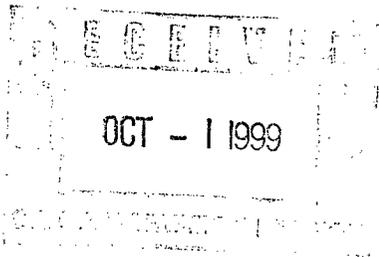


DHC 10/21/99
2496



September 28, 1999

Ms. Lori Wrotenbery
New Mexico Oil Conservation
2040 South Pacheco Street
Santa Fe, New Mexico 87505

RE: Administrative Approval to Downhole Commingle
Federal Gas Com H # 2
2,045' FNL & 1,685' FEL Sec. 31, T 30 N, R 12 W
San Juan County, New Mexico

Dear Ms. Wrotenbery

Cross Timbers Operating Company (CTOC) request administrative approval to downhole commingle the Basin Fruitland Coal and Flucher Kutz Pictured Cliffs pools in the subject well. The Federal Gas Com H #2 was permitted and drilled as a Basin Fruitland Coal well. The well has not been completed. The Pictured Cliffs formation in this area is marginally productive. Downhole commingling of the Fruitland Coal and the Pictured Cliffs will allow economic production of the marginal Pictured Cliffs formation.

To comply with New Mexico Oil Conservation Rules, Cross Timbers Operating Co. is submitting the following data for your approval of the proposed commingling.

1. C107A - Application for Downhole Commingling.
2. C102 - Location plats showing each spacing unit and dedicated acreage.
3. Typical production curves for the Fruitland Coal and the Pictured Cliffs.
4. Allocation Method.
5. Well location plat.

In accordance with New Mexico Oil Conservation Division Rule 303C, all interest holders are being notified of this application by mail.

If additional information is needed, please contact me.

Sincerely,

Loren W Fothergill
Loren W Fothergill
Production Engineer

CC: NMOCD - Aztec

DISTRICT I

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

DISTRICT II

811 S. 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 875054-6429

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

APPROVAL PROCESS:

Administrative Hearing

EXISTING WELLBORE

YES NO

APPLICATION FOR DOWNHOLE COMMINGLING

Operator Cross Timbers Operating Company Address 2700 Farmington Ave., Bldg. K. Ste 1 Farmington, NM 87401

Lease Federal Gas Com H Well No. #2 Unit Ltr. - Sec - Twp - Rge G 31 30 N 12W County San Juan

OGRID NO. 167067 Property Code _____ API NO. 30-045-29705 Spacing Unit Lease Types: (check 1 or more)
Federal State (and/or) Fee

The following facts are submitted in support of downhole commingling:	Upper Zone	Intermediate Zone	Lower Zone
1. Pool Name and Pool Code	Basin Fruitland Coal 71629		Fulcher Kutz PC 77200
2. Top and Bottom of Pay Section (Perforations)	1,260' - 1,504'		1520 1530
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: Gas & Oil - Flowing: All Gas Zones: Estimated Current Measured Current Estimated Or Measured Original	a. (Current) 585 psig Estimated	a.	a. 600 psig Estimated
	b. (Original) 585 psig Estimated	b.	b. 600 psig Estimated
6. Oil Gravity (^o API) or Gas BTU Content)	1053 BTU Estimated		1200 BTU Esitmated
7. Producing or Shut-In?	Not Completed Yet		Not Completed Yet
Production Marginal? (yes or no)	Y		Y
* 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: N/A Rates:	Date: Rates:	Date: NA Rates:
* If Producing, give date and oil/gas/water rates of recent test (within 60 days)	Date: Not Producing Rates: To be determined	Date: Rates:	Date: Not producing Rates: TO be determined
8. Fixed Percentage Allocation Formula -% for each zone	Oil: % Gas: 9%	Oil: % Gas: %	Oil: % Gas: % Diff. %

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 in 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) _____

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 Loren W Fothergill TITLE Operation Engineer DATE 9/28/99

TYPE OR PRINT NAME Loren W Fothergill TELEPHONE NO(505) 324 1090

DATE IN	SUSPENSE	ENGINEER	LOGGED	TYPE
---------	----------	----------	--------	------

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
NSL NSP DD SD

Check One Only for [B] and [C]

- [B] Commingling - Storage - Measurement
DHC CTB PLC PC OLS OLM

- [C] Injection - Disposal - Pressure Increase - Enhanced Oil Recovery
WFX PMX SWD IPI EOR PPR

[2] **NOTIFICATION REQUIRED TO:** - Check Those Which Apply, or Does Not Apply

- [A] Working, Royalty or Overriding Royalty Interest Owners
- [B] Offset Operators, Leaseholders or Surface Owner
- [C] Application is One Which Requires Published Legal Notice
- [D] Notification and/or Concurrent Approval by BLM or SLO
U.S. Bureau of Land Management - Commissioner of Public Lands, State Land Office
- [E] For all of the above, Proof of Notification or Publication is Attached, and/or,
- [F] Waivers are Attached

[3] **INFORMATION / DATA SUBMITTED IS COMPLETE** - Statement of Understanding

I hereby certify that I, or personnel under my supervision, have read and complied with all applicable Rules and Regulations of the Oil Conservation Division. Further, I assert that the attached application for administrative approval is accurate and complete to the best of my knowledge and where applicable, verify that all interest (WI, RI, ORRI) is common. I understand that any omission of data, information or notification is cause to have the application package returned with no action taken.

Note: Statement must be completed by an individual with supervisory capacity.

Loren W Fothergill Loren W Fothergill Operations Engineer 9-28-99
Print or Type Name Signature Title Date

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

State of New Mexico
Energy, Minerals & Natural Resources Department

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

¹ API Number	² Pool Code 71629 / 77200	³ Pool Name BASIN FRUITLAND COAL/FULCHER KUTZ PICTURED CLIFFS
⁴ Property Code	⁵ Property Name FEDERAL GAS COM H	⁶ Well Number 2
⁷ GRID No. 167067	⁸ Operator Name CROSS TIMBERS OPERATING COMPANY	⁹ Elevation 5464'

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
G	31	30N	12W		2045	NORTH	1685	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	¹³ Joint or Infill	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

<p>¹⁶</p>	<p>¹⁷ OPERATOR CERTIFICATION</p> <p>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief</p>
	<p>Signature Loren W. Fothergill</p> <p>Printed Name Production Engineer</p> <p>Title</p> <p>Date</p>
	<p>¹⁸ SURVEYOR CERTIFICATION</p> <p>I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.</p> <p>SEPTEMBER 14, 1998</p> <p>Date of Survey</p> <p>Signature and Seal of Registered Professional Surveyor</p> <p>Certificate No. 6857</p>

Cross Timbers Oil Company

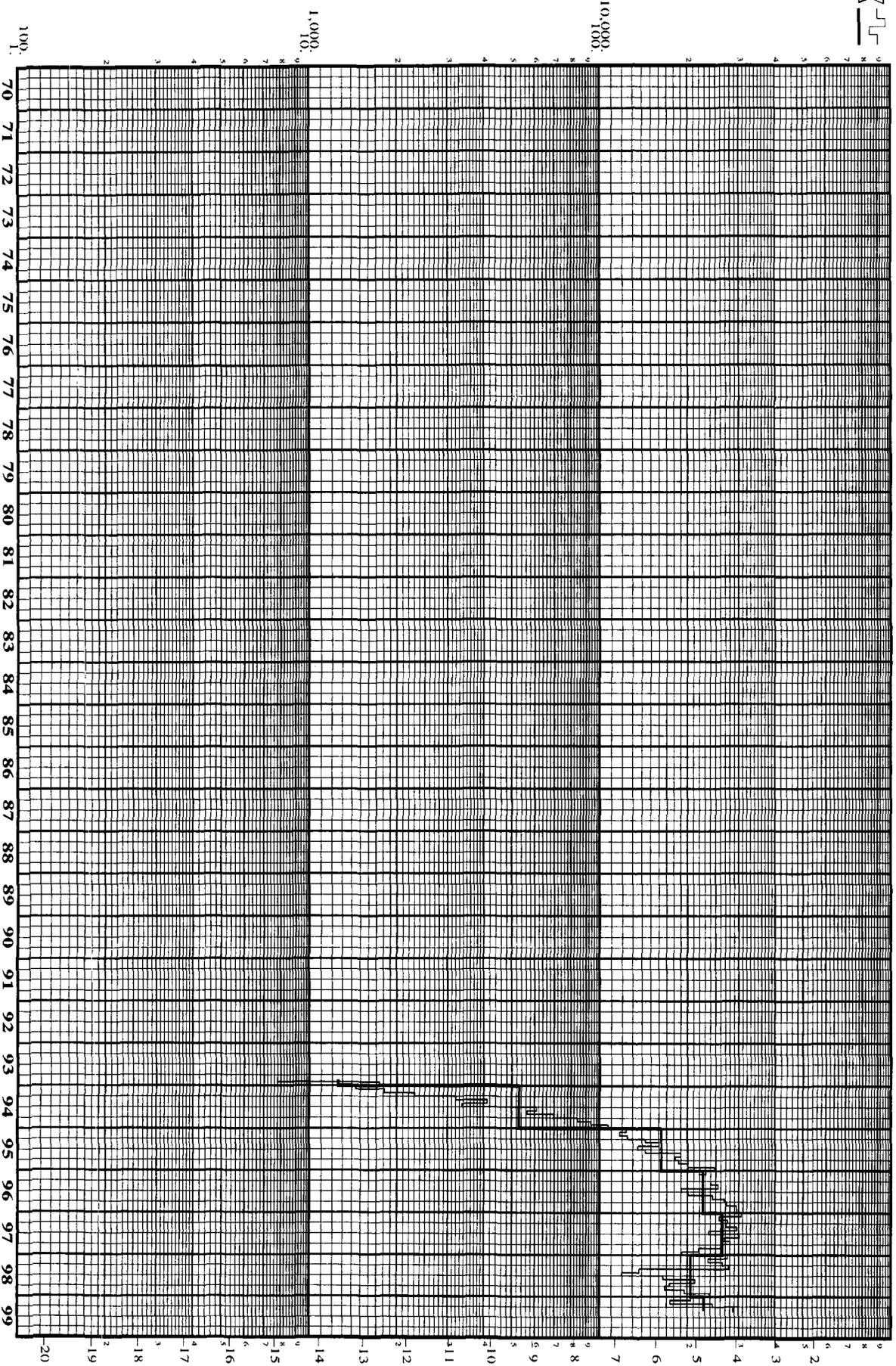
ROPSCO FEE FC 6
 1
 TEXAKOMA OIL & GAS CORPORATION
 BASIN (FRUITLAND COAL)
 SAN JUAN, NEW MEXICO
 6 29 N12 W
 A
 30045288930000

CTOC -

Oil (bbl/yr)	Gas (mcf/yr)	Oil (bbl)	Gas (mcf)	Res. Cat. Life	
0	0	0	1,186,105	As-of-Date	
0.0%	0.0%	0	0	Setup file	
		0	1,186,105	Q Prod	
		0	0	Q Owner	
		0	0	Q Other	
Oil Price (\$/bbl)	Gas Price (\$/mcf)	OPC (\$/bbl)	Flat Life (years)	Last Production (dd/yy)	
0.00	0.00	0.00	0.0	04/99	
Oil Price (\$/bbl)	Gas Price (\$/mcf)	OPC (\$/bbl)	Net Cash Flow	P.W. @ 0.0%	
0.00	0.00	0.00	\$ 0	\$ 0	
WT - NRI - 0.00000%	Oil Price (\$/bbl) 0.00	Gas Price (\$/mcf) 0.00	OPC (\$/bbl) 0.00	Flat Life (years) 0.0	Last Production (dd/yy) 04/99
0.00000%	0.00	0.00	0.00	0.0	04/99

Run Date:

GAS (mcf/yr)
 OIL (bbl/yr)



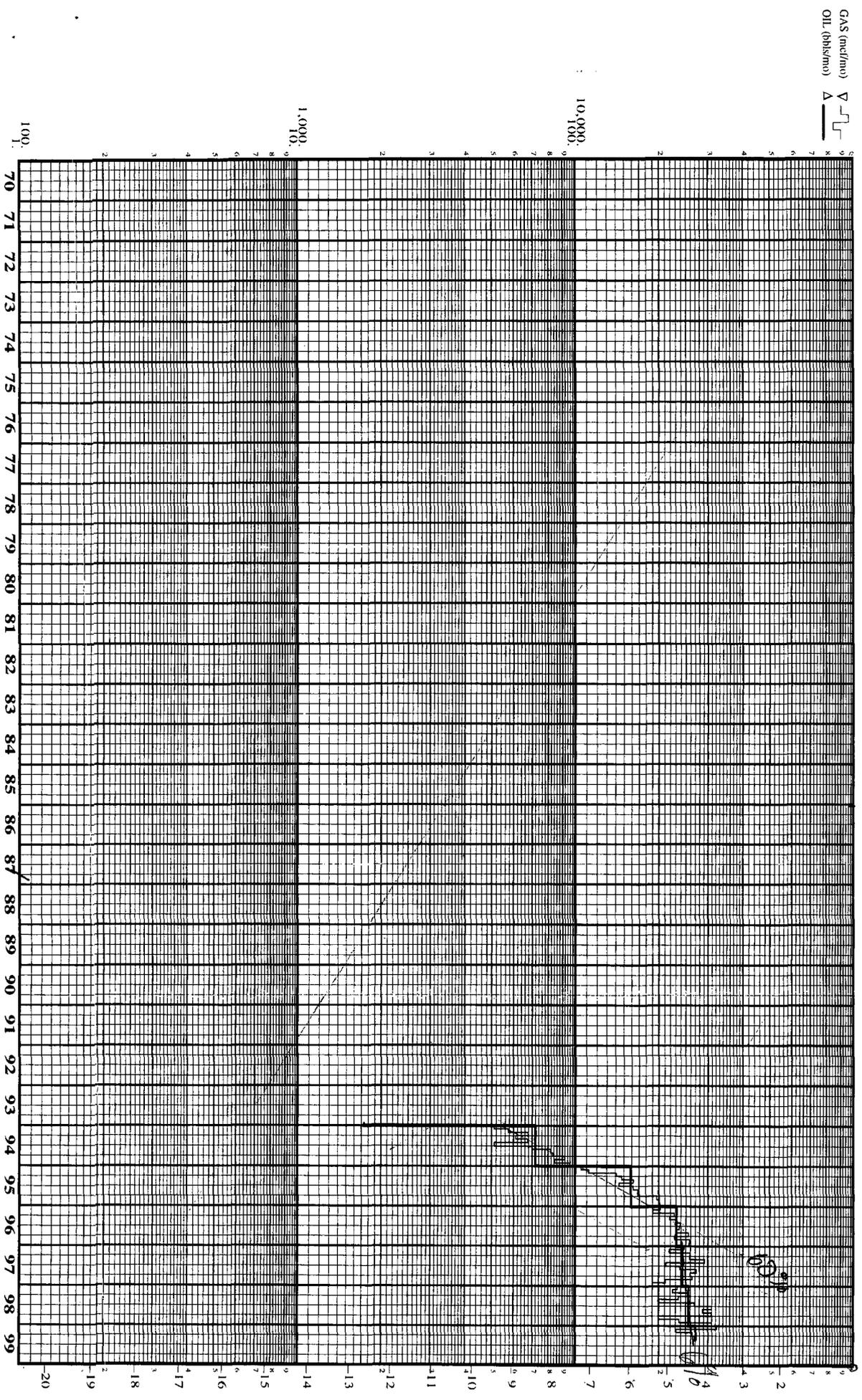
Cross Timbers Oil Company

FEDERAL FC 5
 1
 TEXAKOMA OIL & GAS CORPORATION
 BASIN (FRUITLAND COAL)
 SAN JUAN, NEW MEXICO
 5 29 N12 W
 A

30045289070000

Oil (bbls/mo)	Gas (mcf/mo)	Oil (bbls)	Gas (mcf)	Res. Cat.
0	0	0	1,263,499	0.0000
0.00%	0.00%	0	0	Setup File
0.00%	0.00%	0	1,263,499	Q. Prod
		0	0	Q. Owner
				Q. Other
Gross Cum @***/**		Gross Remaining		
Gross Ultimate		Net Remaining		
Oil Price (\$/bbl)	Gas Price (\$/mcf)	OPC (\$/bbl)	Flat Life (years)	Last Production
0.00	0.00	0.00	0.0	04/99
Net Cash Flow		P.W. @ 0.0%		
\$ 0		\$ 0		

CTOC -



ALLOCATION METHOD
FEDERAL GAS COM H #2

Cross Timbers Operating Company proposes to allocate the production for the Federal Gas Com H #2 by a difference method. CTOC proposes to test the Pictured Cliffs formation. The initial production rate established would be declined at a rate of 9%. The 9% decline was determined from the surrounding Pictured Cliff production (see attached decline curves).

Once the Fruitland Coal formation is completed in this well and its production is commingled downhole with the Pictured Cliffs production. The expected production from the Pictured Cliff formation will be subtracted from the total production from the well and the difference allocated to the Fruitland Coal formation. If the expected Pictured Cliff production exceeds the total production from the well, all production for that month will be assigned to the Pictured Cliffs formation.

One hundred percent of the water production will be allocated to the Fruitland Coal formation.

PAN AMER FBO C 28
CTOC
10 1389
7 135
0211-1197
DKOT

FOOTHILLS 2
TEXAKOMA O&G
0 27
0 0
0185-0286
PCCF

PAN AMER FED C 1 19
CTOC
9 1447
0 42
0263-1197
DKOT

TEXAKOMA FOOTHILLS D 1
TEXAKOMA O&G
0 218
0 517
0184-1087
PRLD

FOOTHILLS 1
TEXAKOMA O&G
00 88127
00 8483
0185-0180/185-1087
PCCF/PRLD

FOOTHILLS C 1
TEXAKOMA O&G
0 118
0 67
0182-1097
PRLD

DANBY 2
GAS 2013
TRADERS D
11/20/1953

FOOTHILLS 3
TEXAKOMA O&G
0 0
0 0
0185-0286
PRLD

PAN AMER FED C 2
CTOC
8 923
0 47
1183-1187
DKOT

MCKENZIE 18
DUGAN PROD
8 317
1 39
0283-1187
DKOT

SAN JUAN FED 1
TEXAKOMA O&G
0 74
0 47
0422-1047
PRLD

MCKENZIE 1
DUGAN PROD
1 342
0 0
0482-1187
DKOT

SAN JUAN FED 2
TEXAKOMA O&G
0 107
0 92
0267-1025
PRLD

FOOTHILLS A 1
TEXAKOMA O&G
0 0
0 21
0184-1087
PRLD

FOOTHILLS B 1
TEXAKOMA O&G
0 128
0 14
0185-1087
PRLD

RICE 1
D&A - 2015
SOUTHERN UNION PROD
10/14/1945

FOOTHILLS C 1
TEXAKOMA O&G
0 100
0 100
0267-1025
PRLD

DUGAN PROD
12 1412
1 88
0267-1187
DKOT

AMOCO 1
TEXAKOMA O&G
0 88
0 18
0286-1087
PRLD

DANBY 1
CTOC
13 31
0 0
0263-1197
DKOT

DANBY 2
PAN AMER
0 71
0 0
0263-1197
DKOT

STEPHENS 1
MOBIL
08 20680
00 00
1080-1080/080-1088
MVRDCKOT

MOBIL 1
D&A 1945
BURR JOEL B JR
12/27/1991

MCCOY 2
CTOC
13 31
0 0
0263-1197
DKOT

MCCOY 1
MADDOX RL
0 0
1183-1187
PCCF

MCCOY CC
CTOC
17 28
1 28
0263-1197
DKOT

FEDERAL COM D 1
CTOC
11 1756
0 31
0264-1197
DKOT

STATE 1
D&A 1778
EL PASO NATURAL GAS
1/8/1958

LYMAN C V
10/28/1949

LLYWHITE GAS UNIT
1-30
GAS 8594
PAN AMERICAN PET
3/4/1954

DANBY 1
GAS 1892
LYMAN C V
10/28/1949

TEXAKOMA-FHIS 1
TEXAKOMA O&G
0 102
0 124
0264-1197
PRLD

COUNTRY CLUB 1
TEXAKOMA O&G
0 10
0 45
0185-1087
PRLD

COPP 1
S M N S
0 428
0 0
1046-1046
PCCF

FEDERAL COM D 1 E
CTOC
0 872
0 77
0261-1187
DKOT

BROWN 2
S M N S
0 384
0 0
0179-0179
PCCF

FEDERAL COM S 1 E
CTOC
8 508
0 81
0261-1187
DKOT

BROWN 1
S M N S
0 228
0 0
0247-0247
PCCF

COUNTRY CLUB 2
D&A - 1825
BURR JOEL B JR
10/3/1987

FEDERAL PIONEER 1
BAYLESS RL
0 1 81
0181-0787
DKOT

HOLDER 1
SOUTHLAND ROY
0 832
0 0
1146-0184
PCCF

WAGGONER 1
BROWN CARL S
0 314
0 0
0246-0246
PCCF

MCCARTY 1
SOUTHLAND ROY
0 322
0 0
1046-0267
PCCF

WYPER 1
OIL 580
B M N S COMPANY
8/27/1948

WYPER 2
S M N S
0 544
0 0
0147-1074
PCCF

ELLSWORTH 1
BAYLESS RL
18 2228
0 86
0262-0787
DKOT

WAGGONER 2
S M N S
0 88
0 0
0247-0247
PCCF

MCCOY COM D 1 E
CTOC
3 823
1 80
0263-1187
DKOT

MCCOY 1
D&A - 1852
M S B W COMPANY
1/25/1948

MCCOY CC
CTOC
17 28
1 28
0263-1197
DKOT

JOHNTEC
BAYLESS
018
00
1181-1181/11
MVRDCKOT

MONTGOMERY 1
ROPERN DEV
0 340
0 0
1147-1147
PCCF

MCCARTY 1
GLBREATH N L
0 328
0 0
0246-0246
PCCF

GLBREATH 1
HALLWOOD PET
0 126
0 222
0246-1087
PRLD

GLBREATH 1
HALLWOOD PET
0 126
0 222
0246-1087
PRLD

2/18/1994

PALMER 1
KERR-MCGEE
0 871
0 0
0247-0246
PCCF

FEDERAL COM H 1
CTOC
23 1518
1 28
0263-1187
DKOT

FEDERAL COM H 1 E
CTOC
4 354
0 40
0182-1187
DKOT

QUIRE COM 1
CTOC
7 1010
0 81
0482-1187
DKOT

OLINE COM 1 E
CTOC
7 420
0 76
0185-1187
DKOT

CARSON COM 1 E
CTOC
3 878
0 81
0264-1187
DKOT

CARSON COM 1
AMOCO
7 1288
0 9
0482-0286
DKOT

SAMMONS 2
SURLINGTON RES
12 2898
0 78
0261-1187
DKOT

SAMMONS 1
SOUTHLAND ROY
0 314
0 0
0147-0147
PCCF

SAMMONS 2E
SURLINGTON RES
0 1111
0 178
0262-1187
DKOT

MADDOX COM 2
CONOCO
8 1871
0 178
0261-1187
DKOT

MADDOX 1
CONOCO
13 2874
1 227
0246-1187
DKOT

MADDOX 2
FLAG REDFERN
0 545
0 0
0246-0246
PCCF

HARGIS 1
KERR-MCGEE
0 889
0 0
0246-0246
PCCF

MADDOX 1
CONOCO
13 2874
1 227
0246-1187
DKOT

HARGIS 2
FLAG REDFERN
0 545
0 0
0246-0246
PCCF

HARGIS 1
KERR-MCGEE
0 889
0 0
0246-0246
PCCF

HALLWOOD PET
0 126
0 222
0246-1087
PRLD

HALLWOOD PET
0 126
0 222
0246-1087
PRLD

WELLS W/PRODUCTION

Well Name & Number
Operator
Cum Oil MBO Cum Gas MMCF
Curr Rate Bopd Curr Rate Mcfd
Start-End Date
Formation

WELLS W/O PRODUCTION

FRUITLAN
FRUITLAN
PICTURED