

BEFORE THE  
**Oil Conservation Commission**  
SANTA FE, NEW MEXICO  
February 16, 1955

IN THE MATTER OF:

CASE NO. 825 - Regular Hearing

TRANSCRIPT OF PROCEEDINGS

**ADA DEARNLEY AND ASSOCIATES**  
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BEFORE THE  
OIL CONSERVATION COMMISSION  
Santa Fe, New Mexico  
February 16, 1955

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IN THE MATTER OF:

The application of the Oil Conservation Commission  
for revision of an administrative order in creation  
of a non-standard gas proration unit.

Applicant, in the above-styled cause, seeks an  
order amending Administrative Order NSP-46 and  
directing Sinclair Oil and Gas Company to reduce  
the size of the non-standard gas proration unit  
permitted therein to conform to the provisions of  
Paragraph 3 of Rule 5(a) of the Special Rules and  
Regulations for the Eumont Gas Pool, as set forth  
in Order R-520; the resulting proration unit to  
consist of NW/4 of Section 21, Township 20 South,  
Range 37 East, Lea County, New Mexico.

Case No.  
825

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BEFORE:

Honorable John F. Simms  
Mr. E. S. (Johnny) Walker  
Mr. William B. Macey

TRANSCRIPT OF HEARING

MR. MACEY: The next case on the docket is Case 825.

MR. KITTS: Mr. Secretary, before going into this group of  
cases, I have a statement I wish to make on behalf of the staff.

MR. MACEY: Which group of cases?

MR. KITTS: 825 to 838.

MR. SMITH: Before you make your statement I would like to  
refer again to Case 822 and like to say to the Commission that I  
have talked to Mr. Reider and observed the data he has from which  
he was asking questions of Mr. Hiltz. There was some slight mis-  
understanding. I believe that the data that Mr. Hiltz testified

to with respect to the deliverability were proper and correct.

In other words, I think that, if the Commission is interested, we can get the report out and show just what we are talking about, but I think it should satisfy you that we are in agreement now, and that there is no difference, not the difference indicated by his questions from the testimony that Mr. Hiltz has put into the record.

MR. MACEY: The deliverability test is on file in the Commission Office, and it speaks for itself.

MR. SMITH: That is right, it does. Also, I would like to suggest, since the question of Yates oil was injected, there is a possibility, I will check with our office on the matter, that there has been confusion in the reports that have been submitted. Actually, the oil in question is Queens oil reported erroneously.

May I suggest to the Commission that, if they care to, it would be acceptable to us to continue the matter to the next month and straighten the matter out and find out what the condition is. So far as our information is concerned, it is a gas well and there is no appreciable oil being produced. However, as I stated awhile ago, I don't think that particular matter is pertinent to our application. If it is an oil well it is an oil well, and we would have to drill a gas well to get it. However, in all fairness we would like to straighten the matter out.

MR. MACEY: You wish to continue the case?

MR. SMITH: Until next month.

MR. MACEY: Continue Case 822 until the regular hearing in March. Mr. Kitts has a statement that he wishes to read in respect to Cases 825 through 838.

MR. KITTS: "Considerable confusion has developed in recent

weeks regarding the formation of non-standard gas proration units in Lea County gas pools, and the following statement is presented in an effort to eliminate this confusion and to clarify the requirements in filing applications for approval of non-standard gas proration units in the Southeast gas pools.

The basic considerations for approval of all applications will be that the formation of such unit will:

1. Prevent Waste
2. Protect Correlative Rights
3. Serve the Best Interests of Conservation

For an application to receive consideration for administrative approval, the unit for which the exception is requested must in all respects meet the requirements of Rule 5(a) paragraph 3 and Rule 5(b) of the various pool rules contained in Order R-520. Any application which does not meet these requirements for administrative approval must be heard after notice at a hearing of the Commission at which time the merits of the application can be considered.

Further, the Commission Staff feels that Order R-520 clearly implies the radius of influence for one well in the various Southeast gas pools, covered by Order R-520, to be 3735' -- that is, the radius of a circle which will totally enclose a 640-acre section. And that such radius should be applied to all applications for exception to the provisions of Order R-520. Quite naturally, this radius of influence cannot be the only consideration and factors of economics, offset counter-drainage, and good operating practice must be considered. The Commission Staff is aware that each request for approval of a non-standard gas proration unit must stand on its own merits, and be treated individually - and we take note of this fact.

We have briefly outlined our position in an effort to assist the operators in making application for and securing non-standard units, and with the hope that the operators can assist the Commission Staff by keeping their units within the limits as set out in this statement, in so far as economics and good operating practice will permit.

We are certain that we can count on the full support of all of the operators.

MR. MACEY: Is that all you have? You want that statement put into every case?

MR. KITTS: It might be helpful.

MR. HINKLE: If it is not asking too much, I wonder if the statement couldn't be printed and sent out when you send out the regular docket.

MR. MACEY: We can certainly do that. We will try and have the statement available for distribution tomorrow morning, if possible.

MR. McGOWAN: I am James McGowan representing Sinclair Oil and Gas Company. This is a showcause order directed by the Commission arising out of the fact that we have previously filed application pursuant to Paragraph 5 of Order R-520, requesting a non-standard unit assignment of 320 acres to a well for proration purposes in the Eumont Gas Pool and which was granted and under which we have been operating.

We first would like to say that we feel the order as it was issued was proper and should stand, but assuming the Commission is not agreeable to letting it stand without further hearing, we are in a position to offer testimony in support of the unit as it has

been previously approved by the Administrative Order.

For that purpose, we would request that the application and the notices that were given in connection with it when we filed for the Administrative Order be made a part of the record because it does affirmatively show that all offsetting leaseholders, as required by the Commission, were given notice of the intention to acquire and the acquisition therein.

MR. MACEY: Perhaps we should get all the applications, I think they are pertinent to all the cases. Mr. Reider has the application over there.

MR. MCGOWAN: All right. We have on this case a map showing the unit in yellow, which we will term our Exhibit No. 1.

C. D. G A I N E S ,

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

DIRECT EXAMINATION

By MR. MCGOWAN:

Q Will you state your name, please?

A C. D. Gaines.

Q By whom are you employed?

A Sinclair Oil and Gas Company.

Q In what capacity?

A Assistant Division Engineer.

Q How long have you been employed by the Sinclair Oil and Gas Company?

A Six years.

Q Do you have a degree from a university in Petroleum Engineering?

A I have a B. S. Degree in Petroleum Engineering from Texas Technological College.

MR. MCGOWAN: Is the Commission satisfied he is an expert witness?

MR. MACEY: Yes, sir.

Q Will you look at the map which I have given you as Exhibit 1? Was this map prepared by you or under your direction?

A It was prepared under my supervision.

Q Just what did you intend to show or indicate by the map?

A The portion in yellow indicates the 320 acres of the Sinclair Oil and Gas Company, W. C. Roach Lease; the other acreage bordered in red is the acreage in the area which is dedicated to gas wells. Each of the gas wells are circled in orange.

Q In other words then each of the areas bordered in red is a previously approved unit for proration purposes for one gas well in this pool, from the same sand from which our well is producing?

A That is correct. I might add that in the southeast corner Section 2, the 160 acres there has been applied for by Stanolind to annex on to their Stanolind B, the Lilly B Well No. 6X.

Q In other words, they have applied to make a unit out of the east half of Section 2?

MR. MACEY: You are referring to Section 21?

A Section 21, thank you.

Q 21, beg your pardon. Does the Sinclair Oil and Gas Company have a producing well on this 320 acres?

A Yes, sir, we do.

Q Where is it located?

A The Well No. 1 is located 330 feet from the north and west

lines of the lease.

Q When was that well completed?

A The well was completed November 12, 1954 as a dual completion.

Q When was that well originally drilled?

A It was originally drilled April 20, 1936. It was a Grayburg oil producer.

Q The well was originally drilled and completed then for production prior to the issuance of Order R-520?

A That is correct.

Q Is the royalty interest under the 320 acres commonly owned?

A Yes, sir, it is.

Q Is the working interest commonly owned?

A Yes, sir.

Q Would the formation of this unit disrupt or cause any disadvantages to adjoining acreages in that it would make other units have to be unusually non-conforming or to have to cross section lines, or, in other words, interfere with adjoining units?

A No, sir, I do not believe it would interfere with adjoining units to the property.

Q In your opinion, Mr. Gaines, would the well adequately drain gas from under the 320 acres which is presently assigned to the well?

A In my opinion, it would.

Q Is this in an area where there are several or at least a few non-uniform gas producing units for proration purposes?

A Yes, sir, it is.

Q It all lies within the boundaries of the Eumont Gas Pool?

A Yes, sir, that is correct.

MR. MCGOWAN: I believe that is all the questions I have.



MR. MACEY: Any questions of the witness?

CROSS EXAMINATION

By MR. RHODES:

Q Mr. Gaines, was it?

A Yes, sir.

Q You are probably aware that Order R-520 requires that the entire unit be productive of gas?

A Yes, sir.

Q Well, I notice that there is a big old dry hole right up there in the northwest of the southwest, known as the Rhodes No. 4.

A Yes, sir. Would you like to hear a little bit about it? That well was drilled in the latter part of 1937. It was drilled and tested in the Grayburg formation and was completed November 18th as a non-commercial producer in the Grayburg. After considerable testing the well was temporarily abandoned and was plugged and abandoned April 12, 1939. The pipe was set up on top of the Grayburg and we have no record whatsoever that there was any testing through the pipe in this well.

Q There was no test made through the pipe?

A No, sir.

Q Was that hole logged?

A No, sir, just a formation log is all we have.

Q Do you have any other information on this hole which might indicate that that area would be productive in this Queen interval?

A Well, we have an offset well that was completed just the other day which is 330 feet west of, well, we might say it is 660 feet west of Well No. 4. That would be in the southwest corner of Section 20.

MR. McGOWAN: Southeast.

A Southeast corner of Section 20.

Q That is over on that Vem Lease?

A Yes.

Q It is a Vem well?

A Yes, sir.

Q It is a Queen Well?

A Yes, sir. That is the information that we received, that it was a Queen Well.

Q Do you have any idea what the well potentialized?

A Two million seven hundred thousand. The well was completed the record shows, November 15, 1954.

Q Two million seven hundred thousand open flow?

A I don't think that that would be an open flow test necessarily, not by the back pressure.

Q It was a back pressure test?

A No, I have no information that it was.

Q You say it was two million seven hundred thousand, but you are not sure what kind of a test?

A That is correct.

Q I note further there are no gas wells to the south of your lease?

A That is correct. However, there are gas wells to the southwest and also to the southeast.

Q How far to the southeast, Mr. Gaines?

A Well, it would be a diagonal mile from the southwest corner and I would say approximately a mile, slightly less, it would be about a mile from the southeast corner.

Q You don't happen to have any information on the dry hole drilled in the northeast of the southeast of Section 28 on that Turner Lease?

A No, sir, we do not.

Q As I see it, that is directly between the production to the southeast and your lease here. For what it is worth, I would also like to ask, in your opinion about the Roach No. 1, is that definitely a Queen Well?

A In our opinion it is, yes, sir.

Q How about the Commission's position, does your Queen coincide with that of the Commission?

A From the information that we have it does. We have marked the top of the Queen there at 3250. The well is perforated from 3360 to 3366, 3378 to 3422. We have the top of the Grayburg 3560.

Q The bottom of your perforation is 3422?

A Yes, sir.

Q What will that No. 1 deliver into the line?

A We don't have a connection on the well, so, therefore, we don't have a deliverability into a line.

Q Do you have a test on it, of any nature?

A Yes, sir, we do. It tested 2,420,000, that was on November 11, 1954.

Q 2,420,000, that was open flow?

A No, sir, that was, I believe at that time it was at the time of completion of the well and I don't believe that we had the equipment there to take an open flow back pressure test.

Q What type of test was that, potential?

A Yes, sir.

Q What do you think that well would put into the line, Mr. Gaines, under normal conditions?

A It would be purely a guess. I would estimate somewhere between a million and a million and a half.

Q A million and a million and a half?

A Yes, sir.

Q There you are assuming about 60 percent of your potential to the line, right?

A Yes, sir. However, it should be considered that this test was a very short interval test and due to the fact that it was to the atmosphere, I think it is not a true test of the potential of the well.

MR. RHODES: I would like to submit to the Commission the idea that we may have to continue this Case 825 until such time as Sinclair Oil and Gas Company can prove to us that the south half of that 320-acre proration unit will be productive of gas, and further that the Roach No. 1 will be capable of making a 320-acre allowable.

MR. MACEY: Mr. Rhodes, do you think those are the only considerations we should give the matter?

MR. RHODES: I believe I lost you there.

MR. MACEY: Do you think that is the only consideration we should give the matter as to whether or not the south half of the 320-acre unit does produce, or is productive of gas and whether or not the well can deliver into the line, do you think those are the only things we should consider?

MR. RHODES: I believe they are rather pertinent in this instance.

MR. MACEY: They are not necessarily everything?

MR. RHODES: No, of course not.

CROSS    EXAMINATION

By MR. KITTS:

Q Have you any reason to believe this well would drain in any other manner other than radially, are there any other unusual structures?

A No, sir.

Q You believe it would drain radially?

A Reasonably so.

Q When was the Roach No. 1 completed?

A It was completed November 12, 1954, application to dual was submitted June 21, 1954.

MR. MACEY: Anyone else have a question of the witness? Do you know whether it would be feasible to go into the No. 4 Well located in the northwest of the southwest quarter and re-complete the well in the Eumont Gas Pool?

A It would not.

MR. MACEY: You have pulled the pipe?

A Yes, sir.

MR. MACEY: Did anyone have any other question? If not, the witness may be excused. Do you have anything further in this case?

MR. McGOWAN: No, sir. If we are going to follow the gentleman's suggestion and continue it until there is gas in the south half of the 160, I would like to know how we are going to know, how are we going to prove it other than drilling a well, in which event we would withdraw our application.

MR. MACEY: Does anyone have anything further in this case,

any other statements to make?

MR. KELLAHIN: Mr. Jason Kellahin, representing Continental. While Continental does not feel that they will be adversely affected by the particular application, we do feel that we should make a statement as to what our position is in regard to this matter of non-standard units.

We want to say that we feel the Commission is correct in its present interpretation of the provision of Rule 5(b), Order No. R-520 and should make its policy clear. I believe Mr. Kitts has done so, that exceptions will not be approved administratively unless they conform to provisions of Paragraph 5(a). The question really boils down to a question then as to whether the restrictions in Paragraph 5(a) are reasonable or not, and Continental feels that they are reasonable and should be adhered to unless the applicant can make a convincing showing that nobody is going to be hurt by an exception.

We have no particular quarrel with this case, but we do feel that several of the other applications are highly questionable from several points of view, and we hope that the Commission will give careful consideration to this question.

MR. MACEY: Anyone else have a statement to make in this case?

MR. KITTS: I want to ask one more question.

-CROSS EXAMINATION

By MR. KITTS:

Q You do have waivers from the offset operators?

A We have a waiver from Stanolind Oil and Gas Company, yes.

MR. MACEY: Mr. Selinger, they didn't say that it was specifically the 3735 that applied to the administrative relief. They apply those to all units.

MR. KITTS: A consideration, one of the considerations which, of course, will not be exclusive. Furthermore, as far as administrative relief goes, I believe that is discretionary with the Commission. There are certain things we consider, for instance, what the well will drain is one consideration.

MR. SELINGER: Don't you think that would be one of the bases of test or evidence for the applicant to present to the Commission as to whether or not a well would drain the amount of acreage that they desire?

MR. KITTS: I certainly do. It is more or less of a presumption which can be made. I certainly think testimony should be introduced.

MR. SELINGER: Mr. Kitts, my only concern is that the Commission issue an order that would not be the subject matter of a lot of trouble in the future and I still maintain that the granting of administrative relief is a source of trouble. It was borne out very well today by your cases, that you have had presented before you, in which the staff had an opportunity of completely questioning all the witnesses, and the public as well. We feel that the matter of assignment of units for gas wells are dealing with property rights of royalty owners and I think the only sound basis of fact for Commission Order is jurisdictional.

MR. REIDER: Mr. Selinger, to answer that, if, when you get your copy of that statement, it said in there, I believe, to receive administrative relief, the unit must in every way agree with the

provisions of R-520. The suggested radius of influence was merely inserted as a guide to the operators so that they would have an idea of what the staff had in mind as a non-standard unit for discussion. In other words, it was merely a guide to the operators so that they might, if possible, confine their appeals to such a limitation or within such a limitation. In other words, the staff nor the Commission would, in no way, infringe on R-520. It is merely there as a guide. You understand that if an application for non-standard unit does not meet every provision of Order R-520 it must have notice and hearing.

MR. SELINGER: May I say this, do you not think it would have been worthwhile to have notified the industry and permitted them to have comments about this so-called radius of influence of 3735'?

You have issued that in the form of a statement, now, how are the members of the industry going to proceed in discussing that matter? For example, you, generally, when an applicant comes in and asks for relief, units around them are already assigned to previous drilling wells or units are already established, the 3735 foot radial is cut off as a matter of right by operation of other operators. He is entitled to his radial 3737 feet. If he is cut off on two sides he doesn't have his fair share of the reservoir. He doesn't have the full allocation for the amount of surface acreage. He is cut off. He has no place to go. He has no right. You have prevented him, by your 3735 feet radial cut-off on the south where he may have acreage of his own that may be productive; whereas on the north that radial part is cut off by units already in existence. He doesn't have his share of the amount of acreage



that he is entitled to. I think members of the industry ought to have the opportunity of discussing the radial influence.

MR. REIDER: That is in no way a rule or a law. It is just merely a suggestion. It in no way cuts you off from any potential acreage you might have. All you have to do, if you don't agree with that, is to come in here at a hearing, and I think there are some thirteen of them here that don't, and just appeal.

MR. SELINGER: Well, to lay down a rule of that nature without permitting the industry to comment, members of the industry to comment, I don't think it quite fair. I believe a matter of that type should be thoroughly discussed. I, for one, feel that matters of this kind should be thrown open at a public hearing before the Commission in which everybody has an opportunity of discussing it.

MR. REIDER: You have my complete agreement. It was merely made as a suggestion and guide.

MR. SELINGER: It is a guide. I have a comment on the guide. I want some place to go to make my comment.

MR. KITTS: I think one of the reasons was to indicate to the industry our thinking, because we see an application for a non-standard unit without specific test as to what the well will drain. I am pretty sure the statement said that. We believe that absent. It didn't say absent -- on the information, by setting up 640-acre unit, that implies that radius of drainage or a radius of interference. I believe we also said that is only one factor considered, the matter such as counter drainage and economics.

MR. SELINGER: You realize from the practical administration when you put in 3735 foot radial influence, that means before an

operator can get more than 480 acres his well must be around 1550 feet from the nearest line in order to come within that 3735', which means that every administrative order would require a hearing anyway.

MR. KITTS: I believe when you get the statement, you will see it was not set down as a rule.

MR. SELINGER: But, in order to meet your suggestion, your general practice of administration, the well must be located 1550 feet in order to come within the 3735 on every unit in excess of 160 acres. Those practical considerations, I think, should be discussed. I am not quarreling with the 3735' requirement. I am just saying that I think it should be thrown out for discussion to the operators, after sufficient time, for comments. You may find that from the practical administration you may not want that.

MR. MACEY: Mr. Selinger, I am speaking for myself. I am not speaking for the other members of the Commission by any means, but when this Commission established a 640-acre proration unit they put a proviso in there that the well should be located 1980 feet from the outer boundaries of that 640-acre unit. The reasoning behind that, as I see it, as I saw it then, as I see it now, is to protect the correlative rights of the offset operators, both royalty owners and working interest owners. We, furthermore, said, if you had 160 acres and the well was situated 660, 660 that that likewise was a non-standard unit, but at the same time, the correlative rights of the offsets were being protected. Now, I think that when the Commission established a 640-acre unit, they said in effect, that one well would drain 640 acres, but they furthermore have specified that the well had to be located at a

certain point on that unit in order to protect everybody's interest. I think when they set up a 640-acre unit and provided for that, that they in effect created a drainage radius. I don't agree with the 3735 feet, if you are interested. That is their business.

MR. SELINGER: Everybody has their right.

MR. MACEY: I am a little bit stronger. I feel that when a well is located 1980 and you have 640 acres that the drainage area is from the well to the farthest point on that 640 acres, which is about 4600 feet. At the same time, I think it is a very definite consideration in this matter. Sinclair happens to be the first one on the docket here and they are more or less caught in the middle to a certain extent, but it applies to every single one of these units in which we have a notice and a hearing is a must in these instances.

In approving the units, as I did, over a period of time, there were fourteen of them, I recognize the fact and I sincerely believed it then and I believe it right now, that I exceeded the authority that was granted to me. I don't care how you want to read the rules. I don't think it was fair to the offsets or the royalty owners or any one involved to do it any other way than to have a notice and hearing. The suggestion that they made of 3735 feet is their suggestion. The fact that I don't agree with them today doesn't mean I might not agree with them tomorrow. I do believe you have got a point about bringing it out to determine what the factor ought to be.

MR. SELINGER: I agree with you on 640 and 1980 requirements. I say that should apply to all new wells drilled and should have applied to all new wells drilled for gas for the assignment of that

size unit, but you must also remember that you are dealing with new wells, recompleted wells, wells that have been on production for a long time and you are re-completing them and those locations just don't fit anything more than a 330 at a maximum of 660. When you say you assign your 640 acres you assume that a well will drain the 640 acres. Well, now, when you put in your radial influence you have to consider that an operator that has 320 acres or 640 surface acres, and all surrounded by production, and there are units completely surrounding him, for example, on one side to the north that radial is cut off from him. He must go south. He has that much productive acreage. You can't use a fantastic radial theory to say that is all he is entitled to because he is cut off.

MR. KITTS: I would like to make one more comment, in regard to opening it up to hearing. The Commission staff could have done one of two things, as I see it. It could have stayed back in the back room and reviewed the cases without giving you the benefit of the things we were guided by, or it could issue the statement as we did here today and let the industry and operators know what we are thinking. That is why the statement was made.

MR. SELINGER: My comment is not in any way a criticism of your statement. As a matter of fact, we appreciate knowing what is in the minds of the Commission.

Having associated with proration in New Mexico since 1935, I will say this for this State, whenever the Commission has ever done anything on a statewide basis throughout here it has always given the oil industry an opportunity of coming in and making their suggestion. This is one of the few states that permits such cooperation between the industry and the members of the Commission.

As has been done in the past, and you still do it, you put out proposed rules. My only comment was when you put something out like that, put it out to where the industry may have an opportunity of making suggestions. The individual members may tell the Commission and its staff where it is not workable where you should not set up such a standard in deciding exceptions, but give the industry the opportunity of making their comment. We appreciate the preliminary statement. My comment was not in direct criticism of that, it was only suggesting that that be thrown out to the industry and be taken up at some future time.

MR. REIDER: On behalf of the staff I would like to say that at any time any of the operators would care to comment, we would be more than happy to meet with any group or any individual upon this matter.

MR. SELINGER: That is what I am doing right now. I like to make my comments at open hearing.

MR. KITTS: Also, the presumption is rather a wild presumption that the Commission always agrees with the recommendation of the Commission staff.

MR. MACEY: Does anyone have anything further?

MR. MCGOWAN: I would like to say a couple of things since it was brought up. In the first place the suggestion that this be continued that there was gas and that the well would deliver its allowable, we think it will deliver its allowable, but this is a completely common owned acreage. As to lease, owned acreage and as to royalty, I don't see if over a period of time it did not deliver its allowable, that anybody would be hurt because whatever gas we deliver through the well is going to be paid to the owners

of mineral.

Insofar as proving there is gas under the southeast 360, the only way I know how to do it is to prove there is a gas well producing on the north 160 and one producing 300 feet, and there are wells southwest and southeast producing gas from this formation within a mile and a half of the closest boundary of this 160 on which we do have electric logs, which the staff may examine to show this is one common source of supply.

It is far fetched to say that the 160 is not going to have gas under it, under those circumstances. I do request that, unless the Commission feels rather strongly, we have no objection to a continuance. I don't see anything that could be gained on the two particular points other than a test of the production of well. If it can make its allowable, all right, if it can't I don't see that it makes too much difference in that the same parties are going to get the same amount of money whether it is its allowable or half of it.

MR. RHODES: What concerns me most is not so much whether that half is productive or not. I am informed by Mr. Montgomery that the Penrose in the area is pretty much of a blanket sand and there is not, well it is a practical proposition as to whether it is or isn't there. There seems to be reasonable doubt as to whether that is productive, and there appears to be a lack of any gas production directly to the east of that 160, directly to the south and looks like you are getting over in some dry hole country there. I for one would appreciate it if we could have those logs of which you are speaking so that we could look into it a little further.

MR. MCGOWAN: You desire that we put them into the record

in this case?

MR. RHODES: I desire any well information or any information you may have which might indicate that the lower --

A Do you want a list of the wells for the record?

MR. RHODES: In which the logs are submitted?

A Yes.

MR. RHODES: If it would help make the record complete, go ahead.

MR. MACEY: Go ahead and read them into the record.

A The Amerada Anderson No. 3 located in 8, 20, 37; Amerada Anderson No. 4, that would be in the same section; Humble State "F" 4, is 17, 20, 37; Texas Company State LH-26, 20, 20, 37; Amerada State W-2, 30, 20, 37; El Paso Shell State No. 6 in 32, 20, 37; Phillips Cooper No. One, 27, 20, 37; Stanolind Federal No. One, 35, 20, 37; Stanolind B 6X, 21, 20, 37; Stanolind Gillully "B"4 - 24, 20, 37. Some of the logs are to the north there, but we submit them all.

MR. RHODES: You say that you feel that the well will make its allowable. What do you base that estimate on? Do you base that on a test or the method by which it was taken?

A Well, we have a number of wells in that same area that have potentials that are in line with this well, that I believe are producing gas at a rate that would --

MR. RHODES: (Interrupting) You have never run a deliverability test?

A No, sir, we haven't.

MR. RHODES: That is right, you said you had no connections.

A That is right.

MR. MACEY: Is that all you have, Mr. Rhodes?

MR. RHODES: Yes.

MR. MACEY: Does anyone have anything further in this case?

MR. SMITH: Not in this case except along the same lines of conversation up to now. We are affected by the general statement that was made.

MR. MACEY: I believe it would only be fair to Sinclair to dismiss the witness if no one has any further questions.

(Witness excused.)

MR. MACEY: Does anyone have any statements they want to make in connection with this case?

MR. SMITH: If it please the Commission, with reference to the general statement that was put in at the beginning of the recently concluded case, I got the impression that those rules or guides or standards would be used in the future cases and since we have some cases that would come up I would like at this time to say, as far as Stanolind is concerned, we do not agree with Continental's interpretation of the rules.

I am not fully conversant with the Commission's opinion precisely what it may be as to the way they apply it, but applying the 3735 foot radial drainage theory, I think the Commission ought to keep in mind that they have certain standards laid down to them in the statutes, and the statutes don't contemplate, in my opinion, any use of such a guide as that, even as a preliminary stepping point.

In the Section 12C of the Act, in discussing the gas proration units, it says in protecting correlative rights, open flow, porosity, permeability, deliverability and quality of gas, and refers to such other pertinent factors as may from time to time prevent drainage



between producing tracts in a pool which is not equalized and so forth. As I understand the discussion, at the time that the Act was established in 1939, the very thing we are talking about was brought up at that time in that you get your land by squares and you develop your oil, like we are talking, on a radial basis. In order to recognize that rather inconsistent position and since it is necessary to compensate, you have counter-drainage. We come then to the point that Mr. Selinger is making, which is, that if you have 320 productive acres, and by some mischance your well was drilled at an early date, in a corner, you are still entitled under the law to get your 320 acres of gas, and if you start with an arbitrary 3735 feet or 4600 feet, as you suggested, or any other figure, you are starting on a false premise. The statutes I think contemplate that the proof should be whether or not you are draining somebody, and, if so, is he making it up by counter-drainage from another point in your particular territory and not from the standpoint of going from a particular point and stopping at that particular point? I would like to suggest that to the Commission because it occurs to me, or I got the inference that there might be a certain amount of prejudging of the evidence, by reason of using a guide that isn't authorized by the statutes, as I interpret them.

MR. MACEY: Mr. Rhodes?

MR. RHODES: I would like to qualify my recommendation to the Commission in that I will take the logs that have been submitted and I will consult with Mr. Montgomery in an effort to ascertain the lower 160 is productive, thereby relieving Sinclair of the burden. However, I would still like to see some evidence to the fact that the Roach No. 1 will produce a 320-acre allowable.

MR. MACEY: Does anyone have anything further in this case? Mr. Smith, I don't agree with your interpretation of the Statutes, one iota, because I think the section you quoted pertains to prorating gas. In the particular portion after that statute very clearly pertains to the manner in which the Commission prorates or develops a formula, but in the establishing of proration units, which is what we are worrying about today, I don't think that part of the Statute has anything to do with it.

MR. SMITH: Of course, there is always grounds for difference of opinion. I would like to suggest that there is a fundamental difference and it might be well to get an opinion from the Attorney General.

MR. WALKER: He might have a difference of opinion, too.

MR. SMITH: It is quite possible. We might have to go to the Supreme Court of the State. I don't think we should wind up in a stalemate on the matter.

MR. MACEY: I agree with you there. I think you will notice that if you read Section 120, that the correlative rights, the part you read about is a part of a complete paragraph in which they are referring to the Commission allocating production and shall recognize correlative rights and then it further says, "In protecting correlative rights, they shall do the following things". I don't think they are talking about proration units in any form, shape or size.

MR. SMITH: Of course, you may be quite correct in your statement. But, I can't avoid clear language which says, "Shall prevent drainage by counter-drainage". That is a general direction, whether it is directed to the entire statute.

MR. MACEY: I certainly agree with you as far as the counter-drainage, there is no question about that. But, I further believe that in establishing a proration unit that this Commission has to take into consideration what a well will drain, and, if, for example, in this Sinclair case there was a well down at the southern end offsetting them on the southside, I don't see how anyone could say that that southern portion of the tract was being drained or being counter-drained.

MR. SMITH: I have heard testimony before this Commission on many occasions where it has been undisputed that in a particular field one gas well would drain the entire field given a question of time. I think the matter for inquiry on the part of the Commission is whether or not the acreage is productive, whether or not the drainage of somebody else's property is being protected by counter-drainage by the same person. I think this is a positive direction. It is a direction in the Statute to the Commission which applies to producing tracts. It doesn't say proration unit, it says producing tracts. All the producing tracts are in the form of a square. You have to keep that in mind when you get ready to lay down the rules.

Maybe 3735 is a correct figure, I don't know. We have no opportunity to know the reasoning or background that prompted the particular rule in the minds of the Commission staff. There is no way we can approach the matter. It may be reasonable. I have no quarrel with that. I do say when you take any arbitrary rule or any arbitrary point and cut it off at that particular point and without our knowing what prompted that point, and in the face of the statute which did recognize, in my opinion, that there is a difference in

your land ownership and in the production of oil, and tells you how to do it, you offset it by counter-drainage, that that is the limit to the authority of the Commission in that respect. I am not trying to regulate this thing, they can think all they want to along that line. To make a statement and make it a part of each of these cases, that you are going to have to disprove the 3735 feet, then the burden of proof is upon us. It has been shifted, and proof that is not required by the Statutes, in my opinion.

MR. MACEY: I want to point out one very significant thing. I think you are taking it that that is a hard fast rule on the Commission's part and on the Staff's part. That is not the intent of the statement in any way whatsoever. They dreamt that up by themselves. That is their business.

MR. REIDER: I would like to say just one more time, that statement is merely a statement for a guide as it is so outlined. It was merely meant to be a guide to the operator. Had you had the statement before you would still have submitted the same proof. You would have been proving, well, probably the similar proof, the same proof you are using. It was put out as a suggested guide for you to use. We further put into the statement that counter-drainage would both be considered as well as good operating practices. Further, it is not a rule. It is merely a suggestion. There was considerable inquiry as to what our policy was, what we wanted. That was made merely to give an idea of what we had in mind. It, in no way, takes away your right for hearing or limits you in any way.

MR. SMITH: I don't think it is necessary to carry the discussion any further on the matter. I understand your position

and I did at the time. I think the reason I more or less objected to it, is that when a person gets something in his mind it is lodged there and has to be dislodged. You are not getting the same kind of trial that you get from a person who goes into it that has no preconceived opinion whatsoever. It is an obstacle, a huddle, it is a burden placed on us, and the Commission Staff should base these cases on the testimony that is put in each particular case. I think, in all fairness, that we ought to stand back and look at it from the standpoint of how much gas has he got, is he entitled to produce a certain quantity in order to get his fair share of that pool, and that is the end of it.

MR. MACEY: How far do you think we ought to go toward the protection of correlative rights, do you think notice and hearing is sufficient to protect correlative rights? Do you think we have an implied right to protect royalty owners whether they appear or not?

MR. SMITH: I don't know, maybe you have the implied obligation to protect the taxes of the State to make sure that the production is adequate to see that the schools are run. You are talking more in the morals now. The Commission has no authority to settle legal rights between royalty owners and the leases. I know that, with respect to questions of title the Courts have held that they have no jurisdiction in the particular phase of it. I think that it is just a question of fairness on the part of the Commission. If they think that oil operators are doing things that are contrary to the royalty owners' best interest, and they ought to put out a notice and have a hearing, why that is certainly due process, but on the other hand let's suppose we have that, and

suppose that the royalty owner doesn't have enough money to come up here and represent himself or hire a lawyer, to say that he is going to be cut off by virtue of the fact that you had a notice go out and can't go to the Court and get his day in Court in a quarrel with the particular lessee, is, I think, going farther than is intended by the Courts. What we are talking about is the doctrine of collateral attack. The lessee comes in and says it is 320 acres spacing, I can't drill another well. He can't come in and say that the Commission is wrong because that is a collateral attack and you have due notice out. If that is what you are thinking about, perhaps you are correct that you should issue notice and hearing in every case to protect all the parties concerned.


MR. MACEY: I might point out that we have hashed this matter over hours and hours at a time for the last thirty days. We have discussed a number of things that you have brought up today and I think it is a healthy situation to discuss these things, but, as to how far we should go, I believe that is, of course, up to the Commission. I do want you to understand, and everyone to understand that the Commission staff's ideas are not necessarily ours, we are not bound by them and you are certainly not bound by any 3735 feet. You have got your rights just like anything else.

Does anyone have anything further in this case? If not we will take the case under advisement.

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

I, ADA DEARNLEY, 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 notarial  
 seal this 6th day of March, 1955.

  
 Notary Public, Court Reporter

My Commission Expires:

June 19, 1955

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REFERENCE N° A 3271 -D

<div style="display: flex; justify-content: space-between;"> <span style="font-size: 1.5em; font-weight: bold;">LANE</span> <span style="text-align: center;">RADIOACTIVITY LOG</span> <span style="font-size: 1.5em; font-weight: bold;">WELLS</span> </div> <div style="text-align: center; margin-top: 5px;">COMPANY</div>				FILE NO									
Location of Well	COMPANY: HUMBLE OIL AND REFINING CO. WELL: STATE P NO. 1 FIELD: MONUMENT COUNTY: LEA STATE: N.M. LOCATION: 660' PS & W LINES SEC. 17 - T 20 S - R 37 E	COMPANY: HUMBLE OIL & REFINING CO. WELL: STATE P NO. 1 FIELD: MONUMENT COUNTY: LEA LOCATION: STATE: N.M.											
LOG MEAS. FROM TOP BRADEN HEAD + 10'	ELEV. 3511.1'												
ORIG. MEAS FROM: TOP BRADEN HEAD + 10'	ELEV. 3511.1'												
PERM. DATUM BRADEN HEAD	ELEV. 3531.1'												
TYPE OF LOG RUN NO DATE TOTAL DEPTH (DRILLER) RACK EFFECTIVE DEPTH (DRILLER) TOP OF LOGGED INTERVAL BOTTOM OF LOGGED INTERVAL TYPE OF FLUID IN HOLE FLUID LEVEL MAXIMUM RECORDED TEMP NEUTRON SOURCE STRENGTH & TYPE SOURCE SPACING - IN LENGTH OF MEASURING DEVICE - IN O.D. OF INSTRUMENT - IN TIME CONSUMED - HOURS LOGGING METHOD STATISTICAL EVALUATION SENSITIVITY REFERENCE RECORDED BY WITNESSED BY	GAMMA RAY ONE O.W. 8-3-54 3855' 3855' SURFACE 3812' WATER 36" 3 5/8" 4.0 20 - 40 274 SCHLOTTERBACK SHERRILL	NEUTRON ONE O.W. 8-3-54 3855' 3855' SURFACE 3855' WATER 1650' 600 N 8.25" 9.1" 3 5/8" 3.2 20 - 40 275 SHERRILL	RECORDED SIMULTANEOUSLY										
CASING RECORD													
RUN NO. 1 1 1 1	BIT SIZE 12 1/2" 8 3/4" 6 3/4" 4 3/4"	CASING WT. - LB 10 3/4" 7 7/8" 5 1/2" O.H.	<table style="width: 100%; border-collapse: collapse;"> <tr> <th style="text-align: left; border-bottom: 1px solid black;">FROM WELL RECORD</th> <th style="text-align: left; border-bottom: 1px solid black;">FROM R A LOG</th> </tr> <tr> <td style="border-bottom: 1px solid black;">SURF. TO 181'</td> <td style="border-bottom: 1px solid black;">SURF. TO 181'</td> </tr> <tr> <td style="border-bottom: 1px solid black;">SURF. TO 1119'</td> <td style="border-bottom: 1px solid black;">SURF. TO 1119'</td> </tr> <tr> <td style="border-bottom: 1px solid black;">SURF. TO 3727'</td> <td style="border-bottom: 1px solid black;">SURF. TO 3723'</td> </tr> <tr> <td style="border-bottom: 1px solid black;">TO 3855'</td> <td style="border-bottom: 1px solid black;">TO 3857'</td> </tr> </table>	FROM WELL RECORD	FROM R A LOG	SURF. TO 181'	SURF. TO 181'	SURF. TO 1119'	SURF. TO 1119'	SURF. TO 3727'	SURF. TO 3723'	TO 3855'	TO 3857'
FROM WELL RECORD	FROM R A LOG												
SURF. TO 181'	SURF. TO 181'												
SURF. TO 1119'	SURF. TO 1119'												
SURF. TO 3727'	SURF. TO 3723'												
TO 3855'	TO 3857'												
REMARKS OR OTHER DATA													
GAMMA RAY		NEUTRON											



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REFERENCE N° A 3135 -C

**SCHLUMBERGER WELL SURVEYING CORPORATION**  
 HOUSTON, TEXAS  
 SIMULTANEOUS  
**Gamma Ray-Neutron**

FIELD or LOCATION: EUMONT  
 WELL: SHELL STATE # 6  
 COMPANY: EL PASO NATURAL GAS CO.

COMPANY EL PASO NATURAL GAS COMPANY  
 WELL SHELL STATE # 6

FIELD EUMONT  
 LOCATION SEC. 32-205-37E

COUNTY LEA  
 STATE NEW MEXICO

Location of Well  
 1980' f S&E/L  
 Sec. 32-205-37E

GRN (SG)

Elevation: D.F. \_\_\_\_\_  
 K.B. \_\_\_\_\_  
 or G.L. 3524

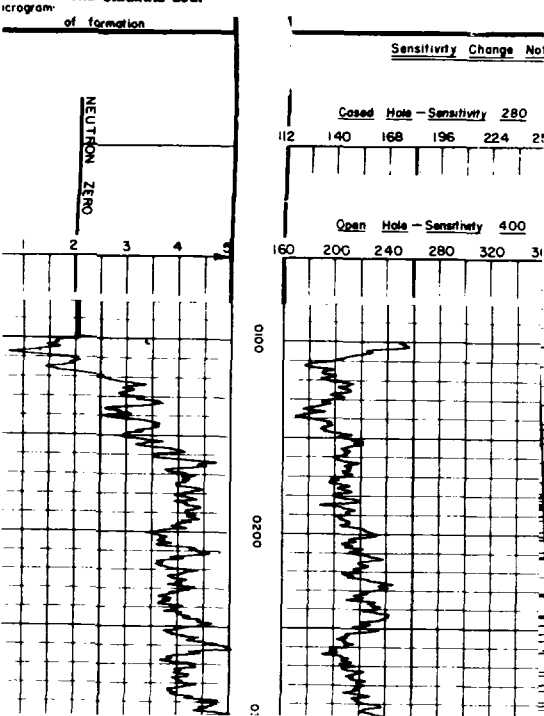
FILING No. \_\_\_\_\_

RUN NO.	LOG	DATE	TIME	LOGGERS
1	6-24-54			
2	8-24-54			
3	8-24-54			
4	8-24-54			
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98	8-24-54			
99	8-24-54			
100	8-24-54			

REMARKS: 1762-Hobbs Reinders

GAMMA RAY CALIBRATION - 860 - 5138 - 200 c.p.s. - 200 Divisions - 200 Sw  
 NEUTRON CALIBRATION - 5138 - 240 c.p.s. - 100 Divisions - 400 Sens. Col  
 RECORDING SPEED - (100 to 2400 - 4000 fph) - (2400 to 3495 - 2000 fph)

**THIS IS NOT A COMPLETE REPRODUCTION OF THE ORIGINAL LOG.**



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 Dallas 1, Texas

REFERENCE N° A 2933 -D

**LANE RADIOACTIVITY LOG WELLS COMPANY**

Location of Well

COMPANY: AMERADA PET. CORP.  
 WELL: AMERSON NO. 3  
 FIELD: MONUMENT  
 COUNTY: LEA STATE: N. MEX.  
 LOCATION: 2310' FSL & 1690' FSL OF SECTION 8, 20-8, 37-8

D. F. ELEV. 3520

LOG MEAS. FROM KELLY DRIVE BUSHING ELEV.  
 DRUG MEAS. FROM KELLY DRIVE BUSHING ELEV.  
 PERM DATUM BRADEN HEAD ELEV.

TYPE OF LOG	GAMMA RAY	NEUTRON
RUN NO.	ONE-24	ONE-24
DATE	3-7-54	3-7-54
TOTAL DEPTH (DRILLER)	5720	5720
EFFECTIVE DEPTH (DRILLER)	5720	5720
TOP OF LOGGED INTERVAL	5711	5721
BOTTOM OF LOGGED INTERVAL	5720	5721
TYPE OF FLUID IN HOLE	WUD	WUD
FLUID LEVEL	322	322
MAXIMUM RECORDED TEMP.	6000	6000
NEUTRON SOURCE STRENGTH & TYPE	3.75	3.75
SOURCE SPACING - IN.	36"	36"
LENGTH OF MEASURING DEVICE - IN.	3 5/8"	3 5/8"
O.D. OF INSTRUMENT - IN.	6.25	6.25
TIME CONSTANT - SECONDS	20-40	20-40
LOGGING SPEED FT. MIN.	27A	27A
STATISTICAL VARIATION - IN.	KELLY	KELLY
SENSITIVITY REFERENCE	BLOUNT	BLOUNT
RECORDED BY		
WITNESSED BY		

CASING RECORD

RUN NO. - BIT SIZE	CASING WT. - LB.	FROM WELL RECORD	FROM R/A LOG
ONE - 13 3/8"		SURFACE TO 225	SURFACE TO 225
ONE - 11 5/8"		SURFACE TO 2900	SURFACE TO 2900
ONE - 9 5/8"		SURFACE TO 5700	SURFACE TO 5720
		TO	TO
		TO	TO

2300

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REFERENCE N° A 2947 -C

# LANE RADIOACTIVITY LOG WELLS COMPANY

COMPANY: THE TEXAS COMPANY  
WELL: STATE OF N. MEX. T-1 LIEU NO. 26  
FIELD: ELMONT  
COUNTY: LEA STATE: N. MEX.  
LOCATION: NEAR THE CENTER OF NW 1/4  
OF SECTION 20, T-20-S, R-37-E

LOG MEAS. FROM TOP ROTARY TABLE ELEV. 3529  
DRLG. MEAS. FROM TOP ROTARY TABLE ELEV. 3529  
PERM. DATUM GROUND LEVEL ELEV. 3520

TYPE OF LOG	GAMMA RAY	NEUTRON
RUN NO.	ONE-ON	ONE-ON
DATE	3-11-54	3-11-54
TOTAL DEPTH (DRILLER) FEET	3410	3410
EFFECTIVE DEPTH (DRILLER) FEET	3410	3410
TOP OF LOGGED INTERVAL	SURFACE	SURFACE
BOTTOM OF LOGGED INTERVAL	3411	3411
TYPE OF FLUID IN HOLE	NEO	NEO
FLUID LEVEL	FULL	FULL
MAXIMUM RECORDED TEMP.		6000
NEUTRON SOURCE STRENGTH & TYPE		8.25
SOURCE SPACING - IN.		9"
LENGTH OF MEASURING DEVICE - IN.	36"	3 5/8"
O.D. OF INSTRUMENT - IN.	3 5/8"	3 5/8"
TIME CONSTANT - SECONDS	6.25	4.0
LOGGING SPEED FT./MIN.	20-40	20-40
STATISTICAL VARIATION - IN.		
SENSITIVITY REFERENCE	274	275
RECORDED BY	SCHLOTTERBACK	SCHLOTTERBACK
WITNESSED BY	SWEITZER	SWEITZER

## CASING RECORD

RUN NO.	BIT SIZE	CASING	WT.-LB.	FROM WELL RECORD	FROM R/A LOG
ONE	11"	8 5/8"		SURFACE TO 1110	SURFACE TO 1098
ONE	6 3/4"	5 1/2"		SURFACE TO 3410	SURFACE TO 3413
				TO	TO
				TO	TO

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REFERENCE N° A 2867 -B

# LANE RADIOACTIVITY LOG WELLS COMPANY

Location of Well  
COMPANY: AMERADA PET. CORP.  
WELL: STATE "W" NO. 2  
FIELD: ELMONT  
COUNTY: LEA STATE: N. MEX.  
LOCATION: 1980' FNL & 1980' FEL OF  
SECTION 30, T-20-S, R-37-E

LOG MEAS. FROM OLD DERRICK FLOOR ELEV. 3538  
DRLG. MEAS. FROM OLD DERRICK FLOOR ELEV. 3538  
PERM. DATUM GROUND LEVEL ELEV. 3528

TYPE OF LOG	GAMMA RAY	NEUTRON
RUN NO.	ONE-ON	ONE-ON
DATE	2-5-54	2-5-54
TOTAL DEPTH (DRILLER) WIRE LINE	3888	3888
EFFECTIVE DEPTH (DRILLER)	3888	3888
TOP OF LOGGED INTERVAL	SURFACE	SURFACE
BOTTOM OF LOGGED INTERVAL	3878	3888
TYPE OF FLUID IN HOLE	OIL	OIL
FLUID LEVEL	1970'	1970'
MAXIMUM RECORDED TEMP.		6000
NEUTRON SOURCE STRENGTH & TYPE		8.25
SOURCE SPACING - IN.		9.1"
LENGTH OF MEASURING DEVICE - IN.	36"	3 5/8"
O.D. OF INSTRUMENT - IN.	3 5/8"	3 5/8"
TIME CONSTANT - SECONDS	6.25	4.0
LOGGING SPEED FT./MIN.	20-40	20-40
STATISTICAL VARIATION - IN.		
SENSITIVITY REFERENCE	274	275
RECORDED BY	SCHLOTTERBACK	SCHLOTTERBACK
WITNESSED BY	SMITH	SMITH

RUN NO.	WT. SIZE	CASING	WT.-LB.	FROM WELL RECORD	FROM R/A LOG
ONE	17"	13 3/8"		SURFACE TO 210	SURFACE TO 212
ONE	11"	8 5/8"		SURFACE TO 2555	SURFACE TO 2560
ONE	7 7/8"	6 5/8"	20"	SURFACE TO 3710	SURFACE TO 3710
ONE	7 7/8"			3710 TO 3888	3710 TO 3890
				TO	TO

REMARKS OR OTHER DATA

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REFERENCE No A 2925 -E

# WELLS

## RADIOACTIVITY LOG

### COMPANY

LOCATION OF WELL	COMPANY: STANGLING OIL & GAS COMPANY	FILE NO.
WELL: O. J. OILWELL # 4	WELL: O. J. OILWELL # 4	WELL: O. J. OILWELL # 4
FIELD: MONUMENT	FIELD: MONUMENT	FIELD: MONUMENT
COUNTY: LEA	COUNTY: LEA	COUNTY: LEA
STATE: N.MEX.	STATE: N.MEX.	STATE: N.MEX.
LOCATION: 340' IN A M. LINE OF SECTION 22, T.20S-R.27E	LOCATION: 340' IN A M. LINE OF SECTION 22, T.20S-R.27E	LOCATION: 340' IN A M. LINE OF SECTION 22, T.20S-R.27E

G MEAS. FROM MONUMENT ELEV. 3554  
LG. MEAS. FROM MONUMENT ELEV. 3554  
IM. DATUM MONUMENT ELEV. 3554

NO. OF LOG	DATE	TIME	RECORDED SIMULTANEOUSLY
1	3-30-54	10:00	
2	3-30-54	10:00	
3	3-30-54	10:00	
4	3-30-54	10:00	
5	3-30-54	10:00	
6	3-30-54	10:00	
7	3-30-54	10:00	
8	3-30-54	10:00	
9	3-30-54	10:00	
10	3-30-54	10:00	
11	3-30-54	10:00	
12	3-30-54	10:00	
13	3-30-54	10:00	
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31	3-30-54	10:00	
32	3-30-54	10:00	
33	3-30-54	10:00	
34	3-30-54	10:00	
35	3-30-54	10:00	
36	3-30-54	10:00	
37	3-30-54	10:00	
38	3-30-54	10:00	
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99	3-30-54	10:00	
100	3-30-54	10:00	

N. NO.	WT. SIZE	CASING	WT. - LB.	FROM WELL RECORD	FROM R/A LOG
1	2 1/2"	5 1/2"	3766	SURFACE TO 216	TO 216
2	2 1/2"	5 1/2"	3766	SURFACE TO 1213	TO 1213
3	2 1/2"	5 1/2"	3766	SURFACE TO 3766	TO 3766
4	2 1/2"	5 1/2"	3766	SURFACE TO 3766	TO 3766

REMARKS OR OTHER DATA

SCHLUMBERGER WELL SURVEYING CORPORATION HOUSTON, TEXAS	
Electrical Log	
COMPANY AMERADA PETR. CORP.	Location of Well 2310' f 58M/L Sec. 8-20S-37E
WELL T. ANDERSON # 4	ES-GRL (ML)
FIELD MONUMENT	Elevation: D.F.: 3557 K.B.: or G.L.:
LOCATION SEC. 8-20S-37E	FILING No.
COUNTY LEA	
STATE NEW MEXICO	

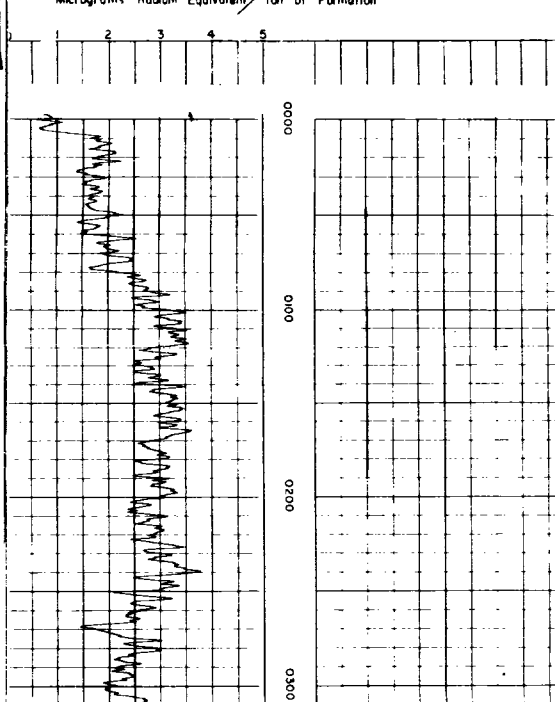
RUN No.	6-14-54
Date	6-14-54
First Reading	3707
Last Reading	2528
Feet Measured	1179
Csg. Schlum.	2528
Csg. Driller	2530
Depth Reached	3710
Bottom Driller	3710
Depth Datum	KB 10.7' Adv. GL
Mud Nat.	Gei-Chemicals
Density	9.1
Viscosity	34
Resist.	27 @ 70 F
Res. BHT	22 @ 98 F
pH	6.1
Wtr. Loss	22 CC 30 min
Max. Temp. F	98
Bit Size	3 1/4"
Speds - AM	10
A	32" LS
AO	12
Opr. Rig Time	3 Hrs.
Truck No.	1762-ROADS
Recorded By	R. J. JONES
Checked By	
REMARKS	Adjusted to driller's TD at operators request.

THIS IS NOT A COMPLETE REPRODUCTION OF THE ORIGINAL LOG.

SPONTANEOUS-POTENTIAL millivolts	DEPTHS	RESISTIVITY -ohms. m <sup>2</sup> /m
20	2 1/100	10" Normal 40
Radioactivity Increases		400
		32" LS Lateral 25

GAMMA RAY CALIBRATION - (Two Detectors)  
B.A.O. SL38 - 160 cps 100 Divisions 200 Sensitivity cal

SCALE OF LOG  
Micrograms Radium Equivalent / Ton of Formation



Reproduced By  
West Texas Electrical Log  
1305 Commerce Street  
Dallas 1, Texas

REFERENCE No A 2971

# WELLS

## RADIOACTIVITY LOG

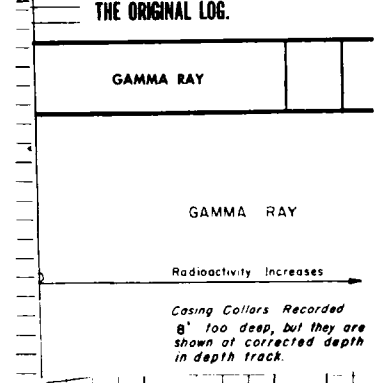
### COMPANY

LOCATION OF WELL	COMPANY STANGLING OIL AND GAS CO.	FILE NO.
WELL: GILLULLY B # 6	WELL: GILLULLY B # 6	WELL: GILLULLY B # 6
FIELD: MONUMENT	FIELD: MONUMENT	FIELD: MONUMENT
COUNTY: LEA	COUNTY: LEA	COUNTY: LEA
STATE: N.MEX.	STATE: N.MEX.	STATE: N.MEX.
LOCATION: SEC. 21-20S-3	LOCATION: SEC. 21-20S-3	LOCATION: SEC. 21-20S-3

NO. OF LOG	DATE	TIME	RECORDED SIMULTANEOUSLY
1	3-30-54	10:00	
2	3-30-54	10:00	
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REMARKS

THIS IS NOT A COMPLETE REPRODUCTION OF THE ORIGINAL LOG.



REPRODUCED BY  
West Texas Electrical Log Service  
1305 COMMERCE STREET  
DALLAS 1, TEXAS

REFERENCE N° A 2630 -E

**SIMULTANEOUS RADIATION LOG**

PERFORATING GUNS ATLAS CORP.  
NATURAL GAMMA RADIATION INDUCED NEUTRON RADIATION

LOCATION: 10' F.W.L. 180' F.W.L. C. 35 OS-R37E G NO. 6575

COMPANY: MORRIS R. ANTWEIL  
WELL: STANLEY FEDERAL #1  
FIELD: UNDESIGNATED GAS  
COUNTY: LEA STATE: NEW MEXICO  
SECTION: 35 TOWNSHIP: 20S RANGE: 37E

MEASURED FROM: ROTARY TABLE ELEVATION: 3492  
LOG MEAS. FROM: SAME ELEVATION: 3492

PERMANENT ROTARY TABLE  
DATE: 9-25-1953  
AL. DEPTH (DEGLASS): 3660  
ACTIVE DEPTH P. & A. C.: 3660  
TOP OF LOGGED INTERVAL: SURFACE  
TYPE OF FLUID IN HOLE: SURFACE  
IS LEVEL: 3 5/8  
MINIMUM RECORDED TEMP.: 3 5/8  
O.D. OF INSTRUMENT — INCHES: 7-5  
CONSTANT — SECONDS: 15-60  
BANG SPEED — FPM/MINUTE: 15-60  
TEXTUAL VARIATION — INCHES: 15-60

RECORDED BY: YOUNG  
WITNESSED BY: ADAMS

CASING RECORD  
H. NO. 8 5/8  
E 5 1/2  
WEIGHT, LB. SURFACE TO 212  
INTERVAL SURFACE 3524

OPEN HOLE RECORD  
BIT SIZE, IN. 4 3/4  
INTERVAL 3524 TO 3660

REMARKS AND OTHER DATA  
RESET TO DRILLER'S DEPTH BY REQUEST OF WITNESS

REPRODUCED BY  
West Texas Electrical Log Service  
1305 COMMERCE STREET  
DALLAS 1, TEXAS

REFERENCE N° A 2359 -E

# LAINE RADIOACTIVITY WELLS COMPANY

Location of Well: COMPANY: MORRIS R. ANTWEIL  
WELL: PHILLIPS HOOPER NO. 1  
FIELD: LEA COUNTY W/O  
COUNTY: LEA STATE: N.M.  
LOCATION: 660' FSL & 1980' FSL OF SECTION 27, 20S, 37E.

D.P. - 3503' ELEV. 3505'  
LOG MEAS. FROM KELLY DRIVE BUSHING ELEV. 3506'  
DRIG. MEAS. FROM KELLY DRIVE BUSHING ELEV. 3506'  
PERM. DATUM GROUND LEVEL ELEV. 3496'

FILE NO. COMPANY: MORRIS R. ANTWEIL  
WELL: PHILLIPS HOOPER NO. 1  
FIELD: LEA COUNTY W/O  
COUNTY: LEA STATE: N.M.

TYPE OF LOG	GAMMA RAY	NEUTRON
RUN NO.	1	1
DATE	4-23-55	4-23-55
TOTAL DEPTH (DRILLER) BACK	3828'	3828'
EFFECTIVE DEPTH (DRILLER)	3828'	3828'
TOP OF LOGGED INTERVAL	SURFACE	SURFACE
BOTTOM OF LOGGED INTERVAL	3816'	3828'
TYPE OF FLUID IN HOLE	MUD	MUD
FLUID LEVEL		FULL
MAXIMUM RECORDED TEMP.		600E
NEUTRON SOURCE STRENGTH & TYPE		8.25
SOURCE SPACING — IN.	34	2
LENGTH OF MEASURING DEVICE — IN.	3 5/8	3 5/8
O.D. OF INSTRUMENT — IN.	5	3.2
TIME CONSTANT — SECONDS	20-50	20-50
LOGGING SPEED FT. MIN.		
STATISTICAL VARIATION — IN.		
SENSITIVITY REFERENCE	274	275
RECORDED BY	KELLY	KELLY
WITNESSED BY	ADAMS	ADAMS

CASING RECORD  
RUN NO. BIT SIZE CASING WT.-LB. FROM WELL RECORD FROM R/A LOG  
1 12 3/4 SURF. TO 212 SURF. TO 210'  
1 5 1/2 15' SURF. TO 3485' SURF. TO 3687'  
1 4 3/4 3685' TO 3828' 3687' TO 3828'

