

CASE 1230: Continental Oil Co. application
for 240-acre NS gas proration unit, Eumont
Gas Pool (Sanderson A-11 #1 Well)

Case No.

1230

Application, Transcript,
Small Exhibits, Etc.

OIL CONSERVATION COMMISSION
P. O. BOX 871
SANTA FE, NEW MEXICO

May 11, 1957

C
O
P
Y

Mr. V. T. Lyon
Continental Oil Company
Petroleum Building
Roswell, New Mexico

Dear Sir:

We enclose a copy of Order R-990 issued May 10, 1957, by the Oil Conservation Commission in Case 1230, which was heard on March 27th at Hobbs.

Very truly yours,

A. L. Porter, Jr.
Secretary - Director

bp
Encl.

BEFORE THE OIL CONSERVATION COMMISSION
OF THE STATE OF NEW MEXICO

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

CASE NO. 1230
Order No. R-990

APPLICATION OF CONTINENTAL OIL
COMPANY FOR AN ORDER ESTABLISHING
A 240-ACRE NON-STANDARD GAS PRORATION
UNIT IN THE EUMONT GAS POOL, CONSISTING
OF THE SE/4 AND S/2 SW/4 SECTION 11,
TOWNSHIP 20 SOUTH, RANGE 36 EAST, NMPM,
LEA COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 10 o'clock a.m. on March 27, 1957, at Hobbs, New Mexico, before Warren W. Mankin, Examiner duly appointed by the New Mexico Oil Conservation Commission, hereinafter referred to as the "Commission," in accordance with Rule 1244 of the Commission Rules and Regulations.

NOW, on this 10th day of May, 1957, the Commission, a quorum being present, having considered the application, the evidence adduced, and the recommendations of the Examiner, Warren W. Mankin, 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 case and the subject matter thereof.

(2) That the applicant is the co-owner and operator of the Sanderson "A-11" Well No. 1, located 1930 feet from the South line and 660 feet from the East line of Section 11, Township 20 South, Range 36 East, NMPM, Lea County, New Mexico.

(3) That the applicant is the co-owner and designated operator of the following acreage which comprises a portion of the New Mexico Federal Unit: SE/4 and S/2 SW/4 of said Section 11.

(4) That the applicant proposes to dedicate the aforementioned acreage to the said Sanderson "A-11" Well No. 1, to form a non-standard gas proration unit in the Eumont Gas Pool, Lea County, New Mexico.

(5) That the creation of the proposed non-standard gas proration unit will not cause waste nor impair correlative rights.

IT IS THEREFORE ORDERED:

(1) That the application of Continental Oil Company for a 240-acre non-standard gas proration unit in the Eumont Gas Pool, consisting of the SE/4 and S/2 SW/4 of Section 11, Township 20 South, Range 36 East, NMPM, Lea County, New Mexico, be and the same is hereby approved and a non-standard gas proration unit consisting of the aforesaid acreage is hereby created, said unit to be dedicated to applicant's Sanderson "A-11" Well No. 1, located in the NE/4 of the SE/4 of said Section 11.

(2) That the said Sanderson "A-11" Well No. 1 be granted an allowable in the proportion that the acreage in the aforementioned unit bears to the acreage in a standard proration unit for the Eumont Gas Pool in accordance with Rule 8 of the Special Rules and Regulations for the Eumont Gas Pool as set forth in Order No. R-520.

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

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

E. L. Mechem

EDWIN L. MECHEM, Chairman

M. E. Morgan

MURRAY E. MORGAN, Member

A. L. Porter, Jr.

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



DOCKET: EXAMINER HEARING MARCH 27, 1957

Mexico Oil Conservation Commission 10:00 a.m. Hobbs, New Mexico

Conservation Commission Office, 1000 W. Broadway, Hobbs, New Mexico

the following cases will be heard before Warren W. Mankin, Examiner:

- - -

SE 1229: Application of Rowan Oil Company for a 160-acre non-standard gas proration unit in the Eumont Gas Pool in exception to Rule 5 (a) of the Special Rules and Regulations for said pool. Applicant, in the above-styled cause, seeks an order authorizing a 160-acre non-standard gas proration unit in the Eumont Gas Pool consisting of the N/2 S/2 of Section 7, Township 22 South, Range 37 East, Lea County, New Mexico; said unit to be assigned to Rowan Oil Company and Neville G. Penrose, Inc. H. T. Mattern No. 1 Well located 1650 feet from the South line and 330 feet from the West line of said Section 7.

CASE 1230: Application of Continental Oil Company for a 240-acre non-standard gas proration unit in the Eumont Gas Pool in exception to Rule 5 (a) of the Special Rules and Regulations for said pool. Applicant, in the above-styled cause, seeks an order authorizing a 240-acre non-standard gas proration unit in the Eumont Gas Pool consisting of the SE/4 and S/2 SW/4 Section 11, Township 20 South, Range 36 East, Lea County, New Mexico; said unit to be dedicated to the applicant's Sanderson "A-11" Well No. 1 located 1980 feet from the South line and 660 feet from the East line of said Section 11.

CASE 1231: Application of the Ibex Company for approval of an unorthodox location and the establishment of an allowable for its McElvain No. 2 Well in the E-K Queen Pool. Lea County, New Mexico, in exception to Rule 104 of the Commission Rules and Regulations. Applicant, in the above-styled cause, seeks an order authorizing an unorthodox location and the establishment of an allowable for its McElvain No. 2 Well located one-half foot from the North line and 1978 feet from the East line of Section 30, Township 18 South, Range 34 East, Lea County, New Mexico. Applicant is the owner of the SW/4 SE/4 of Section 19 offsetting said well to the North.

CASE 1232: Application of Gulf Oil Corporation for an order granting an exception to Rule 309 (a) of the Statewide Rules and Regulations of the New Mexico Oil Conservation Commission to permit the production of more than eight wells into a common tank battery in the South Eunice Pool, Lea County, New Mexico. Applicant, in the above-styled cause, seeks an order approving a common tank battery to receive production from a maximum of sixteen producing wells on its J. F. Janda "F" Lease, South Eunice Pool, Lea County, New Mexico; said property consisting of Section 4, Township 22 South, Range 36 East.

OIL CONSERVATION COMMISSION
SANTA FE, NEW MEXICO

Date 3/29/57

CASE 1230

Hearing Date 10am on 3/27/57 @ Hobbs
before WAM

My recommendations for an order in the above numbered cases are as follows:

OK to approve the 240 Ac NSP in
Emmont Gas Pool
Allow inc. per Rule 8

Warren M. Martin
Staff Member

Examiner

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 EUMONT GAS POOL CONTAINED IN
ORDER NO. R-520 IN ENLARGEMENT TO
240 ACRES OF THE PRESENTLY APPROVED
160-ACRE NON-STANDARD GAS PRORATION
UNIT ALLOCATED TO ITS SANDERSON A-
11 WELL NO. 1; SAID ENLARGED UNIT
TO CONSIST OF SE/4 AND S/2 SW/4 OF
SECTION 11, T-20-S, R-36-E, NMPM,
LEA COUNTY, NEW MEXICO

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 gas proration
unit allocated to its Sanderson A-11 well No. 1 from the presently
approved 160-acre unit, consisting of the SE/4 of Section 11,
T-20-S, R-36-E, NMPM, Lea County, New Mexico, to a 240-acre unit
consisting of SE/4 and S/2 SW/4 of said Section 11; and in
support thereof would show:

1. That applicant is co-owner and is the operator
of a lease designated the Sanderson A-11 lease consisting of the
SE/4 and S/2 of the SW/4 Section 11, T-20-S, R-36-E, NMPM, Lea
County, New Mexico.

2. That applicant drilled the Sanderson A-11 well No.
1 at a location 1980 feet from the South line and 660 feet from
the East line of said Section 11 and completed it September 9,
1936 as an oil well.

3. That said well is an oil well producing oil from
the Monument Pool and a Bradenhead gas well producing gas from
the Eumont Pool.

4. That for gas proration purposes the well is presently
allocated the SE/4 of said Section 11; that the S/2 SW/4 has never
been allocated to any gas well for gas proration purposes; that
the entire area sought to be allocated to said well may reasonably
be presumed to be productive of gas; and that all of said area
should be allocated to a gas well in the interests of the prevention
of waste and the protection of correlative rights.

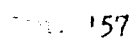
5. That the most practical and economical method of allocating said acreage for Eumont Pool gas production is to establish a 240-acre non-standard gas proration unit as described above for assignment to the Sanderson A-11 No. 1.

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 Eumont 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

PETROLEUM BUILDING
ROSWELL, NEW MEXICO

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

February 18, 1957

*Examiner
Hobbs
about 3/27/57*

Case # 11-1-2

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

Attention of Mr. A. L. Porter, Jr.

Re: Continental Oil Company's
application for non-standard
gas proration unit for its
Sanderson A-11 well No. 1
located in Section 11, T-
20-S, R-36-E, Lea County,
New Mexico

Gentlemen:

We forward herewith application in triplicate for approval of the enlargement of the presently approved non-standard unit for our Sanderson A-11 No. 1. In accordance with the last paragraph of the application, it is respectfully requested that hearing be set before an examiner in Hobbs, New Mexico, at the earliest convenient date.

Yours very truly,

R. L. Adams

RLA-BC

Enc

cc: HLJ-2, NAR, JK

BEFORE THE
OIL CONSERVATION COMMISSION
March 27, 1957
Hobbs, New Mexico

IN THE MATTER OF:

Case No. 1230

TRANSCRIPT OF HEARING

DEARNLEY - MEIER & ASSOCIATES
INCORPORATED
GENERAL LAW REPORTERS
ALBUQUERQUE - SANTA FE
3-6691 2-2211

NEW MEXICO OIL CONSERVATION COMMISSION

Hobbs, NEW MEXICO

REGISTER

HEARING DATE March 27, 1957

TIME: 10:00 a.m.

NAME:	REPRESENTING:	LOCATION:
E. J. Fickert	OCC	Hobbs, N.M.
O. H. Reagan	The Hobbs	Hobbs, N.M.
J. H. Fickert	"	"
W. H. Fickert	Self Oil Corp	Hobbs, N.M.
Dr. Fickert	"	Hobbs, N.M.
Victor Fickert	"	Hobbs, N.M.
Peggy Fickert	"	Hobbs, N.M.
Wm. Fickert	"	Hobbs, N.M.
Wm. Fickert	OCC	Hobbs, N.M.
P. J. Fickert	OCC	Hobbs, N.M.
Wm. Fickert	OCC	Hobbs, N.M.

BEFORE THE
OIL CONSERVATION COMMISSION
March 27, 1957
Hobbs, New Mexico

IN THE MATTER OF:

Application of Continental Oil Company for a
240-acre non-standard gas proration unit in
the Eumont Gas Pool in exception to Rule 5 (a)
of the Special Rules and Regulations for said
pool. Applicant, in the above-styled cause,
seeks an order authorizing a 240-acre non-
standard gas proration unit in the Eumont Gas : Case No.
Pool consisting of the SE/4 and S/2 SW/4 Section: 1230
11, Township 20 South, Range 36 East, Lea
County, New Mexico; said unit to be dedicated
to the applicant's Sanderson "A-11" Well No. 1
located 1980 feet from the South line and 660
feet from the East line of said Section 11.

BEFORE:

Mr. Warren W. Mankin, Examiner.

TRANSCRIPT OF PROCEEDINGS

MR. MANKIN: The hearing will come to order. First case on
the docket is Case No. 1230.

MR. COOLEY: Case No. 1230. Application of Continental
Oil Company for a 240-acre non-standard gas proration unit in the
Eumont Gas Pool in exception to Rule 5 (a) of the Special Rules and
Regulations for said pool.

MR. LYON: The appearances for the applicant are V. T.
Lyon and R. J. Francis. I have one witness, Mr. Francis.

(Witness sworn.)

MR. MANKIN: Proceed.

MR. LYON: This is an application of Continental Oil Company for the enlargement of one existing 160-acre non-standard proration unit in the Eumont Pool to a non-standard unit of 240-acres in Section 11, Township 20 South, Range 36 East, Lea County, New Mexico.

ROGERS FRANCIS

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

DIRECT EXAMINATION

BY: MR. LYON:

Q Would you state your name, please.

A Rogers Francis.

Q By whom are you employed? A Continental Oil Company.

Q In what capacity? A Petroleum engineer.

Q Will you please review briefly for the Examiner your qualifications, education, and experience?

A I attended Louisiana State University and on August the 5th, 1950 I received a Bachelor of Science degree in petroleum engineering. At that time, I accepted a position with Continental Oil Company and have been working with them ever since then.

During my first year of employment I was assigned to an engineering program, six months of which was spent in the Hobbs area, and at the end of that year, I was assigned here primarily as a petroleum engineer.

Q In your capacity as a petroleum engineer, have you had

occasion to become familiar with the Sanderson "A-11" Lease?

A I have.

MR. LYON: Are the witness' qualifications acceptable?

MR. MANKIN: They are.

Q (By Mr. Lyon) Mr. Francis, are you familiar with the application that has been filed in this case?

A Yes, I am.

(Applicant's Exhibit No. 1 Marked
for Identification.)

Q Referring to what has been marked Exhibit No. 1, will you please briefly describe the information shown thereon?

A Exhibit 1 is a plat showing the general area surrounding the Sanderson "A-11" Well No. 1. The well is circled in red on the plat and is shown on there 1980 feet from the South line and 660 feet from the East line of Section 11, Township 20 South, Range 36 East, New Mexico Principal Meridan, Lea County, New Mexico.

The present unit is outlined by a dashed red line and is shown on the plat consisting of the Southeast Quarter of Section 11.

The proposed unit is outlined by a solid red line and is shown to consist of the Southeast Quarter and South Half of the Southwest Quarter of Section 11, containing 240-acres.

The Exhibit also shows, circled in green, the gas wells on offsetting leases, with the unit allocated to them enclosed in green.

The proposed enlargement is accomplished by adding to the present unit the South Half of the Southwest Quarter of Section 11, which

is a part of the same lease as the present unit. This portion of the lease has no producing gas wells to which its acreage can be assigned for allowable purposes.

By the structural contours on top of the Yates, included in Exhibit 1, it may be seen that the acreage of the proposed enlargement, consisting of the South Half of the Southwest Quarter of Section 11, is comparable structurally to Continental Oil Company's Sanderson "A-14" Well No. 7, situated southeast of the proposed enlargement, completed in the Eumont Pay September 29, 1956, with a calculated open flow potential of eleven thousand seven hundred and fifty MCF's per day, and deliverability against six hundred pound pressure, of six thousand nine hundred MCF's of gas per day. It is therefore reasonable to assume that the entire proposed enlargement is productive of gas.

Q You stated that it is reasonable to assume -- That this is reasonably presumed to be productive of gas. Is that based on the structural contours as well as the producing gas wells surrounding this area?

A That is correct.

(Applicant's Exhibit No. 2 Marked
For Identification.)

Q Now, referring to what has been marked Exhibit No. 2, would you please describe briefly the information shown on that Exhibit?

A Exhibit 2 is a capacity diagram showing the formations in which the subject well is completed, complete with the estimated tops of producing formations, and the method in which gas is produced

from the Eumont Pool.

It may be seen from this diagram that ten and three-quarter inch surface casing was set at two hundred and fifty-one feet, and intermediate strings of seven and five-eighths inches was set at a depth of two thousand three hundred and twenty-eight feet, and a producing string of five and a half inches was set at three thousand seven hundred and seventy-eight, with one hundred and fifty sacks of cement, and the well being carried up to a total depth of three thousand eight hundred and eighty-eight feet for initial completion in the Grayburg as an oil well.

Gas production, as it occurs at the present time, is originating from the open hole, open hole annular section, between the five and a half and seven and five-eighths at a depth of two thousand three hundred and twenty-eight to an estimated two thousand nine hundred and ninety on the top of the cement. This producing zone includes all of the Yates Formation and part of the Seven Rivers.

Q What date was this well completed?

A The well was originally completed -- That is, its oil completion, on August the 30th, 1956.

Q And the well is now producing oil from the Grayburg through the production string and gas through the Bradenhead connections?

A That is correct.

Q From the Eumont Zone?

A That is correct.

Q Now, do you have any evidence to indicate that the well is capable of production for the enlarged unit?

A Yes.

(Applicant's Exhibit No. 3 Marked
for Identification.)

A (Continuing) As indicated by Exhibit No. 3, the well was recently potentialled, on September the 21st, 1956. At that time, by back pressure test, it was calculated for an open flow potential of five thousand one hundred and fifty MCF's of gas per day, and deliverability against six hundred pounds line pressure, of two thousand five hundred and fifty MCF's of gas per day.

Q You previously testified that, in your opinion, the entire unit sought to be allocated to the well is reasonably thought to be productive of gas. Does the unit consist of contiguous quarter quarter sections?

A It does.

Q Are they all contained within the boundaries of a single government section?

A It is.

Q Is the unit's length, or width, in excess of five thousand two hundred and eighty feet?

A No.

MR. LYON: I believe that's all we have to offer into evidence, and I would like to offer Exhibits Nos. 1, 2, and 3.

MR. MANKIN: Are there any objections to the entrance of Exhibits 1, 2, and 3 in this case? If not, they will be so entered.

CROSS EXAMINATION

BY: MR. MANKIN:

Q Mr. Francis, at the present time, all of the completed wells on this 240-acre unit are oil wells in the Monument Oil Pool, is that

correct?

A That is correct.

Q Except the subject well which is the Bradenhead Well, which has Bradenhead gas from the Eumont and the remainder of the wells are Monument Wells?

A That is correct.

MR. MANKIN: Are there any further questions of the witness in this case?

MR. COOLEY: I have some questions.

MR. MANKIN: Mr. Cooley.

BY: MR. COOLEY:

Q Mr. Francis, is the Southeast Quarter in the South Half of the Southwest Quarter contained in one basic lease?

A That is correct.

Q And is Continental the sole owner of the working interest in that lease?

A No, it is not.

Q What is the ownership of the lease?

A The ownership of the lease? You are, of course, referring to the operating --

Q Yes.

A Continental owns twenty-five per cent of the working interest in it, and is the operator. The other seventy-five per cent is owned equally by Pan American, Atlantic, and Standard of Texas.

Q You say Continental is the operator. Is it designated as an operator in an operating agreement?

A That is correct.

Q And the royalty interest is common throughout?

A That's right.

Q You do not have a copy of that agreement, do you, Mr. Francis?

A No, I do not have a copy at the present time.

MR. LYON:: We do not have a copy available at this time.

MR. COOLEY: I wonder, is it a communization agreement or simply an operating agreement?

MR. LYON:: I might state for the record that this lease is a part of the New Mexico Federal Unit.

MR. COOLEY: What?

MR. LYON:: This lease is a part of the New Mexico Federal Unit.

Q (By Mr. Cooley): This well is 660 feet from the North line of the lease, or the proposed unit?

A That is correct, it would be situated 660 from the Northeast line, or 1980 feet from the section line, Section 11.

Q That makes it a 660 location?

A That is correct, 660 location.

MR. COOLEY: I believe that is all.

MR. MANKIN: Are there any further questions of the witness? If not, the witness may be excused. Do you have anything further?

MR. LYON:: Do you have anything further to add, Mr. Francis?

MR. FRANCIS: No, I don't have.

MR. MANKIN: Is there anything further to be presented in this case? If not, we will take the case under advisement.

STATE OF NEW MEXICO)
)
 COUNTY OF BERNALILLO) ss.

I, J. A. Trujillo, 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.

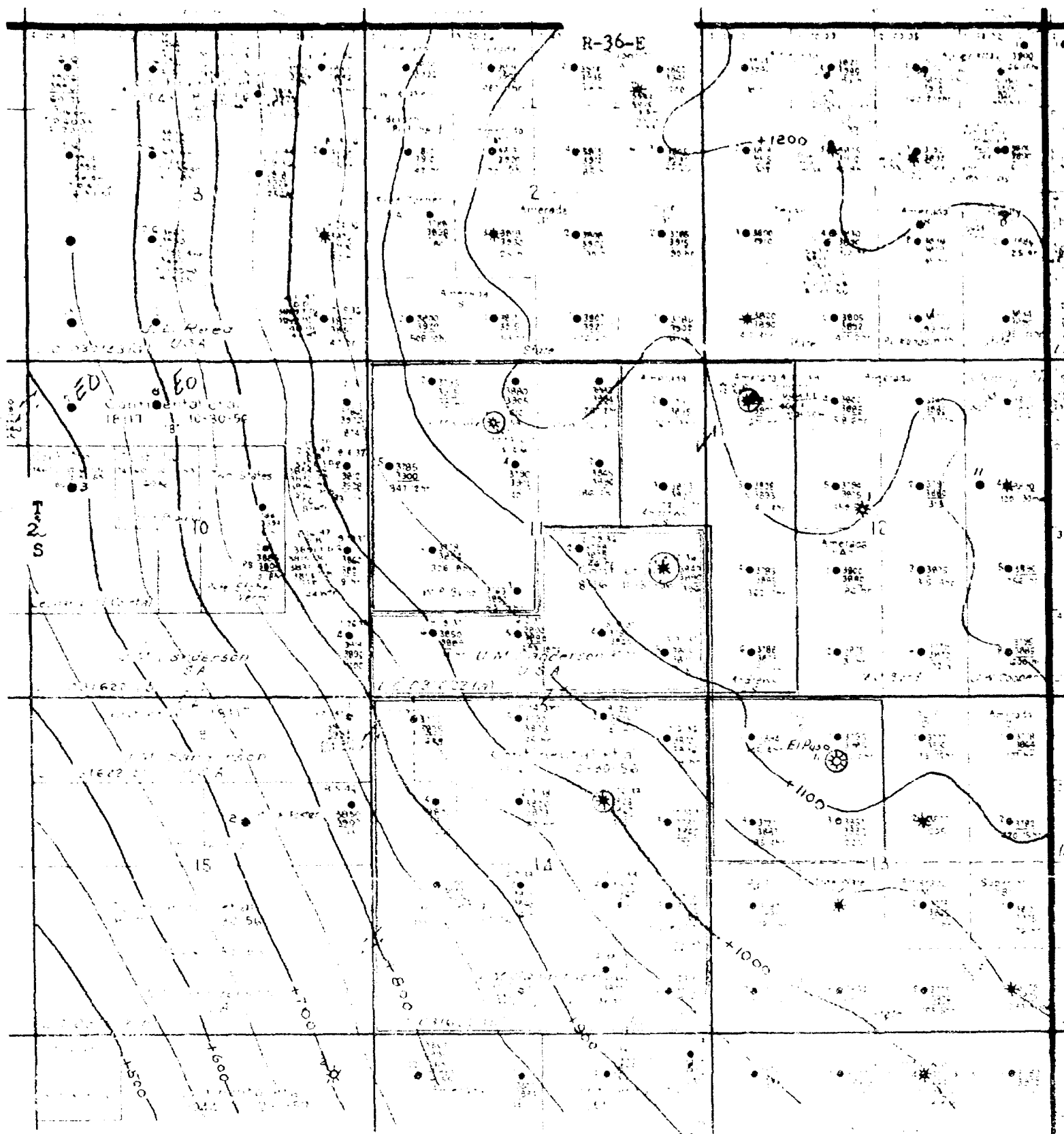
WITNESS my Hand and Seal, this, the 3rd day of April, 1957, in the City of Albuquerque, County of Bernalillo, State of New Mexico.

J. A. Trujillo
 NOTARY PUBLIC

My Commission Expires:

October 5, 1960

March 27 1230 57
Waverly Hunter



CONTINENTAL OIL COMPANY

scale: 1" = 2000' 50' contours on top of Yates

Subject Gas Well
Acreage Now Assigned to Well
Acreage Proposed for Well

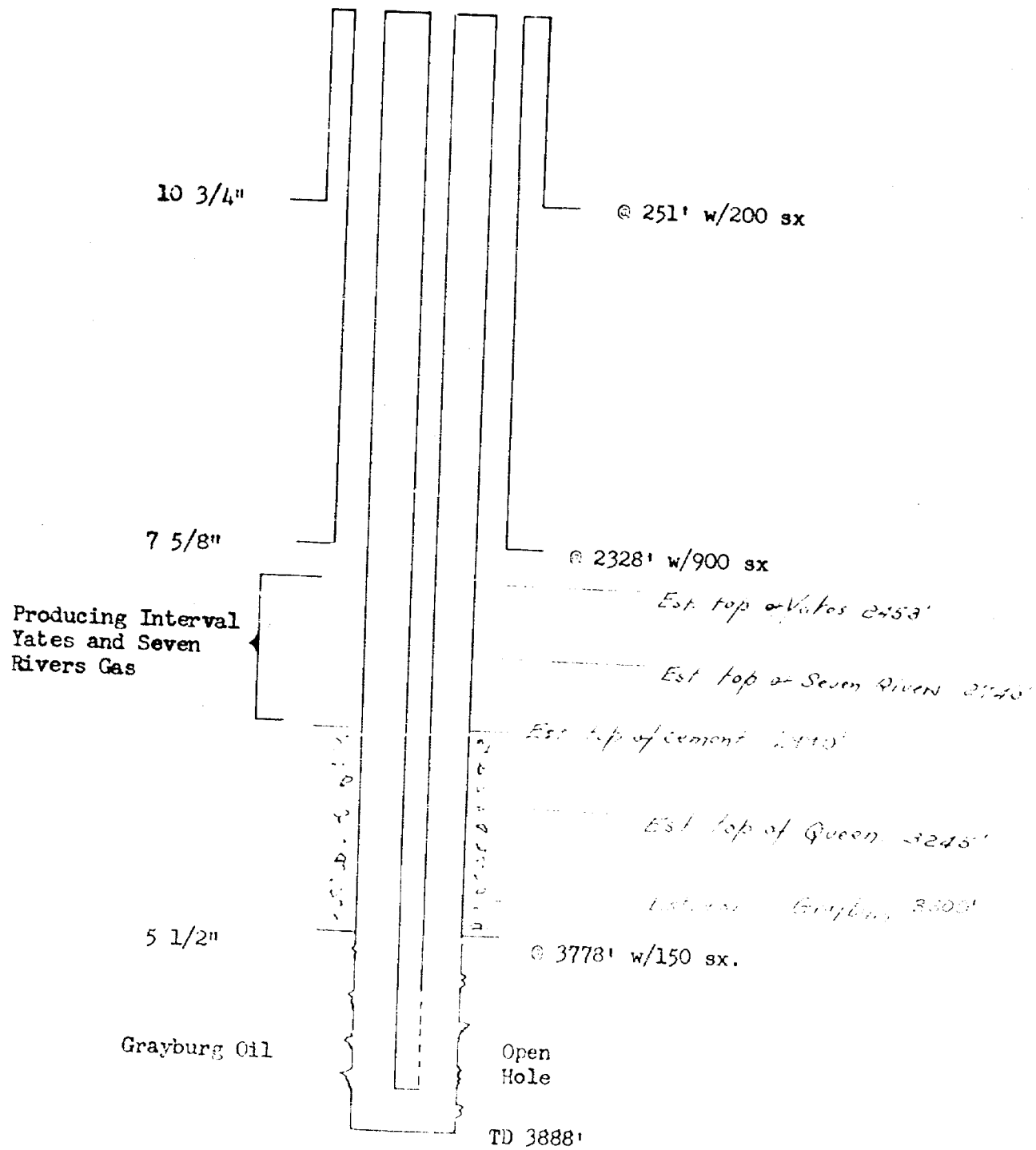
Offset Gas Well
Offset Gas Unit

Jan. '57

CASE
EXHIBIT

CONTINENTAL OIL COMPANY
 SANDERSON A-11 NO. 1
 Bradenhead Gas Well

Elev. 3573'



*Close to 30
 1/2 in.*

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Revised 1-1-55

Pool Eumont Formation Yates and Seven Rivers County Lea
 Initial _____ Annual _____ Special X Date of Test 9-21-56
 Company Continental Oil Company Lease Sanderson A-11 Well No. 1
 Unit I Sec. 11 Twp. 20 Rge. 36 Purchaser EPNG
 Casing 5 1/2 Wt. 17 I.D. - Set at 3778 Perf. - To -
 Tubing 2 1/2 Wt. 6.5 I.D. - Set at - Perf. - To -
 Gas Pay: From 2453 To 3000 L 2453 xG .670 -GL 1644 Bar.Press. 13.2
 Producing Thru: Casing X Tubing _____ Type Well Bradenhead
 Single-Bradenhead-G. G. or G.O. Dual _____
 Date of Completion: 9-30-36 Packer - Reservoir Temp. 90°

OBSERVED DATA

Tested Through ~~XXXXXXXX~~ ~~XXXXXXXX~~ (Meter) Type Taps Flange

No.	Flow Data			Tubing Data		Casing Data		Duration of Flow Hr.
	(Pressure) (Line) Size	(Orifice) (Orifice) Size	Press. psig	Diff. h _w	Temp. °F.	Press. psig	Temp. °F.	
SI						830		72
1.	4	1,500	593	58	74	584		23
2.	4	1,500	616	35	74	613		25
3.	4	1,500	608	25	74	616		24
4.	4	1,250	601	.64	74	758		24
5.								

FLOW CALCULATIONS

No.	Coefficient (24-Hour)	$\sqrt{h_{wpf}}$	Pressure * psia	Flow Temp. Factor F _t	Gravity Factor F _g	Compress. Factor F _{pv}	Rate of Flow Q-MCFPD @ 15.025 psia
1.	13.99	185.46		.9868	.9463	1.067	2587
2.	13.99	146.84		.9868	.9463	1.067	2048
3.	13.99	123.29		.9868	.9463	1.067	1720
4.	9.643	19.61		.9868	.9463	1.067	188
5.							

*Note - L-10 chart used.

PRESSURE CALCULATIONS

Gas Liquid Hydrocarbon Ratio - cf/bbl. Specific Gravity Separator Gas -
 Gravity of Liquid Hydrocarbons - deg. Specific Gravity Flowing Fluid -
 F_c Not applicable (1-e⁻⁸) Not applicable P_c 843.2 P_c² 711.0

No.	P _w P _t (psia)	P _c ²	P _c ²	(P _c ²) ²	(P _c ²) ² (1-e ⁻⁸)	P _w ²	P _c ² -P _w ²	Cal. P _w	P _w /P _c
1.	597.2	356.6	-	-	-	356.6	354.4	597.2	.71
2.	626.2	392.1	-	-	-	392.1	318.9	626.2	.74
3.	629.2	395.9	-	-	-	395.9	315.1	629.2	.75
4.	771.2	594.7	-	-	-	594.7	116.3	771.2	.91
5.									

Absolute Potential: 5,150 MCFPD; n 1.00

COMPANY Continental Oil Company
 ADDRESS Box 427 - Hobbs, New Mexico
 AGENT and TITLE W. D. Howard, Gas Tester
 WITNESSES _____
 COMPANY _____

Slope greater than 1.00. Slope of 1.00 drawn thru highest rate of flow per paragraphs 10c and 10d of Back-pressure Manual. Due to Bradenhead flow, water-logging and leaking into purchasers pipeline, this well has been extremely difficult to test.

INSTRUCTIONS

This form is to be used for reporting multi-point back pressure tests on gas wells in the State, except those on which special orders are applicable. Three copies of this form and the back pressure curve shall be filed with the Commission at Box 871, Santa Fe.

The log log paper used for plotting the back pressure curve shall be of at least three inch cycles.

NOMENCLATURE

Q = Actual rate of flow at end of flow period at W. H. working pressure (P_w).
MCF/da. @ 15.025 psia and 60° F.

P_c = 72 hour wellhead shut-in casing (or tubing) pressure whichever is greater.
psia

P_w = Static wellhead working pressure as determined at the end of flow period.
(Casing if flowing thru tubing, tubing if flowing thru casing.) psia

P_t = Flowing wellhead pressure (tubing if flowing through tubing, casing if flowing through casing.) psia

P_f = Meter pressure, psia.

h_w = Differential meter pressure, inches water.

F_g = Gravity correction factor.

F_t = Flowing temperature correction factor.

F_{pv} = Supercompressibility factor.

n = Slope of back pressure curve.

Note: If P_w cannot be taken because of manner of completion or condition of well, then P_w must be calculated by adding the pressure drop due to friction within the flow string to P_t .

COMPANY Continental Oil Co.
 WELL Sanderson A-11 No.1
 LOCATION I 11-20S-36E.
 COUNTY Lea
 DATE 9-21-'56.

CODING BOOK COMPANY, INC. NORWOOD, MASSACHUSETTS
PRINTED IN U.S.A.

NO. 51-261 LOGARITHMIC PLOT OF 1/4-INCH CYCLES BASE SHORT WAY.

