

BEFORE THE  
OIL CONSERVATION COMMISSION  
SANTA FE, NEW MEXICO

IN THE MATTER OF:

CASE 278

TRANSCRIPT OF HEARING

MAY 13, 1959

DEARNLEY - MEIER & ASSOCIATES  
GENERAL LAW REPORTERS  
ALBUQUERQUE NEW MEXICO  
Phone CHapel 3-6691

BEFORE THE  
OIL CONSERVATION COMMISSION  
SANTA FE, NEW MEXICO  
MAY 13, 1959

-----  
IN THE MATTER OF: :

CASE 278 Application of Farm Chemical Resources De- :  
velopment Corporation and National Potash :  
Company for an extension of the Potash-Oil :  
Area as set forth in Order R-111-A. Appli- :  
cants, in the above-styled cause, seek an :  
order extending the Potash-Oil Area as de- :  
fined in Order R-111-A to include additional: :  
acreage in Townships 19, 20, and 21 South, :  
Ranges 29, 31, and 32 East, Lea and Eddy :  
Counties, New Mexico. :

-----  
BEFORE:

Mr. Murray Morgan  
Gov. John Burroughs  
Mr. A. L. Porter

T R A N S C R I P T    O F    P R O C E E D I N G S

MR. PORTER: We will proceed next to Case 278.

MR. PAYNE: Case 278. Application of Farm Chemical Resources Development Corporation and National Potash Company for an extension of the Potash-Oil Area as set forth in Order R-111-A.

MR. PORTER: Before we call for appearances in Case 278, I would like to announce that this is the last case that the Commission will start this afternoon. Other cases will be heard tomorrow at the Highway Commission Building.

At this time I would like to have appearances in Case 278.

MR. LUSK: T. E. Lusk of Reese, McCormick, Lusk &

Payne, appearing for Farm Chemical Resources Development Corporation.

MR. NEAL: C. M. Neal of Neal & Neal, appearing for National Potash Company.

MR. PAYNE: Mr. Lusk and Mr. Neal, how would you like to proceed here? As I understand it, each of the applicants has different acreage that they want included, so one of you will go first, and then the other one, is that how you are going to do it?

MR. LUSK: Yes. Mr. Hicks will be a witness for the applicant, Farm Chemical Resources Development Corporation.

(Witness sworn)

CHARLES HICKS

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

DIRECT EXAMINATION

BY: MR. LUSK:

MR. LUSK: May it please the Commission, the application which has been filed seeks no amendment or modification of Order No. R-111-A of this Commission with the exception of the inclusion of the additional acreage which is contained in the application, and which will be identified on the blown-up map which is a blow-up of the Exhibit attached to the application filed in connection with this case.

MR. PORTER: In other words, if the area is extended as the applicant requests, then the rules -- special rules included

in R-111-A would apply to this extended area?

MR. NEAL: That is true as to the Potash Company too.

Q (By Mr. Lusk) You are Charles Hicks, Carlsbad, New Mexico?

A Yes, sir.

Q An employee of Farm Chemical Resources Development Corporation, is that correct?

A Right.

Q That is a New Mexico corporation?

A Delaware corporation.

Q It is presently engaged in the preparation of or getting ready to produce potash from the leases that it has obtained in the area --

A Yes, sir.

Q -- shown here?

A Yes, sir.

Q We have tacked up a map there, Mr. Hicks, on the board. Would you show to the Commission the acreage -- first show the area that is included in the present potash oil lease area -- potash oil area.

A The red outlined area is the presently designated potash-oil area, according to Oil Conservation Commission Order R-111-A.

Q Now, the area which is in the pink represents what?

A That's our Federal lease.

Q Those are Federal leases that are held by your cor-

poration as lessee?

A That's right.

Q What is represented by the area which is shown in yellow?

A The yellow are State leases.

Q I see. Now, would you point out to the Commission the area which is sought to be included in the potash oil area?

A The dashed area here is what we are attempting to have included.

Q All of that area is contiguous to the present potash oil area?

A Yes, sir.

Q And is all of that land leased by your corporation?

A No, sir. Here, this area that isn't shaded but it is crosshatched is State land; belongs to United States Potash Company.

Q Leased by the United States Potash Corporation?

A Yes, sir. And on this side, this is Federal land that is not leased.

Q Why is it that you are asking that to be included in the area if it is not in your lease?

A We have offset holes or adjacent holes here that show commercial, and also on this side that show commercial ore.

Q So it is your intention, if it can be done, to produce potash from that area, is that correct?

A Yes, sir.

Q Now, in connection with the application that you filed, you have taken certain core tests, have you not?

A Yes, sir.

Q Those core tests, would you point them out, those that are pertinent to this area, and identify them by number, please?

A No. 59, 71, 72, 73, 67, 43, 52, 69, 66, 76, 77, 78, and 79.

Q Those have been -- core tests have been made between 1954 and 1957, is that correct? Date of completion?

A Yes, sir.

Q All right. Now, of those holes, were there some that did not show the presence of commercial potash?

A We had some holes that only showed mineralization, such as -- 71, 43, 76, 69, and 77 showed mineralization, but did not show commercial ore.

Q Now, would you point out to the Commission the location of the holes that core tests did reflect to have commercial ores?

A That had commercial ore, in 59, 72, 73, 52, 66, 78, and 79.

Q And those are intended to be mined by your company in connection with an orderly program?

A Yes, sir.

Q Your company has not yet begun production of potash

from any of its leases, has it?

A No, we haven't.

Q And -- however, it is your intention to begin that within a reasonable period of time?

A Yes, sir. We have one shaft down, and we plan to have a large scale pilot plant in construction this year.

Q It is in connection with the orderly development of your mining program that you seek to have these lands included and be afforded the protection that is given by Order R-111-A, is that correct?

A Yes.

Q The tests that were made, were they all under your supervision, Mr. Hicks?

A Yes, sir.

Q And the analysis of the ores by which you determined whether or not there was commercial potash, was that done under your supervision or at your request?

A At my request by competent chemists.

Q Some in the employ of others, and some in the employ of your company, is that correct?

A That is right.

Q They did disclose -- those reports did disclose the presence of commercial potash all the way?

A Yes, sir.

Q And you have prepared here, as Exhibit No. 1, a history

of the shot holes from which the core tests were taken which relate to this particular application, marked Exhibit 1, is that correct?

A Yes, sir.

Q And marked Exhibit 2, you have shown the results from the holes which you have mentioned as showing commercial potash, commercial ore as being present. You have marked that and shown what the chemical result -- chemical analysis result?

A That's true.

Q And that was compiled by you from information which you had and which you obtained from chemists, is that true?

A That's true.

MR. LUSK: We ask to introduce Exhibits 1 and 2, sir.

MR. PORTER: Are these all the Exhibits that you will offer?

MR. LUSK: They are all the Exhibits beyond the Exhibit which is attached to the application, Mr. Porter.

MR. PORTER: Is there objection to the admission of these Exhibits?

MR. NEAL: No objection.

MR. PORTER: It will be admitted in the record.

Q (By Mr. Lusk) The numbers of the holes which appear on Exhibits 1 and 2, which have just been introduced, also appear upon the Exhibit attached to the application, which is a small map showing the information which is on this larger map from which

you have been testifying, is that correct?

A That's true.

Q And you can find the hole numbers and the hole locations on the map, which is attached to the application?

A Yes, sir.

MR. LUSK: I would like to ask at this time, Mr. Porter, if it would be required to introduce the map again since it is attached to the application?

MR. PORTER: Since it is attached to the application and filed with the Commission, it will not be necessary for you to do so.

MR. LUSK: All right, sir.

Q (By Mr. Lusk) The lands which are sought to be included -- again, I would like to ask a question of the Commission's procedure for the purpose of saving time. The map to which was attached the application, shows the exact description of the acreage sought to be included. Would you wish to have these witnesses have that read into the record, or will it be satisfactory just to have it on the application?

MR. PAYNE: Are you sure that the acreage listed in the application, Mr. Lusk, is the entire acreage that you wish to be included?

MR. LUSK: Yes, sir.

MR. PORTER: Mr. Payne, off the record.

(Discussion off the record)

Q The description of the lands which by virtue of these tests you made you seek to be brought into the potash area, include the following: I will read them off, and I wish you would answer if that is correct or incorrect.

All of this is lying in Township 21 South, Range 31 East, in Eddy County, New Mexico. Section 10: the E/2, consisting of 320 acres; Section 11: All, consisting of 640 acres; Section 12: SW/4 of the SW/4, 40 acres; Section 13: the W/2, consisting of 320 acres; Section 14: All, 640 acres; Section 15: the E/2, 320 acres; Section 16: W/2 SW/4, 80 acres; Section 17: All, 640 acres; Section 18, SE/4 NE/4, SE/4 SE/4 SW/4, 240 acres; Section 19, All; Section 20: All, both consisting of 640 acres. Section 21: NW/4 NW/4, S/2 NW/4 and SW/4, consisting of 280 acres; Section 22: the E/2, consisting of 320 acres; Section 23: the N/2, consisting of 320 acres; Section 24: the NW/4, consisting of 180 acres; Section 27: E/2, E/2 and the NW/4 NE/4, consisting of 200 acres, and Section 34: E/2 NE/4 and SW/4 NE/4, consisting of 120 acres, for a total acreage sought of 5,940 acres.

Is that the area which you seek to have included within the order?

A Yes, sir, it is.

Q You prepared and submitted to -- in accordance with the rules of the Commission -- to the Commission a list of all persons holding State and Federal leases, on the land sought to be included, is that correct?

A Yes, sir.

Q And that is from the information obtained from the State Land office, from the Federal Land office, is that correct?

A Yes, sir.

Q All of this land is State or Federal, is that correct?

A That is true.

Q You have read the application which has been filed?

A Yes, sir.

Q And I would ask you if allegations contained therein -- the statements contained therein, whether covered by this examination or not, are true and correct to the best of your knowledge?

A They are.

Q All right, sir.

MR. LUSK: That's all of this witness.

MR. PORTER: Any questions of the witness?

MR. PAYNE: Yes, sir.

CROSS EXAMINATION

BY MR. FISCHER:

Q I would like to ask on this acreage that you want included into R-111-A. Do you have knowledge of any oil wells that are now in existence on that acreage, on any of that acreage?

A There are none.

Q There are none?

A That is in operation. There are two abandoned holes there.

MR. FISCHER: Thank you very much.

MR. PORTER: Mr. Payne?

QUESTIONS BY MR. PAYNE:

Q Mr. Hicks, I believe you testified that the potash in all of this acreage is, in your opinion, of commercial quantity, is that right, but that there is commercial quantity potash in this entire acreage?

A There are areas in there that are barren, probably, and some that have below commercial mineralization.

Q Would you hazard an estimate as to the average depth or average thickness of the potash bearing area?

A Four and a half feet, probably.

Q How much was that, sir?

A Four and a half feet.

MR. PAYNE: Thank you. That's all.

QUESTIONS BY MR. PORTER:

Q You testified that there might be barren areas or areas of non-commercial ore, but apparently, you believe that it will be necessary to take in all of the acreage requested here in order to get all of the commercial ore in the area?

A Yes, sir, true.

QUESTIONS BY MR. MORGAN:

Q This potash lease then is not in conflict with the area sought to be included, other than that which you indicated, and which is not to be leased for potash?

not be leased for potash?

A There may be some State land that is not leased in there. I am not sure, but I believe so.

Q You determined the extent of the oil and gas leases in the State sections or the Federal sections from the Federal books?

MR. LUSK: Mr. Chairman, the information is contained on the Exhibit attached to the application, which he did not have.

A There are -- there is some open land. The SW/4 SW/4 of Section 17 is opened; it is State land.

Q (By Mr. Morgan) It is what kind of a lease?

A That's oil and gas, and also the SE of the NW, Section 20. I believe that's all, just those two.

MR. PORTER: Anyone else have a question of the witness?

QUESTIONS BY MR. NUTTER:

Q Mr. Hicks, it lingers in my memory that when the potash oil area was originally established and defined by the Commission that a certain cutoff point of so many feet of thickness and a certain percentage of solenoid or other ores was the cutoff point, and that was the defined cutoff area. This area that you ask as an extension today conforms with that previous criteria?

A That's the same feet we use, forty-four feet of eight percent K<sub>2</sub>O.

Q And this extension today is the same cutoff point

that was previously established?

A Yes, sir, it is the same.

MR. PORTER: Any further questions? The witness may be excused.

MR. LUSK: Can I ask one question?

MR. PORTER: Yes, sir.

REDIRECT EXAMINATION

BY MR. LUSK:

Q With reference to the questions that have been asked about the areas that are barren in potash, it is not unusual to hit a barren area, but you have to go through it to get to a pay lode?

A That's true.

Q And the area that you have developed on the fringes demonstrated on the map and Exhibit do contain commercial ores, in your opinion, conforming to the standards set up at the time of this previous hearing?

A Yes, sir.

MR. LUSK: That's all.

MR. PORTER: If there are no further questions, the witness may be excused.

(Witness excused)

MR. NEAL: Mr. Billman, will you be sworn, please, sir?

(Witness sworn)

R. E. BILLMAN,

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

DIRECT EXAMINATION

BY MR. NEAL:

Q State your name, please.

A My name is R. E. Billman.

Q What do you do, Mr. Billman?

A I am a mining engineer for National Potash Company.

Q Are you registered in New Mexico?

A No, sir.

Q What college did you graduate from?

A I graduated from the University of Idaho.

Q National Potash has made an application for the inclusion in the Potash Area, as defined by R-111-A, of land in Township 19 South, Range 31 East; Section 36, N/2 and the SW/4. Township 20 South, Range 31 East, Section 1, W/2, W/2. Section 2, All. Section 3, All. Section 11, N/2 and W/2 SW/4. Section 14, W/2 and W/2 NW/4. Township 19 South, Range 32 East; Section 33 N/2 and W/2, SE/4. Section 34, N/2; Township 20 South, Range 32 East, W/2 NW/4; Section 5, N/2, SW/4, N/2, SE/4; Section 6, NE/4 N/2 SE/4 and SE/4 SE/4; Township 20 South, Range 29 East, Section 5, S/2 S/2.

Are you familiar with that application, and does that correctly describe the land that you desire to have included in --

National Potash desires to have included in the Potash-Oil Area?

A Yes, sir.

( Whereupon, Exhibit No. 1 was  
marked for identification.)

Q I direct your attention to the map which has been identified as Exhibit 1, and ask you, first, in relation to the small area which appears on the right-hand side of the map. Is that in what you call the reserve area?

A Yes, sir, that's in what was established as the Government Potash reserve.

Q I believe, in order to explain the map -- the outline -- the lines marked red on the map are the lines for which an application for extension has been made?

A Yes, sir.

Q And they are the lands that we are seeking to have included in the Potash-Oil Area?

A Yes, sir.

Q Now, with respect to oil and gas leases on that land, has that been withdrawn by the Federal Government?

A Yes, sir, it has.

Q There are no leases on it?

A No, sir.

Q Has National Potash Company made core tests to determine whether or not the presence of commercial quantities of Potash exist on that area?

A Yes, sir. We drilled twelve holes.

Q Now, the holes are marked on the map, I believe, and those pertinent to the examination have the footage and Potash content, as shown by your tests, is that right?

A Right.

Q Were most of those run under your supervision?

A Yes, sir. In this Eddy County reserve area, they were all done under my supervision.

Q And who made the company mechanical tests on them?

A They were done by a chemist in our own company and by a chemist of our -- with which National Potash was involved.

Q Is the chemist for National Potash to be available as a witness, if necessary?

A Yes, sir.

Q Do those show the presence of commercial quantities of  $K_2O$  there?

A Yes, sir. The holes in question, some of them show commercial quantities, and the others are, show mineralized beds not quite commercial.

Q In your opinion, is the extension necessary to properly and orderly mine?

A Yes, sir.

Q Does National Potash have a lease?

A Yes, sir, it does.

Q I believe they are presently engaged in sinking a

shaft, an additional shaft in this same section, is that right?

A Actually, sinking hasn't started yet, but they are in the process of --

Q The contract has been signed?

A The contract has been signed, yes.

Q Now, on the other area, National Potash is in production, right?

A Yes, it is.

Q How long have they been in production?

A They have been in production since February, 1957.

Q And the square on the map is the site of the shaft from which you are producing ore?

A This patterned area here is the plat site area.

Q That is in Section --

A Section 18, --

Q Section 18, --

A -- 20, 32.

Q Now, the test holes that have been drilled in the areas for which extension is sought on this other part of the map, indicate the presence of Potash in commercial quantities in those areas?

A Yes, sir.

Q Those are limited on the map and show where commercial quantities exist?

A Yes.

Q What is the measuring stick you use for commercial quantity?

A We use the standard set forth for the -- we use four feet of fourteen percent  $K_2O$ .

Q In your opinion, all of this area from the examination that you made, have commercial quantities of Potash and minerals?

A The entire area, I can't say that it does contain commercial quantities of ore. However, the core tests which we have drilled and which have proven to include quantities of commercial ore, outline and delineate an area which we have taken under lease and maintained leases, and intend to mine in such a manner that these areas that would not be commercial you would have to have accessibility to the entire section in order to get all the commercial ore.

Q In your opinion, is it necessary for the safe and orderly mining of this area for the Potash mining oil area to be extended to include it?

A Yes, sir.

Q Does National Potash hold potash leases on the entire area?

A Yes, sir, they hold Federal and State leases.

Q And have they provided the Commission with a list of the owners of oil and gas leases?

A Yes, sir.

Q Do you know of any oil production now existing in that area?

A I know of two wells that are drilled in that area. I don't know whether or not they are producing at the present time.

MR. NEAL: That's all. We desire to introduce in evidence Exhibit 1.

MR. PORTER: Without objection, Exhibit 1, National Potash Company, will be admitted.

(Whereupon, National Potash Company's Exhibit 1 was received in evidence.)

MR. PORTER: Does anyone have a question of Mr. Billman?

CROSS EXAMINATION

BY MR. PAYNE:

Q Could you give us the location of those two oil wells in the area, sir?

A I cannot give you the exact location. I can point them out on the map to you.

Q All right, sir. Could you draw a circle in there with a pencil wherever they are, approximately?

A To the best of my knowledge, a well was drilled by the Leonard Oil Company in Section 34 of 19, 32, in the southern half of the Section, which was on the Potash lease. And another well was drilled by Texas Oil Company in, to the best of my knowledge, Section 25, which is outside of our lease area but within one mile of the area. However, I don't know whether or not either

of these wells are producing.

MR. NEAL: They were drilled some time ago, were they not?

A Yes, sir.

MR. PORTER: Does anyone else have a question? The witness may be excused.

(Witness excused)

MR. NEAL: That's all, unless the Commission desires us to put the chemist on.

MR. LUSK: A moment ago I failed to, in my search for speed, failed to qualify Mr. Hicks for the testimony which he gave. I would like to at this time.

MR. PORTER: Suppose you recall Mr. -- we will excuse this witness and call Mr. Hicks.

CHARLES HICKS

recalled as a witness, having been previously duly sworn, on oath, testified as follows:

DIRECT EXAMINATION (Continued)

By MR. LUSK:

Q Mr. Hicks, you previously stated that you were a geologist employed by the Farm Resources Development Corporation, is that correct?

A Yes, sir.

Q Would you state to the Commission what your background as a geologist is and your training and so on?

A Yes, sir. I graduated from Texas Technological College

in Lubbock in 1940 with a B. S. degree in geology. The same year I went to work for the International Minerals and Chemical Company, worked with them until 1952. I worked as junior engineer and geologist. While working as a geologist, I conducted explorations and calculations on ore reserves. At that time I went to work for this project that we are talking about now, which at that time was being operated by National Farmers Union. I conducted exploration and ore reserve calculations, worked for them until March of '55. Kerr McGee Oil Industries at that time became independent and took over as operators. I worked for them as a geologist until May of '56 doing the same type of work, and then Farm Chemical Resources Development Corporation was formed, and I was handed down to them as geologist. We continued our drilling and explorations and we are still in that process.

MR. LUSK: All right, sir. You have been connected with this development, in effect, since 1952, then, is that correct?

A That's right.

Q And you have conducted tests of this type both for International Minerals and Chemicals Corporation and for the other employers which you have detailed?

A That is true.

MR. LUSK: Any questions?

MR. PORTER: No, we have no questions. The witness' qualifications are acceptable to the Commission. Although Mr. Neal didn't request acceptance of his witness' qualifications, they are

noted in the record and are acceptable.

Anyone have any further statements to make in this case,  
any statements or comments? Take the case under advisement.



committee whose purpose would be to encourage co-operation between operators and livestock growers.

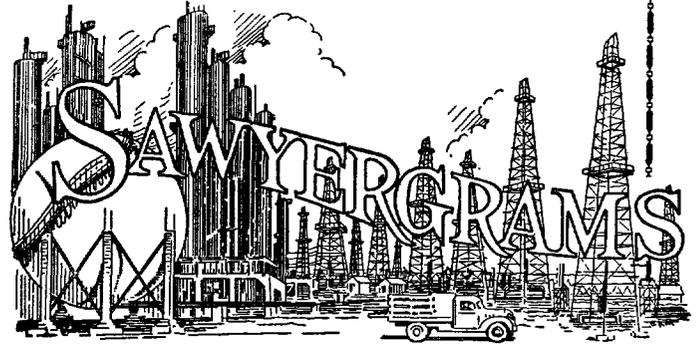
The Executive Committee of the Association has been sent details of the proposal and will make a decision in the near future whether or not the Association will participate in the effort.

### Association's New Location:

Offices of the Association have been moved from the Second to the Fifth Floor of the J. P. White Building. Room No. 508.

*Case 278*

## Petroleum Promotes Progress



Vol. 13

No. 3

MAY, 1951



### IN THIS ISSUE

Ad Valorem Taxation

Potash-Oil Operators, Eddy County

San Juan Basin

New Location



By  
Charles C. Loveless, Jr.,  
Executive Secretary  
New Mexico Oil & Gas Association  
Roswell, New Mexico

# SAWYERGRAMS

## Ad Valorem Taxation:

A meeting of the Ad Valorem Tax Committee was held at the Adolphus Hotel in Dallas on Thursday, April 10. Twenty members attended. The discussion pertained to:

1. A reported statement by Mr. Fred M. Moxey, Chief Tax Commissioner of the New Mexico Tax Commission that he plans to revise the schedule of equipment valuations.
2. A renewal of the effort by the Hobbs school district to annex the Monument School District.

## Potash-Oil Operators, Eddy County:

The Land Commissioner's committee to promulgate rules and regulations for simultaneous operations for oil and gas and potash on state lands has met twice. At these meetings an effort has been made to determine the scope and limits of rules and regulations. Broadly, the discussions have resulted in consideration of two main issues:

1. Area to be affected by the rules and regulations.
2. A casing program calculated to protect potash mines and potash deposits.

Oil Industry representatives on the Commissioner's Committee adopted a recommendation by the N. M. Oil & Gas Engineering committee that a technical committee be appointed from its membership to draft a tentative casing program for a "defined area" pursuant to (2) above. The technical committee is as follows:

Mr. R. L. Boss.....Gulf Oil Corporation  
Mr. George Gray.....Sinclair Oil & Gas Co.  
Mr. Harve Mayfield.....Magnolia Petroleum Co.  
Mr. Raymond Lamb.....Wilson Oil Company  
Mr. Gil Griswold.....Consulting Mining Engineer  
Mr. M. A. Sherwood.....Shell Oil Company

Mr. George Cannon.....Humble Oil & Rfg. Co.  
Mr. J. E. Hill.....Richardson and Bass

The technical committee has met twice. On May 16th, the second meeting was held in Midland in the offices of Magnolia Petroleum Company. The committee completed its recommendations and forwarded them to the oil industry representatives on the Land Commissioner's committee for their consideration. If the technical committee's recommendations are adopted, they will in turn be submitted to the Land Commissioner who has announced that a public meeting will be held in Santa Fe on June 22nd for consideration of the recommended casing program as well as the other issues involved in the potash-oil problem.

Copies of the technical committee's recommended casing program and the USGS "defined area" underlain by potash deposits may be obtained from Mr. Glenn Staley, New Mexico Oil and Gas Engineering Committee, Hobbs, New Mexico.

## San Juan Basin:

On Tuesday, May 8, a mass meeting called by the Bureau of Land Management, was held in Farmington, New Mexico attended by representatives of the livestock industry, oil and gas operators, BLM and USGS. The purpose of the meeting was to discuss a voluntary code of operations for the oil industry to avoid unreasonable annoyances to cattle grazers and to prevent erosion and surface damage to federal lands. After hearing several instances of damage to fences and livestock from the ranchers, representatives of three oil companies, the San Juan Operators Committee and the New Mexico Oil & Gas Association (subject to approval by the Executive Committee), expressed a willingness to cooperate in the effort to promulgate such a code.

Tentatively, June 12 has been set as the date for a meeting to be held in Farmington for this purpose. It was suggested that the meeting be attended by field production men, exploration men, and claims men of operators in the Basin, as well as representatives from the Advisory Committee of the Grazing District, to discuss the nature of the cattlemen's problems and the practicability of the code. Consideration also may be given to establishing a local grievances