

BEFORE THE
NEW MEXICO OIL CONSERVATION COMMISSION
Santa Fe, New Mexico
January 7, 1970

EXAMINER HEARING

-----)
IN THE MATTER OF:)
)
Application of Gulf Oil Corporation) Case No. 4286
for an exception to Order No. R-3221,)
as amended, Eddy County, New Mexico.)
-----)

BEFORE: Daniel S. Nutter, Examiner.

TRANSCRIPT OF HEARING

NEW MEXICO OIL CONSERVATION COMMISSION

EXAMINER HEARING

SANTA FE, NEW MEXICOHearing Date JANUARY 7, 1970 TIME: 9 A.M.

NAME	REPRESENTING	LOCATION
Jerry L. Lued	Atlantic Richfield	Roswell
Jack Beard	" "	"
Engel & Zeller	Getty oil Co.	Hobbs.
WV Katter	Gulf Oil Corp	Roswell N.M.
J H Hoover	✓	✓
Richard S. Morris	Montgomery et al	Santa Fe
JOE B. McSHANE, JR.	Wood & McSHANE	Monahans, Tex
Oliver Wood	Wood, Kress & Thoms. Cdc	✓
James H. Hyde	Coastal States v Atl. Rich	Roswell, N.M.
W D Elliott	Coastal States	Copus Christi TEX
Victor T. Lyon	Continental Oil Co.	Hobbs, N.M.
Pat Kelly	Mobil Oil	Midland, Tex
C. R. KREUZ	✓	✓
Jim Sperling	Madrell Seymour Sperling Reed & Harris	alb.
Jack McGraw	Coastal States	Midland, Tex
S. L. Motter	CITIES SERVICE OIL Co	Midland
Jason Kellam	Lawyer -	Santa Fe

NEW MEXICO OIL CONSERVATION COMMISSION

EXAMINER HEARINGSANTA FE, NEW MEXICOHearing Date JANUARY 7, 1970 TIME: 9 A.M.

NAME	REPRESENTING	LOCATION
<i>Maccum, Gordon</i>	<i>State Land</i>	<i>SANTA FE,</i>
<i>Nma S. Durburne</i>	<i>RW Byram</i>	<i>Santa Fe</i>

MR. NUTTER: The hearing will come to order, please. The first case this morning will be Case 4286.

MR. HATCH: Application of Gulf Oil Corporation for an exception to Order No. R-3321, as amended, Eddy County, New Mexico.

MR. KASTLER: I am Bill Kastler, from Roswell, representing Gulf Oil Corporation and our witness in this case will be Mr. John Hoover.

(Witness sworn).

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

JOHN HOOVER

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

DIRECT EXAMINATION

BY MR. KASTLER:

Q For the record, will you please state your name and position?

A John H. Hoover, district production engineer, Gulf Oil Corporation, Roswell, New Mexico.

Q Are you familiar with Gulf's application in Case No. 4286?

A Yes, sir.

Q Have you previously qualified as an expert engineer and given testimony before the New Mexico Oil Conservation Commission Hearing?

A Yes, I have.

Q Mr. Hoover, what is Gulf seeking in this application?

A We are asking for approval to dispose of produced water in unlined surface pits, as an exception to salt water disposal, Order No. R-3221, as amended.

Q Where is this produced water coming from and how are you disposing of it at the present?

A This water is produced from the Shugart Pool and the Shugart-Delaware Pool on our Federal Littlefield "AB" Lease, which is shown on Exhibit No. 1.

Exhibit No. 1 is a plat showing this lease -- outlined in red -- and it's described as all of Section 22, T 18 South, R 31 East, Eddy County, New Mexico.

Wells 2, 5, 6 and 7 are producing from the Shugart Pools and wells number 1, 3 and 4 are producing from the Shugart-Delaware Pool. The total water produced from all these wells averages approximately thirty-three barrels per day.

We are, at the present time, disposing of water in the Keohane "C" Federal Well No. 3, which is located in Unit I of Section 21, Township 18 South, Range 31 East. This well is circled and colored in red on Exhibit No. 1.

This disposal was approved by Order No. R-3347 in Case No. 3793, dated July 3, 1968.

Q Why do you now want to use surface pits in lieu of underground disposal?

A We are going to the expense of underground disposal. However, offset operators have requested and received approval from the Commission to use unlined pits. We do not believe that underground disposal is necessary in this area and the expense cannot be justified for us to put water underground when offset operators dispose of it on the surface.

We also have need for this disposal equipment at another location and by utilizing this equipment, we will realize a saving on investment cost.

The value of the equipment that we can utilize here is about twelve thousand two hundred dollars. We estimate it is costing us at this time about a dollar a day to dispose of water, but this cost represents a new

well and new system; and, therefore, as the system gets older and the well gets older, the cost would go up.

If we -- if our application is approved in this case we would close in that Keohane "C" Federal Well No. 3 and hold it for possible waterflood at a later date.

Q Will you please state the order numbers approving surface disposal for the offset operators in which exceptions have been granted?

A Yes. VS Well, Case No. 4146, Order No. R-3778, Examiner Hearing June 4, 1969, approved disposal for eighty-four barrels per day in the northeast quarter of Section 28.

Referring to Exhibit No. 1, the northeast quarter of 28 is a southwest offset to our Federal Littlefield "AB" Lease. This order stated there were no shallow water wells within four miles radius.

Then, Pan American Petroleum Corporation, Case No. 4132, Order No. R-3771, Examiner Hearing May 21, 1969, approved the disposal of two hundred seven barrels per day in the northeast quarter and southeast quarter of Section 27, 18 South, 31 East; and referring to Exhibit No. 1 that is the section offsetting our Littlefield "AB" Federal Lease to the south.

Q You say two hundred seven barrels of water a day were authorized?

A Yes. And this order stated no -- the nearest shallow water wells were approximately four miles northeast from Unit H and surface and subsurface drainage appears to be towards the southwest.

The next order, although not an offset -- but, it is in the vicinity -- it's Union Oil Company, Case No. 4180, Order No. R-3813, Examiner Hearing August 6, 1969, approved disposal of twenty-two barrels per day in the northeast quarter of Section 31, Township 18 South, 31 East. That is about three miles southwest from our lease.

Q Shown on Exhibit No. 1 as a pure lease?

A Yes. This order also stated no shallow water wells within the vicinity.

Q How much water are you producing at the present time?

A The Littlefiled "AB" Federal Wells Nos. 2, 5, 6 and 7 in the Shugart Pool produced approximately four hundred sixty-five barrels during the month of November and wells nos. 1, 3 and 4 in the Shugart-Delaware produced approximately five hundred ten barrels during this month, making a total of nine hundred seventy-five barrels for

the month of November. This is an average of thirty-three barrels per day.

Q Are there any shallow water wells on this lease?

A No, there are not. We find no shallow water wells within three and a half miles of the center of Section 22.

Q If your approval was granted, where would the disposal pit be located?

A Our tank battery is located in the center of Section 22. We have two small pits, one just to the north of the battery and one just to the south of the battery and we would use both of these pits.

Q Mr. Hoover, have you made any cursory studies of the general topographical conditions in this area, which I think is referred to as the Clayton Basis?

A Just briefly. At the last moment, I ran across this. But, examining the topographical map put out by the U. S. Geological Survey, which they list as their Clayton Basin Map, the contours -- the slope is all to the southwest.

The contours in the center of Section 22 are on about three thousand, six hundred fifty-five feet, going to the southwest down in Section -- the corner of Section

12, which is 19 South, 30 East. The contour is thirty-four forty, which makes about two hundred ten feet drop to the southwest from our disposal location and in that regard the Commission issued Order No. R-3221B, where they exempted several townships and ranges as exempt from the disposal order and the -- this Section 12, that I referred to, would be the nearest corner section to our lease; so, we would be about five miles northeast from the start of this area that is exempt.

MR. NUTTER: Is Section 12 in the exempt area?

THE WITNESS: Yes, it is. The exempt area starts in Township 19 South, Range 30 East, and it's Sections 8 through 36. Section 12 would catch it and the order stated that the major portion of the Clayton Basin and north draw, being broad depressions caused by the slumping of the surface due to the removal of underlying salt by solution lie within the above described area and that the general direction of movement of both ground water and surface water in the subject area is toward and into said basins; then, southwest into Nash draw toward Malaga Bend.

Q (By Mr. Kastler) In other words, you find there is some evidence of an extension of this exempted

area toward your Township 18 South, Range 31 East area, which would not constitute any pollution effect if water were disposed of under the surface?

A Yes; that's right. In fact, just checking the elevations of our wells the Well No. 4 ground level is thirty-six hundred forty-eight feet. You get down to Well No. 5, it drops to thirty-six forty-two feet; so, even the ground level elevations of our wells going to the southwest fall slightly in a southwesterly direction.

MR. KASTLER: Mr. Examiner, would you like us to introduce this topographical plat as our Exhibit No. 2? We only have the one copy. However, we can obtain more and send them up.

MR. NUTTER: I think since reference has been made to it that we should identify it as an exhibit and enter it in the record.

You have indicated on this exhibit a little red "X" in the northeast corner of Section 12, Mr. Hoover. Would that be the northeast corner of the exempted area?

THE WITNESS: Yes, it would.

MR. NUTTER: And it is approximately five miles, then, northeast up to your lease in Section 22?

THE WITNESS: Yes. I have the center section,

too, marked with a little red "X".

MR. NUTTER: Right. What is the location of the pit in Section 22?

THE WITNESS: They would be right at the tank battery, which is in the center of the section.

MR. NUTTER: Where the "X" is, then?

THE WITNESS: Yes. One is just to the north of the battery, probably within a hundred feet and one is just to the south of the battery within a hundred feet.

MR. KASTLER: We will stamp this as Exhibit 2.

Q (By Mr. Castler) Do you have anything further to add in this case, Mr. Hoover?

A No, sir, I don't.

Q Was Exhibit No. 1 prepared by you or under your supervision and at your direction?

A Yes, it was.

MR. KASTLER: This concludes our direct testimony, Mr. Nutter; and, at this time I would like to have Exhibit No. 1 and Exhibit No. 2 entered into evidence.

MR. NUTTER: Gulf's Exhibit 1 and 2 will be admitted in evidence.

CROSS EXAMINATION

BY MR. NUTTER:

Q Mr. Hoover, you mentioned that you had some equipment here that could be used at another location.

A Yes, sir.

Q What do you have here that could be removed and utilized somewhere else?

A Yes, sir. Okay. We have a Bethlehem Triplex plunger pump, a value of twenty-four hundred twenty dollars, with a thirty horsepower electric motor.

We have an eight foot by twelve foot building, valued at four hundred ninety-five dollars. We have a low five hundred welded steel plat bottom tank, internally coated with epoxy, three thousand thirty-three dollars.

Then, we have forty-four hundred ninety-nine feet of two and three eighths inch plastic coated tubing electrical material, six hundred thirty-nine dollars; total value, twelve thousand two hundred dollars.

We have need for the pump right now to help out on an additional disposal system that needs a little more help in getting rid of additional water.

Q I see. So, you are having to put this water into this disposal well under pressure, then?

A Yes, sir.

Q You would be able to salvage all of this equipment?

A Yes, sir.

MR. NUTTER: Are there further questions of Mr. Hoover? He may be excused.

(Witness excused).

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

MR. KASTLER: No, I haven't.

MR. NUTTER: Does anyone have anything they wish to offer in Case 4286?

We will take the case under advisement.

I N D E X

<u>WITNESS</u>	<u>PAGE</u>
JOHN H. HOOVER	
Direct Examination by Mr. Kastler	2
Cross Examination by Mr. Nutter	11

E X H I B I T S

Applicant's Exhibits	
1 & 2	2

STATE OF NEW MEXICO)
) ss
 COUNTY OF BERNALILLO)

I, GLENDA BURKS, Court Reporter 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.




 Notary Public

My Commission Expires:

March 12, 1973

I do hereby certify that the foregoing is
 a complete record of the proceedings in
 the Examiner hearing of Case No. 4286,
 heard by me on 11/7, 1970.


 _____, Examiner
 New Mexico Oil Conservation Commission