



OIL & GAS CONSERVATION COMMISSION
Meeting: December 15, 1965
Mr. John Bannister, Executive Sec'y

26
19
12
9





OFFICE OF
Oil and Gas Conservation Commission
 STATE OF ARIZONA
 ROOM 202
 1624 WEST ADAMS
 Phoenix, Arizona 85007
 PHONE: 271-5161

SAMUEL P. GODDARD
 GOVERNOR
 LYNN LOCKHART
 CHAIRMAN
 R. KEITH WALDEN
 VICE CHAIRMAN
 ORME LEWIS
 MEMBER
 LUCIEN B. OWENS
 MEMBER
 GEORGE T. SILER
 MEMBER

JOHN BANNISTER
 EXECUTIVE SECRETARY
 J. R. SCURLOCK
 PETROLEUM GEOLOGIST

A G E N D A

Meeting

December 15, 1965

- 9:30 a.m. Call to order
1. Approval of minutes of November 17 meeting
 2. Approval of report by Executive Secretary
 3. Approval of report by Geologist
 4. Old business
 5. New business
 6. Adjourn

*Draw up proposed legis. suggestions
 for dry hole support from state
 ask for \$100,000.*

*Pickell
 O'Donnell*

*take out discussion
 of incentive bills*

Meeting of Comm 1-19-66



THE UNIVERSITY OF ARIZONA
TUCSON, ARIZONA 85721

ARIZONA BUREAU OF MINES

December 11, 1965

Mr. John Bannister
Executive Secretary
Oil and Gas Conservation Commission
Room 202
1624 West Adams Street
Phoenix, Arizona 85007

Dear Mr. Bannister:

Thank you for sending me a copy of the Minutes of the Meeting of the Oil and Gas Conservation Commission which was held here at the University of Arizona on November 17, 1965.

I have read the document with interest and I am writing to suggest there should be some amendments made of the material before the Minutes are approved for permanent record. The changes and/or additions are as follows:

1. 4th paragraph, page 2.
Change; Executive Vice President to Vice President for University Relations.
2. 7th paragraph, page 2.
Change third sentence of paragraph to read; The College offers training in geology, geophysics-geochemistry, geological engineering, hydrology, chemical engineering, metallurgical engineering, and mining engineering.
3. 1st paragraph, page 3.
Change; \$5,000,000 to \$500,000,000.

I will thank you if you will see to it that the above proposals are properly accommodated in the permanent record of the Minutes of the Meeting of November 17, 1965.

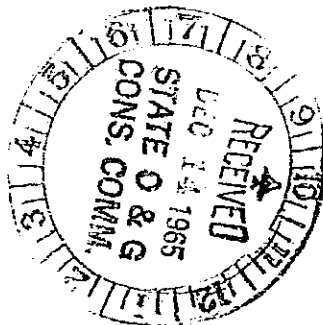
Regards and best wishes.

Sincerely,

J. D. Forrester

J. D. Forrester
Dean and Director

JDF:rs



OIL AND GAS CONSERVATION COMMISSION
1624 West Adams - Suite 202
Phoenix, Arizona

Minutes of Meeting
November 17, 1965
Room 257, Student Union Building
University of Arizona, Tucson

Present:

Mr. Lynn Lockhart, Chairman
Mr. Lucien B. Owens, Member
Mr. George T. Siler, Member
Mr. Hiram S. Corbett, Member
Mr. John Bannister, Executive Secretary
Mr. J.R. Scurlock, Geologist
Dr. J.D. Forrester, Dean, College of Mines, University of Arizona
Dr. Wesley Peirce, Arizona Bureau of Mines
Dr. Willard Pye, Geology Department, University of Arizona
Honorable Priscilla Hayes, Arizona House of Representatives
Honorable Darrell F. Smith, Attorney General, State of Arizona
Mr. Keith Walden
Mr. Loren Buck
Mr. Carl Richards
Mr. Arthur Chambers
Mr. Ray Jones, ArkLa Exploration Company
Mr. Darby Hand
Mr. J.D. Hurt
Mr. J.B. Terrell
Mrs. John Bannister
Mrs. Lucien B. Owens
Mrs. George T. Siler
Mrs. Marjorie Rushton

Chairman Lockhart called the meeting to order at 9:50 a.m. He welcomed Mr. Corbett as a new member of the Commission and then commented upon the association and cooperation of the Commission and the College of Mines and Bureau of Mines.

Mr. Owens stated he had gone over the minutes of the Meeting of October 27, 1965 and moved that these minutes be approved. The motion passed.

Report of the Executive Secretary and Geologist were accepted and approved.

Mr. Bannister requested direction as to the disposition of the recording tapes which are made during Commission meetings. He pointed out that by law the Commission is required to keep its Rules, Regulations, and orders only and that this information is to be available to the public during working hours. Mr. Bannister further stated that the Attorney General's office has advised him that the

Minutes of Meeting
November 17, 1965
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tape has no official status as a record and that it would be no more than a stenographer's shorthand notes; that the official records are the written minutes once made.

After discussion by both Mr. Siler and Mr. Owens, the Commission directed that after a tape has been transcribed and the written minutes approved and signed, the tape is to be immediately erased for re-use. The Commission further directed Mr. Bannister to dispose of the old accumulation of tapes.

So as not to conflict with Christmas activities, the date of the December meeting was set for December 15, 1965, at the Commission's office in Phoenix.

Chairman Lockhart introduced Dr. Forrester, Dean of the College of Mines and Director of the Bureau of Mines. Dean Forrester extended greetings of the President of the University and the Executive Vice President, and welcomed this opportunity to explain the method and purposes of promoting the mineral industry within the State.

He stated that the University contains two agencies which devote their efforts to the State's mineral industry. Both are educational in nature. The College of Mines duties are those of giving instruction and of research in fields of various metals. The College trains young people to enable them to enter industry as engineers or as scientists. The student may, of course, upon completion of the basic college courses enter graduate studies.

Dean Forrester further stated that by virtue of his being Dean of the College of Mines he was also Director of the Bureau of Mines, a service agency of the State, rendering service to the citizens of Arizona as to the nature and occurrence of the various mineral deposits. The service is not restricted to metals, but to all minerals.

He also stated that the College has special studies for persons with special aptitudes and interests. Each field of study is comprehensive. The College offers training in Geology, Geophysics, hydrology, chemical engineering, and metallurgical engineering. The College of Mines has an academic reputation which makes it nationally competitive with similar schools.

The courses of specialization in oil and gas in general are under the direction of Dr. Willard Pye of the College's Geology Department.

Dean Forrester stated that the Bureau of Mines interests encompass all minerals found in Arizona; that each of Arizona's fourteen counties produces some form of mineral wealth and that as a result of the work of the College of Mines and the Bureau of Mines some thirty-three additional minerals are now being produced within the State.

Well over \$5,000,000 of new wealth by way of mineral substances was created in Arizona during the last year. Hydrocarbon substances and water are exceedingly important to the State.

Dr. Peirce of the Bureau of Mines devotes much time to studies and analysis of oil and gas within the State. As the result of the cooperation with the Oil and Gas Conservation Commission the Bureau of Mines maintains a central repository, and has catalogued and put into workable records the results encountered in the drilling of 1,866 wells in the State. Of this, 249 are oil wells and 1,617 are deep water wells. 150,000 separate samples are in this central repository.

Dean Forrester stated that Dr. Peirce has developed the composite geological map of Arizona here displayed for the Commission, and it is in wide use throughout the State and Nation. Dr. Peirce, in addition to cataloging well records and samples, is engaged with the Commission in preparing a program of well information concerning oil, gas and helium in Arizona. Through the cooperation with the Oil and Gas Conservation Commission Dr. Peirce now has available loan samples on many of the State's oil, gas and helium wells.

Dean Forrester expressed his appreciation of the Commission's monetary contribution which he pointed out is used to help defray the costs of storing and cataloging well samples maintained by the College.

Dean Forrester further stated that the services rendered by the College of Mines and by the Bureau of Mines accommodates the interests of the citizens of this State but are not pursued in conflict with private industries.

One of the services Dean Forrester pointed out as offered by the Bureau of Mines is the preparation and publication of bulletins giving authoritative information. The bulletins are available to residents of Arizona at no costs and on a cost basis to non-residents.

Another service is the classification and identification of rocks which may include spectrum analysis; and, in cooperation with industry, the Bureau maintains a laboratory and pilot plant testing facilities. Dean Forrester stated that in his opinion the mapping service performed by the programs under his direction have brought to our State a most comprehensive mapping development perhaps better than any available in any other state.

In response to a question from Mr. Bannister, Dean Forrester pointed out that the Bureau of Mines has no regulatory functions but that such functions are performed by other State agencies.

Chairman Lockhart thanked Dean Forrester and called on Dr. Pye for any remarks.

Dr. Pye indicated that four ingredients must be present before oil and gas are found: (1) a source bed, (2) a reservoir, (3) a trap,

and (4) a cover.

He stated that only the central part of the State shows evidence of lacking the four natural ingredients.

As to the northwest portion of the State he indicated that while there is a thick section of marine rocks for a source bed, the Grand Canyon has undoubtedly allowed an escape of some of the minerals. However, he feels that the potential of this area is great.

In southwest Arizona the favorable areas are in general covered with debris making this area difficult to interpret. However his belief is that southwest Arizona is favorable for oil and gas production.

Southeast Arizona, too, is a potential area of production. Here the mountains and valleys under which we cannot see make this area unknown.

The northeast section of the State has all the necessary ingredients and it is here of course that at present oil, gas, and helium are being produced.

In Dr. Pye's opinion the big problem facing the oil and gas industry of the State is the lack of geological information. He pointed out, as mentioned by Dean Forrester, that the College of Mines and the Bureau of Mines, in cooperation with the Oil and Gas Conservation Commission, are doing all in their power to help overcome this lack of information, but that much actual drilling must of necessity be done to answer the question of Arizona's future as an oil and gas producing State.

Dr. Pye stated that the Geology Department functions primarily to train students to go into various fields of geological work. He pointed out the necessity of practical field experience for these geologists and that the University was interested in securing as much as possible of this type of work for each student.

Dr. Pye stated that Arizona is ideally suited for wildcat venture in that drilling for oil and gas in most of the State will not have to be too deep or too costly in comparizon to depth and costs of drilling currently going on in surrounding states. He further pointed out that as drilling activity in the State does increase the drilling costs will decrease.

Dr. Pye commented that in his opinion the Oil and Gas Conservation Commission is, in addition to being a regulatory body, an agency that should disseminate information concerning the full range of oil and gas exploration and production. He feels that the Commission has a definite role in informing the State and individuals within the State of both the benefits and the pitfalls which could be encountered in exploration.

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Dr. Pye Pye stated that through the Geology Department students develop much information which could be disseminated through both the University outlet and through the Commission's outlet to currently increase the industry's knowledge of the geological potential of Arizona.

Chairman Lockhart acknowledged Dr. Pye's presentation and then called upon Dr. Wesley Peirce for any comments.

Dr. Peirce stated that he felt that the remarks of both Dean Forrester and Dr. Pye well summed up his feeling concerning the State as well as the cooperation between the University and the Oil and Gas Conservation Commission. He expressed his appreciation of the growing cooperation between the University and the Oil and Gas Conservation Commission.

At this point Dr. Pye expressed his feeling that the Commission constitutes one of the most important efforts of the State and that the far-sighted view of the Commissioners and the staff has placed Arizona in the position of being able to orderly control any development of oil and gas or helium which may come to the State.

Chairman Lockhart asked if any visitors wished to make any comments.

Mr. Darby Hand questioned the Commission as to its policy for collecting well samples. He was informed that the policy of the Commission is to request and take samples from any and all wildcat wells exploring for oil and gas within the State.

In response to a question from Chairman Lockhart, Dean Forrester replied that within an area of 125 miles radius from Tucson, more than one-half of the nation's copper production is to be found. He further stated that while copper is the number one mineral industry with the State, that the number two industry is the production of sand and gravel. He pointed out that appreciable quantities of gold, silver, and molybdenum are a by-product of operations.

Dr. Pye commented upon Arizona's water problem and pointed out that improper well completions results in the loss of much valuable water and he urged that the Commission use all its influence to insist that each water producing formation be properly sealed off and protected.

Meeting adjourned at 11:10 a.m.



SAMUEL P. GODDARD
GOVERNOR

LYNN LOCKHART
CHAIRMAN

R. KEITH WALDEN
VICE CHAIRMAN

ORME LEWIS
MEMBER

LUCIEN B. OWENS
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GEORGE T. SILER
MEMBER

OFFICE OF

Oil and Gas Conservation Commission

STATE OF ARIZONA

ROOM 202

1624 WEST ADAMS

Phoenix, Arizona 85007

PHONE: 271-5161

JOHN BANNISTER
EXECUTIVE SECRETARY

J. R. SCURLOCK
PETROLEUM GEOLOGIST

December 2, 1965

Nemo to: Commissioners
From: John Bannister, Executive Secretary

re: Report of Activities

As you are aware, an announcement has recently been made concerning the construction of the State's second helium plant near the town of Navajo in Apache County. LaFleur Corp. is a wholly owned subsidiary of Douglas Aircraft Company.

This Commission has worked long and diligently with Apache Drilling Company to secure this plant and it is felt that we should "pat ourselves on the back" that this endeavor has met with success. I have been informed recently of the following figures which I feel will be of interest to you. Kerr-McGee Corporation is apparently selling 1 MCF of pure helium at approximately \$22.00. The liquid helium is being sold at approximately \$25.00 per gallon; and a gallon of fluid represents approximately 27 cubic feet of helium.

I cannot vouch for the accuracy of these figures, but I believe them to be potentially correct.

We have received many compliments and thanks as the result of the Tucson meeting. I definitely feel that periodically regular Commission meetings should be held in different areas of our State. I feel that a meeting at Flagstaff and possibly one in Prescott and Yuma should be considered. Of course other towns, such as Holbrook and Kingman should not be overlooked.

By holding meetings in various corners of our State it will allow people interested in our endeavors to easily attend and see what we are doing. I believe it would be of great benefit, not only to our own efforts to to the State.

The Interstate Oil Compact meeting in Corpus Christi, Texas, will commence on December 6, 1965 and will be attended by Senator Lockhart, Mr. Scurlock, Senator Udine and myself. Due to Senator Arnold's recent heart attack it is not expected that he will attend.

The following permits were issued since our last report:

- 334: ArkLa Exploration Co. #7 New Mexico Arizona Land, NW/4SW/4 24-17N-22E, Navajo County
- 335: ArkLa Exploration Co. #36 New Mexico Arizona Land, NE/4NE/4 19-17N-23E, Navajo County
- 336: Occidental Petroleum Corp. #1 State, SW/4SE/4 28-16N-23E, Navajo County

You will note that Occidental Petroleum Corp. has, as predicted, entered our State and is currently engaged with ArkLa Exploration Company in evaluating New Mexico Arizona Land Company's holdings.

It was recently indicated to me by ArkLa personnel that they are currently interested in hydrocarbon exploration, and as soon as the necessary work has been done on the potash potential on the area in which they are now working, they will turn their efforts to oil, gas, and helium.

At last report, the Willett #1 State well, southwest of Flagstaff, has moved in rotary equipment in an attempt to complete this well at the earliest possible time. This well has been plagued with water encroachment problems.

The O'Donnel & Ewing El Federal well, south of Ashfork, is currently at 1,190 feet and fighting loss of circulation problems. The C & J Drilling #1 State well, near Congress Junction, is at this time at a total depth of 1,060 feet and it too has brought in a large rotary rig in order to complete as early as possible.

There has been no change in the status of the Ari-Mass #1 State well, south of Florence.

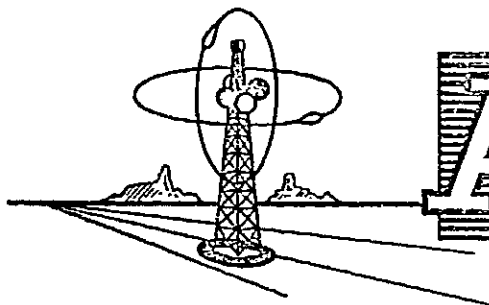
The Teil Development Co. Kruglich-Fletcher #1 State well, Section 22-19N-26E, Apache County, the Pinta Dome area, has been ordered plugged.

As you will recall, Teil Development lost the lease upon which this well was drilled and consequently the well itself reverted to the State. Apache Drilling Company, through arrangements with the owner of the new lease, attempted to secure a permit to re-enter this old well. However, inasmuch as the State Land Department was unable to get the principals involved together in order to work out an equitable arrangement, it refused permission for the use of State property, i.e., the well, and consequently this Commission has no choice but to order this well plugged and abandoned.

In general, the attempts of this Commission to secure the plugging of old wells is meeting with more than anticipated success. It

is felt that by the end of our fiscal year, June, 1966, this plugging shall be completed.

To date this Commission has mailed approximately 700 copies of the Rules and Regulations and daily are answering additional requests.



APACHE Drilling Co., Inc.

December 1, 1965

I am sharing the good news of the progress of your company concerning its recent contract negotiation. Additional information will follow in a further progress report.

CLASS OF SERVICE
This is a fast message unless its deferred character is indicated by the proper symbol.

WESTERN UNION TELEGRAM

W. P. MARSHALL, PRESIDENT

SF-1201 (4-60)

SYMBOLS
DL = Day Letter
NL = Night Letter
LT = International Letter Telegram

The filing time shown in the date line on domestic telegrams is LOCAL TIME at point of origin. Time of receipt is LOCAL TIME at point of destination 2148

110P PST NOV 30 65 LC094

L LLY153 PD LOS ANGELES CALIF 30 1223P PST 223 1158

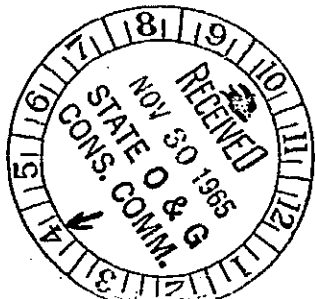
MR McDONALD, APACHE DRILLING CO INC

7823 NORTH 27 AVE PHOENIX ARIZ

PROPOSED PRESS RELEASE TO BE HELD UNTIL TELECON CONFIRMATION
THE CONSTRUCTION OF A HELIUM REFINING PLANT IN EASTERN ARIZONA
WAS ANNOUNCED JOINTLY TODAY BY APACHE DRILLING CO. AND THE
LA FLEUR CORP. OF LOS ANGELES THE VENTURE IS INTENDED TO PROVIDE
AN ADDITIONAL ONE MILLION CUBIC FEET/MONTH OF HELIUM TO THE
WESTERN UNITED STATES MARKET ALTHOUGH THE DETAILS OF THE AGREEMENT
WERE NOT PUBLICALLY ANNOUNCED THE PLAN CALLS FOR THE PLANT
TO BE ON STREAM BY JANUARY 1967 MARKETING OF THE GAS WILL BE
HANDLED EXCLUSIVELY BY LA FLEUR THROUGH THEIR INDUSTRIAL GAS
DIVISION

J E BAGGS
(08).

943-4016
\$ 15.00
M J
12/1/65



Very truly yours,

C. T. Henderson

C. T. Henderson, Chairman, Board of Directors