BEFORE THE
OIL CONSERVATION COMMISSION
SANTA FE, NEW MEXICO
AUGUST 30, 1961

EXAMINER HEARING

IN THE MATTER OF:
CASE 2361

TRANSCRIPT OF HEARING

BEFORE THE
OIL CONSERVATION COMMISSION
SANTA FE, NEW MEXICO
AUGUST 30, 1961

IN THE MATTER OF: Application of Shell Oil Company for an exception to Rule 303, Lea County, New Mexico. Applicant, in the above-styled cause, seeks an exception to Rule 303 to permit commingling of the production from the Terry-Blinebry, Drinkard, and Hare Pools on its Taylor Glenn Lease, located in Sections 3 and 4, Township 21 South, Range 37 East, Lea County, New Mexico, and to allocate production to each pool on the basis of monthly well tests.	Case 2361

BEFORE:

Elvis A. Utz, Examiner

EXAMINER HEARING

MR. UTZ: Case 2361, Application of Shell Oil Company for an exception to Rule 303.

MR. SETH: Oliver Seth appearing for the Applicant. Before we go on the record may we discuss --

(Discussion off the record.)

MR. UTZ: Back on the record, now. Will you stand and be sworn.

JOSEPH G. YOPE,

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

DIRECT EXAMINATION

BY MR. SETH:

Q Would you state your name, please.

A Joseph G. Yope.

Q And what is your position with Shell Oil Company?

A I am a Mechanical Engineer in the Roswell Division.

Q And what has been your practical experience?

A I was employed with Shell in '54, have 7 years with the company, of which the last 5 I have been employed in Roswell working in the Mechanical Engineering Section on Surface Facilities, Oil Handling Equipment, and Producing Methods, and Drilling Engineering.

Q Have you had some formal training in mechanical engineering?

A Yes, sir. I am a graduate of the The University of Michigan, BS in Mechanical Engineering.

Q Did you design the facilities which are the subject of the obligation in these 3 cases?

A Yes, sir; I did.

MR. SETH: May he testify?

MR. UTZ: Yes, sir.

Q (By Mr. Seth) Will you tell us, briefly, first please, what the purpose of the Application in 2361 is?

A Shell is proposing to commingle Drinkard Wantz Abo -- correction on that -- proposing to commingle the Drinkard, the Hare, and the Terry-Blinebry Oil on our Taylor Glem Lease, and

commingle it on the basis of monthly well tests.

Q Do you have a plat showing the location of these?

A I would like to enter Exhibit 1, which is a general plat of the area. The Taylor Glenn Lease is indicated at the top with an arrow pointing to it. There are several leases enclosed in red on there. This plat also indicates the general location of the Central Battery that will serve the three zones, and it indicates that a condensate battery will still be there, operated separately from this system.

Q Is the ownership, royalty ownership common through all zones on this lease?

A To the best of my investigation of our records, ownership is common throughout. It is a fee lease.

Q Do you have a diagram of the proposed facilities?

A Yes, sir; I do. Entered here is Exhibit 2, the diagramatic sketch of the proposed facilities to handle the three zones into a common treating and/or common central battery.

Q Now, would you explain this briefly, and trace the information for us if you will?

A As you notice here on Exhibit 2, there is one production separator and one test separator. All wells will come into the header and go into one induction separator, being commingled at the separator. The gas produced from the three zones will be commingled at that point and so from the production separator. We have a test separator which will be used to determine our

monthly well tests. It is a 3-phase metering separator, oil, water, and gas, which has a prover connection downstream so the accuracy of this meter can be checked periodically.

Q Is this pretty much a typical layout for this kind of facility? Do you have others similar to this?

A Somewhat similar. We do not have any that are exactly like this in our division. For commingling zones on the basis of monthly well tests, yes, we have another one like this in our Livingston.

Q Is that operating successfully?

A Yes, it is.

Q Is there anything further on the diagram that you want to mention?

A Well, I would like to point out, here, that the estimated production rates involved here from these zones, and we have the three wells, Terry-Blinebry, commingled, which produce approximately 80 barrels a day.

Q In the aggregate, you mean?

A The total of the three, the three Drinkard wells produce approximately 30 barrels per day, and the two Hare wells produce approximately 20 barrels per day. All wells are marginal.

MR. UTZ: What is the production on it?

THE WITNESS: 80 barrels a day for three wells.

MR. UTZ: Those are the totals for wells shown on Exhibit 2?

THE WITNESS: Yes, sir.

MR. UTZ: In other words, the Drinkard is 30 for three wells?

THE WITNESS: Yes, sir.

MR. UTZ: And the Hare is 20 for two wells?

THE WITNESS: That is correct.

MR. PORTER: Do you have a little breakdown on that Terry Blinebry?

MR. MORRIS: I think we ought to have a breakdown on all of them, if I might interrupt.

THE WITNESS: Okay. On your Terry-Blinebry, we have Well No. 3, produces approxmately 30 barrels per day; Well No. 7 produces about 22 barrels per day; Well No. 8 produces about 30 barrels per day. Those are the three Terry-Blinebry. The three Drinkard wells are Well No. 1, produces about 12 barrels per day; Well No. 2 producing about 10 barrels per day, and Well No. 6 producing 8 barrels per day. On the Hare, we have Well No. 4 producing about 12 barrels per day, and Well No. 5 producing about 7 barrels per day. These total aggregate figures are rounded off, so they may not add up exactly.

Q (By Mr. Seth) Is there any significance about water production?

A No, sir. The only zone producing any water, percentage wise, is the Hare, and there we have about 20 per cent water being produced with the No. 5 Well. The other two zones produce one

per cent or less in water.

Q Do you believe that the planning on monthly well tests is a reasonable basis?

A Yes, sir; I do. I believe that the wells are steady enough that we will allocate production to the best of our ability on a monthly well test basis.

Q Does this, generally, conform to the Committee's recommendation on commingling procedures?

A In general, it does. They do not diagram commingling below top allowable wells in the Committee report. I believe all the diagrams there are pertinent to top allowable, metering every zone. So, this does not correspond to any diagram in the mimimum standard report.

Q Now, this will be the usual closed system; will it not?

A Yes, sir. We will go in to a central battery, a surge tank, and then sell the oil with ACT to create a closed system.

Q How much saving in volume and gravity do you anticipate?

A We anticipate conservation of half a degree API gravity, which would give us six tenths of one per cent volume increase. This has occurred in our most recent installation in the Hobbs Consolidation. They are experiencing at least half a degree increase at the time.

Q Is there anything further on this Application you would like to mention?

A No, sir.

MR. SETH: I believe that is all. Perhaps there are other questions.

Q (By Mr. Utz) How do you spell your name, please.

A Y-o-p-e.

Q Mr. Yope, do you plan to participate in work on any of these wells in the near future?

A This is possible, but I don't really anticipate it at this time.

Q If, at any time, anyone of these 8 wells became non-marginal, would you be willing to advise the Commission to meter that well?

A Yes, sir; we would. We would like to be able to raise some of those wells, really, if we could.

MR. UTZ: Are there other questions of the witness?

MR. MORRIS: Yes, sir.

Q (By Mr. Morris) Mr. Yope, you said that all the wells here were marginal. Now, are any of them marginal only in the sense that they produce below top allowable because they are penalized?

A We have several wells that are penalized. Particularly in the Terry-Blinebry this applies, and that is Well No. 7, I believe it is.

Q Do you know what that well is capable of producing?

A No. 7, there, the last 24-hour test, tested 22 barrels of oil and six tenths per cent water on a 14,000 GOR. The well is

flowing, and had a 200-pound tubing pressure with a twenty sixty-fourths-inch choke. We do not believe that it is capable of producing top allowable if we just opened it up. How much it can produce, I really don't know.

Q Are any of your other wells penalized because of high GOR?

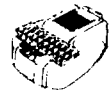
A Yes, sir. The Drinkark, Taylor Glenn 1 and 2 have penalized GOR's of 18 barrels each and our most recent test data on them, the wells are not even capable of making that, now. No. 1 made 12 barrels, and No. 2 made 10 barrels.

Q It is possible, though, that your No. 7 might be able to produce more than its 22 barrels, but that 22 is your top limit as a penalized allowable; is that right?

A Let me check. 21 is the top.

Q The reason I am going into this at some length, Mr. Yope, it is anticipated that the commingling of marginal wells may be allowed, as such, only when the wells are incapable of producing their top penalized allowable, and inasmuch as a decision on the cases that are heard today will probably be deferred until after standards are adopted, it may be that your installation, here, won't be eligible for approval if the decision is based upon the standards that are adopted. Would it be possible for you to get some additional information together on the potentials of these wells and submit it to the Commission?

A This would be possible, true, best information I could



give you. Eight months, June or July test, here, is what I am reading from, but they were 24-hour tests, and I imagine we can open some of these wells up.

MR. SETH: We have only one well.

THE WITNESS: I would like to correct that for the record, here. I was looking at the wrong well, No. 3 is the penalized well on the Terry-Blinebry.

MR. UTZ: These figures you gave us, then, Mr. Yope, are not maximum production figures. They are choked production figures?

THE WITNESS: Yes, sir; they are choked, what we test for our own benefit as to what the well can do from month to month.

MR. UTZ: Well, would each of these wells do anymore with this potential increase if you enlarged the choke?

THE WITNESS: Well, this is possible, but it is always a question as to whether or not this can be maintained. I mean, you can shut the well in and open it, open on a long choke and produce top allowable.

MR. UTZ: Would you maintain a top allowable?

THE WITNESS: I don't know. We haven't tested any this way, to my knowledge. Just what the capacity of the well is, I really don't know.

MR. UTZ: Well sir, you would be in a position to obtain these maximum tests and submit them to us?

THE WITNESS: Yes, sir; I believe we could.

MR. UTZ: Would you do so, please?

MR. SETH: How do you mean, without a choke, or --

MR. UTZ: Conduct them in such a manner that we can arrive at the maximum productibility of each well. We have no standards set up. The only way I know he could do it would be to --

MR. SETH: That is why I asked the question as do you have any suggestions as to how it should be; time choke, and time wise, and so forth.

MR. UTZ: Well, it should be 24-hour tests, and the only rule of thumb that I could give you would be to use the largest choke possible, to what it will produce through.

THE WITNESS: Now, on which wells are you referring to, sir?

MR. UTZ: Well, I am referring to all of them.

THE WITNESS: Every one?

MR. UTZ: Since they are all choked, even the 8-barrel well, we are not sure, are we, whether it is the top allowable or not.

THE WITNESS: I think we can pretty well say it couldn't. It's got a 22 tubing pressure through it.

MR. UTZ: If you have that type of information that you can submit --

THE WITNESS: Well, I do, sir.

MR. SETH: Let's go through it for each well. Do you want to do that, Elvis?

MR. UTZ: Yes. I guess we can.

THE WITNESS: Let's take the Drinkard, first. Taylor Glenn No. 1.

MR. UTZ: All right.

THE WITNESS: 24-hour test at 12 barrels of oil, no water, 13,000 GOR, 175 shut-in tubing pressure. This is surface pressure, surface tubing pressure between cycles. In other words, the well is shut-in for 10 minutes and flowed 5 minutes, flowing through a twenty-two sixty-fourths inch choke.

MR. SETH: Would you rather we tabulated this and submit it as a --

MR. UTZ: I think it would probably be better to do that. Then, we will take a look at them and request tests on the ones we think that should have tests. It is probably a better way to handle it.

MR. MORRIS: I have some further questions,here

MR. UTZ: Mr. Morris.

Q (By Mr. Morris) Mr. Yope, you said that your installation, here, will conform substantially to the Committee report recommending mimimum standards. Would the operation of this system, as far as the accuracy that you would observe and metering methods that you would use, would they conform to the general requirements of that report?

A Yes, sir; but I would like to point out I don't believe there is anything outlined in the report on marginal type wells.

Q There are general requirements, Mr. Yope. They are applicable to all commingling installations.

A Well, true. This metering pot is one that we would use in this type of installation.

MR. UTZ: Now, what do you call a metering pot?

THE WITNESS: I am referring to the test separator to obtain our monthly well tests.

MR. UTZ: Oh, yes.

MR. MORRIS: I have no further questions. Thank you, Mr. Yope.

MR. UTZ: Are there any other questions? Are there any other statements. The witness may be excused. Are there any statements to be made in this case. If not, the case will be taken under advisement.

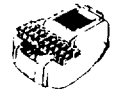
When do you think you can get those tabulations to us?

MR. MORRIS: Let's go off the record for a minute.

(Discussion off the record.)

MR. UTZ: The case will be taken under advisement.

(Whereupon the Hearing of Case 2361 was concluded.)



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

I, MICHAEL P. HALL, 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 notary seal this 30th day of August 1961.

Michael P. Hall
Court Reporter - Notary Public

My Commission expires:

June 20, 1965.

I do hereby certify that the foregoing is a complete record of the proceedings in the Examiner hearing of Case No. 2361, heard by me on Aug. 30, 1961.

....., Examiner
New Mexico Oil Conservation Commission