CASE 3605: Application of WALTER DUNCAN for a casing-cementing exception & unorthodox location.

Case Number

3605

Application Transcripts.

Small Exhibits

F/C

GOVERNOR DAVID F. CARGO CHAIRMAN

State of New Mexico Bil Conservation Commission

LAND COMMISSIONER GUYTON B. HAYS MEMBER



P. O. BOX 2088 SANTA FE

July 18, 1967

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

Mr. Raymond T. Duncan	Re: Case No. 3605	
Walter Duncan Oil Properties Post Office Box 137	Order No. R-3275	
Durango, Colorado	Applicant:	
	WALTER DUNCAN	

Dear Sir:

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

Very truly yours,

A. L. PORTER, Jr. Secretary-Director

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Carbon copy of order also sent to:		
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Artesia OCC		
Aztec OCCx		
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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. 3605 Order No. R-3275

APPLICATION OF WALTER DUNCAN FOR A CASING-CEMENTING EXCEPTION, AND FOR AN UNORTHODOX LOCATION, SAN JUAN COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on June 28, 1967, at Santa Pe, New Mexico, before Examiner Elvis A. Utz.

NOW, on this 18th day of July, 1967, 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, Walter Duncan, is the owner and operator of the North Hogback 1 Well No. 5 located 2466 feet from the North line and 2310 feet from the East line of Section 1, Township 29 North, Range 17 West, NMPM, San Juan County, New Mexico.
- (3) That the applicant seeks, as an exception to the pump and plug method of cementing required by Rule 107 (a) of the Commission Rules and Regulations, an order approving the cementing of the 4 1/2-inch production casing string in the aforesaid well by pumping cement through 1/2-inch pipe, set at approximately 670 feet, sufficient to cement said 4 1/2-inch casing from said casing shoe, set at approximately 670 feet, to approximately 305 feet above the casing shoe.
- (4) That the method of cementing employed by the applicant will adequately protect all oil and/or gas-bearing strata

-2-CASE No. 3605 Order No. R-3275

encountered in the aforevaid well, provided the applicant performs additional cementing sufficient to bring said cement to the surface.

(5) That the applicant's request for an unorthodox location was dismissed at the request of the applicant.

IT IS THEREFORE ORDERED:

(1) That the applicant, Walter Duncan, is hereby granted an exception to the pump and plug method of cementing required by Rule 107 (a) of the Commission Rules and Regulations to permit the cementing of the 4 1/2-inch production casing in his North Hoglack 1 Well No. 5 located 2466 feet from the North line and 2310 feet from the East line of Section 1, Township 29 North, Range 17 West, NMPM, San Juan County, New Mexico, by pumping cement through 1/2-inch pipe, set at approximately 670 feet, sufficient to cement said 4 1/2-inch casing from said casing shoe, set at approximately 670 feet, to approximately 305 feet above the casing shoe;

PROVIDED HOWEVER, that the applicant shall perform additional cementing of the aforesaid casing sufficient to ensure the annular space is cemented from the casing shoe to the surface;

PROVIDED FURTHER, that the aforesaid additional cementing shall be completed on or before August 10, 1967, and the applicant, Walter Duncan, shall notify the Aztec District Office of the Commission of the date and hour said recementing is to be commenced.

(2) 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

DAVID F. CARGO, Chairman

GUYTON B. HAYS Member

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

OBI /

Cure 3605 1. Grant Deman an exception to Rule 10 % Memo

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A. L. PORTER, JR.

SECRETARY-DIRECTOR

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157 MAY 27 AM 9 44 WALTER DUNGAN OIL PROPERTIES POST OFFICE BOX 197 DURANGO, GOLORADO May 26, 1967 Walter Duncan, North Hogback 2466' S/N, 2310' W/E, 1-29N-17W Well No. 5 Re: San Juan County, New Mexico Mr. A. L. Porter, Jr. Secretary and Director New Mexico Oil and Gas Commission Post Office Box 2088 Santa Fe, New Mexico We respectfully request a hearing before the New Mexico Oil Conservation Commission for the purpose of asking for a deviation from Dear Mr. Porter: Rule 107, Paragraph a, concerning the cementing of production casing. ware 101, raragraph a, concerning the cementing of production casing.
We further request this hearing at your earliest possible convenience. WALTER DUNCAN DOCKET MAILED Raymond T. Duncan RTD:C;br



STATE OF NEW MEXICO

STATE ENGINEER OFFICE BANTA FE

S. E. REYNOLDS STATE ENGINEER June 27, 1967

ADDRESS CORRESPUNDENCE TO: STATE CAPITOL SANTA FE, NEW MEXICO 87501

Mr. A. L. Porter, Jr. Secretary-Director Oil Conservation Commission Santa Fe, N. M.

Dear Mr. Porter:

Reference is made to Case #3605 on your docket #19-67.

I have not received a copy of the Walter Duncan application which is the subject of Case 3605 and therefore I am unable to comment on it.

FEI/ma

Yours truly,

S. E. Reynolds State Engineer

By: Frank E. Irby

Chief

Water Rights Div.

BEFORE THE NEW MEXICO OIL CONSERVATION COMMISSION Santa Fe, New Mexico EXAMINER HEARING June 28, 1967 IN THE MATTER OF:

Application of Walter Duncan for a casing-cementing exception, and for an unorthodox location, San Juan County, New Mexico.

Case No. 3605

BEFORE: Elvis A. Utz, Examiner.

TRANSCRIPT OF HEARING



MR. UTZ: Case 3605.

MR. HATCH: Application of Walter Duncan for a casing-cementing exception, and for an unorthodox location, San Juan County, New Mexico.

MR. DUNCAN: I am Raymond T. Duncan from Colorado, representing Walter Duncan and also as part owner in the lease and the well, the subject of this case.

MR. HATCH: Mr. Duncan, would you stand and be sworn, please?

MR. DUNCAN: Yes.

(Witness sworn.)

MR. UTZ: You are an individual representing yourself?

MR. DUNCAN: Yes, sir, that's right.

MR. HATCH: Excuse me, could I get your name?

MR. DUNCAN: Raymond T. Duncan, Durango, Colorado.

RAYMOND T. DUNCAN

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

MR. DUNCAN: In the case of the unorthodox location,
I think this plat will perhaps explain it there.

(Whereupon, Applicant's Exhibits 1 & 2 were marked for identification.)

MR. DUNCAN: It's actually 330 feet out of the

quarter section corner. The problem is that the section is a long section to the north. It has 2796 feet from the center line to the north line and therefore the 2466 from the north line actually puts it 330 feet out of the center section line. Of course, it is 2310 from the east line, so I believe it is a regular location as far as the section goes.

MR. UTZ: Is this an oil well?

MR. DUNCAN: Yes, sir, it is. As far as the request for the exception to the cementing, perhaps I should explain what we did and why and how we corrected it. The map you have in front of you there is a structure map, contoured on top of the Dakota sandstone, which is the producing zone in this as yet unnamed field.

We have found these wells, that the best way to complete them is to keep mud and everything else off of the reservoir as it seems to be very touchy and lots of times we can get an oil flow or a show and core through it or drill through it a ways and we'll never get the oil back again, Therefore, what we have been doing is drilling down and setting 4-1/2-inch casing on top of the pay just as soon as we get into the Dakota sandstone and then go ahead and dry up the hole and core in with air.

As you can see there on the map, we drilled the No. 1,3, 6 and 7 wells in Section 1 as dry holes and we have

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In this case, 4-1/2-inch casing cemented in those holes. when we got to the top of the Dakota sandstone we ran about flat with the No. 1 well which is a dry hole, and the well in question here is the 1-5. We were about flat with the No. 1 well. We were a little high to the No. 6, and we were 15 feet low to the No. 2 well there, which is a producer.

We felt that there was a very good chance that we were not going to get any oil in this well. In the interest of testing it, however, we did run 4-1/2-inch casing to bottom before we had a show and we just pricked the top of the Dakota sandstone. From there we simply set the casing on a shoulder and did not cement it. We reduced the hole size from 6-1/4 to 3-7/8ths and dried up the hole, blew it down and got the hole dried up from the mud and cored in with air.

We cored about five feet and cored two feet of real good saturated sand. The well flowed initially at the rate of ten barrels an hour, so there we were with the 4-1/2 in the hole actually set on a shoulder with no communication between the Dakota and behind the pipe because we have not had any mud in the hole and, of course, the hole did dry up and we cored in with air, so we weren't getting any communication when we went in.

At that point we ran half-inch line pipe between the casing and the hole and cemented it with 35 sacks of cement,

DEPOSITIONS, HEARINGS, STATEMENTS, EXPERT TESTIMONY, DAILY COPY, CONVENTIONS

which in that hole size would fill the hole about 375 feet, so we did get a cement job, although it wasn't in accordance with the regular pumping plug method as prescribed by the Oil and Gas Commission.

The reason, of course, that we didn't cement the pipe in the first place was that if we had cored in and found ourselves in water with no production, why we could have recovered the 4-1/2-inch casing and saved the cost of the cement job, which the total of those two is about \$2,000. The cost of these wells over-all is about eight thousand, and so we're talking about 25 percent of the cost of the well. So that was, that's actually what we did. We do have a cement job now.

We got permission, we did get an allowable on the well and have been producing it for about a month subject to this hearing here today; however, we have had no problem with the well, no mud in our oil or anything like that, so we're confident that we do have a good cement job and a good seat.

MR. UTZ: Again, how did you put that cement down the annulus or down the pipe?

MR. DUNCAN: We ran some half-inch line pipe between the pipe and the bore hole and cemented through the half-inch pipe and, of course, we just left the half-inch in the hole. It's cemented right in the hole.

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MR. UTZ: You went all the way to the bottom with your half?

MR. DUNCAN: Yes, we went to a total depth of 67 and we have cement up to about 300 feet, something like that.

MR. UTZ: How many sacks did you put in there?

MR. DUNCAN: 35 sacks.

MR. UTZ: What did you use to pump the cement down, did you have Halliburton out there?

MR. DUNCAN: Yes, we had Halliburton out there. It works all right, it's a little slow.

MR. UTZ: Actually your application here is not for a non-standard location, it's just for an exception in the cement job?

MR. DUNCAN: Yes.

MR. UTZ: It looks to me that the 330 feet is the story on that.

MR. DUNCAN: Yes.

MR. UTZ: Are there any questions of the witness?
How much reservoir pressure do you have in this well?

MR. DUNCAN: Well, I can't answer that. We don't have much. It's just barely enough to flow the well. It will probably run 200 pounds, something like that. I'm just not sure.

MR. UTZ: The wells do flow?

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The wells do flow. Yes, the water drive
from the Dakota, but what the pressures are, I really don't
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MR. UTZ: You have never checked the pressures at know.

MR. DUNCAN: No, sir. If we did, I don't have that the wellhead?

MR. UTZ: The witness may be excused. Any statements dope here. (Witness excused.) in this case?

MR. HATCH: We have all these exhibits marked?

MR. HATCH: How many exhibits did you have, two? MR. UTZ: Yes.

MR. DUNCAN: Two exhibits.

MR. UTZ: Exhibits 1 and 2 will be entered into the record in this case.

(Whereupon, Applicant's Exhibits 1 and 2 were admitted in evidence.)

MR. UTZ: Let's adjourn until 1:30.

dearnley-meier reporting service

1120 SIMMS BLDG, • P.O. BOX 1092 • PHONE 243-469] • ALBUQUERQUE, NEW MEXICO 87101 1400 FIRST NATIONAL BANK EAST • PHONE 256-1294 • ALBUQUERQUE, NEW MEXICO 87108

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WITNESS

RAYMOND T. DUNCAN

Testimony

EXHIBITS

MARKED

ADMITTED

PAGE

Applicant's 1 & 2

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STATE OF NEW MEXICO)
) ss
COUNTY OF BERNALILLO)

I, ADA DEARNLEY, 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; and that the same is a true and correct record of the said proceedings, to the best of my knowledge, skill and ability.

Witness my Hand and Seal this 3rd day of July, 1967.

NOTARY PUBLIC

My Commission Expires:
June 19, 1971.

I do bereky curtify that the foregoing in a complete record at the propositions in the Francher bearing of the to 56.5.

How Mexico Oil Conservation Commission

MEXICO OIL CONSERVATION COMMISS I WELL LOCATION AND ACREAGE DEDICATION PLAT

Form C-102 Supersedes C-128 Effective 1-1-65

All distances must be from the outer boundaries of the Section Well No. Operator Walter Duncen North Hogback Unit Letter Township Ronge 29 N San Juan Actual Footage Location of Well: 2466 llorth feet from the Ground Level Elev: Producing Formation Dedicated Acreage: 40 Undesignated 4981 Dekota 1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below. 2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty). 3. If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consolidated by communitization, unitization, force-pooling. etc? Yes No If answer is "yes," type of consolidation. If answer is "no," list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.)_ No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interests, has been approved by the Commis-CERTIFICATION I hereby certify that the information contained herein is true and complete to the Raymond 1'. Duncan, for Propose WALTER DUNCAN Locatibn Box 137, Durango, Colo. May 15, 1967 I hereby certify that the well location shown on this plot was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief. Hay 11, 1967 Registered Professional Engineer and/or Land Surveyor E. N. 1 3795

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