

TICARILLA G #9

DAKOTA

SJ 27-5 #145
88-2.3 644-3617
110-2.2 NW P
103-1.1 EP

SJ 27-5 #147 (P)
233-2.4 1023-10696
123-1 NW P
309- EP

35

SJ 27-5 #144
41-2.2 563-4113
48-2 NW P
132-1 EP

MERIDIAN

TIC G #6M
25-3 247-879
63-1 GNM
119-4 UTP

TIC G #8
174-1 1303-5464
128-4 GNM
202-1.3 12-70 UTP

(M)

2

TIC G #6
94-5 933-7111
92-7 GNM
106-1.3 12-69 UTP

TIC G #8E
128-1.1 14-106
69-3 GNM
5-85 UTP

UTPC

TIC G #4E
122-6 269-964
78-3 GNM
130-2 7-81 UTP

TIC G #7
236-1.4 279-325
186-1 GNM
237-1.5 2-70 UTP

11

TIC G #4
86-3 117-7433
93-2 GNM
155-7 UTP

TIC G #7M
188-1.2 552-3622
124-6 GNM
137-1 10-80 UTP

UTPC

36

SJ 27-5 #146
63-1 419-1895
44- NW P
101-7.72 EP

MERIDIAN

TIC G #1E
200-1.7 50-372
256-1.7 GNM
7-85 UTP

TIC G #9
21-2 380-2797
30-1 GNM
56-1 2-71 UTP

(G)

1

TIC G #1
71 797-934
53 GNM
89 12-70 UTP

TIC G #9E
191-7 7-85
G NM
UTP

UTPC

TIC G #5M
236-1.4 298-1657
186-1 GNM
237-1.5 2-83 UTP

TIC G #10
70- 865-1451
62- GNM
141 2-71 UTP

12

TIC G #5
64-8 822-10198
85-2 GNM
82-3 2-67 UTP

TIC G #10M
68-5 427-2756
125-1.2 GNM
150-7 3-79 UTP

UTPC

31

SJ 27-4 #46
80-2.2 67-7852
90-2 NW P
138-1 10-71 EP

MERIDIAN

NW #3
64-2 1401-16280
128-6 NW P
149-2 4-65 COL. P.M.

TIC #4
134-1.5 3147-17937
165-1.8 NW P
204-2.4 EPX

(M)

NW #3E
122-2 156-1131
93-5 NW P
118-5 7-81 COL. P.M.

COLUMBUS ENERGY

MERIDIAN

T 27 N

T 26 N

BEFORE EXAMINER CATANACH
OIL CONSERVATION DIVISION

UNION TEXAS EXHIBIT NO. 1

CASE NO. 8994

WELL NAME
1984 MCFD-80PD MCF-80
1985 MCFD-80PD PIPELINE
CARCITY MCFD-80PD 1ST DEL. PNT
OPERATOR

PMP
8/2/86

COMMINGLED
DUAL

KIO HKIRH COUNTY, W.M.
TICARILLA G #9

MESHERDE

ST. 27-5 #20
14 283-236
10 NW
41 9-57
EP

ST. 27-5 #36
23- 418-
76- NW
EP 10-58

ST. 27-4 #4
3- 54
6- NW
9- 6-56
EP

ST. 27-5 #12
29 284-9
14 NW
43 11-56
EP

ST. 27-5 #18
29 272-
P49 NW
EP 56

ST. 27-4 #26
28 446-
17 NW
35 1-61
EP

ST. 27-4 #4
16-6 325-280
81-4 NW
124-5 5-80
EP

MERIDIAN

MERIDIAN

MERIDIAN

TIC G #6M
136-6 487-1431
220-17 GNM
265-5 6-80
UTP

TIC G #8
72-2 874-527
61-3 GNM
108-3 12-70
UTP

TIC G #9
48 660-884
49 GNM
54 2-11
UTP

TIC. 119 N #5A
42-1 446-1706
80-4 NW
132-7 1-77
MERID.

TIC. 119 N #4
29 664-520
33 NW
45 4-57
EPX

TIC G #6
101- 1357-225
90- GNM
166 12-69
UTP

TIC G #1
63-3 766-558
68-2 GNM
108-2 10-58
UTP

TIC G #9H
60 363-1174
59 GNM
110 5-80
UTP

TIC. 119 N #5
31 113-1586
50-2 NW
141-4 7-57
MERID

TIC. 119 N #4B
65-3 127-840
84-5 NW
173-1.5 12-82
EPX

UTPC

UTPC

MERIDIAN

TIC G #4A
43-1 843-557
46-1 GNM
74-2 2-79
UTP

TIC G #7
127-3 1768-567
123-4 GNM
331-7 2-70
UTP

TIC G #6M
195-7 389-1225
339-1.3 GNM
471-2 2-83
UTP

TIC. G #10
76 1147-444
97 GNM
151 2-71
UTP

TIC. 119 N #10A
90-3 572-1728
65-3 NW
154-4 1-77
MERID.

NW #1
28 418-158
33 NW
64- 4-65
COLLEN.

11

12

7

2

1

6

T
26
N

T
27
N

WELL NAME	MACT - BC
1984 MCFD-80PD	PIPELINE
1985 MCFD-80PD	1ST DEED
CAPACITY MCFD-80PD	OPERATOR

PMP
8/2/86
COMMINGLED
DUAL

TIC G #4
12 1767-3787
69 GNM
129 18-68
UTP

TIC G #7M
229-1 554-3354
212-7 GNM
325-1.7 10-80
UTP

TIC G #5
173 2350-
155 GNM
137 12-69
UTP

TIC G #10M
139 364-477
80 GNM
70 5-77
UTP

TIC. 119 N #10
32-2 111-3734
21- NW
92- NW
MERID.

NW #1A
31-2 183-1357
35-2 NW
103-5 10-78
COLLEN.

UTPC

UTPC

MERIDIAN

RWW

COLUMBUS ENERGY

JICARILLA G #9

GALLUP

35

36

31

T
27
N

JIC. G #1E
26-192
103-0.9 GCNM
138-0.9 UTP

JIC. G #9
(C)

NW #3
467-3488
103- NW P
34- NW P
47- COL EN.



(D)

2

1

6

T
26
N

JIC. G #8E
23-130 GCNM
300-1.7 UTP

JIC. G #9H
249-1.7 GCNM
213-1.2 GCNM
312-2.3 UTP

NW #3E
15- NW P
19- NW P
36- COL EN.

(M)

UTPC

UTPC

COLUMBUS ENERGY

11

12

NW #1
28- 418-158
33- NW P
56- 4-1-65
COL EN.

(M)

UTPC

UTPC

D4W

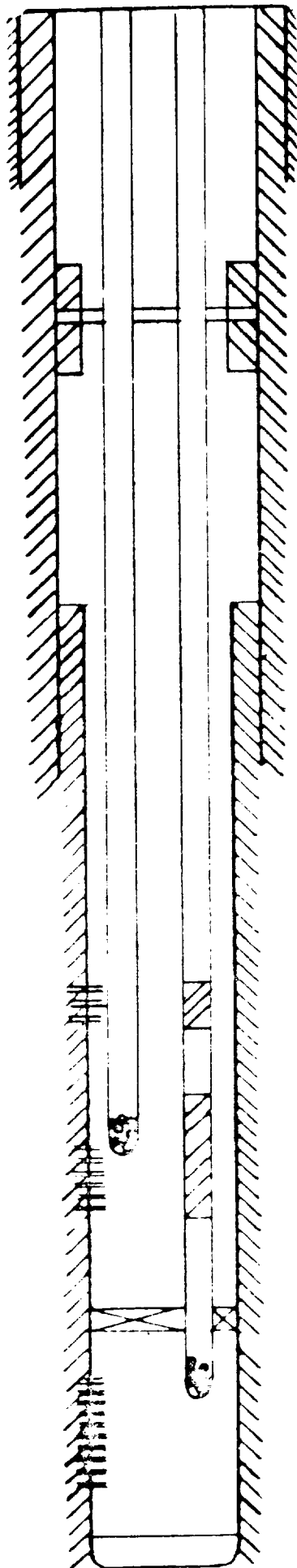
WELL NAME	MACT - B
1984 MCF/D-80PD	MACT - B
1985 MCF/D-80PD	PIPELINE
CAPACITY MCF/D-80PD	1ST DEL. D
	OPERATOR

PMF
8/2/76
COMMINGLED
DUAL

(D)
(D)

Surface hole size -
13-3/4"
Intermediate hole size -
9-7/8"
Production hole size -
6-3/4"

Larkin Fig. 905, 7-5/8"
casing centralizers run on
60 ft. spacing from 4050 ft.
to 4335 ft. R.K.B.



Mesaverde
Perforations

5774 ft.
to
5896 ft.

6312 ft.
to
6352 ft.

Dakota Perforations
8312 ft.
to
8526 ft.

WELL: Jicarilla "G" No. 9
LOCATION: 990 ft. from North line &
1650 ft. from the East line of
Section 1, Township 26 North, Range 5
West, Rio Arriba County, New Mexico.
POOL: Basin Dakota-Blanco Mesaverde
Dual Completion

SURFACE CASING: 10-3/4", 32.75#, H-40
set at 383 ft. R.K.B. Cemented to
surface w/250 sacks.

TOP CEMENT on 7-5/8" casing at surface

STAGE COLLAR Set at 2260 ft. R.K.B. on
7-5/8" csg. & cemented w/800 cu.ft.

5 1/2", 15.50#, K-55 csg. as liner. Top
liner at 2089 ft. R.K.B. Bottom at
2419 ft. R.K.B. Cemented w/50 cu.ft. cmt.
Liner patch over stage collar at 2260 ft.

TOP LINER on 5 1/2", 15.50#, J-55 csg. at
4189 ft. R.K.B.

Top Cement on 5 1/2" liner at 4189 ft. R.K.B.

INTERMEDIATE CASING: 7-5/8", 26.40#, K-55
set at 4350 ft. R.K.B. 1st stage
cemented w/500 cu.ft. cement.

2-1/16" O.D. Baker Blast joints set
across Cliffhouse perms from 5761 -
5904 ft. R.K.B.

1 1/2" Integral joint, 2.76#, YCO-55 tbg.
set to Mesaverde. Landed at 6321 ft. R.K.B.

2-1/16" O.D. Baker Blast joints set
across Point Lookout from 6295-6355 ft.

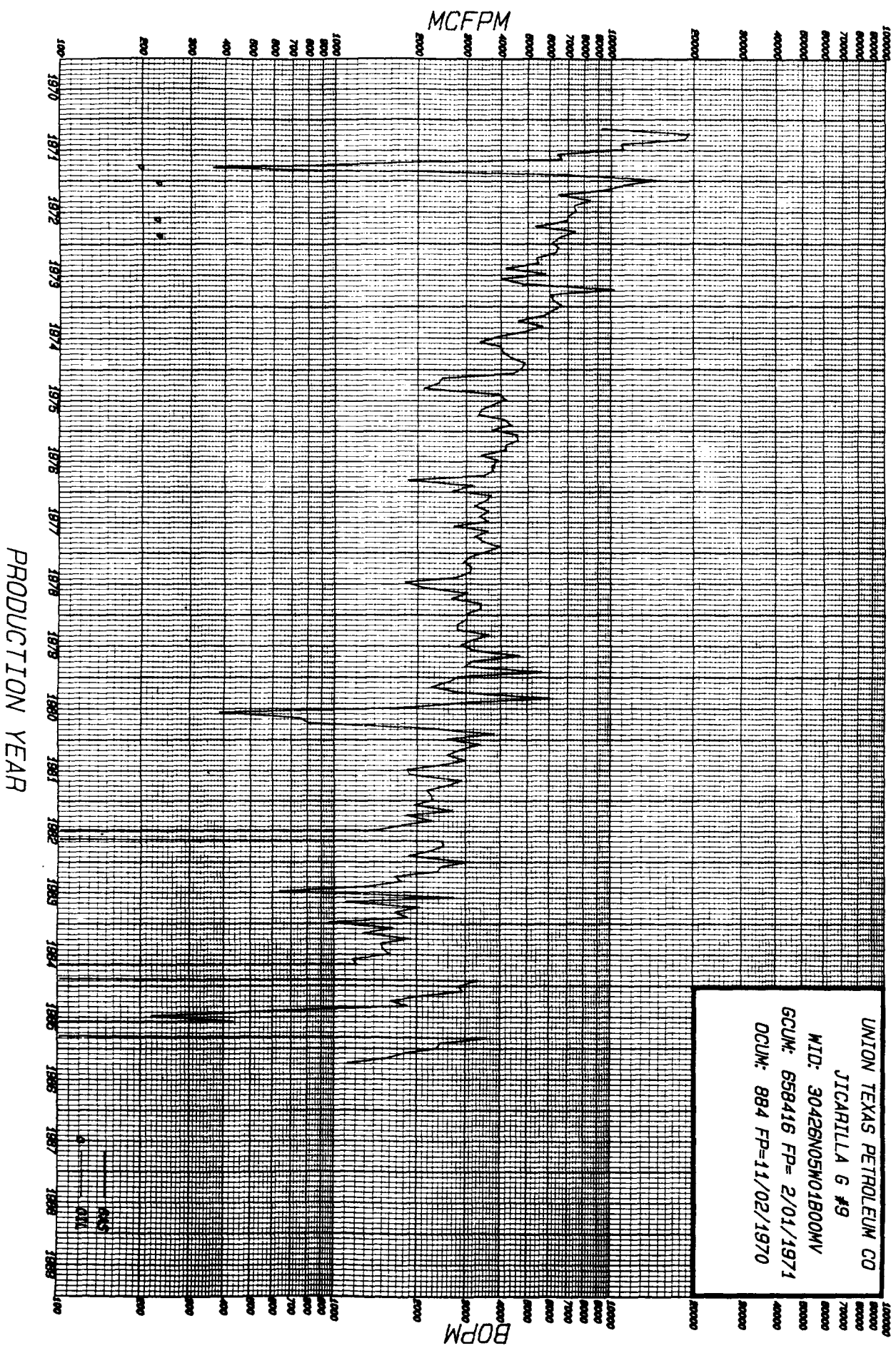
BAKER 5 1/2" Model "D" Production Packer
set at 8181 ft. R.K.B.

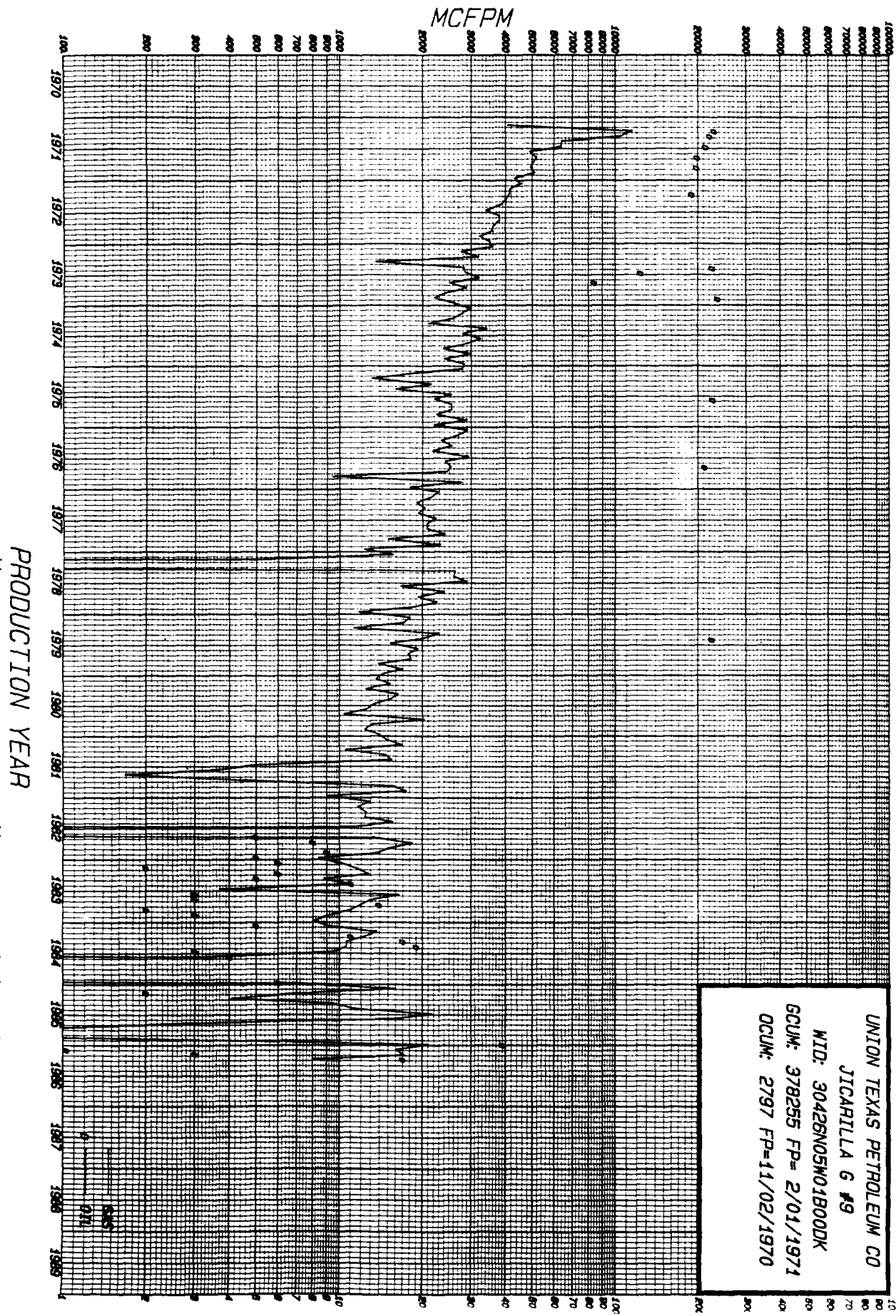
1 1/2", 2.90#, E.U.E., YCO-55 tubing set
to Dakota. Landed at 8351 ft. R.K.B.

Bottom 5 1/2", 15.50#, K-55 liner at 8554
ft. R.K.B. Cemented to top of liner
w/700 cu.ft. cement.

P.B.T.D. 8535 ft. R.K.B.

TOTAL DEPTH 8555 ft. R.K.B.





ANTICIPATED BOTTOM HOLE PRESSURES

Jicarilla G #9
Rio Arriba County, NM

Rawlins & Schellhardt Basic Equation

<u>Formation</u>	<u>SICP (psig)</u>	<u>BHP (psig)</u>	<u>Data taken from</u>
Mesaverde	525	617	Jicarilla G #9
Gallup	621	759	Jicarilla G #9A
Dakota	793	970	Jicarilla G #9

PRODUCT INFORMATION REPORT 50G-5847-A **NOTE: FILL IN DATA APPLICABLE TO PRODUCT TESTED**

ANALYSIS NO. _____ DATE Aug 5, '86

PRODUCT DESCRIPTION Union Texas Petro Tocarilla G-9A Gallup

VAPOR PRESSURE	GRAVITY <u>.7080</u> (SP.GR.) (API)	CORROSION TEST COPPER STRIP
DRYNESS TEST-PROPANE	RESIDUE TEST-LPG	WEATHERING TEST-LPG
LEAD ACETATE TEST	BTU <u>1228.66</u> /ft. ³ (DRY)	DOCTOR TEST
HYDROGEN SULFIDE gr/100 ft. ³	MERCAPTANS gr/100 ft. ³	GRADE

CHROMATOGRAPHIC ANALYSIS				COMMENTS	DISTILLATION	
	MOLE %	G.P.M.	LIQUID VOLUME %		%	TEMPERATURE
CARBON DIOXIDE	<u>.64</u>					IBP
NITROGEN	<u>.28</u>					5
METHANE	<u>30.85</u>					10
ETHANE	<u>11.23</u>	<u>2.996</u>				20
PROPANE	<u>4.27</u>	<u>1.174</u>				30
ISOBUTANE	<u>.66</u>	<u>.214</u>				40
N BUTANE	<u>.86</u>	<u>.270</u>				50
ISOPENTANE	<u>.42</u>	<u>.152</u>				60
N PENTANE	<u>.32</u>	<u>.114</u>				70
HEXANE +	<u>.49</u>	<u>.199</u>				80
	<u>0.2</u>					90
TOTAL	<u>5.119</u>					EP

ALL TEMPERATURES, PRESSURES AND VOLUMES ARE CONVERTED TO INDUSTRY STANDARDS.

TESTED BY Ernest Laughter

REMARKS AND ADDITIONS

NOTE: FILL IN DATA APPLICABLE TO PRODUCT TESTED

ANALYSIS NO. _____

DATE _____

Aug 5, 86

PRODUCT DESCRIPTION

Union Texas Petro Ficarilla G-9 M.V.

VAPOR PRESSURE

GRAVITY

.6863

(SP.GR) (API)

CORROSION TEST COPPER STRIP

DRYNESS TEST-PROPANE

RESIDUE TEST-LPG

WEATHERING TEST-LPG

°F @ 95% BP

LEAD ACETATE TEST

BTU

1190.37

/ft.³ (DRY)

DOCTOR TEST

HYDROGEN SULFIDE

MERCAPTANS

GRADE	
-------	--

 $\text{gr}/100 \text{ ft.}^3$ $\text{gr}/100 \text{ ft.}^3$

CHROMATOGRAPHIC ANALYSIS				COMMENTS	DISTILLATION	
	MOLE %	G.P.M.	LIQUID VOLUME %		%	TEMPERATURE
CARBON DIOXIDE	.76				1BP	
NITROGEN	.37				5	
METHANE	84.14				10	
ETHANE	8.41	2.243			20	
PROPANE	3.88	1.065			30	
ISOBUTANE	.67	.220			40	
N BUTANE	.76	.238			50	
ISOPENTANE	.35	.126			60	
N PENTANE	.25	.089			70	
HEXANE +	.43	.175			80	
					90	
					E.P.	
TOTAL		4.157			LOSS	RES DUE

ALL TEMPERATURES, PRESSURES AND VOLUMES ARE
CONVERTED TO INDUSTRY STANDARDS.

TESTED BY

Ernest Laughter

REMARKS AND ADDITIONS

PRODUCT INFORMATION REPORT

SUG-5647-A

NOTE: FILL IN DATA APPLICABLE TO PRODUCT TESTED

ANALYSIS NO.		DATE <i>Aug 5, '86</i>	
PRODUCT DESCRIPTION <i>Union Texas Petro Jicarilla G-9 DK.</i>			
VAPOR PRESSURE	GRAVITY <i>.6705</i> (SP.GR) (API)	CORROSION TEST (COPPER STRIP)	
DRYNESS TEST-PROPANE	RESIDUE TEST-LPG	WEATHERING TEST-LPG	
LEAD ACETATE TEST	BTU <i>1162.58</i> /ft. ³ (DRY)	DOCTOR TEST	
HYDROGEN SULFIDE	MERCAPTANS	GRADE	
gr/100 ft. ³	gr/100 ft. ³	°F @ 95% BP	

CHROMATOGRAPHIC ANALYSIS				COMMENTS		DISTILLATION	
	MOLE %	G.P.M.	LIQUID VOLUME %			%	TEMPERATURE
CARBON DIOXIDE	<i>.99</i>					1BP	
NITROGEN	<i>.24</i>					5	
METHANE	<i>84.79</i>					10	
ETHANE	<i>9.34</i>	<i>2.492</i>				20	
PROPANE	<i>2.83</i>	<i>.777</i>				30	
ISOBUTANE	<i>.58</i>	<i>.188</i>				40	
N BUTANE	<i>.55</i>	<i>.174</i>				50	
ISOPENTANE	<i>.25</i>	<i>.089</i>				60	
N PENTANE	<i>.14</i>	<i>.049</i>				70	
HEXANE +	<i>.31</i>	<i>.125</i>				80	
						90	
						E.P.	
						LOSS	RESIDUE
TOTAL		<i>3.894</i>					

ALL TEMPERATURES, PRESSURES AND VOLUMES ARE CONVERTED TO INDUSTRY STANDARDS.

REMARKS AND ADDITIONS

TESTED BY

Ernest Laughter



Rocky Mountain Region

LABORATORY INVESTIGATION
OF
JICARILLA G-9
JICARILLA G-9A
DAKOTA AND GALLUP FORMATIONS

SEPTEMBER 4, 1986

PREPARED FOR
UNION TEXAS PETROLEUM

PREPARED BY



JAMES C. TERRY
District Engineer
THE WESTERN COMPANY
OF NORTH AMERICA
FARMINGTON DISTRICT

14

Laboratory Investigation
Jicarilla G-9
Jicarilla G-9A
Dakota and Gallup Formations

SUMMARY OF RESULTS

1. No precipitation of materials was observed from the admixture of oils or waters under investigation.
2. Emulsion testing was performed. 100% breakout of oil and water occurred within 10 minutes for each combination of possible oil/water mixture.
3. Paraffin deposition due to temperature reduction is not a fear due to so small a paraffin component in either oil. Adiabatic expansion and associated cooling should not be a concern for the same reason.

LABORATORY INVESTIGATION
JICARILLA G-9
JICARILLA G-9A
DAKOTA & GALLUP FORMATIONS

On September 2, 1986, laboratory analysis of oils and waters from the separate zones of the Jicarilla G-9 and Jicarilla 9A wells were conducted for Mike Pippin, Union Texas Petroleum engineer.

PURPOSE

Mike requested we investigate the concern over detrimental effects due to comingling of Dakota, Gallup and Mesa Verde zones in the Jicarilla "G" lease of San Juan Basin.

BACKGROUND INFORMATION

- a. BHST Gradient: 2.0° F/100 ft depth.
- b. Any paraffin deposition occurs within 1000' of surface within the wellbore environment.
- c. Water is produced by both Mesa Verde and Dakota zones but is absent in Gallup production.
- d. Paraffin deposition is not a significant problem on these wells.

CONCERNS TO BE ADDRESSED IN THE ANALYSIS

- a. The precipitation of materials produced by the admixture of produced fluids of potentially different constitution.
- b. The formation of emulsion due to the admixture of different fluids.
- c. Increased paraffin deposition by additive properties of oils.
- d. Increased paraffin deposition due to the decrease in temperature and pressure as a result of accompanying gas expansion.

14.
LABORATORY INVESTIGATION
JICARILLA G-9
JICARILLA G-9A
DAKOTA & GALLUP FORMATIONS

STEPS TAKEN IN ANALYSIS

- a. API Analysis of oils including:
 - API GRAVITY
 - CLOUD POINT
 - POUR POINT
 - PARAFFIN CONTENT
 - ASPHALTENE CONTENT
- b. Mixing of oils/waters in appropriate cases with additional paraffin testing to determine resulting fluid characteristics.
- c. Discussions with Mike Pippin regarding the well bore production and conditions.

LABORATORY INVESTIGATION
JICARILLA G-9
JICARILLA G-9A
DAKOTA & GALLUP FORMATIONS

WELL NAME

JICARILLA G 9A
B.S. MESA GALLUP FIELD

LEGAL DESCRIPTION

SWSE SEC 1 T26N R5W
RIO ARriba COUNTY, N.M.

SAMPLE 1

FORMATION	GALLUP
PERFORATIONS DEPTH (ft)	Unknown
API GRAVITY @ 60°F	58.2
CLOUD POINT	38° F
POUR POINT	< 0°F
PARAFFIN CONTENT	< 0.5% wt (TSTM)*
ASPHALTENE CONTENT	Negligible (TSTM)

WELL NAME

JICARILLA G 9
BASIN DAKOTA FIELD

LEGAL DESCRIPTION

SW SE SEC 1 T26N R5W
RIO ARriba COUNTY, N.M.

SAMPLE 2

FORMATION	DAKOTA
PERFORATION DEPTH (ft)	Unknown
API GRAVITY @ 60° F	53.6
CLOUD POINT	<0°F
POUR POINT	<0°F
PARAFFIN CONTENT	<0.1% wt (TSTM)

*TSTM-TOO SMALL TO MEASURE

NOTE: These are both very "clean" oils. They might better be described as "condensates".

LABORATORY INVESTIGATION
JICARILLA G-9
JICARILLA G-9A
DAKOTA & GALLUP FORMATIONS

DISCUSSION

The API oil analysis and water analysis conducted in conjunction with actual mixing tests involving Mesa Verde, Gallup and Dakota produced fluids resulted in no concern over comingling effects. The basic characteristics of each fluid is of no potential problematic or detrimental nature. Any possible mixture expected poses no potential threat.

There is no compatibility problem with fluids investigated in the analysis. This combination of fluids is possibly the best we have seen for comingling candidacy.

ANALYSIS NO. S3 83:86

API FORM 45-1

FIELD RECEIPT NO. _____

API WATER ANALYSIS REPORT FORM

Company UNION TEXAS PETROLEUM		Sample No. 1		Date Sampled	
Field BLANCO MESA VERDE		Legal Description Sec: 1 T26N R5W		County or Parish RIO ARRIBA	
State NM		Depth 9		Formation MESA VERDE	
Lease or Unit JICARILLA G		Well		Water, B/D	
Type of Water (Produced, Supply, etc.) PRODUCED		Sampling Point WELLHEAD OR SEPARATOR		Sampled By MP	

DISSOLVED SOLIDS

CATIONS	mg/l	me/l
Sodium, Na (calc.)	3062	183.7
Calcium, Ca	80	4.0
Magnesium, Mg	175	14.3
Barium, Ba		
Potassium, K ⁺	27	0.7

ANIONS

Chloride, Cl	4688	132.2
Sulfate, SO ₄	≤ 50	1.0
Carbonate, CO ₃	179	6.0
Bicarbonate, HCO ₃	824	13.5
Hydroxide, OH	-0-	-0-

Total Dissolved Solids (calc.)

9085

Iron, Fe (total)

-0-

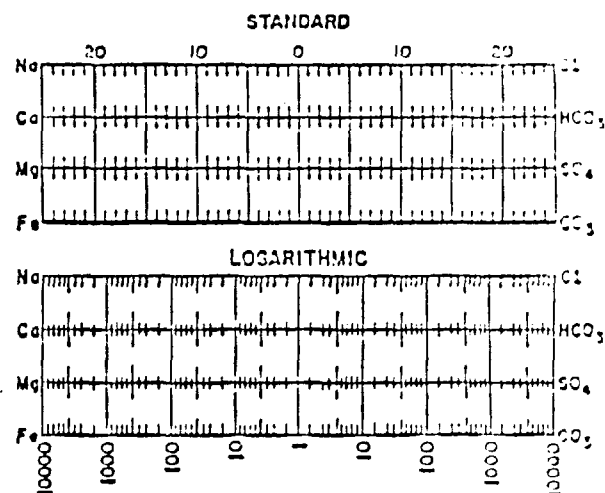
Sulfide, as H₂S

-0-

OTHER PROPERTIES

pH	8.48
Specific Gravity, 60/60 F.	1.015
Resistivity (ohm-meters) 74 F.	0.690
Total hardness	920

WATER PATTERNS — me/l



REMARKS & RECOMMENDATIONS:

MEASURED TDS 8790 mg/l

ANALYST: CLAY TERRY

THE WESTERN COMPANY OF
NORTH AMERICA, FARMINGTON, NM
(505) 327-6222

Please refer any questions to: Clay Terry, District Engineer

ANALYSIS NO. S3 83 86

API FORM 45-1

FIELD RECEIPT NO. _____

API WATER ANALYSIS REPORT FORM

Company UNION TEXAS PETROLEUM		Sample No. 2		Date Sampled	
Field BASIN DAKOTA	Legal Description S1 T26N R5W		County or Parish RIO ARriba		State NM
Lease or Unit JICARILLA G	Well 9	Depth	Formation DAKOTA	Water, B/D	
Type of Water (Produced, Supply, etc.) PRODUCED		Sampling Point WELLHEAD OR SEPERATOR		Sampled By MP	

DISSOLVED SOLIDS

CATIONS	mg/l	me/l
Sodium, Na (calc.)	2672	116.7
Calcium, Ca	228	11.4
Magnesium, Mg	177	14.5
Barium, Ba		
Potassium, K ⁺	30	1.0

ANIONS

Chloride, Cl	4535	127.9
Sulfate, SO ₄	180	3.8
Carbonate, CO ₃	49	1.6
Bicarbonate, HCO ₃	630	10.3
Hydroxide, OH	-0-	-0-

Total Dissolved Solids (calc.)

8509

Iron, Fe (total)

-0-Sulfide, as H₂S-0-

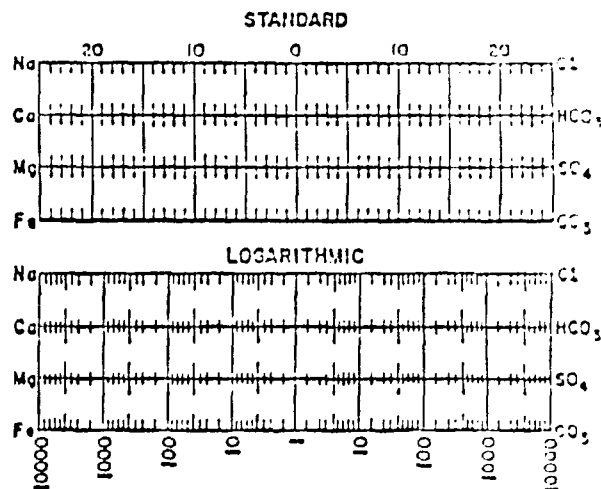
REMARKS & RECOMMENDATIONS:

MEASURED TDS 12,023 mg/l

OTHER PROPERTIES

pH	7.75
Specific Gravity, 60/60 F.	1.017
Resistivity (ohm-meters) 74° F.	0.555
Total hardness	1300.

WATER PATTERNS — me/l

ANALYST: CLAY TERRY

THE WESTERN COMPANY OF
NORTH AMERICA, FARMINGTON, NM
(505) 327-6222

Please refer any questions to: Clay Terry, District Engineer

CAMPBELL & BLACK, P.A.
LAWYERS

JACK M. CAMPBELL
BRUCE D. BLACK
MICHAEL B. CAMPBELL
WILLIAM F. CARR
BRADFORD C. BERGE
J. SCOTT HALL
PETER N. IVES
JOHN H. BEMIS

GUADALUPE PLACE
SUITE 1 - 110 NORTH GUADALUPE
POST OFFICE BOX 2208
SANTA FE, NEW MEXICO 87504-2208
TELEPHONE: (505) 988-4421
TELECOPIER: (505) 983-6043

August 15, 1986

Meridian Oil Company
3535 East 30th Street
P. O. Box 4289
Farmington, New Mexico 87499

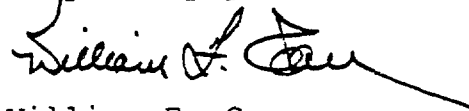
Re: Application of Union Texas Petroleum Corporation for
Triple Downhole Commingling, Lea County, New Mexico.

Dear Sirs:

This letter is to advise you that Union Texas Petroleum Corporation has filed an application with the New Mexico Oil Conservation Division seeking authority to downhole commingle production from the Gallup, Dakota and Mesaverde formations in the wellbore of its Jicarilla G No. 9 Well at a location 990 feet from the North line and 650 feet from the East line of Section 1, Township 26 North, Range 5 West, N.M.P.M., Rio Arriba County, New Mexico.

This application has been set for hearing before a Division Examiner on September 17, 1986. You are not required to attend this hearing, but as an offsetting operator you may appear and present testimony. Failure to appear at that time and become a party of record will preclude you from challenging the matter at a later date.

Very truly yours,



William F. Carr
Attorney for Union Texas
Petroleum Corporation

WFC/cv

CAMPBELL & BLACK. P.A.
LAWYERS

JACK M. CAMPBELL
BRUCE D. BLACK
MICHAEL B. CAMPBELL
WILLIAM F. CARR
BRADFORD C. BERGE
J. SCOTT HALL
PETER N. IVES
JOHN H. BEMIS

GUADALUPE PLACE
SUITE 1 - 110 NORTH GUADALUPE
POST OFFICE BOX 2208
SANTA FE, NEW MEXICO 87504-2208
TELEPHONE: (505) 988-4421
TELECOPIER: (505) 983-6043

August 15, 1986

Columbus Energy
P. O. Box 2038
Farmington, New Mexico 87499

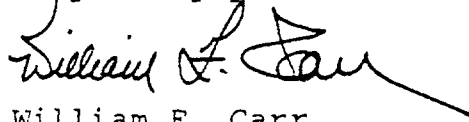
Re: Application of Union Texas Petroleum Corporation for
Triple Downhole Commingling, Lea County, New Mexico.

Dear Sirs:

This letter is to advise you that Union Texas Petroleum Corporation has filed an application with the New Mexico Oil Conservation Division seeking authority to downhole commingle production from the Gallup, Dakota and Mesaverde formations in the wellbore of its Jicarilla G No. 9 Well at a location 990 feet from the North line and 650 feet from the East line of Section 1, Township 26 North, Range 5 West, N.M.P.M., Rio Arriba County, New Mexico.

This application has been set for hearing before a Division Examiner on September 17, 1986. You are not required to attend this hearing, but as an offsetting operator you may appear and present testimony. Failure to appear at that time and become a party of record will preclude you from challenging the matter at a later date.

Very truly yours,



William F. Carr
Attorney for Union Texas
Petroleum Corporation

WFC/cv