

ABOVE THIS LINE FOR DIVISION USE ONLY

NEW MEXICO OIL CONSERVATION DIVISION - Engineering Bureau -

ADMINISTRATIVE APPLICATION COVERSHEET

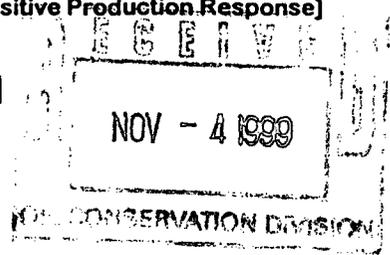
THIS COVERSHEET IS MANDATORY FOR ALL ADMINISTRATIVE APPLICATIONS FOR EXCEPTIONS TO DIVISION RULES AND REGULATIONS

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 [X] NSL [X] NSP [ ] DD [ ] SD



Check One Only for [B] or [C]

- [B] Commingling - Storage - Measurement [X] 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] [X] Working, Royalty or Overriding Royalty Interest Owners [B] [X] Offset Operators, Leaseholders or Surface Owner [C] [ ] Application is One Which Requires Published Legal Notice [D] [X] Notification and/or Concurrent Approval by BLM or SLO U.S. Bureau of Land Management - Commissioner of Public Lands, State Land Office [E] [X] 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 further verify that all applicable API Numbers are included. 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.

Paul C. Thompson Print or Type Name

Paul C. Thompson Signature

Agent Title

11/2/99 Date

DISTRICT I  
P.O. Box 1980, Hobbs, NM 88241-1980

State of New Mexico  
Energy, Minerals and Natural Resources Department

Form C-107-A  
New 3-12-96

DISTRICT II  
811 South First St., Artesia, NM 88210-2835

**OIL CONSERVATION DIVISION**

APPROVAL PROCESS:

2040 S. Pacheco  
Santa Fe, New Mexico 87505-6429

Administrative  Hearing

DISTRICT III  
1000 Rio Brazos Rd, Aztec, NM 87410-1693

**APPLICATION FOR DOWNHOLE COMMINGLING**

EXISTING WELLBORE

YES  NO

COLEMAN OIL & GAS COMPANY c/o Walsh Engr. & Prod. 7415 E. Main Farmington, N.M. 87402  
Operator Address

Federal 11 3-R I 11 28N 13W San Juan County  
Lease Well No. Unit Ltr. - Sec - Twp - Rge County

OGRID NO. 004838 Property Code 24004 API NO. 30-045-29952 Spacing Unit Lease Types: (check 1 or more)  
Federal  State  Land/for Fee

The following facts are submitted in support of downhole commingling:	Upper Zone	Intermediate Zone	Lower Zone
1. Pool Name and Pool Code	Basin Fruitland Coal		W. Kutz Pictured Cliffs 79880
2. Top and Bottom of Pay Section (Perforations)	1609-1628'	Perfs Estimated from Federal 11 #3	1641-1645'
3. Type of production (Oil or Gas)	Gas		Gas
4. Method of Production (Flowing or Artificial Lift)	Pumping		Pumping
5. Bottomhole Pressure Oil Zones - Artificial Lift: Estimated Current Gas & Oil - Flowing: Measured Current All Gas Zones: Estimated Or Measured Original	a. (Current) 175 est. b. (Original) 175	a. Pressures estimated from Federal 11 #3 b.	a. 180 est. b. N/A
6. Oil Gravity (°API) or Gas BTU Content	1050	Analysis from Federal 11 #3	1055
7. Producing or Shut-In?	Shut In		Shut In
Production Marginal? (yes or no)	Yes		Yes
* If Shut-In, give date 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: 11/96 Rates: 30 MCF 20 BWPD	Date: Rates from Federal 11 #3 Rates:	Date: 9/96 Rates: 92 MCF 17 BWPD
* If Producing, give date and oil/gas/water rates of recent test (within 60 days)	Date: Rates:	Date: Rates:	Date: Rates:
8. Fixed Percentage Allocation Formula - % for each zone	Oil: % Gas: 46.7 %	Oil: % Gas: %	Oil: % Gas: 53.3 %

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. NMOC Reference Cases for Rule 303(D) Exceptions: ORDER NO(S). DHC-1426; NSL-3738 (NSP)

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 Paul C. Thompson TITLE Agent DATE 11/2/99

TYPE OR PRINT NAME Paul C. Thompson TELEPHONE NO. ( 505 ) 327-4892



**WALSH**

ENGINEERING & PRODUCTION CORP.

Petroleum Engineering Consulting  
Lease Management  
Contract Pumping

7415 East Main  
Farmington, New Mexico 87402  
(505) 327-4892 • Fax: (505) 327-9834

November 1, 1999

Ms. Lori Wrotenbery  
New Mexico Oil Conservation Division  
P.O. Box 2088  
Santa Fe, NM 87504-2088

Re: Application for Non-Standard Location  
and Downhole Commingling  
Coleman Oil and Gas  
Federal 11 #3R  
1425' FSL, 1140' FEL  
Section 11, T28N R13W  
San Juan County, New Mexico  
Basin Fruitland Coal and W. Kutz Pictured Cliffs

Dear Ms. Wrotenbery,

This is a request for administrative approval for a non-standard location for a completion in the Basin Fruitland Coal formation. This is also a request for administrative approval to downhole commingling of the production from the Basin Fruitland Coal and West Kutz Pictured Cliffs pools.

The Federal 11 #3R is a replacement for the Federal 11 #3 which was plugged due to mechanical problems. The Federal 11 #3R is located 40' south and 44' east of the Federal 11 #3. The downhole commingling of the production from the Basin Fruitland Coal and West Kutz Pictured Cliffs pool for the Federal 11 #3 was approved in Administrative Order DHC-1426. The non-standard Fruitland Coal location and non-standard proration unit for the Federal 11 #3 was approved by Administrative Order NSL-3738 (NSP).

All of Section 11 is dedicated to the Basin Fruitland Coal formation. Due to a variation in the legal subdivision of the U.S. Public Land Surveys the entire section is only 275.36 acres. The well does meet the set back requirements for a Fruitland Coal well.



The basal coal thins dramatically in the western half of this section. A Fruitland Coal completion in a standard location in the southwest quarter would not, in our opinion, result in an economic well. Please refer to Exhibit 1 which contains copies of the open hole logs for the Federal #2E (SW 11) and the Federal 11 #3 (SE 11).

The location for the replacement Federal 11 #3R was selected by the surface owner, Bolack Land and Cattle Company, to reduce the surface disturbance and utilize the existing pad, access road and pipeline.

I have attached for your review, C-102's for each pool, an acreage plat outlining the dedicated acreage, offset wells and offset operators. I have also included a proposed allocation formula. The allocation formula is based on the cumulative production from the offset wells since there is insufficient production data. Production curves from the Federal 11 #3 are attached to show that the production from both zones is marginal. Water and gas analysis from the Federal 1 #3 are attached to show that the fluids are similar and that no damage will occur due to the commingling.

The offset Fruitland Coal operators (Burlington and Amoco) and the interest owners of the Federal 11 #3R are being notified of this application by certified return receipt mail. Copies of these letters are enclosed.

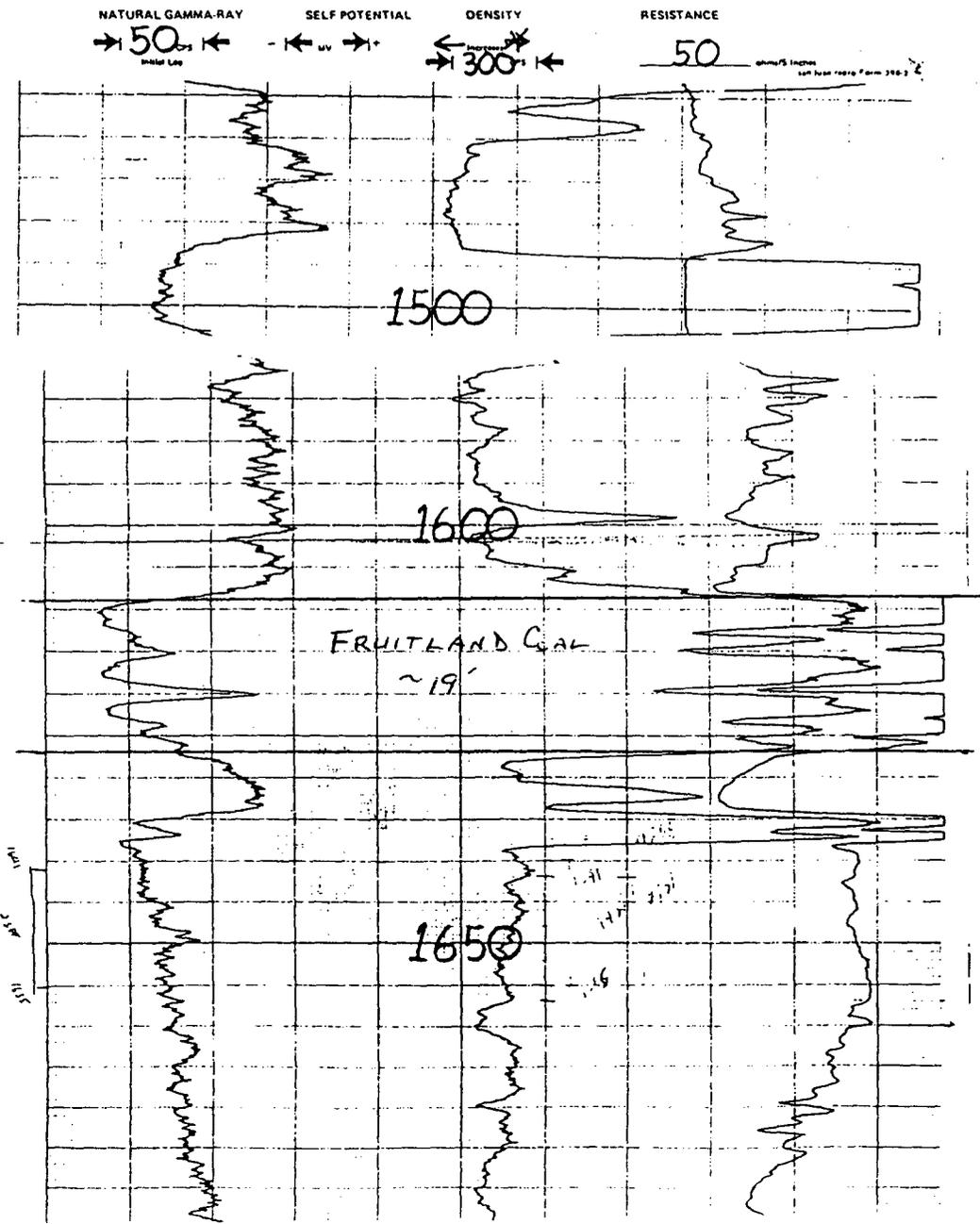
Thank you for your consideration and approval of this application. If you have any questions please do not hesitate to call upon me.

Sincerely,

  
Paul C. Thompson, P.E.  
Agent

cc: Chris Coleman, COG  
NMOCD Aztec NM  
BLM Farmington NM

<b>W. J. Surveys</b>		Date	4-27-79	1826	1826
Operator	Ralph Abbott	By	4312 - o - T.D.	Scale	1000 - 300
Well No.	3-11	Well No.	Mud	Logging	Time Out
Project	West Kutz Picture Cliffs Gas Project	Well No.	115	Total	Time Out
County	San Juan	State	N. Mex.	Depth	115
Section	11	Range	28N	Operator	J. Hennie
Block	13W	Operator	Mr. Abbott	Company	CAMMUS-GAMMA DENSITY
INITIAL LOG		NATURAL GAMMA RAY			
T.D. LOGGED	1809	Scale	1000 - 300		
NATURAL GAMMA	50	TC	Logging Scale	TC	Logging Scale
TIME CORRECTED	2	Logging Scale	TC	Logging Scale	TC
LOGGING SPEED	20	TC	Logging Scale	TC	Logging Scale
Gamma Calibration - Probe Data		TC	Logging Scale	TC	Logging Scale
Source No.	19	TC	Logging Scale	TC	Logging Scale
Source Value	7" / 16	TC	Logging Scale	TC	Logging Scale
Detector	Scin.	TC	Logging Scale	TC	Logging Scale
Count Rate	1 x 4	TC	Logging Scale	TC	Logging Scale
Water Factor		TC	Logging Scale	TC	Logging Scale
Accuracy	10	TC	Logging Scale	TC	Logging Scale
S.P.	1	TC	Logging Scale	TC	Logging Scale



STAIRLIFTERS  
 COMPENSATED NEUTRON-  
 FORMATION DENSITY  
 Schlumberger

COUNTRY: SAN JUAN COUNTY  
 BASIN: DAKOTA  
 LOCATION: FEDERAL COM - 12E  
 CURTIS LITTLE

COMPANY: CURTIS LITTLE  
 WELL: FEDERAL COM #2E  
 FIELD: BASIN DAKOTA  
 COINTEL: SAN JUAN STATE NEW MEXICO

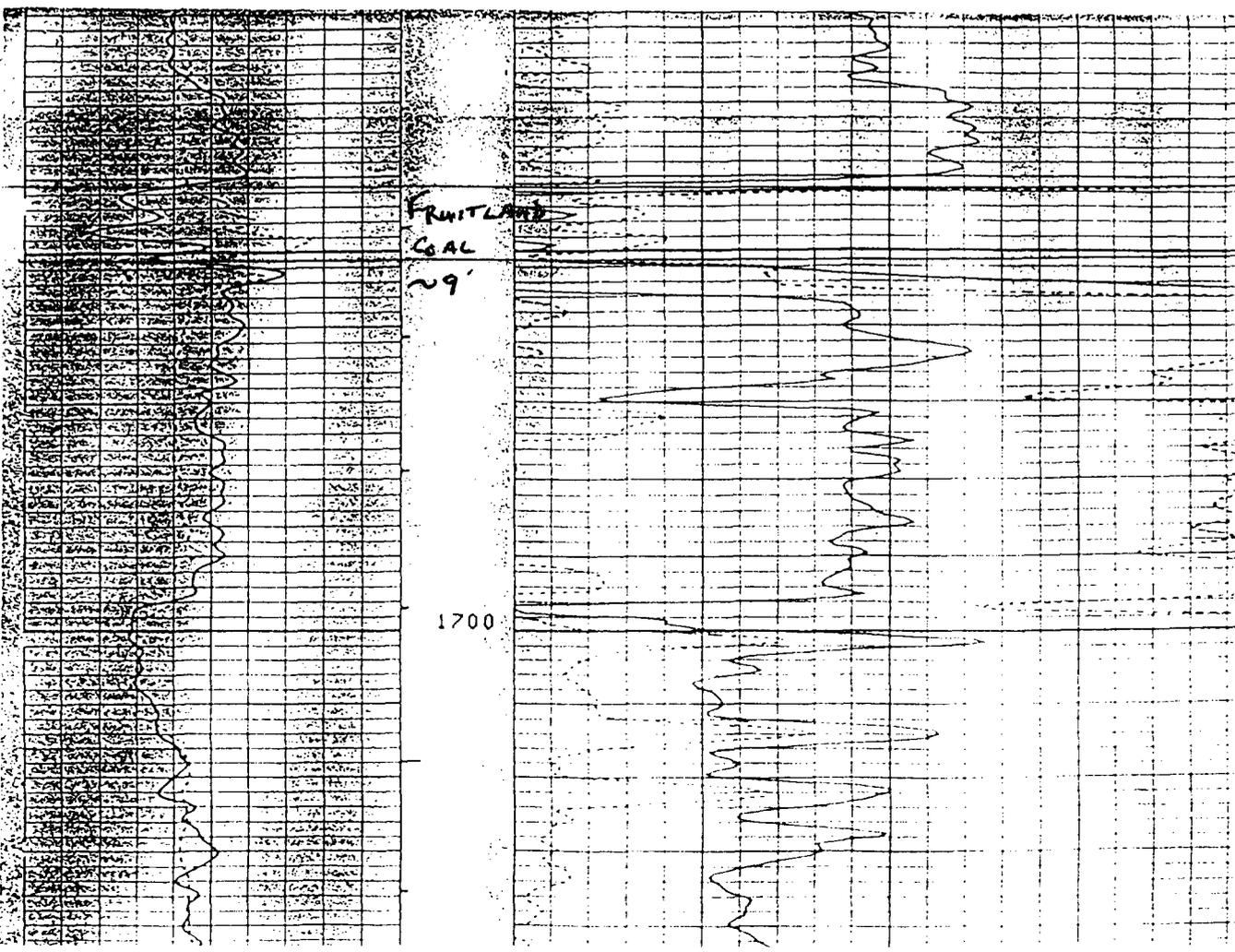
ADDITIONAL NO. 111  
 TWP. 28 N  
 RANGE 13 W

Other Services: I-SFL

Permanent Datum: G.L.  
 Elevation: 5955  
 Measured from: K.B. 12 Ft. Above Perm. Datum  
 Drilling Measurement: K.B. 8  
 Elevation: 5967  
 D.F.: 5966  
 G.L.: 5955

Run No.	590	80
Depth - Driller	6427	
Depth - Recorder	6419	
Drill Log Interval	6416	
Stop Log Interval	6540	
Casing - Driller	8 5/8 @ 215	@
Casing - Logger	218	@
Bit Size	7/8	
Type Fluid	FGM	
Dens. - Mfg.	9.2	63
pH - Fluid	7.5	8.8 ml
Source of Supply	FLO-LINE	
Sm. @ Meas. Amp.	1.93 @ 58	F @
Sm. @ Meas. Amp.	1.53 @ 68	F @
Source of Supply		
Sm. @ Meas. Amp.	4.2 @ 150	F @
Circulation Stopped	2345 12-19	
Log Rec. Temp. in	0500 12-20	
Equip. Location	8206 FARM	
Recorded by	JOHNSON	
Witnessed by	JOHNSON	

NO. 111  
 D.C. 101  
 101



District I  
PO Box 1980, Hobbs, NM 88241-1980

State of New Mexico  
Energy, Minerals & Natural Resources Dept

Form C-102  
Revised February 21, 1994

District II  
PO Drawer 00, Artesia, NM 88211-0719

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

Submit to Appropriate District Office  
State Lease - 4 Copies  
Fee Lease - 3 Copies

District III  
1000 Rio Brazos Rd., Aztec, NM 87410

AMENDED REPORT

District IV  
PO Box 2088, Santa Fe, NM 87504-2088

WELL LOCATION AND ACREAGE DEDICATION PLAT

'API Number		'Pool Code		'Pool Name	
		71629		BASIN FRUITLAND COAL	
'Property Code		'Property Name			'Well Number
		FEDERAL 11			3R
'OGRID No.		'Operator Name			'Elevation
004838		COLEMAN OIL & GAS, INC.			5900'

<sup>10</sup> Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
I	11	28N	13W		1425	SOUTH	1140	EAST	SAN JUAN

<sup>11</sup> 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

<sup>12</sup> Dedicated Acres	<sup>13</sup> Joint or Infill	<sup>14</sup> Consolidation Code	<sup>15</sup> Order No.
275.36	Y		

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

<sup>17</sup> OPERATOR CERTIFICATION

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

*Paul C. Thompson*  
Signature

Paul C. Thompson  
Printed Name

Agent  
Title

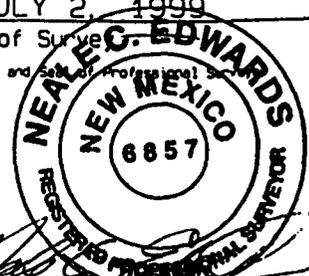
7-15-99  
Date

<sup>18</sup> SURVEYOR CERTIFICATION

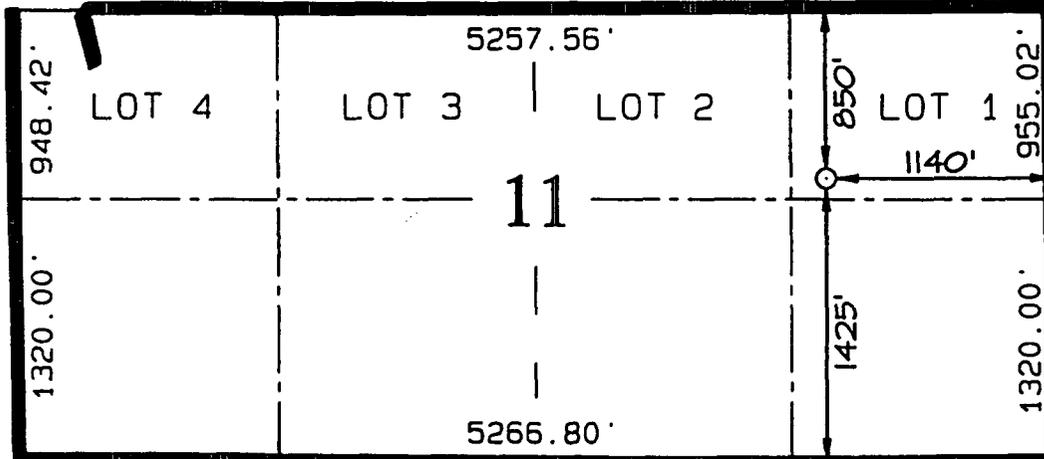
I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision and that the same is true and correct to the best of my belief.

JULY 2, 1999  
Date of Survey

Signature and Seal of Professional Surveyor



Certificate Number 6857



District II  
PO, Drawer 00, Artesia, NM 88211-0700

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

District III  
1000 Rio 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	'Pool Code 79680	'Pool Name WEST KUTZ PICTURED CLIFFS
'Property Code	'Property Name FEDERAL 11	'Well Number 3R
'OGRID No. 004838	'Operator Name COLEMAN OIL & GAS, INC.	'Elevation 5900'

<sup>10</sup> Surface Location

UL or lot no.	Section	Township	Range	Lot Ion	Feet from the	North/South line	Feet from the	East/West line	County
I	11	28N	13W		1425	SOUTH	1140	EAST	SAN JUAN

<sup>11</sup> Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Ion	Feet from the	North/South line	Feet from the	East/West line	County
<sup>12</sup> Dedicated Acres 137.78		<sup>13</sup> Joint or Infill Y		<sup>14</sup> Consolidation Code		<sup>15</sup> Order No.			

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

<sup>17</sup> OPERATOR CERTIFICATION

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

*Paul C. Thompson*  
Signature

Paul C. Thompson  
Printed Name

Agent  
Title

7-15-99  
Date

Date

<sup>18</sup> SURVEYOR CERTIFICATION

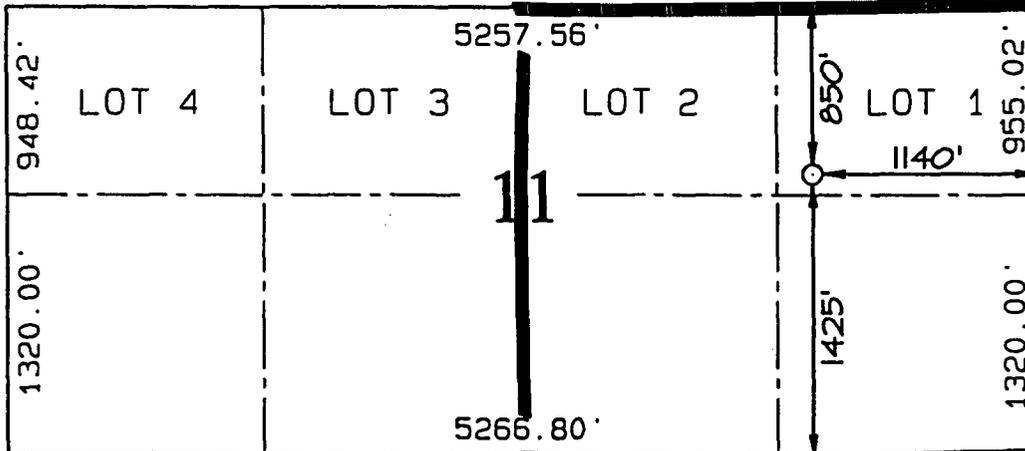
I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.

JULY 2, 1999  
Date of Survey

Signature and Seal of Professional Surveyor



Certificate Number 6857





Federal 11 #3R  
Commingling Application

Allocation Formula

The Federal 11 #3R is a replacement for the Federal 11 #3 well which was plugged due to mechanical problems. The Federal 11 #3R is 40' south and 44' east of the old Federal 11 #3 well. The Federal 11#3 was approved as a non-standard Fruitland Coal location and for downhole commingling.

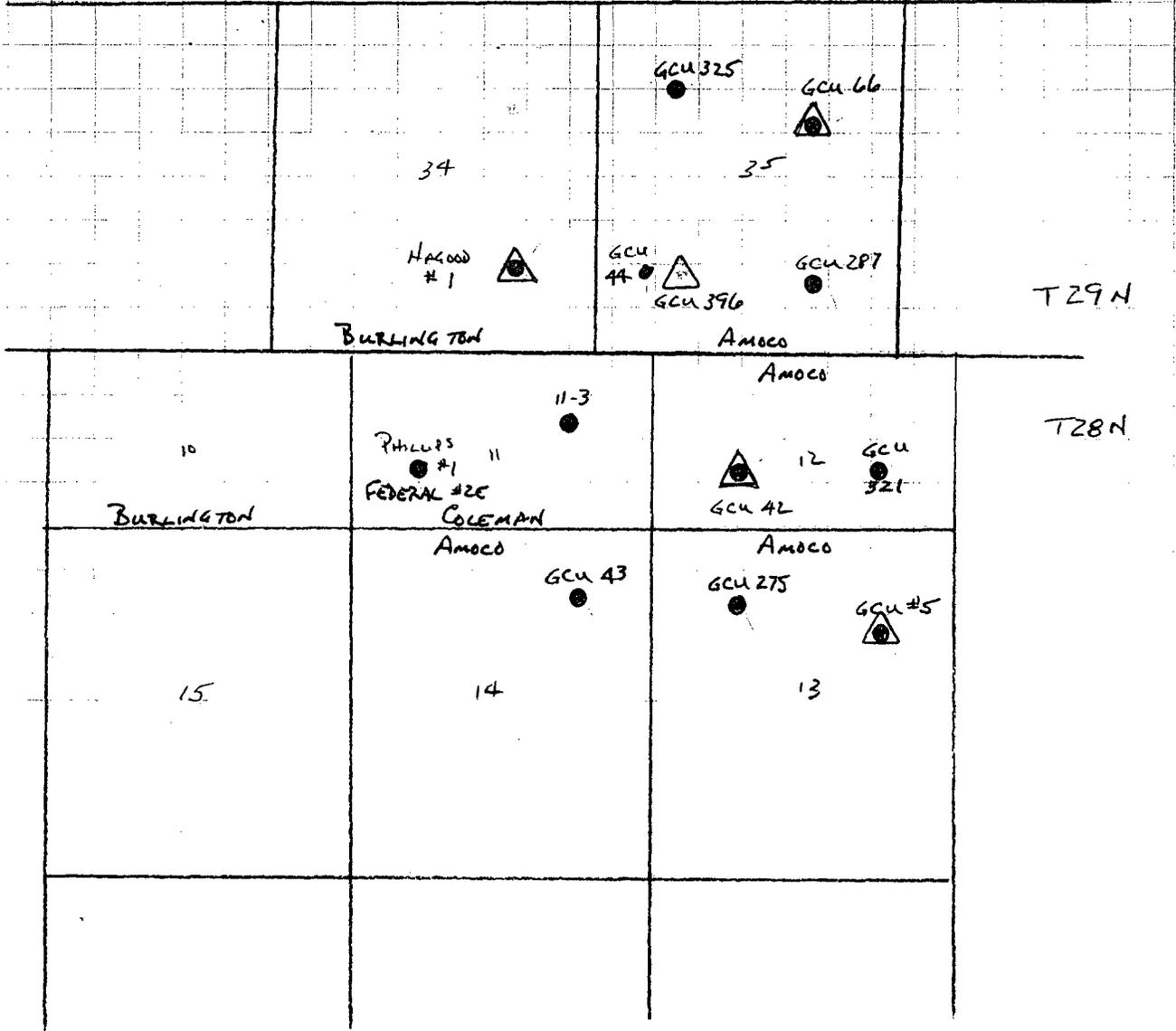
West Kutz Pictured Cliffs in the Federal 11 #3 was completed on May 15, 1979. Due to water production and pump problems the Pictured Cliffs was produced erratically until Coleman purchased the well in January 1996. The Fruitland Coal was completed in 1997 and commingled with the Pictured Cliffs production. Both decline curves are attached.

Since both zones appear to only be capable of marginal production, Coleman Oil and Gas proposes to downhole commingle the production.

Both zones have very similar bottom hole pressures (approximately 180 psig from the Pictured Cliffs and 175 psig from the Fruitland Coal) so cross flow will not be a factor. Both zones produce the same amount of water. Copies of water and gas analysis from the Federal 11 #3 are attached. Neither zone is fluid sensitive and the fluids from the two zones are compatible.

The Federal 11 #3R has not been completed, so no production data is available. Since neither zone has any data to prepare a reliable production forecast, Coleman Oil and Gas proposes to allocate the production based on a ratio of the expected reserves. Average cumulative production from Pictured Cliffs wells in this area is 774,786 Mcf of gas while Fruitland Coal wells average 678,508 Mcf. **The proposed allocation is therefore 53.3% to the Pictured Cliffs and 46.7% to the Fruitland Coal.**

R 13 W



THOMPSON ENGINEERING  
FEDERAL 11 #3 OFFSETS

- PICTURED CLIFFS
- △ FRUITLANDS COAL

**OFFSETS TO FEDERAL 11 #3R  
SECTION 11, T28N, R13W**

**PICTURED CLIFFS WELLS**

WELL NAME	CUMULATIVE PRODUCTON MCF
Gallegos Canyon Unit #287	243,160
Gallegos Canyon Unit #44	895,532
Gallegos Canyon Unit #66	828,168
Gallegos Canyon Unit #275	911,367
Gallegos Canyon Unit #5	1,939,508
Gallegos Canyon Unit #43	358,228
Gallegos Canyon Unit #321	498,256
Gallegos Canyon Unit #42	1,167,923
Phillips #1 and Federal #2E	341,815
Hagood #1	563,903
<b>AVERAGE</b>	<hr/> 774,786
<b>% of TOTAL PC PLUS FTC</b>	53.3

**FRUITLAND COAL WELLS**

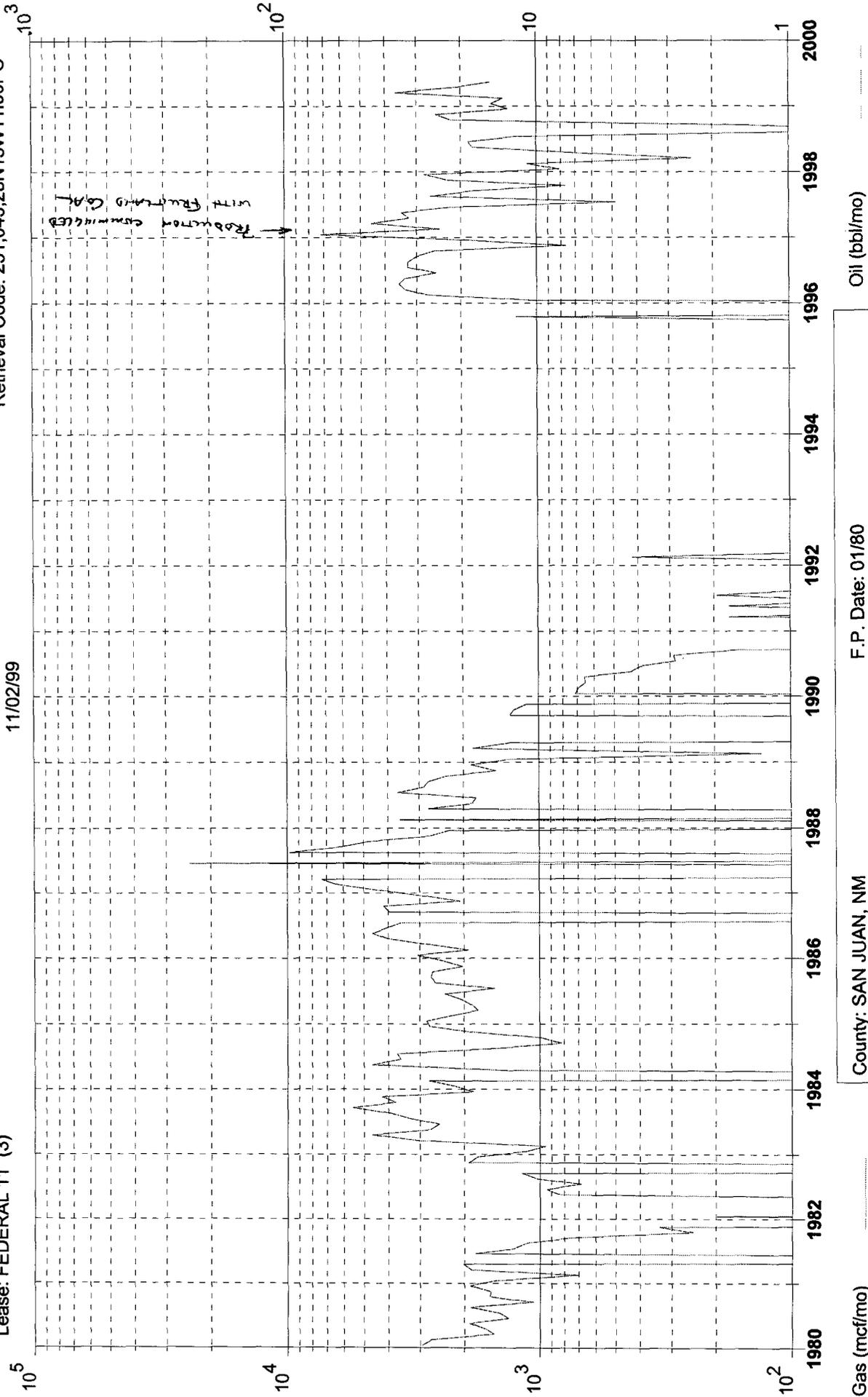
WELL NAME	CUMULATIVE PRODUCTON MCF
Gallegos Canyon Unit #396	557,542
Gallegos Canyon Unit #5	1,098,831
Gallegos Canyon Unit #42	444,349
Gallegos Canyon Unit #66	613,309
<b>AVERAGE</b>	<hr/> 678,508
<b>% of TOTAL PC PLUS FTC</b>	46.7

# Dwights

Lease: FEDERAL 11 (3)

11/02/99

Retrieval Code: 251,045,28N13W1100PC



Gas (mcf/mo)

Oil (bbl/mo)

F.P. Date: 01/80

County: SAN JUAN, NIM

Field: KUTZ WEST (PICTURED CLIFFS) PC

Oil Cum: 0 bbl

Reservoir: PICTURED CLIFFS

Gas Cum: 366.2 mmcf

Operator: COLEMAN OIL & GAS INC

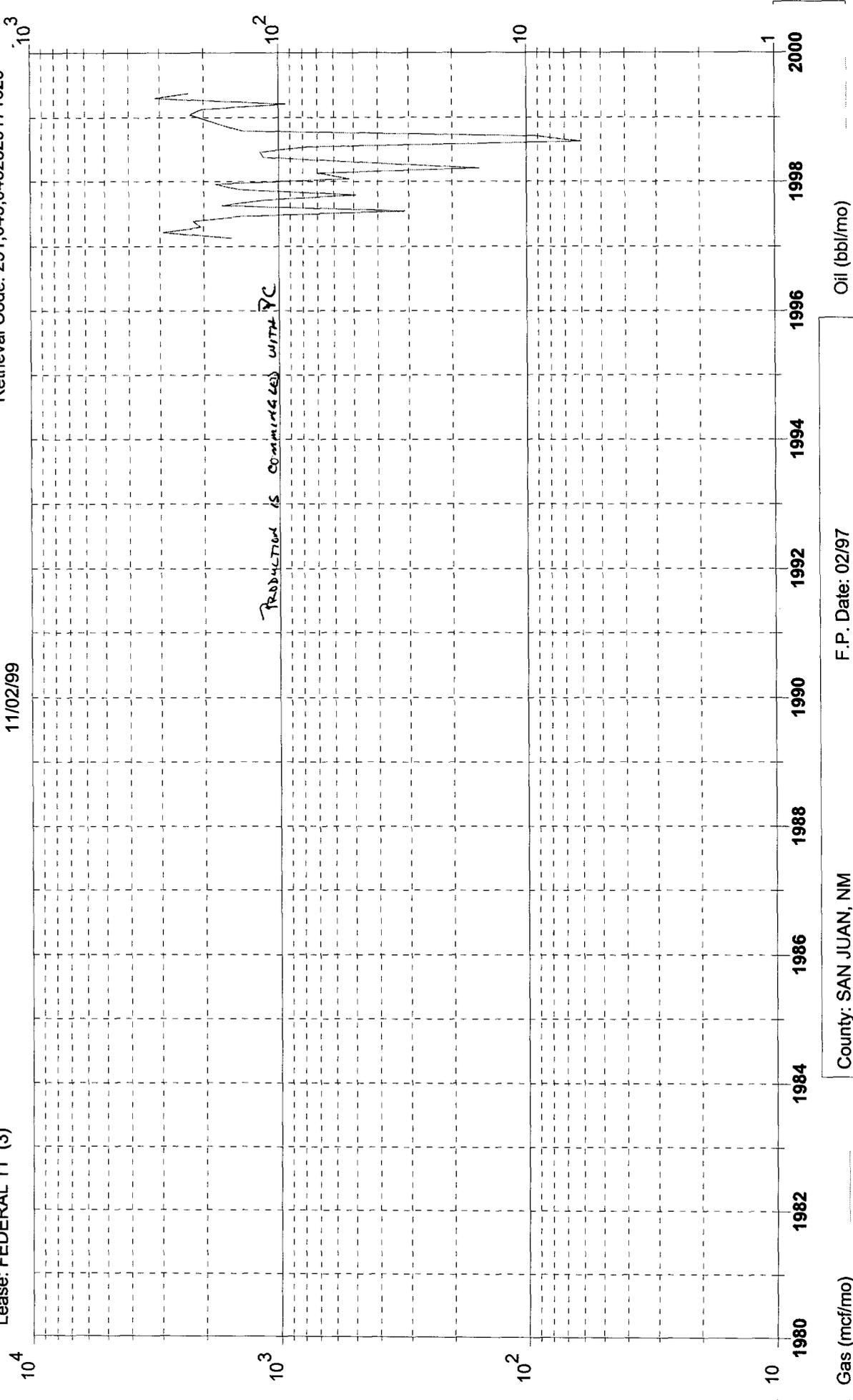
Location: 111 28N 13W

# Dwights

Lease: FEDERAL 11 (3)

11/02/99

Retrieval Code: 251,045,0452329171629



Oil (bbl/mo)

Gas (mcf/mo)

F.P. Date: 02/97

County: SAN JUAN, NIM

Field: BASIN (FRUITLAND COAL) FT

Oil Cum: 0 bbl

Reservoir: FRUITLAND COAL

Gas Cum: 37.71 mmcf

Operator: COLEMAN OIL & GAS INC

Location: 11 28N 13W

*PT*

**BJ SERVICES COMPANY**  
**WATER ANALYSIS #FW01W046**  
**FARMINGTON LAB**

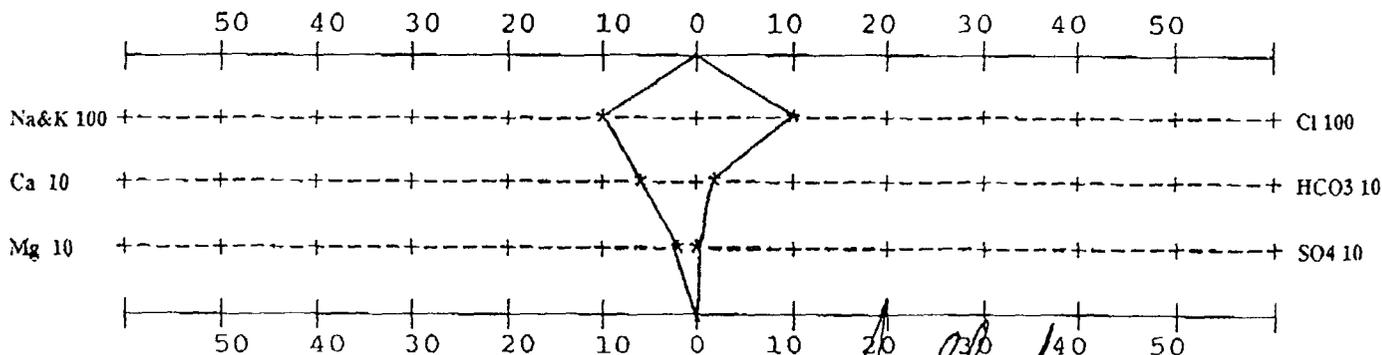
GENERAL INFORMATION		
OPERATOR: THOMPSON ENG.	DEPTH:	
WELL: FED. 11-3	DATE SAMPLED:	
FIELD:	DATE RECEIVED: 10/17/96	
SUBMITTED BY: PAUL THOMPSON	COUNTY:	STATE: NM
WORKED BY : D. SHEPHERD	FORMATION: PICTURED CLIFFS	
PHONE NUMBER:		

SAMPLE DESCRIPTION
SAMPLE FOR ANALYSIS

PHYSICAL AND CHEMICAL DETERMINATIONS			
SPECIFIC GRAVITY:	1.040	@ 78°F	PH: 7.27
RESISTIVITY (MEASURED ):	0.100	ohms @ 75°F	
IRON (FE++) :	3 ppm	SULFATE:	0 ppm
CALCIUM:	1,232 ppm	TOTAL HARDNESS	3,791 ppm
MAGNESIUM:	173 ppm	BICARBONATE:	798 ppm
CHLORIDE:	35,112 ppm	SODIUM CHLORIDE (Calc)	57,759 ppm
SODIUM+POTASS:	21,324 ppm	TOT. DISSOLVED SOLIDS:	61,025 ppm
H2S: NO TRACE		POTASSIUM PPM:	73

REMARKS

STIFF TYPE PLOT (IN MEQ/L)



ANALYST

*D. Shepherd*  
 D. SHEPHERD



Report Date: 12/03/96  
Report Time: 12:18:24

E L P A S O N A T U R A L G A S C O M P A N Y  
Volume Calculation & Distribution Department  
Monthly Volume and Analysis for December, 1995 thru December, 1995

REPORT NO: C6ME747 -01  
Page No: 2

Meter: 90624 - FEDERAL 11 #3 *Fractured Cliffs*  
Oper : 0523 - THOMPSON ENGINEERING & PROD

Reporting party: - \*\*\* No Reporting Party \*\*\*

Effectlive	Mole % / GPM											Spec Grav	GPM	
	CO2	H2S	N2	C1	C2	C3	IC4	NC4	ICS	NC5	C6P			BTU
12/01/95	0.640	0.000	0.390	93.480	4.800	0.420	0.080	0.090	0.030	0.020	0.050	1055	0.595	1.494
	0.000	0.000	0.000	0.000	1.284	0.116	0.026	0.028	0.011	0.007	0.022			

RUTH <sup>W</sup>/WALSH ENG.  
505 327 4892



1115 Farmington Avenue  
 Farmington, N.M. 87401  
 (505) 325-6622

Analysis No. TOG60004  
 Cust. No. 77000-10035

WELL/LEASE INFORMATION

Company	: THOMPSON ENG & PROD	Source	:
Well Name	: FEDERAL 11 #3	Pressure	: 55 PSIG
County	: SAN JUAN	Sample Temp.	: 47 DEG.F
State	: NM	Well Flowing	: YES
Location	: 11-28N-13W	Date Sampled	: 11/29/96
Fld/Formation	: FRUITLAND COAL	Sampled By	: PAUL THOMPSON
Cust.Stn.No.	:	Foreman/Engr	:

Remarks:

ANALYSIS

COMPONENT	MOLE %	GPM**	B.T.U.*	SP.GR.*
NITROGEN	2.466	0.0000	0.00	0.0239
CO2	0.606	0.0000	0.00	0.0092
METHANE	91.658	0.0000	927.85	0.5077
ETHANE	3.127	0.8365	55.46	0.0325
PROPANE	1.189	0.3277	29.99	0.0181
I-BUTANE	0.237	0.0775	7.72	0.0048
N-BUTANE	0.292	0.0921	9.55	0.0059
I-PENTANE	0.119	0.0435	4.77	0.0030
N-PENTANE	0.073	0.0264	2.93	0.0018
HEXANES	0.233	0.1016	11.98	0.0075
TOTAL	100.000	1.5053	1050.26	0.6144

\* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

\*\* @ 14.730 & 60 DEG. F

COMPRESSIBILITY FACTOR	(1/Z)	1.0023
BTU/CU.FT. (DRY) CORRECTED FOR	(1/Z)	1052.7
BTU/CU.FT. (WET) CORRECTED FOR	(1/Z)	1034.4
REAL SPECIFIC GRAVITY		0.6156

ANALYSIS RUN AT 14.730 PSIA & 60 DEGREES F

CYLINDER #	: 026
CYLINDER PRESSURE	: 42 PSIG
DATE RUN	: 12/02/96
ANALYSIS RUN BY	: CHELLE DURBIN

Coleman Oil and Gas  
**Federal 11 #3R**  
1425'FSL & 1140'FEL  
Sec. 11, T28N, R13W  
San Juan County, New Mexico

The following offset Fruitland Coal Operators and interest owners have received written notice of the non-standard Fruitland Coal location and downhole commingling application for the West Kutz Pictured Cliffs and Basin Fruitland Coal.

Mr. T. Greg Merrion  
Merrion Oil and Gas  
P.O. Box 840  
Farmington, NM 87499

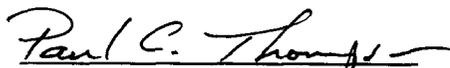
Mr. James Strickler  
Burlington Resources  
3535 E. 30<sup>th</sup> Street  
Farmington, NM 87401

Land Manager  
AMOCO Production Company  
200 AMOCO Court  
Farmington, NM 87401

Mr. George Coleman  
Coleman Oil and Gas  
P.O. Drawer 3337  
Farmington, NM 87499

U.S. Government  
Bureau of Land Management  
Mr. Ruben Sanchez  
1235 La Plata Highway  
Farmington, NM 87401

I certify that copies of the Application for a non-standard Fruitland Coal well and downhole commingling have been mailed to the above Operators and Interest owners.

  
Paul C. Thompson

San Juan County            )  
                                  ) ss  
State of New Mexico        )

The following instrument was acknowledged before me this 21st day  
of January 1998 by Paul C. Thompson.

  
Notary Public



**Federal 11 #3R  
Commingling Application**

**Working, Overriding, and Royalty Interests**

**Pictured Cliffs**

<b>Owner</b>	<b>Working Interest</b>	<b>Net Revenue Interest</b>
U.S. Government		0.12500
Coleman Oil and Gas	0.90000	0.74700
Paul Thompson	0.10000	0.08300
Merrion Oil and Gas		0.01000
George E. Coleman		0.03500
	<hr/>	<hr/>
	1.00000	1.00000

**Fruitland Coal**

<b>Owner</b>	<b>Working Interest</b>	<b>Net Revenue Interest</b>
U.S. Government		0.12500
Coleman Oil and Gas	0.90000	0.74324
Paul Thompson	0.10000	0.08258
Merrion Oil and Gas		0.01418
George E. Coleman		0.03500
	<hr/>	<hr/>
	1.00000	1.00000



**WALSH** ENGINEERING & PRODUCTION CORP.

Petroleum Engineering Consulting  
Lease Management  
Contract Pumping

7415 East Main  
Farmington, New Mexico 87402  
(505) 327-4892 • Fax: (505) 327-9834

CERTIFIED - RETURN RECEIPT

November 2, 1999

Mr. George E. Coleman  
c/o Coleman Oil and Gas  
P.O. Drawer 3337  
Farmington, NM 87499

Re: Application for Non-standard Fruitland Coal  
Location and Downhole Commingling  
Coleman Oil and Gas Company  
Federal 11 #3R  
1425' FSL and 1140' FEL, Section 11, T28N, R13W  
San Juan County, New Mexico  
Basin Fruitland Coal and  
West Kutz Pictured Cliffs

Dear Mr. Coleman,

As a working interest owner in the Federal 11 #3R, you are being notified of the application to the NMOCD to administratively approve the request for a non-standard location in the Fruitland Coal formation. The operator is also requesting administrative approval to commingle the production from the West Kutz Pictured Cliffs pool with the Basin Fruitland Coal pool.

The Federal 11 #3R is a replacement well for the Federal 11 #3 which was plugged due to mechanical problems. The Federal 11 #3R location is approximately 55' from the Federal 11 #3. The Federal 11 #3 was previously approved as a non-standard location in the Fruitland Coal and for downhole commingling.

If you wish to submit remarks concerning this application, please send them to Ms. Lori Wrotenbery, Director, New Mexico Oil and Gas Conservation Division, P.O. Box 2088, Santa Fe, NM 87504-2088. A copy of any comments to the undersigned would be appreciated.



Please do not hesitate to call upon me if you have any questions.

Sincerely,

A handwritten signature in cursive script that reads "Paul C. Thompson". The signature is written in dark ink and is positioned above the typed name.

Paul C. Thompson, P. E.  
Agent  
Coleman Oil and Gas



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CERTIFIED - RETURN RECEIPT

November 2, 1999

Mr. James Strickler  
Burlington Resources  
3535 E. 30<sup>th</sup> Street  
Farmington, NM 87401

Re: Application for Non-standard Fruitland Coal  
Location and Downhole Commingling  
Coleman Oil and Gas Company  
Federal 11 #3R  
1425' FSL and 1140' FEL, Section 11, T28N, R13W  
San Juan County, New Mexico  
Basin Fruitland Coal and  
West Kutz Pictured Cliffs

Dear Mr. Strickler,

As an offset Fruitland Coal operator to the Federal 11 #3R, you are being notified of the application to the NMOCD to administratively approve the request for a non-standard location in the Fruitland Coal formation. The operator is also requesting administrative approval to commingle the production from the West Kutz Pictured Cliffs pool with the Basin Fruitland Coal pool.

The Federal 11 #3R is a replacement well for the Federal 11 #3 which was plugged due to mechanical problems. The Federal 11 #3R location is approximately 55' from the Federal 11 #3. The Federal 11 #3 was previously approved as a non-standard location in the Fruitland Coal and for downhole commingling.

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Please do not hesitate to call upon me if you have any questions.

Sincerely,

A handwritten signature in cursive script that reads "Paul C. Thompson". The signature is fluid and includes a long horizontal flourish at the end.

Paul C. Thompson, P. E.  
Agent  
Coleman Oil and Gas



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Farmington, New Mexico 87402  
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CERTIFIED - RETURN RECEIPT

November 2, 1999

Land Manager  
AMOCO Production Company  
200 AMOCO Court  
Farmington, NM 87401

Re: Application for Non-standard Fruitland Coal  
Location and Downhole Commingling  
Coleman Oil and Gas Company  
Federal 11 #3R  
1425' FSL and 1140' FEL, Section 11, T28N, R13W  
San Juan County, New Mexico  
Basin Fruitland Coal and  
West Kutz Pictured Cliffs

Dear Land Manager,

As an offset operator to the Federal 11 #3R, you are being notified of the application to the NMOCD to administratively approve the request for a non-standard location in the Fruitland Coal formation. The operator is also requesting administrative approval to commingle the production from the West Kutz Pictured Cliffs pool with the Basin Fruitland Coal pool.

The Federal 11 #3R is a replacement well for the Federal 11 #3 which was plugged due to mechanical problems. The Federal 11 #3R location is approximately 55' from the Federal 11 #3. The Federal 11 #3 was previously approved as a non-standard location in the Fruitland Coal and for downhole commingling.

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Sincerely,

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Paul C. Thompson, P. E.  
Agent  
Coleman Oil and Gas



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Farmington, New Mexico 87402  
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CERTIFIED - RETURN RECEIPT

November 2, 1999

Mr. T. Greg Merrion  
Merrion Oil and Gas  
610 Reilly Avenue  
Farmington, NM 87401

Re: Application for Non-standard Fruitland Coal  
Location and Downhole Commingling  
Coleman Oil and Gas Company  
Federal 11 #3R  
1425' FSL and 1140' FEL, Section 11, T28N, R13W  
San Juan County, New Mexico  
Basin Fruitland Coal and  
West Kutz Pictured Cliffs

Dear Mr. Merrion,

As an interest owner in the Federal 11 #3R, you are being notified of the application to the NMOCD to administratively approve the request for a non-standard location in the Fruitland Coal formation. The operator is also requesting administrative approval to commingle the production from the West Kutz Pictured Cliffs pool with the Basin Fruitland Coal pool.

The Federal 11 #3R is a replacement well for the Federal 11 #3 which was plugged due to mechanical problems. The Federal 11 #3R location is approximately 55' from the Federal 11 #3. The Federal 11 #3 was previously approved as a non-standard location in the Fruitland Coal and for downhole commingling.

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Sincerely,

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Paul C. Thompson, P. E.  
Agent  
Coleman Oil and Gas



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Farmington, New Mexico 87402  
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CERTIFIED - RETURN RECEIPT

November 2, 1999

U. S. Government  
Bureau of Land Management  
Attn. Mr. Ruben Sanchez  
1235 La Plata Highway  
Farmington, NM 87401

Re: Application for Non-standard Fruitland Coal  
Location and Downhole Commingling  
Coleman Oil and Gas Company  
Federal 11 #3R  
1425' FSL and 1140' FEL, Section 11, T28N, R13W  
San Juan County, New Mexico  
Basin Fruitland Coal and  
West Kutz Pictured Cliffs

Dear Mr. Sanchez,

As an interest owner in the Federal 11 #3R, you are being notified of the application to the NMOCD to administratively approve the request for a non-standard location in the Fruitland Coal formation. The operator is also requesting administrative approval to commingle the production from the West Kutz Pictured Cliffs pool with the Basin Fruitland Coal pool.

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Sincerely,

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Paul C. Thompson, P. E.  
Agent  
Coleman Oil and Gas