CASE 1958: Application of TEXACO Inc. for approval of automatic custody transfer system - State WARN Tease.

1958

Application, Transcript,
Small Exhibits, Etc.

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

May 19, 1960

Mr. Charlie White Bishop Building P. O. Box 787 Santa Fe, New Mexico

Dear Mr. White:

On behalf of your clients, Aztec Oil & Gas, Texaco Inc., and Sinclair Oil & Gas, we enclose two copies of Order R-1675 in Case 1963, Order R-1676 in Case 1964, Order R-1677 in Case 1959, Order R-1679 in Case 1965 and Order R-1680 in Case 1958. These orders were issued by the Oil Conservation Commission on this date.

Very truly yours,

A. L. PORTER, Jr. Secretary-Director

ir/

Enclosures

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. 1958 Order No. R-1680

APPLICATION OF TEXACO INC. FOR APPROVAL OF AN AUTOMATIC CUSTODY TRANSFER SYSTEM IN THE ECHOL-DEVONIAN 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 May 11, 1960, at Santa Fe, New Mexico, before Daniel S. Nutter, Examiner duly appointed by the Oil Conservation Commission of New Mexico, Nereinafter referred to as the "Commission," in accordance with Rule 1214 of the Commission Rules and Regulations.

NOW, on this 19th day of May, 1960, 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, Texaco Inc., is the owner and operator of the State "AR" lease comprising the N/2 SW/4 and Lots 3 and 4 of Section 2, Township 11 South, Range 37 Rast, NMPM, Lea County, New Mexico.
- (3) That the applicant proposes to install an automatic custody transfer system to handle the Echol-Devonian Pool production from all wells presently completed or hereafter drilled on the said State "AR" lease.
- (4) That the previous use of automatic custody transfer equipment, similar to that proposed by the applicant, has shown that such equipment is a reliable and economic means of transferring the custody of oil, and that the use of such equipment should be permitted, provided adequate safety features are incorporated therein.

-2-CASE No. 1958 Order No. R-1680

IT IS THEREFORE ORDERED:

That the applicant, Texaco Inc., be and the same is hereby authorized to install automatic custody transfer equipment to handle the Echol-Devomian Pool production from all wells presently completed or hereafter drilled on its State "AR" lease comprising the N/2 SW/4 and Lots 3 and 4 of Section 2, Township 11 South, Range 37 East, NMPM, Lea County, New Mexico.

PROVIDED HOWEVER, That the applicant shall install adequate facilities to permit the testing of all wells located on the said State "AR" lease at least once each month to determine the individual production from each well.

PROVIDED FURTHER, That imassuch as no well-head shut-in facilities will be installed in the automatic custody transfer system, the applicant shall install storage facilities capable of handling the lease production during the maximum unattended hours of operation.

IT IS FURTHER ORDERED:

That all meters used in the above-described automatic custody transfer system shall be operated and maintained in such a manner as to ensure an accurate measurement of the liquid hydrocarbon production at all times.

That meters shall be checked for accuracy at least once each month until further direction by the Secretary-Director.

That meters shall be calibrated against a master meter or against a test tank of measured volume and the results of such calibration filed with the Commission on the Commission form entitled "Meter Test Report."

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

> STATE OF NEW MEXICO OIL CONSERVATION COMMISSION

JOHN BURROUGHS, Chairman

JOHN BURROUGHS, Chairman

MURRAY E. MORGAN, Member

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

esr/

DOCKET: EXAMINER HEARING MAY 11, 1960

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

The following cases will be heard before Daniel S. Nutter, Examiner, or Oliver E. Payne, Attorney, as alternate examiner:

CASE 1958:

Application of Texaco Inc., for approval of an automatic custody transfer system. Applicant, in the above-styled cause, seeks an order authorizing the installation of an automatic custody transfer system to handle the production from the Echol-Devonian Pool from all wells on its State "AR" Lease, consisting of the N/2 SW/4 and Lots 3 and 4 of Section 2, Township 11 South, Range 37 East, Lea County, New Mexico.

CASE 1959:

Application of Sinclair Oil & Gas Company for approval of an automatic custody transfer system. Applicant, in the above-styled cause, seeks an order authorizing the installation of an automatic custody transfer system to handle the production from the Empire-Abo Pool from all wells presently completed or hereafter drilled on its M. Yates "B" Lease, consisting of the S/2, NE/4, S/2 NW/4, and NE/4 NW/4 of Section 33, Township 17 South, Range 28 East, Eddy County, New Mexico.

CASE 1960:

Application of Gulf Oil Corporation for approval of a unit agreement. Applicant, in the above-styled cause, seeks approval of its North Caverns Unit Agreement, which unit will embrace approximately 6,303 acres of Federal and State land in Townships 22 and 23 South, Range 24 East, Eddy County, New Mexico.

CASE 1961:

Application of Gulf Oil Corporation for permission to commingle the production from four separate peels and for approval of an automatic custody transfer system to handle said commingled production. Applicant, in the above-styled cause, seeks permission to commingle the production from the Blinebry, Drinkard, Paddock, and Penrose-Skelly Pools from all wells located on its C. L. Hardy lease comprising the SW/4 of Section 20, Township 21 South, Range 37 East, Lea County, New Mexico, after separately metering only the production from the Blinebry Pool and to allocate the Drinkard Paddock and Penrose-Skelly Pool production without prior metering or measurement but on the basis of monthly individual well tests. Applicant further seeks approval of an automatic custody transfer system to handle the said commingled production from all wells on the said C. L. Hardy lease.

Docket No. 13-60

CASE 1962:

Application of McGrath and Smith for a special allowable for one well in the Caprock-Queen Pool, Lea and Chaves Counties, New Mexico. Applicant, in the above-styled cause, seeks a special allowable for one well offsetting a capacity water-flood project in the Caprock-Queen Pool, Lea and Chaves Counties, New Mexico. Said well is the Tidewater-State Well No. 1, located in the NW/4 SE/4 of Section 18, Township 13 South, Range 32 East, Lea County, New Mexico.

CASE 1963:

Application of Aztec Oil & Gas Company for an unorthodox gas well location and for approval of two non-standard units. Applicant, in the above-styled cause, seeks approval of an unorthodox gas well location in the Blanco-Mesaverde Gas Pool for its Richardson Well No. 6, to be located in the SE/4 of Section 22, Township 31 North, Range 12 West, San Juan County, New Mexico. Applicant further seeks establishment of a 297-acre non-standard gas proration unit in the Blanco-Mesaverde Gas Pool and a 297-acre non-standard unit in the Dakota Producing Interval, each consisting of the E/2 of said Section 22 and to be dedicated to the said Richardson Well No. 6.

CASE 1964:

Application of Aztec Oil & Gas Company for an unorthodox gas well location and for approval of two non-standard units. Applicant, in the above-styled cause, seeks approval of an unorthodox gas well location in the Blanco-Mesaverde Gas Pool for its Richardson Well No. 7, to be located in the SE/4 of Section 15, Township 31 North, Range 12 West, San Juan County, New Mexico. Applicant further seeks establishment of a 309. 55-acre non-standard gas proration unit in the Blanco-Mesaverde Gas Pool and a 309.55-acre non-standard unit in the Dakota Producing Interval, each consisting of the E/2 of said Section 15, and to be dedicated to said Richardson Well No. 7.

CASE 1965:

Application of Aztec Oil & Gas Company for approval of an unorthodox gas well location. Applicant, in the above-styled cause, seeks approval of an unorthodox location in the Blanco-Mesaverde Gas Pool for its Thompson Well No. 6, to be located in the SE/4 of Section 28, Township 31 North, Range 12 West, San Juan County, New Mexico.

CASE 1966:

Application of Texas National Petroleum Company for an oilgas dual completion utilizing parallel strings of casing cemented in a common well bore and for an unorthodox gas well location. Applicant, in the above-styled cause, seeks an order authorizing the dual completion of a well to be located at an unorthodox location 660 feet from the North and West -3-Docket No. 13-60

CASE 1966: (Cont.)

lines of Section 1, Township 25 North, Range 9 West, San Juan County, New Mexico, in such a manner as to permit the production of oil from the Gallup formation and the production of gas from the Dakota Producing Interval through 2 7/8-inch casing and through 2-inch tubing set in 4 1/2-inch casing respectively with the casing being cemented in a common well bore.

OIL CONSERVATION COMMISSION SANTA FE, NEW MEXICO

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Staff Member

GILBERT, WHITE AND GILBERT ATTORNEYS AND COUNSELORS AT LAW BISHOP BUILDING SANTA FE, NEW MEXICO April 11, 1960

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

Re: Application of Texaco Inc. for permission to install an automatic custody transfer system on its "AR" Lease in the Echols (Devonian) Pool, Lea County, New Mexico.

Gentlemen:

CARL H. GILBERT L. C. WHITE WILLIAM W. GILBERT SUMNER 3. KOCH

WILLIAM B. KELLY

Enclosed herewith please find original application and two copies to be filed on behalf of Texaco Inc. for permission to install automatic custody transfer system on its State "AR" Lease, Lea County, New Mexico.

Thanking you for your usual courtesies, I am,

Very truly yours,

L. C. WHITE

LCW/ab Encl: 3

BEFORE THE OIL CONSERVATION COMMISSION OF THE

STATE OF NEW MEXICO

IN THE MATTER OF THE APPLICATION OF TEXACO INC. FOR PERMISSION TO INSTALL AN AUTOMATIC CUSTODY TRANSFER SYSTEM ON ITS "AR" LEASE IN THE ECHOLS (DEVONIAN) POOL, LEA COUNTY, NEW MEXICO.

Case No. 1958

APPLICATION

Comes now Texaco Inc. and respectfully petitions the New Mexico Oil Conservation Commission for permission to install an automatic custody transfer system and respectfully shows:

- 1. Applicant is the owner and operator of its State of New Mexico "AR" lease consisting of 117 acres located in Section 2, a fractional section, consisting of the North half of the Southwest Quarter, and Lot 3 (containing 18.52 acres) and Lot 4 (containing 18.58 acres), all being in Township 11 South Range 37 East Lea County, New Mexico. Applicant is the operator of two wells on said lease producing from the Echols (Devonian) Pool.
- 2. Applicant proposes to install a permanent automatic custody transfer system to handle the Echols (Devonian) Pool production from the aforesaid wells. The applicant proposes to measure the oil passing through said automatic custody transfer system by means of either dump-type or positive displacement meters. Said meters will be checked for accuracy at reasonable intervals and the results of such tests furnished to the Commission as may be required by it. All equipment used in the system shall be operated and maintained in such a manner as to insure an accurate measurement of the liquid hydro-carbon production at all times.
- 3. Applicant represents that the automatic custody transfer equipment which it proposes to install is a reliable and economic means of transferring the custody of oil and that the use of such equipment is in the interest of prevention of waste and will not impair correlative rights.

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WHEREFORE, applicant prays that this application be set for hearing Before an Examiner at Santa Fe, New Mexico, that notice be given hereon and that upon such hearing permission be granted as herein requested.

TEXACO INC.

By GILBERT, WHITE AND GILBERT

Attorneys for Applicant P. O. Box 787 Santa Fe, New Mexico

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NEW MEXICO OIL CONSERVATION COMMISSION

Oil Conse	rvation	Commiss	ion	
	Santa	Fe,	NEW	MEXICO
Examiner	Hearing	(Daniel	S. 1	Nutter)
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BEFORE THE OIL CONSERVATION COMMISSION Santa Fe, New Mexico May 11, 1960

EXAMINER HEARING

IN THE MATTER OF:

Application of Texaco Inc., for approval of an automatic custody transfer system. Applicant, in the above-styled cause, seeks an order authorizing the installation of an automatic custody transfer system to handle the production from the Echol-Devonian Pool from all wells on its State MAR* Lease, consisting of the N/2 SW/4 and Lots 3 and 4 of Section 2, Township 11 South, Range 37 East, Lea County, New Mexico.

Case 1958

Daniel S. Nutter, Examiner. BEFORE:

TRANSCRIPT OF HEARING

MR. NUTTER: The hearing will come to order, please. The first case on the docket will be Case 1958.

MR. PAYNE: "Application of Texaco Inc., for approval of an automatic custody transfer system."

MR. WHITE: If the Examiner please, Charles White of Gilbert, White and Gilbert, Santa Fe, New Mexico appearing on behalf of the Applicant, Texaco Company. We have one witness to be sworn.

(Witness sworn.)



J. E. ROBINSON, JR.

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

DIRECT EXAMINATION

BY MR. WHITE:

- Mr. Robinson, will you state your full name for the record, please?
 - J. E. Robinson, Jr.
 - By whom are you employed and in what capacity?
 - Texaco Inc. as proration engineer.
 - Have you previously testified before this Commission?
 - Yes, sir, I have.
 - Have your qualifications been accepted? Q
 - Yes, sir, they have.
 - Is Texaco the operator of its State MAR# Lease?
 - Yes, we are.
- Q Will you refer to your ownership plat, Exhibit No. 1, and explain it to the Examiner, please?
- Exhibit No. 1 is a plat of the area surrounding Texaco's New Mexico "AR" Lease. Colored in yellow is our lease, which shows that we have two Devonian wells. Also shown on the plat is the location of the offset wells, all located in Section 2. Sinclair has one offsetting well and Shell has two Devonian wells located on their State "A" Lease with a total of five wells presently



Q Will you explain your proposed LACT installation, and in so doing, refer to Exhibit No. 2?

LACT battery and the controls. The oil will come down the flow line from the well, go into a free water knockout; from there it will pass into a gun barrel treater and then into a 750 barrel power oil tank which we will use to pump these wells by co-pump and then into the tank A which is a 500 barrel reservoir tank.

On tank A we have a boot in which we have located our high and low level switches. When the oil in tank A reaches the high float switch located 12 feet above the ground, the LACT system will go on stream and will continue to put oil into the pipeline until the level of the oil reaches the low level switch, at which time it will shut off.

If the oil is acceptable by the pipeline as it passes through the BS and W monitor probe, it will continue downstream through the LACT system. If it is not acceptable by the pipeline, a three-way valve will shut the stream off to the system and start up a recirculating monitor pump and will pump back the bad oil to the treater until such time that good oil, clean oil is passing through the BS and W monitor and the LACT system will again go on stream.

We have two 500 barrel tanks that will act as reserve tanks in case we would have a malfunction in the LACT system that would prevent



tank A from overflowing.

At the present time we have two wells which have an allowable of 277 barrels of oil per day. In tank A we have an additional supply of reservoir space of 100 barrels, and then we have the two additional 500 barrel tanks for a total of 1100 barrels storage capacity; at the rate of 5th barrels per day for the two wells this would give us a storage of 1.99 days or 47.7 hours. The maximum time that the lease will go unattended is 41 hours since this lease is pumped by six day pumper.

- Q Mr. Robinson, do you anticipate any additional wells?
- No, sir, the lease is fully developed now.
- Q You believe this storage is adequate?
- Yes, sir, I do. A
- Now, will you refer to Exhibit No. 3 and explain that, Q please?

A Exhibit No. 3 is a three dimensional sketch of the custody transfer unit. As shown on Exhibit No. 2, when the oil in the reservoir tank reaches the high flow switch shown on this exhibit by the figure No. 1, the oil will go on stream, it will pass downstream, be picked up by the pump and will pass through the monitor probe which is shown by the No. 9. If the oil is acceptable, it will pass on downstream. go through the three way routing valve. It will pass through a strainer, through a narrow eliminator and then on through the PD meter and on past a back pressure valve,



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ALBUQUERQUE, NEW MEXICO

which will keep a back pressure on the system that will prevent any entrained gas or air from backing out in the oil, thus preventing any malfunction in the meter reading,

This system also has a prover tack which will be calibrated to ASTM standards. It will be a 10 barrel calibrated tank. When we want to prove our meter we will shut the plug valve shown as figure 12, we will open the plug valve 16 and 15, and circulate oil in this system until the system is entirely full of oil. We will then close the plug valve 15 and fill the calibrated tank until it reaches the 10 barrel mark. We will then shut valve 16 and open valve 15 and pump the oil from the prover tank through the PD meter and check our meter reading before and after running a known measured volume and we will thus prove our PD meter in this fashion.

In your opinion, is the installation a reliable and economical means of transferring the custody of oil?

Yes, sir, it is. It has been proven in the past that such an installation is very accurate.

Has the same type of equipment in previous installations been approved by the Commission, do you know?

Yes, sir, very similar applications.

Were these exhibits prepared by you or under your dir-Q ection?

Yes, sir, they were. A

MR. WHITE: At this time we offer Exhibits 1 through 3.



CH 3-669

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MR. NUTTER: Texaco's Exhibits 1 through 3 will be
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admitted.

MR. WHITE: That concludes our direct examination.

MR. NUTTER: Does anyone have any questions of Mr. Robin-

son? He may be excused.

(Witness excused.)

MR. NUTTER: Do you have anything further, Mr. White?

MR. WHITE: That's all in this case.

MR. NUTTER: Does anyone have anything further for Case 1958? We'll take the case under advisement and take Case 1959.

STATE OF NEW MEXICO SS COUNTY OF BERANLILLO)

I, ADA DEARNLEY, 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 20 th day of May, 1960.

My commission expires:

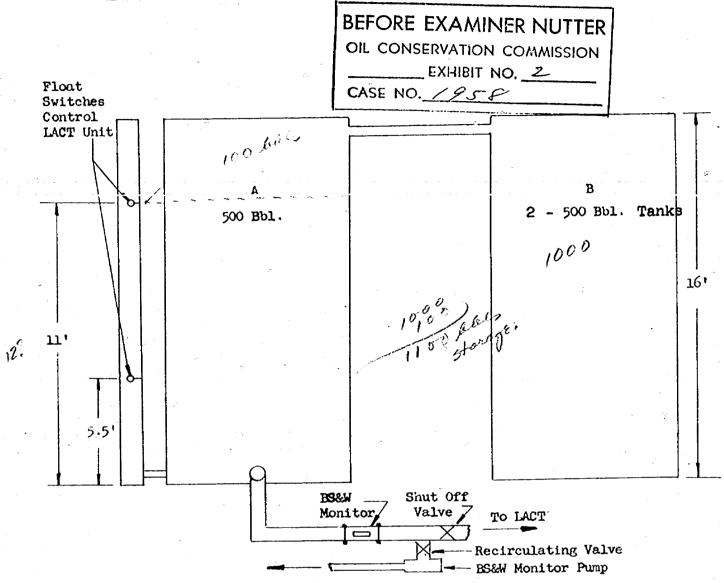
June 19, 1963.

I do hereby certify that the foregoing is a complete record of the proceedings in the Examiner hearing of Case No. 19.60

New Mexico Oil Concervation Commission

BEFORE EXAMINATION OIL CONSERVATION EXMINITED CASE NO. 195	COMMISSION NO			
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TEXACO Inc.
State of New Nexico "AR" Lease
NW/4 of Section 2, T-11-3, R-37-E
Lea County, New Mexico



Reserve storage above top float switch in Tank A to top Tank B 1100 Bbls. At allowable rate of 554 BOPD, two wells @ 277 BOPD reserve storage time equals 1100 = 1.99 days or 47.7 hrs. Maximum 554

time lease will go unattended is 41 hours.

SCHEMATIC DIAGRAM LACT BATTERY AND CONTROLS

TEXACO Inc.

State of New Mexico "AR" Lease
Section 2, T-11-S, R-37-E
Lea County, New Mexico

Echols (Devonian) Pool

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