

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

☒ NSL ☒ NSP ☐ DD ☐ SD

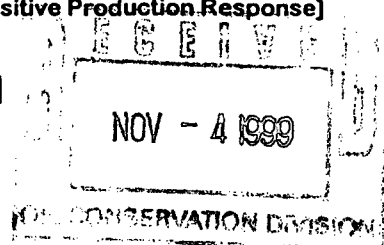
Check One Only for [B] or [C]

[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 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

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 87505-6429Form C-107-A
New 3-12-96

APPROVAL PROCESS:

☒ Administrative ☐ Hearing

EXISTING WELLBORE

☒ YES ☐ NO

APPLICATION FOR DOWNHOLE COMMINGLING

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

004838

24004

30-045-29952

Spacing Unit Lease Types: (check 1 or more)

OGRID NO. _____ Property Code _____ API NO. _____ 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	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 ☐ No11. 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 ☐ No13. 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). 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 11/2/99TYPE OR PRINT NAME Paul C. Thompson TELEPHONE NO. (505) 327-4892

**WALSH**

ENGINEERING & PRODUCTION CORP.

Petroleum Engineering Consulting
Lease Management
Contract Pumping7415 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 11 #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.

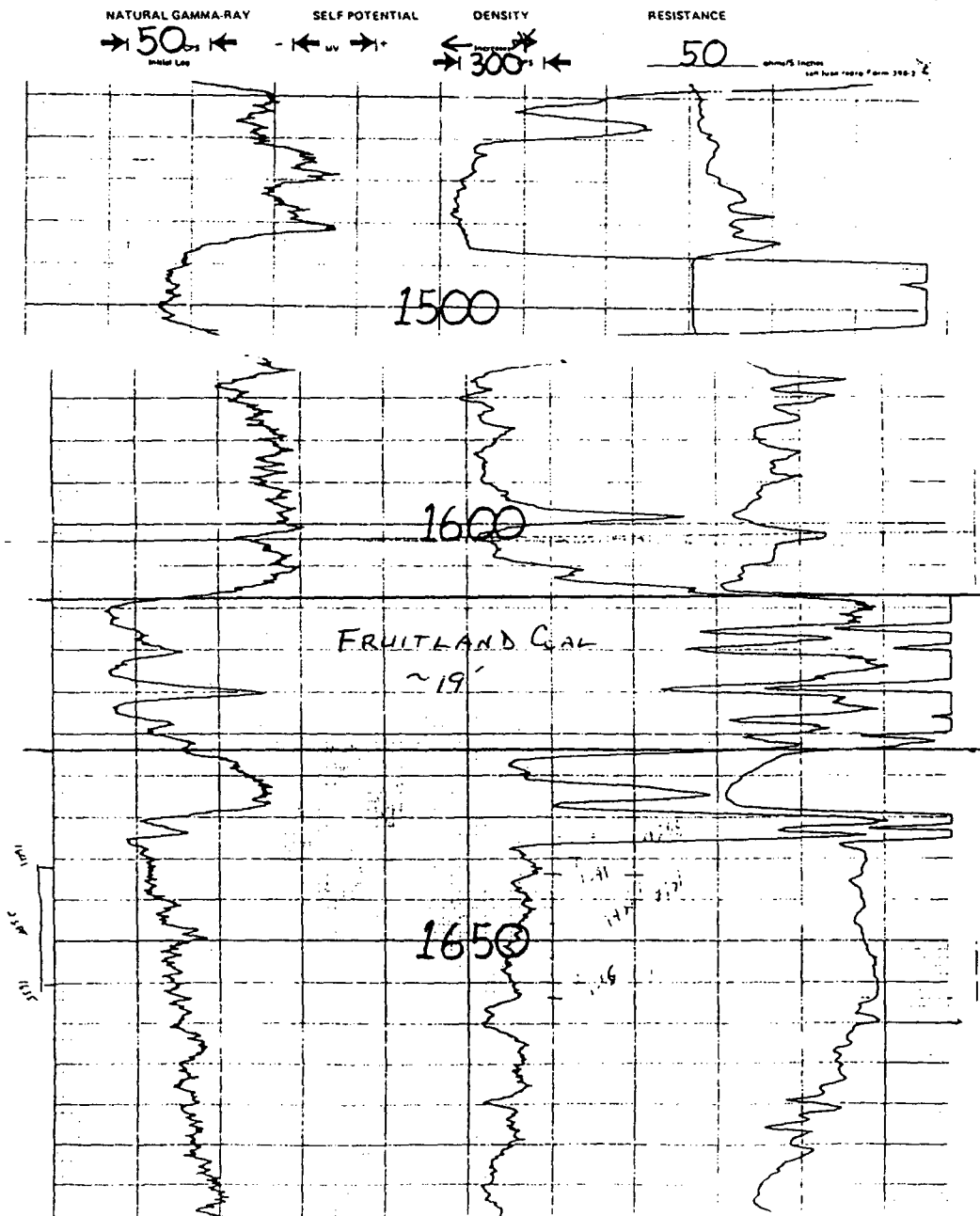
Thank you for your consideration and approval of this application. If you have any questions please do not hesitate to call upon me.

Sincerely,

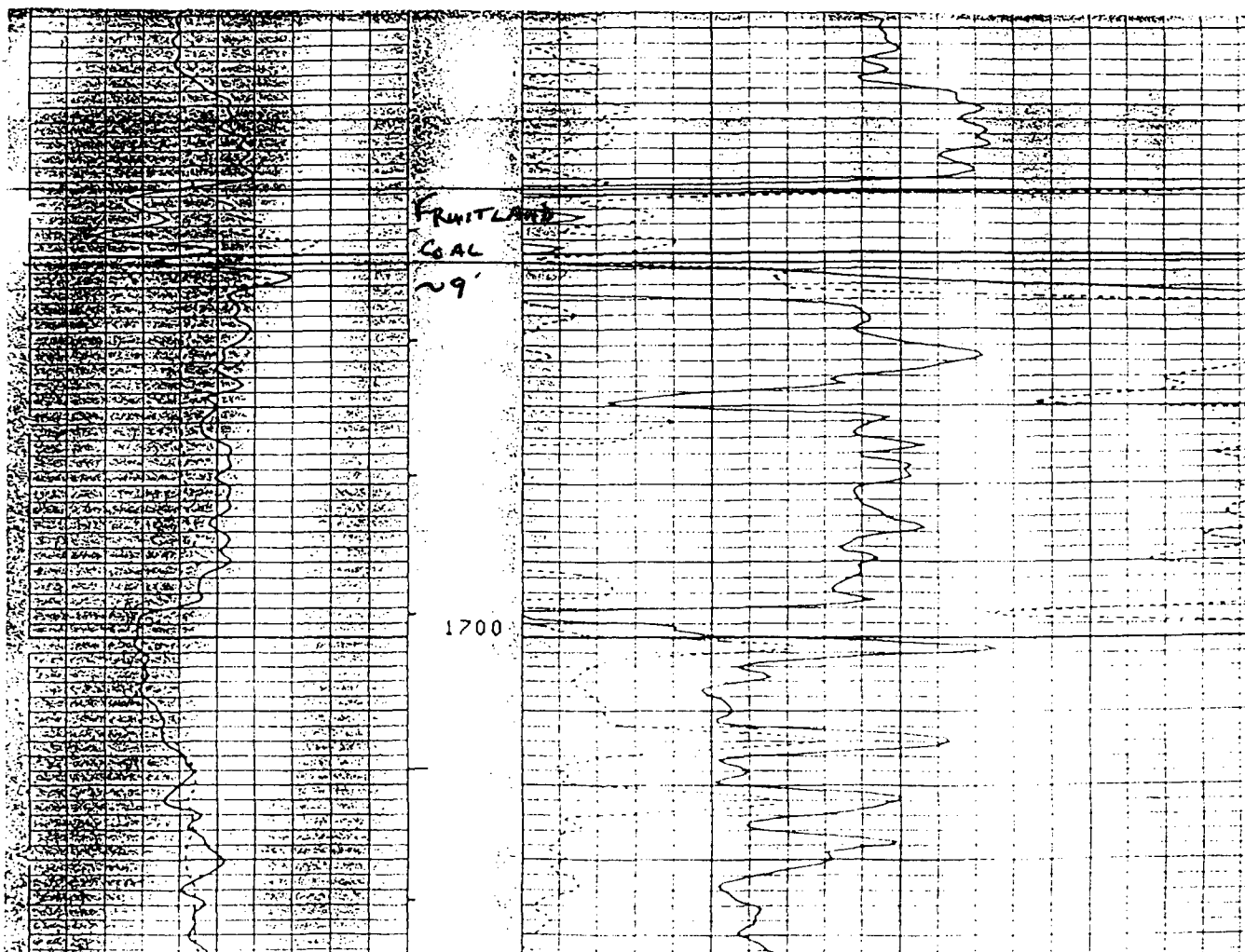

Paul C. Thompson, P.E.
Agent

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

W. J. Surveys		Date 4-27-79		T.D. Drilled 1826		Drill Time	
Company Ralph Abbott		By 43/8 - 2		To T.D.		Scale	
Bore Hole 3-11		Mud		To		Time Out	
Project West Kute Picture Cliffs Gas Project		Density		To		Time Out	
County San Juan		State N. Mex.		To		Time Out	
Section 11		Twp 28N		Range 13W		Unit No 115	
INITIAL LOG		NATURAL GAMMA RAY		Mr. Abbott		Location Farmington	
T.D. LOGGED 1809		Scale		Scale		Scale	
NATURAL GAMMA 50		T.C.		T.C.		T.C.	
TIME CORRECTED 2		LOGGING SPEED 20		LOGGING SPEED 20		LOGGING SPEED 20	
Current Calibration - Probe Data		To		To		To	
Source No.		Source Value		Source Value		Source Value	
Probe No. 19		Probe Size 1 1/16		Probe No. 19		Probe Size 1 1/16	
Diameter Scin.		Diameter Scin.		Diameter Scin.		Diameter Scin.	
Dial Time		Dial Time		Dial Time		Dial Time	
Water Factor		Water Factor		Water Factor		Water Factor	
Resistance		Resistance		Resistance		Resistance	
S.P.		S.P.		S.P.		S.P.	



SIMULTANEOUS COMPENSATED NEUTRON- FORMATION DENSITY

[illegible]

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

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

District III
1000 Rio Brazos 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

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

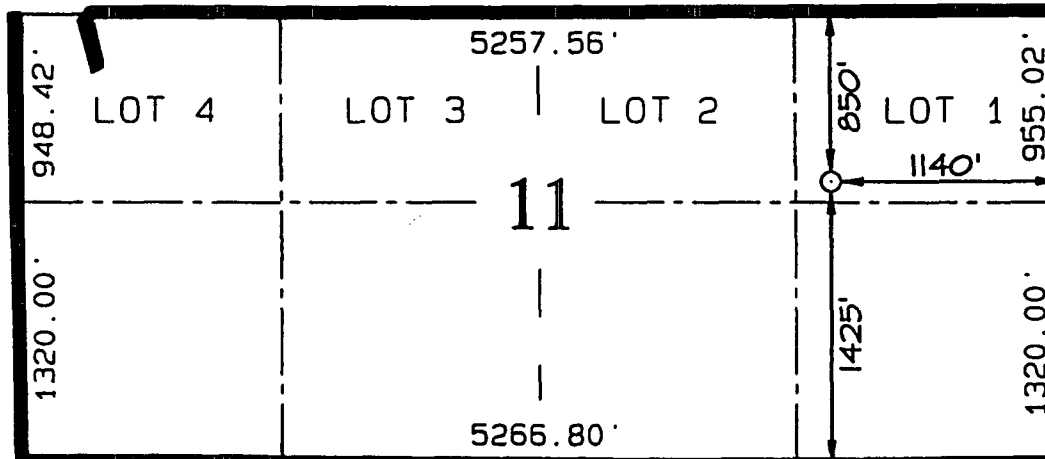
¹⁰ Surface Location

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

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 275.36		¹³ Joint or Infill Y		¹⁴ Consolidation Code		¹⁵ 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



¹⁷ OPERATOR CERTIFICATION

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

Signature

Paul C. Thompson

Printed Name

Agent

Title

7-15-99

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.

JULY 2, 1999

Date of Survey

Signature and Seal of Professional Surveyor

NEALE C. EDWARDS
NEW MEXICO
6857
REGISTERED PROFESSIONAL SURVEYOR
Certificate Number 6857

District II
PO, Drawer 00, Artesia, NM 88211-07OIL CONSERVATION DIVISION
PO Box 2088
Santa Fe, NM 87504-2088District III
1000 Rio Brazos Rd., Aztec, NM 87410District 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
GRID No. 004838	Operator Name COLEMAN OIL & GAS, INC.			Elevation 5900'

10 Surface Location

UL or lot no.	Section	Township	Range	Lot 10	Feet from the	North/South line	Feet from the	East/West line	County
I	11	28N	13W		1425	SOUTH	1140	EAST	SAN JUAN

11 Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot 10	Feet from the	North/South line	Feet from the	East/West line	County
Dedicated Acres 137.78		Joint or Infill Y		Consolidation Code		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

17 OPERATOR CERTIFICATION

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

Signature
Paul C. Thompson

Printed Name

Agent

Title

7-15-99

Date

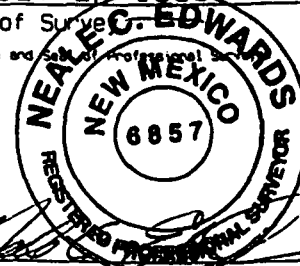
18 SURVEYOR CERTIFICATION

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.

JULY 2, 1999

Date of Survey

Signature and Seal of Professional Surveyor



Certificate Number

6857

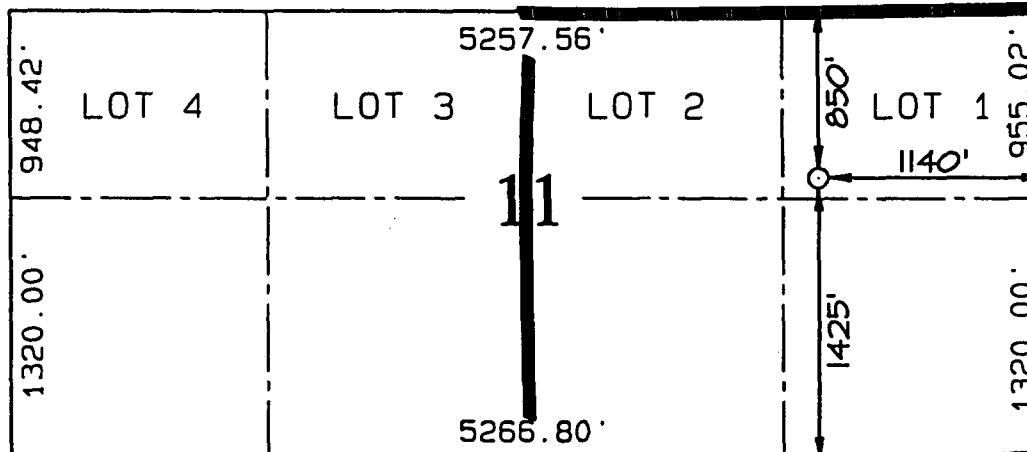
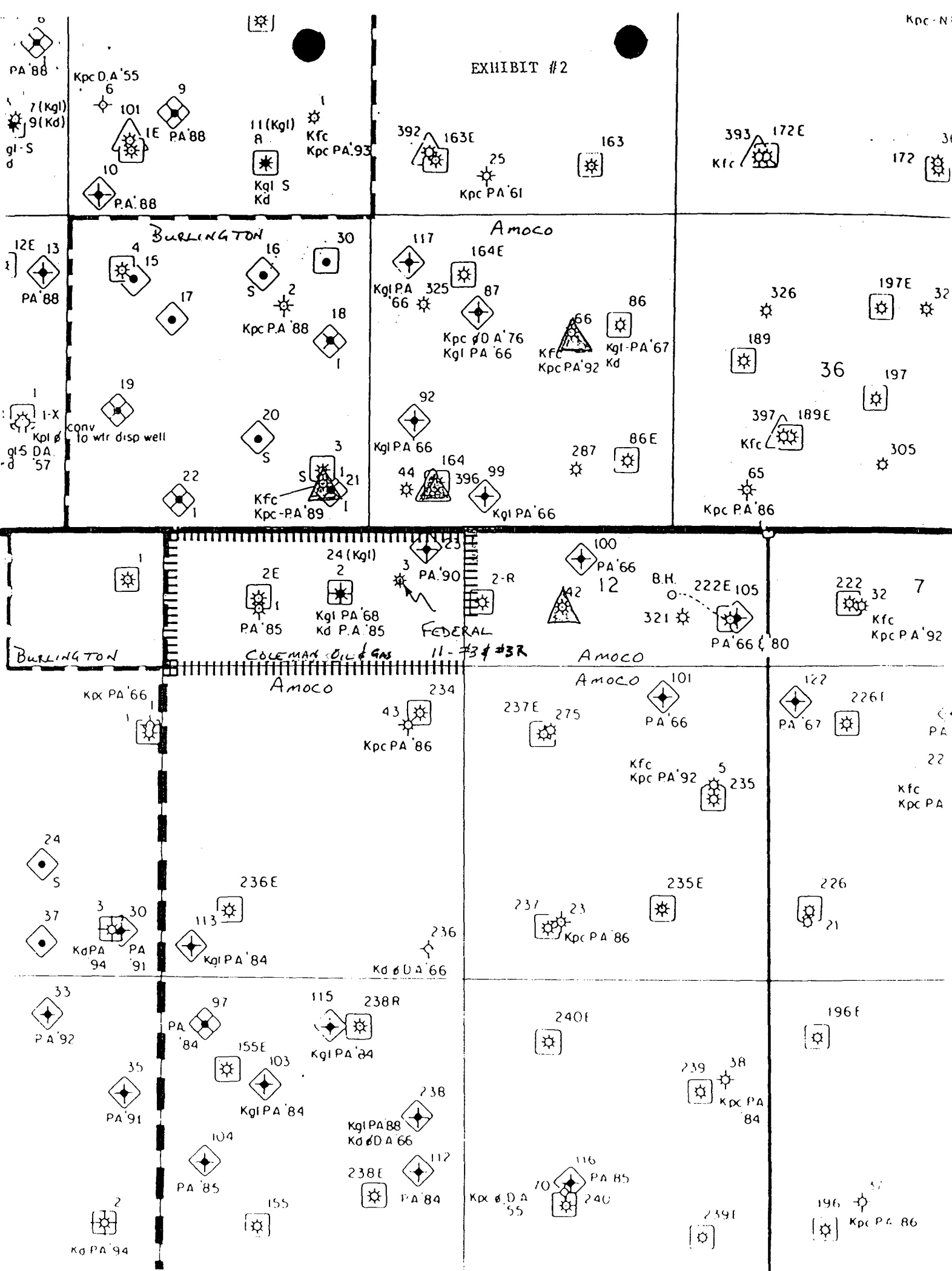


EXHIBIT #2



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.**

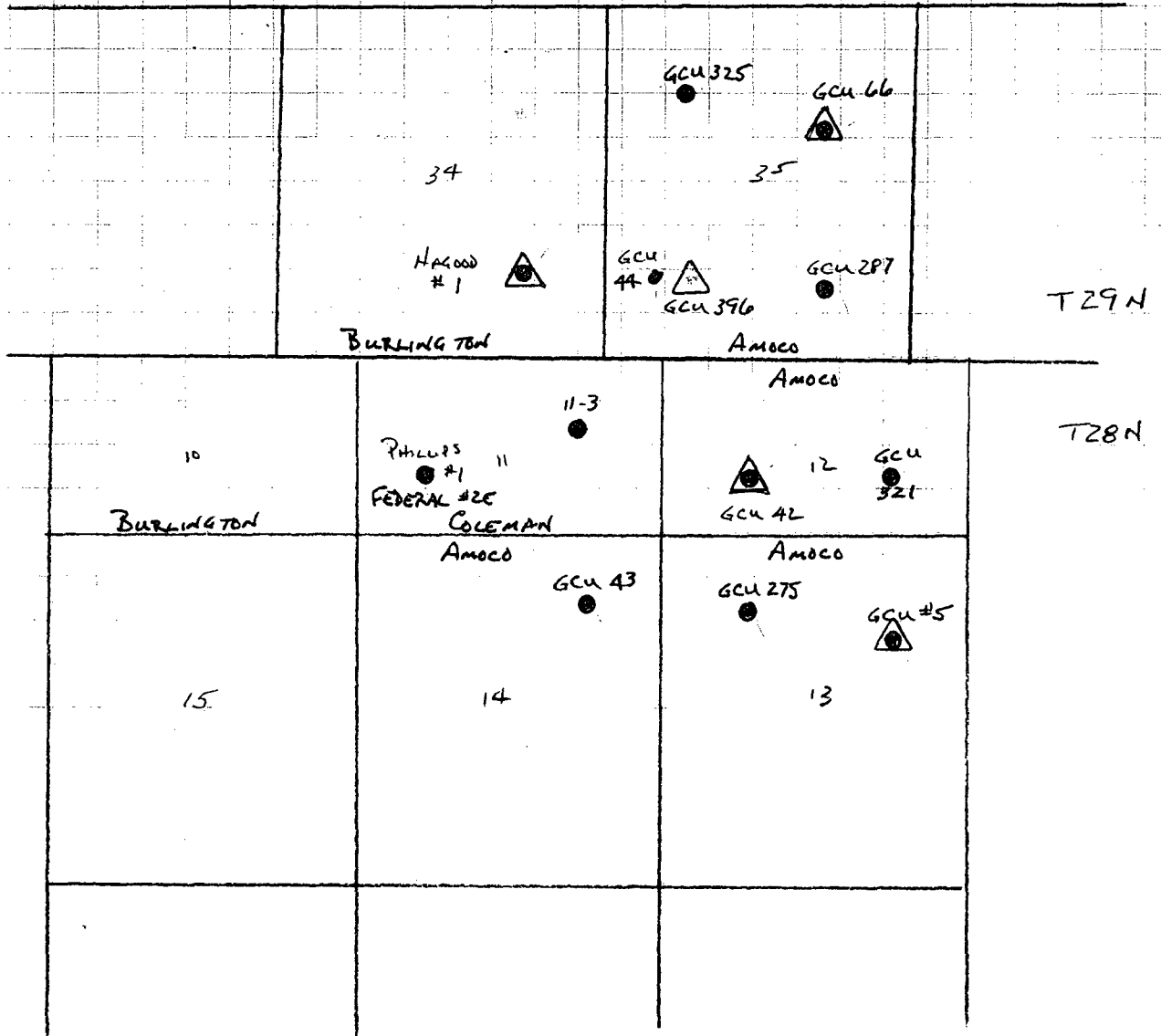
SUBJECT _____

Northwest Pipeline Corporation

PAGE NO _____

BY _____ DATE _____

R 13 W



THOMPSON ENGINEERING
FEDERAL 11 #3 OFFSETS

- PICTURED CLIFFS
- △ FRUITLAND COAL

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

PICTURED CLIFFS WELLS

WELL NAME	CUMULATIVE PRODUCTION 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
AVERAGE	<hr/> 774,786
% of TOTAL PC PLUS FTC	53.3

FRUITLAND COAL WELLS

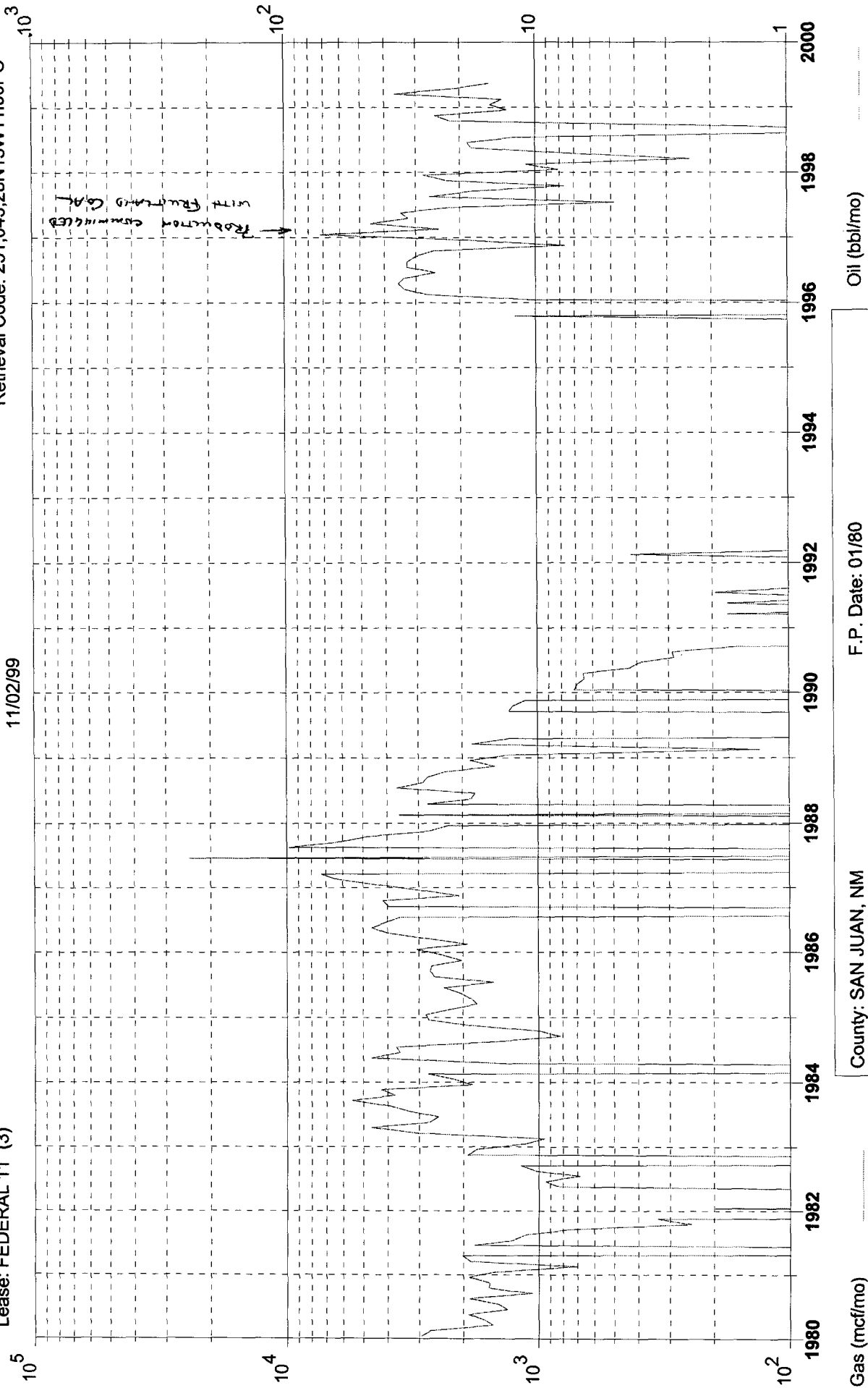
WELL NAME	CUMULATIVE PRODUCTION MCF
Gallegos Canyon Unit #396	557,542
Gallegos Canyon Unit #5	1,098,831
Gallegos Canyon Unit #42	444,349
Gallegos Canyon Unit #66	613,309
AVERAGE	<hr/> 678,508
% of TOTAL PC PLUS FTC	46.7

Dwights

Lease: FEDERAL 11 (3)

11/02/99

Retrieval Code: 251,045,28N13W1100PC



Gas (mcf/mo)

Oil (bbl/mo)

County: SAN JUAN, NM

F.P. Date: 01/80

Field: KUTZ WEST (PICTURED CLIFFS) PC

Oil Cum: 0 bbl

Reservoir: PICTURED CLIFFS

Gas Cum: 366.2 mmcf

Operator: COLEMAN OIL & GAS INC

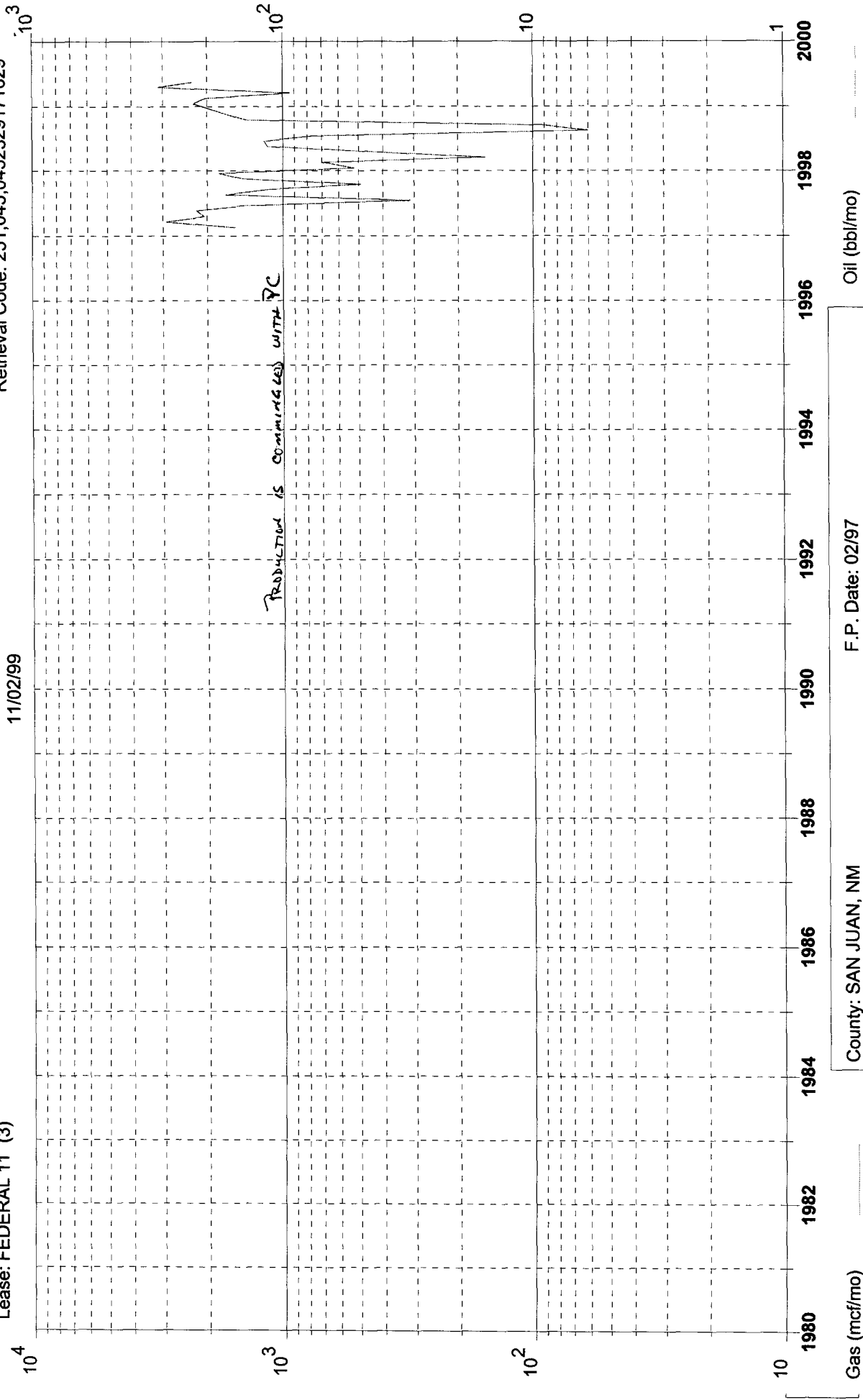
Location: 111 28N 13W

Dwights

Lease: FEDERAL 11 (3)

11/02/99

Retrieval Code: 251,045,0452329171629



Gas (mcf/mo)

Oil (bbl/mo)

F.P. Date: 02/97

County: SAN JUAN, NM

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

FARMINGTON LAB

DEPTH:
DATE SAMPLED:
DATE RECEIVED: 10/17/96
COUNTY: STATE: NM
FORMATION: PICTURED CLIFFS

SAMPLE FOR ANALYSIS

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

Na&K 100

Ca 10

Mg 10

Cl 100

HCO₃ 10

SO₄ 10

ANALYST

P. SHEPHERD

BJ SERVICES COMPANY**WATER ANALYSIS #FW01W076****FARMINGTON LAB****GENERAL INFORMATION**

OPERATOR: THOMPSON ENG.
 WELL: FEDERAL 11 #3
 FIELD:
 SUBMITTED BY:
 WORKED BY :MIKE KHACHATRIAN
 PHONE NUMBER:

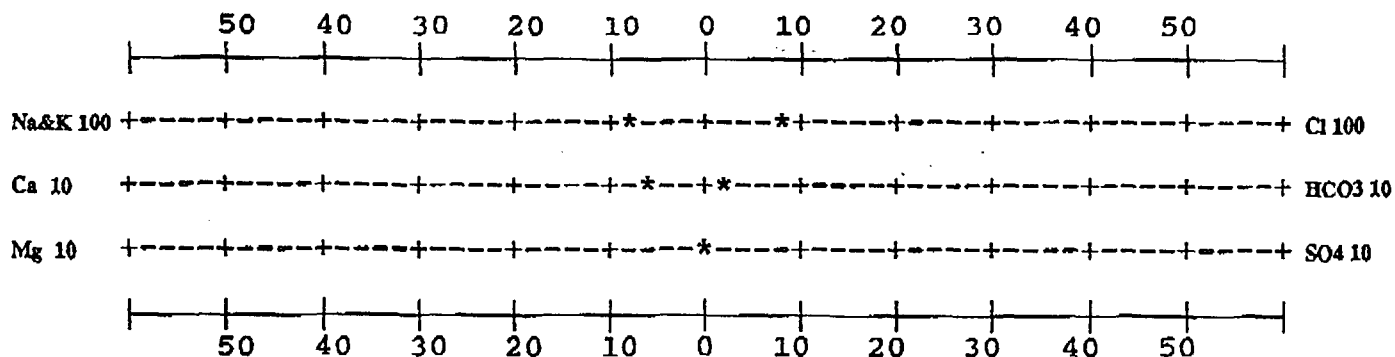
DEPTH:
 DATE SAMPLED: 12/02/96
 DATE RECEIVED: 12/02/96
 COUNTY: STATE: ||
 FORMATION: FRUITLAND COAL

SAMPLE DESCRIPTION

SAMPLE FOR ANALYSIS

PHYSICAL AND CHEMICAL DETERMINATIONS

SPECIFIC GRAVITY:	1.040	@ 64°F	PH:	6.80
RESISTIVITY (MEASURED):	0.100	ohms @ 64°F		
IRON (FE++) :	3	ppm	SULFATE:	5
CALCIUM:	1,174	ppm	TOTAL HARDNESS	3,194
MAGNESIUM:	63	ppm	BICARBONATE:	1,642
CHLORIDE:	30,169	ppm	SODIUM CHLORIDE(Calc)	49,628
SODIUM+POTASS:	18,714	ppm	TOT. DISSOLVED SOLIDS:	53,725
H2S: NO TRACE			POTASSIUM PPM:	75

REMARKS**STIFF TYPE PLOT (IN MEQ/L)**

ANALYST

MIKE KHACHATRIAN

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

EL PASO NATURAL GAS COMPANY
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 *Pictured CLIFF.*

Oper : 0523 - THOMPSON ENGINEERING & PROD

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

Effective 12/01/95	CO2 0.000	H2S 0.000	N2 0.390	C1 93.480	Mole % / GPM					IC4 0.080	NC4 0.090	ICS 0.030	NC5 0.020	C6P 0.050	BTU 1055	Spec Grav 0.595	GPM 1.494
					C2 4.800	C3 0.420	C4 0.080	IC5 0.028									
	0.640	0.000	0.000	0.000	1.284	0.116	0.026	0.011	0.007	0.022							

RUTH W/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

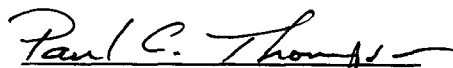
Mr. James Strickler
Burlington Resources
3535 E. 30th Street
Farmington, NM 87401

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

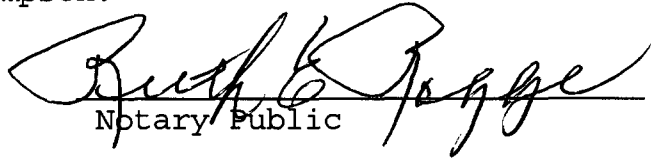
U.S. Government
Bureau of Land Management
Mr. Ruben Sanchez
1235 La Plata Highway
Farmington, NM 87401

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

My Commission Expires:
July 31, 2001



**Federal 11 #3R
Commingling Application**

Working, Overriding, and Royalty Interests

Pictured Cliffs

Owner	Working Interest	Net Revenue Interest
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/> 1.00000	<hr/> 1.00000

Fruitland Coal

Owner	Working Interest	Net Revenue Interest
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/> 1.00000	<hr/> 1.00000

**WALSH**

ENGINEERING & PRODUCTION CORP.

Petroleum Engineering Consulting
Lease Management
Contract Pumping7415 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, reading "Paul C. Thompson", located below the word "Sincerely,".

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

**WALSH****ENGINEERING & PRODUCTION CORP.**Petroleum Engineering Consulting
Lease Management
Contract Pumping7415 East Main
Farmington, New Mexico 87402
(505) 327-4892 • Fax: (505) 327-9834

CERTIFIED - RETURN RECEIPT

November 2, 1999

Mr. James Strickler
Burlington Resources
3535 E. 30th 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.

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".

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

**WALSH**

ENGINEERING & PRODUCTION CORP.

Petroleum Engineering Consulting
Lease Management
Contract Pumping7415 East Main
Farmington, New Mexico 87402
(505) 327-4892 • Fax: (505) 327-9834

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.

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" followed by a horizontal flourish.

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

**WALSH**

ENGINEERING & PRODUCTION CORP.

Petroleum Engineering Consulting
Lease Management
Contract Pumping7415 East Main
Farmington, New Mexico 87402
(505) 327-4892 • Fax: (505) 327-9834

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.

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".

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

**WALSH**

ENGINEERING & PRODUCTION CORP.

Petroleum Engineering Consulting
Lease Management
Contract Pumping7415 East Main
Farmington, New Mexico 87402
(505) 327-4892 • Fax: (505) 327-9834

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.

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, reading "Paul C. Thompson", followed by a horizontal flourish line.

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