16/63	725000	480.0
06/24/64	764000	806.0
05/25/65	812000	747.0
05/20/66	867000	767.0

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

Organize Data ScreenGraph Economics Report Plot Utility Quit
 Browsing: SAN JUAN 32-9 UNIT | 24 | 69868-1 Property No.: 4799
 Table(T): TEST/M,P,H,E,T,Z,C,A,O,D,N,1,2,3,B,U,S Rec: 34/34/103224
 Item: 2/3/33 Name: DATE Type: Date Len: 8/27/203

--DATE--	---CUM GAS--	M SIWHP
	Mcf	Psi
06/11/71	1143330	744.0
06/29/72	1196339	722.0
05/23/73	1252095	694.0
04/16/74	1304808	672.0
05/07/76	1413916	664.0
04/11/78	1504794	649.0
08/27/80	1611014	609.0
06/03/82	1691318	608.0
05/27/83	1723905	595.0
07/19/84	1764779	586.0
05/27/86	1836220	595.0
10/11/89	1956500	545.0
05/20/91	1979153	542.0
07/08/91	1993205	554.0
08/17/93	2062749	519.0

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**

WPD001013.01.04

GAS GRAVITY	0.66
COND. OR MISC. (C/M)	C
%N2	0.17
%CO2	1.85
%H2S	0
DIAMETER (IN)	2.4
DEPTH (FT)	3692
SURFACE TEMPERATURE (DEG F)	60
BOTTOMHOLE TEMPERATURE (DEG F)	110
FLOWRATE (MCFPD)	0
SURFACE PRESSURE (PSIA)	517
BOTTOMHOLE PRESSURE (PSIA)	566.6

SAN JUAN 32-9 UNIT #24 PICTURED CLIFFS - (ANTICIPATED)
SAN JUAN 32-9 UNIT #94 PICTURED CLIFFS - (CURRENT)

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

PRECISION 13.34

GAS GRAVITY	0.66
COND. OR MISC. (C/M)	C
%N2	0.17
%CO2	1.85
%H2S	0
DIAMETER (IN)	2.4
DEPTH (FT)	3692
SURFACE TEMPERATURE (DEG F)	60
BOTTOMHOLE TEMPERATURE (DEG F)	110
FLOWRATE (MCFPD)	0
SURFACE PRESSURE (PSIA)	743
BOTTOMHOLE PRESSURE (PSIA)	817.4

SAN JUAN 32-9 UNIT #24 PICTURED CLIFFS - (ANTICIPATED)
SAN JUAN 32-9 UNIT #94 PICTURED CLIFFS - (ORIGINAL)

Organize Data ScreenGraph Economics Report Plot Utility Quit
 Browsing: SAN JUAN 32-9 UNIT | 94 | 69986-1 Property No.: 7013
 Table(T): TEST/M,P,H,E,T,Z,C,A,O,D,N,1,2,3,B,U,S Rec: 1/6/103224
 Item: 2/3/33 Name: DATE Type: Date Len: 8/27/203

--DATE--	---CUM GAS--	M SIWHP
	Mcf	Psi
11/08/78	0	743.0
02/21/79	15857	716.0
07/17/80	313840	573.0
08/03/81	444685	517.0
06/28/82	506461	516.0
07/12/84	583525	517.0

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

FARMINGTON 1997 MONTHLY PRODUCTION FOR 69868
 SAN JUAN 32-9 UNIT 24
 BLANCO MESAVERDE (PRORATED GAS FIELD MESAVERDE ZONE

PHS030M

DAYS =====			OIL =====		=====			GAS =====					
MO	T	S	ON	PC	PROD	GRV	PC	PROD	ON	BTU	PRESS	WATER	PROD
1	2	F	31	02	6		01	3863	31	1046	15.025		
2	2	F	28	02	6		01	3646	28	1046	15.025		
3													
4													
5													
6													
7													
8													
9													
10													
11													
12													

21 bopd *130 mcf/d*

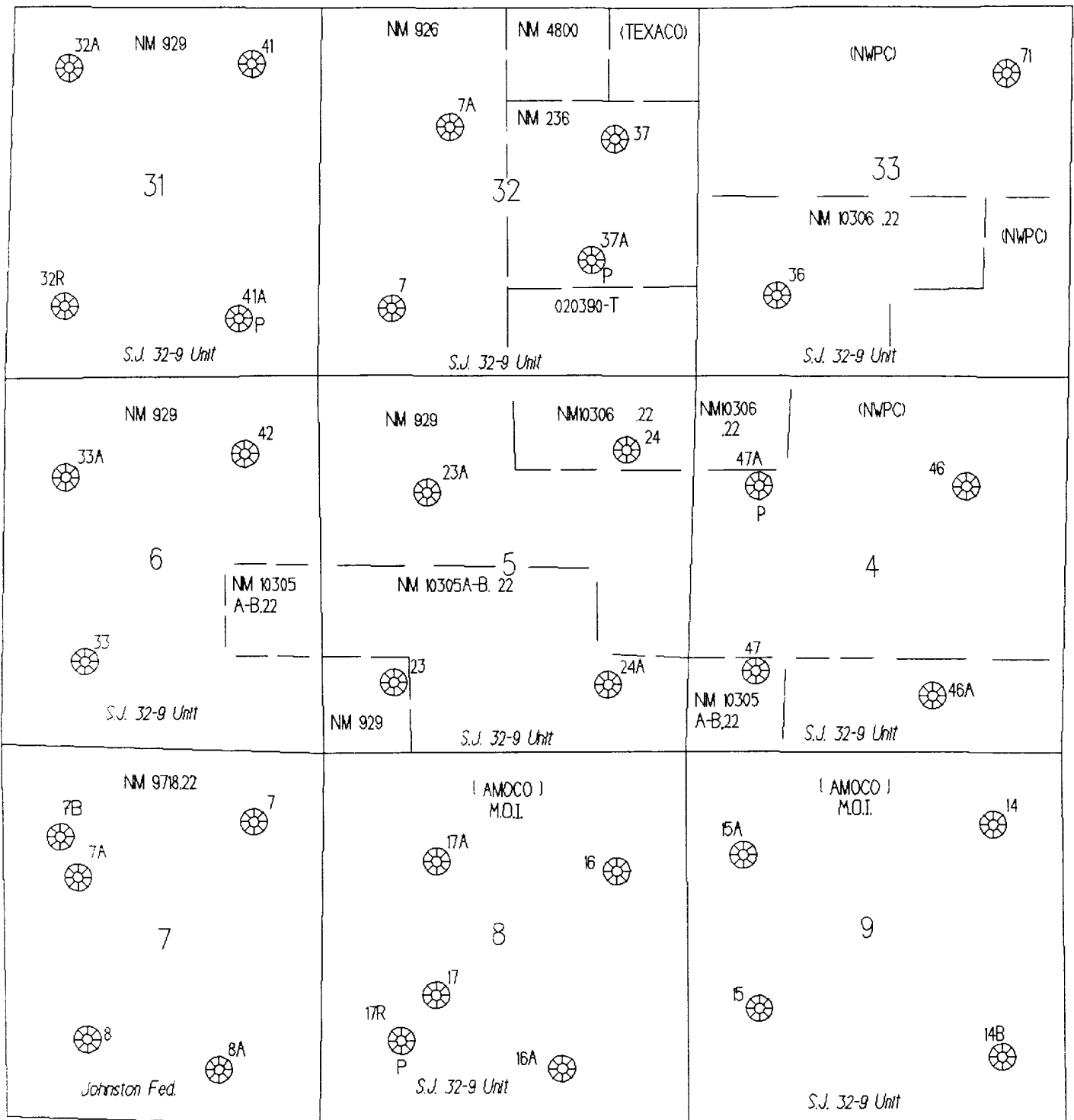
PF6 - RETURNS TO ANNUAL DISPLAY PF3 - TRANSFER TO UPDATE
 PF10 - HELP INFORMATION PF9 - DISPLAY MONTHLY INJECTIC
 00/00/00 00:00:00:0 PRS 04/03/97

B MY JOB NUM LU #29

SAN JUAN 32-9 UNIT #24

SECTION 5, T31N, R09W

SAN JUAN CO, NEW MEXICO



**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. 11601
ORDER NO. R-10692**

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

ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 8:15 a.m. on August 22, 1996, at Santa Fe, New Mexico, before Examiner David R. Catanach.

NOW, on this 1st 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 and Pictured Cliffs gas production within existing or future drilled wells within the San Juan 32-9 Unit, San Juan County, New Mexico.

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

CASE NO. 11601
Order No. R-10692
Page -2-

"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 32-9 Unit which encompasses some 21,864 acres in Townships 31 and 32 North, Ranges 9 and 10 West, NMPM, San Juan County, New Mexico.

(5) Within the San Juan 32-9 Unit, the applicant currently operates two (2) Basin-Dakota Gas Pool wells, one hundred twenty-eight (128) Blanco-Mesaverde Gas Pool wells and thirty-two (32) Blanco-Pictured Cliffs 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 32-9 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 32-9 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 32-9 Unit; and,

CASE NO. 11601

Order No. R-10692

Page -3-

- d) establish a "reference case" or an administrative procedure for authorizing the downhole commingling of existing or future drilled wells within the San Juan 32-9 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 32-9 Unit:

- a) the structure and thickness of the Dakota and Pictured Cliffs formations are very consistent;
- b) the average recoverable Pictured Cliffs gas reserves underlying an undeveloped drill block are approximately 700 MMCFG.
- c) initial producing rates for newly drilled or recompleted Pictured Cliffs gas wells range from 150-600 MCFGD;
- d) the San Juan 32-9 Unit Well Nos. 113 and 114 were recently drilled to test the Dakota formation within the unit. Both wells proved non-productive in the Dakota formation; and,
- e) 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 32-9 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 32-9 Unit, the applicant presented engineering evidence and testimony which indicates that:

- a) the average shut-in pressure within the Pictured Cliffs formation at the time of initial development was approximately 562 psi; and,

CASE NO. 11601
Order No. R-10692
Page -4-

- b) the average current shut-in pressure within the Picured Cliffs formation is approximately 349 psi.

(10) The applicant did not present sufficient bottomhole pressure data within the Dakota and Picured Cliffs formations within the San Juan 32-9 Unit so as to justify the establishment of a "reference case" for pressure criteria.

(11) The applicant testified that various allocation methods will be utilized for downhole commingled wells within the San Juan 32-9 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 where a zone with a well established decline rate is commingled with a newly completed zone; and,
- 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 32-9 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 32-9 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 32-9 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 32-9 Unit of subsequent downhole comminglings is unnecessary and is an excessive burden on the applicant;

CASE NO. 11601
Order No. R-10692
Page -5-

- d) the downhole commingling of wells within the San Juan 32-9 Unit Area will benefit working, royalty, and overriding royalty interest owners. In addition, the downhole commingling of wells within the San Juan 32-9 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 32-9 Unit for obtaining approval for subsequently 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, 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 32-9 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) allocation formulas and (c) modification of notification rules on a unit-wide basis for downhole commingling of Dakota, Mesaverde and Pictured Cliffs gas production within existing or future drilled wells within the San Juan 32-9 Unit, San Juan County, New Mexico, is hereby approved.

(2) The application of Burlington Resources Oil & Gas Company to establish a "reference case" for pressure criteria in the Dakota and Pictured Cliffs formation within the San Juan 32-9 Unit is hereby denied.

(3) Upon filing of Division Form No. C-107-A's for wells subsequently downhole commingled within the San Juan 32-9 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" 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.

CASE NO. 11601
Order No. R-10692
Page -6-

(4) In order to obtain Division authorization to downhole commingle wells within the San Juan 32-9 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 32-9 Unit of such proposed commingling.

(5) 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

State of New Mexico
Energy, Minerals and Natural Resources Department
Oil Conservation Division

Sundry Notices and Reports on Wells

1. Type of Well
GAS

DHC-1566

RECEIVED
OCT 23 1997

API # (assigned by OCD)
30-045-11098

5. Lease Number
Fee

6. State Oil&Gas Lease #

2. Name of Operator

**BURLINGTON
RESOURCES**

OIL & GAS COMPANY

OIL CON. DIV.
DIST. 3

7. Lease Name/Unit Name

San Juan 32-9 Unit

8. Well No.
24

3. Address & Phone No. of Operator

PO Box 4289, Farmington, NM 87499 (505) 326-9700

9. Pool Name or Wildcat
Blanco Pict.Cliffs/
Blanco Mesaverde

4. Location of Well, Footage, Sec., T, R, M

990' FNL, 990' FEL, Sec. 5, T-31-N, R-9-W, NMPM, San Juan County

10. Elevation:

Type of Submission

Type of Action

☐ Notice of Intent

☐ Abandonment

☐ Change of Plans

☒ Subsequent Report

☐ Recompletion

☐ New Construction

☐ Final Abandonment

☐ Plugging Back

☐ Non-Routine Fracturing

☐ Casing Repair

☐ Water Shut off

☐ Altering Casing

☐ Conversion to Injection

☒ Other - attempted recompletion

13. Describe Proposed or Completed Operations

9-30-97 MIRU. ND WH. NU BOP. Attempt to release pkr. TIH w/chemical cutter. Chemical cut tbg @ 5392'. Did not free pkr. TOOH. Chemical cut tbg @ 5384'. TOOH. SDON.

10-1-97 TOOH w/tbg. TIH w/fishing tools. TOOH w/fishing tools, tbg & pkr. SDON.

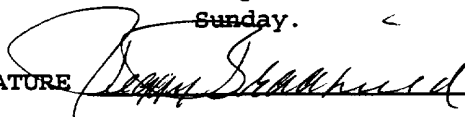
10-2-97 TIH w/RBP, set @ 5358'. TOOH. TIH w/7" FB pkr, set @ 4001'. PT csg & RBP to 2200 psi, failed. PT annulus to 1000 psi/15 min, OK. PT csg, failed. Reset pkr @ 4199'. TOOH w/pkr. TIH, ran CNL-GR-CCL @ 3200-5358'. TOOH. Load hole w/wtr. Unable to pressure up on csg to log. Ran CBL-CCL-GR @ 3070-5358' TOC @ 4320'. SDON.

10-3-97 Hydro test tbg. TIH through tight spot in csg @ 4030'. TIH, unable to get below 5165'. TOOH. TIH w/5 1/2" retrieving tool. (Verbal approval to squeeze from Ernie Busch, OCD). SDON.

10-4-97 Latch RBP, TOOH. TIH w/5 1/2" CIBP, set @ 5360'. Perf 2 sqz holes @ 3800', perf 2 sqz holes @ 3200'. TOOH. TIH w/7" cmt retainer, set @ 3741'. PT tbg to 2000 psi, OK. Establish injection. Pump 200 sx Class "B" neat cmt w/2% calcium chloride through perfs @ 3800'. Displace tbg w/13.5 bbl wtr. Spot 1 bbl cmt on top of cmt retainer. TOOH to 3210'. Load annulus w/10 bbl wtr. Spot 50 sx Class "B" neat cmt w/2% calcium chloride @ 3210'. Displace w/11.5 bbl wtr. TOOH. Load 7" csg w/6.5 bbl wtr. WOC. SD for Sunday.

Continued on back

SIGNATURE



Regulatory Administrator October 21, 1997

(This space for State Use)

Approved by ORIGINAL SIGNED BY ERNIE BUSCH Title DEPUTY OIL & GAS INSPECTOR, DIST. # Date

OCT 24 1997

10-6-97 TIH, tag TOC @ 2984'. Drill cmt @ 2984-3182'. Circ hole clean @ 3480'. PT csg to 800 psi/15 min, OK. TIH, tag TOC @ 3655'. Drill cmt @ 3655-3707'. Circ hole clean @ 3707'. SDON.

10-7-97 Circ hole clean w/KCl wtr. TOOH. TIH, ran CBL @ 0-3715', cmt @ 3600', 3090-3280' 3200-3240', 1674-1868'. (Verbal approval to squeeze from Ernie Busch, OCD). TOOH. TIH, perf 2 sqz holes @ 3591'. TOOH. TIH w/7" FB pkr, set @ 3358'. Establish injection. Pump 240 sx Class "B" neat cmt. Displace w/13 bbl wtr. WOC. SDON.

10-8-97 Release pkr, TOOH. TIH, tag TOC @ 3516'. Drill cmt @ 3516-3600'. TIH to 3707'. PT csg to 800 psi/15 min, OK. Circ hole clean. TOOH. TIH, ran CBL @ 3190-3707', TOC @ 3560'. TOOH. Perf 2 sqz holes @ 3554'. TOOH. SDON.

10-9-97 TIH w/7" pkr to 3297'. Load annulus & pressure up to 200 psi. Establish injection. Unable to squeeze. Release pkr, TOOH. TIH, perf 2 sqz holes @ 3530'. TOOH. TIH w/pkr set @ 3298'. Pump 35 bbl wtr to pressure up annulus to 300 psi. Establish injection. Pump 290 sx Class "B" neat cmt. Start displacing. Hole pressured up to 3000 psi. Released pkr. Reversed out 30 bbl cmt. TOOH w/pkr. Load csg w/6 bbl wtr PT to 1000 psi, OK. WOC. SDON.

10-10-97 TIH, tag TOC @ 3308'. Drill cmt @ 3308-3496'. TOOH. Markings on bit indicate parti csg collapse. TIH to 2958'. SDON.

10-11-97 TIH through tight place in csg @ 3496-3499'. Drill cmt to 3530'. TIH to 3707'. Circ hole clean. TOOH. SD for Sunday.

10-13-97 TIH w/swedge. Work swedge through tight spot @ 3496'. TOOH w/swedge. TIH w/taperec mill to 3400'. SDON.

10-14-97 Mill csg @ 3496-3507'. PT csg to 500 psi/15 min, OK. TOOH w/tapered mill. TIH, drill cmt @ 3507-3530'. TIH, Drill cmt retainer @ 3707' & cmt to 3717'. Circ hole clean. SDON.

10-15-97 Drill cmt @ 3717-3805'. Circ hole clean. PT csg to 300 psi/15 min, OK. TOOH. TIH w/mill. Blow well & CO. Ream out cmt ring @ 3705-3811'. SDON.

10-16-97 Blow well & CO @ 5305'. Drill cmt @ 5308-5311'. Mill out 5 1/2" CIBP @ 5360'. Blow well & CO. TOOH w/mill. SDON.

10-17-97 TIH w/196 jts 2 3/8" 4.7# J-55 EUE tbg, landed @ 5676'. ND BOP. NU WH. Pump 1200 @ 15% Hcl. Flush w/975 gal wtr. Blow well & CO. RD. Rig released.

The well was not recompleted to the Pictured Cliffs formation