CASE 5245: Appli. of TEXACO INC. FOR A TUEINGLESS QUADRUPLE COMPLETION & DOWNHOLE COMMINGLING

Control of the Contro

Application,

Transcripts, Small Ekhibts

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BEFORE THE NEW MEXICO OIL CONSERVATION COMMISSION Santa Fe, New Mexico May 22, 1974

EXAMINER HEARING

IN THE MATTER OF:

Application of Texaco, Inc., for a tubingless quadruple completion and downhole commingling, Lea County, New Mexico.

Case No. 5245

BEFORE: Richard L. Stamets, Examiner

For the New Mexico Oil Conservation Commission:

William Carr, Esq.
Legal Counsel for the
Commission
State Land Office Building
Santa Fe, New Mexico

For the Applicant:

Ken Bateman, Esq.
WHITE, KOCH, KELLY &
McCARTHY
220 Otero Street
Santa Fe, New Mexico

THE NYE REPORTING SERVICE
STATE-WIDE DEPOSITION NOTARIES
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SANTA FE, NEW MEXICO 87501
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CASE 5245

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EUGENE CRAIG HINRICHS
Direct Examination by Mr. Bateman
Cross Examination by Mr. Stamets

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Applicant's Exhibits Nos. 1 through 7

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HINRICHS-DIRECT

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MR. STAMETS: Case 5245.

MR. CARR: Case 5245. Application of Texaco, Inc., for a tubingless quadruple completion and downhole commingling, Lea County, New Mexico.

MR. BATEMAN: Mr. Examiner, I am Ken Bateman of White, Koch, Kelly and McCarthy, representing the Applicant. I have one witness and I ask that he be sworn.

MR. STAMETS: Are there any other appearances in this case?

The witness will stand and be sworn, please.

EUGENE CRAIG HINRICHS

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

DIRECT EXAMINATION

BY MR. BATEMAN:

- Q Please state your full name, your address and place of employment?
- A My name is Eugene Craig Hinrichs. I am District Production Engineer for Texaco, Incorporated at Hobbs, New Mexico.
- Q Have you previously testified before the Commission and made your qualifications a matter of record?
 - A Yes, I have.

MR. BATEMAN: Are the witness' qualifications acceptable?

MR. STAMETS: They are.

BY MR. BATEMAN:

Q Mr. Hinrichs, would you refer to what we have marked as Exhibit 1 and state what Texaco desires by its Application?

A Texaco seeks authority to commingle in wellbore production from the East Weir-Blinebry, and Skaggs-Drinkard and produce through a single string casing in the C. H. Weir A Well No. 8. This well is located 1980 feet from the north line and 1980 from the west line of Section 12, Township 20 South, Range 37 East in Lea County. The subject lease is outlined in yellow and the subject well is designated by the red arrow.

In addition to the wellbore commingling, we wish to recomplete this well in the East Weir-Tubb in such a manner as to permit production of the Weir-Tubb East, Skaggs-Glorieta and the commingled Drinkard and Blinebry through three parallel strings of 2 and 7/8-inch casing cemented in a common wellbore.

Q Has the multiple completion that existed in the well previously been approved by the Commission?

HINRICHS-DIRECT

A Yes, it has. It was approved by Administrative Order MC-1186, issued May 17th, 1962.

Q Refer to what we have marked as Exhibit 2 and describe how the well is presently completed?

A The well is presently completed as a triple tubingless completion with 9 and 5/8-inch casing set at 1440 with cement circulated behind. There are three strings of 2 and 7/8-inch casing, one each set at 5416, 6882 and 6883, cemented with 1600 sacks of cement with the cement top at 2400 feet determined by a temperature survey.

Q As you stated, the well is not presently producing the Tubb gas?

A No, it is not.

Q Continue with Exhibit No. 3 and describe how you propose to recomplete the well?

A What we propose to do is to set a cast iron bridge plug in the Drinkard string at 6790 which is above the Drinkard perforations, and cap it with cement. We will then run a perforating gun in the Blinebry casing string and shoot across into the Drinkard string from 6840 to 6843, communicating the Drinkard and Blinebry zones which will be produced out of the Blinebry casing. The Tubb

HINRICHS-DIRECT

Calledon Abores 18

Page.....

zone will then be opened above the bridge plug and the abandoned Drinkard string and the Glorieta will be produced as it was before. After this work is done, the zone certification tests will be run to assure that the Tubb and Glorieta and commingled Blinebry-Drinkard strings are properly segregated.

Q Would you continue your testimony with Exhibit No. 4, the data sheet for wellbore commingling?

A This sheet contains the information on the two zones that are to be commingled, the Weir-Blinebry East and Skaggs-Drinkard. It shows that both zones are currently flowing and it shows the measured bottom-hole pressure of each zone. There are attached pressure surveys which were recently run.

I would like to point out that the static pressure gradients of both reservoirs are the same, .33, so that no cross-flow will occur between the zones at any time.

Also, this sheet shows the fluid characteristics of the different zones. The gravities are similar and they are currently being commingled at the surface with no detrimental effects. Also, these two zones are presently downhole commingling in the C. H. Weir B Well No. 5. If

HINRICHS -DIRECT

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you will look at the plat, there are three locations west of the subject well in Section 11, and this well has had no detrimental effects due to commingling.

Q That is Well No. 5 in Section 11?

A Right. This commingling was authorized by Order R-4366 issued on September 6th, 1972. The work on this well was done June 16th of '73.

Q Please continue with Exhibits Nos. 5 and 6.

There is one more thing I wanted to say about this. The GOR of the Drinkard string or Drinkard zone is excessive, about 47,000. The reason for this is that during this particular test, the well was left open for a full 24 hours and what we normally do on this zone is to flow the well intermittently, the gas line is reduced by doing this and the oil and water lines remain the same.

GOR's in a range of 10,000 to 1 have been obtained in the well in this zone by this method, and if this well is downhole commingled, the well will be produced and we will recover 14 barrels of oil per day as shown on the combined test, and we will keep the gas production within the allowable limits which is 214 MCF a day based on 2000 to 1 gas-oil ratio.

Q So, you don't expect any limitation of production

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HINRICKS-DIRECT

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due to the gas-oil ratio?

A Nc.

Q Now, would you continue with Exhibits 5 and 6?

A Exhibit 5 is a decline curve of the Drinkard Zone. No. 6 is a decline curve of the Weir-Blinebry East. It shows that the well, both zones are on established decline of 15 percent for both zones. They are declining in such manner that a production allocation can be made in the future. The recommended allocation at this time is 57 percent allocated to the Drinkard and 43 percent allocated to the Blinebry. This is based on the current producing rate of 8 barrels a day from the Drinkard and 6 barrels a day from the Blinebry.

Q Do you expect additional production of reserves by this method?

A Yes. I do. Those zones will require artificial lift in the future when they cease to flow due to the bottom-hole pressure decline. The economic limit above zones would be two barrels a day per zone if you produce it separately. If the zones are commingled the economic limits would be two barrels per day from both zones combined and this will result in recovering an additional 4500 barrels of oil.

HINRICHS-DIRECT

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- Q Please continue with Exhibit No. 7.
- A Exhibit 7 is a gamma ray neutron log. This shows the present completion intervals of Glorieta,
 Blinebry and Drinkard zones and also it shows the proposed Tubb perforations.
- Q Are there any other wells completed in the area in the Tubb and Gas?

A Yes, there are. Weir A No. 11, once again refer to the plat. The east offset to subject well is a Tubb Gas Well. The M. B. Weir B-7 in the southwest corner of Section 12 is completed in the Weir Tubb East and C. H. Weir B-4 in Section 11 is completed in the Weir Tubb East.

- Q What gas production do you expect?
- A We expect top allowable gas production, 888 MCF per day.
- Q Have offset operators been notified of your Application?
 - A Yes, they have been.
- Q Will the granting of the Application in your opinion pr ... waste and protect correlative rights?
 - A Yes, sir, it will.
- Q Were Exhibits 1 through 7 prepared by you or under your direction?

HINRICHS-DIRECT

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A Yes, sir.

MR. BATEMAN: Mr. Examiner, I offer at this time Applicants Exhibits 1 through 7.

MR. STAMETS: Without objection, Exhibits 1 through 7 will be admitted.

(Whereupon, Applicant's Exhibits Nos. 1 through's were marked for identification, offered and admitted into evidence.)

MR. BATEMAN: I have no further direct.

CROSS EXAMINATION

BY MR. STAMETS:

Q Mr. Hinrichs, you have proposed a percentage split of the oil production. You haven't said anything about the gas production from the well. How would you propose to divide the gas production as well?

A I would say that we should run a test before commingling in the same manner that we plan to after the commingling to see what the gas production is and split it accordingly.

Q Do you feel like the oil rates have been sufficiently established at this point that this should be the formula?

A Yes.

HINRICHS-CROSS

- Q How long do you believe it would take to establish a gas percentage rate?
- A I think probably about a week of testing would be adequate.
 - Q Within 30 days?
 - A Yes.
- Q What is the spacing for the Tubb Gas, 80-acre spacing?
- A Right. We currently have an east-west —
 that quarter section in the middle there 40 acres for
 Well 8 and 40 acres for Well 11 is currently allocated to
 Well No. 11, but we have sent in plats —I don't have
 them attached here to get a north-south so that the
 acreage for Well No. 8 will be in the 40 acres right
 there plus the 40 acres to the south. It would be a
 north-south 80-acre tract instead of an east-west.
 - Q I believe your testimony was that you didn't feel like the combined gas-oil ratio of the two zones, Drinkard and Blinebry, would result in reduction of the production from these two zones?
 - A From the commingled zone?
 - Q Right.
 - A No.

HINRICHS-CROSS

case?

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MR. STAMETS: Are there any other questions of this witness?

If not, you may be excused.

(Witness dismissed.)

MR. STAMETS: Is there anything further in this

We will take the case under advisement.

STATE OF NEW MEXICO) SS.
COUNTY OF SANTA FE)

I, RICHARD L. NYE, Court Reporter, do hereby certify that the foregoing and attached Transcript of Hearing before the New Mexico Oil Conservation Commission was reported by me, and the same is a true and correct record of the said proceedings, to the best of my knowledge, skill and ability.

COURT REPORTER

I do hereby certify that the foregoing is a complete record of the proceedings in the Examiner hearing of Case No. 32 45 heard by me on 19.

New Mexico Oil Conservation Commission



OIL CONSERVATION COMMISSION

STATE OF NEW MEXICO P.O. BOX 2088 · SANTA FE 87501

June 4, 1974

I. R. TRUJILLO CHAIRMAN

LAND COMMISSIONER ALEX J. ARMIJO MEMBER

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

	Re: CASE NO	5245
	ORDER NO.	R-4805
Mr. Ken Bateman White, Koch, Kelly & McCarthy	Applicant:	
Attorneys at Law Post Office Box 787	Texaco	Inc.
Santa Fe, New Mexico		
Dear Sir:		
Enclosed herewith are two copi Commission order recently ente	truly yours,	
Very	DD A	
	L. Porter,	J,
A. I	. PORTER, Jr. retary-Director	
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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. 5245 Order No. R-4805

APPLICATION OF TEXACO INC. FOR MULTIPLE COMPLETION AND DOWN-HOLE COMMINGLING, LEA COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on May 22, 1974, at Santa Fe, New Mexico, before Examiner, Richard L. Stamets.

NOW, on this 4th day of June, 1974, the Commission, a quorum being present, having considered the testimony, the record, and the recommendations of the Examiner, 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 C. H. Weir "A" Well No. 8 located in Unit F of Section 12, Township 20 South, Range 37 East, Lea County, New Mexico.
- (3) That said Well No. 8 is completed as a tubingless triple completion in the Skaggs-Glorieta, East Weir-Blinebry, and Skaggs-Drinkard Pools under authority granted by Administrative Order MC-1186.
- (4) That the applicant proposes to recomplete said Well as a tubingless quadruple completion by plugging off existing Skaggs-Drinkard perforations and, in the same casing, perforating into a Tubb gas zone; by perforating the Skaggs-Drinkard zone in the existing East Weir-Blinebry casing, and producing, commingled in the well bore, the East Weir-Blinebry and Skaggs-Drinkard oil production through a single string of casing; and by continuing to produce from the Skaggs-Glorieta zone through a separate string of casing.
- (5) That from the Blinebry zone, the subject well is capable of low mazginal production only.

-2-Case No. 5245 Order No. R-4805

- (6) That from the Drinkard zone, the subject well is capable of low marginal production only.
- (7) That the proposed commingling may result in the recovery of additional hydrocarbons from each of the subject pools, thereby preventing waste, and will not violate correlative rights.
- (8) That the reservoir characteristics of the Blinebry and Drinkard zones is such that underground waste would not be caused by the proposed commingling.
- (9) That in order to allocate the commingled oil production to each of the commingled zones in the subject well, 57 percent of the commingled oil production should be allocated to the Drinkard zone and 43 percent to the Blinebry zone.
- (10) That in order to allocate the commingled gas production to each of the commingled zones in the subject well, the operator should conduct adequate production tests on said well before and after the Drinkard zone is perforated.
- (11) That the mechanics of the proposed multiple completion are feasible and in accord with good conservation practice.
- (12) That the application for multiple completion and down-hole commingling should be approved.
 - (13) That Administrative Order MC-1186 should be superseded.

IT IS THEREFORE ORDERED:

(1) That the applicant, Texaco Inc., is hereby authorized to complete its C. H. Weir "A" Well No. 8, located in Unit F of Section 12, Township 20 South, Range 37 East, NMPM, Lea County, New Mexico, as a guadruple completion (tubingless) to produce gas from a Tubb gas zone, oil from the Skaggs-Glorieta, and oil commingled in the well bore from the East Weir-Blinebry and Skaggs Drinkard Pools through three parallel strings of 2 7/8-inch casing cemented in a common well bore;

PROVIDED HOWEVER, that the applicant shall complete, operate and produce said well in accordance with the provisions of Rule 112-A of the Commission Rules and Regulations insofar as said rule is not inconsistent with this order:

PROVIDED FURTHER, that the applicant shall take zone segregation tests upon completion and annually thereafter during the Annual Gas-Oil Ratio Test Period for the Skaggs-Drinkard Pool.

-3-Case No. 5245 Order No. R-4805

- (2) That the commingled oil production authorized by Order (1) of this order shall be allocated to the commingled zones as follows: 57 percent to the Drinkard zone and 43 percent to the Blinebry zone.
- (3) That the applicant shall conduct adequate production tests before and after performing the work necessary to commingle the Drinkard and Blinebry zones to determine the proper allocation of gas production to said commingled zones.
- (4) That the applicant shall file the results of tests required by Order (3) of this order with the Commission within 30 days after the date of first commingled production.
 - (5) That Administrative Order MC-1186 is hereby superseded.
- (6) That jurisdiction of this cause is retained for the entry of such further orders as the Commission may deem necessary.

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

> STATE OF NEW MEXICO OIL CONSERVATION COMMISSION

I. R. TRUJILLO, Chairman

ALEX J. ARMIJO, Member

A. L. PORTER, Jr., Member Secretary

SEAL

Dockets Nos. 15-74 and 16-74 are tentatively set for hearing on June 5 and June 19. Application for hearing must be filed at least 22 days in advance of hearing date.

DOCKET: EXAMINER HEARING - WEDNESDAY - MAY 22, 1974

9 A.M. - OIL CONSERVATION COMMISSION CONFERENCE ROOM, STATE LAND OFFICE BUILDING - SANTA FE, NEW MEXICO

The following cases will be heard before Daniel S. Nutter, Examiner, or Richard L. Stamets, Alternate Examiner:

CASE 5206: (Continued from the April 25, 1974, Examiner Hearing)

Application of Continental Oil Company for downhole commingling, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to commingle West Warren-Blinebry and East Skaggs-Drinkard production in the wellbore of its SEMU Burger Well No. 21 located in Unit O of Section 19, Township 20 South, Range 38 East, Lea County, New Mexico.

CASE 5240: In the matter of the hearing called by the 011 Conservation Commission on its own motion to permit Burwinkle and Scanlon and Husky Energy, Inc. and The Employers' Fire Insurance Company and all other interested parties to appear and show cause why the following wells located in Section 28, Township 20 North, Range 9 West, McKinley County, New Mexico, should not be plugged and abandoned in accordance with a Commission-approved plugging program:

Ohwell Wells Nos. 1, 2, 3, 5, 8, and 39 in Unit C; Ohwell Wells Nos. 9, 10, 11, 12, and 13 in Unit A; and Jaco State Well No. 104 in Unit G.

- CASE 5241: Application of Depco, Inc. for an unorthodox gas well location, Chaves County, New Mexico. Applicant, in the above-styled cause, scaks, as an exception to Order No. R-1670-H, approval for the unorthodox location of a well to be drilled 1325 feet from the North and East lines of Section 3, Township 15 South, Range 27 East, Buffalo-Pennsylvanian Gas Pool, Chaves County, New Mexico.
- CASE 5242: Application of Penroc Oil Corporation for a dual completion, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval for the dual completion (conventional) of its Allied-Com Well No. 1 located in Unit B of Section 27, Township 20 South, Range 27 East, Eddy County, New Mexico, in such a manner as to produce undesignated Wolfcamp gas through the tubing and undesignated Morrow gas through the annulus by means of a cross-over assembly.
- CASE 5243: Application of Continental Oil Company for special gas-oil ratio, Lea County, New Mexico. Applicant, in the above-styled cause, seeks the establishment of a special gas-oil ratio limitation of 10,000 cubic feet of gas per barrel of oil for the Weir-Drinkard Oil Pool, Lea County, New Mexico.

CASE 5245:

CASE 5248: Application of Cities Service Oil Company for a dual completion, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval for the dual completion (conventional) of its Tracy "A" Com Well No. 1 located in Unit C of Section 33, Township 21 South, Range 27 East, in such a manner as to produce undesignated Strawn gas through the tubing and undesignated Morrow gas through the annulus by means of a cross-over assembly.

CASE 5244: Application of El Paso Natural Gas Company for a dual completion, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks approval for the tubingless dual completion of its Hubbell Well No. 14 located in Unit G of Section 18, Township 29 North, Range 10 West, San Juan County, New Mexico, in such a manner as to produce Aztec-Fruitland and undesignated Chacra gas through parallel strings of 2 7/8-inch casing cemented in a common wellbore.

Application of Texaco Inc. for a tubingless quadruple completion and downhole commingling, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval for the quadruple completion of its C. H. Weir "A" Well No. 8 located in Unit F of Section 12, Township 20 South, Range 37 East, Lea County, New Mexico, in such a manner as to produce Skaggs-Glorieta, East Weir-Blinebry, East Weir-Tubb, and Skaggs-Drinkard production through three parallel strings of 2 7/8-inch casing cemented in a common wellbore with the East Weir-Blinebry and the Skaggs-Drinkard production commingled and produced through a single string of casing.

CASE 5246: Application of Tenneco Oil Company for pressure maintenance expansion and dual completions, McKinley County, New Mexico. Applicant, in the above-styled cause, seeks approval for the expansion of its South Hospah Lower Sand Pressure Maintenance Project, South Hospan Field, McKinley County, New Mexico, by the dual completion of its Hospan Well No. 41 located five feet from the North line and 1650 feet from the East line and its Hospah Well No. 56, located 1100 feet from the North line and 1275 feet from the East line, both in Section 12, Township 17 North, Range 9 West, to permit injection of water into the Lower Sand as well as the Upper Sand as presently authorized.

CASE 5247: Application of Champlin Petroleum Company for a dual completion, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval for the dual completion (conventional) of its Pecos Federal Well No. 1 located in Unit C of Section 1, Township 22 South, Range 27 East, Eddy County, New Mexico, in such a manner as to produce undesignated Strawn gas through the tubing and undesignated Morrow gas through the annulus by means of a cross-over assembly.



OIL CONSERVATION COMMISSION

STATE OF NEW MEXICO P. O. BOX 2088 - SANTA FE 87501

COVERNOR **BRUCE KING** CHAIRMAN

LAND COMMISSIONER ALEX J. ARMIJO MEMBER

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

Attention: Drawer 728 Hobbs, New Mexico 88240

> Administrative Order No. DHC- 144 Well Name & No: C. H. Weir "A" Well to 8
> Location: Unit F. Section 12, Township 20 South,
> Pools: Pange 37 East, NMPM, Lea County New Moxico.
> Skaggs Drinkard and East Weir - Blinebry

Gentlemen:

Reference is made to your recent application for an exception to Rule 303-A of the Commission Rules and Regulations for the subject dually completed well to permit the removal of the down-hole separation equipment and to commingle the production from both pools in the well-bore.

It appearing that the subject well qualifies for approval for such exception pursuant to the provisions of Rule 303-C, and that reservoir damage or waste will not result from such down-hole commingling, and correlative rights will not be violated thereby, you are hereby authorized to commingle the production as described above and Commission Order No. MC - 1/96. which authorized the dual completion and required separation of the zones, is hereby placed in abeyance.

In accordance with the provisions of Rule 303-C, total commingled oil production from the subject well shall not exceed 40 barrels per day, and total water production from the well shall not exceed 40 barrels per day. The maximum amount of gas which may be produced daily from the well shall be determined by multiplying 2000 by top unit allowable for the Skaggs

Assignment of allowable to the well and allocation of production from the well shall be on the following basis:

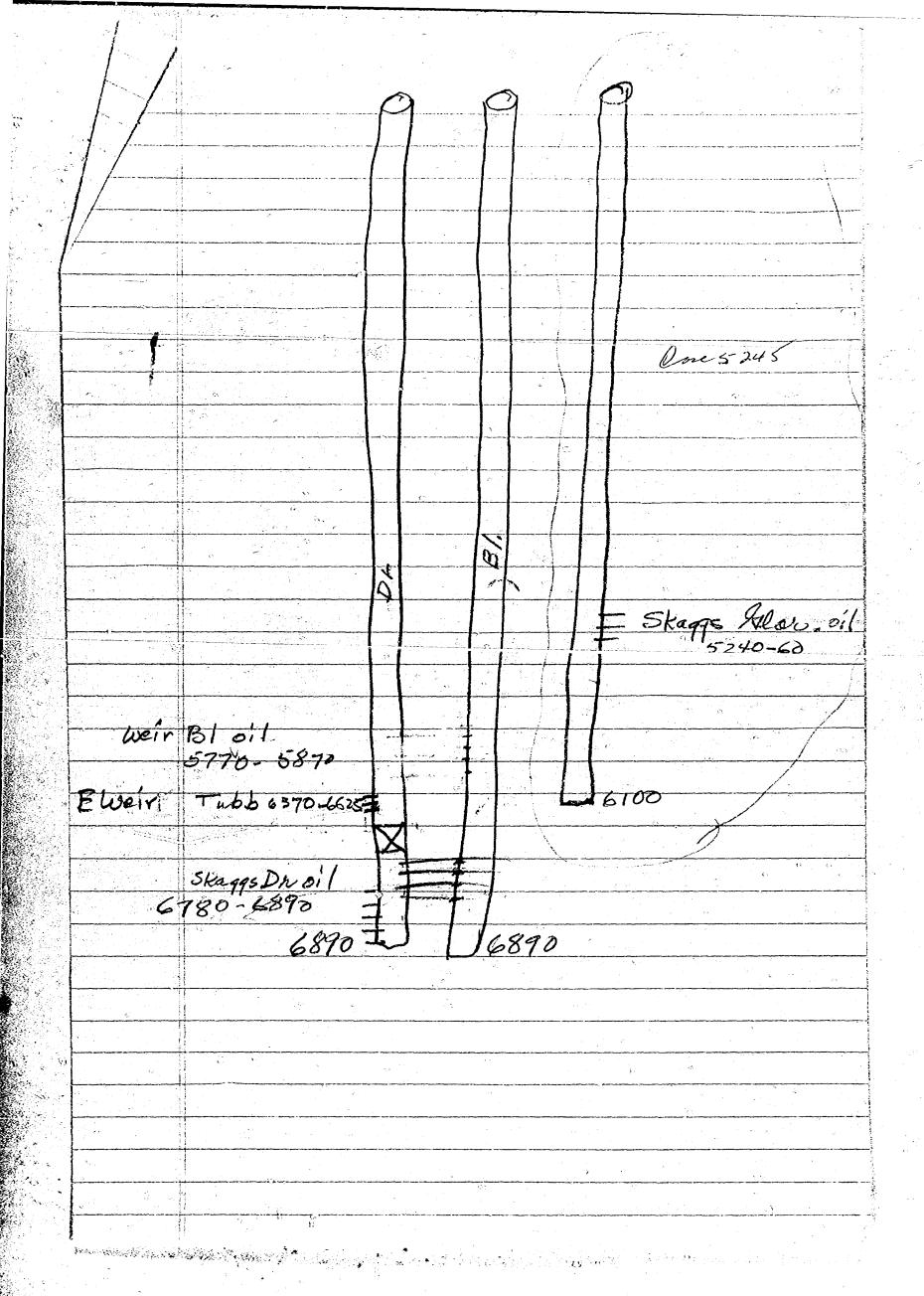
Upper Pool: 43 % Lower Pool: 57 %

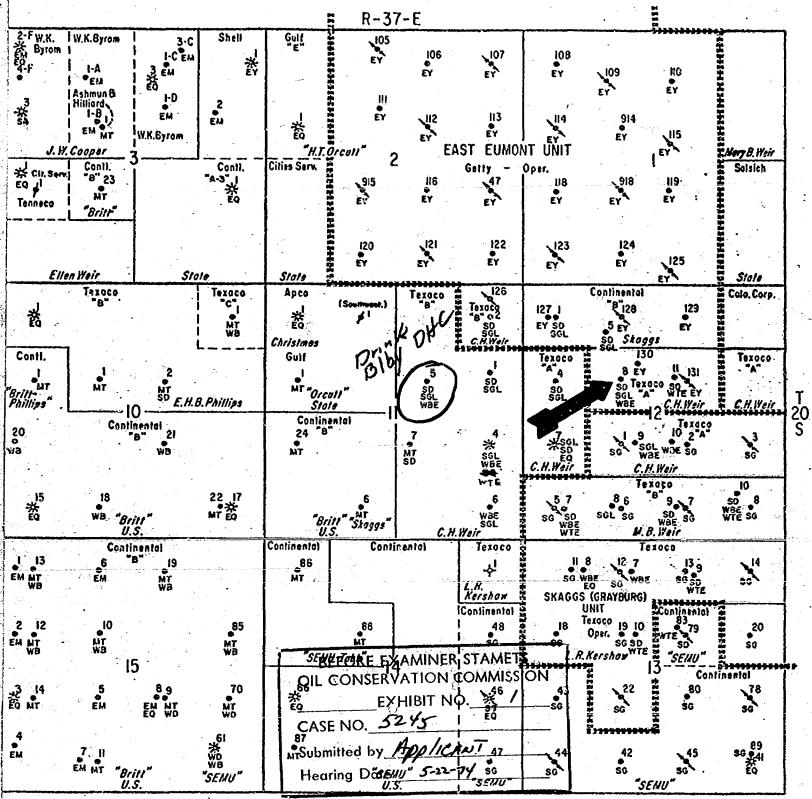
Pursuant to Rule 303-C 5, the commingling authority granted by this order may be rescinded by the Secretary-Director if, in his opinion, conservation is not being best served by such commingling.

Very truly yours,

A.L. Podar. 9.

Blinding 5,763-5,817 - 1,60, mouth 60R 9/35 Dimberd 6370-6625 - 18 Bo, 11 BW 47,000





LEGEND:

EY - EUNICE MONUMENT GRAYBURG SAN ANDRES SG - SKAGGS GRAYBURG

EQ — EU:10MT QUEEN GAS EY — EU:10MT YATES SEVEN RIVERS

IT - MONUMENT TUBB

SA - SAN ANDRES MIDDLE CAS

SD - SKAGGS DRINKARD

SCL - SKACGS GLORIETA

WB - WEIR BLINEBRY

WBE - WEIR BLINEBRY EAST

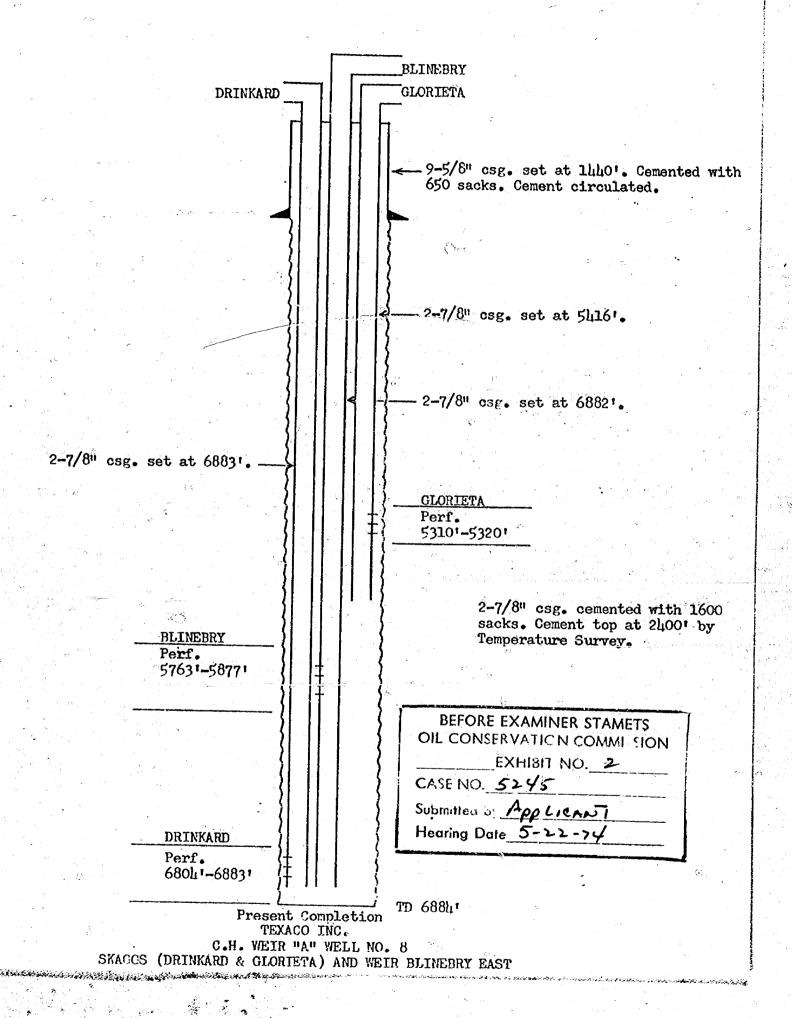
WD - YEIR DRINKARD

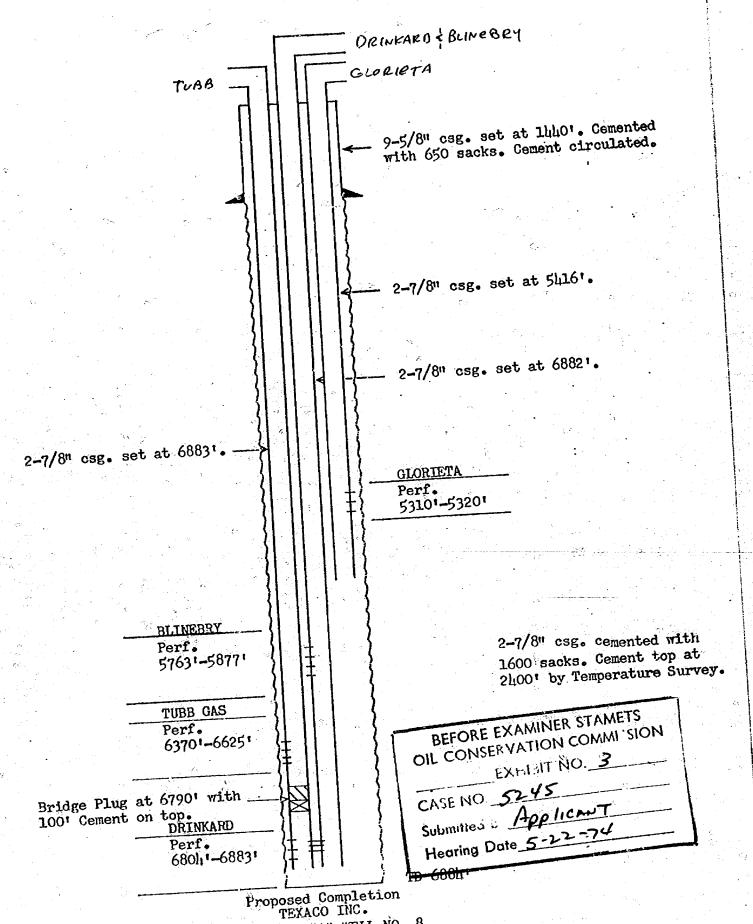
WTE - WEIR TUBB EAST

TEXACO Inc. OIL & GAS COMPLETIONS IN PART OF T-20S R-37-E

LEA COUNTY, NEW MEXICO FIR 5-25-72

Rev.: 10-8-73





C.H. WEIR "A" WELL NO. 8
SKAGGS (DRINKARD & GLORIETA), WEIR BLINEBRY EAST, WEIR TUBB EAST

DATA SHEET FOR WELLBORE COMMINGLING

Operator:

TEXACO Inc.

Location: Unit F	1985 Feet fr	on the	liorth	_Line and	
1980 Feet from		f Section		and and	*
Township 20-South			Lea	County.	
WELL DATA					
	Upper Pool		Lower F	2001	
Name of Pool	Weir Blinebry E	- last		Drinkard	
Producing Method	Flow		Flow	DITIMATO	
BHP	1116	-	1536		
ype Crude	Sour	-	Sour		
ravity	36.6		37.0		
OR Limit	2000		2000		
mpletion Interval	5763'-5877'		68041-68	383'	
irrent Test Date	2-12-74	yseje, s yd Signasia Ta	2-11-74		
011	6		8		
Water	0	44	11	*	
GOR	9833		47,000		
lling Price of Crude-\$/BBL.	5.12		5.12		
ily Income - \$/Day	30.72		40.96	-	
MINGLED DATA:				INER STAME	
avity of Commingled Crude	36.8	OIL C		BINO. 4	·iOi
ling Price of Commingled Crude	e - \$/BBL. 5.12		10. 524		
ly Income - \$/Day 71.68		Submit	g Date 5-	plicant	
(Gain) (Loss) From Wellbore (ed on current producing rates.	Commingling - \$/Day	· ilone-l		Currently 1	bein

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DHC -144

TEXACO INC. DRAWER 728 HOBBS, NEW MEXICO 88240

April 3, 1974

Case 5-245

New Mexico Oil Conservation Commission P. O. Box 2088
Santa Fe. New Mexico 87501

Re: Wellbore Commingling
C. H. Weir "A" Well No.

Skaggs Drinkard & Weir Dlinebry

East Pools Lea County, New Mexico

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

Gentlemen:

TEXACO Inc. requests administrative approval to commingle in the wellbore oil production from the Skaggs Drinkard Pool and the Weir Blinebry East Pool which are multiply completed with the Skaggs Glorieta Pool as permitted by Administrative Order No. MC-1186 dated May 17, 1962, in Well No. 8 on the C. H. Weir "A" Lease located in Section 12, Township 20 South, Range 37 East, Lea County, New Mexico.

The subject well, for which wellbore commingling approval is requested, qualifies under the provisions of Statewide Rule 303C, which provides for administrative application and approval of wellbore commingling. Both zones are classified as oil zones and produce oil and gas at rates below the limits specified in the subject order. Both the Drinkard and Blinebry zones are flowing; therefore, production after commingling will be flowed from the Blinebry casing. The Blinebry zone does not produce water, and the Drinkard zone produces water below the limits specified. The fluids from these two reservoirs are commingled on surface in common storage and are known to be compatible. Ownership of the minerals in both zones is common, and the value of the commingled fluids is not less than the total value of the fluids if they were marketed separately. Secondary operations will not be jeepardized by approval of this application.

Upon approval of this application a bridge plug will be set in the Drinkard casing above the Drinkard zone and the Drinkard zone will be communicated with the Blinebry. Production from the two zones will be produced from the Blinebry casing.

A Weir Tubb East completion will be attempted by perforating the abandoned Drinkard casing from 6370' to 6625'. Gas from this completion will be produced from the Drinkard casing. The Skaggs Glorieta zone will remain undisturbed.

A data sheet is attached listing all required data for the Skaggs Drinkard and Weir Blinebry East zones. Also attached is a production decline curve for each zone in the well which may be used for allocating production. Well tests are included as submitted on Form C-116.

DOCKET MAILED

Date 5/9/2

Copies of this application are being mailed to each of the offset operators. shown on the attached list.

Yours very truly,

J. V. Gannon Justict Superintendent

JBS/kw MAS, Jr. NMOCC - Hobbs Attachments

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DATA SHEET FOR WELLBORE COMMINGLING

Address: P. O. Box 728, Hobbs			
ease and Well No: C. H. Weir		North Line and	
Location: Unit F			
1980 Feet from	•		
Township 20-South	Range 37-East	; Lea County.	
WELL DATA			35
	Upper Pool	Lower Pool	
Name of Pool	Weir Blinebry East	Skaggs Drinkard	
Producing Method	Flow	Flow	
	1116	1536	
ВНР	Sour	Sour	
Type Crude	36.6	37.0	
Gravity	2000	2000	
GOR Limit	5763'-5877'	6804'-6883'	
Completion Interval	2-12-74	2-11-74	
Current Test Date	6	8	
Oil	0	11	
Water	9833	47,000	
GOR	9033		
Selling Price of Crude-\$/BBL.	5,12	5.12	
Daily Income - \$/Day	30.72	40.96	
COMMINGLED DATA:			
Gravity of Commingled Crude	36.8		
Selling Price of Commingled Cr			
Daily Income - \$/Day 71.68			
Net (Gain) (Loss) From Wellbon based on current producing rate	re Commingling - \$/Day	None-Production currer commingled on surface	ntly bei

NEW MEXICO OIL CONSERVATION COMMISSION GAS-OIL RATIO TESTS

C-116 Revised 1-1-65

TEXACO Inc.			Po		Bline	ory East			·	Co	unty I	æe.				
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LEASE NAME	NO.	U	s	T R		TEST	37AT			ALLOW-	TEST HOURS	WATER BBLS.	GRAV.	OIL BBLS	GAS M.C.F.	RATIO CU.FT/BI
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No well will be assigned an allowable greater than the amount of oil produced on the official test,

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

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

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

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

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

(Au) I A

Assistant District Superintendent

(Date)

NEW MEXICO OIL CONSERVATION COMMISSION GAS-OIL RATIO TESTS

C-116 Revised 1-1-65

TEXACO Inc.			Poo		agga	Drinkard			75	Con	ounty	Lea			· · · · · · · · · · · · · · · · · · ·	
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to well will be assigned an allowable greater than the amount of oil produced on the official test.

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

Gas volumes must be reported in MCF measured at a pressure base of 15,025 pais and a temperature of 60° F. Specific gravity base will be 0.60.

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

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

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

(Signature)

Assistant District Superintendent

(Title)

(Date)

OFFSET OPERATORS

Continental Oil Company
P. O. Box 460
Hobbs, New Mexico

Colorado Oil Company P. O. Box 1567 Big Spring, Texas

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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:

APPLICATION OF TEXACO INC. FOR MULTIPLE COMPLETION AND DOWN HOLE COMMINGLING, LEA COUNTY,

BW.

ORDER OF THE COMMISSION

BY THE COMMISSION:

NEW MEXICO

at Santa Fe, New Mexico, before Examiner Richard L. Stamets

NOW, on this day of June, 1974, the Commission, a quorum being present, having considered the testimony, the record, and the recommendations of the Examiner, 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 C. H. Weir "A" Well No. 8 located in Unit F of Section 12, Township 20 South, Range 37 East, Lea County, New Mexico.

-2-Case No. 5245 Order No. R-

- (3) That said Well No. 8 is completed as a tubingless triple in completion from the Skaggs-Glorieta, East Weir-Blinebry, and Skaggs-Drinkard Pools under authority granted by Administrative Order MC-1186.
- (4) That the applicant proposes to recomplete said Well

 which as a tubingless guadruple completion by plugging off existing

 Skaggs-Drinkard perforations and in the same casing, perforating

 into a Tubb gas zone; by reperforating the Skaggs-Drinkard zone

 in the existing East Weir-Blinebry casing, and producing,

 commingled in the well bore, the East Weir-Blinebry and Skaggs
 Drinkard oil production through a single string of casing; and by Continuing

 to product from the Skags-General Zone Through a separate tring of casing.
- (5) That from the Blinebry zone, the subject well is capable of low marginal production only.
- (6) That from the Drinkard zone, the subject well is capable of low marginal production only?
- (7) That the proposed commingling may result in the recovery of additional hydrocarbons from each of the subject pools, thereby preventing waste, and will not violate correlative rights.
- (8) That the reservoir characteristics of the Blinebry and Drinkard zones is such that underground waste would not be caused by the proposed commingling.
- (9) That in order to allocate the commingled oil production to each of the commingled zones in the subject well, 57 percent of the commingled oil production should be allocated to the Drinkard zone and 43 percent to the Blinebry zone.
- (10) That in order to allocate the commingled gas production to each of the commingled zones in the subject well, the operator should conduct adequate production tests on said well before and after the Drinkard zone is reperforated.

- (11) That the mechanics of the proposed multiple completion are feasible and in accord with good conservation practice.
- (12) That the application for multiple completion and down-hole commingling should be approved.
 - (13) That Administrative Order MC-1186 should be superseded.
 IT IS THEREFORE ORDERED:
- (1) That the applicant, Texaco Inc., is hereby authorized to complete its C. H. Weir "A" Well No. 8, located in Unit F of Section 12, Township 20 South, Range 37 East, NMPM, Lea County, New Mexico, as a guadruple completion (tubingless) to produce gas from a Tubb gas zone, oil from the Skaggs-Glorieta, and oil commingled in the well bore from the East Weir-Blinebry and Skaggs Drinkard Pools through parallel strings of 2 7/8-inch casing cemented in a common well bore;

PROVIDED HOWEVER, that the applicant shall complete, operate and produce said well in accordance with the provisions of Rule 112-A of the Commission Rules and Regulations insofar as said rule is not inconsistent with this order;

PROVIDED FURTHER, that the applicant shall take zone segregation tests upon completion and annually thereafter during the Annual Gas-Oil Ratio Test Period for the Skaggs-Drinkard Pool.

- (2) That the commingled oil production authorized by Order (1) of this order shall be allocated to the commingled zones as follows: 57 percent to the Drinkard zone and 43 percent to the Blinebry zone.
- (3) That the applicant shall conduct adequate tests before and after performing the work necessary to commingle the Drinkard and Blinebry zones to determine the proper allocation of gas production to said commingled zones.
- (4) That the applicant shall file the results of tests required by Order (3) of this order with the Commission within 30 days after the date of first commingled production.
 - (5) That Administrative Order MC-1186 is hereby superseded.
- (6) That jurisdiction of this cause is retained for the entry of such further orders as the Commission may deem necessary.

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

