

**CASE 3150: Application of CONTINENTAL
SAI COMPANY for three non-standard
protection units.**

Case No.

2159

Application, Transcript,
Small Exhibits, Etc.

4-1-54

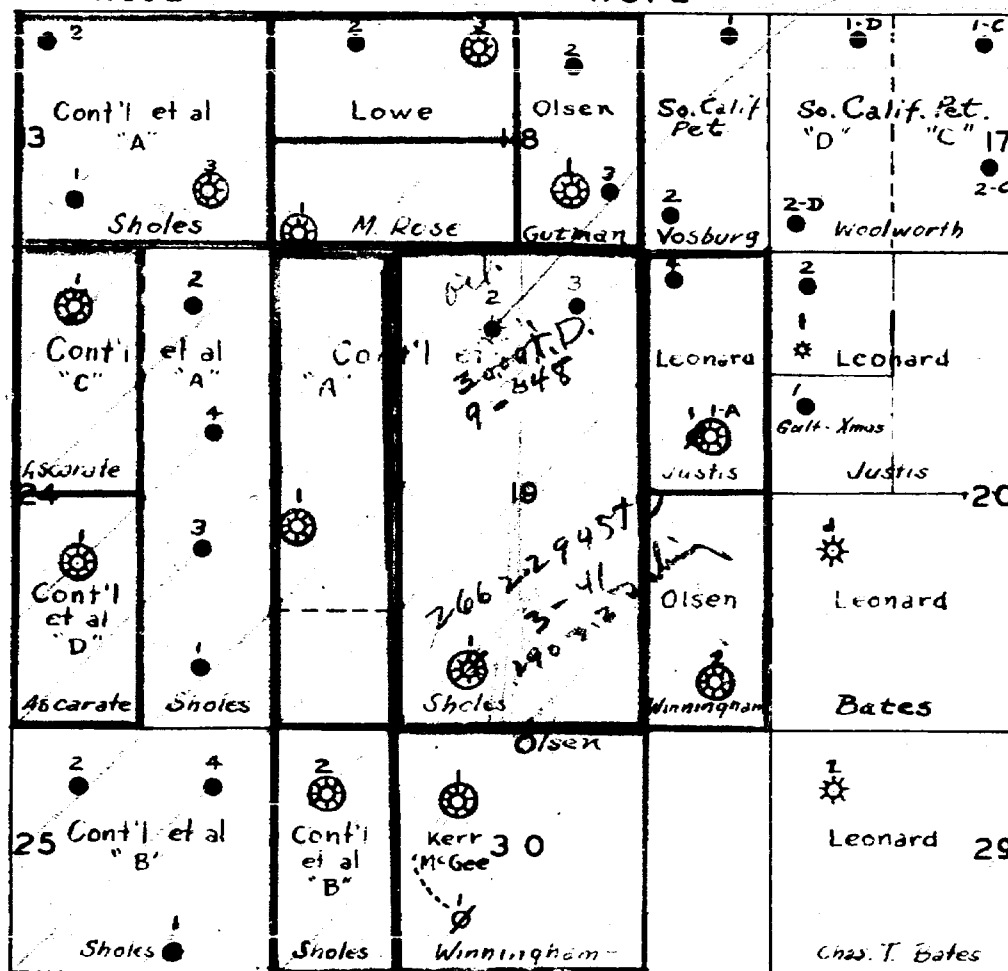
Single- Bradenhead-G.C. or G.C. Dual

255

55-1562

CASE NO.

R 37 E



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25
S

C-116 5-60

SHOLES A-19 & B-19 LEASES

SURROUNDING LEASEHOLDINGS AND WELLS

Sholes B-19 No. 1 ○

Proposed Gas Unit

Approved Gas Unit Well O

Approved Gas Unit

RECEIVED
811

NEW MEXICO OIL CONSERVATION COMMISSION
One-point Back Pressure Test for Gas Wells
(Deliverability)

Form C-122-C
4-1-31

Pool Jalnet Formation Yates County Lee
Initial Annual X Special Shalen B-19 Date of test 3/7-11/40 AM 9 40
Company Continental Oil Company Lease Shalen B-19 Well No. 1
Unit 1 Sec. 19 Twp. 28 Rge. 37 Purchaser El Paso Natural Gas Co.
Casing 7" Wt. 23.1 I.D. 6.366 Set at 2662 Perf. O.H. 2662 To 2945
Tubing None Wt. 2662 I.D. 6.366 Set at 2662 x G .677 = GL 1802 Bar. Press. 13.2
Gas Pay: From 2662 To 2945 L 2662 Type Well Single
Producing Thru: Casing X Tubing Single- Bradenhead-G.C. or G.C. Dual

			FLOW DATA		Type Taps	Line Size	Orifice Size	Static Press.	Differ- ential	Flow Temp.
Date	Started time	Taken Date time	Duration Hours							
3-7	8:00 AM	3-8 8:00 AM	24	FLG	4"	1.500	129	10.24	55°	

FLOW CALCULATIONS							Rate of Flow MCF/Da. @ 15.025 psia
Static Pressure P _s	Differ- ential P _d	Meter Extension P _s h _w	24-Hour Coeff- icient	Gravity Factor F _g	Temp. Factor F _t	Compress- ibility F _{pv}	
142.2	10.24	38.16	13.99	.9414	1.0048	1.013	511.6

SHUT-IN DATA				FLOW DATA			
Shut-in Date	Time	Press. Taken Date Time	Duration Hours	Wellhead Pressure P _o psia	Working Pressure P _w and P _t psia		
3-8	8:00 AM	3-9 8:00 AM	24	218.2			145.2
		3-10	48	228.2			
		3-11	72	231.2			

PRODUCTION CALCULATIONS (if necessary)
 $P_w^2 = (145.2)^2 + (1.4915 \times .5116)^2 \times 117 = 21.09$
 $P_w = 145.2$ (Pressure Drop Insignificant)

DELIVERABILITY CALCULATIONS
 $P_o = 145.2$ $P_s = 231.2$ $P_o + P_s = .6280$
 $P_w = .3720$ $1 + \frac{P_w}{P_o} = 1.6280$ $\frac{P_w}{P_o} = .6056$
 $1.6280 \times .5945 = 9.774152-10$ $\times .987 = .987$
 $\log 9.774152-10 = 9.777088-10$
 $\log 2 = 2.708930$
 $\log 2 = 2.486018$
 $\log 2 = 306.2$

COMPANY Continental Oil Company
ADDRESS Box 68, Eunice, New Mexico
AGENT and TITLE J. K. Harker Dist. Supt.
WITNESSES
COMPANY

REMARKS

MMOCC-3 WEG HLJ WAM FILE-2

Re: Continental
wells B-1#1
A-1-25-36

Dear Elvis

The proposed unit of continental is located in sec. 1, T25S-R36E — The wells B#1, certainly should be productive of gas over the entire proposed unit; well logs certainly verify this. The gas/oil contact in this area is very erratic, and is at about $(\pm) +100'$ above sea level instead of $-150'$ ss. This erratic g/o contact is due to the past production history of this area of the Jalwat, mainly due to the tremendous amount of gas that had been flared in the past.

Due to the fact that some porosity or Porus formation stringers now carry some oil above the original gas/oil contact, this well might possibly make a small amount of oil, or water. Refer to, Case 2014, to the exhibits and study made by this office. This area is very similar to Case 2014, except that the water in these zones is properly pushing oil ahead, and this oil is the oil encountered above normal g/o contact, around the continental - wells B-1#1 proposed unit.

Elvis!

I interpret this to mean that the entire unit is gas productive.

JLR

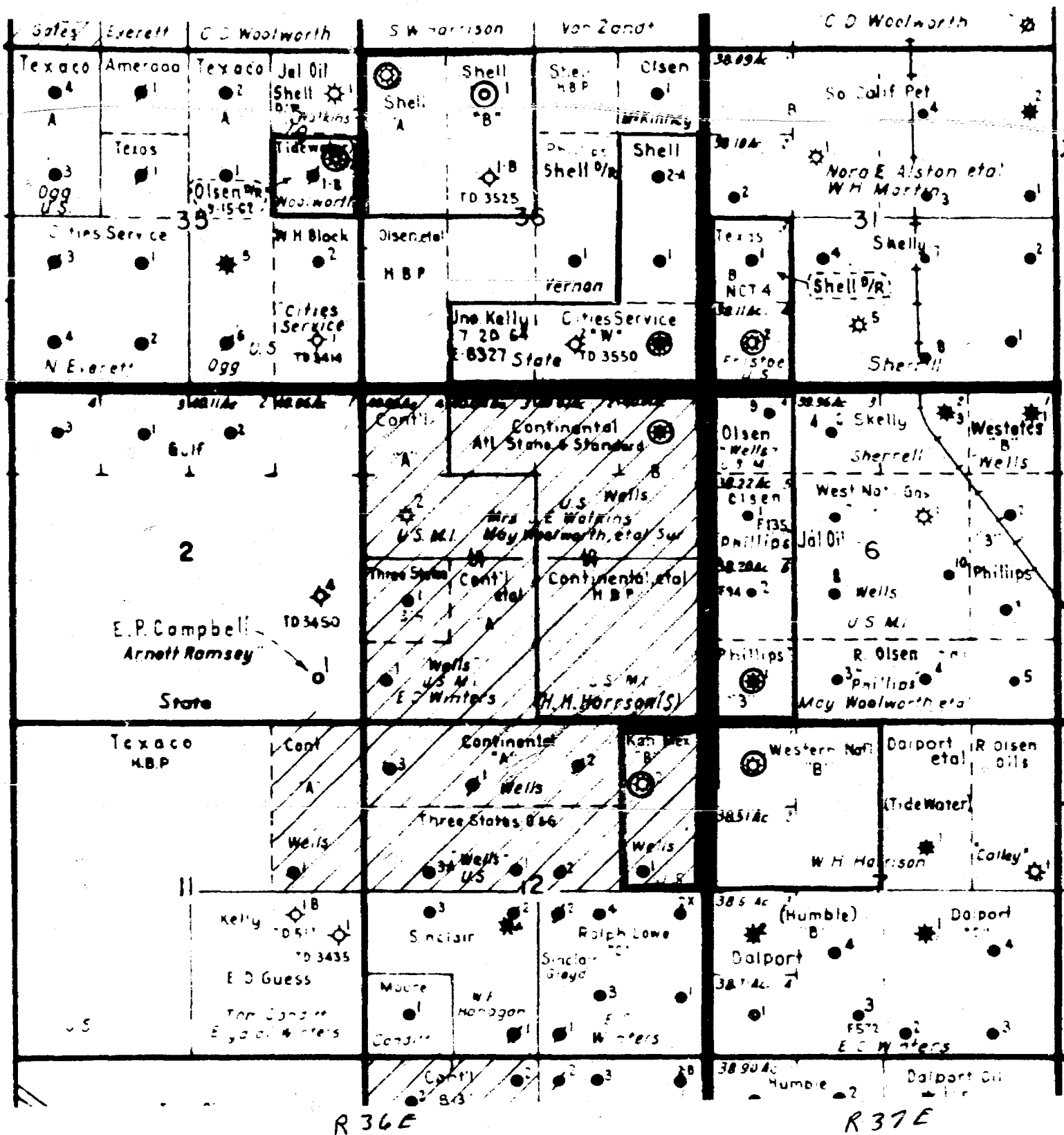
Memo

From
Elvis Utz
Gas Engineer

To Joe Ramey,

Please check prod.
interval for this unit.
to determine if it is
prod of oil or Gas.
Present dedication
NE 1/4.

Elvis



CONTINENTAL OIL COMPANY
LOCATION AND OWNERSHIP PLAT

Scale: 1" = 2000'

NEW MEXICO OIL CONSERVATION COMMISSION
One-point Back Pressure Test for Gas Wells
 (Deliverability)

Form C-122-C
 4-1-54

Pool Antero Formation Yates County Lea
 Initial Annual Special Annual Date of test 3/11/60
 Company Continental Oil Company Lease Wells B-1 Well No. 1
 Unit A Sec. 1 Twp. 25 Rge. 36 Purchaser El Paso Natural Gas Co.
 Casing 7" Wt. 20 I.D. 6.456 Set at 3144 Perf. 2790 To 2999
 Tubing 1-1/2" Wt. 9.20 I.D. 2.992 Set at 3149 Perf. 2790 To 2999
 Gas Pay: From 2790 To 2999 L 2790 x G .655 = GL 1637 Bar. Press. 13.2
 Producing Thru: Casing ■ Tubing ■ Type Well G.O. Dual
 Single- Bradenhead-G.G. or G.O. Dual

FLOW DATA

Started		Taken		Duration	Type	Line	Orifice	Static	Differ-	Flow
Date	time	Date	time	Hours	Taps	Size	Size	Press.	ential	Temp.
3-7	9:45 AM	3-8	9:45 AM	24	F18	4"	.750	210	60.84	510
	PM		PM							

FLOW CALCULATIONS

Static	Differ-	Meter	24-Hour	Gravity	Temp.	Compress-	Rate of Flow
Pressure	ential	Extension	Coeff-	Factor	Factor	ability	MCF/Da. @ 15.025 psia
P _s	P _w	P _g	icient	F _g	F _t	F _{pv}	Q
223.2	60.84	116.5	1.435	.9571	1.0088	1.023	395.3

SHUT-IN DATA

Shut-in		Press. Taken		Duration Hours	Wellhead Pressure		W.H. Working Pressure	
Date	Time	Date	Time		Po psia	Pw and Po psia		
					Tubing	Casing	Tubing	Casing
3-8	9:45 AM	3-9	9:45 AM	24		490.2		470.2
		3-10		48		520.2		
		3-11	PM	72		533.2		

FRICTION CALCULATIONS (if necessary)

$$P_w = (470.2)^2 / (1.045 \times .3953)^2 .110 = 220.77$$

$$P_w = 470.2 \text{ (Pressure drop insignificant)}$$

DELIVERABILITY CALCULATIONS

$$P_o = 470.2 \quad P_o = 533.2 \quad P_w + P_o = 893.2$$

$$1 - \frac{P_w}{P_o} = \frac{1.009}{1.779} \quad 1 - \frac{P_w}{P_o} = \frac{1.8931}{0.250176} \quad 1 - \frac{P_w}{P_o} = \frac{1.2024}{.629}$$

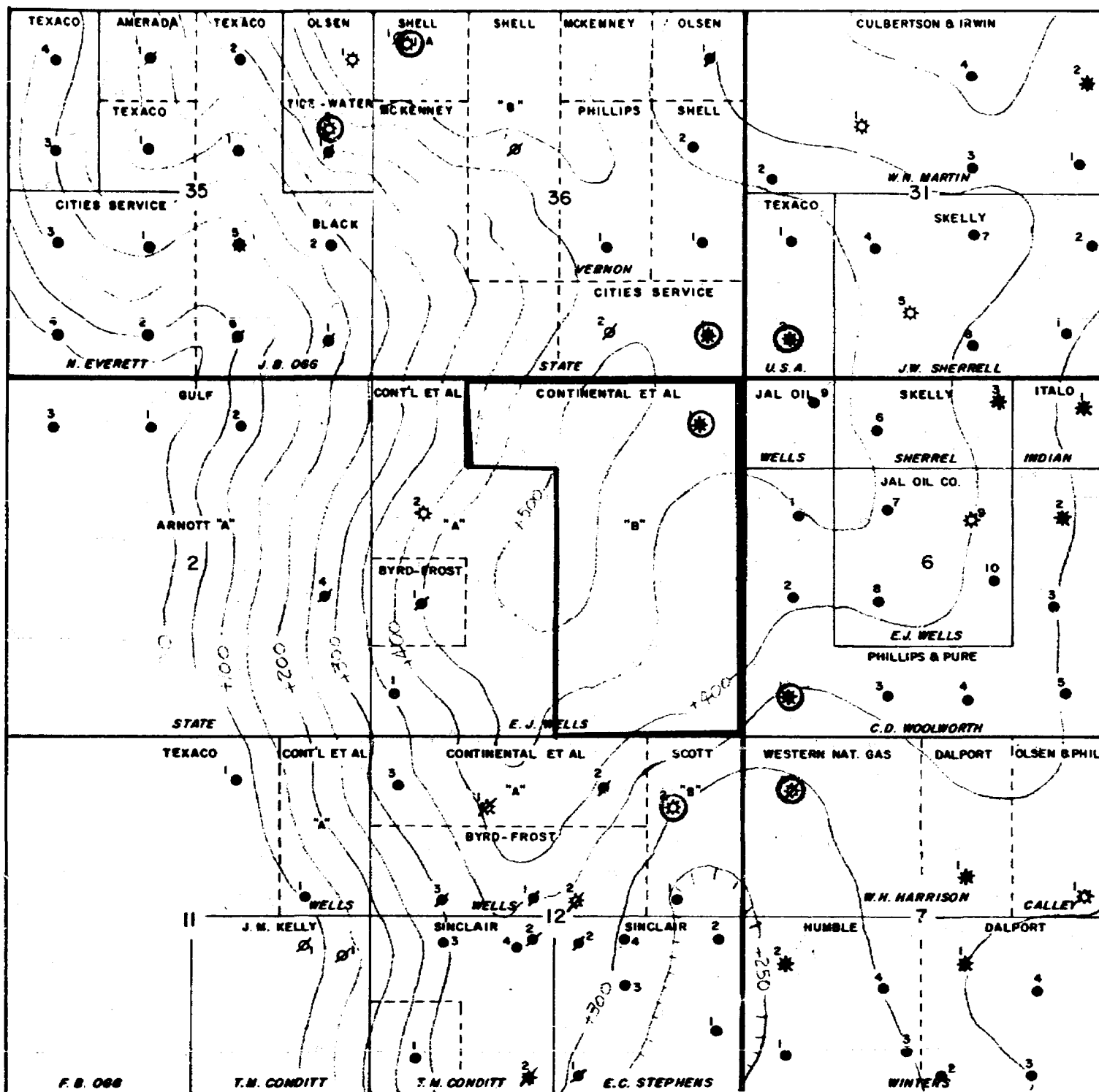
SUMMARY

P _o =	533.2	psia
Q =	395.3	MCF/Da.
P _w =	470.2	psia
P _o =	426.6	psia
Q =	568	MCF/Da.
	0.157361	
Log Q =	2.596926	
Log P =	2.754287	
Antilog =	567.7	= Q

COMPANY Continental Oil Company
 ADDRESS Box 62, Amrita, New Mexico
 AGENT and TITLE Dist. Supt.
 WITNESSES
 COMPANY ■

REMARKS

AMDOC-3 410 410 410 410 410



CONTINENTAL OIL COMPANY
 CONTOURED ON TOP OF THE YATES
 Contour Interval - 50'
 T24S, R36E, Lea Co., New Mexico

Wells B-1 No. 1 ○

Proposed Gas Unit —

Memo

From
Elvis Utz
Gas Engineer

To Joe Runney

Please check # 2
well for interval and
producing status.
It seems if the well is
in the same interval
as the # 2 it should be
perm. S.F. or the SWSW
out of the unit if it
is completed in same
interval.

Utz

Re: Continued

Myers A-29#3

Gas unit

To Don

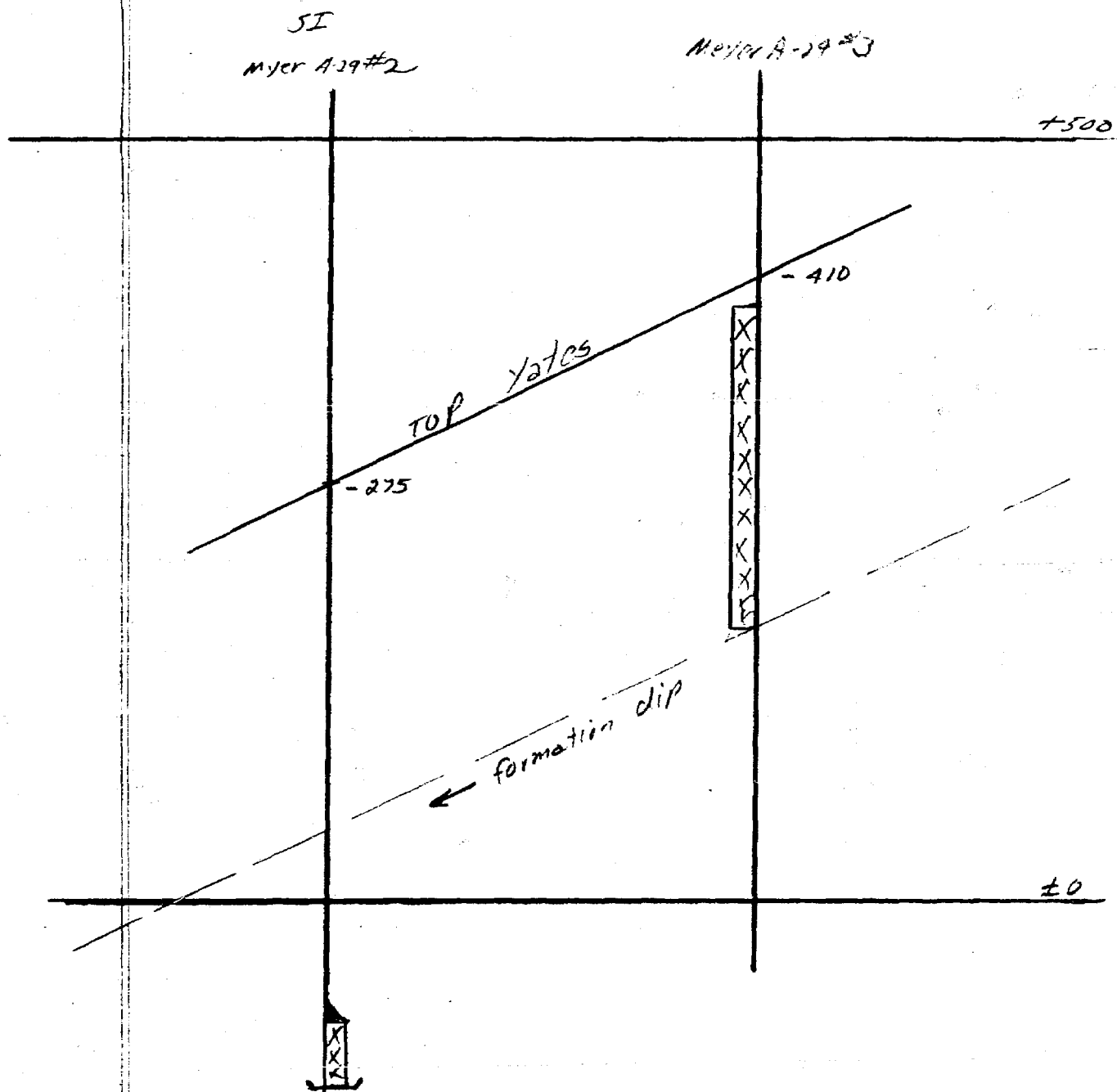
As shown on attached stick log the Myers A-29#2 well is completed in relation to the Myers A-29#3 as follows:

from the base of the perf in well #3 to the top of the open hole or cgs in well #2 there is an geological separation of some 125'. According to the well file, well No 2 has never been completed within the geological zone that well #3 is presently completed in. The SW SW/4 should be productive of gas.

JWB

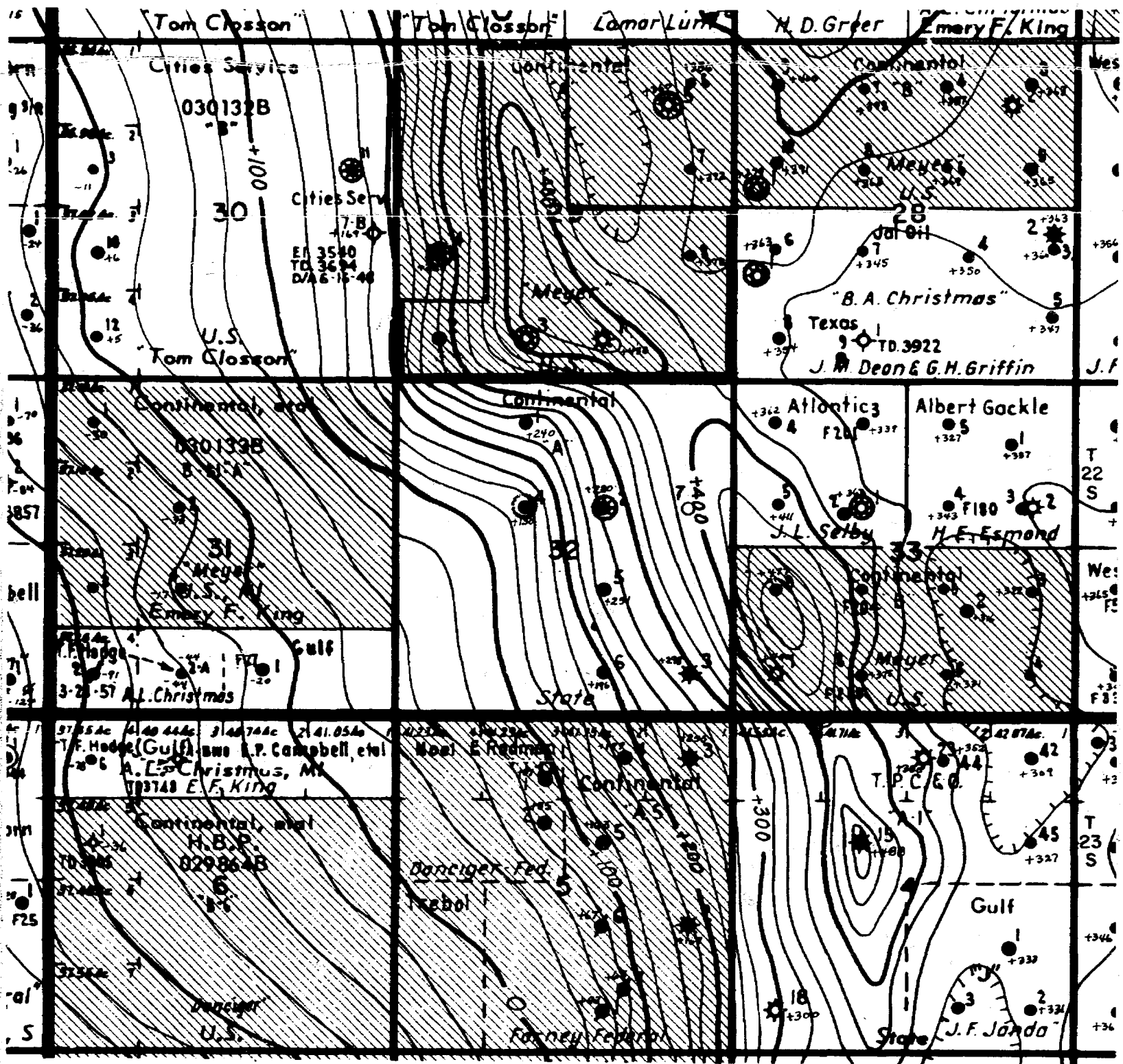
MAIN OFFICE OCC

1961 FEB 22 AM 8:03



vert scale 1"=100'

CGS @ 3600 } OH = -117 to -122
 TD @ 3645 }
 ED 3523



R-36-E

CONTINENTAL OIL COMPANY
STRUCTURE PLAT
CONTOURED ON TOP OF YATES

Jalmat Gas
Jalmat Oil
South Eunice

BEFORE EXAMINER UTZ
OIL CONSERVATION COMMISSION
EXHIBIT NO. 8
CASE NO. 2159
Proposed Gas Unit

Scale: 1" = 2000'
Contour Interval: 25'
Meyer A-29 No. 3 ○

EUNICE DIST. OFFICE

NEW MEXICO OIL CONSERVATION COMMISSION
One-point Back Pressure Test for Gas Wells
(Deliverability)

Form C-122-C
4-1-54

Pool Jalisco Formation Yates County Lea
Initial Annual X Special X Date of test 2/5-12/60
Company Continental Oil Company Lease Meyer A-29 Well No. 3
Unit 1 Sec. 29 Twp. 23S Rge. 16E Purchaser El Paso Natural Gas Co.
Casing 2-1/2 Wt. 14.5 I.D. 5.012 Set at 3527 Perf. 3130 To 3342
Tubing 2-7/8 Wt. 9.5 I.D. 4.441 Set at 3297 Perf. 3130 To 3342
Gas Pay: From 3130 To 3342 L 3297 x G .672 = CI Bar. Press. 13.2
Producing Thru: Casing X Tubing X Type Well Single
Single- Braderhead-G.C. or G.C. Dual

FLOW DATA									
Started	Taken	Duration	Type	Line	Orifice	Static	Differ-	Flow	
Date	time	Date	time	Hours	Taps	Size	Size	Press.	ential
2-8	11:40 AM	2-9	11:40 AM	24	Flg	4"	2.750	265	70.56
	PM		PM						77°

FLOW CALCULATIONS							
Static	Differ-	Meter	24-Hour	Gravity	Temp.	Compress-	Rate of Flow
Pressure	ential	Extension	Coeff-	Factor	Factor	ibility	MOF Da. @ 15.025 psia
P _s	P _w	P _s h _w	icient	F _G	F _T	F _{pv}	
276.2	70.56	140.1	19.27	.9449	.9840	1.026	2,575

SHUT-IN DATA				FLOW DATA			
Shut-in	Press.	Taken	Duration	Wellhead	Pressure	W.P. Working	Pressure
Date	Time	Date	Time	Hours	P _{co} , psia	P _w and P _t , psia	
					Tubing	Casing	Tubing
2-9	11:40 AM	2-10	11:40 AM	24	514.2	514.2	381.2
		2-11		48	523.2	525.2	428.2
	PM	2-12	PM	72	530.2	530.2	

FRICTION CALCULATIONS (if necessary)

SUMMARY

P_w Measured

P_{co} = 530.2 psia

Q = 2575 MOF/Da.

P_w = 428.2 psia

P_c = 424.2 psia

D = 2647 MOF/Da.

DELIVERABILITY CALCULATIONS

P_w = 428.2 P_{co} = 530.2 P_w + P_c = .8076
 $1 - \frac{P_w}{P_c} = .1924$ $1 + \frac{P_w}{P_c} = 1.8076$ $1 - \frac{P_w}{P_c} \left| 1 - \frac{P_w}{P_c} \right| = M$ $.3478$
 $1.36 + M = 1.035$ $\log 0.014940$ $\times 10^4 = .801$ $= 0.011967$

COMPANY Continental Oil Company
ADDRESS Box 68, Eunice, New Mexico
AGENT and TITLE H. H. H. Dist. Supt.
WITNESSED
COMPANY

Log Q = 3.410777

Log D = 3.422744

ADJUSTED = 2647

= D

NDCC-3 WEG HLJ WAM FILE-2

REMARKS

Re: Continental-
NSP 363

Dear Dan

I do not recommend that continental under NSP 363 be given the 320 acre dedication asked.

① The continental shales well #2, classified as an oil well should be reclassified to gas (a) Due to GOR (b) That most of the zone open in this well is in the gas zone.

(2) That the continental shales B #1 is open in part of the same geological zone as the shales B #2 well, and therefore the shales B #1 and the shales B #2 are in true dual dedication if given the 320 acres proposed. I would recommend giving the shales B #1 gas well, only 260 acres (minus the north 80 acres asked.)

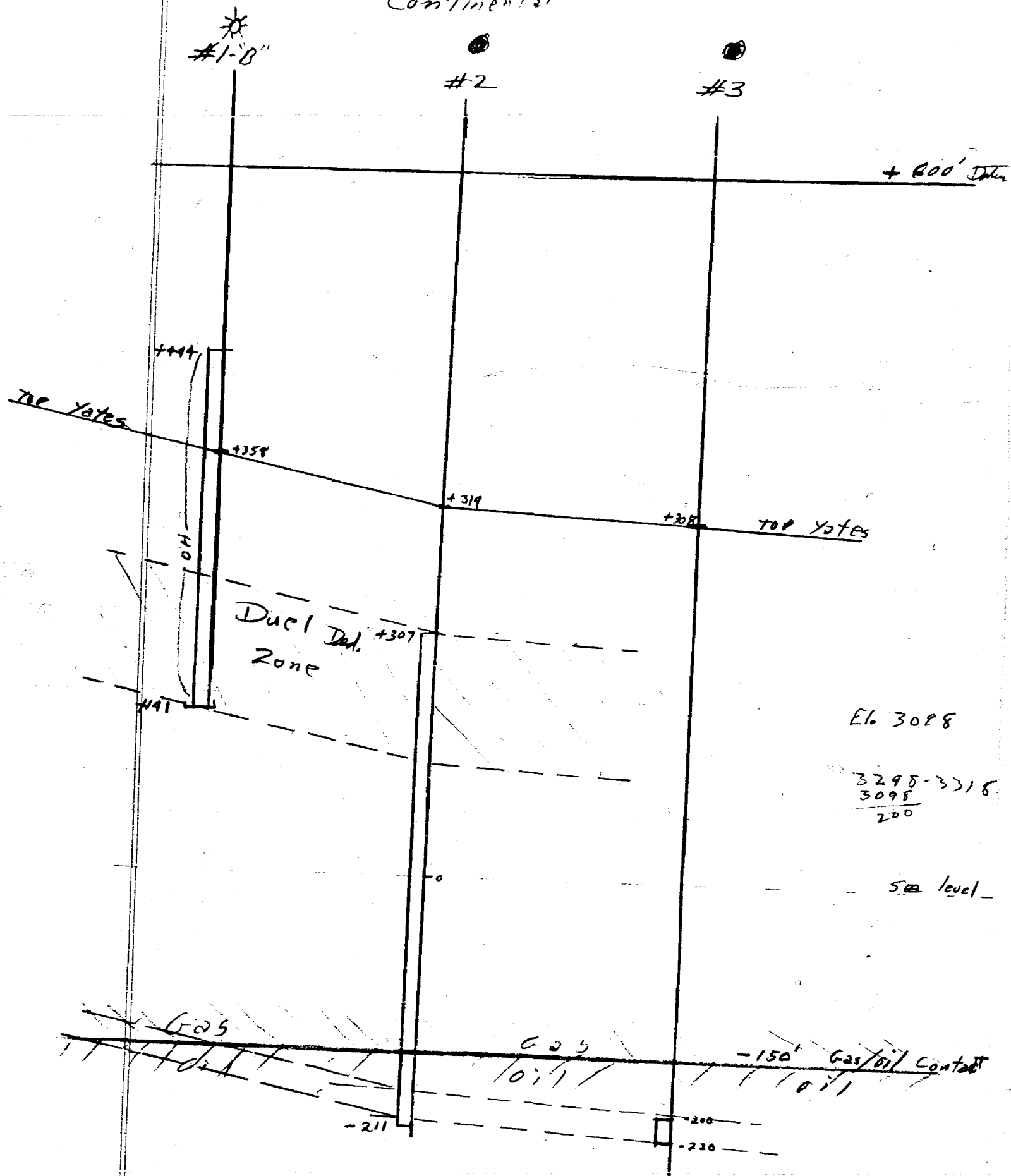
The shales "B" #3 well, is completed below the gas oil contact, but it is also completed in the same zone as the shales "B" #2 well. A reclassification of the shales "B" #2 to gas, would only allow 20 acre dedication to the shales "B" #2.

check next page for geological sketch of the above conditions.

JWR

Spole - B-19
14-19-25-37

Continental



Memo

From
Elvis Utz
Gas Engineer

To Joe Ramey,
Can't testified that the
#2 well was an oil
well with a 23,300:1
Ratio. Their C-116 for
5-60 shows 76.500:1.

The 1959 Prod shows.

$$\frac{177,594}{790} = 224,803:1$$

The Nov. 60 shows:

$$\frac{12,928}{50} = 258,560:1$$

Seems this is an ~~oil~~ ^{gas}
well.

Also will you please

Memo

From
Elvis Utz
Gas Engineer

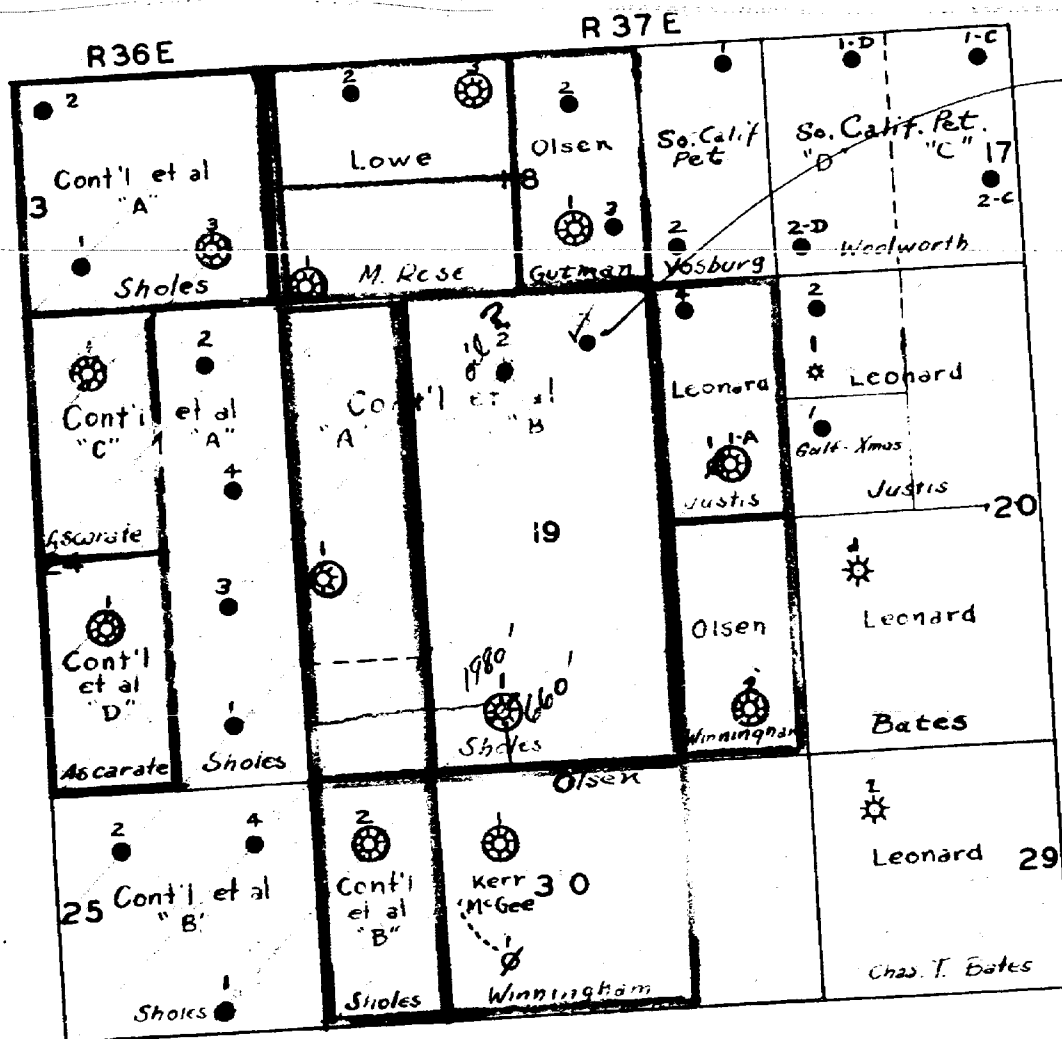
To check to completion
intervals & see if
the #3 is not in the
same interval as the
gas zone of the #1.
Lts. Apr. 1960 Prod.

Ratio is $\frac{1050}{250} = 7200:1$

She want to increase
the unit from 160 to
320 to include the
N160.

Will hold Recommendation
for you rec.

NSP-263



CONTINENTAL OIL COMPANY

SHOLES A-19 & B-19 LEASES SURROUNDING LEASEHOLDINGS AND WELLS

Sholes B-19 No. 1 ○
Proposed Gas Unit —

Approved Gas Unit Well ○
Approved Gas Unit —

NEW MEXICO OIL CONSERVATION COMMISSION
One-point Back Pressure Test for Gas Wells
(Deliverability)

REC-111
60

Form C-122-C
4-1-34

Pool Jalisco Formation Tates County Lea
Initial Annual Special Date of test 3/7-11/40 9 43
Company Continental Oil Company Lease Shales B-19 Well No. 1
Unit 1 Sec. 19 Twp. 25 Rge. 37 Purchaser El Paso Natural Gas Co.
Casing 7" Wt. 23# I.D. 6.366 Set at 2662 Perf. O.H. 2662 To 2945
Tubing None Wt. I.D. Set at Perf. To
Gas Pay: From 2662 To 2945 L 2662 x G .677 = GL 1802 Bar. Press. 13.2
Producing Thru: Casing X Tubing Type Well Single
Single- Bradenhead-C.G. or G.O. Dual

FLOW DATA

Started Date	Time	Taken Date	Time	Duration Hours	Type Taps	Line Size	Orifice Size	Static Press.	Differ- ential	Flow Temp.
3-7	8:00 AM	3-8	8:00 AM	24	Flg	4"	1.500	129	10.24	55°
	PM		PM							

FLOW CALCULATIONS

Static Pressure	Differ- ential	Meter Extension	24-Hour Coeff- icient	Gravity Factor	Temp. Factor	Compress- ibility	Rate of Flow MCF/Da. @ 15.025 psia
142.2	10.24	38.16	13.99	.9414	1.0048	1.013	511.6

SHOT-IN DATA

Shot-in Date	Time	Press. Date	Taken Time	Duration Hours	Wellhead Pressure psia	Working Pressure psia
3-8	8:00 AM	3-9	8:00 AM	24	218.2	145.2
		3-10		48	228.2	
		3-11		72	231.2	

PROVISIONAL CALCULATIONS if necessary

$$P_w^2 = (145.2)^2 + (.9415 \times .5116)^2 \times 117 = 21.09$$

$$P_w = 145.2 \text{ (Pressure Drop Insignificant)}$$

DELIVERABILITY CALCULATIONS

$P_w = 145.2$	$P_r = 231.2$	$P_w - P_r = 86.0$	$P_w - P_r = 86.0$
$\frac{P_w}{P_r} = .3720$	$\frac{P_w}{P_r} = 1.6280$	$\frac{P_w}{P_r} = .6056$	$\frac{P_w}{P_r} = .6056$
$\log P_w = .5945$	$\log P_r = 9.774152-10$	$\log \frac{P_w}{P_r} = .987$	$\log \frac{P_w}{P_r} = .987$

SUMMARY

$P_r = 231.2$	psia
$Q = 511.6$	MCF/Da.
$P_w = 145.2$	psia
$P_r = 185$	psia
$Q = 306$	MCF/Da.
$\log Q = 2.708930$	
$\log P_r = 2.486018$	
$\log \frac{Q}{P_r} = 306.2$	= D

COMPANY Continental Oil Company
ADDRESS Box 68, Eunice, New Mexico
AGENT and TITLE R. L. L. Dist. Supt.
WITNESSED
COMPANY

Log Q = 2.708930
Log P = 2.486018
Log Q/P = 306.2 = D

REMARKS

NMCCC-3 WEG HLG WAM FILE-2

OIL CONSERVATION COMMISSION
HOBBS, NEW MEXICO

January 31, 1961

C
O
P
Y

Continental Oil Company
Box 68
Eunice, New Mexico

Gentlemen:

Your Sholes B Well No. 2 located in Unit B of Section 19, T-25-S, R-37-E, Jalmat Pool, has been producing with a gas-oil ratio in excess of 100,000 for at least the last two years. During 1959 the producing gas-oil ratio was 224,802 cubic feet per barrel, and during the first eleven months of 1960 this ratio has increased to 289,854. In view of this, the well is reclassified as a gas well producing from the Jalmat Pool and is to be shut in effective February 1, 1961.

Should you desire to produce this well at some future date, it will be necessary that you obtain an allowable as per Order No. R-1670.

Yours very truly,

OIL CONSERVATION COMMISSION

Joe D. Ramey
Proration Manager

JDR/mc
cc-Elvis Utz, Gas Engineer
OCC, Santa Fe

Memo

From

Joe D. Ramey

Supervisor & Production Manager

To Elvis :

1961 FEB 11 AM 10 03

The Sholes B 19 No. 2
is re-classified as a gas
well & will be shut-in
Feb 1, 1961.

With this well shut-in
the entire 320 acres will
be gas productive & I can
see no reason for denying
the NSP.

JDR

BEFORE THE OIL CONSERVATION COMMISSION
OF THE
STATE OF NEW MEXICO

IN THE MATTER OF THE APPLICATION OF
CONTINENTAL OIL COMPANY FOR AN
EXCEPTION TO RULE 5 (a) OF THE
SPECIAL RULES AND REGULATIONS FOR
THE PRORATED GAS POOLS OF SOUTHEAST
NEW MEXICO CONTAINED IN ORDER NO.
R-1670 FOR THE ENLARGEMENT OF THE
PRESENTLY APPROVED 160-ACRE UNIT TO
A NON-STANDARD GAS PRORATION UNIT OF
360-ACRES CONSISTING OF E/2 AND NE/4
NW/4 SECTION 1, T-25S, R-36E, NNPM,
LEA COUNTY, NEW MEXICO, TO BE ALLOCATED
TO ITS WELLS B-1 WELL NO. 1, JALMAT GAS
POOL

A P P L I C A T I O N

Comes now applicant, Continental Oil Company, and petitions the Commission for an order enlarging the present 160-acre gas proration unit to one of 360 acres consisting of E/2 and NE/4 NW/4 of Section 1, T-25S, R-36E, NNPM, Jalmat Gas Pool, Lea County, New Mexico, to be allocated to its Wells B-1 No. 1 well located 660 feet from the north line and 660 feet from the east line of said Section 1 and in support thereof would show:

1. That applicant is owner and operator of a lease designated as the Wells B-1 Lease consisting of E/2 and the NE/4 NW/4 Section 1, T-25S, R-36E, NNPM, Lea County, New Mexico.
2. That applicant drilled and completed in March, 1950, its Wells B-1 Well No. 1 at a location 660 feet from the north line and 660 feet from the east line of said Section 1.
3. That the NW/4 of the said Section 1 is presently assigned the said Well No. 1, but that the SE/4 and the NE/4 NW/4 is not assigned to any gas well and that all of said acreage may reasonably be presumed to be productive of gas from the Jalmat Pool and should be allocated to a gas well in the interests of the prevention of waste and the protection of correlative rights.
4. That the most practical and economical method of allocating said acreage for Jalmat Pool gas production is to enlarge the existing 160-acre unit to a 360-acre non-standard gas proration unit for assignment to the Wells B-1 Well No. 1.

Wherefore, applicant prays that this application be set for hearing before the Commission's duly appointed examiner, in Hobbs, New Mexico, that appropriate notice thereof be given, and that upon hearing, an order be entered granting applicant an exception to Rule 5 (a) of the special rules and regulations for the prorated gas pools of southeast New Mexico, contained in Order No. R-1670 for the non-standard gas proration unit described above.

Respectfully submitted,
CONTINENTAL OIL COMPANY

W. A. Mead

W. A. Mead
Division Superintendent
of Production
New Mexico Division

BEFORE THE OIL CONSERVATION COMMISSION
OF THE
STATE OF NEW MEXICO

IN THE MATTER OF THE APPLICATION OF
CONTINENTAL OIL COMPANY FOR AN
EXCEPTION TO RULE 5 (a) OF THE
SPECIAL RULES AND REGULATIONS FOR
THE PRORATED GAS POOLS OF SOUTHEAST
NEW MEXICO CONTAINED IN ORDER NO.
R-1670 FOR THE ENLARGEMENT OF THE
PRESENTLY APPROVED 160-ACRE UNIT TO
A NON-STANDARD GAS PRORATION UNIT OF
360-ACRES CONSISTING OF E/2 AND NE/4
NW/4 SECTION 1, T-25S, R-36E, NMPM,
LEA COUNTY, NEW MEXICO, TO BE ALLOCATED
TO ITS WELLS B-1 WELL NO. 1, JALMAT GAS
POOL

A P P L I C A T I O N

Comes now applicant, Continental Oil Company, and petitions the Commission for an order enlarging the present 160-acre gas proration unit to one of 360 acres consisting of E/2 and NE/4 NW/4 of Section 1, T-25S, R-36E, NMPM, Jalmat Gas Pool, Lea County, New Mexico, to be allocated to its Wells B-1 No. 1 well located 660 feet from the north line and 660 feet from the east line of said Section 1 and in support thereof would show:

1. That applicant is owner and operator of a lease designated as the Wells B-1 Lease consisting of E/2 and the NE/4 NW/4 Section 1, T-25S, R-36E, NMPM, Lea County, New Mexico.
2. That applicant drilled and completed in March, 1950, its Wells B-1 Well No. 1 at a location 660 feet from the north line and 660 feet from the east line of said Section 1.
3. That the NW/4 of the said Section 1 is presently assigned the said Well No. 1, but that the SE/4 and the NE/4 NW/4 is not assigned to any gas well and that all of said acreage may reasonably be presumed to be productive of gas from the Jalmat Pool and should be allocated to a gas well in the interests of the prevention of waste and the protection of correlative rights.
4. That the most practical and economical method of allocating said acreage for Jalmat Pool gas production is to enlarge the existing 160-acre unit to a 360-acre non-standard gas proration unit for assignment to the Wells B-1 Well No. 1.

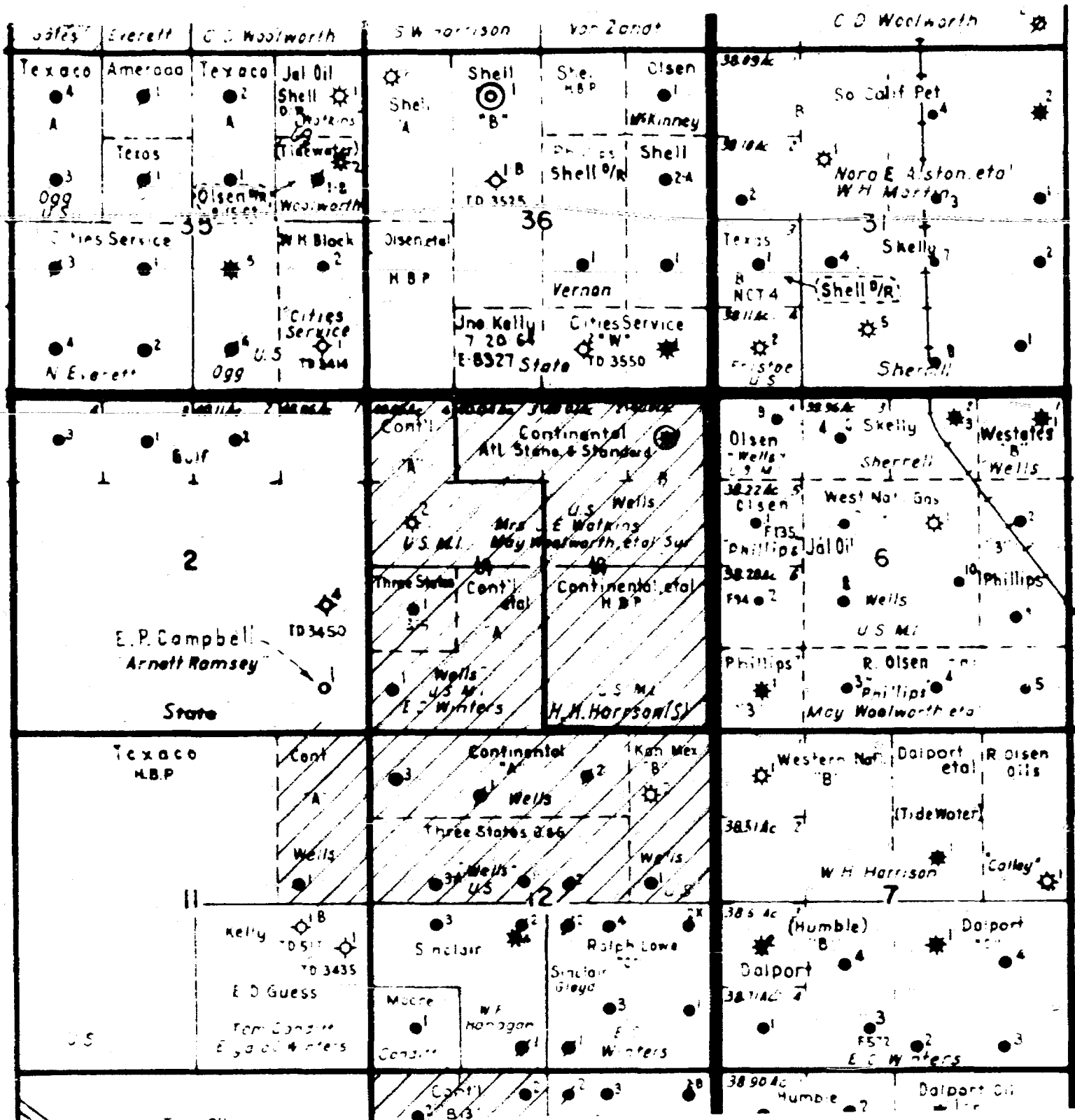
Wherefore, applicant prays that this application be set for hearing before the Commission's duly appointed examiner, in Hobbs, New Mexico, that appropriate notice thereof be given, and that upon hearing, an order be entered granting applicant an exception to Rule 5 (a) of the special rules and regulations for the prorated gas pools of southeast New Mexico, contained in Order No. R-1670 for the non-standard gas proration unit described above.

Respectfully submitted,

CONTINENTAL OIL COMPANY

W. A. Mead

W. A. Mead
Division Superintendent
of Production
New Mexico Division



CONTINENTAL OIL COMPANY LOCATION AND OWNERSHIP PLAT

Scale: 1" = 2000'

Wells B-1 No. 1 ○

Proposed Gas Unit —

BEFORE THE OIL CONSERVATION COMMISSION
OF THE
STATE OF NEW MEXICO

IN THE MATTER OF THE APPLICATION OF
CONTINENTAL OIL COMPANY FOR AN EXCEPTION
TO RULE 5 (A) OF THE SPECIAL RULES AND
REGULATIONS FOR THE PRORATED GAS POOLS
OF SOUTHEAST NEW MEXICO CONTAINED IN
ORDER NO. R-1670 FOR THE ENLARGEMENT OF
THE PRESENTLY APPROVED 160 ACRE UNIT TO
A NON-STANDARD GAS PRORATION UNIT OF 320
ACRES CONSISTING OF THE W/2 E/2 AND THE
E/2 W/2 OF SECTION 19, T-25S, R-37E, NMPM,
LEA COUNTY, NEW MEXICO, TO BE ALLOCATED TO
ITS SHOLES B-19 WELL NO. 1, JALMAT GAS POOL

A P P L I C A T I O N

Comes now applicant, Continental Oil Company, and petitions the Commission for an order enlarging the present 160 acre gas proration unit to one of 320 acres, consisting of the W/2 E/2 and the E/2 W/2 of Section 19, T-25S, R-37E, NMPM, Lea County, New Mexico to be allocated to its Sholes B-19 No. 1 well located 660 feet from the south line and 1980 feet from the west line of said Section 19, and in support thereof would show:

1. The applicant is co-owner and operator of a lease designated as the Sholes B-19 Lease, consisting of the SW/4 SW/4, E/2 W/2 and W/2 E/2 of Section 19, T-25S, R-37E, NMPM, Lea County, New Mexico.

2. The applicant drilled the Sholes B-19 No. 1 at a location 660 feet from the south line and 1980 feet from the west line of the said Section 19 and completed it March 22, 1941, as a gas well in the Jalmat Pool.

3. That no part of the acreage comprising the E/2 NW/4 and the W/2 NE/4 of said Section 19 is allocated to a gas well and that all said acreage may reasonably be presumed to be productive of gas from the Jalmat Pool and should be allocated to a gas well in the interests of the prevention of waste and the protection of correlative rights.

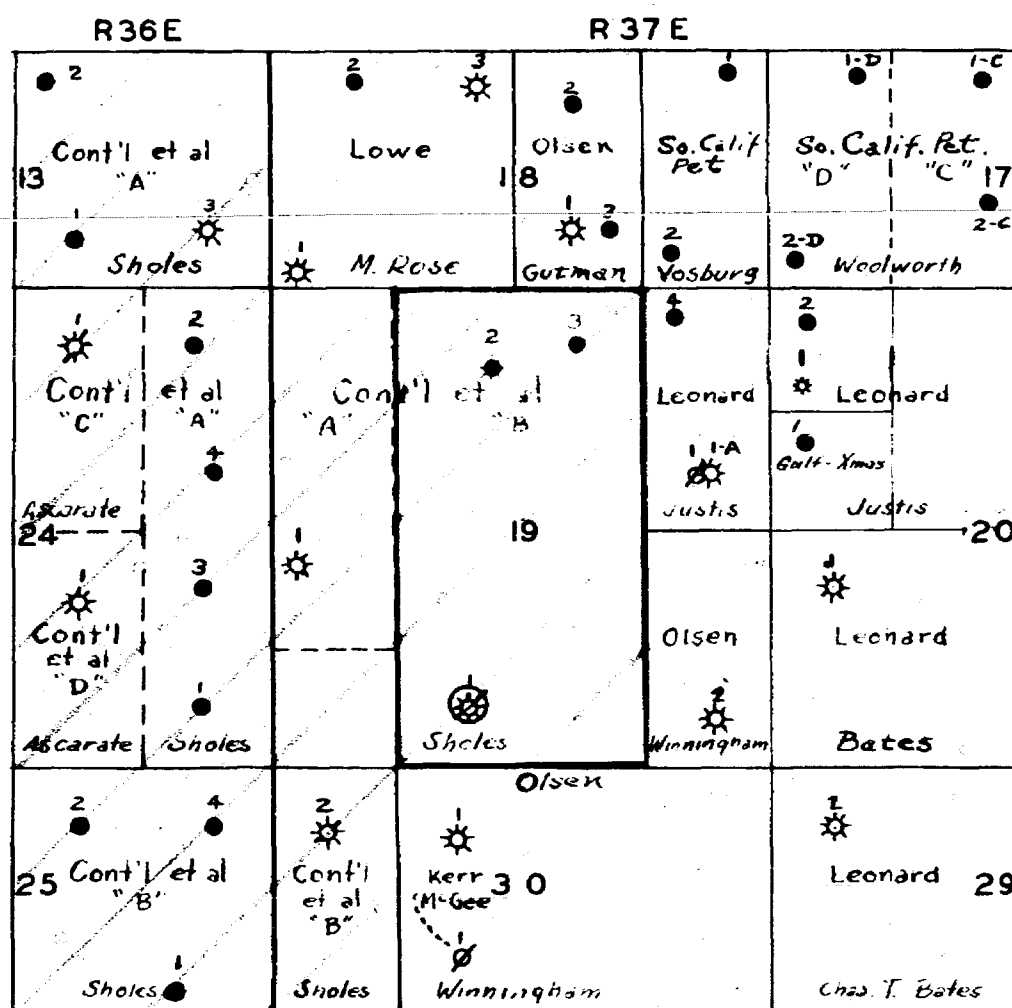
4. That the most practical and economical method of allocating said acreage for the Jalmat Pool gas production is to enlarge the existing 160 acre unit to a 320-acre non-standard gas proration unit for assignment to the Sholes B-19 Well No. 1.

Wherefore, applicant prays that this application be set for hearing before the Commission's duly appointed examiner that appropriate notice therefore be given, and that upon hearing, an order be entered granting applicant an exception to Rule 5 (a) of special Rules and Regulations for the prorated gas pools of Southeast New Mexico contained in Order No. R-1670 for the non-standard gas proration unit described above.

Respectfully submitted,
CONTINENTAL OIL COMPANY

W. A. Mead
W. A. Mead
Division Superintendent
of Production
New Mexico Division

WAM-DFW



CONTINENTAL OIL COMPANY

SHOLES A-19 & B-19 LEASES
SURROUNDING LEASEHOLDINGS AND WELLS

Sholes B-19 No. 1 ○

Proposed Gas Unit —

BEFORE THE OIL CONSERVATION COMMISSION
OF THE
STATE OF NEW MEXICO

IN THE MATTER OF THE APPLICATION OF
CONTINENTAL OIL COMPANY FOR AN EXCEPTION
TO RULE 5 (a) OF THE SPECIAL RULES AND
REGULATIONS FOR THE PRORATED GAS POOLS
OF SOUTHEAST NEW MEXICO CONTAINED IN
ORDER NO. R-1670 FOR THE ENLARGEMENT OF
THE PRESENTLY APPROVED 200-ACRE UNIT TO
A NON-STANDARD GAS PRORATION UNIT OF 360
ACRES, CONSISTING OF SE/4, E/2 W/2 AND
SW/4 SW/4 OF SECTION 29, T-22S, R-36E,
TO BE ALLOCATED TO ITS MEYER A-29 WELL
NO. 3, JALMAT GAS POOL

A P P L I C A T I O N

Comes now applicant, Continental Oil Company, and petitions
the Commission for an order enlarging the present 200-acre gas prora-
tion unit to one of 360 acres, consisting of SE/4, E/2 W/2 and SW/4
SW/4 of Section 29, T-22S, R-36E, NMPM, Lea County, New Mexico, to be
allocated to its Meyer A-29 No. 3 located 660 feet from the south
line and 1980 feet from the west line of said Section 29 and in
support thereof would show:

1. That applicant is co-owner and operator of the Meyer
A-29 Lease, consisting of Section 29, T-22S, R-36E, NMPM, Lea County,
New Mexico.
2. That applicant has completed four gas wells in the
Jalmat Pool on the said lease described as follows:
 - No. 1 - located 660 feet from the south line
and 1980 feet from the east line.
 - No. 3 - located 660 feet from the south line
and 1980 feet from the west line.
 - No. 4 - located 1980 feet from the south line
and 660 feet from the west line; and
 - No. 5 - located 990 feet from the north and
east lines of said Section 29.
3. That the lease acreage is currently allocated for Jalmat
gas proration in the following manner:
 - No. 1 - 160 acres, consisting of the SE/4
 - No. 3 - 200 acres, consisting of the E/2 of
W/2 and the SW/4 of SE/4
 - No. 4 - 120 acres, consisting of the W/2 of
NW/4 and the NW/4 of SW/4
 - No. 5 - 160 acres, consisting of the NE/4 of
said Section 29.

4. That Well No. 1 has become unable to produce gas commercially into the sales line.

5. That applicant proposes to allocate the acreage now assigned to Well No. 1 to Well No. 3 so that the enlarged unit for No. 3 will be 360 acres, consisting of SE/4, E/2 V/2 and SW/4 SW/4 of said Section 29.

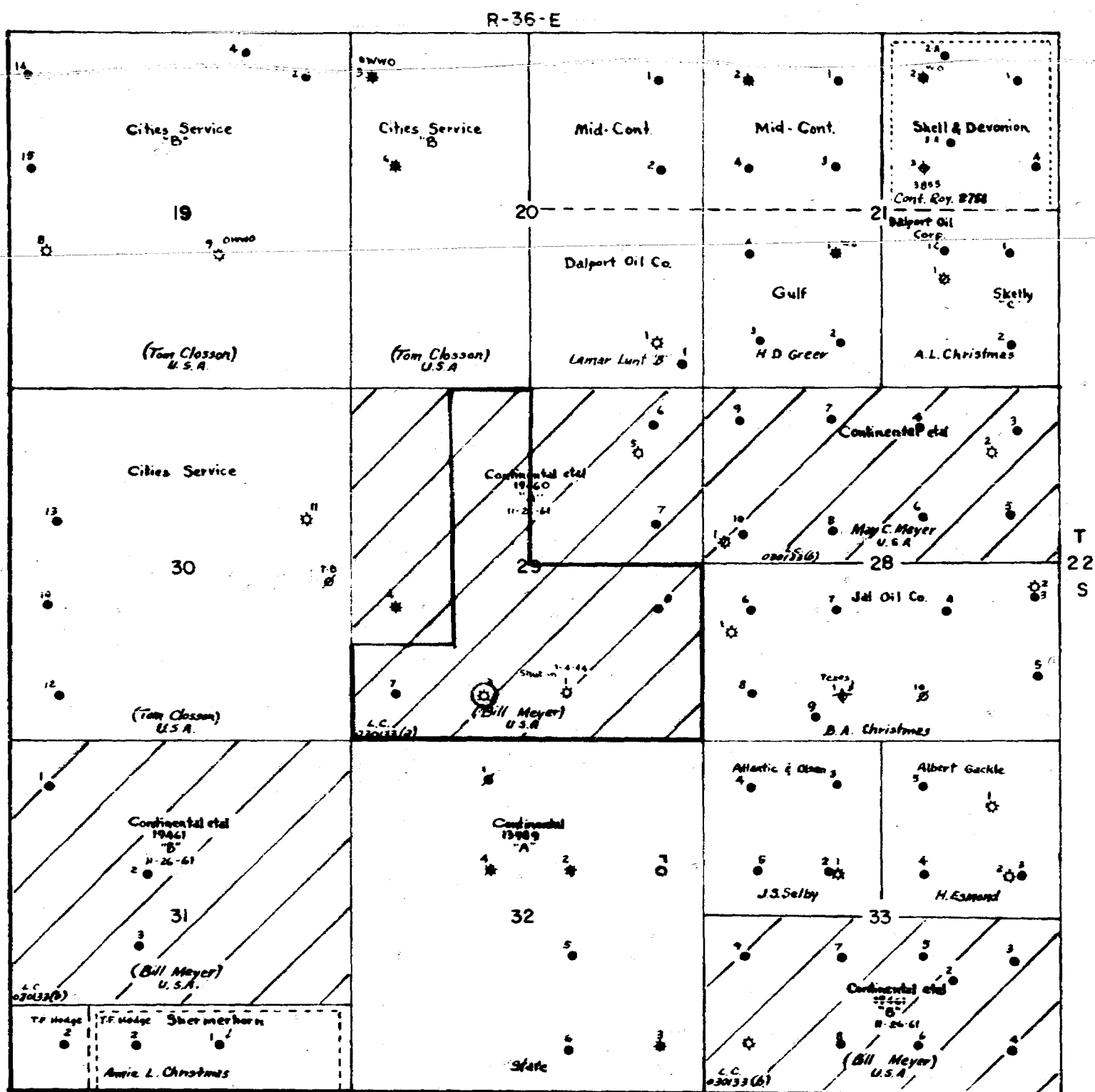
6. That the proposed re-allocation is in the interests of the prevention of waste and the protection of correlative rights.

Wherefore, applicant prays that this matter be set for hearing before the Commission's duly appointed examiner, that appropriate notice thereof be given, and that upon hearing, an order be entered re-allocating the acreage of our Meyer A-29 Lease as described above.

Respectfully submitted,
CONTINENTAL OIL COMPANY

W. A. Mead
W. A. Mead
Division Superintendent
of Production
New Mexico Division

WAM-DFW



CONTINENTAL OIL COMPANY

Scale: 1" = 2000'

Meyer A-29 No. 3 ○

Proposed Gas Unit —



CONTINENTAL OIL COMPANY

825 PETROLEUM BUILDING
ROSWELL, NEW MEXICO

December 21, 1960

WM. A. MEAD
DIVISION SUPERINTENDENT
OF PRODUCTION
NEW MEXICO DIVISION

New Mexico Oil Conservation Commission
Box 871
Santa Fe, New Mexico

Attention: Mr. A. L. Porter, Jr., Secretary-Director

Re: Application of Continental
Oil Company for an Exception
to Rule 5 (a) of the Special
Rules and Regulations for the
Prorated Gas Pools of South-
east New Mexico Contained in
Order No. R-1670 for the
Enlargement of Three Presently
Approved Non-Standard Gas
Proration Units in the Jalmat
Gas Pool, Lea County, New
Mexico

Gentlemen:

Please find attached three copies each of Continental
Oil Company's applications for exception to Rule 5 (a) of the
Special Rules and Regulations for the prorated gas pools of
Southeast New Mexico contained in Order No. R-1670 for the
enlargement of three presently approved non-standard gas
proration units in the Jalmat Gas Pool, Lea County, New Mexico.

These applications are listed below:

1. Sholes B-19 No.1, presently approved 160-acre
gas proration unit to be enlarged to 320-acres, consisting

*Booked
by Michael
1-12-61*

PIONEERING IN PETROLEUM PROGRESS SINCE 1875

of the W/2 E/2 and the E/2 W/2 of Section 19, T.25-S, R.37-E,
NMPM, Lea County, New Mexico

2. Wells B-1 No. 1, presently approved 160-acre non-
standard gas proration unit to be enlarged to 360-acres
consisting of E/2 and NE/4 NW/4 of Section 1, T.25-S, R.36-E,
NMPM, Lea County, New Mexico.

3. Meyer A-29 No. 3, presently approved 200-acre non-
standard gas proration unit to be enlarged to 360-acres
consisting of SE/4, E/2 W/2 and SW/4 SW/4 of Section 29, T.22-S,
R.36-E, NMPM, Lea County, New Mexico.

We respectfully request that these applications be set
for hearing on the same date in consecutive order at the
earliest convenient date.

Yours very truly,

W. G. McKel

WAM-sk

Enc.

cc: RGP
HGD
JRP
JWK

DOCKET: EXAMINER HEARING - WEDNESDAY, JANUARY 25, 1961
OIL CONSERVATION COMMISSION - 9 a.m. CONFERENCE ROOM - STATE LAND OFFICE
BUILDING, SANTA FE, NEW MEXICO

The following cases will be heard before Elvis A. Utz Examiner, or Oliver E. Payne, attorney, as alternate examiner:

CASE 2159:

Application of Continental Oil Company for three non-standard gas proration units. Applicant, in the above-styled cause, seeks the establishment of the following-described non-standard gas proration units in the Jalmat Gas Pool, Lea County, New Mexico:

A 320-acre non-standard gas proration unit consisting of the W/2 E/2 and E/2 W/2 of Section 19, Township 25 South, Range 37 East, to be dedicated to the Sholes B-19 Well No. 1, located in the center of the SE/4 SW/4 of said Section 19.

A 320-acre non-standard gas proration unit consisting of the E/2 and NE/4 NW/4 of Section 1, Township 25 South, Range 36 East, to be dedicated to the Wells B-1 Well No. 1, located in the center of the NE/4 NE/4 of said Section 1.

A 360-acre non-standard gas proration unit consisting of the SE/4, E/2 W/2 and SW/4 SW/4 of Section 29, Township 22 South, Range 36 East, to be dedicated to the Meyer A-29 Well No. 3, located in the center of the SE/4 SW/4 of said Section 29.

CASE 2160:

Application of Continental Oil Company for a quadruple completion. Applicant, in the above-styled cause, seeks an order authorizing the quadruple completion of its North-east Haynes-Apache 9 No. 1 Well, located in the NW/4 SW/4 of Section 9, Township 24 North, Range 5 West, Rio Arriba County, New Mexico, in such a manner as to permit the production of hydrocarbons from the Greenhorn formation through a string of 2 7/8-inch casing, the production of hydrocarbons from the Dakota formation through 2 3/8-inch tubing installed within a string of 4 1/2-inch casing, the production of hydrocarbons from the Mesaverde formation through the 2 3/8 x 4 1/2-inch annulus of the latter casing string, and the production of hydrocarbons from the Gallup formation through 2 3/8-inch tubing installed within a second string of 4 1/2-inch casing, the three strings of casing being cemented in a common well bore.

CASE 2161:

Application of Texaco, Inc. for a triple completion. Applicant, in the above-styled cause, seeks an order authorizing the triple completion of the C. H. Weir "B" Well No. 4, located in Unit 1, Section 11, Township 20 South, Range 37 East, Lea County, New Mexico, in such a manner as to permit the production of gas from the Eumont Gas Pool, the production of oil from the Skaggs-Glorieta Pool and the production of oil from the Skaggs-Drinkard Pool through the casing-tubing annulus, through 2 3/8-inch tubing, and through 2 3/8-inch tubing respectively.

CASE 2162:

Application of The Atlantic Refining Company for an automatic custody transfer system. Applicant, in the above-styled cause, seeks permission to install an automatic custody transfer system to handle the commingled Justis Tubb-Drinkard and Justis-Blinbry production from the following-described leases:

Langlie Federal Lease, N/2 SE/4 of Section 14

Langlie Federal "A" Lease, S/2 NE/4 of Section 14

Langlie Federal "B" Lease, N/2 NE/4 of Section 14

all in Township 25 South, Range 37 East, Lea County, New Mexico.

CASE 2163:

Application of Yates Drilling Company for an automatic custody transfer system. Applicant, in the above-styled cause, seeks permission to install an automatic custody transfer system to handle the Pennsylvanian formation production from all wells presently completed or hereafter drilled on Federal Lease NM 03283, comprising the W/2 of Section 31, Township 8 South, Range 37 East, Roosevelt County, New Mexico.

CASE 2164:

Application of Hudson and Hudson for an exception to Rule 506 (A) of the Commission Rules and Regulations and for permission to transfer allowables. Applicant, in the above-styled cause, seeks an exception to Rule 506 (A) by increasing the limiting gas-oil ratio for the West Tonto Yates Seven Rivers Pool, Lea County, New Mexico, from 2,000 to 6,000 cubic feet of gas per barrel of oil. Applicant further seeks permission to shut-in one well in said pool and transfer its allowable to another well.

CASE 2165:

Application of Pan American Petroleum Corporation for two unorthodox oil well locations and a non-standard oil proration unit. Applicant, in the above-styled cause, seeks approval of two unorthodox oil well locations in the Cha Cha-Gallup Oil Pool, San Juan County, New Mexico, said locations to be as follows:

Navajo Tribal "E" Well No. 7, to be located 250 feet from the South line and 800 feet from the West line of Section 16.

Navajo Tribal "G" Well No. 5, to be located 1830 feet from the South line and 885 feet from the East line of Section 18, both in Township 29 North, Range 14 West.

Applicant also seeks an 88.7-acre non-standard oil proration unit in said pool comprising that portion of the SW/4 of Section 16, within the Navajo Reservation lying South of the mid-channel of the San Juan River, Township 29 North, Range 14 West, to be dedicated to said Navajo Tribal "E" Well No. 7.

CASE 2166:

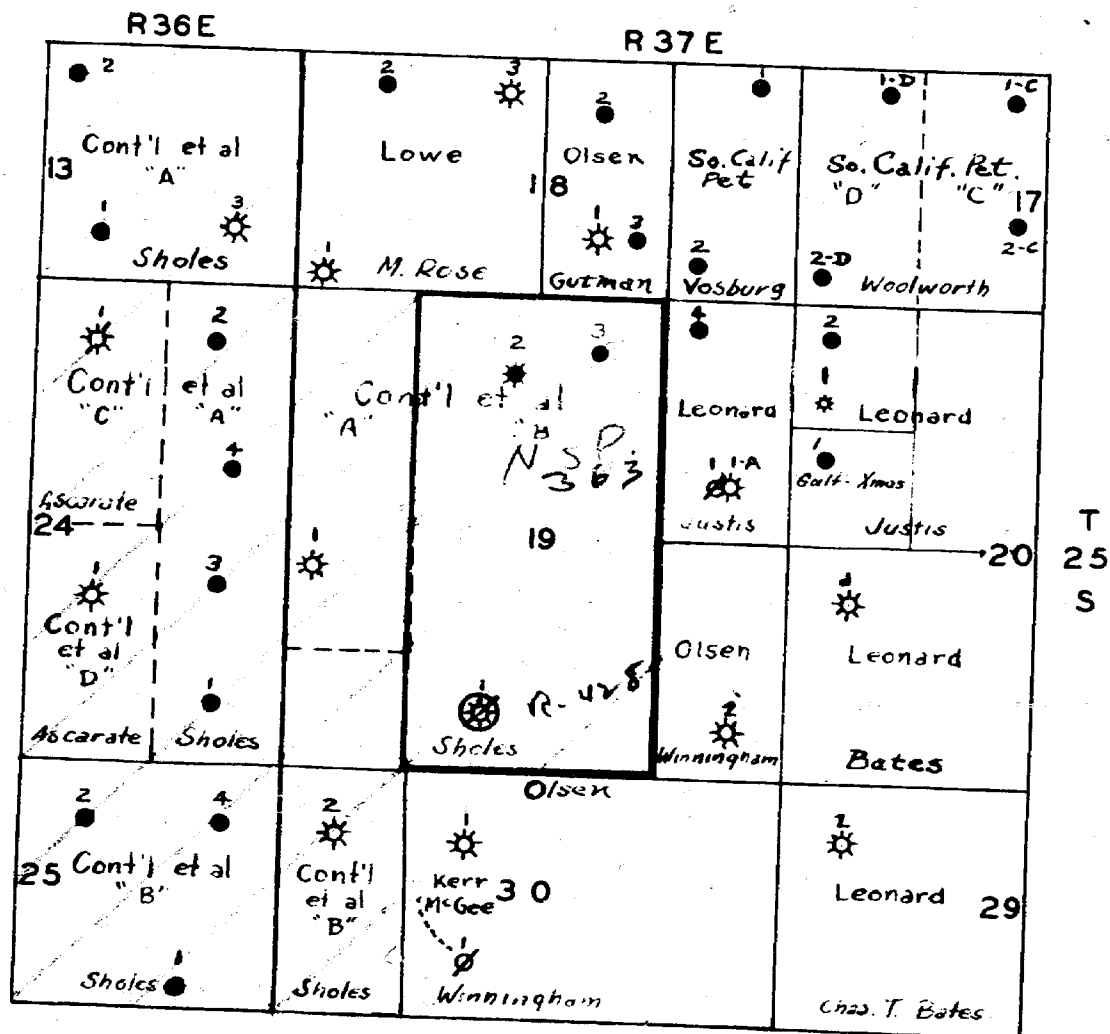
Application of Pan American Petroleum Corporation for permission to take interference tests and transfer allowables. Applicant, in the above-styled cause, seeks permission to take interference tests in the Cha Cha-Gallup Oil Pool, San Juan County, New Mexico, by shutting in its Navajo Tribal "E" Well No. 3, located in the NE/4 SW/4 of Section 21, Township 29 North, Range 14 West and transferring the allowable of said well in equal parts to the other five wells on the said Navajo "E" Lease.

CASE 2167:

Application of Chambers & Kennedy for a 200-acre non-standard gas proration unit and for an unorthodox gas well location. Applicant, in the above-styled cause, seeks the establishment of a 200-acre non-standard gas proration unit in the Eumont Gas Pool, Lea County, New Mexico, comprising the NE/4 NE/4, S/2 NE/4, and the N/2 SE/4 of Section 34, Township 19 South, Range 37 East. Said unit is to be dedicated to the Monument State Well No. 1, located on an unorthodox location at a point 1649 feet from the South line and 2197 feet from the East line of said Section 34.

- CASE 2168:** Application of Continental Oil Company for permission to shut-in one well and transfer its allowable to other wells. Applicant, in the above-styled cause, seeks permission to shut-in its Wilder Well No. 20, located 1980 feet from the South and East lines of Section 26, Township 26 South, Range 32 East, El Mar-Delaware Pool, Lea County, New Mexico, and transfer its allowable to the following offset wells in said Section 26: Wilder Lease Well Nos. 17, 18, 22 and 25.
- CASE 2169:** Application of Gulf Oil Corporation for a salt water disposal well. Applicant, in the above-styled cause, seeks an order authorizing the disposal of produced salt water into the Grayburg and San Andres formations through its J. F. Janda "F" Well No. 17, located in Unit A, Section 4, Township 22 South, Range 36 East, Lea County, New Mexico, with the proposed injection interval from 3999 feet to 5650 feet.
- CASE 2170:** Application of Amerada Petroleum Corporation for an amendment of Order R-1750. Applicant, in the above-styled cause, seeks an amendment of Order No. R-1750, which authorized the triple completion of its Wimberly Well No. 13, located in Unit M, Section 24, Township 25 South, Range 37 East, NMPM, Lea County, New Mexico, to substitute an undesignated oil pool, probably Paddock, for the Langlie-Mattix which was previously authorized. Applicant also proposes to use three parallel strings of tubing rather than two as provided in Order R-1750.

19-25-37



CONTINENTAL OIL COMPANY

SHOLES A-19 & B-19 LEASES
SURROUNDING LEASEHOLDINGS AND WELLS

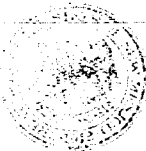
Sholes B-19 No. 1 ○

Proposed Gas Unit —

GOVERNOR
JOHN BURROUGHS
CHAIRMAN

State of New Mexico
Oil Conservation Commission

LAND COMMISSIONER
MURRAY E. MORGAN
MEMBER



P. O. BOX 871
SANTA FE

February 8, 1961

STATE GEOLOGIST
A. L. PORTER, JR.
SECRETARY DIRECTOR

Mr. Jason Kellahin
Kellahin & Fox
Box 1718
Santa Fe, New Mexico

Re: Case No. 2159
Order No. B-1886
Applicant:
Continental Oil Company

Dear Sir:

Enclosed herewith are two copies of the above-referenced
Commission order recently entered in the subject case.

Very truly yours,

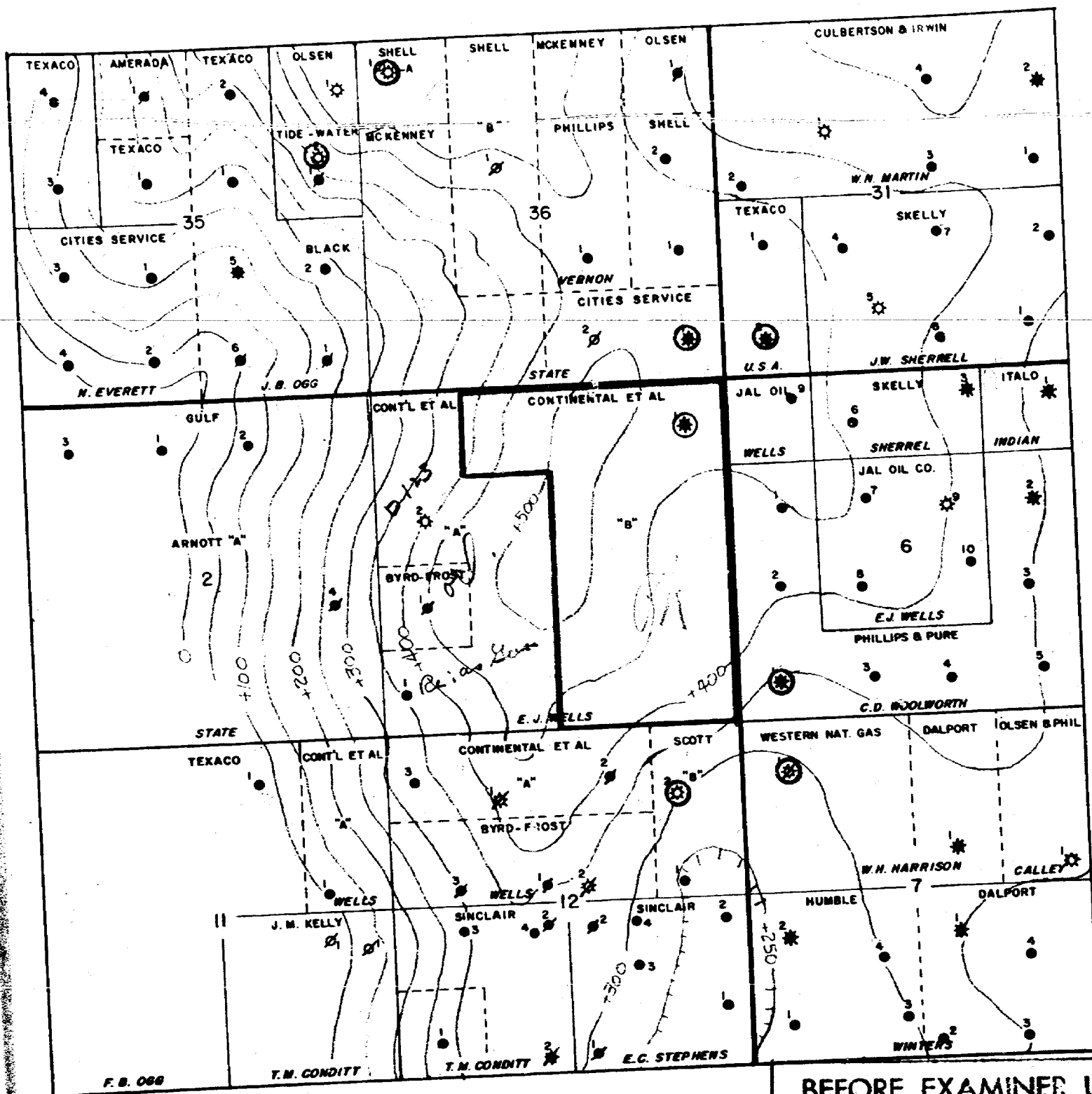
A. L. PORTER, Jr.,
Secretary-Director

ir/

Carbon copy of order also sent to:

Hobbs OCC ☒
Artesia OCC ☐
Aztec OCC ☐

Other



CONTINENTAL OIL COMPANY
 CONTOURED ON TOP OF THE YATES
 Contour Interval - 50'

T245, R306, Lea Co., New Mexico

BEFORE EXAMINER UTZ

OIL CONSERVATION COMMISSION

EXHIBIT NO. _____

CASE NO. _____

BEFORE EXAMINER UTZ

OIL CONSERVATION COMMISSION

EXHIBIT NO. 5

CASE NO. 2159

Proposed Gas Unit _____

Wells B-1 No. 1 ○

NEW MEXICO OIL CONSERVATION COMMISSION
One-point Back Pressure Test for Gas Wells
(Deliverability)

Form C-122-C
4-1-54

Pool Jalisco Formation Yates County Lee
Initial Annual Special Wells 2-1 Date of test 3/4-11/60 Well No. 1
Company Continental Oil Company Lease Wells 2-1 Purchaser El Paso Natural Gas Co.
Unit A Sec. 1 Twp. 23 Rge. 36 Perf. 2790 To 2999
Casing 7" Wt. 10# I.D. 6.456 Set at 3144 Perf. 2790 To 2999
Tubing 1-1/2" Wt. 9.20 I.D. 1.992 Set at 3149 Perf. 2790 To 2999
Gas Pay: From 2790 To 2999 L 2790 x G .655 = GL 1837 Bar. Press. 13.2
Producing Thru: Casing ■ Tubing ■ Type Well G.O. Dual
Single- Bradenhead-G.C. or G.C. Dual

FLOW DATA										
Started		Taken		Duration Hours	Type Taps	Line Size	Orifice Size	Static Press.	Differ- ential	Flow Temp.
Date	time	Date	time							
3-7	9:45 AM	3-8	9:45 AM	24	718	4"	.790	210	60.84	510
	PM		PM							

FLOW CALCULATIONS								Rate of Flow MCF/Da. @ 15.025 psia
Static Pressure P _s	Differ- ential P _w	Meter Extension P _s P _w	24-Hour Coeff- icient	Gravity Factor F _g	Temp. Factor F _t	Compress- ibility F _{pv}		
223.2	60.84	116.5	3.435	.9571	1.0088	1.023	395.3	

SHUT-IN DATA					FLOW DATA			
Shut-in		Press. Taken		Duration Hours	Wellhead Pressure P _o psia		W.H. Working Pressure (P _w and P _t) psia	
Date	Time	Date	Time		Tubing	Casing	Tubing	Casing
3-8	9:45 AM	3-9	9:45 AM	24		496.2		476.2
	PM	3-10		48		520.2		
		3-11	PM	72		533.2		

FRICITION CALCULATIONS (if necessary)

$$P_w^2 = (476.2)^2 / (1.045 \times .3953)^2 \cdot 116 = 226.77$$

$$P_w = 476.2 \text{ (Pressure drop insignificant)}$$

DELIVERABILITY CALCULATIONS

$$P_o = 476.2 \quad P_w = 533.2 \quad P_w + P_o = .6931$$

$$1 - \frac{P_w}{P_o} = .1069 \quad 1 + \frac{P_w}{P_o} = 1.6931 \quad 1 - \frac{P_w}{P_o} = .2024$$

$$.36 + M = 1.779 \quad \text{Log } 0.250176 \quad x \cdot n = .629$$

SUMMARY

$$P_o = 533.2 \text{ psia}$$

$$Q = 395.3 \text{ MCF/Da.}$$

$$P_w = 476.2 \text{ psia}$$

$$P_{wi} = 426.6 \text{ psia}$$

$$D = 568 \text{ MCF/Da.}$$

$$= 0.157361$$

$$\text{Log } Q = 2.596926$$

$$\text{Log } D = 2.754287$$

$$\text{Antilog } = 567.9 = D$$

COMPANY Continental Oil Company
 ADDRESS Box 68, Eunice, New Mexico
 AGENT and TITLE Dist. Supt.
 WITNESSED
 COMPANY

MMCC-3 BEC NLJ BAX 7/11-2

REMARKS

NEW MEXICO OIL CONSERVATION COMMISSION
 Form C-122-C
 4-1-54

NEW MEXICO OIL CONSERVATION COMMISSION

One-point Back Pressure Test for Gas Wells
 (Deliverability)

Form C-122-C
 4-1-54

Pool Jalisco Formation Yates County Lea
 Initial Annual ☒ Special 2/5-12/60
 Company Continental Oil Company Lease Meyer A-29 Well No. 4
 Unit 1 Sec. 29 Twp. 22S Rge. 10E Purchaser El Paso Natural Gas Co.
 Casing 5-1/2 Wt. 14.2 I.D. 5.012 Set at 3227 Perf. 3130 To 3142
 Tubing 2-7/8 Wt. 6.34 I.D. 2.441 Set at 3297 Perf. 3130 To 3142
 Gas Pay: From 3130 To 3142 L. 3297 x G. .672 = GI Bar. Press. 13.2
 Producing Thru: Casing X Tubing X Type Well Single
 Single- Bradenhead-G.C. or G.C. Dual

FLOW DATA

Started		Taken		Duration Hours	Type Taps	Line Size	Orifice Size	Static Press.	Differ- ential	Flow Temp.
Date	time	Date	time							
2-8	11:40 AM	2-9	11:40 AM	24	Flg	4"	1.750	265	70.56	77°

FLOW CALCULATIONS

Static	Differ-	Weyer	24-Hour	Gravity	Temp.	Compress-	Rate of Flow
Pressure	ential	Extension	Coeff-	Factor	Factor	ability	MOF/Da. @ 13.025 psia
P _s	P _e	P _{es}	icient	F _g	F _t	F _{pv}	Q
278.2	70.56	140.1	19.27	.9449	.9840	1.026	2,575

SHUT-IN DATA

Shut-in		Press. Taken		Duration Hours	Wellhead Pressure		W.B. Working Pressure	
Date	Time	Date	Time		(P _o) psia		(P _w and P _t) psia	
					Tubing	Casing	Tubing	Casing
2-9	11:40 AM	2-10	11:40 AM	24	514.2	514.2	381.2	428.2
		2-11		48	523.2	525.2		
	PM	2-12	PM	72	530.2	530.2		

FRICTION CALCULATIONS (if necessary)

SUMMARY

P_w Measured

P_o = 530.2 psia

Q = 2575 MOF/Da.

DELIVERABILITY CALCULATIONS

P_e = 428.2 psia

P_i = 424.2 psia

D = 2647 MOF/Da.

P_e 428.2 P_o 530.2 P_w + P_o .8076
 $\frac{P_w}{P_o} = .1924$ $\frac{P_w}{P_o} = 1.8076$ $\frac{P_w}{P_o} = .3478$
 $\log + M = 1.035$ $\log = 0.014940$ $\times n = .801$

= 0.011967

COMPANY Continental Oil Company
 ADDRESS Box 68, El Paso, New Mexico

LOG Q = 3.410777

AGENT and TITLE G. H. H. Dist. Supt.

LOG D = 3.422744

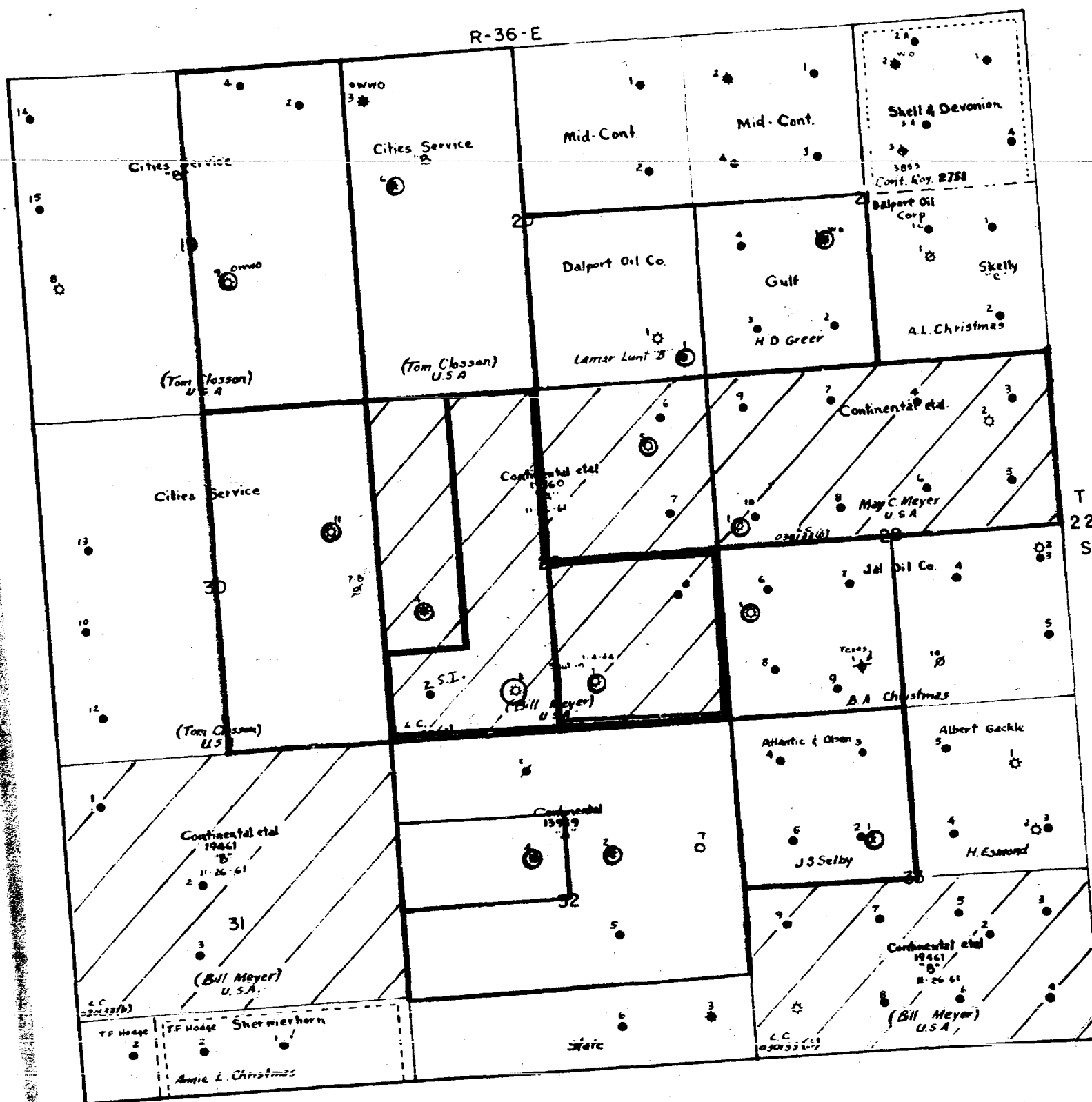
WITNESSED
 COMPANY

Analogue = 2647 = D

NMOCC-3 WEG HLJ WAM FILE-2

REMARKS

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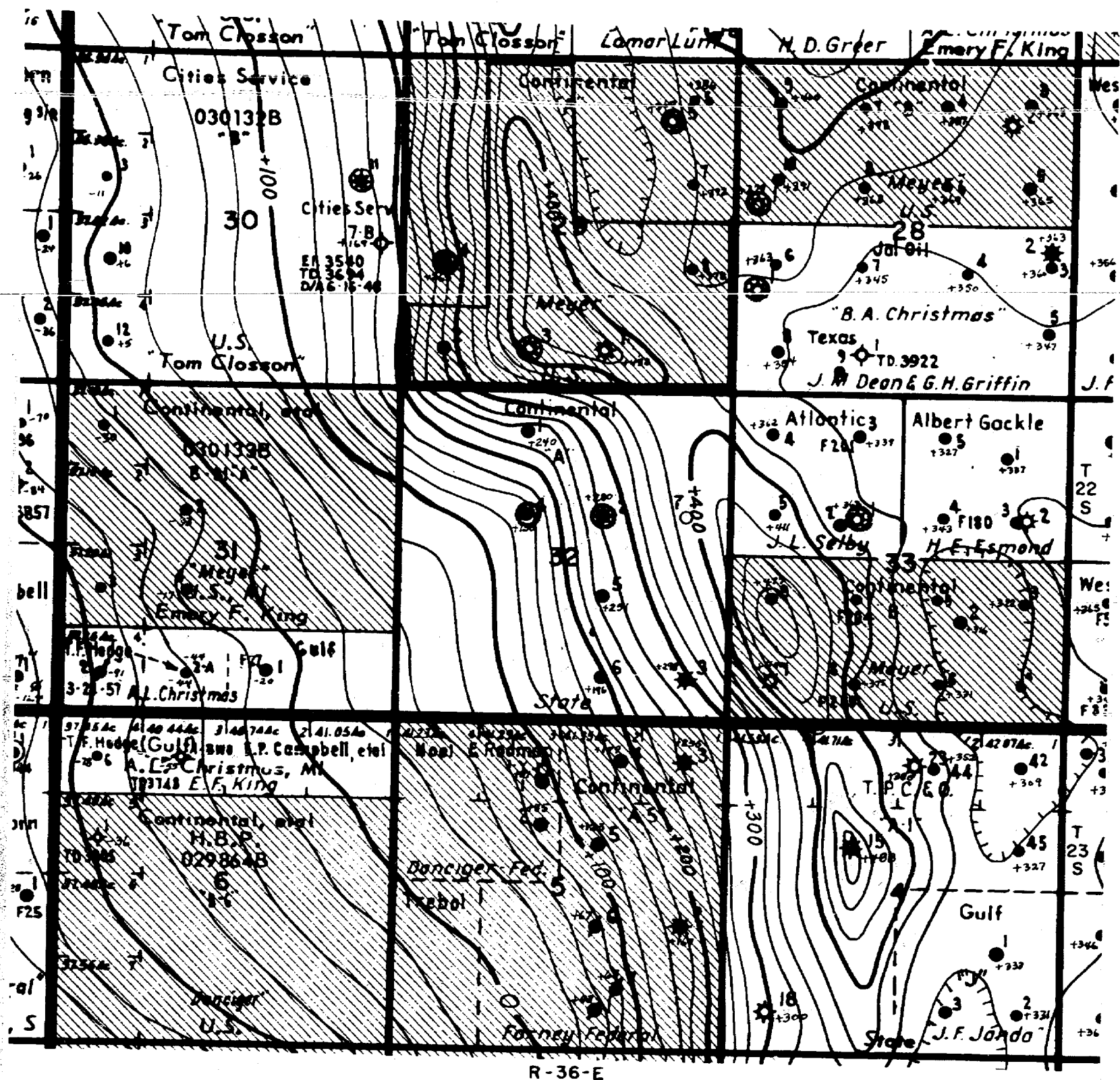


CONTINENTAL OIL COMPANY

Scale: 1" = 2000'

Proposed Gas Unit —
Meyer A-29 No.3 ○

Approved Gas Unit —
Approved Gas Unit Well ○



CONTINENTAL OIL COMPANY
STRUCTURE PLAT
CONTOURED ON TOP OF YATES

Jalmat Gas
Jalmat Oil
South Eunice

Proposed Gas Unit —

**BEFORE THE OIL CONSERVATION COMMISSION
OF THE STATE OF NEW MEXICO**

**IN THE MATTER OF THE HEARING
CALLED BY THE OIL CONSERVATION
COMMISSION OF NEW MEXICO FOR
THE PURPOSE OF CONSIDERING:**

**CASE No. 2159
Order No. R-1866**

**APPLICATION OF CONTINENTAL OIL COMPANY
FOR THREE NON-STANDARD GAS PRORATION
UNITS IN THE JALMAT GAS POOL, LEA COUNTY,
NEW MEXICO.**

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 o'clock a.m. on January 25, 1961, at Santa Fe, New Mexico, before Elvis A. Utz, Examiner duly appointed by the Oil Conservation Commission of New Mexico, hereinafter referred to as the "Commission," in accordance with Rule 1214 of the Commission Rules and Regulations.

NOW, on this 8th day of February, 1961, the Commission, a quorum being present, having considered the application, the evidence adduced, and the recommendations of the Examiner, Elvis A. Utz, and being fully advised in the premises,

FINDS:

(1) That due public notice having been given as required by law, the Commission has jurisdiction of this cause and the subject matter thereof.

(2) That the applicant, Continental Oil Company, seeks the establishment of the following-described non-standard gas proration units in the Jalmat Gas Pool, Lea County, New Mexico:

A 320-acre non-standard gas proration unit consisting of the W/2 E/2 and E/2 W/2 of Section 19, Township 25 South, Range 37 East, to be dedicated to the Sholes B-19 Well No. 1, located in the center of the SE/4 SW/4 of said Section 19.

A 360-acre non-standard gas proration unit consisting of the E/2 and NE/4 NW/4 of Section 1, Township 25 South, Range 36 East, to be dedicated to the Wells B-1 Well No. 1, located in the center of the NE/4 NE/4 of said Section 1.

A 360-acre non-standard gas proration unit consisting of the SE/4, E/2 W/2 and SW/4 SW/4 of Section 29, Township 22 South, Range 36 East, to be dedicated to the Meyer A-29 Well No. 3, located in the center of the SE/4 SW/4 of said Section 29.

-2-

CASE No. 2159
Order No. R-1866

(3) That the above-described gas proration units can reasonably be presumed to be productive of gas from the Jalmat Gas Pool.

(4) That approval of the subject application will neither cause waste nor impair correlative rights.

IT IS THEREFORE ORDERED:

(1) That the following-described non-standard gas proration units in the Jalmat Gas Pool, Lea County, New Mexico, are hereby established:

A 320-acre non-standard gas proration unit consisting of the W/2 E/2 and E/2 W/2 of Section 19, Township 25 South, Range 37 East, to be dedicated to the Sholes B-19 Well No. 1, located in the center of the SE/4 SW/4 of said Section 19.

A 360-acre non-standard gas proration unit consisting of the E/2 and NE/4 NW/4 of Section 1, Township 25 South, Range 36 East, to be dedicated to the Wells B-1 Well No. 1, located in the center of the NE/4 NE/4 of said Section 1.

A 360-acre non-standard gas proration unit consisting of the SE/4, E/2 W/2 and SW/4 SW/4 of Section 29, Township 22 South, Range 36 East, to be dedicated to the Meyer A-29 Well No. 3, located in the center of the SE/4 SW/4 of said Section 29.


(2) That the above-described gas wells are hereby assigned an acreage factor for allowable purposes in the proportion that the acreage in the non-standard gas proration unit bears to the acreage in a standard gas proration unit in the Jalmat Gas Pool, subject to the provisions of the Special Rules and Regulations for said pool.

DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION


EDWIN L. MEEHAN, Chairman


E. S. WALKER, Member


A. L. PORTER, JR., Member & Secretary

esr/

Case 2159

Heard. 1-25-61

1-27-61

1. Grant Court request for three
NSP's as follows:

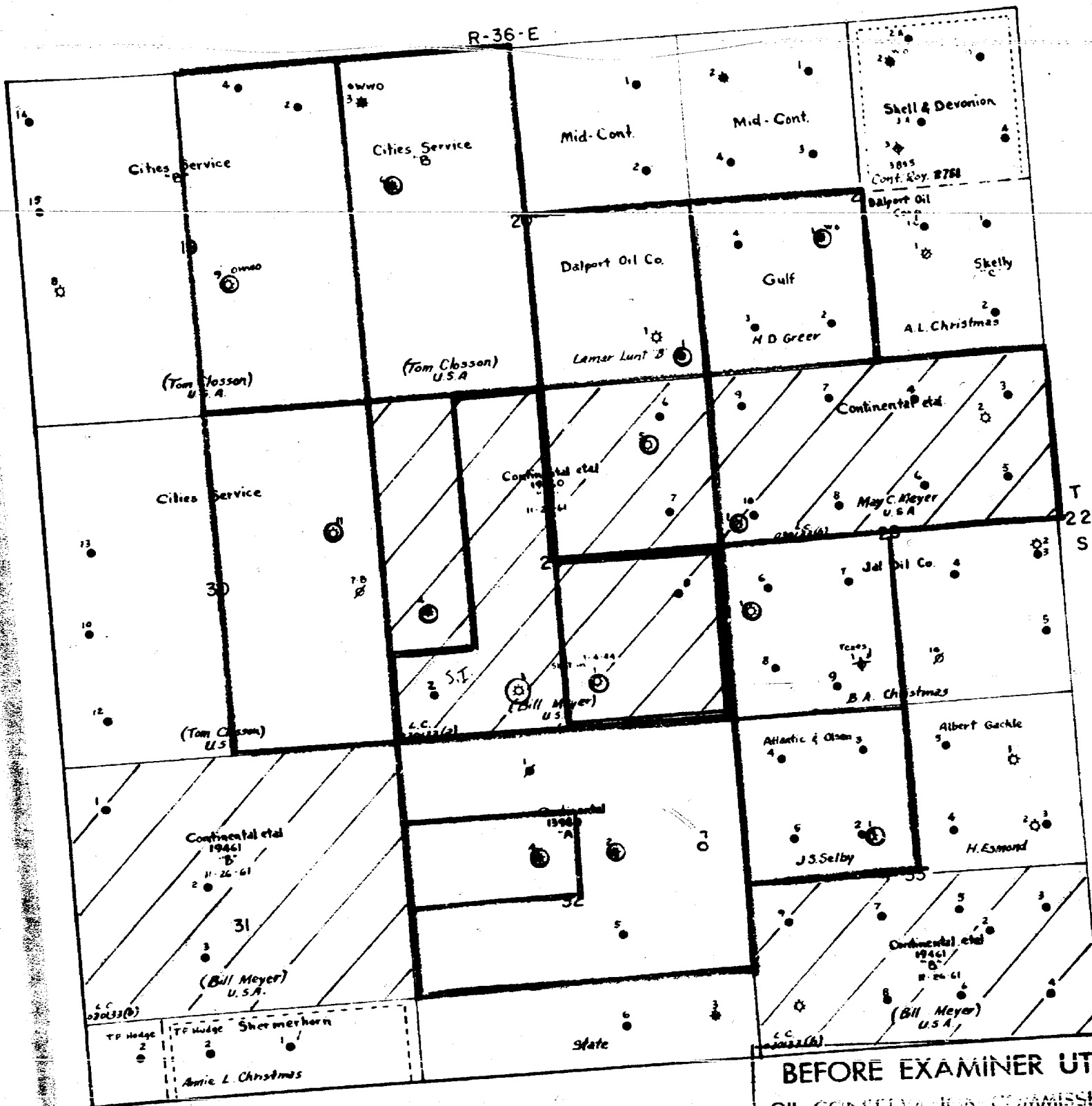
(a) a 360 Acre unit consisting of
the E/2 and NE/4 NW/4, 360 Ac. to be
dedicated to the Well B-1 #1, ^{center} NENE
1-255-36 E.

(b) a 360 Ac. unit consisting of
the SE/4, E/2 W/2, SWSW, sec. 29-225-
36 E to be dedicated to their ~~Sholex~~
Meyer A-29 #3 center SE SW sec. 29.

(c) a 320 Ac. unit consisting of
the W/2 E/2, E/2 W/2, 19-25-37 to be
dedicated to their Sholex B-19 #1
center sec. 19.

All acreage in these units appears
to be productive of Gas in the
interval open in the dedicated
well.

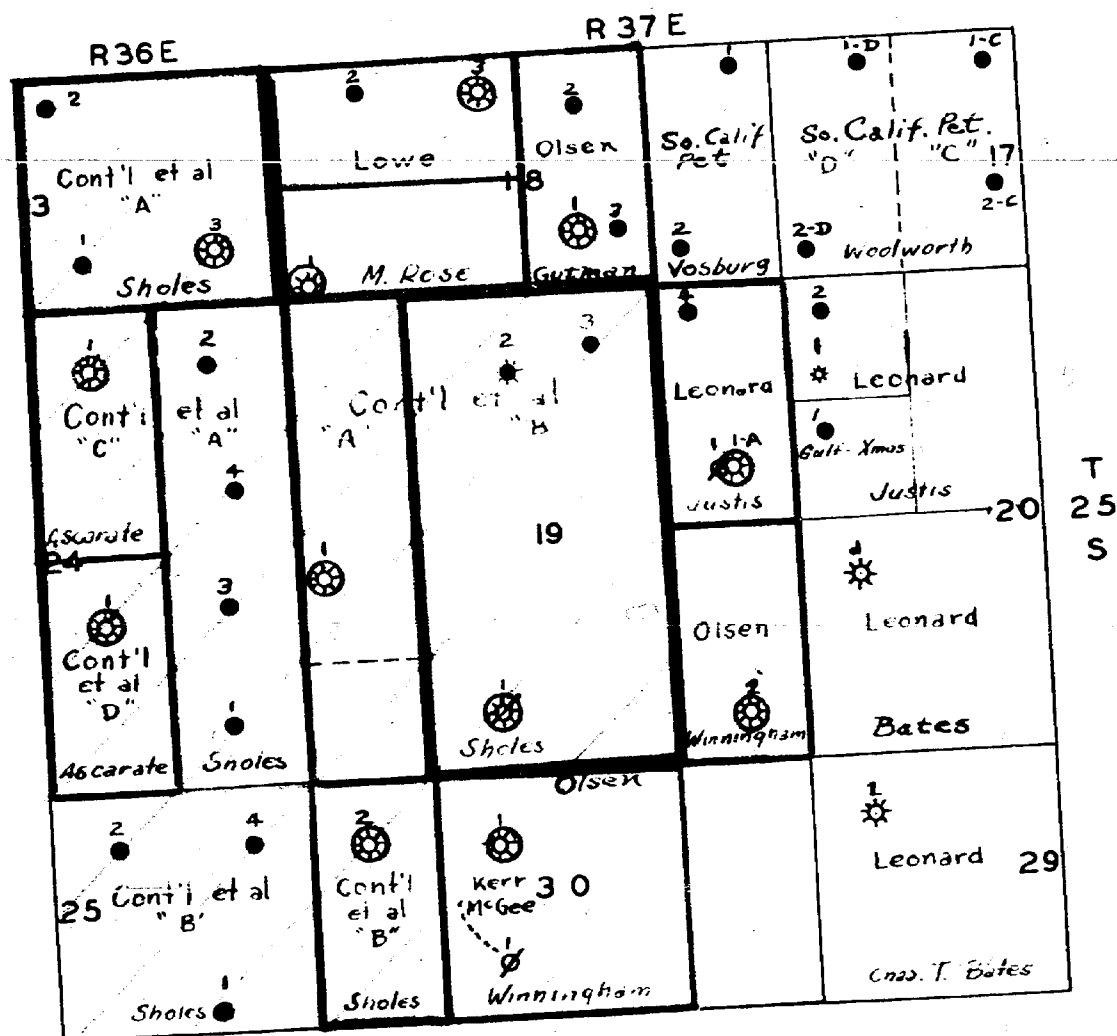
Thus A. D. R.



CONTINENTAL OIL COMPANY

BEFORE EXAMINER UTZ
OIL CONSERVATION COMMISSION
EXHIBIT NO. 79
CASE NO. 2159

Approved Gas Unit —
Approved Gas Unit Well ○



CONTINENTAL OIL COMPANY

SHOLES A-19 & B-19 LEASES
SURROUNDING LEASEHOLDINGS AND WELLS

Sholes B-19 No. 1 ○
Proposed Gas Unit —

Approved Gas Unit Well ○
Approved Gas Unit —

RECEIVED
CUN

NEW MEXICO OIL CONSERVATION COMMISSION
One-point Back Pressure Test for Gas Wells
(Deliverability)

Form C-122-C
4-1-56

Pool Jalisco Formation Yates County Lee
Initial Annual Special Shales B-19 Date of test 3/7-11/40 AM 9 49
Company Continental Oil Company Lease Shales B-19 Well No. 1
Unit 1 Sec. 19 Twp. 25 Rge. 37 Purchaser K1 Paso Natural Gas Co.
Casing 7" Wt. 23.4 I.D. 6.366 Set at 2662 Perf. O.H. 2662 To 2945
Tubing None Wt. I.D. Set at Perf. To
Gas Pay: From 2662 To 2945 L 2662 x G .677 = GL 1802 Bar. Press. 13.2
Producing Thru: Casing X Tubing Type Well Single
Single- Bradenhead-G.G. or G.C. Dual

Started		Taken		Duration Hours	Type Taps	Line Size	Orifice Size	Static Press.	Differ- ential	Flow Temp.
Date	time	Date	time							
3-7	8:00 AM	3-8	8:00 AM	24	Flg	4"	1.500	129	10.24	55°
	PM		PM							

FLOW CALCULATIONS								Rate of Flow	
Static Pressure P _s	Differ- ential P _w	Meter Extension P ₁ P ₂	24-Hour Coeff- icient	Gravity Factor F _g	Temp. Factor F _t	Compress- ibility F _{pv}		MCF/Da.	3 15.025 psia
142.2	10.24	38.16	13.99	.9414	1.0048	1.013		511.6	

SHUT-IN DATA								FLOW DATA	
Shut-in Date	Time	Press. Date	Taken Time	Duration Hours	Wellhead Pressure (P ₀) psia	W.H. Working Pressure (P _w) and (P ₁) psia			
3-8	8:00 AM	3-9	8:00 AM	24		218.2		145.2	
		3-10		48		228.2			
		3-11	PM	72		231.2			

FRICTION CALCULATIONS (if necessary)

$$P_w^2 = (145.2)^2 + (.4915 \times .5116)^2 \cdot 117 = 21.09$$

$$P_w = 145.2 \text{ (Pressure Drop Insignificant)}$$

DELIVERABILITY CALCULATIONS

$$P_w = 145.2 \quad P_0 = 231.2 \quad P_w + P_0 = .6280$$

$$\frac{P_w}{P_0} = .3720 \quad \frac{P_w}{P_0} = 1.6280 \quad \frac{P_w}{P_0} = .6056$$

$$.36 + M = .5945 \quad \log 9.774152-10 \quad \times .987 = .987$$

SUMMARY

$$P_0 = 231.2 \text{ psia}$$

$$Q = 511.6 \text{ MCF/Da.}$$

$$P_w = 145.2 \text{ psia}$$

$$P_1 = 185 \text{ psia}$$

$$D = 306 \text{ MCF/Da.}$$

$$= 9.777088-10$$

$$\log Q = 2.708930$$

$$\log D = 2.486018$$

$$\text{Antilog} = 306.2 = D$$

COMPANY Continental Oil Company
ADDRESS Box 68, Eunice, New Mexico
AGENT and TITLE J. R. Hank Dist. Supt.
WITNESSED
COMPANY

NMOCC-3 WEG HLJ WAM FILE-2

REMARKS

NEW MEXICO OIL CONSERVATION COMMISSION

Examiner Hearing (Elvis A. Utz)

Santa Fe, NEW MEXICO

REGISTER

HEARING DATE January 25, 1961 TIME: 9 a.m.

NAME:	REPRESENTING:	LOCATION:
H. T. Frost Jr.	ATLANTIC REFINING Co.	MIDLAND, TEX
G. W. EATON, JR.	PAN AMERICAN PETR. CORP.	FAIRMINGTON, N.M.
GUY BUELL	" " " "	FORT WORTH, TEX.
R. S. Christie	Amerade	Tulsa Okla
Jason Kellahin	Kellahin + Fox	Santa Fe, N.M.
Ray Allen	Atlantic	Roswell, N. Mex.
H. P. Butler	H. P. H.	" "
A. L. Porter	O. C. C.	Santa Fe.
W. C. Kelly	Gulf Oil & Refining	" "
J. E. Robinson, Jr.	TESSCO Inc.	MIDLAND, TEXAS
Tan McKenna	Chambers + Kennedy	Midland, Texas
Leo S. Cichowicz	Continental Oil Co.	Roswell N. M.
M. R. McLENNAN	Continental Oil Co.	Parango, Colo
William M. Huggitt	" " "	Denver, Colo
Bill Lester	Gulf Oil Corp.	Roswell.
Don Bulbrech	Gulf Oil Corp.	Hobbs
Gerald J. Savage	Gulf Oil Corp.	Roswell
William A. Hick	Chambers + Kennedy	Midland, Tex
J. Losco	Yates Mfg Co	Artesia N. M.
Ken Reynolds	"	"

NEW MEXICO OIL CONSERVATION COMMISSION

Examiner Hearing (Elvis A. Utz)

Santa Fe, NEW MEXICO

REGISTER

HEARING DATE January 25, 1961

TIME: 9 a.m.

NAME:

Jim Bailey

REPRESENTING:

Yates Oil Co

LOCATION:

Midland

BEFORE THE
OIL CONSERVATION COMMISSION
Santa Fe, New Mexico
January 25, 1961

EXAMINER HEARING

IN THE MATTER OF:

Application of Continental Oil Company for three non-standard gas proration units. Applicant, in the above-styled cause, seeks the establishment of the following-described non-standard gas proration units in the Jalmat Gas Pool, Lea County, New Mexico:

A 320-acre non-standard gas proration unit consisting of the W/2 E/2 and E/2 W/2 of Section 19, Township 25 South, Range 37 East, to be dedicated to the Sholes B-19 Well No. 1, located in the center of the SE/4 SW/4 of said Section 19.

A 320-acre non-standard gas proration unit consisting of the E/2 and NE/4 NW/4 of Section 1, Township 25 South, Range 36 East, to be dedicated to the Wells B-1 Well No. 1, located in the center of the NE/4 NE/4 of said Section 1.

A 360-acre non-standard gas proration unit consisting of the SE/4, E/2 W/2 and SW/4 SW/4 of Section 29, Township 22 South, Range 36 East, to be dedicated to the Meyer A-29 Well No. 3, located in the center of the SE/4 SW/4 of said Section 29.

Case
2159

BEFORE:

Elvin A. Utz, Examiner

TRANSCRIPT OF HEARING

MR. UTZ: Case 2159.

MR. PAYNE: Application of Continental Oil Company for three non-standard gas proration units.

MR. KELLAHIN: Jason Kellahin, Kellahin & Fox, Santa Fe,

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PHONE CH 3-6691



representing the applicant. We have one witness, Mr. Cichowicz.
(Witness sworn.)

MR. UTZ: Other appearances in this case?

LEO CICHOWICZ

called as a witness, having been previously duly sworn, testified
as follows:

DIRECT EXAMINATION

BY MR. KELLAHIN:

Q Would you state your name, please?

A Mr. Leo S. Cichowicz.

Q By whom are you employed and in what position?

A Senior Production Engineer, Continental Oil Company.

Q Are you a petroleum engineer?

A Yes, sir.

Q Have you testified before this Commission as a petroleum
engineer?

A Yes, sir.

MR. KELLAHIN: Are the witness's qualifications acceptable?

MR. UTZ: Yes, sir.

Q (By Mr. Kellahin) Mr. Cichowicz, are you familiar with
the application in Case 2159?

A Yes, sir, I am.

Q Would you state briefly what is proposed in this appli-
cation?

A On its initial well, B-19 No. 1, this is the application

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of Continental Oil Company for the enlargement of the presently approved 160-acre unit to a non-standard gas proration unit of 320 acres consisting of the W/2 E/2 and the E/2 W/2 of Section 19, Township 25 South, Range 37 East, NMPM, Lea County, New Mexico, in the Jalmat Gas Pool for its Sholes B-19 Well No. 1.

Q That is the first portion of the application; is that correct?

A Yes, sir.

Q Referring to Exhibit No. 1, will you discuss the information shown on the exhibit?

A Exhibit No. 1 is a location and ownership plat showing the Sholes B-19 Lease and surrounding area. The lease consists of the W/2 E/2, and E/2 W/2 and SW/4 SW/4 of Section 19, Township 25 South, Range 37 East, NMPM, Lea County, New Mexico.

It is proposed to allocate the W/2 E/2 and the E/2 W/2 of Section 19, Township 25 South, Range 37 East for Jalmat gas proration purposes to the Sholes B-19 No. 1 which is shown circled in red, located 660 feet from the south line and 1980 feet from the west line of Section 19, Township 25 South, Range 37 East. Surrounding Jalmat gas wells are shown circled in green, and the acreage allocated to them is shown outlined in green, also.

Q You prepared a structure plat of the area involved?

A Exhibit No. 2 is the structure plat, contoured on the Yates Marker, showing the proposed unit and surrounding area. The No. 1 well, to which the unit is proposed to be allocated for gas



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proration purposes is shown circled in red and the acreage proposed to be allocated to the No. 1 well is outlined in red. As can be seen, the Yates formation extends under the Sholes B-19 Lease at an elevation which is proven by other wells to be gas productive.

Q On the basis of this exhibit, in your opinion is all the area you propose to dedicate to the well productive of gas?

A Yes, sir.

Q Now, have you any deliverability test information on the Sholes B-19 No. 1 well?

A Exhibit No. 3 is a copy of the deliverability tests of the Sholes B-19 No. 1 well. It shows the well is capable of producing the allowable for the enlarged unit.

Q What does the test reflect as to its productivity?

A Deliverability is shown to be 306 MCF of gas per day as measured by a test taken March 7th to 11th, 1960.

Q Is the additional acreage you propose to dedicate to this well presently dedicated to Jalmat production?

A The acreage to be rededicated to the No. 1 well has been dedicated to the No. 2 well. However, to present additional testimony in regard to the production performance of the No. 2 well, we offer the following: The additional acreage proposed to be allocated to the Sholes B-19 No. 1 was originally allocated to the No. 2, which is now classified as a Jalmat oil well. The No. 2 well was completed on September 9th, 1948, for an initial daily potential of 4,220 MCF of gas. The interval open to production is from the



base of the 5 1/2-inch casing set at 2700 to 3000, with the pay being the Yates formation from 2800 to T.P.

During July of 1952 the Sholes B-19 No. 2 began producing oil and tested at the daily rate of 25 barrels of oil, no water, with 1,168 MCF of gas. The well was then reclassified as an oil well.

During 1957 gas production recurred, and the Sholes B-19 No. 2 was reclassified as a Jalmat gas well on April 1, 1957, and assigned 160 acres by Commission Order NMSP 363. Only marginal gas production was obtained, and on January 16th, 1958, the bottomhole pressure bomb was run into the well and found fill material at a depth of 2718 feet and liquid at 1925 feet.

On May 1st, 1958, the Sholes B-19 No. 2 was temporarily shut down. During August, 1958, this well was cleaned out to 3,000 feet and treated with 2,000 gallons of acid, 20,000 gallons of lease crude, 15,000 pounds of sand and 1,000 pounds of Adomite. After this workover the No. 2 well tested 12 barrels of oil per day, no water, with 577 MCF of gas, giving a GOR of 48,083, and was reclassified as a Jalmat oil well on August 27th, 1958.

Q Is that well presently classified, then, as an oil well?

A Yes, sir, it is.

Q What is the status of your No. 3 well, which appears on the same unit?

A The No. 3 well is producing from the Seven Rivers formation at a depth of, through perforations of 3298 to 3318. I might add that these perforations are at a considerably low inter-

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val in the Seven Rivers formation.

Q Is the same interval open in the No. 2 well as in the No. 1 well?

A Yes. However, in addition the No. 2 well has penetrated approximately 55 feet of the Yates formation which was not open into the No. 1 well. I might add, also, that the contour map shows the No. 1 well to exist approximately 39 feet higher on the structure.

Q In your opinion does that account for the difference in the characteristics of the two wells?

A Yes, sir.

Q Is the same interval open in the No. 1 well as in the No. 3 well?

A No, it is not.

Q What is the difference there?

A As previously mentioned, the No. 3 well was completed with casing set and perforated in the interval 3298 to 3318 which is considerably below the T.D. of either wells No. 1 or 2, which were completed in open hole.

Q At the present time is the E/2 of the NW/4 and the W/2 of the NE/4 allocated for Jalmat Production?

A No.

Q Is the Sholes B-19 No. 1 well capable of producing the allowable for a 320-acre unit?

A Yes, it is.

Q Does the proposed unit consist of contiguous quarter-

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quarter sections?

A Yes, sir.

Q Within a single governmental section?

A Yes, it does.

Q Does the length and width comply with the present rules of the Commission?

A Yes, they do.

Q In your opinion, would the approval of this non-standard unit impair correlative rights?

A No.

Q Would it prevent waste?

A Yes, it would.

Q Now, what is proposed as to the Wells B-1 No. 1 unit?

A In regard to the Wells B-1 No. 1, this is Continental Oil Company's application for the enlargement of the presently approved 160-acre unit to a non-standard 360-acres, consisting of the E/2 and the NE/4, NW/4 of Section 1, Township 25 South, Range 36 East, NMPM, Lea County, New Mexico, in the Jalmat Gas Pool for the Wells B-1 No. 1.

Q Have you prepared an ownership plat showing the lease and surrounding area?

A Exhibit No. 4 is the location and ownership plat showing the Wells B-1 lease and the surrounding area. As shown, outlined in red, the lease consists of the E/2 of the NE/4 of Section 1, Township 25 South, Range 36 East, NMPM, Lea County, New Mexico. It



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is proposed to allocate the entire lease for Jalmat gas proration purposes to the Wells B-1 No. 1 which is shown circled in red and is located 660 feet from the north and east lines of Section 1, Township 25 South, Range 36 East. Surrounding Jalmat gas wells are shown circled in green and the acreage allocated to them is outlined in green.

Q Have you prepared a structure plat showing the area?

A Exhibit No. 5 is a structure plat, contoured on the Yates Marker, showing the proposed unit and surrounding area. The No. 1 well to which this unit is proposed to be allocated for gas proration purposes is shown circled in red and the acreage proposed to be dedicated is outlined in red. As can be seen on this exhibit, the Yates formation extends under the entire Wells B-1 Lease at an elevation which is proven by other wells to be gas productive.

Q On the basis of this information would you consider all of the acreage you propose to dedicate to be productive of gas?

A Yes, sir, I do.

Q Do you have deliverability test data on the Wells B-1 No. 1 well?

A Exhibit No. 6 is a copy of the deliverability test of the Wells B-1 No. 1. As shown, the well is capable of producing the allowable for the enlarged unit.

Q Do you have any conclusions on the basis of this testimony?

A Yes. The SE/4 of the NE/4 NW/4 is not assigned to any



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gas well and is available for allocation to a gas well. The Wells B-1 No. 1 is capable of producing the allowable for a 360-acre proration unit. The proposed unit is comprised of contiguous quarter-quarter sections and is contained within a single governmental section. The length and width of the said unit does not exceed 5,280 feet. The entire unit is reasonably presumed productive of gas from the Jalmat Pool. Approval of this application would be in the interests of preventing waste and protecting correlative rights. In consideration of the facts just mentioned it is recommended that this application be approved.

Q Now, in connection with your Meyer A-29 No. 3 well, what is proposed on that?

A In regards to the Meyer A-29 No. 3, this is Continental Oil Company's application for the enlargement of the presently approved 200-acre unit to a 360-acre non-standard gas proration unit consisting of the SE/4, E/2 W/2 and the SW/4 SW/4 of Section 29, Township 22 South, Range 36 East, Lea County, New Mexico, in the Jalmat Gas Pool, for its Meyer A-29 No. 3.

Q Do you have a location and ownership plat on that well?

A Exhibit No. 7 is a location and ownership plat showing the Meyer A-29 Lease and surrounding area. The lease consists of Section 29, Township 22 South, Range 36 East, NMPM, Lea County, New Mexico. It is proposed to allocate the SE/4 and the E/2, the W/2, and the SW/4 SW/4 of Section 29, Township 22 South, Range 36 East, for jalmat gas proration purposes to the Meyer A-29 No. 3 which is



shown circled in red and is located 660 feet from the south line and 1980 feet from the west line of Section 29, Township 22 South, Range 36 East. Surrounding Jalmat gas wells are shown circled in green and the acreage allocated to them is shown outlined in green.

Q What is the situation as to the SE/4 of the lease?

A It may be noted that the SE/4 of the lease is presently allocated to the Meyer A-29 No. 1, which is not capable of commercial production. A recent workover of the Meyer A-29 No. 1 consisted of testing each producing interval and squeezing the lowermost interval 3360 to 3390 to shut off water production. After this workover the well swabbed dry. It is anticipated that an expensive stimulation treatment of the Meyer A-29 No. 1 would recover the remaining gas reserves. However, the most economical and practical method of recovering the gas reserves from under the Meyer A-29 No. 1 is to allocate the acreage to the Meyer A-29 No. 3.

Q You state that the Meyer A-29 No. 1 is non-commercial. In your opinion, does that mean that there is no gas left under that area?

A No. It simply means that the squeezing operation between 3360 to 3390 had acted to shut off all pay intervals, and it would involve reperforation and retreatment to convert the well to a producer.

Q In your opinion is there gas under the acreage which is dedicated to that well?

A Yes, based on offset production, I do.

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Q Do you have a structure plat of the area?

A Exhibit 8 is a structure plat, contoured on the Yates Marker, showing the proposed unit and surrounding area. The No. 3 well, to which the unit is proposed to be allocated for gas production purposes is shown circled in red and the acreage proposed to be allocated to the No. 3 well is outlined in red. As can be seen, on this exhibit, the Yates formation extends under the entire Meyer A-29 Lease at an elevation which is proven by other wells to be gas productive.

Q On the basis of this exhibit, in your opinion is all of the acreage you propose to dedicate to the well productive of gas?

A Yes, sir.

Q Do you have deliverability test data on the A-29 No. 3?

A Exhibit 9 is a copy of the deliverability test of the Meyer A-29 No. 3. It shows that the Meyer A-29 No. 3 is capable of producing the allowable for the enlarged unit.

Q Do you have any conclusions on the basis of this information, Mr. Cichowicz?

A I conclude the Meyer A-29 No. 3 is capable of producing the allowable for a 360-acre unit. The proposed unit is comprised of contiguous quarter-quarter sections and is contained within a single governmental section. The length or width of the proposed unit does not exceed 5,280 feet. The entire unit is reasonably presumed to be productive of gas from the Jalmat Pool. Approval of this application would be in the interests of preventing waste and



protecting correlative rights. In considering the facts just mentioned, it is recommended that this application be approved.

Q Mr. Cichowicz, have you examined Exhibits 1 through 9, inclusive?

A I have.

Q In your opinion are they correct and reflect the information as depicted on them accurately?

A Yes, sir.

MR. KELLAHIN: At this time we would like to offer in evidence Exhibits 1 through 9 inclusive.

MR. UTZ: Exhibits 1 through 9 will be entered into the record.

MR. KELLAHIN: That is all the questions I have.

BY MR. UTZ:

Q In regard to your Sholes B-19 No. 2, I believe you said that you intended to continue producing that as an oil well?

A Yes, sir.

Q And the only difference between the vertical perforations of the No. 2 and the No. 1 is that the No. 2 is perforated a little lower?

A No. Both wells are completed in open hole. However, the No. 2 well had penetrated approximately 55 feet of Yates which is not open in the No. 1 well. Both wells are completed in open hole. I might add, the casing in the No. 1 well is set at 2662, T.D. at 2945. The casing in Sholes B-19 No. 2, set at 2700 feet, T.D.

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3,000, and the completion data, which might help, the No. 1 well completed March 22nd, 1941; Sholes B-19 No. 2 completed September 9th, 1943.

Q Do you know where the oil is coming from in the No. 2?

A In studying the performance, the production performance of 1 and 2 I would say the oil is coming from the 55-foot interval not open in the No. 1 well. Otherwise the No. 1 well would probably be reacting in a similar manner, that is, producing oil.

Q You don't think there is any gas coming from the upper zone, the open hole above the 55-foot interval?

A Yes, I do. I believe there is gas coming from that interval.

Q What did you say the GOR was, 48 something, wasn't it?

A Yes, sir, 48,083 to one. We have a more recent test than that one I have mentioned. 12/19/60 the well produced two barrels of oil, zero water, with a GOR of 23,300 to one. That puts the well, I believe, in the realm of an oil producer with a GOR considerably below the 100,000 to one mark.

Q How long a test was that?

A Twenty-four hours.

Q Two barrels of oil?

A That's all, sir. Evidently the well had declined from the test run on the rework during August, 1958, at which time it produced 12 barrels. It is possible that the well may be subject to shut in within the near future when it reaches an economic limit.

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which it is bordering now with the current production.

Q Have you any production figures over the past couple of months?

A For the No. 2, no.

Q It is not producing very much gas, and the same zone as the No. 1, so it would appear the gas is almost depleted in that quarter section too, wouldn't it?

A Well, no. I don't know exactly what production technique is being used. However, there is no doubt that we are suppressing production out there to maintain a low GOR. If the well was run with an open choke the gas production would be in considerable excess of that amount reflected by the most recent test.

Q Is the oil producing through tubing?

A That I would have to check. The No. 1 well, I am sure, yes, sir. I have that information, ran 2903 feet of 2-inch tubing, No. 1 well. No. 2 well, I do not have that information.

Q Referring to your Exhibit No. 5, which would be your Wells B-1 No. 1 well, to the west of this unit, what do we have in the way of oil and gas wells?

A The W/2, which is the Wells A Lease, by Commission letter dated October 28, 1960, a request was made to run a deliverability on No. 2, shown as a gas well. Test has been run, deliverability measured as 123 MCF per day. This test was taken November 28 to December 2, 1960. This was in compliance with the request by the Commission. Subsequently it is anticipated within the next month



or so an allowable will occur on the gas proration schedule. The No. 1 well located further south is currently in the process of being reworked.

Q Is that an oil well?

A It was an oil well. However, as I recall the reworking details it is possible there was a recompletion as a gas well. However, the tests now are being made for an attempt to reconvert the well to a producing status as oil.

Q Has that well been producing right along?

A It has been producing oil, but the amount has been low. Consequently, re recommended remedial work which is now being done. In regard to Three States lease, I am not familiar with the production. It looks like the well is shut in.

Q It shows it to be abandoned.

A No, I believe that symbol on the contour map is erroneous. I believe that well on Exhibit 4, I believe it shows it to be a producer, Three States producer, and I believe the well is still producing. It seems that I remember seeing a cross section in evaluating the remedial work for the No. 1, which shows the Three States to be an oil producer. However, I am not familiar with the intervals open in the well.

Q In regard to your A-29 Meyer No. 3, what explanation do you have for the abandonment of the No. 1 well?

A I brought the completion report, that is, the recompletion report given in outline for the work that was done during the re-

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completion operation. I will give that verbatim: Pay in the well is Yates Seven Rivers, 3100 to 3190 feet. This pay entails selective perforations from 3100 to 3192; 3200 to 3226; 3261 to 3300 and 3360 to 3390. The remedial work and testing entailed the following: Ran tubing with a retrievable bridge plug and packer, straddled the interval 3360 to 3390; well swabbed 70 barrels of water in 13 and a half hours. We then straddled the interval from 3360 to 3300. The well flowed seven barrels of water in 16 hours with an estimated 200 MCF of gas per day. Then we straddled the uppermost interval. The well tested 12 barrels of water in 12 hours, estimated 200 MCF of gas per day. The casing was then tested from the surface to 3075, tested O.K. Set retainer at 3340 and tested the perforations from 3360 to 3390.

Q And how do you intend to produce that well now?

A We intend to keep the well shut in. We feel the squeeze job has been effective in shutting off water, but pay also, mud pay also. We feel it would be, as mentioned before, more economical to produce the allowable from the No. 3 well, and at the same time to maintain the well with the cement shut in to protect production from the No. 3, which is a direct west offset. The No. 3 is an excellent producer, as is reflected by the back pressure test offered as Exhibit No. 9, and we want to protect the production of gas from the 3 well.

Q What can you tell me about the gas wells to the east of this unit, in Section 28?



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A I have not looked into the productivity or the zones of completion in any of the wells other than those that we have discussed up to now. I do not have any additional information.

Q In view of the fact that the No. 1 completely quit producing, why do you feel the SE/4 of Section 29 is productive of gas?

A The structure map given as Exhibit No. 8, I believe, shows the Meyer No. 1 to be located approximately, as I recall, I checked that, 50 feet higher than in the No. 3 well, and the productivity to date from the No. 1 well, gas production, fairly conclusively proves that the only reason the productivity of the No. 1 has been marred at all is water production. We had attempted remedial work to exclude water production which was, we feel, unsuccessful. We don't feel it wise to spend any additional money to attempt to revert the No. 1 well to a gas producer, and we request that the No. 3 well be rededicated the acreage assigned to the No. 1.

Q It looks as though the No. 1 well is flooded out, doesn't it?

A No. I believe the water was being produced from the lowest set of perforations, from 3360 to 3390. This interval is not open in the No. 3 well, and the No. 3 well is not producing water; it is located lower on the structure.

Q But on your tests above that all you got was water?

A I believe it is communication behind the pipe.

Q In other words, it is just a bum completion, then?

A I would say so.



MR. UTZ: Any other questions?

BY MR. PAYNE:

Q What is the status of the No. 2 well on the Meyer lease?

A The Meyer A-29 Lease?

Q Yes.

A It is shut in.

Q As an oil well?

A I believe the No. 2 well was an oil well that has, since completion, been shut in, but I do not have additional information on where it is completed or the productivity of oil to date. However, if you care to I would sure look up the information and send it to you for your use during the review of these applications.

Q What I am interested in is whether the subject well here, A-29 No. 3, is perforated in an interval productive of Jalmat gas only, or whether it is also perforated in an interval that somewhere on this unit is also productive of oil from the Jalmat Pool?

A The No. 3 well was recently reworked. The interval below the top of the Seven Rivers was tested and produced water, and was squeezed. That might give evidence that all these zones open in the No. 3 well are in the Yates, which is strictly within the Jalmat gas pool. There are no intervals open below the Yates in the No. 3 well.

MR. UTZ: Any other questions? Witness may be excused.
Other statements in this case? Case will be taken under advisement.

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STATE OF NEW MEXICO)
COUNTY OF BERNALILLO) ss

I, JUNE PAIGE, Court Reporter, do hereby certify that the foregoing and attached transcript of proceedings before the New Mexico Oil Conservation Commission at Santa Fe, New Mexico, is a true and correct record to the best of my knowledge, skill and ability.

IN WITNESS WHEREOF I have affixed my hand and notarial seal this 6th day of February, 1961.

Jane Paige
Notary Public - Court Reporter

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ALBUQUERQUE, NEW MEXICO

PHONE CH 3-6691



I N D E XWITNESSPAGE

LEO C. CICHOWICZ
 Direct Examination by Mr. Kellahin
 QUESTIONS by Mr. Utz

2
 12

E X H I B I T S

<u>NUMBER</u>	<u>EXHIBIT</u>	<u>IDENTIFIED</u>	<u>OFFERED</u>	<u>ADMITTED</u>
	Sholes B-19			
Ex.#1	Location Plat	3	12	12
Ex.#2	Structure Plat	3	12	12
Ex.#3	Deliverability Test	4	12	12
	Wells B-1 No. 1			
Ex.#4	Location Plat	7	12	12
Ex.#5	Structure Plat	8	12	12
Ex.#6	Deliverability Test	8	12	12
	Meyer A-29 No. 3			
Ex.#7	Ownership Plat	9	12	12
Ex.#8	Structure Plat	11	12	12
Ex.#9	Deliverability Test	11	12	12

I do hereby certify that the foregoing is
 a complete record of the proceedings in
 the Examiner hearing of Case No. 2159.
 heard by me on Jan. 25, 1961.

[Signature] Examiner
 New Mexico Oil Conservation Commission

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ALBUQUERQUE, NEW MEXICO



DRAFT

RSM/esr
February 2

BEFORE THE OIL CONSERVATION COMMISSION
OF THE STATE OF NEW MEXICO

IN THE MATTER OF THE HEARING
CALLED BY THE OIL CONSERVATION
COMMISSION OF NEW MEXICO FOR
THE PURPOSE OF CONSIDERING:

CASE No. 2159
Order No. R-1866

APPLICATION OF CONTINENTAL OIL COMPANY
FOR THREE NON-STANDARD GAS PRORATION
UNITS IN THE JALMAT GAS POOL, LEA COUNTY,
NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 o'clock a.m. on
January 25, 1961, at Santa Fe, New Mexico, before Elvis A. Utz,
Examiner duly appointed by the Oil Conservation Commission of New
Mexico, hereinafter referred to as the "Commission," in accordance
with Rule 1214 of the Commission Rules and Regulations.

NOW, on this _____ day of February, 1961, the Commission,
a quorum being present, having considered the application, the
evidence adduced, and the recommendations of the Examiner, Elvis A.
Utz, and being fully advised in the premises,

FINDS:

(1) That due public notice having been given as required by
law, the Commission has jurisdiction of this cause and the subject
matter thereof.

(2) That the applicant, Continental Oil Company, seeks the
establishment of the following-described non-standard gas prora-
tion units in the Jalmat Gas Pool, Lea County, New Mexico:

A 320-acre non-standard gas proration unit consisting
of the W/2 E/2 and E/2 W/2 of Section 19, Township 25
South, Range 37 East, to be dedicated to the Sholes
B-19 Well No. 1, located in the center of the SE/4 SW/4
of said Section 19. ✓

A 360-acre non-standard gas proration unit consisting
of the E/2 and NE/4 NW/4 of Section 1, Township 25 South,
Range 36 East, to be dedicated to the Wells B-1 Well No. 1, ✓
located in the center of the NE/4 NE/4 of said Section 1.

A 360-acre non-standard gas proration unit consisting
of the SE/4, E/2 W/2 and SW/4 SW/4 of Section 29, Town-
ship 22 South, Range 36 East, to be dedicated to the
Meyer A-29 Well No. 3, located in the center of the
SE/4 SW/4 of said Section 29. ✓

(3) That the above-described gas proration units can reasonably be presumed to be productive of gas from the Jalmat Gas Pool.

(4) That approval of the subject application will neither cause waste nor impair correlative rights.

IT IS THEREFORE ORDERED:

(1) That the following-described non-standard gas proration units in the Jalmat Gas Pool, Lea County, New Mexico, are hereby established:

A 320-acre non-standard gas proration unit consisting of the W/2 E/2 and E/2 W/2 of Section 19, Township 25 South, Range 37 East, to be dedicated to the Sholes B-19 Well No. 1, located in the center of the SE/4 SW/4 of said Section 19.

A 360-acre non-standard gas proration unit consisting of the E/2 and NE/4 NW/4 of Section 1, Township 25 South, Range 36 East, to be dedicated to the Wells B-1 Well No. 1, located in the center of the NE/4 NE/4 of said Section 1.

A 360-acre non-standard gas proration unit consisting of the SE/4, E/2 W/2 and SW/4 SW/4 of Section 29, Township 22 South, Range 36 East, to be dedicated to the Meyer A-29 Well No. 3, located in the center of the SE/4 SW/4 of said Section 29.

(2) That the above-described gas wells are hereby assigned an acreage factor for allowable purposes in the proportion that the acreage in the non-standard gas proration unit bears to the acreage in a standard gas proration ^{unit} in the Jalmat Gas Pool, subject to the provisions of the Special Rules and Regulations for said pool.

DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.