STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION

TONEY ANAYA
GOVERNOR

50 YEARS
1935 - 1985

POST OFFICE BOX 2088
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO 87501
(505) 827-5800

August 1, 1986

AMENDED
Administrative Order No. DHC-619

Union Texas Petroleum
375 U.S. Highway 64
Farmington, New Mexico 87401

Attention: P. M. Pippin

Re: Oxnard No. 3-A Well, Unit P,
Sec. 8, T-31 North, R-8 West, NMPM,
San Juan County, New Mexico
Basin Dakota and Blanco Mesaverde Pools

Gentlemen:

Reference is made to your recent application for an exception to Rule 303-A of the Division Rules and Regulations to permit the subject well to commingle the production from both pools in the wellbore.

It appearing that the subject well qualifies for approval for such exception pursuant to the provisions of Rule 303-C, and that reservoir damage or waste will not result from such downhole commingling, and correlative rights will not be violated thereby, you are hereby authorized to commingle the production as described above and any Division Order which authorized the dual completion and required separation of the two zones is hereby placed in abeyance.

In accordance with the provisions of Rule 303.C.4., total commingled oil production from the subject well shall not exceed 60 barrels per day, and total water production from the well shall not exceed 120 barrels per day. The maximum amount of gas which may be produced daily from the well shall be determined by Division Rules and Regulations or by the gas allowable for each respective prorated gas pool as printed in the Oil Conservation's San Juan Basin Gas Proration Schedule.

In accordance with the provisions of Rule 303-C, the supervisor of the Aztec District Office of the Oil Conservation Division shall determine the proper allocation of production from the subject well following its completion.

Pursuant to Rule 303-C 5, the commingled authority granted by this order may be rescinded by the Division Director if, in his opinion, conservation is not being best served by such commingling.

Very truly yours,

R. L. STAMETS,
Director

cc: Gas Co. of N.M.
OCD District Office - Aztec

REMARKS: Due to the circumstances within this wellbore, the applicant is hereby authorized to commingle the production without removing the downhole separation equipment and is further authorized to install any surface equipment needed to tie in the dual tubing strings.

Union Texas Petroleum

375 U.S. Highway 64
Farmington, New Mexico 87401
Telephone (505) 325-3587

July 11, 1986

Mr. Richard L. Stamets
N.M. Oil Conservation Division
P.O. Box 2088
Santa Fe, New Mexico 87501-2088

Re: Administrative Order No. DHC-619
Oxnard #3A P Sec. 8,T31N-R8W
San Juan County, New Mexico
Basin Dakota & Blanco Mesaverde Pools

Dear Mr. Stamets:

Union Texas Petroleum is applying for an administrative amendment to the referenced order to obtain surface commingling aproval for the Blanco Mesaverde and Basin Dakota intervals.

Due to the Dakota interval's poor production (average less than 10 MCF/D), we would be forced to propose plugging the Dakota and recompleting the well as a single Mesaverde rather than having the expense of moving a rig onto location and attempting either a dual completion or removing the downhole equipment. The present economic climate has forced our company to not only cut expenses but to eliminate operations that could lead to more expenses such as moving a rig into this location. Therefore, surface commingling would now be the most efficient method of producing the subject well.

The proposed commingling will result in the recovery of additional hydrocarbons from the Basin Dakota interval, thereby preventing waste, and will not violate correlative rights.

Enclosed for your convenience is a copy of our original application along with a copy of order #DHC-619.

Yours truly,

P.M. Pippin
Senior Production Engineer

PMP:bjs

cc: Frank Chaves - O.C.D.- Aztec Office
W.K. Cooper

PMP

Union Texas Petroleum

375 U.S. Highway 64
Farmington, New Mexico 87401
Telephone (505) 325-3587

May 7, 1986

RECEIVED
JUL 15 1986
OIL CON. DIV.
DIST. 3

Mr. Richard L. Stamets
N. M. Oil Conservation Divison
P. O. Box 2088
Santa Fe, NM 87501-2088

Re: Oxnard #3-A MV/DK 880' FEL, 1120' FSL
Section 8, T31N, R8W, San Juan County, NM

Dear Mr. Stamets:

Union Texas Petroleum is applying for an administrative downhole commingling order for the referenced well in the Basin Dakota and Blanco Mesaverde fields. The ownership of the zones to be commingled is common, with Union Texas Petroleum having a 75% working interest and Arco a 25% working interest. The two offset operators are Arco and Northwest Pipeline Corporation. The Bureau of Land Management and these offset operators will receive notification of this proposed downhole commingling.

The Dakota zone was perforated with a total of 19 holes from 7977' - 8077', and fraced with 50,000# sand in slick water. The Dakota has produced only 60 MMCF since its first delivery in November, 1981. The Mesaverde zone was perforated with a total of 31 holes from 5469'-5933', and fraced with 93,000# sand in slick water. The Mesaverde has produced 270 MMCF since its first delivery in September, 1981 and is presently capable of 321 MCF/D. The well was initially completed as a dual Mesaverde/Dakota in March, 1980.

A packer leakage test in November, 1985 indicated the two producing zones were communicated downhole. Due to the Dakota interval's poor production (average less than 10 MCF/D), we would propose plugging the Dakota and recompleting the well as a single Mesaverde rather than making the possibly expensive repairs necessary to eliminate the communication and continue producing as a dual. All of the nearby Dakota wells are also poor producers. Therefore, downhole commingling would now be the most efficient method of producing the subject well. The proposed commingling will result in the recovery of additional hydrocarbons from the Basin Dakota interval, thereby preventing waste, and will not violate correlative rights.

The reservoir characteristics of each of the subject zones are such that underground waste would not be caused by the proposed downhole commingling. The fluids from each zone are compatible and no precipitates will be formed to cause damage to either reservoir. The Dakota side of this well does not produce water, nor do the other Dakota wells nearby. The Mesaverde in this well makes very little water. The daily production will not exceed the limit of Rule 303c, Section 1a, Part 1. Neither zone has produced any oil or condensate. The bottom hole pressure for the Dakota is 1157 psi. The bottom hole pressure for the Mesaverde is 595 psi. These bottom hole pressures were calculated using the shut-in pressures from the formations' last deliverability test and the Rawlins and Schellhardt method for determining bottom hole pressures in gas well.

The District Office in Aztec will be notified any time the commingled well is shut in for seven (7) consecutive days.

To allocate the commingled production to each of the zones, Union Texas Petroleum will consult with the District Supervisor of the Aztec District Office of the Divison to determine an allocation formula for each of the production zones.

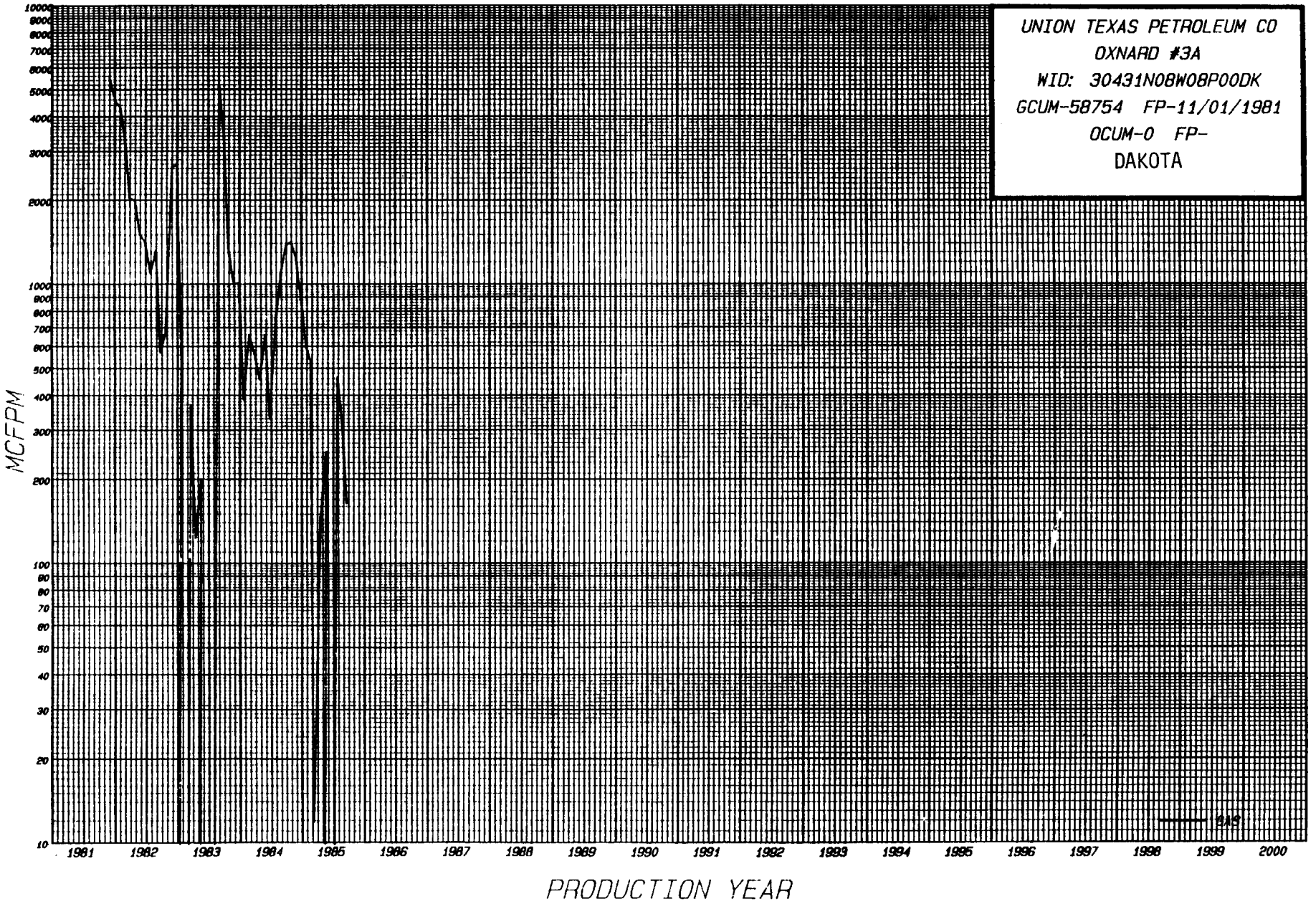
Included with this letter is a plat showing ownership of offsetting leases, letters to the offset operators and the BLM, wellbore diagram, data sheet, production curves, Mesaverde water analysis, and the most current deliverability tests.

Yours truly,

P. M. Pippin
Senior Production Engineer

PMP:lmg

cc: Frank Chaves
OCD - Aztec Office


UNION TEXAS PETROLEUM CO
OXNARD #3A
WID: 30431N08W08P00DK
GCUM-58754 FP-11/01/1981
OCUM-0 FP-
DAKOTA
MCFPM
PRODUCTION YEAR
10000
9000
8000
7000
6000
5000
4000
3000
2000
1000
900
800
700
600
500
400
300
200
100
90
80
70
60
50
40
30
20
10
1981
1982
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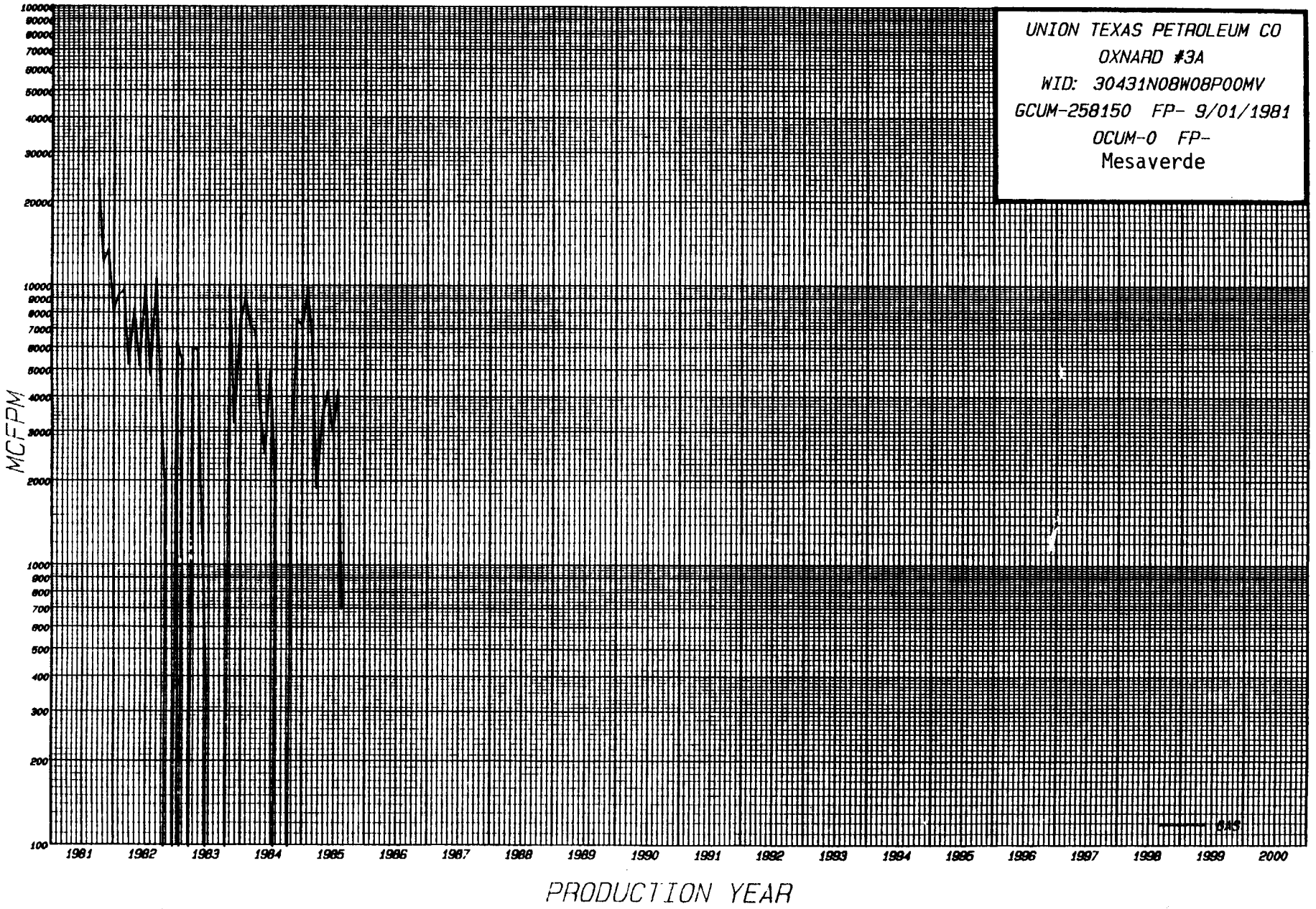
UNION TEXAS PETROLEUM CO
OXNARD #3A
WID: 30431N08W08P00MV
GCUM-258150 FP- 9/01/1981
OCUM-0 FP-
Mesaverde
MCFPM
PRODUCTION YEAR
100000
90000
80000
70000
60000
50000
40000
30000
20000
10000
9000
8000
7000
6000
5000
4000
3000
2000
1000
900
800
700
600
500
400
300
200
100
1981
1982
1983
1984
1985
1986
1987
1988
1989
1990
1991
1992
1993
1994
1995
1996
1997
1998
1999
2000

Union Texas Petroleum

375 U.S. Highway 64
Farmington, New Mexico 87401
Telephone (505) 325 3587

May 7, 1986

Arco Oil & Gas Company
1816 East Mojave
Farmington, New Mexico 87401

Gentlemen:

Union Texas Petroleum is in the process of applying for a downhole commingling order for their Oxnard #3A well located 880' FEL, 1120' FSL, Sec. 8, T31N, R8W, N.M.P.M., San Juan County, NM, in the Basin Dakota and Blanco Mesaverde.

The purpose of this letter is to notify you of such action, as our records indicate that you are the owner and operator of acreage which adjoins the area in which the downhole commingling is requested. If you have no objections to the proposed commingling order, we would appreciate your signing the attached copy of this letter and returning same to this office.

Your prompt attention to this matter would be appreciated.

Yours truly,

P. M. Pippin
Senior Production Engineer

PMP:lmg

The above downhole commingling request is hereby approved:

_____

Date: _____

Union Texas Petroleum

375 U.S. Highway 64
Farmington, New Mexico 87401
Telephone (505) 325-3587

May 7, 1986

Northwest Pipeline Corporation
P. O. Box 90
Farmington, New Mexico 87499

Gentlemen:

Union Texas Petroleum is in the process of applying for a downhole commingling order for their Oxnard #3A well located 880' FEL, 1120' FSL, Sec. 8, T31N, R8W, N.M.P.M., San Juan County, NM, in the Basin Dakota and Blanco Mesaverde.

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Your prompt attention to this matter would be appreciated.

Yours truly,

P. M. Pippin
Senior Production Engineer

PMP:lmg

The above downhole commingling request is hereby approved:

_____

Date: _____

API FORM 45-1

API WATER ANALYSIS REPORT FORM

Company		Sample No.	Date Sampled
Union Texas Petroleum		1	05/01/86
Field	**Legal Description**	**County or Parish**	**State**
Blanco	P 8 31 8	San Juan	NM
Lease or Unit	**Well**	**Depth**	**Formation**	**Water, B/D**
Oxnard	3A		Mesaverde	Trace
Type of Water (Produced, Supply, etc.)	**Sampling Point**		**Sampled By**
Produced	Separation Unit		

DISSOLVED SOLIDS

CATIONS	*mg/l*	*me/l*
Sodium, Na (calc.)	2217	96.8
Calcium, Ca	119	5.9
Magnesium, Mg	121	9.9
Barium, Ba		
Potassium, K	20	0.5

ANIONS		
Chloride, Cl	3908	110.2
Sulfate, SO_4	28	0.6
Carbonate, CO_3		
Bicarbonate, HCO_3	137	2.3
Hydroxide, OH-	0	0

Total Dissolved Solids (calc.) 6550

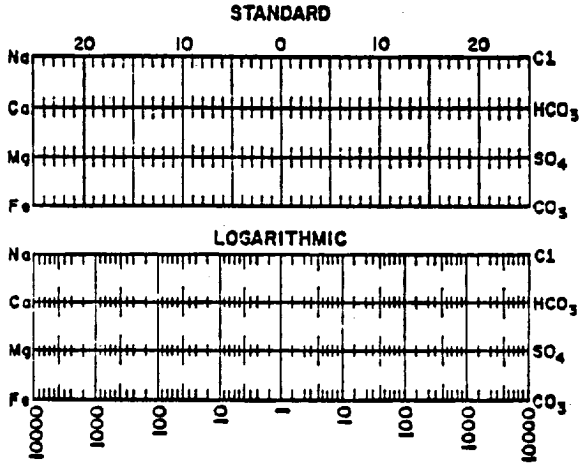
Iron, Fe (total) FE $^{++}$=10/Fe $^{+++}$=0

Sulfide, as H_2S 0

OTHER PROPERTIES

pH	5.84
Specific Gravity, 60/60 F.	1.004
Resistivity (ohm-meters) 63 F.	1.000
Total hardness	800

WATER PATTERNS — *me/l*



REMARKS & RECOMMENDATIONS:

PRODUCTION ANALYSTS
Analytical Services
P. O. Box 10112
Farmington, NM 87497

Analyst Clay Terry

Union Texas Petroleum

375 U.S. Highway 64
Farmington, New Mexico 87401
Telephone (505) 325-3587

May 7, 1986

U.S. Department of the Interior
Minerals Management Service
P. O. Drawer 600
Farmington, NM 87499

Gentlemen:

Union Texas Petroleum is in the process of applying for a downhole commingling order for their Oxnard #3A well located 880' FEL, 1120' FSL, Sec. 8, T31N, R8W, N.M.P.M., San Juan County, NM, in the Basin Dakota and Blanco Mesaverde.

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Your prompt attention to this matter would be appreciated.

Yours truly,

P. M. Pippin
Senior Production Engineer

PMP:lmg

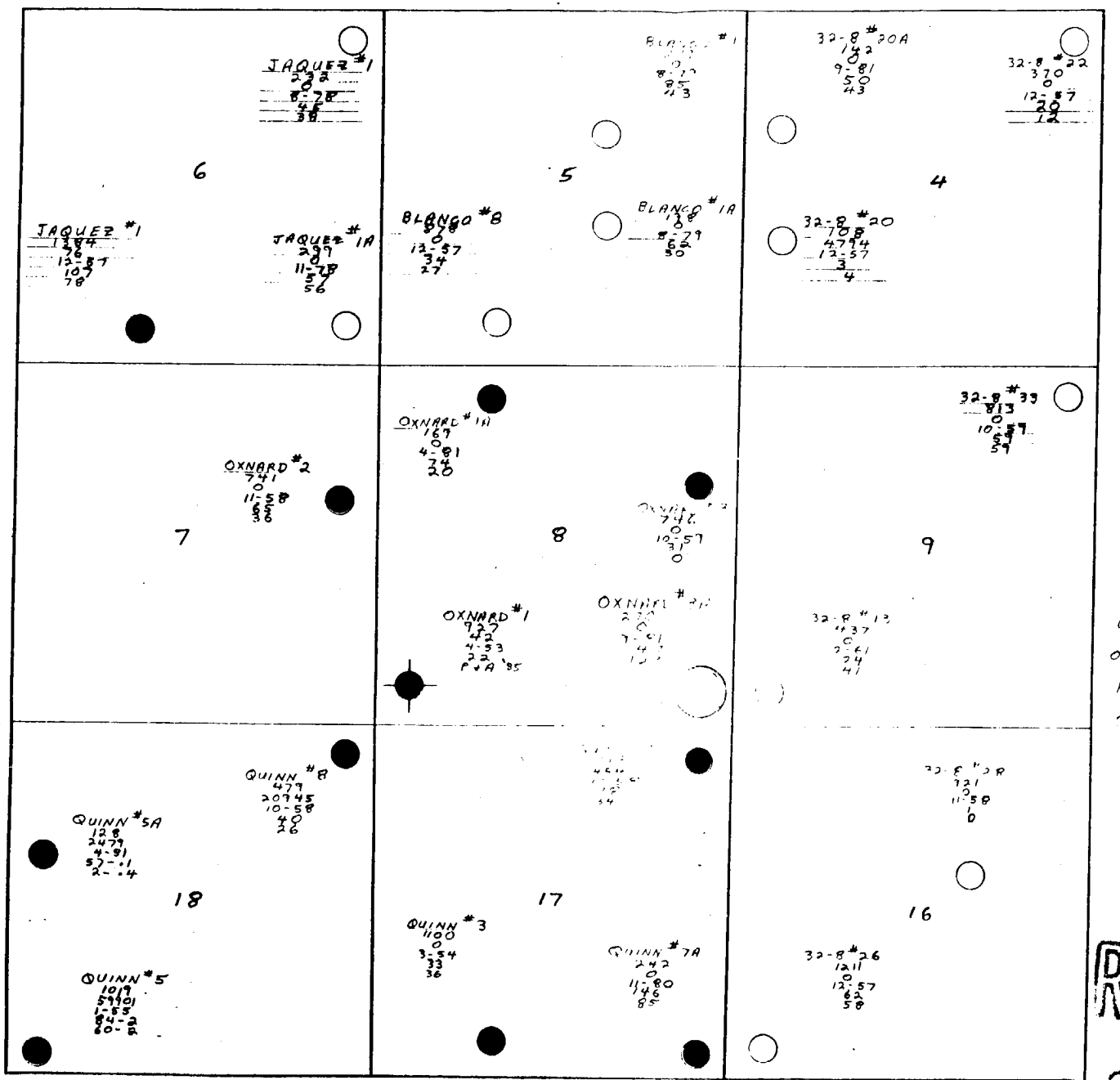
The above downhole commingling request is hereby approved:

_____

Date: _____

MESAVERDE WELLS NEAR OXNARD 3A

SAN JUAN COUNTY, N.M.



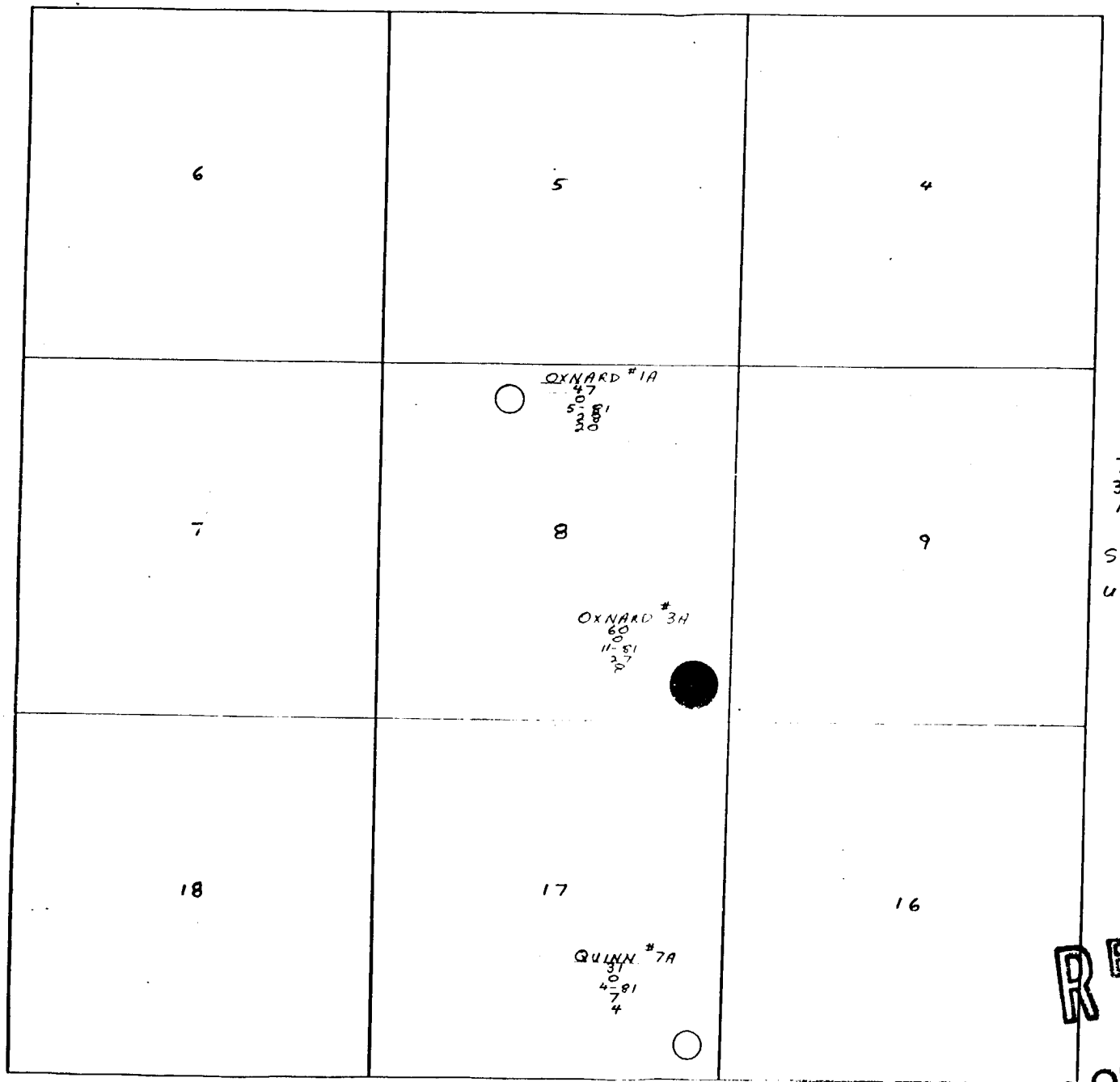
WELL NAME
CUM. GAS (MMCF)
CUM. OIL (B.O.)
1ST DEL. DATE
AVE. 1784 PROD. MCF/D-BOPD
AVE 1785 PROD. MCF/D-BOPD

GTPC OPERATED
OUTSIDE OPERATED
PLUGGED
SUBJECT WELL

5/6/86

VARIOUS WELLS NEAR OXNARD 3A

SAN JUAN COUNTY, N. M.



WELL NAME
CUM. GAS (MMCF)
CUM. OIL (BBLS)
1ST DEL. DATE
AVE. 1984 PROD. MCF/D
AVE. 1985 PROD. MCF/D

SUBJECT WELL

UTPC OPERATED

PMP
5/6/86

WORKOVER DATA SHEET

WELL NAME Oxnard #3A

DATE 12/2/85

LOCATION 880' FEL; 1120' FSL Sec. 8, T31N, R8W
San Juan County, NM

DATUM KB (13' above G.L.)

ELEVATION 6546' G.L.

TOTAL DEPTH 8122'

FIELD FORMATION Basin Dakota
Blanco Mesaverde

UNICON W.I. 75%
NR = 62.625%

COMPLETED
3/28/80

INITIAL POTENTIAL
MV: AOF=3177 MCF/D; SICP=1274 psi
DK: AOF=1990 MCF/D; SITP=2205 psi

PLUG BACK TOTAL DEPTH
8109'

CASING RECORD	CASING SIZE	WT. & GRADE	DEPTH SET	CEMENT	TOP CEMENT
13-3/4" hole	10-3/4"	32.75# H-40	324'	275 sx	circ.
9-7/8" hole	7-5/8"	26.4# K-55	3740'	350 sx	2100' (survey)
6-3/4" hole	5-1/2"	15.5# K-55	3568'-8122'	500 sx	circ.

TUBING RECORD

2-1/16"	3.25# IJ	7931'
	Baker Model R double grip pkr @ 7924'	
	2 Baker Blast Joints 5509'-5549'	
	4 Baker Blast Joints 5743'-5823'	
2-1/16"	3.25# IJ	5873'

WELL HEAD

LOGGING RECORD

Density & Induction Logs

STIMULATIONS

Perf DK 7977', 78', 79', 8001', 4', 7', 10', 13', 16', 19', 8053', 56', 59' 62', 65', 68', 71', 74', 77' w/1-0.42" hole/ft. Total 19 holes. Fraced w/50,000# 20/40 sand in slick water. Perf MV 5469', 72', 74', 5521', 23', 26', 30', 32', 36', 39', 58', 69', 5610', 12', 65', 67', 5756', 61', 69', 81', 87', 91', 99', 5804', 12', 18', 23', 64', 66', 5931', 33' w/1-0.42" shot/ft. Total 31 holes. Fraced w/ 93,000# 20/40 sand in slick water.

WORKOVER HISTORY

NONE

PRODUCTION HISTORY

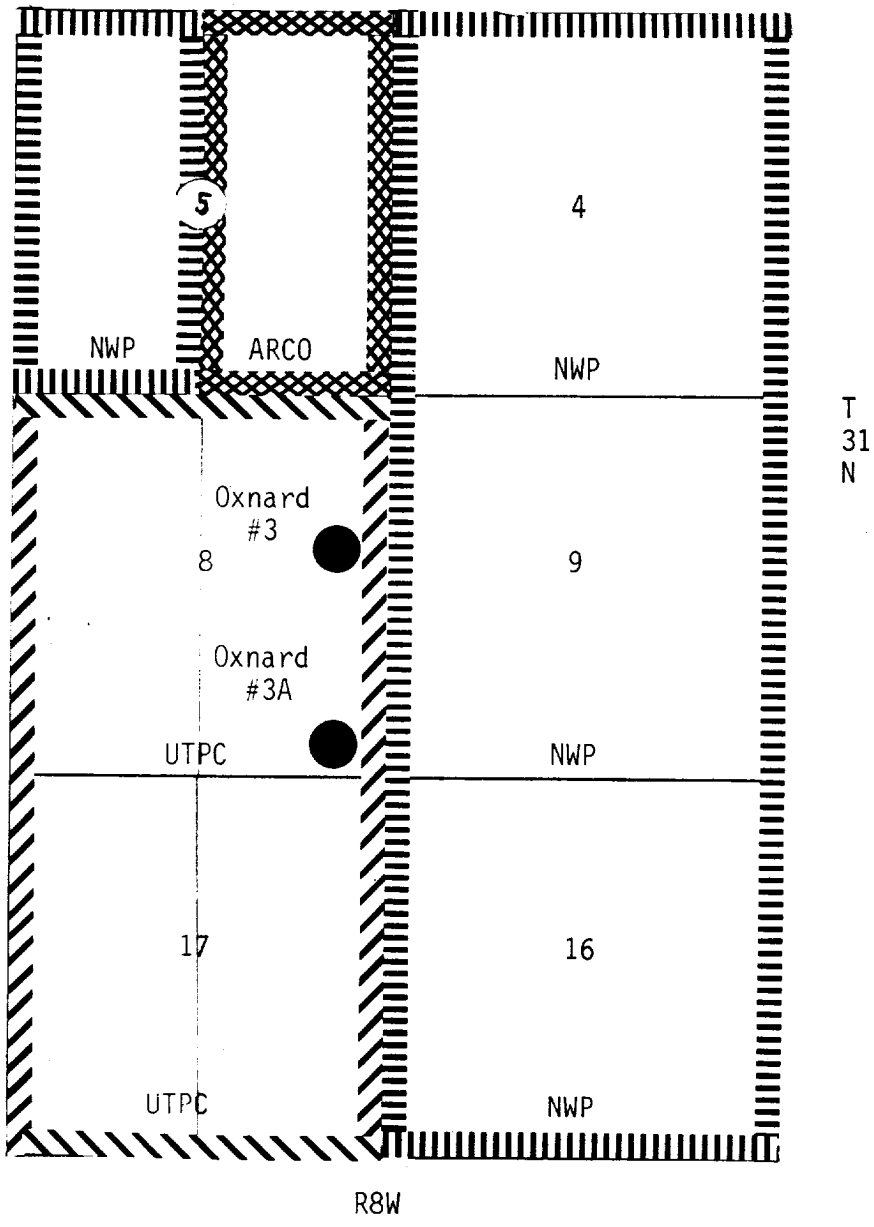
DK = 991 BTU
MV = 1011 BTU
1st Delivery: 9/81
Cumulative MV: 258 MMCF
Cumulative DK: 59 MMCF

UNION TEXAS PETROLEUM CORPORATION

Oxnard #3A

Mesaverde-Dakota Commingle Application

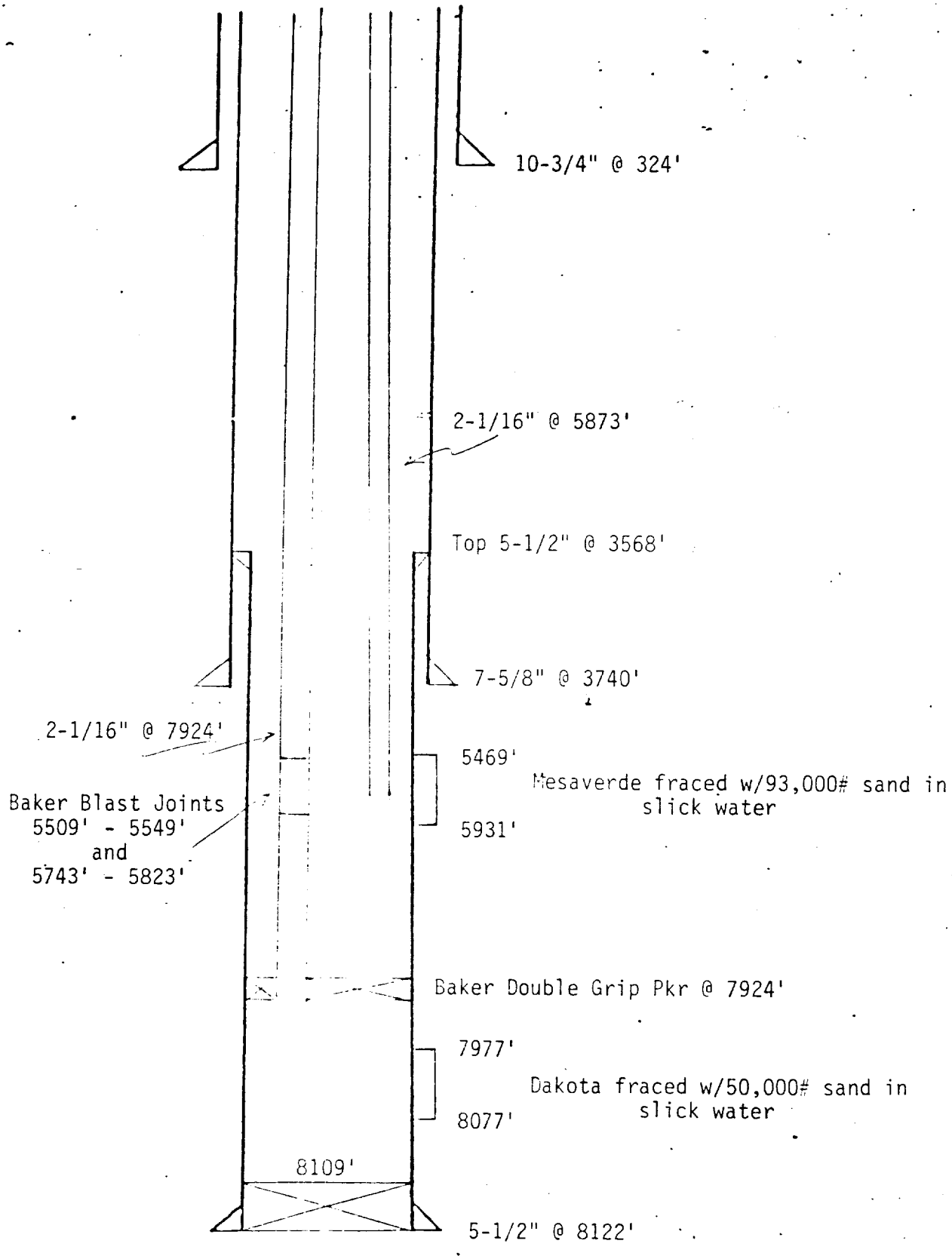
San Juan County
New Mexico



Operator

Northwest Pipeline Corp.
Union Texas Petroleum
Arco

WELL BORE DIAGRAM FOR Oxnard #3A



NEW MEXICO OIL CONSERVATION COMMISSION
WELL DELIVERABILITY TEST REPORT FOR 19 83

Form C122-A
Revised 1-1-66

POOL NAME	POOL SLOPE	FORMATION	COUNTY
Basin	n= 0.75	Dakota	San Juan

COMPANY			WELL NAME AND NUMBER		
Union Texas Petroleum Corp.			Oxnard No. 3-A		
UNIT LETTER	SECTION	TOWNSHIP	RANGE	PURCHASING PIPELINE	
P	8	31N	8W	Southern Union Gathering	
CASING O.D. - INCHES	CASING I.D. - INCHES	SET AT DEPTH - FEET	TUBING O.D. - INCHES	TUBING I.D. - INCHES	TOP - TUBING PERF. - FEET
7.625 5.500	6.969 4.950	3740 3568-8122	2.0625	1.750	7921
GAS PAY ZONE		WELL PRODUCING THRU		GAS GRAVITY	GRAVITY X LENGTH
FROM 7977 TO 8077		CASING	TUBING XX	.601	4761
DATE OF FLOW TEST			DATE SHUT-IN PRESSURE MEASURED		
FROM 4/8/83 TO 4/16/83			6/15/83		

PRESSURE DATA - ALL PRESSURES IN PSIA

(a) Flowing Casing Pressure (DWt)	(b) Flowing Tubing Pressure (DWt)	(c) Flowing Meter Pressure (DWt)	(d) Flow Chart Static Reading	(e) Meter Error (Item c - Item d)	(f) Friction Loss (a - c) or (b - c)	(g) Average Meter Pressure (Integr.)
—	289	285	289	-4	+4	305
(h) Corrected Meter Pressure (g + e)	**(i) Avg. Wellhead Press. P_t = (h + f)**	**(j) Shut-in Casing Pressure (DWt)**	**(k) Shut-in Tubing Pressure (DWt)**	**(l) P_c = higher value of (j) or (k)**	**(m) Del. Pressure P_d = 50 %P_c**	**(n) Separator or Dehydrator Pr. (DWt) for critical flow only**
301	305	—	972	972	486	—

FLOW RATE CORRECTION (METER ERROR)

Integrated Volume - MCF/D	Quotient of $\frac{\text{Item c}}{\text{Item d}}$	$\sqrt{\frac{\text{Item c}}{\text{Item d}}}$	Corrected Volume
3	.9862	.9931	Q = 3 MCF/D

WORKING PRESSURE CALCULATION

$(1-e^{-s})$	$(F_c Q_m)^2$ (1000)	$R^2 = (1-e^{-s})(F_c Q_m)^2(1000)$	P_t^2	$P_w^2 = P_t^2 + R^2$	$P_w = \sqrt{P_w^2}$
.293		FLN	93,025		Pf. 305

DELIVERABILITY CALCULATION

$$D = Q\left[\frac{P_c^2 - P_d^2}{P_c^2 - P_w^2}\right]^n = 3 \left[\left(\frac{708,588}{851,759}\right)^n = (.8319)^n = .8710\right] = 3 \text{ MCF/D}$$

REMARKS: Annual test first schedule

SUMMARY

Item b	301	Psia
P_c	972	Psia
Q	3	MCF/D
P_w	305	Psia
P_d	486	Psia
D	3	MCF/D

Company Union Texas Petroleum Corp.
By Barbara Norman
Title Production Secretary
Witnessed By
Company

OIL CONSERVATION DIVISION

P. O. BOX 2088
SANTA FE, NEW MEXICO 87501

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT

Form C-122-A
Revised 10-1-78

WELL DELIVERABILITY TEST REPORT FOR 19 86

POOL NAME	POOL SLOPE	FORMATION	COUNTY
Blanco	n=0.75	Mesaverde	San Juan

COMPANY			WELL NAME AND NUMBER		
Union Texas Petroleum Corp.			Oknard No. 3-A		
UNIT LETTER	SECTION	TOWNSHIP	RANGE	PURCHASING PIPELINE	
P	8	31N	8W	El Paso Natural Gas Co.	
CASING O.D. - INCHES	CASING I.D. - INCHES	SET AT DEPTH - FEET	TUBING O.D. - INCHES	TUBING I.D. - INCHES	TVD - TUBING DEV. - FEET
7.625 5.500	6.969 4.950	3740 3568-5122	2.0625	1.750	5863
GAS PAY ZONE		WELL PRODUCING THRU		GAS GRAVITY	GRAVITY X LENGTH
FROM 5469 TO 5933		CASING	TUBING XX	.597	3500
DATE OF FLOW TEST			DATE SHUT-IN PRESSURE MEASURED		
FROM 3/18/86 TO 3/25/86			4/1/86		

PRESSURE DATA - ALL PRESSURES IN PSIA

(a) Flowing Casing Pressure (DWT)	(b) Flowing Tubing Pressure (DWT)	(c) Flowing Meter Pressure (DWT)	(d) Flow Chart Static Reading	(e) Meter Error (Item c - Item d)	(f) Friction Loss (a-c) or (b-c)	(g) Average Meter Pressure (Integ.)
414	408	405	405	0	+ 3	333
(h) Corrected Meter Pressure (g + e)	**(i) Avg. Wellhead Press. P_t = (h+f)**	**(j) Static Casing Pressure (DWT)**	**(k) Static Tubing Pressure (DWT)**	**(l) P_c = higher value of (j) or (k)**	**(m) Del. Pressure P_d = 70 %P_c**	**(n) Separator or Bradenhead Pr. (DWT) for critical flow only**
333	336	527	485	527	369	——

FLOW RATE CORRECTION (METER ERROR)

Integrated Volume - MCF/D	Quotient of Item e / Item d	$\sqrt{\text{Item e / Item d}}$	Corrected Volume
273	1.000	1.000	Q = 273 MCF/D

WORKING PRESSURE CALCULATION

$(1-e^{-s})$	$(P_c\ Q_{int})^2\ (1000)$	$R^2 = (1-e^{-s})(P_c\ Q_{int})^2(1000)$	P_t^2	$P_w^2 = P_t^2 + R^2$	$P_w = \sqrt{P_w^2}$
.225	13,063	2939	112.896	115.835	340

DELIVERABILITY CALCULATION

$$D = Q\left[\frac{P_c^2 - P_d^2}{P_c^2 - P_w^2}\right]^n = 273 \left[\left(\frac{141,568}{161,894}\right)^{.75} = .8744\right]^{.85} = .9042 = 247 \text{ MCF/D}$$

REMARKS:

SUMMARY

Item h	333	Psia
P_c	527	Psia
Q	373	MCF/D
P_w	340	Psia
P_d	369	Psia
D	247	MCF/D

Company: Union Texas Petroleum Corp.
By: Barbara Norman 4/18/86
Title: Production Technician
Witnessed By:
Company: