Gulf Oil Exploration and Production Company

R. C. Anderson
PRODUCTION MANAGER
HOBBS AREA

P. O Box 670
Hobbs, NM 88240

December 17, 1984

Re: C. D. Woolworth #7
Unit J, Section 30-T24S-R37E
Lea County, New Mexico

Case 9467

Mr. Richard L. Stamets
Energy and Minerals Department
New Mexico Oil Conservation Division
P. O. Box 2088
Santa Fe, New Mexico 87501

Gentlemen:

Your administrative approval is requested for an exception to Rule 303-C to permit down-hole commingling of Jalmat Yates Seven Rivers and Langlie Mattix Seven Rivers Queen production in the subject well.

Please find enclosed all pertinent data regarding this application as outlined in Rule No. 303-C.

Yours very truly,

for R. C. ANDERSON

MJP/skc
Enclosures

cc: New Mexico Oil Conservation Division
District I Office
P. O. Box 1980
Hobbs, New Mexico 88240

Offset Operators

C. D. Woolworth #7
Unit J, Section 30-T24S-R37E
Lea County, New Mexico

Approval is requested for an exception to Rule 303-C to permit down-hole commingling of the Jalmat Yates Seven Rivers and Langlie Mattix Seven Rivers Queen production in the subject well.

The C. D. Woolworth #7 was approved for dual completion in the Jalmat and Langlie Mattix on Form C-107 dated 10-4-84. Permission to commingle the Jalmat with the Langlie Mattix at the surface was approved on Commingling Order PC-683 dated 12-10-84.

Both the Jalmat and Langlie Mattix are currently being pumped. The Langlie Mattix is being produced into the tank battery along with Langlie Mattix production from the C. D. Woolworth #4 and #5 and Jalmat production from the C. D. Woolworth #6. The Jalmat production from the C. D. Woolworth #7 is currently being produced into a portable tank while it is being tested.

The fluids show no evidence of incompatibility; therefore, down-hole commingling is not expected to result in reservoir damage. Ownership in the two pools is common and correlative rights will not be violated.

Should secondary recovery operations become practical in the future, the two zones could be separated at such time without damaging either reservoir.

Offset operators are being notified of the intent to down-hole commingle subject well by copy of this application.

1. Operator: Gulf Oil Corporation, P. O. Box 670, Hobbs, NM 88240

2. Lease, Well and Location: C. D. Woolworth #7, Unit J, 1980' FSL and 1980' FEL, Section 30-T24S-R37E, Lea County, New Mexico.

3. Producing Zones: Currently producing both the Jalmat Yates Seven Rivers and the Langlie Mattix Seven Rivers Queen which are to be commingled if approved.

4. Production Decline: The Jalmat gas is expected to decline 20% per year after an IP of 150 MCFPD while the oil will decline 20% per year after an IP of 4.5 BOPD. The Langlie Mattix gas is expected to decline 15% per year after an IP of 50 MCFPD while the oil will decline 23% per year after an IP of 10 BOPD.

5. Bottom Hole Pressure: Jalmat BHP at 3224' is 202 psi. Langlie Mattix BHP corrected to 3224' is 242 psi. See attached sheet.

6. Fluid Characteristics: The Jalmat and Langlie Mattix are currently commingled in surface facilities located on the C. D. Woolworth lease per Commingling Order PC-683 dated 12-10-84. To date, there has been no evidence of fluid incompatibility.

7. Well History: The well was spudded 8-1-84 and drilled to a total depth of 3750'. Ten and three-quarter inch surface pipe was set at 450' and cement was circulated to surface. Seven inch production casing was set at 3737' and cement was circulated to the surface.

   8-22-84, perforated the Langlie Mattix at 3509', 3545', 3585', 3601', 3604', 3618', 3624', and 3636' with 1-0.4" JHPF. Broke down each perforation with 42 gallons of 15% MCA. Fractured with 5000 gallons of 20# guar and 40,000 gallons of cross-linked 40# HPG with 124,000# of 20/40 mesh sand.

   9-6-84, installed electric service and equipped Langlie Mattix to pump.

   10-3-84, perforated Jalmat at 3206', 3208', 3216', 3219', 3222', 3279', 3349', 3376', 3404', 3406', 3432', and 3434' with 1-½" JHPF. Broke down each perforation with 42 gallons of 15% MCA. Fractured with 5000 gallons of 20# guar and 33,000 gallons of cross-linked 40# HPG with 50,000# of 10/20 mesh Ottawa sand.

   10-10-84, equipped Jalmat to pump.

8. Value of Commingled Fluids: Jalmat and Langlie Mattix oil production is currently being commingled in surface storage facilities on the subject lease, therefore, downhole commingling will not effect the price which is approximately 6 cents per day more than the total revenue from the individual pools. (see attached sheet)

9. Current Production: See attached State Form C-116.

SUGGESTED ALLOCATION

	Jalmat	Langlie Mattix
Oil	33%	67%
Gas	88%	12%

The suggested allocation of produced hydrocarbons is based on the percentages of oil and gas produced on the latest C-116.

WOOLWORTH OFFSET OPERATORS

Conoco
P. O. Box 460
Hobbs, New Mexico 88240

John Yuronka
102 Petroleum Bldg.
Midland, Texas 79701

Union Texas Petroleum Co.
1300 Wilco Bldg.
Midland, Texas 79701

Getty Oil
P. O. Box 730
Hobbs, New Mexico 88240

ARCO Oil and Gas
P. O. Box 1710
Hobbs, New Mexico 88240

Doyle Hartman
500 N. Main
Midland, Texas 79701

Texaco
P. O. Box 728
Hobbs, New Mexico 88240

Cities Service
P. O. Box 1919
Midland, Texas 79702

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT

OIL CONSERVATION DIVISION

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

Form C-107
Revised 2-1-82

APPLICATION FOR MULTIPLE COMPLETION

Gulf Oil Corporation	Lea	9-27-84
Operator	County	Date
P. O. Box 670, Hobbs, NM	C. D. Woolworth	7
Address	Lease	Well No.

Location of Well	Unit	Section	Township	Range
	J	30	24S	37E

All Applicants for multiple completion must complete Items 1 and 2 below.

1. The following facts are submitted:	Upper Zone	Intermediate Zone	Lower Zone
a. Name of Pool and Formation	Jalmat Yates 7 Rivers		Langlie Mattix 7 Rivers Queen
b. Top and Bottom of Pay Section (Perforations)	3206-3434'		3509-3636'
c. Type of production (Oil or Gas)	Gas		Oil
d. Method of Production (Flowing or Artificial Lift)	Flow		Pump
e. Daily Production ☐ Actual ☒ Estimated Oil Bbls. Gas MCF Water Bbls.	 0 BO 150 MCF 0 BW	 	 13 BO 100 MCF 45 BW

2. The following must be attached:

a. Diagrammatic Sketch of the Multiple Completion, showing all casing strings, including diameters and setting depths, centralizers and/or turbolizers and location thereof, quantities used and top of cement, perforated intervals, tubing strings, including diameters and setting depth, location and type of packers and side door chokes, and such other information as may be pertinent.

b. Plat showing the location of all wells on applicant's lease, all offset wells on offset leases, and the names and addresses of operators of all leases offsetting applicant's lease

c. Electrical log of the well or other acceptable log with tops and bottoms of producing zones and intervals of perforation indicated thereon. (If such log is not available at the time application is filed it shall be submitted as provided by Rule 112-A.)

at OCD

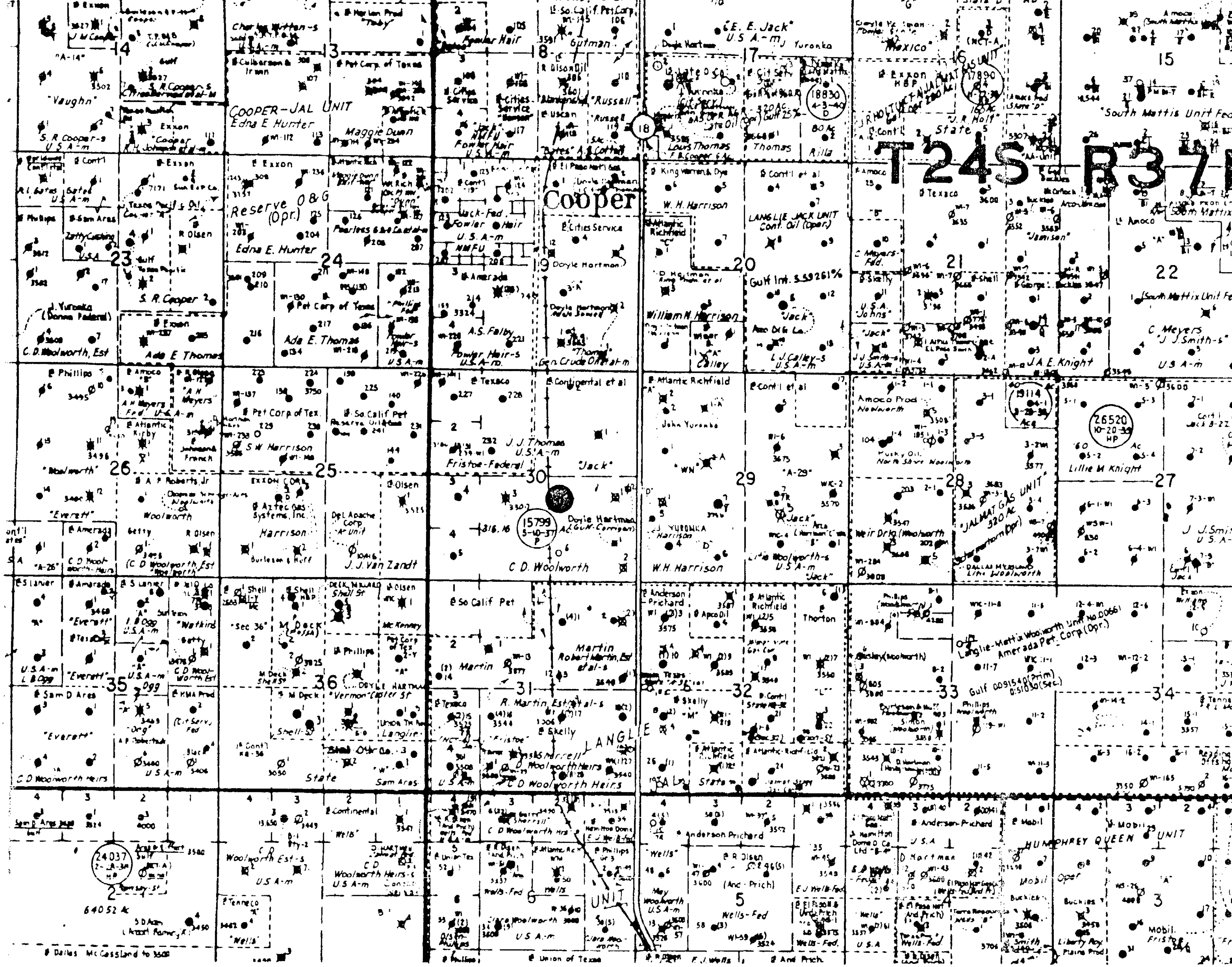
I hereby certify that the information above is true and complete to the best of my knowledge and belief.

Signed R L Putue Title Area Prod Mgr Date 9-27-84

(This space for State Use)

Approved By [signature] Title DISTRICT 1 SUPERVISOR Date OCT - 4 1984

NOTE: If the proposed multiple completion will result in an unorthodox well location and/or a non-standard proration unit in one or more of the producing zones, then separate application for approval of the same should be filed simultaneously with this application.


T24S-R37E
Cooper
COOPER-JAL UNIT
Edna E Hunter
Reserve O&G (Opr.)
Edna E. Hunter
LANGLIE JACK UNIT
Cont. Oil (Oper.)
JALMAT GAS UNIT
Langlie-Mattix Woolworth Unit No. D0661
Amerada Pet. Corp. (Opr.)
HUMPHREY QUEEN UNIT
LANGLIE JAL UNIT
"South Mattis Unit Fed"
South Mattix Unit Fed.
C. D. Woolworth
W. H. Harrison
J. J. Thomas
U.S.A.-m
Fristoe-Federal
J. J. Van Zandt
Ada E. Thomas
S. R. Cooper
Lillie M Knight
J. A. E. Knight
C. Meyers
"J. J. Smith-s"
Martin
Robert Martin, Est et al-s
C D Woolworth Heirs
Wells-Fed
Anderson Prichard
State
"Everett"
"Vaughn"
"Woolworth"
Maggie Dunn
Fowler Hair
Gutman
"Russell"
Doyle Hartman
Gulf Int. 5.55261%
"Jack"
26520 10-20-39 HP
19114
17890
18830 4-3-40 D
15799 5-10-37 P
24037
640 52 Ac
Dallas McCassland to 3500
Union of Texas
1 2 3 4 5 6 7 8 9 13 14 15 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36

NEW MEXICO OIL CONSERVATION COMMISSION

WELL LOCATION AND ACREAGE DEDICATION PLAT

Form C-102
Supersedes C-128
Effective 1-1-65

All distances must be from the outer boundaries of the Section.

Operator	Lease	Well No.
Gulf Oil Corporation	C. B. Woolworth	7

Unit Letter	Section	Township	Range	County
J	30	24 South	37 East	Lea County

Actual Footage Location of Well: 1980 feet from the South line and 1980 feet from the East line

Ground Level Elev.	Producing Formation	Pool	Dedicated Acreage:
3257.7	Yates 7 Rivers	Jalmat	40 Acres

1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.

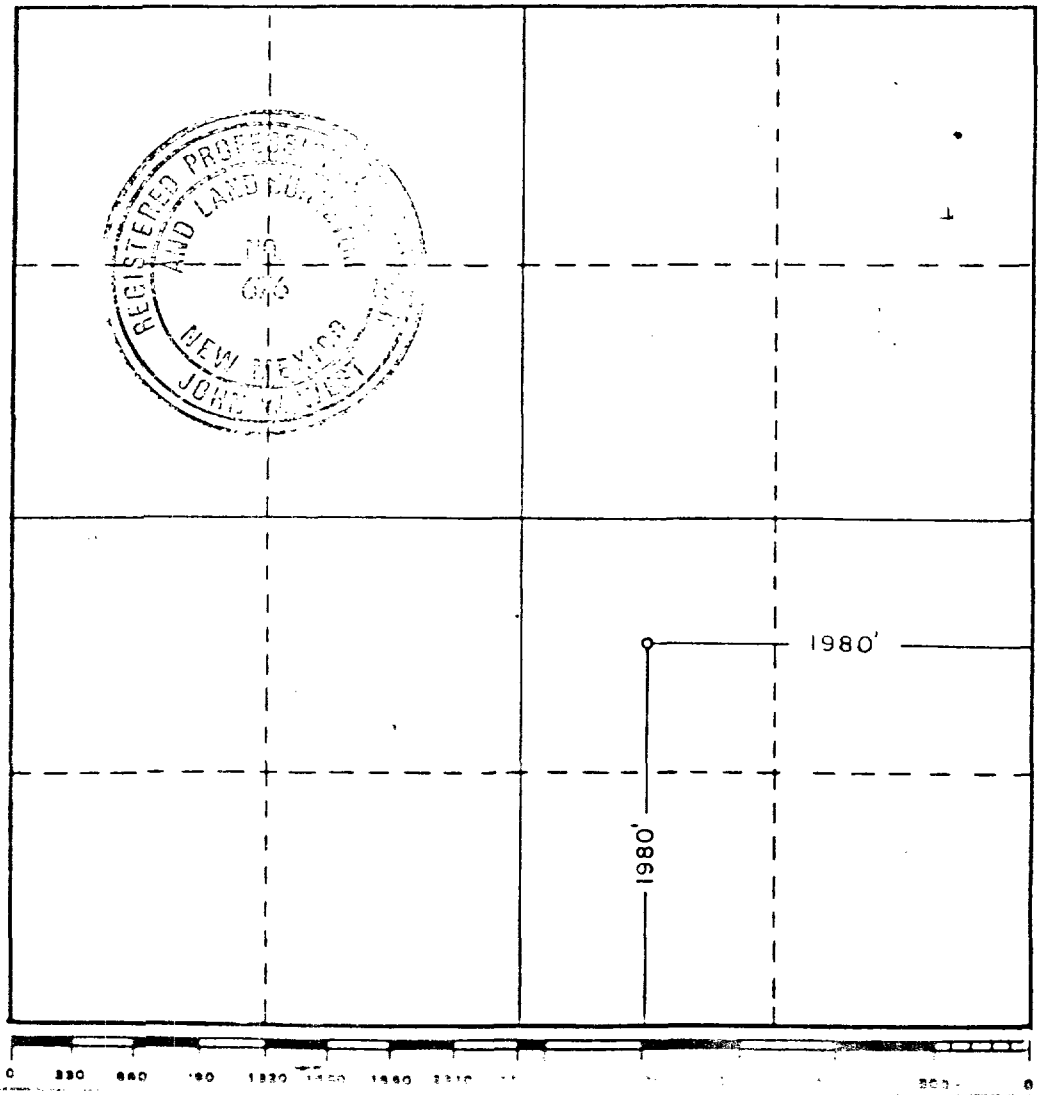
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).

3. If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consolidated by communitization, unitization, force-pooling. etc?

☐ Yes ☐ No If answer is "yes," type of consolidation _____

If answer is "no," list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.) _____

No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interests, has been approved by the Commission.



CERTIFICATION

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

R D Pitre

Name: R.D. PITRE

Position: AREA ENGINEER

Company: GULF OIL CORP

Date: 10-23-84

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 knowledge and belief.

Date Surveyed: July 2, 1984

Registered Professional Engineer and/or Land Surveyor

John W. West

Certificate No. JOHN W. WEST, 676

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT

OIL CONSERVATION DIVISION
P. O. BOX 2088
SANTA FE, NEW MEXICO 87501

Form C-116
Revised 10-1-78

GAS-OIL RATIO TESTS

Operator: [illegible] Oil Corporation | Pool: Jalmat | County: Lea

Address: [illegible] 670, Hobbs, NM 88240

TYPE OF TEST - (X): Scheduled ☐ Completion ☒ Special ☐

LEASE NAME	WELL NO.	LOCATION U	LOCATION S	LOCATION T	LOCATION R	DATE OF TEST	STATUS	CHOKE SIZE	TBG. PRESS.	DAILY ALLOW-ABLE	LENGTH OF TEST HOURS	PROD. DURING TEST WATER BBLS.	GRAV. OIL	OIL BBLS.	GAS M.C.F.	GAS - OIL RATIO CU.FT/BBL
D Woolworth	7	J	30	24	32	12-11-84	P	2" wo	50	3	24	14	30.8	3	108.0	3600

Completion Test

No well will be assigned an allowable greater than the amount of oil produced on the official test.

During gas-oil ratio test, each well shall be produced at a rate not exceeding the top unit allowable for the pool in which well is located by more than 25 percent. Operator is encouraged to take advantage of this 25 percent tolerance in order that well can be assigned increased allowables when authorized by the Division.

Gas volumes must be reported in MCF measured at a pressure base of 15.025 psia and a temperature of 60° F. Specific gravity base will be 0.60.

Report casing pressure in lieu of tubing pressure for any well producing through casing.

Mail original and one copy of this report to the district office of the New Mexico Oil Conservation Division in accordance with Rule 301 and appropriate pool rules.

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

D. D. Jennings (Signature)

Well Tester (Title)

12-14-84 (Date)

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT

OIL CONSERVATION DIVISION
P. O. BOX 2088
SANTA FE, NEW MEXICO 87501

Form C-116
Revised 10-1-78

GAS – OIL RATIO TESTS

Operator: Mlf Oil Corporation | Pool: Langlie Mattix Seven Rivers Queen | County: Lea

Address: Box 670, Hobbs, NM 88240 | TYPE OF TEST – (X) | Scheduled ☐ | Completion ☒ | Special ☐

LEASE NAME	WELL NO.	LOCATION U	S	T	R	DATE OF TEST	STATUS	CHOKE SIZE	TBG. PRESS.	DAILY ALLOWABLE	LENGTH OF TEST HOURS	PROD. DURING TEST WATER BBLS.	GRAV. OIL	OIL BBLS.	GAS M.C.F.	GAS – RATI CU.FT/
D. Ubelworth	7	J	30	24	37	12-11-84	P	2" wo	25	18	24	18	31.6	6	15.0	2500
						completion Test										

No well will be assigned an allowable greater than the amount of oil produced on the official test.

During gas-well rate test, each well shall be produced at a rate not exceeding the top unit allowable for the pool in which well is located by more than 25 percent. Operator is encouraged to take advantage of this 25 percent tolerance in order that well can be assigned increased allowables when authorized by the Division.

Gas volumes must be reported in MCF measured at a pressure base of 15.025 psia and a temperature of 60° F. Specific gravity base will be 0.60.

Report casing pressure in lieu of tubing pressure for any well producing through casing.

Mail original and one copy of this report to the district office of the New Mexico Oil Conservation Division in accordance with Rule 301 and appropriate pool rules.

I hereby certify that the above infor is true and complete to the best of my ledge and belief.

D. R. Lanniers
Well Tester (Signature)

(Title)

12-14-84

C. D. WOOLWORTH LEASE, TANK BATTERY
Section 30-T24S-R37E
LEA COUNTY, NEW MEXICO

WELLS AND POOL	PRODUCTION AUG. 84	SEPT. 84	TOTAL	AVG. BOPD
C. D. Woolworth #6, 7 Jalmat				3
C. D. Woolworth #4, 5, 7 Langlie Mattix	313	310	623	10.2

	BOPD	GRAVITY	$/BBL	$/DAY
Jalmat	3	31.3	31.33	93.99
Langlie Mattix	10.2	32.6	31.35	319.77
TOTAL				413.76
Commingled	13.2	32.3	31.35	413.82
			Difference	+0.06

JOHN W. WEST ENGINEERING COMPANY
412 NORTH DAL PASO, HOBBS, NEW MEXICO

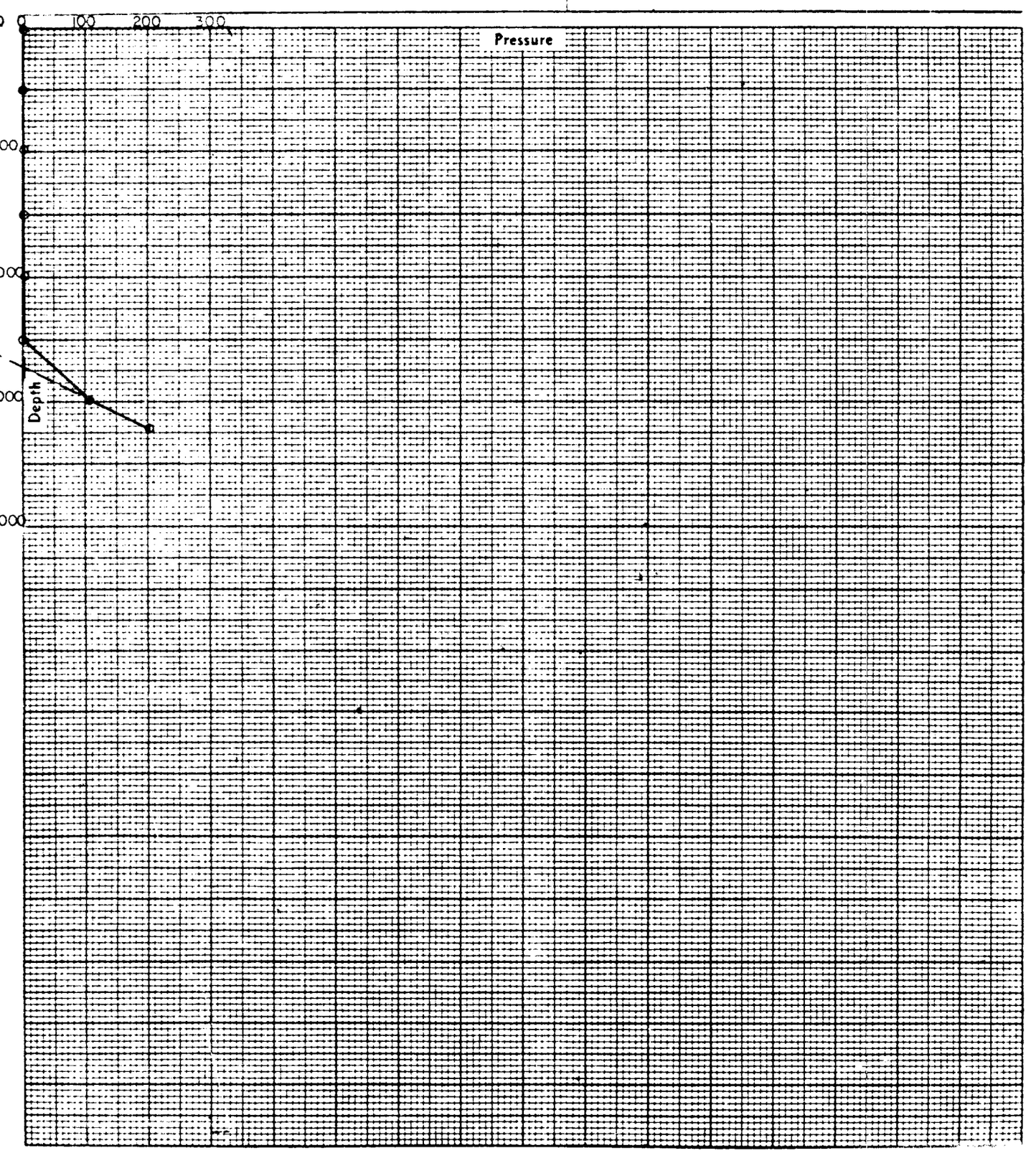
TELEPHONES 393-3942
393-3117

BOTTOM HOLE PRESSURE SURVEY REPORT

OPERATOR GULF OIL CORPORATION
LEASE C.B. WOOLWORTH
WELL NO. 7 (Jalmat Upper Zone)
FIELD
DATE 12-1-8 TIME 8:00 A.M.

STATUS TEST DEPTH 3224'
TIME S.I. LAST TEST DATE
CAS. PRES. BHP LAST TEST
TUB. PRES. 0 PSI BHP CHANGE
ELEV. FLUID TOP 2750'
DATUM WATER TOP
TEMP RUN BY R.B.
CLOCK NO. 23123 GAUGE NO. 19389
ELEMENT NO. 13129 (0-2500 PSI)

DEPTH	PRESSURE	GRADIENT
000	000	
500	000	Neg.
1000	000	Neg.
1500	000	Neg.
2000	000	Neg.
2500	000	Neg.
3000	108	.108
3224	202	.420



JOHN W. WEST ENGINEERING COMPANY
412 NORTH DAL PASO, HOBBS, NEW MEXICO

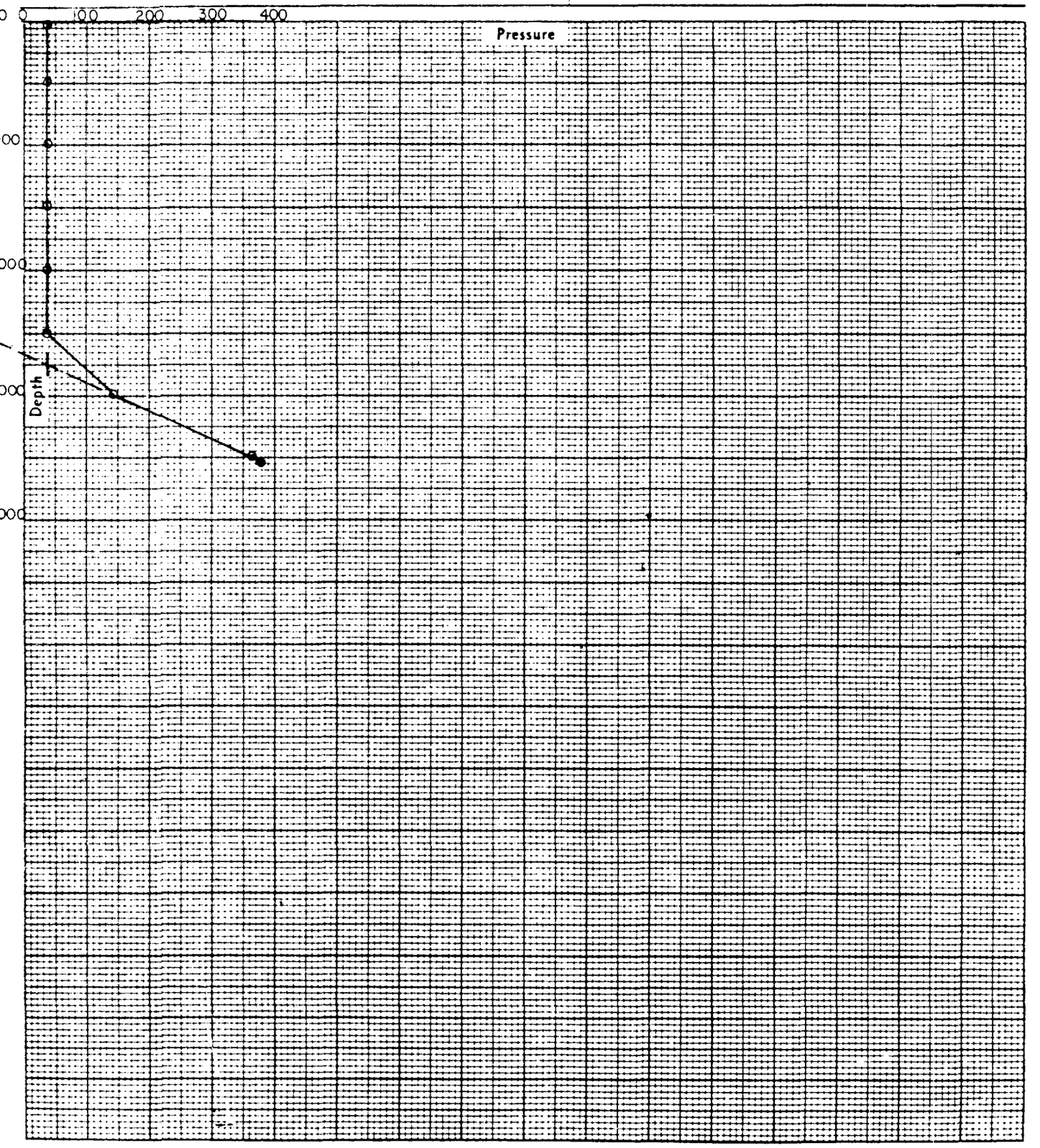
TELEPHONES 393-3942
393-3117

BOTTOM HOLE PRESSURE SURVEY REPORT

OPERATOR GULF OIL CORPORATION
LEASE C.B. WOOLWORTH Langlie Mattix
WELL NO. 7 Lower Zone.
FIELD
DATE 12-1-84 TIME 8:45 A.M.

STATUS Shut-In TEST DEPTH 3530'
TIME S.I. LAST TEST DATE
CAS. PRES. BHP LAST TEST
TUB. PRES. 35 PSI BHP CHANGE
ELEV FLUID TOP 2750'
DATUM WATER TOP
TEMP RUN BY R.E.
CLOCK NO 23123 GAUGE NO. 19389
ELEMENT NO. 18129 (0-2500 PSI)

DEPTH	PRESSURE	GRADIENT
000	035	
500	035	Neg.
1000	035	Neg.
1500	035	Neg.
2000	035	Neg.
2500	035	Neg.
3000	142	.214
3500	366	.448
3530	380	.467



WELL DATA SHEET

EASE & WELL NO. C. D. Woolworth #7 FIELD/POOL Langlie Mattix 7 Rivers Queen/ Jalmat Yates 7 Rivers DATE 11/27/84

OCATION 1980 FEET FROM South LINE AND 1980 FEET FROM East LINE

ECTION 30, T 24S, R 37E COUNTY Lea STATE NM

GE 3258 '
KDB to GE 12 '
DF to GE _____ '

10 3/4" OD Surface Pipe
set @ 450 ' w/ 450 sx
Cmt. Circulated? yes

3206'
3208'
3216'
3219'
3222'
3279'
3349'
3376'
3404'
3406'
3432'
3434'

Jalmat
1-½" JHPF

3509'
3545'
3585'
3601'
3604'
3618'
3624'
3636'

Langlie-Mattix
1-0.4" JHPF

7 " OD 23# Thd
Gr. K-55, ST&C Csg.
set @ 3737 ' w/ 1800 sx
Cmt Circulated? yes
TOC @ Surf ' by

PBD 3690 '
TD 3750 '

Date Completed 8-84 / 10-84
Initial Formation Langlie-Mattix / Jalmat
From: 3509/3206 ' to 3636/3434 ' GOR _____
Initial: Production ☐ _____ bopd _____ bwpd
Or: Injection ☐ _____ bwpd @ _____ psi
Completion Data:

Subsequent Workover or Reconditioning:

Present Inj. ☐ _____ bwpd @ _____ psi Date __
Present Prod. ☐ _____ bopd _____ bwpd Date __
GAS _____ MCFPD _____

Remarks Or Additional Data: _____

MJP