BEFORE THE
OIL CONSERVATION COMMISSION
September 21, 1960

Examiner Hearing

IN THE MATTER OF:

Application of Gulf Oil Corporation for permission to commingle the production from several separate pools and for permission to install two automatic custody transfer systems. Applicant, in the above-styled cause, seeks permission to commingle the production from the Brunson-Ellenburger Pool with production from the Hare Pool, and to commingle the production from the Wantz-Abo Pool, Paddock Pool, Penrose-Skelly Pool and Drinkard and the Blinebry Gas Pool, from all wells on its Eunice King Lease consisting of the N/2 of Section 28, Township 21 South, Range 37 East, Lea County, New Mexico. Applicant further seeks permission to install two automatic custody transfer systems to handle the aforesaid commingled production.

CASE NO. 2085

BEFORE:

Daniel S. Nutter, Examiner
Oliver E. Payne

TRANSCRIPT OF PROCEEDINGS

MR. NUTTER: Case Number 2085.

MR. PAYNE: Application of Gulf Oil Corporation for permission to commingle the production from several separate pools and for permission to install two automatic custody transfer systems.

MR. SMITH

having been previously duly sworn, was recalled and testified as follows:

DIRECT EXAMINATION

BY MR. KASTLER:

Q Mr. Smith, you are the same Mr. Smith who testified in the last case?

A Yes, sir.

MR. KASTLER: Let the record show Mr. Smith is qualified and competent to give further testimony in Case 2085.

MR. NUTTER: The record will so show.

Q (By Mr. Kastler) What is Gulf seeking in application of Case 2085?

A In this case we wish to install and operate automatic custody transfer equipment to commingle all sweet crude into a separate ATC Battery and to commingle all crude from the lease into ATC Battery.

Q Have you prepared a lease plat for introduction into evidence here as Exhibit Number 1?

A Yes, sir.

Q Referring to the lease plat, which is Exhibit Number 1, will you locate Gulf's lease that is pertinent to this lease?

(Whereupon, Applicant's Exhibit 1 was marked for identification.)

A Gulf's lease pertinent to this case is outlined in red

on this plat. It consists of the N/2 of Section 28, Range 21 South, Township 37 East, Lea County, New Mexico.

Q I would like to have that Township 21 South, Range 37 East.

A What did I say?

Q You transposed Township and Range.

A I am sorry. It is Section 28, Township 21 South, Range 37 East, Lea County, New Mexico.

Q Does Exhibit 1 also show all of Gulf's producing wells on its Eunice King lease?

A Yes, sir.

Q Does it as well show the identical of the offset operators?

A Yes, sir.

Q What production does Gulf have on the Eunice King lease?

A We have production from, condensate production from the Tubb Gas and Blinebry Gas, 2 wells each. We have Drinkard production 7 wells, Penrose-Skelly production 4 wells, Paddock production 4 wells, Wantz-Abo production 4 wells.

Q What are all of these wells?

A That consists, that is all sour production, consists of 2 Brunson wells and 5 Hare Pool wells.

Q What present production facilities are installed for handling this production?

A We have a tank battery for each one of these oil pays,

and one for the condensate pay, one for all of the condensate pay.

(Whereupon, Applicant's Exhibit Number 2 was marked for identification.)

Q I now call your attention to Exhibit Number 2 in Case 2085, which is a diagram of the Eunice King Tank Batteries and Lact. Would you state what this schematic diagram shows?

A This is production flow diagram we propose on our 2 automatic batteries. The sour battery is the top battery. The top part of the page we have a common test facility and the sweet battery for the Brunson and Hare on the lower part of the page.

Q Would you please trace the direction of flow from the Drinkard, Penrose-Skelly and then Paddock and Wantz-Abo wells, all of which are flowing into the sour battery or are proposed to flow?

A I think they are identical so I will start at the Drinkard Header to the right and go through from there. You can put the gas that comes there from that Drinkard Header, any one to the test leg or you can go straight across to the left to the production phase. Going across to the left, three phase metering separator where the gas is separated and goes to the gas sales system, the water is separated and measured and goes to the salt water disposal unit and the oil is separated and measured and sampled and joins, commingled with the other sour oil pays and goes into the heater from the heater it goes into the Settling Tank and will remain until the BS&W is separated and we have a BS&W monitor, continuous circulating type arrangement that takes a sample just

below the spill off, just below the level of the spill over line of the Surge Tank. Any oil that gets to the spill over line will be good oil. Upon indication of bad oil, high BW&S oil, the shut-in valve to the left of the Settling Tank is shut, closed, and production builds up and spills over into the suction of the circulating pump and the circulating pump starts recirculating this production back upstream of the heater and you still have other production coming in. If the BS&W Monitor couldn't do it before you reach good oil in the settling tank, the oil of the production from these four oil zones are shut-in at the headers, which consequently shut them in at the wells. If the oil is good, it goes. If it cleans itself, the shut-in valve will open and go into the total four pay zones. It will be metered with the dump meter and there is a set stop counter for the total allowable, monthly allowable for those four pays on these dump meters. That is the purpose of these dump meters at this point. Then the production would go to the surge tank and be joined by condensate at that point and on to the pipe line.

Q Would you trace the production in the event a test is desired, a flow diagram?

A If the test is desired, coming from the same Drinkard Header we would take, come out of the Header going downward on that line to the test line and then back to the left into the pressure test heater, gas is separated and measured, goes to the gas sales system, water is separated and measured and joins the

water system, totaling system. Oil is separated and measured and goes back through a respective diverter valve which would be open, this would close and open valves, the second from the header. It is the first one on the end. It would lead it back to its respective pay stream, production stream would be the Drinkard production stream, where it will be joined and go through the 3 phase metering and there is a high level float control in this test heater treater that should one of the meters fail for some reason and the level is reached in the tank, the fluid of the vessel, it would automatically at the Header kick this well off the test and back into production.

Q Now, would you trace the flow of the condensate?

A The condensate production comes into the header, 2 Tubb and 2 Blinebry gas wells that all make condensate. This is not an automatic header valve arrangement, it is a normal manual header and we come on in there to your master lease shut-in valve and then into a separator where the gas is separated and goes to the gas sales and in through a Dump Meter where the total condensate is measured before it joins the rest, the sour oil production just upstream of the Surge Tank.

MR. NUTTER: This condensate, I presume, is the high pressure separators?

A The high pressure separators are located at the well and is simply the low pressure separator.

Q (By Mr. Kastler) What company takes the high pressure gas?

A Permian Gas and Pipeline takes the high pressure gas and Warren takes the low pressure gas.

Q Mr. Smith, in this proposal, does every vessel have failure features?

A All the three phase metering as well as the condensate separator, the test heater treater, the two settling tanks, and the two suction tanks both have Varec fluid level controls and any one of these three phase meters, if there should be failure or for some reason the oil wasn't going through, it would shut in the appropriate wells on that pay zone. It would shut in all the wells on that header.

Q What pipe line is taking the oil and condensate?

A Shell Pipe Line is taking the oil and condensate.

Q Has Shell Pipe Line okayed this proposal?

A Yes, sir, from the standpoint of taking it as we plan, with the exception of commingling the condensate with the sour crude production. And due to the illness of the man that is to make this decision, he is out of town, we have not been able to receive a decision on this before the hearing, so we therefore prepared and do now submit this flow diagram. It is supposed to be labeled 2A, I forgot to put it on there, I will afterwards. It should be 2A, Exhibit 2A.

Q Now, Mr. Smith, in this alternate proposal, what is different from the original proposal which is shown on Exhibit 2?

A If you will hold them side by side so you can see the

difference, coming from the condensate separator we have taken out the Dump Meter and it will go into a Surge Tank and through a BS&W monitor, the Surge Tank, of course, is a $V_a$rec fluid control level and the BS&W monitor will prevent running any excess BS&W to the pipe line and separate Lact units. So in a sense we are asking here for, we are submitting two proposals and as soon as we can find out, which would be a day or two we think, we would let you know which to act on. Also you put a separate unit in for the condensate, it allows to take the dump meter from between the settling tank and Surge Tank and move our set stop counter down to the PD meter on the ACT unit.

Q And Gulf proposes to notify the Oil Conservation Commission within a very short time of which proposal it will follow?

A Yes, sir.

Q I now call your attention to Exhibit Number 3, this is the Central Battery Lact Unit, and Mr. Smith, does this differ in any particular way from the proposed Lact unit in the previous case which is Case 2084?

(Whereupon, Applicant's Exhibit Number 3 was marked for identification.)

A No, sir, it does not. Everything that I said for the previous case stands for this one.

Q If the Commission please, I would like to request that the portion of our case 2084 applying to the lease automatic

custody transfer system be incorporated into this record to save duplication.

MR. NUTTER: We will take note of that.

A The only difference that can be is which system we go on. If we go on Exhibit 2A, both Lact units will be identical, in fact, all flow we put in will be identical.

Q You will put in three Lact units?

A With a set stop counter on the Sweet Battery on the PD Meter but not one on the sour PD. The set stop will then be on the Dump Meter too.

Q Would they realize a saving on installing this automatic proposal over the present operating facilities?

A Yes, sir, both in labor saving and employment. We are at the point we need to add some additional treating facilities; at this time we will also be able to salvage a great deal of equipment that is now on the lease.

Q Salvage for use in this set up or on other leases?

A Yes.

Q Which would you be salvaging it for, for other leases?

A Salvage for other leases, mostly tankage and several heaters, treaters as well and separators also, be used on new leases where additional equipment is needed.

Q In the application, in the interest of protection of correlative rights, is it true it does not impair correlative rights?

A That is true.

Q Does it incur and involve any waste in your opinion?

A No, sir.

Q Have the offset operators been given notice of this application?

A Yes, sir.

Q Were Exhibits 1, 2, 2A and 3 prepared by you or under your direction and supervision?

A Yes, sir.

MR. KASTLER: This concludes the questions in Case 2085 on direct examination.

MR. NUTTER: Any questions of Mr. Smith? Mr. Payne?

BY MR. PAYNE:

Q Mr. Smith, I notice in both, Case 2084 and 2085, you didn't have any exhibits relative to gravities of the production from the various pools and whether the commingled value of the production has been good, been greater, less or the same as it was not commingled. Now, what affect does the commingling have in 2084 between the Brunson and Hare Pool on the value of commingled production?

A Approximately the same or slight gain according to the time of year you do your calculations. On all my calculations it indicates a slight gain.

Q What about in the Case 2085?

A The same.

Q It is either the same or slight gain?

A It would be if we could put in the condensate the way we can, like a gain, the relative volume. The condensate averages for the year are about 20 barrels per day, which isn't great, it is enough to up-grade the sour to some extent.

MR. PAYNE: Thank you.

BY MR. NUTTER:

Q Does Gulf already have permission to commingle the distillates from the Tubb and Blinebry?

A I cannot recall the order number, it is a previous order in, whereby it is a general condensate from Tubb gas and Blinebry gas and maybe commingled in the same Tank Battery, it is now being done.

Q You are presently doing that?

A Yes, sir.

Q Do the same answers apply in this case that applied in the previous case as to the Varec Valves and the shut-in switches?

A Yes, sir.

Q Do you have any high pressure wells into, in the header?

A Not that I call high pressure, were all flowing wells to have shut-in devices and shut down the pumping wells with electricity.

MR. NUTTER: Any further questions of Mr. Smith? You may be excused.

(Witness excused.)

MR. NUTTER: Do you wish to offer your exhibits at this

time?

MR. KASTLER: Yes, sir.

MR. NUTTER: Gulf's 1 through 3 will be admitted. Do you have anything further?

MR. KASTLER: No.

MR. NUTTER: Does anyone have anything for Case 2085? We will take the case under advisement and take Case 2086.

STATE OF NEW MEXICO)
: ss
COUNTY OF BERNALILLO)

I, LEW NELSON, Notary Public in and for the County of Bernalillo, State of New Mexico, do hereby certify that the foregoing and attached transcript of proceedings before the Oil Conservation Commission was reported by me in stenotype and reduced to typewritten transcript by me and/or under my personal supervision 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 7th day of October, 1960, in the City of Albuquerque, County of Bernalillo, State of New Mexico.

Lew Nelson
NOTARY PUBLIC

My Commission Expires:
June 14, 1964

I do hereby certify that the foregoing is a complete record of the proceedings in the Examiner hearing of Case No. 2095, heard by me on 9/21, 1960.

..., Examiner
New Mexico Oil Conservation Commission

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