

Case No.

1541

Application, Transcript,
Small Exhibits, Etc.

Memo

From

Daniel S. Nutter
Chief Engineer

To Randall

Here are exhibits etc on that
Contl non-std 320-acre unit case
which we discussed on the phone
the other day -

Please give us your opinion
of this proposed unit. The
strange thing about it is
that the gas well, the Meyer
B-33 No. 1 is perforated from the
top of the Yates down to almost
the top of the T Rivers while the
No 2 well, the Jarnat oil well, is
completed & open hole from the
top of the Yates down thru 50' of
the T Rivers. I am wondering
if this is a synclinal accumula-
tion of oil or if there is a definite
gas oil contact running thru here
which we indicate that the
acreage is non-productive of gas.
Thank.

Memo

From

Daniel S. Nutter
Chief Engineer

To Legal Re: Case 1541

OK to approve
320-acre non std
unit requested by
Contl in Case 1541.
Unit is to comprise s/r
Sec 33-22-36 and
be dedicated to applicants
Meyer B33 No 1 Unit M3322-36

Interval of completion of neighboring wells
as determined by Vic Lyon:

Well	Location	Interval	Formation
Atlantic Elby No 1	F-33-22-36	open hole 3075-3395 shot 3170-3322	Tensill - upper 7 ft. Entire Yates except upper 50
Beckle Commodore	H-33-22-36	3578-3622 3662-3836	Middle Seven Rivers Lower Seven Rivers
Western Hale No 1	K-34-22-36	5132-5598 open hole	Yates - all but Seven Rivers
Gable Shell State	D-3-22-36	3120-3340	All of Yates
TP State 22	E-4-22-36	3422-3480 (open hole)	Tensill to upper Seven Rivers

*Corrected
test - sub
mitted after
the hearing
amended
exhibit*

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

Form C-122-C
4-1-54

Pool Jalmat Formation Yates County Lea
Initial Annual X Special Date of test 3-7/3-14-58
Company Continental Oil Company Lease Meyer B-33 Well No. 1
Unit Sec. 33 Twp. 22 Rge. 36 Purchaser El Paso Nat. Gas Company
Casing 2 1/2 wt. 14 I.D. 5.012 Set at 3508 Perf. 3056 To 3180
Tubing 2 1/2 wt. 6.5 I.D. Set at Perf. To
Gas Pay: From 3056 To 3180 L 2903 x G .680 = GL 1974 Bar. Press. 13.2
Producing Thru: Casing Tubing X Type Well Single
Single- Bradenhead-G.G. or G.O. 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	8:00 AM	3-10	8:00 AM	24	P1g	4"	1.500	477	9.00	60
	PM		PM							

FLOW CALCULATIONS

Static Pressure P _f	Differ- ential h _w	Meter Extension $\sqrt{p_f h_w}$	24-Hour Coeff- icient	Gravity Factor F _g	Temp. Factor F _t	Compress- ability F _{pv}	Rate of Flow MCF/Da. @ 15.025 psia Q
490.2	9.00	66.42	13.99	.9393	1.000	1.058	924

SHUT-IN DATA

Shut-in		Press. Taken		Duration Hours	Wellhead Pressure (P _c) psia		W.H. Working Pressure (P _w) and (P _t) psia	
Date	Time	Date	Time		Tubing	Casing	Tubing	Casing
3-11	8:00 AM	3-14	8:00 AM	72	598.2		491.2	
	PM		PM					

FRICTION CALCULATIONS (if necessary)

$$P_w = \left[(491.2)^2 \div (5.866 \times 924)^2 (.127) \right] \div 2 = 495.0$$

DELIVERABILITY CALCULATIONS

$$P_w = 495.0 \quad P_c = 598.2 \quad P_w + P_c = .8274$$

$$1 - \frac{P_w}{P_c} = .1726 \quad 1 + \frac{P_w}{P_c} = 1.8274 \quad \left(1 - \frac{P_w}{P_c} \right) \left(1 + \frac{P_w}{P_c} \right) = M = .3154$$

$$.36 + M = 1.141 \quad \text{Log } 0.0572856 \quad x (n) = .771$$

SUMMARY

$$P_c = 598.2 \text{ psia}$$

$$Q = 924 \text{ MCF/Da.}$$

$$P_w = 495.0 \text{ psia}$$

$$P_d = 478.6 \text{ psia}$$

$$D = 1.023 \text{ MCF/Da.}$$

$$= 0.0441671 +$$

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

$$\text{Log } Q = 2.9656720$$

$$\text{Log } D = 3.0098391$$

$$\text{Antilog } = 1.023 = D$$

REMARKS

**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. 1541
Order No. R-1203**

**APPLICATION OF CONTINENTAL OIL COMPANY
FOR A 320-ACRE NON-STANDARD GAS PRORATION
UNIT 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 November 6, 1958, at Santa Fe, New Mexico, before Daniel S. Nutter, 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 17th day of December, 1958, the Commission, a quorum being present, having considered the application, the evidence adduced and the recommendations of the Examiner, Daniel S. Nutter, 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, is the owner and operator of the S/2 of Section 35, Township 22 South, Range 36 East, NMPM, Lea County, New Mexico.

(3) That the applicant proposes the establishment of a 320-acre non-standard gas proration unit consisting of the above-described acreage, said unit to be dedicated to the applicant's Meyer B-33 Well No. 1, located 660 feet from the South line and 660 feet from the West line of said Section 33.

(4) That the entire acreage in the proposed non-standard gas proration unit may reasonably be presumed to be productive of gas from the Jalmat Gas Pool.

(5) That approval of the subject application will not cause waste nor impair correlative rights.

(6) That the subject application should be approved.

-2-

Case No. 1541
Order No. E-1306

IT IS THEREFORE ORDERED:

(1) That the application of Continental Oil Company for the establishment of a 330-acre non-standard gas proration unit in the Jalmat Gas Pool, consisting of the S/2 of Section 33, Township 22 South, Range 36 East, NMPN, Lea County, New Mexico, be and the same is hereby granted, said unit to be dedicated to the applicant's Moyer B-33 Well No. 1, located 660 feet from the South line and 660 feet from the West line of said Section 33.

(2) That the said Moyer B-33 Well No. 1 be designated as the unit well for said unit and that the same be granted an acreage factor for allowable purposes in the proportion that the above-described acreage bears to the standard gas proration unit for the Jalmat Gas Pool.

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

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

E. L. Nechen

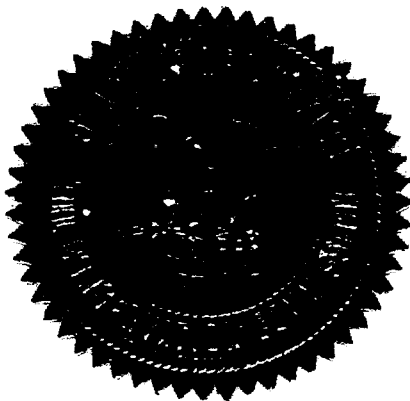
EDWIN L. NECHEN, Chairman

Murray E. Morgan

MURRAY E. MORGAN, Member

A. L. Porter, Jr.

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



BEFORE THE
OIL CONSERVATION COMMISSION
SANTA FE, NEW MEXICO

IN THE MATTER OF:

Case No. 1541

TRANSCRIPT OF HEARING

November 6, 1958

DEARNLEY - MEIER & ASSOCIATES
GENERAL LAW REPORTERS
ALBUQUERQUE NEW MEXICO
Phone CHapel 3-6691

BEFORE THE
OIL CONSERVATION COMMISSION
November 6, 1958

IN THE MATTER OF:

Application of Continental Oil Company for a 320-acre non-standard gas proration unit. Applicant, in the above-styled cause, seeks an order establishing a 320-acre non-standard gas proration unit in the Jalmat Gas Pool consisting of the S/2 of Section 33, Township 22 South, Range 36 East, Lea County, New Mexico, said unit to be dedicated to the applicant's Meyer P-33 No. 1 Well, located 660 feet from the South and West lines of said Section 33. :Case 1541

Mabry Hall
Santa Fe, New Mexico

BEFORE:

Daniel S. Nutter, Examiner.

TRANSCRIPT OF HEARING

MR. NUTTER: We will take the next case, 1541.

MR. PAYNE: Case 1541, "Application of Continental Oil Company for a 320-acre non-standard gas proration unit."

MR. KELLAHIN: Jason Kellahin, Kellahin and Fox, Santa Fe, New Mexico, appearing on behalf of the applicant. We will have one witness, Mr. V. T. Lyon.

(Witness sworn in).

(Whereupon, the documents were marked as Exhibits 1 through 4 for identification).

VICTOR T. LYON

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

DIRECT EXAMINATION

BY MR. KELLAHIN:

Q Would you state your name, please?

A Victor T. Lyon.

Q By whom are you employed?

A Continental Oil Company.

Q In what position?

A District Engineer, Eunice District, located in Eunice, New Mexico.

Q Mr. Lyon, have you previously testified before this Commission as an expert petroleum engineer and have your qualifications been accepted?

A I have.

MR. KELLAHIN: Are the qualifications of the witness acceptable?

MR. NUTTER: Yes, sir. Please proceed.

Q (By Mr. Kellahin) Mr. Lyon, are you familiar with the application in Case 1541?

A Yes, sir.

Q Briefly, what does that propose?

A This is Continental Oil Company's application for the enlargement of the present 160-acre gas proration unit consisting

of the southwest quarter of Section 33, Township 22 South, Range 36 East, to a 320-acre non-standard unit consisting of the south half of the said Section 33.

Q Referring to what has been marked as Exhibit Number One, would you state what it shows?

A Exhibit Number One is a location and ownership plat showing the Meyer B-33 lease and the surrounding area. The Meyer B-33 lease is outlined in red and the one to which the unit is proposed to be allocated is circled in red. It also shows the surrounding non-standard units which are assigned to the wells within the unit. These units are outlined in green and the wells to which they are assigned are circled in green. Only the immediately surrounding units have been shown, we have not shown all of the units that acutally exist in this area.

Q Now, the proposed unit of 320 acres, is that one basic lease?

A Yes, sir.

Q Referring to what has been marked as Exhibit Number Two, would you state what that shows?

A Exhibit Number Two is a structure map showing the structural contours of the top of the Yates in essentially the same area shown on Exhibit Number One. Again, the lease and the proposed unit is outlined in red and the unit wells circled in red and producing Jalmat gas wells are shown circled in green.

Q According to Exhibit Number Two, the proposed unit is

completely surrounded by gas producing--Jalmat Gas Pool, is that correct?

A Yes sir, it is.

Q Mr. Lyon, what's the status of your Well Number Two on the Meyer lease?

A Number Two is a Jalmat oil well.

Q And with that in mind, is there anything that would make you think that the entire area proposed to be dedicated to the Meyer B-22 Number One Well--B-33 Number One Well is gas productive?

A The fact that the Number Two Well is an oil well does not lead me to think that the east half is not productive. As a matter of fact, the fact that the lease and the proposed unit is surrounded by gas units, also the comparative locations on the structure map, or the structure as shown on Exhibit Two, indicates that the entire lease is productive. I would like to point out, for example, the Albert Jackel Esmond Number Two, which is a gas well which has the northeast quarter of Section 33 allocated to it. It is structurally about thirteen feet low to our Number Two. Also, a core analysis on our Number Three from the top of the Yates on through a portion of the Queen formation and --

MR. NUTTER: Core analysis on which Number Three?

A Our Meyer B-33 Number Three, which the analysis and the interpretation of the analysis indicated that there is free gas in the Yates in that well.

Q (By Mr. Kellahin) Mr. Lyon, do you know what the status of the Albert Jackel Well Number Three is?

A Yes sir, that well is a dual completion which is producing from the Jalmat and the South Eunice Fields.

Q Then you have a twin well situation there, a gas well and an oil well producing from the Jalmat, is that correct?

A Yes sir, that's true.

Q Now, referring to what has been marked as Exhibit Number Three, could you state what that is?

A Exhibit Number Three is a copy of the radio-activity log on our Meyer B-33 Number One and we have indicated in red the top of the Yates, the perforations from which the well is producing and the plug-back depth.

Q Referring to what has been marked as Exhibit Number Four, would you state what that is?

A Exhibit Number Four is a copy of the Form C-122-C which we initially filed on this well. When we were preparing the exhibit for this, we inadvertantly got this one wrong. There is a corrected C-122-C which has been filed. In this particular one, we forgot to calculate the friction, so that the correct C-122-C shows a deliverability of 1,023 rather than the 998 shown on this exhibit. If the Commission --

MR. KELLAHIN: If the Examiner please, we would request permission to file the corrected C-122-C as a late filed exhibit.

MR. NUTTER: We will come to that when you introduce them.

MR. KELLAHIN: All right.

Q (By Mr. Kellahin) Mr. Lyon, referring back to Exhibit Number Two, in your opinion, is the Meyer B lease subject to disproportionate withdrawals?

A Yes sir, I feel strongly that it is.

Q Would that be to the Albert Jackel Well?

A Well, several wells in the surrounding area.

Q In your opinion, is the approval of this application in the interests of the prevention of waste?

A Yes, sir.

Q And would it protect your correlative rights?

A Yes, sir.

Q Is there any other well in this acreage to which it could be dedicated at the present time?

A No, there is not.

MR. KELLAHIN: At this time, we would like to offer in evidence Exhibits One through Four inclusive and request permission to file the corrected Form C-122-C as a late filed exhibit.

MR. NUTTER: Is there objection to the introduction of Continental's Exhibits One through Four with the provision that Exhibit Number Four will be corrected and re-filed?

If not, the exhibits will be so admitted.

MR. KELLAHIN: That's all the questions we have.

MR. NUTTER: Are there any questions of Mr. Lyon?

CROSS EXAMINATION

BY MR. NUTTER:

Q Mr. Lyon, I believe by observing the log of your Meyer B-33 Number One, that it would be safe to say that that well was completed in the upper Yates formation?

A No, I believe it is completed essentially through the Yates.

Q Do you have the top of the Seven Rivers picked on this log?

A I don't.

Q Can you indicate the top of the Seven Rivers on the log?

A Yes, sir.

Q Could you so indicate it on this exhibit, please?

A I have indicated the top of the Seven Rivers at approximately 3220.

Q Thank you. Then Mr. Lyon, it would probably be safe to say is completed throughout the Yates formation?

A Yes sir, except for the two basal members.

Q Now, could you tell me the formation that your Number Seven Well on this Meyer B-33 lease is completed?

A Number Seven is producing, I believe from the lower Seven Rivers.

Q What pool is it classified --

A South Eunice.

Q South Eunice?

A Yes, sir.

Q How about the Number Eight Well, what is it classified as?

A South Eunice.

Q How about the Number Five Well?

A It's South Eunice.

Q How about the Number Three Well?

A South Eunice.

Q The Number Four?

A South Eunice.

Q The Number Six?

A South Eunice.

Q And the Number Two?

A Jalmat.

Q This is a Jalmat oil well. What formation is it completed in?

A In the Yates.

Q What portion of the Yates?

A It is completed open hole in the Yates and very top of the Seven Rivers and was shot in I would say the upper two-thirds of the Yates.

Q It is open hole from the top of the Yates --

A Yes, sir.

Q Down into the Seven Rivers?

A Yes, sir.

Q And how much of the Seven Rivers is open in that well?

A Approximately fifty feet.

Q And the hole was shot from the TD up to where?

A Well, perhaps I'd better check the record. This log

indicates that it was shot from approximately 3210 to 3340. Let me check and see. 3210 to 3340.

Q Where is that in relation to the top of the Yates and the top of the Seven Rivers?

A That would be to the Yates--top of the Yates to a point approximately sixty feet above the top of the Seven Rivers.

Q What is the production rate on that well at the present time, Mr. Lyon?

A Our latest test was taken April 27 of this year and it tested ten barrels of oil, no water, and 133 MCF of gas for a gas-oil ratio of 13,300.

Q Ten barrels of oil, no water, 133 MCF and the GOR was 13,300?

A Correct.

Q Do you have any idea what the producing formation of the gas wells is, which are producing, these wells being the ones that are dedicated to the units immediately offsetting the acreage in question today?

A I don't believe I have the information on all of them. The only one that I have that I am sure of is the Albert Jackel Number Two Esmond.

Q Where is it producing?

A It is producing from the Yates through perforations at 3230 to 40 and open hole from 3249 to 3360.

Q Do you know the top of the Yates in that well?

A The top of the Yates, top of the Yates sand, let me give you that point, is 3200.

Q That is the same point that --

A That I have given you as the top of the Yates.

Q That you have given on your exhibits at 3052 or something like that?

A Correct, those are the tops that I have been referring to as the top of the Yates. That actually is the top of the first Yates sand.

Q Mr. Lyon, could you determine, after you have returned to your office, the interval from which the Atlantic and Olson Selby Number One are producing, also the Jackel Sinclair Number Three, Western Gas Jones Number One in Section 34, T and P Coal and Oil Company's Number 23-A, and this well which is in the northwest of the northwest quarter of Section 3 southeast of your lease?

A Jackel Sinclair State Number Three?

Q Yes, I guess that's what it says. The well is in the Jalmat Gas Pool.

A I understand that that well alternates between oil and gas.

Q On account of the GOR of the well?

A Yes, sir.

Q Could you determine the producing intervals for those various wells and submit that to the Commission?

A Yes, sir.

Q We would appreciate it, Mr. Lyon.

A All right.

Q Mr. Lyon, what reason do you have to believe that the southeast quarter of Section 33 is productive of gas from the Yates formation?

A Well, the fact that it is higher structurally than the Albert Jackle Esmond Number Two, which is a gas well producing from the Yates, and the fact that our core analysis on our Meyer B-33 Number Three indicated a free gas zone.

Q What is your explanation for the fact that your Number Two Well is completed throughout the Yates formation and is productive of oil and classified as an oil well and yet is located almost in the center of the southeast quarter of Section 33?

A Well, that is what we engineers sometimes refer to as an anomaly. I feel that there is a free gas zone throughout the Yates but through some quirk of circumstances, that zone is stimulated in that well.

Q Has any actual test been made of the Yates formation in any of the other wells in the southeast quarter of Section 33?

A No, there have been no tests of the Yates in that section other than the Number Two.

Q Do you believe personally, Mr. Lyon, that if the Number Five Well were opened to the Yates, that it would be an oil well or a gas well?

A I think it depends on where you open it.

Q In the Yates.

A I believe that any well in that quarter section could be opened selectively and made a gas well.

Q Including your Number Two Well? A Yes, sir.

MR. NUTTER: Any further questions of Mr. Lyon?

If not, he may be excused.

(Witness excused).


MR. NUTTER: Does anyone have anything further they wish to offer in Case 1541?

We will take the case under advisement.

STATE OF NEW MEXICO)
: ss
COUNTY OF BERNALILLO)

I, JERRY MARTINEZ, Notary Public in and for the County of Bernalillo, State of New Mexico, do hereby certify that the foregoing and attached Transcript of Hearing before the New Mexico Oil Conservation Commission was reported by me in stenotype and reduced to typewritten transcript by me, and that the same is a true and correct record, to the best of my knowledge, skill and ability.

WITNESS my Hand and Seal this 8th day of November, 1958, in the City of Albuquerque, County of Bernalillo, State of New Mexico.


Notary Public

My Commission Expires:
January 24, 1962

DOCKET: EXAMINER HEARING NOVEMBER 6, 1958

Oil Conservation Commission 9 a.m., Mabry Hall, State Capitol, Santa Fe

The following cases will be heard before Daniel S. Nutter, Examiner:

CASE 1541:

Application of Continental Oil Company for a 320-acre non-standard gas proration unit. Applicant, in the above-styled cause, seeks an order establishing a 320-acre non-standard gas proration unit in the Jalmat Gas Pool consisting of the S/2 of Section 33, Township 22 South, Range 36 East, Lea County, New Mexico, said unit to be dedicated to the applicant's Meyer B-33 No. 1 Well, located 660 feet from the South and West lines of said Section 33.

CASE 1542:

Application of Atlantic Refining Company for an exception to Rule 309 (a) of the Commission Rules and Regulations. Applicant, in the above-styled cause, seeks an order authorizing it to commingle the production from all wells now completed or hereafter drilled in the Horseshoe-Gallup Oil Pool on the following described lands in San Juan County, New Mexico:

TOWNSHIP 31 NORTH, RANGE 16 WEST
All of Sections 29, 30, 31 and 32,
and all of those portions of Sections
28 and 33 lying within the Navajo
Indian Reservation.

CASE 1543:

Application of Drilling and Exploration Company, Inc. for an exception to the casing requirements for the potash-oil area in Lea and Eddy Counties, New Mexico. Applicant, in the above-styled cause, seeks an order authorizing an exception to the shallow-zone casing requirements for the potash-oil area as set forth in Order No. R-111-A for its Ballard No. 1 Well located 1980 feet from the North and West lines of Section 27, Township 20 South, Range 34 East, Lea County, New Mexico. Applicant proposes to drill with cable tools to an approximate depth of 3,700 feet adjacent to the Lynch Pool.

It is proposed to use the following casing program in lieu of the program prescribed for cable tool holes by Order R-111-A:

1. 13 3/8 inch casing to be cemented at approximately 70 feet.
2. 10 3/4 inch casing to be landed at approximately 700 feet.
3. 8 5/8 inch casing to be landed at approximately 1250 feet.
4. 5 1/2 inch casing to be cemented at the top of the producing formation with 50 sacks cement for testing purposes.
5. 10 3/4 inch casing and 8 5/8 inch casing to be pulled.
6. In the event commercial production is obtained, 5 1/2 inch casing to be perforated and cement circulated to surface.

Well	location	interval	formation
Atlantic	F-33-22-36	open hole 3075-3395	Tansill - upper 7 Rivers
Sally Hall		shot 3170-3322	Entire Yates except upper 50'
Gackle	H-33-22-36	3518-3622	Middle Seven Rivers
Commodore		3662-3836	Lower Seven Rivers Queen
Western	K-34-22-36	3132-3594	Yates - all but lower
Hale no 1		open hole	Seven Rivers
Gackle	D-3-23-36	3120-3340	All of Yates
Shell State no 3			
TP	B-4-23-36	2982-3400	Tansill to
State 23		(open hole)	upper Seven Rivers

MAIN OFFICE OCC
JASON W. KELLAHIN
ROBERT E. FOX

RECEIVED NOV 17 AM 8:32
RECEIVED NOV 17 AM 8:32

KELLAHIN AND FOX

ATTORNEYS AT LAW
54 1/2 EAST SAN FRANCISCO STREET
POST OFFICE BOX 1713
SANTA FE, NEW MEXICO

Nov. 15, 1958

TELEPHONES
YUCCA 3-9396
YUCCA 2-2266

Mr. Daniel S. Nutter
Oil Conservation Commission of
New Mexico
P. O. Box 871
Santa Fe, New Mexico

Re: OCC Case No. 1541


Dear Dan:

In the presentation of the above case, leave was asked and granted to file an amended exhibit in place of Exhibit No. 4 presented at the hearing.

Enclosed is the amended Exhibit No. 4 for filing in Case No. 1541, being a copy of the deliverability test on Contiantal Oil Company's Meyer B-33 Well No. 1, dated March 8 and March 14, 1958.

With thanks for your consideration in this matter.

Yours very truly,



Jason W. Kellahin

JWK:ss
Encl.

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

Form C-122-C
4-1-54

Pool Jalmat Formation Yates County Lea
Initial Annual X Special _____ Date of test 3-7/3-14-58
Company Continental Oil Company Lease Meyer B-33 Well No. 1
Unit M Sec. 33 Twp. 22 Rge. 36 Purchaser El Paso Nat. Gas Company
Casing 5 1/2 wt. 14 I.D. 5.012 Set at 3508 Perf. 3056 To 3180
Tubing 2 1/2 wt. 6.5 I.D. _____ Set at _____ Perf. _____ To _____
Gas Pay: From 3056 To 3180 L 2903 x G .680 = GL 1974 Bar.Press. 13.2
Producing Thru: Casing _____ Tubing X Type Well Single
Single- Bradenhead-G.G. or G.O. 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	8:00 AM	3-10	8:00 AM	24	Flg	4"	1.500	477	9.00	60
	PM		PM							

FLOW CALCULATIONS

Static Pressure P _r	Differ- ential h _w	Meter Extension $\sqrt{P_r h_w}$	24-Hour Coeff- icient	Gravity Factor F _g	Temp. Factor F _t	Compress- ability F _{pv}	Rate of Flow MCF/Da. @ 15.025 psia Q
490.2	9.00	66.42	13.99	.9393	1.000	1.058	924

SHUT-IN DATA

Shut-in		Press. Taken		Duration Hours	Wellhead Pressure (P _c) psia		W.H. Working Pressure (P _w) and (P _t) psia	
Date	Time	Date	Time		Tubing	Casing	Tubing	Casing
3-11	8:00 AM	3-14	8:00 AM	72	598.2		491.2	
	PM		PM					

FRICTION CALCULATIONS(if necessary)

$$P_w \left[(491.2)^2 \div (5.866 \times 924)^2 (.127) \right]^{1/2} = 495.0$$

DELIVERABILITY CALCULATIONS

$$P_w \quad 495.0 \quad P_c \quad 598.2 \quad P_w + P_c \quad .8274$$

$$1 - \frac{P_w}{P_c} \quad .1726 \quad 1 + \frac{P_w}{P_c} \quad 1.8274 \quad \left(1 - \frac{P_w}{P_c} \right) \left(1 + \frac{P_w}{P_c} \right) = M \quad .3154$$

$$.36 + M \quad 1.141 \quad \text{Log } 0.0572856 \quad x (n) \quad .771$$

SUMMARY

P_c = 598.2 psia
Q = 924 MCF/Da.
P_w = 495.0 psia
P_d = 478.6 psia
D = 1,023 MCF/Da.
= 0.0441671 +

COMPANY Continental Oil Company
ADDRESS Box 68, Eunice, New Mexico
AGENT and TITLE _____
WITNESSED _____
COMPANY _____

Log Q = 2.9656720

Log D = 3,0098391

Antilog = 1,023 = D

REMARKS

*Corrected test
Submitted after the hearing
as an amended Exhibit*

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

Form C-122-C
4-1-54

Pool Jalnet Formation Yates County Lea
Initial Annual X Special Date of test 3-7/3-14-58
Company Continental Oil Company Lease Meyer B-33 Well No. 1
Unit A Sec. 33 Twp. 22 Rge. 36 Purchaser El Paso Nat. Gas Company
Casing 5 1/2 I.D. 5.012 Set at 3508 Perf. 3056 To 3180
Tubing 2 1/2 I.D. 6.5 Set at Perf. To
Gas Pay: From 3056 To 3180 L 2903 x G .640 = GL 1974 Bar. Press. 13.2
Producing Thru: Casing Tubing X Type Well Single
Single- Bradenhead-G.G. or G.O. 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	8:00 AM	3-10	8:00 AM	24	Plg	4"	1.500	477	9.00	60
	PM		PM							

FLOW CALCULATIONS

Static Pressure P _f	Differ- ential h _w	Meter Extension $\sqrt{P_f h_w}$	24-Hour Coeff- icient	Gravity Factor F _g	Temp. Factor F _t	Compress- ability F _{pv}	Rate of Flow MCF/Da. @ 15.025 psia Q
490.2	9.00	66.42	13.99	.8393	1.000	1.056	924

SHUT-IN DATA

Shut-in		Press. Taken		Duration Hours	Wellhead Pressure (P _c) psia		W.H. Working Pressure (P _w) and (P _t) psia	
Date	Time	Date	Time		Tubing	Casing	Tubing	Casing
3-11	8:00 AM	3-14	8:00 AM	72	598.2		491.2	
	PM		PM					

FRICTION CALCULATIONS (if necessary)

$$P_w \left[(491.2)^2 \div (5.866 \times 924)^2 (.127) \right] \frac{1}{2} = 495.0$$

DELIVERABILITY CALCULATIONS

$$P_w \quad 495.0 \quad P_c \quad 598.2 \quad P_w + P_c \quad .8274$$

$$1 - \frac{P_w}{P_c} \quad .1726 \quad 1 + \frac{P_w}{P_c} \quad 1.8274 \quad \left[1 - \frac{P_w}{P_c} \right] \left[1 + \frac{P_w}{P_c} \right] = M \quad .3154$$

$$.36 + M \quad 1.141 \quad \text{Log } 0.0572856 \quad x(n) \quad .771$$

SUMMARY

$$P_c = 598.2 \text{ psia}$$

$$Q = 924 \text{ MCF/Da.}$$

$$P_w = 495.0 \text{ psia}$$

$$P_d = 478.6 \text{ psia}$$

$$D = 1.023 \text{ MCF/Da.}$$

$$= 0.0441671 +$$

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

$$\text{Log } Q = 2.9656720$$

$$\text{Log } D = 3.0098391$$

$$\text{Antilog } = 1.023 = D$$

REMARKS

Case 1541



CONTINENTAL OIL COMPANY

825 PETROLEUM BUILDING
ROSWELL, NEW MEXICO

R. L. ADAMS
DIVISION SUPERINTENDENT
OF PRODUCTION
NEW MEXICO DIVISION

October 7, 1958

New Mexico Oil Conservation Commission
P. O. Box 871
Santa Fe, New Mexico

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

Gentlemen:

Attached are three copies of Continental Oil Company's application for an exception to Rule 5 (a) of the Special Rules and Regulations for the Jalmat Gas Pool, contained in Order No. R-520, for the enlargement of the presently approved 160-acre unit to a non-standard gas proration unit of 320 acres, consisting of the S/2 of Section 33, T-22S, R-36E, NMPM, Lea County, New Mexico, to be allocated to its Meyer B-33 Well No. 1.

It is respectfully requested that this matter be set for hearing at the earliest convenient date.

Yours very truly,

R. L. Adams

RLA-JC

*Docket Mailed
10-7-58 BP*

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 JALMAT GAS POOL CONTAINED IN
ORDER NO. R-520 FOR THE ENLARGEMENT
OF THE PRESENTLY APPROVED 160-ACRE
UNIT TO A NON-STANDARD GAS PRORATION
UNIT OF 320-ACRES CONSISTING OF S/2
SECTION 33, T 22S, R 36E, NMPM, LEA
COUNTY, NEW MEXICO, TO BE ALLOCATED
TO ITS MEYER B-33 WELL NO. 1.

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 S/2 of Section 33, T 22S, R 36E, NMPM, Jalmat gas pool, Lea County, New Mexico, to be allocated to its Meyer B-33 No. 1 well located 660 feet from the south line and 660 feet from the west line of said Section 33 and in support thereof would show:

1. That applicant is owner and operator of a lease designated as the Meyer B-33 lease consisting of S/2 section 33, T 22S, R 36E, NMPM, Lea County, New Mexico.

2. That applicant drilled and completed in July, 1947, its Meyer B-33 well No. 1 at a location 660 feet from the south line and 660 feet from the west line of said Section 33.

3. That the SW/4 of the said Section 33 is presently assigned the said well No. 1, but that the SE/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.

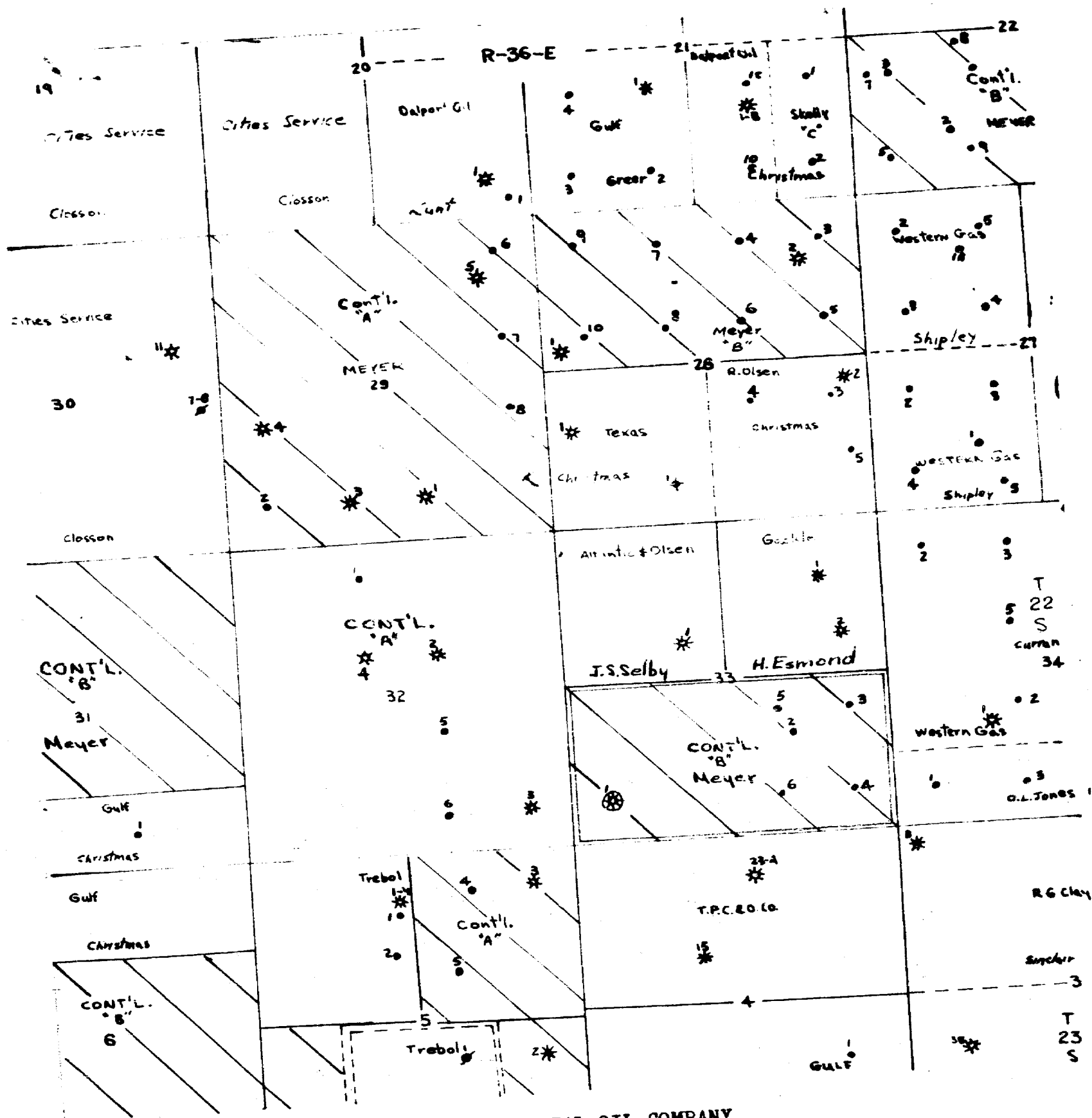
4. That the most practical and economical method of allocating said acreage for Jalmat Pool gas production is to

enlarge the existing 160 acre unit to a 320 acre non-standard gas proration unit for assignment to the Meyer B-33 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 Jalnet gas pool contained in order No. R-520 for the non-standard gas proration unit described above.

Respectfully submitted,
CONTINENTAL OIL COMPANY

R. L. Adams
Division Superintendent
of Production
New Mexico Division

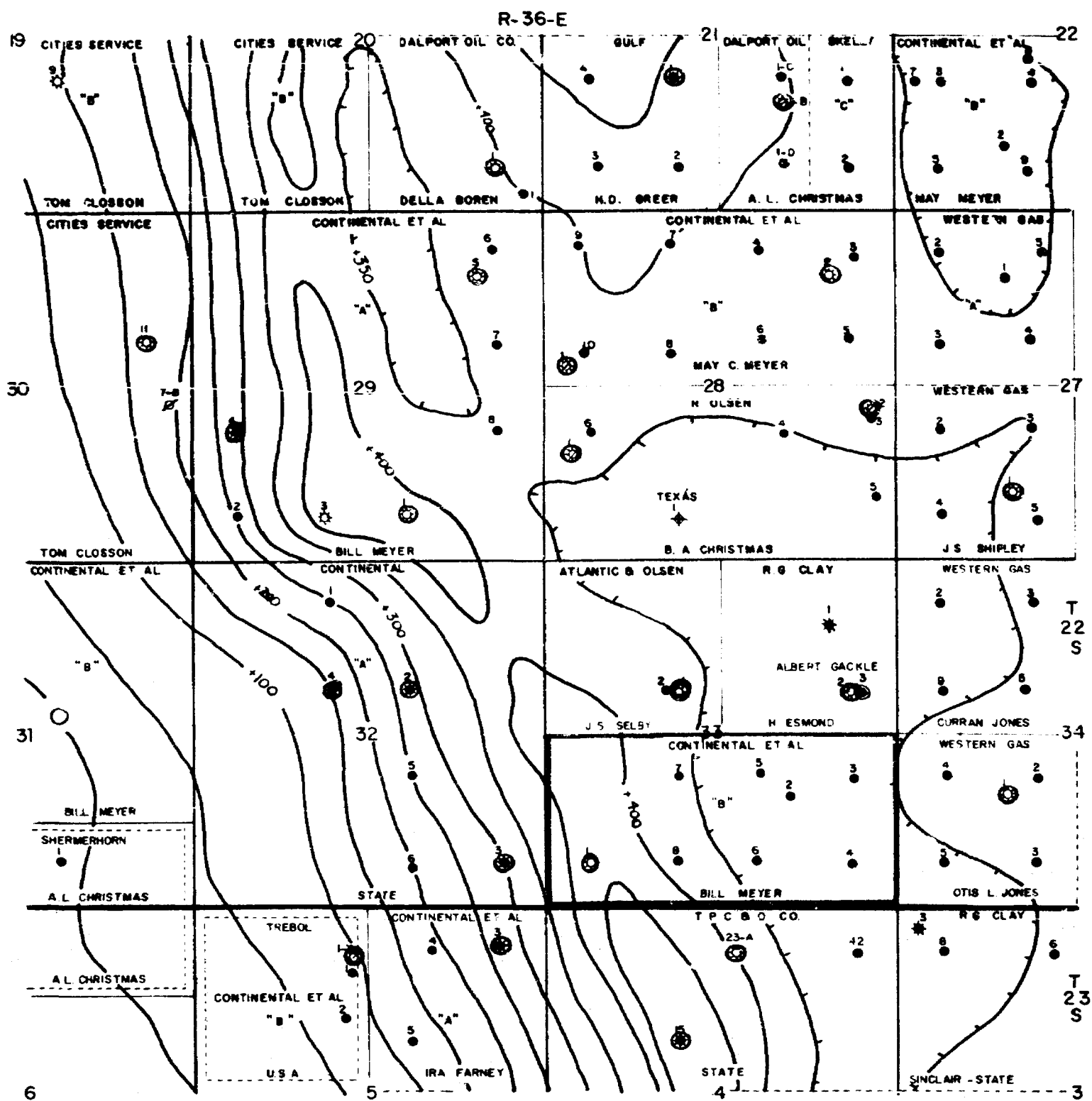


CONTINENTAL OIL COMPANY
LOCATION PLAT

Scale 1" = 2000'

Proposed Unit Boundary —

Proposed Unit Gas Well ○



CONTINENTAL OIL COMPANY
STRUCTURE PLAT-JALMAT POOL
CONTOURED ON TOP OF YATES

Contour Interval: 50'
Proposed Gas Unit _____
Proposed Gas Unit Well _____
Jalmat Gas Well C

BEFORE EXAMINER NUTTER

OIL CONSERVATION COMMISSION

C.O.C. EXHIBIT NO. 2
CASE NO. 1541

1" = 2000'

Exhibit No. _____
Case No. _____

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

Form C-122-C
 4-1-54

Field No. _____ County _____
 Date of test 3-7-54
 Well No. _____
 Casing 1 1/2" I.D. Set at 1000 Perf. 1000 To 1100
 Tubing 1 1/2" I.D. Set at 1000 Perf. 1000 To 1100
 Gas Prg. 1000 To 1100 L. 1000 x G. 1000 = GL 1000 Bar. Press. 13.2
 Producing Interval Casing _____ Tubing _____ Type Well _____
 Single-Bradenhead-G.O. or G.O. 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	8:00 AM	3-10	8:00 AM	24	7/8	4"	1.500	477	9.00	60
	PM		PM							

FLOW CALCULATIONS

Static Pressure P _r	Differ- ential h _w	Meter Extension √P _r h _w	24-Hour Coeff- icient	Gravity Factor P _g	Temp. Factor P _t	Compress- ability P _{pv}	Rate of Flow MCF/Da. @ 15.025 psia Q
490.2	9.00	66.42	13.99	.9993	1.000	1.000	924

SHUT-IN DATA

Shut-in		Press. Taken		Duration Hours	Wellhead Pressure (P _c) psia		W.H. Working Pressure (P _w) and (P _t) psia	
Date	Time	Date	Time		Tubing	Casing	Tubing	Casing
3-11	8:00 AM	3-14	8:00 AM	72	906.2			491.2
	PM		PM					

FLOW DATA

FRICTION CALCULATIONS (if necessary).

SUMMARY

P_c = 996.2 psia
 Q = 924 MCF/Da.
 P_w = 491.2 psia
 P_d = 478.6 psia
 D = 996 MCF/Da.

DELIVERABILITY CALCULATIONS

$$P_w = \frac{P_c}{1 + \frac{R_w}{P_c} \left(1 - \frac{R_w}{P_c} \right)} = M$$

.36 ÷ M _____ Log _____ x (n) .771 = _____ +

COMPANY Continental Oil Company
 ADDRESS Box 60, Houston, Texas
 AGENT and TITLE PARKE
 WITNESSED _____
 COMPANY _____

Log Q = _____
 Log D = _____
 Antilog = 996 = D

REMARKS