

OIL AND GAS CONSERVATION COMMISSION  
MEETING: March 25, 1964  
Mr. John Bannister

March 18, 1964

TO: Commissioners of the Oil and Gas Conservation Commission  
State of Arizona

FROM: John Bannister, Executive Secretary

SUBJECT: Items of Interest Since the February 18th Meeting

I assumed my duties as of March 1, 1964. I should like to take this opportunity to thank each of the Commissioners for my appointment and also to express my appreciation to Mrs. Mary Cooper and to Mr. John Petty for their helpful and friendly cooperation. I feel that a sound and reciprocal working basis has been established between the three of us which will result in a smoothly working organization.

We are presently setting up new office procedures with respect to permit handling, filing, etc.

NEW DRILLING PERMITS

Six drilling permits have been applied for since those reported at the last meeting: They are as follows:

Permit No. 269: Eastern Petroleum Co., Eastern-Santa Fe Fee #37, 1650' S of NL; 1650' E of WL, Section 34-T20N-R27E, Apache County.

Permit No. 270: Texaco Inc., Navajo Tribe "AM" #1, 660 FNL; 1980' FWL, Section 36-T39N-R21E, Navajo County.

Permit No. 271: Texaco Inc., Navajo Tribe "AK", 890' FNL; 730 FEL, Section 6-T40N-R25E, Apache County.

Permit No. 272: Socony Mobil Oil Co., Inc., Socony Mobil-Navajo Tribe-Tract 155 #1, 2310' E of W; 2310' S of N Lines, Section 28-T39N-R25E, Apache County.

Permit No. 273: Eastern Petroleum Co., Eastern-Santa Fe Fee #34, 1650' S of NL; 1650' W of EL, Section 1-T19N-R27E, Apache County.

Permit No. 274: Marathon Oil Company, Marathon Oil Co. - Navajo-Indian Reservation #1, 1500' FSL; 400' FEL, Section 18-T40N-R29E, Apache County.

HOUSE BILL 343: Providing for the Payment of a Reward

As of this date House Bill 343 is still in committees to which it was originally assigned: the Judiciary, Appropriations, and Tourist and Industry Development Committees.

HOUSE BILL 345: Abolishing the Oil and Gas Commission

As you were advised by letter of March 6th, I have been following the progress of this bill through contact with Mr. John McGowan. To date this bill is also still in the committees to which it was assigned: Judiciary, Appropriations, and Boards and Commissions.

March 18, 1964

Items of Interest Since the February 18th Meeting

Page Two

#### HOLBROOK TRIBUNE-NEWS

The March 6th issue of above referenced newspaper carried an editorial criticizing the Governor of the State, various State agencies, and our Commission as follows:

Drilling for oil or natural gas in Arizona has come to a practical standstill since the Arizona Oil and Gas Conservation Commission was brought into existence during the administration of our present governor. He has been coached and shown the way to make this a reasonable commission, or that it would be a detriment. That it is a detriment few people will question who know anything about it.

In order to correct the erroneous impression that the Commission has hampered development of oil and gas in Arizona, a letter was written to Mr. V. P. Richards, Editor of the Holbrook Tribune-News, and Mr. J. Morris Richards bringing them up to date on the current drilling activity in the state. Mr. V. P. Richards has acknowledged receipt of our letter. It would seem that he retains his original opinions.

#### ARIZONA OIL AND GAS INDUSTRY TO BE FEATURED BY FIRST NATIONAL BANK

I met with Mr. Stewart Robinson of the Publicity Department of the First National Bank who will print an article on Arizona's oil and gas industry in the bank's publication, Arizona Profiles. This publication is distributed to the presidents of the 1000 largest corporations in America as well as to the presidents of the 1000 largest banks in America, and is given varied wide distribution. We discussed at length the role of the Arizona banks in Arizona's future oil and gas economy.

#### STATE AND FEDERAL LEASES

Currently it is estimated that there are approximately 4000 oil and gas leases on State lands covering approximately 1,225,000 acres; and approximately 1800 leases on Federal lands covering approximately 1,550,000 acres.

#### TREMPEALEAU FIELD, MORROW COUNTY, OHIO

You were furnished with my report of March 12th regarding Interior Secretary Stewart L. Udall's criticism of the conditions existing in Morrow County, Ohio, together with letter sent from this office to Secretary Udall. There is nothing new to report regarding this matter.

#### EL PASO NATURAL GAS PRODUCTS COMPANY

El Paso Natural Gas Products Company's marketing and refineries have been sold to Shell Oil Company for approximately \$34-\$35 million. Shell is negotiating with American Petrofina and others to sell the Arizona outlets so acquired for approximately \$6 million.

Holbrook Tribune-News Friday 3-20-64

## STRAWS



in  
the  
Wind

By J. Morris Richards

### DON'T LET ONE HAND KNOW

This is what is known as a "political year."

Whenever the office holders—particularly the legislators—are up for re-election, there is almost nothing accomplished in the regular session that will upset the voters.

Many needed bills are in the two houses, but the game of passing the buck becomes a science, and the resulting trickle that reaches the desk of the chief executive is meager indeed.

One of the remarkable phenomena of Arizona history is the success so many people, in and out of public life, have had in using some phase of the Colorado River question to provide themselves with a livelihood—economically or politically.

It is almost as remarkable how successful certain special interest groups have been in controlling the output of the legislature, and in deciding how much of the governor's so-called program he will be permitted to obtain from the lawmakers.

Either of these phenomena would be an excellent thesis for a full-length book.

Our theme this week is but one skein in the web that holds Arizona so tightly.

The complete success with which the major petroleum interests have been able to keep potential Arizona oil and gas reserves from being developed is one of the more interesting, if unfortunate, chapters of our history.

Efforts along this line came with the early suggestions that Arizona have an oil and gas "conservation" commission.

Hopeful citizens, both in and out of the business of exploring for oil, accepted the commission and its regulations, as something necessary, and possibly desirable, in the light of much favorable comment about

(Continued On Page 1-B)

## MORE ABOUT — Straws

(Continued From Page One)  
Arizona as a potential producer. The legislation was passed, the commissioners appointed, and development stymied.

The first battle came with appointment of the commissioners. One knowledgeable man, with more than a little know-how, was named to the commission before the governor could be warned that he was honest in his wish for oil and gas development in Arizona. Then real attempts were made to prevent him from being approved by the State Sen-

ate. Finally he was permitted to be on the commission, but he found himself from that time forward a minority of one in any significant question concerning future development by wildcaters.

Another effective step, taken almost immediately by the commission majority, was to hire an executive secretary who had an excellent vocabulary of oil field words, terms, and personnel. He was made to order to talk a big line and prevent anything significant from happening that would interfere with the long-term plan of major companies to buy up oil and gas leases and sit on them.

In the course of events, the foibles of human weakness crept in. The secretary was obliged to go because of his outside interests. Majority members of the commission have used their inside knowledge to obtain preferred oil leases in the Kaibab before the general public could learn that the area would be opened up. The same majority members of the commission broke their own established practice when it came time for the minority member to serve as chairman, and sidetracked him.

And all the while the governor who has served nearly three and a half years of the four years the commission has been in existence, plays along with these controlled tactics and doesn't even seem to wonder why his great "Develop Arizona" program in oil and gas production has been so effectively contained.

A recent letter to this writer from the current executive secretary of the commission, talks of the many wells being drilled. One needs but to examine the very record he quotes to see that there is practically nothing happening except in the Pinta Dome HELIUM field or on the Indian Reservation in the Four Corners region from which the state and its economic well-being receive comparatively little.

And if there is any doubt about any real interest on the

part of the legislature in getting some worthwhile drilling for commercial production, one needs but to look for the bill that was introduced early in the current session, providing for a sizeable bonus for the first oil or petroleum gas well that would produce commercially for ninety consecutive days.

The bill will be hard to find. It is buried too deeply in too many committees to ever see the light of day, to say nothing of its chances for passage, even from one house.

These paragraphs are but a few of that interesting chapter of that interesting volume that might well be written.

The Arizona Republic 3-25-64

## Test Drilling Unit Okayed for Kaibab

The possibility of an early test for natural gas or oil in the Kaibab North National Forest appeared likely yesterday.

The State Oil and Gas Department has received notice of preliminary U.S. Geological Survey approval of a 91,841-acre, Kaibab North drilling unit made up of holdings of more than 20 oil and gas lease owners.

John Bannister, executive secretary of the Arizona Oil and Gas Conservation Commission, said an application for a state permit to drill the unit's initial test well is expected soon.

He indicated the well will go to 5,500 feet, or the pre-Cambrian, in the unit embracing Townships 38 and 39 North and Ranges 1 and 2 East.

He added that James Pickett, Phoenix oil operator, was instrumental in assembling the Kaibab-North drilling unit, known

as the Jacob Lake unit.

The forest was opened to oil and gas exploration about a year ago, but there has been no drilling activity.



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Friday 3-20-64

## Letters To The Editor

Oil and Gas Conservation  
Commission

Phoenix 7, Arizona

March 10, 1964

Mr. V. P. Richards, Editor

Holbrook Tribune-News

200 East Hopi

Holbrook, Arizona

and

Mr. J. Morris Richards

Winslow, Arizona

Gentlemen:

We have noted your editorial appearing in the Holbrook Tribune-News of March 6, 1964, entitled "Arizona's Greatest Need." We were particularly interested, of course, in your comments upon the Arizona Oil and Gas Conservation Commission.

In order to correct the erroneous impression that the Commission has hampered development of oil and gas in Arizona, we would like to supply you with the attached well report showing the current drilling activity in our state. You will note that the largest category is the number of dry holes. This is due to the fact that Arizona is still a wildcat state, in that considering the large area, comparatively few holes have been drilled; and it is natural and follows the historical pattern that the majority of the initial exploration in any area does result in dry holes. However, each dry hole drilled greatly contributes to the geological knowledge of conditions in that particular area and enhances the chance of following wells to discover hydrocarbon substances. You will note Four Corners oil and gas fields break over into Arizona in this area and consequently it is logically the place for initial activity.

We would like to point out that there are currently, in various stages of drilling, some fifteen wells going down. In addition to these fifteen drilling wells, there are nine wells upon which locations have been staked and permits issued and which should be commenced within the near future. Considering the overall lack of knowledge concerning hydrocarbon geology within the state, we feel that the two dozen wells being drilled or about to be drilled are an indication of major interest in the oil and gas possibilities within our state. It should further be noted that there are currently twenty-five wells actually producing oil, gas and helium within the state, while some fourteen wells now in a shut-in capacity by their operators should eventually be producing.

It has long been the policy of the Oil and Gas Conservation Commission to protect and foster fresh water development

within the state and our rules and regulations provide for this. As the report indicates, as a by-product of oil and gas exploration activities, there have been fifty-six water wells made available to the landowners throughout the state.

It is our feeling that the Oil and Gas Conservation Commission and the rules and regulations which have been developed for its enforcement have done a great deal to encourage continued exploration within this state. It is the far sighted policy of our legislators and the Oil and Gas Conservation Commissioners that such waste as may currently be seen in the Morrow County, Ohio, fields will not occur in Arizona.

We will be happy to furnish you such further information as you may desire concerning the activities of this Commission.

Your very truly,  
John Bannister  
Executive Secretary

EDITOR'S REPLY:

March 12, 1964

Mr. John Bannister,  
Executive Sec'y, Oil and Gas  
Conservation Commission,  
1624 West Adams St.,  
Phoenix, Arizona

Dear Sir:

This will acknowledge receipt of your letter of March 10, in which you refer to an editorial that appeared in the Holbrook Tribune-News entitled "Arizona's Greatest Need," appearing under date of March 6.

Your letter patently was written as a new-comer to Arizona. As a native son of Navajo County, and Arizona, I forgive you, and trust that the longer you live in Arizona, you will be brought up to date. From the copy of the well report showing the current drilling activity, it is clear that major oil companies are now dominating the activities, not only on the Indian reservation, but also the helium production on Pinta Dome, and adjacent area.

If your reaction to this statement is negative, let me assure you that if you will furnish me with the same type well report showing the number of small independents now drilling OFF the Indian lands, or any knowledge you may have in your files the number of wells drilled in Arizona by these small independents PRIOR to creation of the Arizona Oil and Gas Commission, and AFTER its creation.

From what acquaintance I have among those in the petroleum industry that 75 to 85 per cent of production has been discovered by the independent "Wildcatter," it appears to me that such "wildcatters" are looking elsewhere for oil—not in Arizona.

Will you tell me what incentive has been displayed by

the Oil and Gas Commission to the independent for venture capital? So far as I am concerned, little, if any, has been channeled in that direction.

Your present Chairman, Lynn Lockhart, will recall, I am sure, the statement made by a former Executive Secretary Dominic Jerome during the June 10, 1960, meeting of the Northern Arizona Cattlemen in Springerville: "Arizona is no place for small independents because the cost is too great."

Apparently, this trend of thinking still prevails in the Commission.

Thank you for your interest, and the enclosures forwarded with your letter. I hope that I may have the pleasure of meeting you in person in the

future.

Very truly yours,  
V. P. Richards

Holbrook Tribune News  
Friday 3-20-64

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future.

Very truly yours,  
W. P. Richards



XXXXXXXXXX

March 12, 1964

The Honorable Stewart L. Udall  
Secretary of Interior  
Washington, D. C.

Sir:

The Arizona Oil and Gas Conservation Commission has noted with interest the situation existing in the Trempealeau Field in Morrow County, Ohio; and your widely publicized reaction to this situation.

At the suggestion of Mr. Lynn Lockhart, Chairman of the Arizona Oil and Gas Conservation Commission, we would like to inform you of the situation now existing within our state. As you are no doubt aware, our legislators had the foresight to adopt regulations for the conservation and development of oil and gas within the state. Currently these regulations provide for 80 acre spacing for oil wells and 40 acre spacing for gas wells; and further, the Oil and Gas Conservation Commission was given wide latitude as to deviating from these spacing requirements upon proper geological and engineering proof as to the need for different spacing requirements. It is our firm belief that, with the present rules and regulations now existing in Arizona, and with the far sighted policy adopted by our Commissioners; the situation now existing in Morrow County, Ohio, cannot and will not come to pass within our state. It is the policy of the Commission to encourage in all legal manner production and exploration within Arizona while at the same time protecting the correlary rights of the State and of all interest owners.

For your further information, we are enclosing a copy of our current production report together with a copy of a well study concerning oil, gas and helium exploration here.

Please be assured of our complete cooperation with you. Should you at any time desire any information concerning our activities, your request will receive our prompt attention.

Very truly yours,

John Bannister  
Executive Secretary

JB:mkc  
Encl.

Cc: Mr. Lynn Lockhart, Chairman  
Oil and Gas Conservation Commission

Bcc: All Commissioners  
Bcc: Mr. Edward I. Kennedy

BRIEF: Morrow County, Ohio

March 12, 1964

On February 21, 1964, Interior Secretary Stewart L. Udall corresponded with the Honorable James A. Rhodes, Governor of Ohio, concerning conditions in the Trempealeau Field in Morrow County, Ohio. Secretary Udall said that he was shocked at the "uncontrolled development and production of oil which has been taking place in Morrow County, Ohio", and continued that the situation in this field showed a disregard for conservation practices as characterized by outdated and wasteful drilling such as town-lot drilling, close and irregular spacing, excessive rates of production and the flaring of natural gas. Secretary Udall further expressed his hope that the government of Ohio would soon establish the sound conservation practices which have been supported and have been developed by the oil industry itself and as ardently supported by the Interstate Oil Compact Commission. He urged that such laws incorporate the universally recognized practices as proration, unitization and anti-flaring provisions.

In response to Secretary Udall's criticism, which received wide press and industry periodical coverage; Ashland Oil & Refining Company of Ashland, Kentucky, sent letters dated February 24, 1964, and February 29, 1964, to leaders of the oil industry in the Ohio area and to government officials. Briefly, Ashland Oil said that it is the largest purchaser of gas in the Morrow County, Ohio, area and controls some 50,000 acres of leases in this county. Ashland pointed out that by December of 1963, town-lot drilling (i.e., extremely close drilling. In this case as indicated on individual plots within a town with total disregard to any realistic spacing of wells) had become a serious problem and that it, together with the Ohio Oil and Gas Association, had begun to attempt to obtain some legislative control of well spacing and of production. Ashland pointed out that this uncontrolled close spacing of wells constituted a serious economic waste and that voluntary attempts by producers to limit production to 400 barrels of oil from any well have broken down due to the fact that some owners, having secured new market outlets for their production, would not abide by the voluntary limitations. Consequently owners of offset wells had to up their production in order to prevent undue drainage.

It was Ashland's firm belief that Morrow County Field should have been developed on a 40 acre spacing. However, development has since shown that the Trempealeau Field in this area consists of many small pockets and that in some cases 40 acre drilling might have missed some production. (NOTE: This can be said of most fields, particularly in the area of extreme faulting where any sort of regulated spacing might leave a few pockets untapped; however as a sound economic rule, unless geology and exploration shows this to be the case, spacing regulating such as currently in effect in Arizona is by far the most sound economic policy.)

Ashland urged that a plan of voluntary proration should be developed by the principal producers under government supervision, and that the operators in the field would welcome such a program. This voluntary program would be considered only as a stop-gap pending suitable legislation to provide for a regulatory agency and rules and regulations to control wasteful practices and provide for fair proration.

J. Bannister/mko

Copies to all 5 Commissioners and Mr. Edward I. Kennedy

March 25, 1964

TO: The Commissioners of the Oil and Gas Conservation Commission  
State of Arizona

FROM: John Bannister, Executive Secretary

SUBJECT: H. B. 343, Introduced March 2, 1964

Upon the recommendation of the Tourist and Industry Development Committee Chairman Frank L. Crosby, on March 18th, H. B. 343 will be revised to read as follows, after which it will be submitted to the Appropriations and Judiciary Committees before action by the entire House:

Be it enacted by the Legislature of the State of Arizona:

**Section 1. REWARD PAYMENT TO REGISTERED HOLDER OF PERMIT TO DRILL TEST WELL FOR OIL AND GAS**

The oil and gas conservation commission shall offer as an incentive for the first oil or hydrocarbon gas well brought in within the boundaries of the state of Arizona a reward of one hundred thousand dollars, to be used only for future exploration and development of oil or hydrocarbon gas in the state of Arizona, to be paid to the registered holder of a permit of the well. Said well to qualify must produce not less than fifty barrels of commercial oil or at least one million cubic feet of hydrocarbon gas every twenty-four hours pumping or flowing consecutively for a period of not less than ninety days.

**Sec. 2. PROCEDURE FOR PAYMENT**

The oil and gas conservation commission shall determine the registered permit holder who shall be qualified to receive the one hundred thousand dollar reward as prescribed by the terms of section 1 of this act, and prior to authorizing payment shall present the facts to the Governor, who, upon receipt of the certification of the well qualifying shall approve the same and authorize the payment of the reward.

**Sec. 3. APPROPRIATION**

The sum of one hundred thousand dollars is appropriated from the state general fund to the oil and gas conservation commission, to be available for the purposes of this act.

**Sec. 4. EXPIRATION DATE**

The terms of this act shall expire on July 1, 1966, and the appropriation authorized by this act is exempt from the provisions of Sec. 35-173 and 35-190, Arizona Revised Statutes, relating to quarterly allotments and lapsing of appropriations, except that the appropriation, if not expended for the purposes provided by this act, shall lapse on July 1, 1966.

**Sec. 5. EXCLUSIONS**

A. Helium gas is excluded from the provisions of this act since it has already been discovered in commercial quantities.

B. No reward shall be paid under the provisions of this act for any discovery of oil or hydrocarbon gas on Indian land.

XXXXXXXXXX

March 6, 1964

TO THE COMMISSIONERS

Gentlemen:

Enclosed for your information please find a copy of House Bill 348 entitled "An Act Abolishing the Oil and Gas Commission, and Repealing Title 27, Chapter 4, Arizona Revised Statutes". The effect of this bill if it becomes law would be to abolish the Oil and Gas Conservation Commission together with all regulations concerning oil and gas production and conservation.

I have spoken to Mr. John McGowan on two different occasions concerning this bill and have been advised that this bill has currently been assigned to the Appropriations and Judiciary Committees. Mr. McGowan has recently advised me that he has spoken to members of the committees and it has been promised that the bill will be temporarily shelved.

It is my feeling that this bill will die a natural death; however I feel that the situation should be kept under close scrutiny by the Commission members.

Further enclosed is House Bill 348 pertaining to the bonus.

Yours very truly,

John Bannister  
Executive Secretary

JB:mkc  
Encl.

cc: The Commissioners, and  
Mr. Edward I. Kennedy

Bcc: Mr. Orme Lewis: Mr. McGowan has requested that you contact him at your earliest possible convenience to discuss this situation with him.



STATE OF ARIZONA  
26TH LEGISLATURE  
2ND REGULAR SESSION

HOUSE

**H. B. 345**

INTRODUCED  
MARCH 2, 1964

Referred to	Date	Reported Out
Judiciary		

Committee of Whole\_\_\_\_\_

3rd Reading — Aye\_\_\_\_\_ No\_\_\_\_\_ Absent\_\_\_\_\_

Senate Action\_\_\_\_\_

Sent to Governor\_\_\_\_\_ Action\_\_\_\_\_

Introduced by Members Crosby, Simer of Navajo

**AN ACT Abolishing the Oil and Gas Commission, and Repealing  
Title 27, Chapter 4, Arizona Revised Statutes.**

- 1 **Be it enacted by the Legislature of the State of Arizona:**
- 2 Section 1. REPEAL
- 3 Title 27, chapter 4, Arizona Revised Statutes, is repealed.
- 4 Sec. 2. DISPOSITION OF FUNDS, EQUIPMENT
- 5 AND RECORDS
- 6 A. Immediately upon the effective date of this act, all
- 7 funds standing unencumbered and unexpended to the credit
- 8 of the oil and gas conservation commission shall revert to
- 9 the state general fund.
- 10 B. All records, equipment, supplies and other materials
- 11 of the oil and gas conservation commission shall, upon the
- 12 effective date of this act, be transferred to the state land
- 13 department.

STATE OF ARIZONA  
28TH LEGISLATURE  
2ND REGULAR SESSION

HOUSE

**H. B. 343**

INTRODUCED  
MARCH 2, 1964

Referred to	Date	Reported Out
Judiciary		
Committee of Whole		
3rd Reading — Aye	No	Absent
Senate Action		
Sent to Governor		
Action		

Introduced by Members Burson, Higgins of Maricopa; Brown of Apache; Crosby of Navajo

**AN ACT Relating to Oil and Gas; Providing for the Payment of a Reward to the Owner of the Well for the First Oil or Hydrocarbon Gas Well Brought in Within the Boundaries of the State of Arizona That Produces Not Less Than Twenty-Five Barrels of Commercial Oil or at Least One Million Cubic Feet of Hydrocarbon Gas Every Twenty-Four Hours Consecutively Pumping or Flowing for a Period of Not Less Than Ninety Days; Prescribing the Method of Payment of the Reward, and Making an Appropriation.**

- 1 Be it enacted by the Legislature of the State of Arizona:
- 2 Section 1. REWARD PAYMENT TO OIL OR
- 3 HYDROCARBON GAS WELL OWNER
- 4 The oil and gas conservation commission shall offer a
- 5 reward of two hundred fifty thousand dollars to be paid
- 6 to the owner of the well for the first oil or hydrocarbon
- 7 gas well brought in within the boundaries of the state of
- 8 Arizona that produces not less than twenty-five barrels of
- 9 commercial oil or at least one million cubic feet of hydro-
- 10 carbon gas every twenty-four hours pumping or flowing
- 11 consecutively for a period of not less than ninety days.
- 12 Sec. 2. PROCEDURE FOR PAYMENT
- 13 The oil and gas conservation commission shall determine
- 14 the owner of the oil or hydrocarbon gas well who is qualified
- 15 to receive the reward as prescribed by the terms of section
- 16 1 of this act.
- 17 Sec. 3. APPROPRIATION
- 18 The sum of two hundred fifty thousand dollars is ap-

1 appropriated from the state general fund to the oil and gas  
2 conservation commission, to be available for the purposes of  
3 this act.

4 Sec. 4. EXPIRATION DATE

5 The terms of this act shall expire on July 1, 1966, and  
6 the appropriation authorized by this act is exempt from  
7 the provisions of §§ 35-173 and 35-190, Arizona Revised  
8 Statutes, relating to quarterly allotments and lapsing of  
9 appropriations, except that the appropriation, if not ex-  
10 pended for the purposes provided by this act, shall lapse  
11 on July 1, 1966.

12 Sec. 5. EXCLUSIONS

13 A. Helium gas is excluded from the provisions of this  
14 act since it has already been discovered in commercial  
15 quantities.

16 B. No reward shall be paid under the provisions of this  
17 act for any discovery of oil or hydrocarbon gas on Indian  
18 land.

19 Sec. 6. EMERGENCY

20 To preserve the public peace, health and safety it is nec-  
21 essary that this act become immediately operative. It is  
22 therefore declared to be an emergency measure to take ef-  
23 fect as provided by law.

24 Be it enacted by the Legislature of the State of Arizona:  
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27 The oil and gas conservation commission shall offer  
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29 to the owner of the well for the first oil or hydrocarbon  
30 gas well discovered within the boundary of the State of Arizona.

31 The reward shall be paid to the owner of the well within  
32 thirty days of the date of the discovery of the well.

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34 thirty days of the date of the discovery of the well.

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36 thirty days of the date of the discovery of the well.

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File

# Holbrook Tribune - News



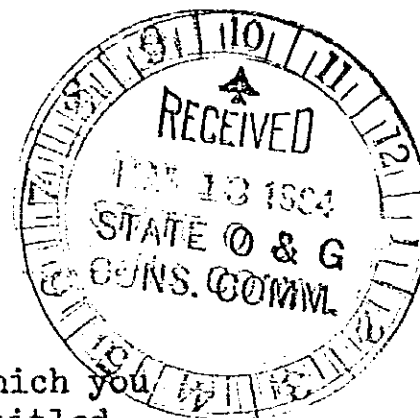
NORTHERN ARIZONA PRINTERS AND PUBLISHERS  
HOLBROOK, ARIZONA

March 12, 1964

PHONES  
524-6203 524-6204

Mr. John Bannister, Executive Sec'y,  
Oil and Gas Conservation Commission,  
1624 West Adams St.,  
Phoenix, Arizona.

Dear Sir:



This will acknowledge receipt of your letter of March 10, in which you refer to an editorial that appeared in the Holbrook Tribune-News entitled "Arizona's Greatest Need," appearing under date of March 6.

Your letter patently was written as a new-comer to Arizona. As a native son of Navajo County and Arizona, I forgive you, and trust that the longer you live in Arizona, you will be brought up to date. From the copy of the well report showing the current drilling activity, it is clear that major oil companies are now dominating the activities, not only on the Indian reservation, but also the helium production on Pinta Dome, and adjacent area.

If your reaction to this statement is negative, let me assure you that if you will furnish me with the same type well report showing the number of small independents now drilling OFF the Indian lands, or any knowledge you may have that small independents are about to commence activity. Perhaps you have in your files the number of wells drilled in Arizona by these small independents PRIOR to creation of the Arizona Oil and Gas Commission, and AFTER its creation.

From what acquaintance I have among those in the petroleum industry that 75 to 85 per cent of production has been discovered by the independent "wildcatter," it appears to me that such "wildcatters" are looking elsewhere for oil - not in Arizona.

Will you tell me what incentive has been displayed by the Oil and Gas Commission to the independent for venture capital? So far as I am concerned, little, if any, has been channeled in that direction.

Your present Chairman, Lynn Lockhart, will recall, I am sure, the statement made by a former Executive Secretary Dominic Jerome during the June 10, 1960, meeting of the Northern Arizona Cattlemen in Springerville: "Arizona is no place for small independents because the cost is too great."

Apparently, this trend of thinking still prevails in the Commission.

Thank you for your interest, and the enclosures forwarded with your letter. I hope that I may have the pleasure of meeting you in person in the future.

Very truly yours,

*V. P. Richards*  
V. P. Richards



XXXXXXXXXX

March 10, 1964

Mr. V. P. Richards, Editor  
Holbrook Tribune-News  
200 East Hopi  
Holbrook, Arizona

and

Mr. J. Morris Richards  
Winslow, Arizona

Gentlemen:

We have noted your editorial appearing in the Holbrook Tribune-News of March 6, 1964, entitled "Arizona's Greatest Need". We were particularly interested, of course, in your comments upon the Arizona Oil and Gas Conservation Commission.

In order to correct the erroneous impression that the Commission has hampered development of oil and gas in Arizona, we would like to supply you with the attached well report showing the current drilling activity in our state. You will note that the largest category is the number of dry holes. This is due to the fact that Arizona is still a wildcat state, in that considering the large area, comparatively few holes have been drilled; and it is natural and follows the historical pattern that the majority of the initial exploration in any area does result in dry holes. However, each dry hole drilled greatly contributes to the geological knowledge of conditions in that particular area and enhances the chance of following wells to discover hydrocarbon substances. You will note too that the majority of activity has been in Apache County. The great Four Corners oil and gas fields break over into Arizona in this area and consequently it is logically the place for initial activity.

We should like to point out that there are currently, in various stages of drilling, some fifteen wells going down. In addition to these fifteen drilling wells, there are nine wells upon which locations have been staked and permits issued and which should be commenced within the near future. Considering the overall lack of knowledge concerning hydrocarbon geology within the state, we feel that the two dozen wells being drilled or about to be drilled are an indication of major interest in the oil and gas possibilities within our state. It should further be noted that there

Messrs. V. P. Richards and J. Morris Richards

March 10, 1964

Page Two

are currently twenty-five wells actually producing oil, gas and helium within the state, while some fourteen wells now in a shut-in capacity by their operators should eventually be producing.

It has long been the policy of the Oil and Gas Conservation Commission to protect and foster fresh water development within the state and our rules and regulations provide for this. As the report indicates, as a by-product of oil and gas exploration activities, there have been fifty-six water wells made available to the landowners throughout the state.

It is our feeling that the Oil and Gas Conservation Commission and the rules and regulations which have been developed for its enforcement have done a great deal to encourage continued exploration within this state. It is the far sighted policy of our legislators and the Oil and Gas Conservation Commissioners that such waste as may currently be seen in the Morrow County, Ohio, fields will not occur in Arizona.

We will be happy to furnish you such further information as you may desire concerning the activities of this Commission.

Yours very truly,

John Bannister  
Executive Secretary

JB:mkc  
Encl.

Cc: Mr. Lynn Lockhart, Chairman  
Oil and Gas Conservation Commission  
525 West Orchid Lane  
Phoenix, Arizona 85021

Bcc: The Honorable Paul Fannin  
Bcc: The Honorable Harold C. Giss

S T A T E O F A R I Z O N A  
OIL, GAS & HELIUM PRODUCTION  
January 1964

<u>COMPANY</u>	<u>WELL NAME &amp; NUMBER</u>	<u>FIELD</u>	<u>BBL'S.</u>	<u>CUMULATIVE</u>
<u>OIL</u>				
Humble Oil & Refining Co.	Navajo Tribe of Indians "E"	E. Boundary Butte	76	28,706
Humble Oil & Refining Co.	Navajo Tribe of Indians	E. Boundary Butte	112	2,006
Pan American Petroleum Co.	Navajo Tribal "P" #1	Undesignated Paradox	165	5,900
Shell Oil Company	Navajo Tribal #23-11	E. Boundary Butte #8	259	7,529
Shell Oil Company	Navajo Tribal #1	North Toh-Athin	0	334
The Superior Oil Company	Navajo Western Navajo #14-16	Twin Falls Creek	180	208
Texas Pacific Coal & Oil	Navajo "H" #1	Dry Mesa	581	117,257
Texas Pacific Coal & Oil	Navajo Tract 138	Dry Mesa	2,494	113,749
Texaco, Inc.	Navajo Tract 138	Dry Mesa	1,863	22,387
	Navajo Tribe "AG" #1	Undesignated		
*****				
<u>HELIUM GAS</u>				
*****				
Kerr-McGee Oil Industries	Poe #1 Unit III	Pinta Dome	7,323	160,487
	Poe #2 Unit VIII		4,825	127,810
	State #1 Unit VI		6,338	82,342
	State #3 Unit IV		134	4,631
	State #2 Unit V		12,660	281,301
	State #4 Unit I		349	38,011
*****				
Eastern Petroleum Company	State #1-28 Unit II	Pinta Dome	5,319	118,518
	State #1-2 Unit IX		4,102	51,113
	State #1-10 Unit X		138	14,012
*****				
<u>NATURAL GAS</u>				
*****				
Humble Oil & Refining Co.	Navajo Tribe of Indians	E. Boundary Butte	19,051	256,041
Humble Oil & Refining Co.	Navajo Tribe of Indians "E"	E. Boundary Butte	5,012	406,528
El Paso Natural Gas Co.	Navajo Tribal - Rita Peak #1	Undesignated	4,786	281,424
Shell Oil Company	Navajo Tribal #23-11	E. Boundary Butte 8	17,977	334,418
Shell Oil Company	Navajo Tribal #2	E. Boundary Butte 7	9,670	175,202
Shell Oil Company	Navajo Tribal #1	North Toh Athin	19,805	218,233
The Superior Oil Company	Navajo "H" #14-16	Twin Falls Creek	28,872	33,990
*****				

STATE OF ARIZONA  
Oil and Gas Conservation Commission

Well Report  
March 1964

COUNTY	Strat Hole	Dry Hole	Locations	Drilling	Shut-in Gas	Shut-in Oil	Shut-in Helium	Producing Oil & Gas	Prod. Oil	Prod. Gas	Prod. Helium	Water	Total
Apache	5	114	7	10	3	2	9	2	8	6	9	4	179
Cochise	-	40	-	1	-	-	-	-	-	-	-	3	44
Cocconino	-	12	-	1	-	-	-	-	-	-	-	9	22
Gila	-	-	-	-	-	-	-	-	-	-	-	13	27
Graham	-	14	-	-	-	-	-	-	-	-	-	-	-
Greenlee	-	-	-	-	-	-	-	-	-	-	-	15	36
Maricopa	-	21	-	-	-	-	-	-	-	-	-	4	18
Mohave	-	14	-	-	-	-	-	-	-	-	-	1	49
Navajo	-	47	1	-	-	-	-	-	-	-	-	-	8
Pima	-	7	-	1	-	-	-	-	-	-	-	3	19
Pinal	-	10	-	-	-	-	-	-	-	-	-	-	2
Santa Cruz	-	2	-	-	-	-	-	-	-	-	-	3	17
Yavapai	-	12	1	1	-	-	-	-	-	-	-	1	14
Yuma	-	12	-	1	-	-	-	-	-	-	-	56	429
TOTALS	5	305	9	15	3	2	9	2	8	6	9	56	429



STATE OF ARIZONA  
Oil and Gas Conservation Commission  
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March 1964


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Graham	-	14	-	-	-	-	-	-	-	-	-	13	27
Greenlee	-	-	-	-	-	-	-	-	-	-	-	-	-
Maricopa	-	21	-	-	-	-	-	-	-	-	-	15	36
Mohave	-	14	-	-	-	-	-	-	-	-	-	4	18
Navajo	-	47	1	-	-	-	-	-	-	-	-	1	49
Pima	-	7	-	1	-	-	-	-	-	-	-	-	8
Pinal	-	10	-	-	-	-	-	-	-	-	-	3	13
Santa Cruz	-	2	-	-	-	-	-	-	-	-	-	-	2
Yavapai	-	12	1	1	-	-	-	-	-	-	-	3	17
Yuma	-	12	-	1	-	-	-	-	-	-	-	1	14
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3-6-64

# Holbrook Tribune-News

Holbrook News Founded 1906 — Holbrook Tribune Founded 1911  
PUBLISHED EVERY FRIDAY MORNING AT  
HOLBROOK, NAVAJO COUNTY, ARIZONA

NORTHERN ARIZONA PRINTERS & PUBLISHERS, INC.  
V. P. RICHARDS, Publisher  
200 EAST HOPKINS TELEPHONE 234-1225

**NATIONAL EDITORIAL ASSOCIATION**

**ARIZONA NEWSPAPER ASSOCIATION**

Second Class postage paid at Holbrook, Arizona.

OFFICIAL NEWSPAPER OF THE COUNTY OF NAVAJO

SUBSCRIPTION RATES (Payable in Advance)	
(In Continental United States)	
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Six Months (Outside Navajo County)	2.25
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Any erroneous reflection upon the standing, character or reputation of any person, firm, corporation which may appear in the columns of the Tribune-News will be gladly corrected upon its being brought to the attention of the management.

## Arizona's Greatest Need...

During the final days of legislative session, and much of the state press is discussing possibilities of Arizona's one or both senators, too few people are aware that many troubles in the State of Arizona have resulted because their executive officer is not keeping up with his moral obligations to the people of his state.

We cannot estimate how many people have told us in the past two years that we could have worse executives if some of these were elected that had run for the job. They believe that the present is the best Arizona can accomplish.

We have never believed this, although we have a fine opinion of most of our state administrators. We cannot remember governors of Arizona previous to statehood, but we have known in the last 50 years some good governors.

Two of them never appointed a state official without securing his signed resignation, without date, and kept them in a private file, promising to use them if they performed anyway but in the public interest. At least one other governor cautioned his appointees that he would fire them if they deserved it.

We do recall that one governor made it his business to bring corporation commissioners to his office and asked them if certain charges were true, because he wanted all executive departments beyond question.

Within the past month we have been concerned about trouble at the state level that should never have happened. Water, both surface and ground, seems to be worrying the most heavily populated centers of the state. In drives and speeches, they expect all of Arizona to get behind the Central Arizona Project, whether for good or ill, when most of them should know before hand there is no water in the Colorado River to bring their project to pass.

We believe that the Governor and his appointees to the Interstate Stream Commission know, beyond a doubt, that their project is doomed before it is built. We intend to delve into various ramifications of their project in the near future, but we cannot but caution members of both houses of the legislature to take another look at the budget for the stream commission, especially that portion for lawyers, engineers and a bunch of parasites hanging around because Arizona is short of water.

Arizona today has less water from the Colorado River than it had 20, or 30 years ago, when a number of us pointed out the dangers of political partisanship to deaf ears.

Drilling for oil or natural gas in Arizona has come to a practical standstill since the Arizona Oil and Gas Conservation Commission was brought into existence during the administration of our present governor. He has been coached and shown the way to make this a reasonable commission, or that it would be a disappointment. That it is a detriment few people will question who know anything about it.

Recent hands in the State Tax Commission, of the Corporation Commission have brought about embarrassment to the people of Arizona. Although these officials are elected to office, it has taken newspaper men to divulge them, and investigations by a legislative committee, instead of a strong hand by the state's chief executive.

Just a few of other ills can be named in the state hospital board, regents auditorium building, highway (rights of way purchases), locations of highways, padding material delivery, flower funds; auto inspection farce, Game and Fish Commission rows, Power Authority arguments—would lead one to believe that appropriations for the governor's office amounting to over \$200,000 is akin to outright waste.

One of our best friends came up this week with this statement: "Nice managers do not win ball games nor govern a state."

A long time observer of state affairs made this observation: "Incompetence with respect to the governor's office, can be seen, heard and smelled. The ghost writer, ghost thinkers, and appointees, with complete lack of supervision, are a shame upon the state."

We know of no candidate for governor mentioned so far that we can call any better than the one we have, but it is about time someone in Arizona, whether Republican or Democrat, proposed that a fast growing state should come up with men competent and sincere enough to do a better job than we have seen in the past decade or more.

We also believe that if members of the Arizona legislature believe that they represent their constituents, they had better take another look at their appropriation bills this session and reflect expenditures with what may be expected—not what they hope for.

For many years we have looked upon our present governor as an agreeable business man and enjoy our personal contact with him. We supported him the first time because he looked the best in the field; we have voted for him since because of his opposition—not because he has been a good governor. —V. P. Richards

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We believe that the Governor and his appointees to the Interstate Stream Commission know, beyond a doubt, that their project is doomed before it is built. We intend to delve into various ramifications of their project in the near future, but we cannot but caution members of both houses of the legislature to take another look at the budget for the stream commission, especially that portion for lawyers, engineers and a bunch of parasites hanging around because Arizona is short of water.

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—V. P. Richards



Office of The Governor  
State House  
Phoenix, Arizona

PAUL FANNIN  
GOVERNOR

March 12, 1964

Mr. John Bannister, Executive Secretary  
Oil and Gas Conservation Commission  
1624 West Adams  
Phoenix 7, Arizona

Dear Mr. Bannister:

Your letter of March 10th with its enclosures is gratefully acknowledged.

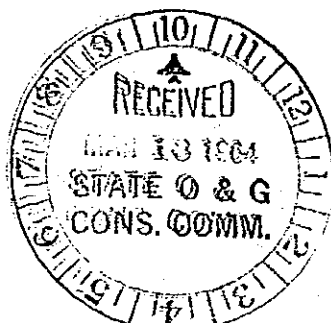
I am most appreciative of your sending me this information to me.

Best regards.

Sincerely,

*Paul Fannin*

Paul Fannin





XXXXXXXXXX

March 10, 1964

The Honorable Paul Fannin  
Governor of Arizona  
State House  
Phoenix, Arizona

Sir:

We are enclosing for your information an article which appeared in the Holbrook Tribune-News on March 6, 1964.

We are further enclosing a letter which we have written in response to editor V. P. Richards' views on the Arizona Oil and Gas Conservation Commission. We believe that our response is informative and hope that it will correct some of the false impressions currently entertained by Mr. Richards.

Very truly yours,

John Bannister  
Executive Secretary

JB:mke  
Encl.

Cc: Mr. Lynn Lockhart, Chairman  
Oil and Gas Conservation Commission  
525 West Orchid Lane  
Phoenix, Arizona 85021

XXXXXXXXXX

March 10, 1964

The Honorable Harold C. Giss  
Arizona State Senate  
Phoenix, Arizona

My dear Mr. Giss:

It was my sincere pleasure to have met you at lunch Monday. Senator Lockhart expressed his deepest admiration for you both as a Senator and as a man.

Pursuant to your indication of interest in our field of endeavor, we would like to give you the attached breakdown of current activities in the oil and gas fields in our state. The production report shows the current monthly production from oil, gas and helium wells as well as the total amount of production from each well.

Also attached is a report showing the total number of wells upon which the Oil and Gas Conservation Commission has files and which we believe to be comparatively accurate. You will note that there are currently fifteen exploratory wells being drilled. These wells are in various phases of completion, some of which we carry as a drilling well because the operators have not yet filed completion reports. In addition there are nine more exploratory wells which will be commenced in the near future and upon which we have already issued permits to drill. It is further interesting to note that as a by-product of oil and gas exploration within the state, some fifty-six water wells have been discovered and turned over to the use of the various landowners involved; and that our General Rules and Regulations provide for the protection of fresh water strata if encountered in the drilling of a well.

For your further information we are enclosing a copy of a letter which we have written to Messrs. Richards concerning an article which recently appeared in the Holbrook Tribune-News.

Your indicated interest in our activities is most pleasing and please be assured of our continuing cooperation with you. If at any time we may be of help, you have only to request it.

Yours very truly,

JB:mkc  
Encl.

Cc: Mr. Lynn Lockhart, Chairman  
Oil and Gas Conservation Commission

John Bannister  
Executive Secretary

**H. B. 343**

1 appropriated from the state general fund to the oil and gas  
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STATE OF ARIZONA  
26TH LEGISLATURE  
2ND REGULAR SESSION

HOUSE

**H. B. 343**

INTRODUCED  
MARCH 2, 1964

Referred to	Date	Reported Out
Judiciary		
Committee of Whole		
3rd Reading — Aye No Absent		
Senate Action		
Sent to Governor Action		

Introduced by Members Burson, Higgins of Maricopa; Brown of Apache; Crosby of Navajo

**AN ACT Relating to Oil and Gas; Providing for the Payment of a Reward to the Owner of the Well for the First Oil or Hydrocarbon Gas Well Brought in Within the Boundaries of the State of Arizona That Produces Not Less Than Twenty-Five Barrels of Commercial Oil or at Least One Million Cubic Feet of Hydrocarbon Gas Every Twenty-Four Hours Consecutively Pumping or Flowing for a Period of Not Less Than Ninety Days; Prescribing the Method of Payment of the Reward, and Making an Appropriation.**

- 1 **Be it enacted by the Legislature of the State of Arizona:**
- 2 Section 1. **REWARD PAYMENT TO OIL OR**
- 3 **HYDROCARBON GAS WELL OWNER**
- 4 The oil and gas conservation commission shall offer a
- 5 reward of two hundred fifty thousand dollars to be paid
- 6 to the owner of the well for the first oil or hydrocarbon
- 7 gas well brought in within the boundaries of the state of
- 8 Arizona that produces not less than twenty-five barrels of
- 9 commercial oil or at least one million cubic feet of hydro-
- 10 carbon gas every twenty-four hours pumping or flowing
- 11 consecutively for a period of not less than ninety days.
- 12 Sec. 2. **PROCEDURE FOR PAYMENT**
- 13 The oil and gas conservation commission shall determine
- 14 the owner of the oil or hydrocarbon gas well who is qualified
- 15 to receive the reward as prescribed by the terms of section
- 16 1 of this act.
- 17 Sec. 3. **APPROPRIATION**
- 18 The sum of two hundred fifty thousand dollars is ap-

March 25, 1964

TO: Commissioners of Oil and Gas Conservation Commission  
State of Arizona

FROM: John K. Petty, Petroleum Geologist

SUBJECT: Additional Field Trips

Field Trip #4

March 18, 1964

Purpose of trip was to visit well projects, and check on reported drilling south of Yuma near the Mexican-California border. Mr. John Bannister, Executive Secretary of the Commission, accompanied me on this trip which I found to be most pleasurable.

The Montezuma Oil and Gas Company #1-A Federal, Section 30-T2S-R9W, elevation 1223 feet, located 33 miles north of Sentinel and in the western part of Maricopa County, was visited and is shut in presently. This well was spudded in 7/28/63 and was drilled to 452 feet, which is present total depth. Operator reported someone dynamited his casing a month or so previously and damaged his operation considerably. Operator says he'll start drilling soon.

The Desert Drilling Company #1 State, Section 16-T7S-R13W, just northwest of Dateland, located in eastern Yuma County, was visited. Per previous report, the rig was moved away from project. The total depth is 6767 feet and all of the available samples have been turned into the Sample Cut and distributed. D. H. Roe and Keoghan let Pan American Petroleum have the samples to below 5000 feet before I was employed by the Commission. Upon request I received a sample log of the well to that depth described by Pan-Am geologists and they delivered the samples to the Four Corners Sample Cut at Farmington. These samples have many skips in them but I don't think anything really worthwhile has been lost as the alluvium is all sand and shale.

The lower samples were preserved fairly well and I turned them over to the Sample Cut.

In regard to future activity of this well, Mr. Weaver of Nashville, Tennessee, will very likely have a metal plate welded over the casing to prevent outside objects from entering the hole until later when I believe some of the owners will perhaps renew the operation and drill deeper. Several have indicated they'd like to. I think some time should be allowed on this project because of the extraordinary circumstances surrounding the cessation of operations.

March 19, 1964

The area south of Yuma to the Mexican border of San Luis was driven over and the exploration well originally drilled by Ross Drilling Company to 3000 feet in SE NW NW Section 35-T10S-R25W, Yuma County, was visited. This well was reported a few weeks ago to have had some oil shows between 2000 and 3000 feet. It was reported that Petroleum Company representatives visited the site. I asked a few companies and they were not aware that such a project existed.



March 25, 1964  
Additional Field Trips  
Page Two

When the well site was visited, Mr. Omar Loeltz, a civil engineer for U.S.G.S. at Yuma said they were cleaning it out and would test for water and that this project's name was Lower Colorado River Project #17. He had seen no shows of oil. He said they'd drilled several water well projects in the area and would drill more. Number 17 had abundant good fresh water at 2000 and it continued fresh until almost 3000 feet where it became not so fresh. Number 17 is located 3 miles north of San Luis and nearly a mile west.

Lower Colorado River Project #10, a water well a few miles east of San Luis at 1200 feet pumped 2500 gallons of water for 24 hours and had a 17 foot draw down in that time.

We were told where to obtain information on the projects drilled in the area and it will be obtained. Some of it will be very useful.

The #17 was the only drilling operation noticed in the vicinity.

JKP:mkc

March 25, 1964

TO: Commissioners of Oil and Gas Conservation Commission  
State of Arizona

FROM: John K. Petty, Petroleum Geologist

SUBJECT: Late well reports and developments

#### P O T A S H

The potash exploration is increasing in that several new companies and individuals are inquiring for data in the Holbrook Salt Basin area. Since Duval Corporation, Kern County Land, and U. S. Borax have drilled several exploration projects, other mining companies and petroleum companies are becoming interested because they think potash deposits have been discovered by the active people. There are six rigs drilling potash exploration tests presently in the Navajo-Holbrook-St. Johns area.

Ben Messer, Manager for Duval, said last Friday that he'd<sup>not</sup> heard of sulfur being discovered. A rumor that Duval had drilled into a sulfur deposit had drifted into this office, which could not be verified.

Several companies are very optimistic about the success of the potash exploration and others are skeptical. Some companies are studying other areas for potash in the state.

#### H E L I U M

In the Navajo Springs area Eastern Petroleum has reported that they'd like to hold information on their drilling for a short while longer and that they have increased the producers from six to possibly ten wells. Since they are still drilling, more can be hoped for.

A worthy new development in the Kerr-McGee Navajo Helium Plant operation is the processing of liquified helium. Kerr-McGee Oil Industries has added this feature to their plant and while they have not sold any to date, they hope to soon.

An approximately 500 liter vat (approximately 125 gallons) has been installed, and 100 liters of liquified helium can be produced per hour.

A few comments on liquid helium are:

1. The liquid helium weighs one pound per gallon.
2. The Pinta Dome gas will produce 40 liters of liquid helium per 1000 cubic feet of helium gas.
3. Usually the liquid helium shipping drums have a 100 liter capacity. One liter equals 1.0567 liquid quarts.

No liquified helium has been shipped or sold to date by Kerr-McGee as they say they have no market. All the above helium information is confidential to this Commission. They are still working on methods of processing, etc., and are experimenting on the whole project. This project is operating in the west end of the existing Navajo Helium Plant.

The liquid helium will be transformed into air on exposure faster than the eye can see.

March 25, 1964  
Late well reports and developments  
Page Two

#### P E T R O L E U M

New interest is evidenced in the Sonoita area in Pima County as several are studying the Mountain States acreage and adjacent areas for a drilling deal.

Ram Oil Company reports a show of oil in a sand at 1560 feet. This was not verified.

Much interest is displayed in the Kaibab area in northern Coconino County. Operators are calling in about areas in this part of the state and others including Pima and Cochise Counties as well. One Midland operator says he is moving out here to drill in the Kaibab area and other localities throughout the state. Many inquiries from outstanding interests have been received, one being the Chief Geologist of Ambassador Oil Company.

Yavapai County is the center of much interest in the area of the Harless wells just north of the highway between Cottonwood and Sedona. Talk of additional drilling several blocks there is noticed, but no actual trades to drill have been heard of.

In the Four Corners the Superior Oil Company #33-12 Navajo, Section 12-T39N-R23E, Apache County, is drilling and coring below 5000 feet on a projected 6530 foot Devonian test. This is a tight hole.

The Texaco Inc. #1 "AK" Navajo, Section 6-T40N-R25E, Apache County, is drilling below 3150 feet on a projected 6750 foot Devonian pay test.

The Texaco Inc. #2 "AG" Navajo Tribe, Section 21-T41N-R25E, Apache County, is at a T.D. of 6781 feet and is 1/2 mile south of the #1 "AG" which opened the Devonian producing Walker Creek Field last year. They perforated this at 6464-74, acidized, swabbed, recovering no petroleum. This interval was shut in for injectivity and later plugged back to 6432. Well was perforated at 6403-17 and acidized with 250 gallons of mud acid. Another injectivity test was run with no satisfactory results. Presently the well is shut in and will be used as a salt water disposal well disposing of salt water into the 6403-17 foot interval of perforations.

The Texaco Inc. #1 Navajo "AM", Section 36-T39N-R21E, Navajo County, is drilling below 3154 on a prospective 7300 Devonian test.

The Socony Mobil Oil Company Inc is reported to have spudded in on their "Tight" Devonian test, the #1 Socony Mobil-Navajo Tribe Tract #155, Section 28-T39N-R25E, Apache County. This project is 3 miles northwest of Rock Point Trading Post and 12 miles south of Texaco's Walker Creek Devonian Field.

The Marathon Oil Company #1 Marathon Oil Company - Navajo Indian Reservation, Section 18-T40N-R29E, Apache County, is a mile south of Mississippian production in the Toh-Atin or Dry Mesa Field. This well will be a Devonian Test and they are reported to have spudded in and are drilling ahead.

The Oil and Gas Journal came through with their promise of a few months ago to publish an Arizona geological petroleum article which would help the industry in this state. A copy of this article is attached.

jkp;mc

# Explorers look to Black Mesa

ARIZONA'S Black Mesa basin appears on the verge of its long-predicted exploration explosion.

Oil and gas discoveries to the northeast in the adjacent Blanding basin and the dividing Tyende saddle area have honed an already-sharp operator interest in probing the deeper Black Mesa beds.

And now it appears that midbasin acreage denied to the industry for more than 35 years due to Indian ownership disputes is finally going to be thrown open for leasing this fall.

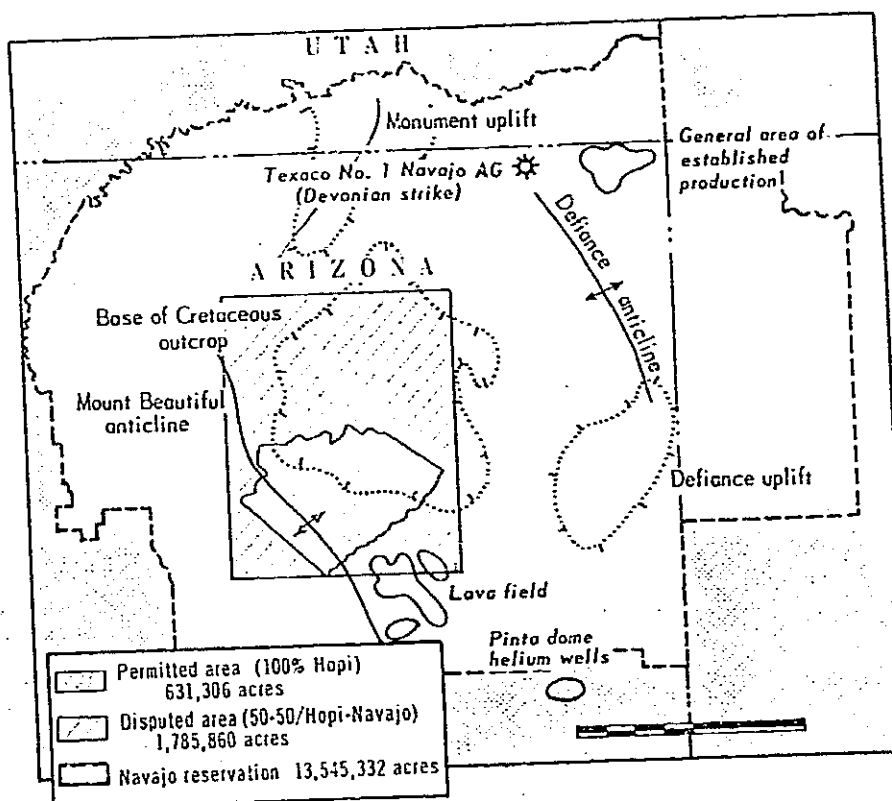
Lease bonuses for choice acreage around the rim of the basin have zoomed during the past few months. And the prices have become definitely dearer as the offered acreage edges nearer the basin proper.

Evidence of this pricing trend shows up very clearly in an analysis of the results of the latest auction of Navajo tribal lands. This was a three-part sale, with separate offerings in November 1963 and in January and February this year.

The November and January sales involved mostly acreage lying to the north and east of Township 39n-21e. Much of this land is in the same general area as Texaco Inc.'s important Devonian-McCracken oil strike at Walker Creek in May 1963. This well, the 1 Navajo-AG in 16-41n-25e, Apache County, completed for 182 bo/d from perforations at 6,370-84 ft. It triggered a flurry of other projects in the saddle area—none of which has scored as yet.

The November offering by the Navajos brought in bids on 35,115 acres of the 145,896-acre package and total bonuses of \$1,029,181. The highest per-acre bid was \$287 and the average figured out to \$29.31. Nothing very spectacular here.

The blocks offered in January proved more interesting, with operators snapping up 71,405 acres of the total 186,095. The average per-acre bonus climbed to \$46.39, thanks in part to a big \$960,179 bid for one 2,560-acre tract. Biggest per-acre bid was \$375.07. And the Navajos raked in a bonus total of more than \$3,300,000.



MIDBASIN ACREAGE denied to the industry for more than 35 years in Black Mesa basin will be thrown open for leasing this fall. Fig. 1.

BY ROBERT J. ENRIGHT  
Southwest Editor

Most of these tracts were in the southern portion of the general area mentioned earlier—the bulk of them in an east-west stretch from 39n-27e through 21e.

Though operator interest was higher, prices paid at this sale—with one or two exceptions—weren't considered unreasonably steep.

Big money tabled. In February, the Navajos offered acreage still farther to the south and nearer yet to the deep portion of the basin—most of it lying in an east-west belt from 38n-27e through 20e.

And this time the lid really flew off.

Operators submitted high bonus bids totaling \$12,623,873.74 for 117,617 of the total 206,983 acres offered for lease. The average per-acre bid soared to \$107.33. And the highest single bonus was \$935/acre. Superior Oil Co. chalked this one with its \$2,384,250 bid for a

2,550-acre tract comprising sections 29, 30, 31, and 32 in 38n-21e.

Many of the majors were in this one competing for tracts. The list of high bidders includes: Pan American, Texaco, Cities Service, Sinclair, Kern County Land, Socony Mobil, California Co., Tenneco, Richfield, Pure, Tidewater, and Sun. It did not include such names as Humble, Gulf, and Shell.

Superior, however, dominated the February offering with an astonishing display of bidding pyrotechnics. Of the more than \$12,600,000 in total high bids, Superior accounted for more than \$9,000,000 in winning leases on 10 tracts comprising roughly 25,600 acres.

The company was high bidder on five of seven tracts going for more than \$500,000. Along with its gold-plated \$2,384,250 block, Superior paid:

- \$1,938,000 (\$710/acre) for sections 29, 30, 31, and 32 in 38n-27e.
- \$1,817,600 (\$710/acre) for sections 25, 26, 35, and 36 in 38n-20e.

## a with great expectations

- \$1,574,400 (\$615/acre) for sections 27, 28, 33, and 34 in 38n-21e.

- \$572,400 (\$225/acre) for sections 5, 6, 7, and 8 in 38n-22e.

Mobil plunked down \$640,307.20 (\$350.12/acre) for sections 13, 14, 23, and 24 in 38n-23e. And Pan American and Sinclair won sections 17, 18, 19, and 20 in 38n-27e with a joint bid of \$522,135 (\$205/acre).

These sky's-the-limit bonuses present something of a misleading picture in that—by inflating averages—they make it appear all Black Mesa area leases are going for premium prices. And this isn't so.

Some tracts, even in the February portion of the sale, were bought for as little as \$1.25 an acre. Kern County Land picked up more than 5,000 acres at this price in winning tracts 197 and 198 in 38n-27e. And Richfield snapped up a 2,560-acre block immediately adjoining on the east the \$2,384,250 Superior tract for a mere \$8,012 (\$3.13/acre).

Furthermore, even on the big-money tracts, a lot of cash was left on the table in many cases.

**Interest indicator?** Despite these factors, the increasing attraction of deep-basin acreage seems clear enough.

And, if there's any sort of conclusion to be drawn from this, it is that there will be a fine scramble for leases located well out into the basin when they finally become available.

Operators' failure to drill in mid-basin is in no way a reflection of any reluctance.

Essentially, the entire basin has been denied to them because of a long drawn-out quarrel between the Navajo and Hopi Indian tribes over ownership of both surface and minerals.

This fuss was resolved in part by a district court decision in Prescott, Ariz., in Oct. 1960.

The court decision, later upheld by the U.S. Supreme Court, gave the Hopis clear title to surface and minerals over a 631,000-acre area in almost the exact middle of the basin in the Keams Canyon-Polacca-

Oraibi locale (See Fig. 1). The judgement was filed in Sept. 1962 and now is final.

It gave joint title to the two tribes to surface and minerals on a rectangular block of land surrounding the Hopi reservation and comprising 1,785,900 acres.

A tremendous 13,545,300-acre spread surrounding the so-called disputed area and bulging over into New Mexico and Utah belongs solely to the Navajos. And it is on these Navajo holdings to the northeast of the disputed territory where present leasing and drilling activity is concentrated.

**The status now.** It is the Hopi and jointly owned lands totaling nearly 2,500,000 acres, however, which cover the heart of the basin where the marine sediments are the thickest.

And now the industry is finally going to get a crack at exploring there.

The Hopis, at least, are getting ready to lease. The tribe recently issued its first exploration permit—

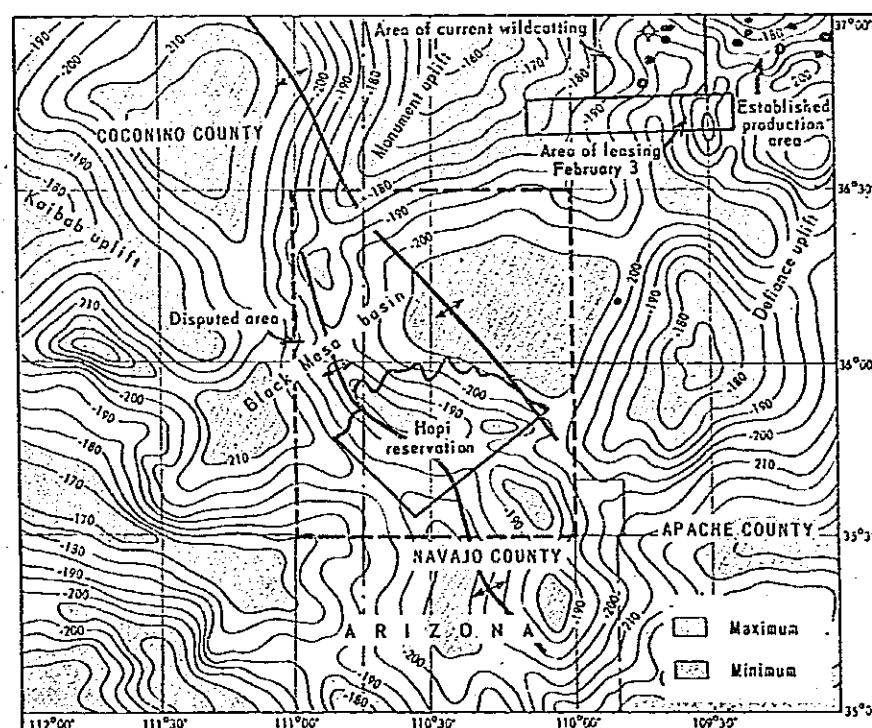
a non-exclusive license covering the entire reservation—to Exploration Surveys, Inc., Dallas. Exploration Surveys will do no leasing but will offer the detailed gravimetric survey data it gathers on a fee basis to operators.

The Hopi tribe will conduct its first lease sale in September. The leases will be offered on a cash-bonus basis and with a fixed 16⅓% royalty. Some will carry drilling clauses. And standard rental will be \$1.25/acre annually. Operators must nominate tracts on which they wish to bid by July 1. The Hopi Agency at Keams Canyon is issuing exploration permits and will conduct the sale.

**Disputed area still tight.** There's no indication that the so-called disputed territory, however, will be opened to leasing in the near future.

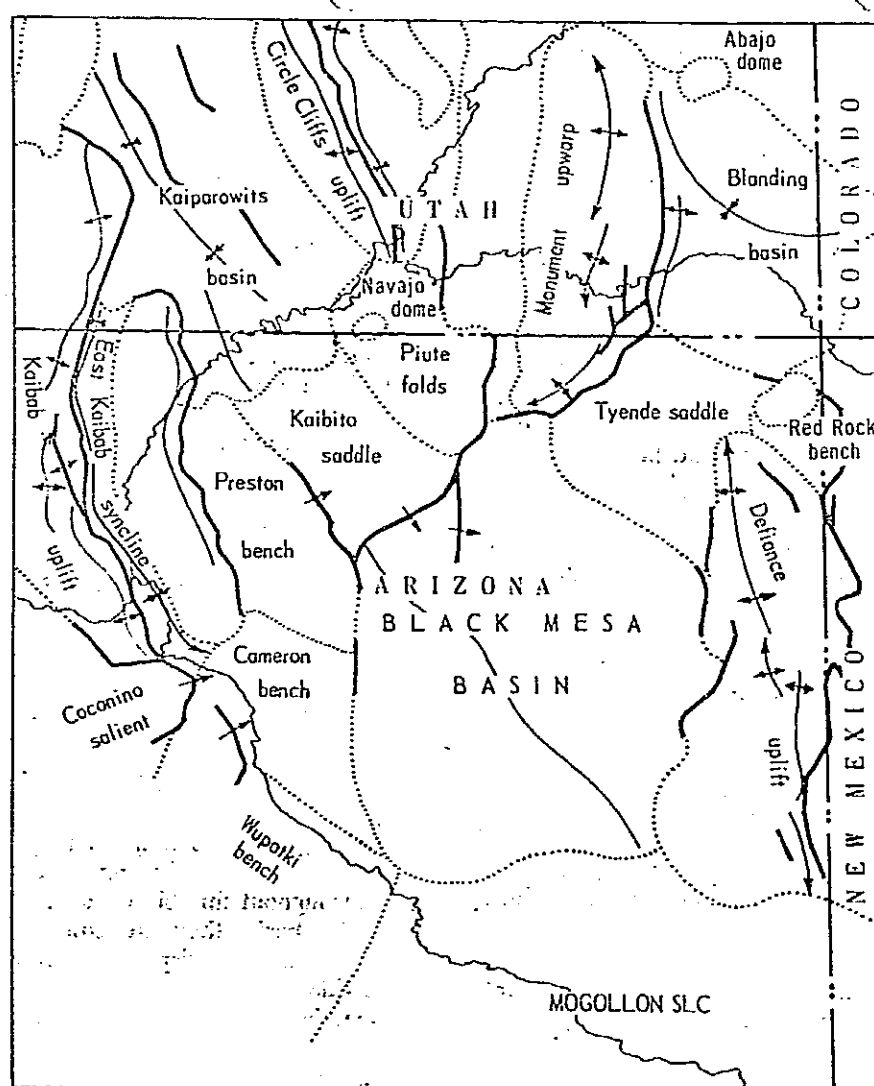
Although the Hopis and Navajos have agreed to share mineral interests throughout this big expanse on a 50-50 basis, they are still embroiled in a bitter dispute over how to divide the surface.

Negotiations on this matter ap-



**THERE COULD BE** as much as 30,000 ft of marine sediments in the middle of Black Mesa basin. This gravity survey map by Exploration Surveys, Inc., reveals major structural features of northeastern Arizona. Fig. 2.





**MOST PUBLISHED DATA** on the basin to date estimate depth to basement at a maximum of about 7,000 ft, but most think this a gross underestimate. Black Mesa has plenty of structure for the driller to test. Tectonic setting of the basin is shown here. Fig. 3.

pear deadlocked. And it's doubtful that the two tribes will agree to lease until the quarrel over division of the surface is settled.

A big unknown. Since there has been no drilling or seismic work in Black Mesa's big mid-section due to the Indian ownership question, little is known about depth of sediments, etc.

Most published material on the basin to date estimates depth to basement at a maximum of about 7,000 ft.

Some exploration experts, however, feel this is a gross underestimate. These sources contend that the basin beds thicken very rapidly coming off the Defiance uplift on the east and the Monument uplift on the north.

One large independent oil firm believes, based on some magnetics, that there could be as much as 30,000 ft of marine sediments in the middle of the basin.

Another student of this area, Maynard Jones of Exploration Surveys, thinks this may be an overestimate. Jones' calculations, based on regional gravity work performed by his firm (Fig. 2), place maximum sedimentary depth at no less than 10,000 ft, with 15,000 ft or more as "probable," and 20,000 ft as "possible."

**Plenty of structure.** Along with the Defiance and Monument uplifts (and the connecting Tyende saddle area), the principal tectonic features hemming in the basin include the southern end of the Circle Cliffs uplift on the northwest, the Echo

Cliffs and Kaibab uplifts on the west and the Mogollon slope on the south (Fig. 3).

On the northwest the Circle Cliffs uplift tails into the Piute folds. And the Echo Cliffs and Kaibab uplifts slump off onto the Preston, Cameron, and Wupatki benches. Together with the Kaibito saddle area which separates the Black Mesa on the northwest from the Kaiparowits basin, these benches ring the Black Mesa proper from the northwest all the way down the western rim.

The basin itself boasts a number of major anticlines and monoclines of great length. The big anticlinal features trend predominantly northwest to southeast. Two of the largest are the Oraibi or Mount Beautiful anticline and the big Cow Springs or Keams Canyon feature. Both of these are continuous nearly all the way across the basin and both cross the Hopi reservation.

Along with this principal northwest-southeast trend of folding, there is a secondary trend, apparently superimposed on the first, and running roughly at right angles to it (from northeast to southwest).

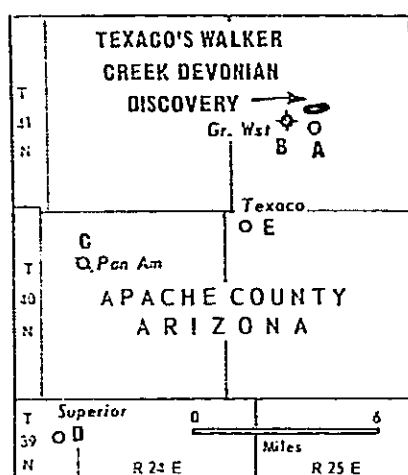
**Drilling targets.** Geologists studying the basin list many formations as good bets for developing commercial production.

Foremost, probably, are those already found productive by Texaco and others in the Tyende saddle area and the Blanding basin rim area. They include the Devonian and the Pennsylvanian generally, with the latter's Morrow, Des Moines, and Virgil zones eyed as hot prospects.

The Permian also is regarded as a good drilling target. And its attraction has been enhanced by Tenneco's prospective Permian-Kaibab dolomite-oil discovery in the neighboring Kaiparowits basin at its 2 Upper Valley Unit in 13-36s-1e, Garfield County, Utah (OGJ, March 2, p. 175).

The explorer's list of potentially productive beds also includes the Tertiary, Cretaceous, Jurassic, and Triassic (especially the Moenkopi and Chinle formations).

**Drillers move south.** Following along conventionally behind the leasing play in the Tyende saddle area, wildcatting is edging steadily



TEXACO INC. announced two new Arizona wildcats, one in Apache County, and the other in Navajo County. Other current tests are shown here. Fig. 4.

south and southwest on the basin rim.

Texaco was drilling below 6,200 ft early this month at its 2 Navajo A-G in 21-41n-25e in an attempt at confirming its Walker Creek Devonian discovery (A in Fig. 4.) Location is .5 mile south of the discovery well and roughly the same distance east of a Devonian duster (at B) plugged and abandoned at 7,099 ft last October in 20-41n-25e. The dry hole was a Great Western-Moncrief venture. It re-

ported these formation sample tops: Ismay 4,710 ft, Desert Creek 4,180 ft, Akah 4,925 ft, Barker Creek 5,050 ft, Molas 5,475 ft, Mississippian 5,640 ft, Ouray 6,010 ft, and Elbert 6,090 ft.

Roughly 8 miles southwest of Walker Creek in 8-40n-24e, (C in Fig. 4), Pan American was reported still at 6,417 ft in its 1 Navajo Q, a tight hole projected to 6,800 ft to the Precambrian. No information is being released.

And 7 miles farther to the south, Superior was reported drilling ahead in another tight hole at its 33-12 Navajo V in 12-39n-23e (D in Fig. 4). This test, a projected 6,530 ft Devonian probe, is closer to the basin proper than any previous hole in the saddle area. Superior, so far, isn't reporting even a current drilling depth.

At press time, Texaco announced two new Arizona wildcats, one in Apache County, and one remote driller in Navajo County. The 1 Navajo-AK will go down in 6-40n-25e, about 4½ miles southeast of Walker Creek (E in Fig. 4). In Navajo County, the 1 Navajo-AM will seek production 26 miles southwest of the field in 36-29n-21e.

What would happen if the Pan Am or Superior tests hit something good? Lease-acquisition folk may already may be shuddering at the thought.

## East Texas' Nacogdoches gets three new tests

THREE shallow tests will be drilled in an old East Texas field. Transamerica Oil Co. of Houston will drill the wells to 1,000 ft and Queen City at Nacogdoches field, southeastern Nacogdoches County.

The 2 Angelina County Lumber Co. will be drilled 3½ miles southeast of Woden. The 3 well will be drilled 3 miles west-southwest of Chireno and northeast of "ancient" production. The 4 well will be drilled in Jesus Gomes Survey, A-227, 2 miles north-northwest of Etoile and 3 miles southeast of the old field's border.

Travis Peak gas. Elsewhere in East Texas, Socony Mobil Oil Co. Inc. completed 1 J. A. Neal in the

R. M. Marler Survey, A-272, 3½ miles northwest of Lassater in Lassater field, northwestern Marion County.

The well flowed 2,500 Mcfd plus 40 bbl condensate per million from perforations in Travis Peak at 7,825 to 7,916 ft.

### Chappel lime pool opens in Wilbarger County, Tex.

Flowing Chappel Mississippian lime production was established at a new strike 1 mile southeast of Odell in Wilbarger County, North Texas.

Shell Oil Co. completed 1 C. Kester flowing 152 bo/d, 44° gravity, on 8/64-in. choke. The operator will also try for completion in the

Ellenburger at 6,644-84 ft. Location is in Section 2, Block 10, H&TC Survey, 1¼ miles northwest of Odell Ellenburger field.

### Clear Fork discovery finalized in West Texas

Permian Clear Fork production was opened in a wildcat in southern Irion County, 15 miles southwest of Mertzen, West Texas.

T. W. Murray completed 1 H. M. Noelke "D" flowing 204 bo/d on 32/64-in. choke, 37° gravity. Pay is through perforations at 3,400-10 ft. Location is in Section 1, Washington County Railroad Survey, 1½ miles southeast of Branch Clear Fork field, separated by dry holes.

**Gaines County hit.** This West Texas county has a new Devonian oil discovery, 20 miles southeast of Seminole. John J. Eisner 1 Same-dan-McGuire flowed 517 bo/d, 36.4° gravity, on 20/64-in. choke from perforations at 12,569-77 ft. Location is in Labor 24, League 295, Reagan CSL Survey, 2¾ miles south of Birge Devonian field.

### Dual gas discovery completed near Midland

A dual Strawn Pennsylvanian and Devonian gas pool was discovered 2 miles northeast of the city of Midland, Midland County, West Texas.

Ashmun & Hilliard completed 1 Roy D. Jones flowing 3,085 Mcfd from Strawn perforations at 10,474-484 ft; flow from Devonian perforations at 11,665-80 ft was 1,100 Mcfd. Location is in Section 32, Block 38, T-1-S, T&P Survey, 3¾ miles northwest of Azalea field limits.

### Remote discovery for North Texas area

Dual production is indicated at a wildcat in northwestern Wise County in North Texas. The well is in an area of no comparable production.

E. B. Fletcher 1 Huddleston, 1½ miles west of Park Springs, is testing in the upper Atoka Pennsylvanian. Flow was 8-9 bbl of oil per hour through perforations at 5,697-5,704 ft. Flow from lower Atoka at 5,727-30 and 5,737-79 ft was 143 bo/d on 12/64-in. choke, 41° gravity. Gas-oil ratio is 1,400:1.

NOTE: \*Quarterly Allotments  
Through Third Quarter

STATEMENT OF LEDGER TRANSACTIONS

February, 1964

		EXPENDITURES OUTSTANDING		EXPENDITURES APPROPRIATION		UNENCUMBERED	
		TO DATE	ENCUMBRANCES	FEB. 1964	FOR YEAR	BALANCE	
Office Staff				\$1,175.00			
Commissioners				150.00			
TOTAL PERSONAL SERVICES		\$12,788.00		\$1,325.00	\$20,850.00*	\$8,062.00	
Office & Geological Supplies				44.98			
Postage				5.99			
TOTAL CURRENT EXPENDITURES - OTHER		\$2,262.41	\$247.95	\$50.97	\$4,837.50*	\$2,327.14	
TOTAL SUBSCRIPTIONS & ORGANIZATION DUES		\$20.35	\$10.00	\$5.00	\$150.00	\$119.65	
Car Expenses				\$62.38			
Commissioners				133.00			
John K. Petty				37.81			
TOTAL TRAVEL - STATE		\$2,010.78	\$36.00	\$232.99	\$4,500.00	\$2,453.22	
TOTAL TRAVEL - OUT OF STATE		\$369.17		.00	\$2,500.00	\$2,130.83	
TOTAL CAPITAL OUTLAY - EQUIPMENT		\$72.29	.00	.00	\$225.00	\$152.71	
TOTAL FIXED CHARGES (Garage Rental)		\$183.22	\$5.00	\$5.00	\$250.00	\$66.78	
TOTAL PROFESSIONAL SERVICES		\$455.80		\$120.00	\$4,000.00	\$3,544.20	
TOTAL MUSEUM OF NORTHERN ARIZONA		\$1,875.00		\$1,250.00	\$1,875.00*	.00	
TOTAL BUREAU OF MINES - U of A		\$1,875.00	.00	.00	\$1,875.00*	.00	
TOTALS		\$21,912.02	\$293.95	\$2,988.96	\$41,062.50	\$18,856.53	
CASH BOND						.00	
LUMP SUM		\$90.01		.00	\$367.65	\$277.64	
RECEIPTS		\$800.00		\$75.00		\$6,620.25	

Mailed March 19, 1964

D R A F T  
Minutes

State of Arizona  
Oil and Gas Conservation Commission  
1624 West Adams, Room 202  
Phoenix, Arizona  
February 18, 1964

COMMISSIONERS PRESENT:

R. Keith Walden, Chairman  
Lynn Lockhart, Vice Chairman  
Charles Kalil, M.D., Member  
Orme Lewis, Member

COMMISSIONER ABSENT:

Robert B. Heward, Member

OTHERS PRESENT:

John K. Petty, Acting Executive  
Secretary and Petroleum Geologist.  
Edward I. Kennedy, Assistant Attorney  
General.  
Mike O'Donnell  
James Pickett  
Van Bennett  
Chuck Martin (Present for portion of  
meeting only.)

Chairman R. Keith Walden called the meeting to order at 9:15 a.m. in the Hearing Room of the Commission. He stated for the record that this meeting, even though it is not on the 4th Wednesday of the month, will serve as the regular meeting of the Commission for the month of February.

Commissioner Lynn Lockhart moved that the minutes for the December 16th meeting be accepted as recorded; motion seconded by Commissioner Charles Kalil; unanimously approved; so ordered.

Commissioner Charles Kalil moved and Commissioner Lynn Lockhart seconded the motion that the reports which had been mailed out by Mr. John K. Petty to the Commissioners from time to time be accepted as received. Unanimously approved; so ordered.

The Chairman then called upon Mr. Petty to report on the current status of the budget which had been submitted to the Legislature for the following fiscal year. Mr. Petty reported that no notice of a derogatory nature has been received; and that as far as is known, budget will be approved as submitted.

Motion was duly made, seconded and unanimously approved authorizing a twenty-five dollar per month increase in salary for Mrs. Mary Cooper, secretary-bookkeeper. So ordered.

The Chairman welcomed the members of the oil industry in Arizona who were in attendance and asked for any comments from them.

Mr. James Pickett stated his wish to follow up with the Commission the letter he had written the Commission regarding the bad publicity the oil industry in Arizona recently received in an ad placed by Merrill Lynch, Pierce, Fenner & Smith in the February 10th issue of

Mailed March 19, 1964

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Newsweek. He stated he wanted to bring this matter to the attention of the Commissioners in the event they would see fit to do something about it. He reported he has sent letters of protest to the local and national offices of Merrill Lynch, Pierce, Fenner & Smith, to the Arizona Development Board, the Governor of the State, congressmen, and senators in an effort to call this ad to the attention of as many people in positions of influence as possible and requesting their help.

Mr. Van Bennett reported that he has written a letter to Senator Barry Goldwater with copies to Governor Paul Fannin, Merrill Lynch, Pierce, Fenner and Smith, and some other individuals; and suggested the Commissioners write some sort of a letter stating that the ad was not fair to the oil and gas industry.

Mr. Mike O'Donnell of Arizona Oil Report reported that through his attorney, Mr. Davidson, he is asking for comparable full page ads in all four magazines in which the ad appeared, and an apology; to be followed by a law suit if they do not comply.

After considerable discussion of this matter, it was agreed that Mr. John K. Petty would write a tactful letter to be reviewed by and mailed over the signature of the Chairman to Merrill Lynch, Pierce, Fenner & Smith providing factual information regarding the oil and gas industry in Arizona as it was agreed by the Commissioners that this action would be more effective than a formal resolution of protest. It was agreed that copy of the letter would be furnished to Mr. O'Donnell.

Senate Bill 43, the \$250,000.00 reward bill, was then discussed. It was reported that the Senate had scheduled some action regarding this bill, but action was delayed because of some more urgent matters; and the exact present status of the bill is not known. The Commissioners agreed that it is a good bill and Commissioners Lynn Lockhart and Charles Kalil made plans to contact Senator Harold Giss to determine his reaction to this bill. Messrs. Van Bennett, Jim Pickett and Mike O'Donnell reported they haven't supported the bill because, in their opinion and the opinion of the Arizona Oil and Gas Association, the bill is too restrictive; and they suggested that if it were amended, and the words "federal or" deleted from the "Exclusions" section so that reward would be applicable to all lands except Indian lands, they would be more apt to support it.

Next was the matter of appointments to the various committees of the Interstate Oil Compact Commission for the coming year. After some discussion, Commissioner Lynn Lockhart made the motion that persons who had served on the committees last year be reappointed with the exception that the Regulatory Practices appointment be left open until such time as an executive secretary is hired for this Commission at which time he would be placed on that committee. Thus, the following reappointments were made: Legal Committee, Commissioner Orme Lewis; Public Lands Committee, Obed Lassen; Research Committee, John K. Petty; and Secondary Recovery and Pressure Maintenance, Commissioner Lynn Lockhart. The motion was seconded, unanimously approved and so ordered.



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Chairman R. Keith Walden announced that he has enjoyed serving as Chairman on this Commission and doing the work involved, but that he also has quite a few responsibilities in connection with the cotton industry which necessitate his devoting a very substantial amount of time outside of the state and outside of the country for another year. For that reason he asked that the Commissioners accept his resignation as Chairman of the Commission to be effective as of the end of today's meeting. Commissioner Lynn Lockhart moved that the resignation be accepted, reluctantly; seconded by Commissioner Orme Lewis; unanimously approved; so ordered.

Commissioner Orme Lewis' motion that Commissioner Lynn Lockhart, the Vice Chairman, be named Chairman of the Commission was seconded by Commissioner R. Keith Walden; unanimously approved and so ordered.

Commissioner Lynn Lockhart's motion that Commissioner R. Keith Walden be named Vice Chairman was seconded by Commissioner Orme Lewis, unanimously approved, and so ordered.

Mention was made of the fact that a vacancy exists on the Commission since Mr. Robert B. Heward's term expired December 31, 1963; and that the Governor's office would appreciate some suggestions to fill the vacancy, preferably a Democrat and preferably someone from the northern area.

The selection of an executive secretary for the Commission was discussed. Commissioner Lynn Lockhart reported the results of his investigation in Texas of Mr. Jack M. Little, Jr., an applicant for the position. On the basis of his findings he reported that he could not recommend Mr. Little for the position. Chairman R. Keith Walden was then asked if he could recommend someone from among the more than one-hundred twenty-seven applications which had been received.

Chairman R. Keith Walden said in part:

I am willing to recommend and recommend to you strongly John Bannister for a number of reasons. I may be wrong, but I would like to say this in front of you fellows here in the Oil and Gas Association and this industry. My concept of the function of this office is to be of service -- and I say that just as the implication is -- service -- to the oil and gas industry, and to regulate in accordance with law the activities of the oil industry when it becomes necessary to regulate it. That hasn't been very much of a job up to this time as you know. I don't find anything in the responsibilities imposed on this Commission or the authority granted to it in the statutes or in the regulations to go out and actively promote the oil and gas industry in this state. And because I feel that way, I think that's your job; and I don't think that we as public servants should be doing it. Because I feel that way, I feel that the kind of a personality this Commission should have in its executive secretary is one who will not compete with you fellows in attempting to promote, but merely be here to service your efforts and the efforts of other people engaged in this industry. This fellow Bannister is I think quiet, cautious,

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reserved, from everything that I have learned through much correspondence and many phone calls. I must have forty letters in his behalf here. I've talked with his employers personally; and his character, his ethics are certainly beyond reproach in my judgment from all the information I have; and I think something would have turned up as a flaw in all the information that I have if there were a flaw. He's not a promoter, but I think he will sit here and be of service and conduct himself in a quiet and dignified manner which is sort of in my analysis the kind of a job this should be. I think he will work well with John Petty who is our technical man in the field of geology, and I think we could have a great team here and be of real service to you fellows with John Bannister. Therefore I am going to recommend that we hire him. . . . The reason that he is available to us now is that El Paso has got a real retrenchment program on and they're moving their land office out of El Paso, and he just wasn't far enough up the ladder to be included in the retrenchment program.

Mr. James Pickett also spoke in Mr. Bannister's behalf and recommended him very highly. Mr. Mike O'Donnell also reported that he has had many very complimentary recommendations of Mr. Bannister.

After some discussion, Commissioner Lynn Lockhart moved that Mr. John Bannister be employed as the Executive Secretary of the Commission effective March 1st. Seconded by Commissioner Orme Lewis; unanimously approved; so ordered.

Mr. John K. Petty was called upon to report on the potash exploration in the state and reported the following:

That there are about fifteen companies either exploring for potash in a drilling sort of way or exploring in an exploration sort of way in the Holbrook, Navajo, Springerville, Show Low, Snowflake area and slightly westward. They haven't started drilling yet as much as they will in another couple of months, but there are probably ten wells either being finished or started or drilling now; and there are about seven or eight rigs up there that are in motion.

That he has contacted these companies and asked them for the information which is ordinarily received from a regular drilling company exploring for oil or gas or helium; and that replies have been received from Kern County Land and American Metal Climax definitely stating that they will cooperate in every way and furnish copies of the logs and all the information that was requested in that letter sent to them, copies of which were furnished to the Commissioners. That before the list of information that the Commission would like to have was written, he had contacted seven of those potash exploration companies and they all were more than willing to cooperate; so it would appear that probably about ninety percent of the information asked for will be furnished to the Commission. Those companies were advised that it would be to their advantage to furnish the Commission with

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the requested information in the event that a water contamination problem should arise in the future.

A discussion followed during which Mr. Mike O'Donnell read an opinion of the Attorney General of Utah, dated January 22, 1964, prepared in response to a request from the Utah Oil and Gas Conservation Commission on the question of whether or not that commission could compel an operator or other responsible people to file a sonic log. The opinion was in the affirmative that the Commission has the power to compel an operator or other persons to file sonic logs on oil and gas wells drilled within the jurisdiction of the Commission and in effect the ruling covered all logs of whatsoever type are run. Mr. O'Donnell requested that a ruling be requested from the Arizona Attorney General's office on whether the Commission has the right to have these logs run.

The fact was brought out that permits to explore for minerals such as potash are granted through the State Land Department, and therefore the matter is not under the jurisdiction of this Commission. Also that a permit is not necessary to drill a well except a water well or an oil or gas well; and that there is no law that would require a permit to drill a well, if it could be called that, to determine if copper or gold or potash or some other mineral were present.

Mr. Edward I. Kennedy reported that this question had arisen before in conjunction with the northeastern section of the state when gas had been struck when purportedly drilling for something else in federal exploration; and that it had been discussed at that time with no conclusions other than that it would be a good idea to have some central agency to handle such matters.

It was also reported that at the present time there is legislation before the current legislature looking to drilling as a means of proving up on mineral plans and that this has been done for years as a matter of exploration but not as a matter of proving out, and that if it is allowed for proving out, that it would increase this question.

It was reported that the State of New Mexico presumes that if drilling is done through an oil and gas formation, the operator is drilling for oil and gas and a permit is required.

Discussion was initiated by Mr. Mike O'Donnell regarding the possibility that perhaps the Commission is not being furnished with all the information available regarding certain wells drilled which is a requirement of the Commission. It was determined that all our law requires is that those who are granted a permit to drill an oil or gas well in this state produce whatever information they assemble to this Commission six months after it is completed, but that the Commission does not have the power to force anyone to run a log on any well.

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Motion was duly made, seconded, unanimously approved, and so ordered that Mr. Edward I. Kennedy, Assistant Attorney General, furnish at the March Commission meeting an opinion of what the Commission's rights are in connection with demanding information from operators, both oil and gas as well as potash.

The last item of business was the appointment of a representative from Arizona to the Regulatory Practices Committee of the Interstate Oil Compact Commission. Commissioner Lynn Lockhart made the motion that since Mr. John Bannister has been selected as the executive secretary that he now also be appointed to serve on that committee. Motion was seconded by Commissioner Orme Lewis; unanimously approved; so ordered.

Upon motion duly made, seconded and unanimously approved; meeting was adjourned at eleven o'clock.

JKP  
mkc

March 18, 1964

TO: Commissioners of Oil and Gas Conservation Commission  
State of Arizona

FROM: John K. Petty, Petroleum Geologist

SUBJECT: Geological Field Trips Taken Since February 18, 1964

Field Trip #1, Saturday, February 22, 1964

Purpose of trip: To investigate possible Devonian outcrop and check water well samples. The formation was volcanic and the samples were not oil stained. Area was north of Black Canyon.

There are possibilities of oil seeps and air blows anywhere in this area. Thus it is worthwhile to check the reports which occasionally come to me.

Field Trip #2, Wednesday, February 26, 1964

I visited an area east of Mesa to study rock and well samples reported to possibly be of Mississippian or Devonian age. They were well cuttings mostly and were composed of 90% quartzite, with calcareous and blended siliceous cement making the other 10%.

Field Trip #3, Tuesday, March 10, 1964

Purpose of trip was to visit Graham, Apache, Navajo and Yavapai County drilling wells; to check some shut in wells, to observe markers of plugged wells for bond release; and to load sample cuttings at Pinta Dome and deposit them at Farmington, at the same time obtaining the Commission's and Museum of Arizona's boxed sample cuts and bringing them to their proper places.

The Ram Oil Company #1 Ram-Sierra Bonita Fee, located in SE SE Section 2-T11S-R22E, 29 miles north of Willcox, spudded 11/1/63, a proposed 5000 foot Devonian test had just had 1408 feet of 10 3/4 inch welded casing set. They were fishing for part of the tool which was lodged a few hundred feet from surface. This casing was set without using cement and operator said water shut off was complete.

Geological reconnaissance was made on a few side roads on the way northward through Globe and Salt River Canyon to Show Low. The older formations from granite up through the coconino and recently deposited sands and shales were observed. These are not described in more detail here because this road log has been described previously. No exploration crews, etc. were observed.

March 11, 1964

Close observance was kept of any kind of drilling or exploration on the road to Springerville, east of Springerville on the Quemado Highway and some side roads. I went to the New Mexico line. No exploration activity was noted.

The Eastern Petroleum Company #1-A Coyote Creek, Section 27-T10N-R30E,

8 miles northeast of Springerville was visited. This well was drilled in 1962 to 650 feet and lost circulation in Coconino Sand. A blow-vacuum

Mailed

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situation resulted and Eastern said they'd like to study the situation. Now they say they'll plug it because they are unable to find it useful.

The Ram Oil Company #1 State, 9 miles northeast of Springerville, Apache County, Section 31-T11N-R31E, an 850 foot possible Coconino test which also lost circulation which could not be regained, is also a blow-vacuum well. Ram has experimented on this well but wants to plug it this year when they finish work on this Graham County venture.

I drove north of this well area on a ranch road and am sure there's no one doing any exploration in the area. It was practically all seismographed in 1962.

The side roads, some pasture roads, etc. were driven on while going to St. Johns from Springerville. Then the Zuni road to the New Mexico line was covered while coming northward from St. Johns toward Sanders.

The Desert Drilling Company #1 State, 15 miles south of Sanders, Section 32-T19N-R29E, Apache County, is shut in presently with a metal plate welded on top of casing at 1620 feet in Chinle formation. Very likely this project will be drilled to the Coconino during this next summer as negotiations are in process now. This was a D. H. Roe project and was shut in because of the operator being indisposed.

A few miles north of this well I drove west on a ranch road for 6 miles but could see no exploration attempts.

The Eastern Petroleum Company #23 Cheto Dome Santa Fe, NE NW Section 25-T21N-R28E, located 3 miles south of Sanders was visited and had a two by protruding from cemented hole instead of pipe and sign four feet, or four inch pipe marker. Eastern was told of this and their superintendent said he'd take care of it. The site will be visited again later.

I went on to Highway 66, hence east of Chambers for a short distance. There is no exploration in that area.

No exploration was noted north of Highway 66 or within seeing distance south from Chambers to Navajo.

Eastern Petroleum has finished their Coconino project well in Section 34-T20N-R27E, as a dry hole. The data will be reported when the completion report is sent in.

March 12, 1964

I went to the McCaughey #1 Sunland State, Section 20-T19N-R26E, to check the well marker and found it to be all right for drilling bond release.

The Ram Oil Company #1-S Hortenstine, a possible Shinarump well located in SW NE Section 5-T19N-R26E, Apache County, was visited and the rig which was over the hole at my last visit had been removed and the 5 1/2 inch casing had cement at its surface so that it presents no hazard.

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The Busby #1 State, Section 26-T19N-R25E; Busby #1 Paulsell, Section 25-T19N-R25E; and Busby #2 State, Section 36-T19N-R25E, were all visited and the dry hole markers erected were found to be satisfactory. This completes inspection for the drilling bond to be released on these wells.

It was arranged for the samples on several Eastern Petroleum wells to be released to the sample cut at Farmington. I went to Eastern's supply house and other places to obtain the samples.

March 13, 1964

The Eastern Petroleum samples were taken to the Four Corners Sample Cut on West Broadway in Farmington, New Mexico. They consisted of samples from the Navajo Springs area in Apache County on the following Eastern Petroleum Company wells: #29, #17, #33, #32, #22, #18, #21, #36, and #27, all on Santa Fe land.

The following well samples already cut for this Commission and the Museum of Northern Arizona were obtained at the Sample Cut:

Pan American #1 Navajo "O", Section 23-T41N-R30E.  
McDonald Oil Company #1 Navajo Indian Reservation, Sec. 31-T41N-R26E.  
Gulf Oil Company #1 Garnet Ridge Navajo, Section 16-T41N-R24E.  
All of these are in the Four Corners area of Apache County.

Also the cuts of samples of the following wells were picked up at the same place:

J. R. Pickett #1 Padre Canyon State, SE SE Section 20-T20N-R10E,  
Coconino County.  
Eli Oil & Gas Company #1 Santa Fe, NE NE NE Section 9-T19N-R27E,  
Apache County.  
Eastern Petroleum Company #20 Santa Fe Fee, C/R/2 Section 23-T19N-R27E,  
Apache County.  
Eastern Petroleum Company #21 Ancon Santa Fe Fee, Section 31-T20N-R28E,  
Apache County.  
Desert Drilling Company #1 State, Section 16-T7S-R13W, near Dateland  
in Yuma County.

The cut belonging to the Museum of Northern Arizona was deposited at the Museum. Several details in regard to the potash and other samples stored at the Sample Cut were arranged.

Leaving Farmington, I came through Shiprock and near the Four Corners, Teec-Nos-Pos, Red Mesa, Mexican Water and it was dark when I arrived in the vicinity of wells drilling in the Mexican Hat-Kayenta vicinity in western Apache and eastern Navajo Counties.

The Texaco Inc. #2 "AG" Navajo Tribe, Section 21-T41N-R25E, Apache County, 1/2 mile south of Texaco Devonian discovery in Walker Creek Field, is being completed. The rig has moved off. The information is tight but it has a total depth just below 6700 and they don't seem too enthusiastic about its possibilities.

March 18, 1964

Geological Field Trips Taken Since February 18, 1964

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The #2 "AG" rig was moved to the Texaco Inc. #1 "AK" Navajo Tribe, Section 6-T40N-R35E, Apache County, which is to be a 6750 foot Devonian test 8 miles southwest of Mexican Water. This is a rank wildcat and the rig had been just completely rigged up and drilled surface hole. This is a tight hole.

The Texaco Inc. #1 "AM" Navajo Tribe, Section 36-T39N-R21E, Navajo County, is to be a 7500 foot Devonian test and is 10 miles southwest of Dinnehotso, Arizona. The rig had just been moved on this project. This will be a tight hole and is the rankest wildcat in the Four Corners at present.

The Superior Oil Company #33-12 Navajo "V" in Section 12-T39N-R23E, Apache County, 14 miles southwest of the Texaco Walker Creek Devonian Field, discovered last spring, will be a 6530 foot test -- perhaps a Devonian try. This test is tight and even the well loggers were sent from Houston. President Keck has been to the wellsite. They are presently drilling, coring and testing around 3000 feet, presumably in the upper Pennsylvanian but that is supposition on my part.

The trip on through Navajoland to Flagstaff was in the dark so no exploration was noticed.

March 14, 1964.

The Harless #1 Federal, 1320 FNL and 660 FWL, Section 4-T17N-R4E, Yavapai County, was shut down temporarily at 1717 in its present workover-testing procedure.

The Harless #27 Harless Federal, 660 FNL and 900 FWL, Section 4-T17N-R4E, Yavapai County, just north of the #1 was shut down waiting on a fishing tool to arrive from Winfield, Kansas. This well is at a depth of 1294 feet and they lost 5 feet of bit, 3 feet of drill stem, a combination socket, pair of broken jars, a bowl -- bottom one -- off pair of conductor socket, in the hole. They expect to overcome their difficulty quickly when the fishing tool arrives.

The Yavapai Oil Corporation #18 M. E. Alsbury Federal, Section 32-T18N-R4E, Yavapai County, is waiting on rotary and has around 300 feet of surface casing set in it as reported before. Harless expects to begin drilling soon on this project.

JKP:mkc

March 18, 1964

TO: Commissioners of the Oil and Gas Conservation Commission  
State of Arizona

FROM: John Bannister, Executive Secretary

SUBJECT: Items of Interest Since the February 18th Meeting

I assumed my duties as of March 1, 1964. I should like to take this opportunity to thank each of the Commissioners for my appointment and also to express my appreciation to Mrs. Mary Cooper and to Mr. John Petty for their helpful and friendly cooperation. I feel that a sound and reciprocal working basis has been established between the three of us which will result in a smoothly working organization.

We are presently setting up new office procedures with respect to permit handling, filing, etc.

NEW DRILLING PERMITS

Six drilling permits have been applied for since those reported at the last meeting: They are as follows:

Permit No. 269: Eastern Petroleum Co., Eastern-Santa Fe Fee #37, 1650' S of NL; 1650' E of WL, Section 34-T20N-R27E, Apache County.

Permit No. 270: Texaco Inc., Navajo Tribe "AM" #1, 660 FNL; 1980' FWL, Section 36-T39N-R21E, Navajo County.

Permit No. 271: Texaco Inc., Navajo Tribe "AK", 890' FNL; 730 FEL, Section 6-T40N-R25E, Apache County.

Permit No. 272: Socony Mobil Oil Co., Inc., Socony Mobil-Navajo Tribe-Tract 155 #1, 2310' E of W; 2310' S of N Lines, Section 28-T39N-R25E, Apache County.

Permit No. 273: Eastern Petroleum Co., Eastern-Santa Fe Fee #34, 1650' S of NL; 1650' W of EL, Section 1-T19N-R27E, Apache County.

Permit No. 274: Marathon Oil Company, Marathon Oil Co. - Navajo-Indian Reservation #1, 1500' FSL; 400' FEL, Section 18-T40N-R29E, Apache County.

HOUSE BILL 343: Providing for the Payment of a Reward

As of this date House Bill 343 is still in committees to which it was originally assigned: the Judiciary, Appropriations, and Tourist and Industry Development Committees.

HOUSE BILL 345: Abolishing the Oil and Gas Commission

As you were advised by letter of March 6th, I have been following the progress of this bill through contact with Mr. John McGowan. To date this bill is also still in the committees to which it was assigned: Judiciary, Appropriations, and Boards and Commissions.

Mailed March 18, 1964

March 18, 1964  
Items of Interest Since the February 18th Meeting  
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HOLBROOK TRIBUNE-NEWS

The March 6th issue of above referenced newspaper carried an editorial criticizing the Governor of the State, various State agencies, and our Commission as follows:

Drilling for oil or natural gas in Arizona has come to a practical standstill since the Arizona Oil and Gas Conservation Commission was brought into existence during the administration of our present governor. He has been coached and shown the way to make this a reasonable commission, or that it would be a detriment. That it is a detriment few people will question who know anything about it.

In order to correct the erroneous impression that the Commission has hampered development of oil and gas in Arizona, a letter was written to Mr. V. P. Richards, Editor of the Holbrook Tribune-News, and Mr. J. Morris Richards bringing them up to date on the current drilling activity in the state. Mr. V. P. Richards has acknowledged receipt of our letter. It would seem that he retains his original opinions.

ARIZONA OIL AND GAS INDUSTRY TO BE FEATURED BY FIRST NATIONAL BANK

I met with Mr. Stewart Robinson of the Publicity Department of the First National Bank who will print an article on Arizona's oil and gas industry in the bank's publication, Arizona Profiles. This publication is distributed to the presidents of the 1000 largest corporations in America as well as to the presidents of the 1000 largest banks in America, and is given varied wide distribution. We discussed at length the role of the Arizona banks in Arizona's future oil and gas economy.

STATE AND FEDERAL LEASES

Currently it is estimated that there are approximately 4000 oil and gas leases on State lands covering approximately 1,225,000 acres; and approximately 1800 leases on Federal lands covering approximately 1,550,000 acres.

TREMPEALEAU FIELD, MORROW COUNTY, OHIO

You were furnished with my report of March 12th regarding Interior Secretary Stewart L. Udall's criticism of the conditions existing in Morrow County, Ohio, together with letter sent from this office to Secretary Udall. There is nothing new to report regarding this matter.

EL PASO NATURAL GAS PRODUCTS COMPANY

El Paso Natural Gas Products Company's marketing and refineries have been sold to Shell Oil Company for approximately \$34-\$35 million. Shell is negotiating with American Petrofina and others to sell the Arizona outlets so acquired for approximately \$6 million.

A G E N D A  
OIL AND GAS CONSERVATION COMMISSION  
1624 West Adams, Room 202  
Phoenix, Arizona  
March 25, 1964  
9:30 a.m.

1. Approval of the minutes of the previous meeting.
2. Consideration of the written report of the Executive Secretary.
3. Consideration of the written report of the Petroleum Geologist.
4. Any other matters the Commissioners may desire to discuss.

Mailed March 18, 1964



The Oil and Gas Compact Bulletin  
Volume XXII, December, 1963, Number 2  
Featuring: The 1963 Annual meeting  
Santa Fe, New Mexico  
December 9-11, 1963

Mailed to Commissioners Lewis, Lockhart,  
Kalil, Walden 3/2/64

XXXXXXXXXXXX  
XXXXXXXXXXXX

February 26, 1964

Senator Lynn Lockhart, Chairman  
Oil and Gas Conservation Commission  
State of Arizona  
525 West Orchid Lane  
Phoenix, Arizona 85021

Dear Senator Lockhart:

Attached find copies of "Compact Comments" in which  
you'll find Bonus Act S. B. 43 of Arizona mentioned.  
Lawrence and his secretary said last week they would  
write it up.

Also find copy of the Amazon measurements and "Plain  
Facts About Oil" which I thought you'd find interesting.

Very truly yours,

John K. Petty  
Acting Executive Secretary

JKP:mkc  
Encl.

Cc: Commissioner R. Keith Walden  
Commissioner Orme Lewis  
Commissioner Charles Kalil  
Commissioner Robert B. Howard  
Mr. Edward I. Kennedy, Assistant Attorney General  
Encls.

United States Department of the Interior  
Office of Oil and Gas, "Plain Facts About  
Oil", 34 page booklet, price 65¢.

Mailed to all Commissioners & EIK 2/25/64

Published by  
**THE INTERSTATE OIL COMPACT COMMISSION**

A MONTHLY  
NEWSLETTER

Volume 19, Number 2  
February, 1964

#### EXECUTIVE COMMITTEE MEETS

The Executive Committee of the Interstate Oil Compact Commission met in Oklahoma City, Okla., on February 3, on the call of Gov. Jack M. Campbell, of New Mexico, chairman. The routine financial affairs of the Commission were taken care of by the Executive Committee at that time.

In addition, the Executive Committee considered the suggestion made by Mr. Lawrence J. O'Connor, Jr., member of the Federal Power Commission, in his talk at Santa Fe, N. M. He suggested that the Commission consider being a clearing house for natural gas statistics, both production and reserves. In his talk, he said that the different agencies today were reporting statistics that were not necessarily comparable, such as is found today in statistics on oil. The headquarters office was instructed to obtain information on this subject and report to the Commission at the Midyear Meeting in Billings, Mont., June 22-24, 1964.

The Executive Committee also considered a suggestion that had been made that the Midyear and Annual Meetings be held in areas and cities where the meetings could be held in one central headquarters hotel. However, it was the consensus of the committee that the practice followed in the past should be continued and that meetings be held in all the member states.

The committee also passed a resolution of sympathy to Mr. Everett G. Trostel, due to his recent illness, and expressed appreciation to him for the work he had done on the Governors' Special Study Committee.

Mr. Richard C. Byrd, administrative assistant to Gov. Matthew E. Welsh, chairman of the Governors' Special Study Committee, reported on the progress that had been made in accumulating factual data and editing this data. At this time, the Governors' Special Study Committee expects to present all the factual data in a completed form at the Midyear Meeting in Billings.

#### PLANS PROGRESSING FOR MIDYEAR MEETING

The program for the Midyear Meeting, which is being held in Billings, Mont., June 22 - 24, is being completed. The headquarters hotel for the meeting will be the Northern Hotel. However, again, it will be necessary to house a number of registrants in motels in the area. Only approximately half of the registrants can be accommodated at the Northern Hotel. Requests for reservations will be mailed from the headquarters office the first part of March. All reservations will be handled by the headquarters office.

Editors and others are invited to make free use of reprinting liberties in the utilization of any material in Compact Comments, with or without credit to the Interstate Oil Compact Commission.

CARL SHERMAN GOES TO NEW YORK

Carl Sherman, chairman of the Compact's Secondary Recovery and Pressure Maintenance Committee, and presently petroleum engineer and head of the section of petroleum engineering, Illinois State Geological Survey, has been appointed director of conservation by the New York Conservation Commission. Mr. Sherman is the first director of this newly organized department that was established by legislation creating the department and the program for oil and gas conservation in New York. Mr. Sherman will assume his new position on April 1. A meeting has been called by Commissioner Harold G. Wilm, of the New York Advisory Committee, to meet with Mr. Sherman in Albany on February 19, to start a study providing rules and regulations in accordance with the new conservation act. A replacement for Mr. Sherman has not yet been named by the Illinois Geological Survey.

COMPACT BULLETIN BEING COMPLETED

The bulletin that will carry the proceedings of the meeting in Santa Fe, N. M., December 9-11, 1963, is now being completed, and should be in the mail by March 1. This will be the largest bulletin on a meeting that has been published by the Interstate Oil Compact Commission.

BOWLIN ASSUMES DUTIES

Charles E. Bowlin, Jr., has assumed his duties as director of technical services in the headquarters office in Oklahoma City, effective February 1. Mr. Bowlin will be in charge of the technical publications and compilation of statistics for the Commission. Mr. Bowlin was formerly chief engineer and assistant director of conservation for the Oklahoma Corporation Commission, conservation department.

COMMITTEES APPOINTED

Gov. Jack M. Campbell, chairman of the Interstate Oil Compact Commission, has, with the approval of the Executive Committee, appointed the standing committees for the year 1964. Gov. Campbell has written letters of appointment to all of the committeemen that have been nominated by the governors of the respective states. A few states have not yet suggested committeemen to represent them but, at the meeting of the Executive Committee on February 3, Governor Campbell was authorized to appoint these nominees at his pleasure.

COUNCIL OF COMMITTEE CHAIRMEN MEETS

The Council of Committee Chairmen met in the IOCC Headquarters Office in Okla. City, Okla., on February 1, to continue their work on the factual data for the Governors' Study Committee. Preceding the meeting, the Regulatory Practices subcommittee met on January 31, as well as the Editorial Committee on the same day. All of the factual information is now being completed by the subcommittee of the Council of Committee Chairmen, with the exception of two. It is expected their work will be completed and in the hands of the Editorial Committee the first part of March.

PUBLICATION ANNOUNCEMENT

Peter T. Flawn, director, bureau of economic geology, University of Texas, has announced publication of two geologic maps. One of these is Geologic Quadrangle Map No. 25, Geology of the Johnson City Quadrangle, Blanco County, Texas, by V. E. Barnes. This is a map with text, scale - 1:24,000, November, 1963, and the charge is \$1.50 plus .03¢ state sales tax. The other is Geologic Quadrangle Map No. 26, Geology of the Eagle Mountains and Vicinity, Hudspeth County, Texas, by James R. Underwood, Jr. This is also a map with text, scale - 1:48,000, November, 1963, and the charge is \$2.25 plus .05¢ state sales tax. These publications are not available from the Interstate Oil Compact Commission; however, they may be obtained upon request from the Bureau of Economic Geology, University of Texas, University Station, Box X, Austin, Texas 78712.

**BONUS ACT INTRODUCED IN ARIZONA**

An act, S. B. 43, has been introduced in the 26th Arizona Legislature that provides that the conservation commission shall offer a reward of \$250,000 to be paid to the owners of a well for the first oil or hydrocarbon gas well brought in within the boundaries of the state of Arizona that produces not less than 25 barrels of commercial oil or at least one million cubic feet of hydrocarbon gas every 24 hours pumping or flowing consecutively for a period of not less than 90 days. This reward shall apply only to a well discovered on either state or privately owned lands, and does not apply for discovery on federal or Indian land.

**SUMMARY OF OKLAHOMA ORDERS**

Following is a summary of the orders issued by the Oklahoma Corporation Commission, prepared by Oil-Law Records Corporation, of Oklahoma City, Okla. This summary shows the growth in the number of cases handled annually by the Oklahoma Corporation Commission:

**OKLAHOMA CORPORATION COMMISSION ACTION 1959 thru 1963**

Set out below, by category, is a comparison of oil and gas orders entered by the Oklahoma Corporation Commission during the calendar years 1959 thru 1963.

1963	1962	1961	1960	1959	Category
43	54	88	47	37	Acreage Attribution
16	15	19	18	17	Allocation - Oil & Gas
117	97	46	43	32	Capacity Production
68	94	73	98	82	Commingle
21	7	14	9	19	Denials (Various)
9	0	0	7	10	Directionally-Drill
36	49	133	13	14	Discovery or Testing Allowable
0	3	1	1	4	Drill Well Pending Spacing and Direction
113	135	151	254	314	Dual or Triple Completion
143	122	114	113	3	Increased Allowable (Voluntary Spacing, etc.)
107	95	74	101	103	Location Exception
6	15	11	20	12	Pipe Pulling Expenses
94	82	101	89	77	Pooling or Adjudication of Equities
0	0	0	0	3	Purchaser Proration
233	247	230	258	346	Salt Water Disposal
522	530	623	587	523	Spacing and/or Rules
30	21	18	21	28	Underage Reinstatement
0	0	2	0	1	Underground Storage
68	45	60	10	55	Utilization
10	14	10	10	17	Vacuum
125	127	134	152	150	Waterflood (Excluding Units)
36	30	101	0	0	Exceptions to Waterflood Restrictions
7	18	12	9	11	Others

**TOTAL ORDERS ISSUED**

1963	1962	1961	1960	1959
1800	1727	1762	1573	1660

**TOTAL APPLICATIONS FILED**

1963	1962	1961	1960	1959
1728	1618	1606	1463	1436 (Conservation Docket)
240	264	312	303	354 (Pollution Docket)



## APPENDIX

Several important cases were decided during 1963 by both State and Federal courts, which directly affected the industry. While an attempt will not be made to cite all the cases which the writer reported in "Compact Comments," here are some which were particularly important:

In *State of Wisconsin v. FPC* (Nos. 73, 73, 74, Oct. Term, 1962) the Supreme Court, on May 29, 1963, handed down a 5-4 decision affirming FPC Order No. 338, which terminated the Section 4(e) and 5(a) rate proceedings of Phillips Petroleum Company without findings as to the justness or reasonableness of Phillips' rates. The Court held that the FPC did not abuse its discretion in electing to allocate its resources and personnel to area investigations rather than to the reopening of Phillips' record in order to make a determination sought by the petitioners.

In *Northern Natural Gas Company v. State Corporation Commission of Kansas*, (No. 62, Oct. Term, 1962) the Court reversed the Supreme Court of Kansas in upholding the validity of ratable take orders issued by the Commission by holding that the Gas Company was not a producer, but a purchaser of gas from producers, and that none of its activities in Kansas shown upon the record involved "production and gathering" in the sense that those terms are used in (Section 1 (b) of the Natural Gas Act). The main objection to the decision is that it takes from the states the power of enforcing the ratable taking of gas to protect its natural rights, and transfers the power to the FPC in direct conflict with the Natural Gas Act.

In *Tidewater Oil Company v. Jackson Brothers*, (No. 6944, 10th Circuit, June, 1963) the Court reversed and awarded punitive damages given to Jackson Brothers of Wichita, Kansas, in a suit for the alleged damages caused from waterflooding brought against Tidewater. Jackson Brothers contended that eight of their wells were damaged by waterflooding secondary recovery operations by Tidewater. Judge Marshall on the majority, sustained compensatory damages in the amount of \$670,700 and reversed a judgment for punitive damages of \$25,000.

In *Amanda E. Sims, et al v. Oil Conservation Commission of New Mexico*, (No. 7206, N. M. Sup. Ct., May, 1963) the Court reversed the commission on a compulsory pooling order entered in December, 1958. The Court held that the commission was without jurisdiction to enter the order and that it was void as the order contained no finding as to the existence of waste, or that pooling would prevent waste based on evidence to support such a finding.

## STATE LEGISLATURES TO CONSIDER NEW OIL BILLS

Twenty-two states will meet in regular session, with seventeen already convened in January, four in February, and Louisiana convening in May. A special session has convened in Vermont, Illinois, and Maine.

Air and water pollution will be a matter of concern in several states. Over 200 such bills were introduced last year and the trend is expected to continue.

Proposals for compulsory unitization and perhaps severance taxes will be discussed in Mississippi, Colorado, and possibly Kansas.

#### TEXAS DISTRICT COURT UPHOLDS COMMISSION ON ALLOCATION FORMULA

In a case pending in the District Court of Travis County which was commenced in December, 1963, and concluded in January, 1964, the Trial Court upheld an order of the Texas Railroad Commission, which provided for an allocation formula based on 50% productive acres and 50% net acre of pay. The parties took the appeal from the commission's order contending that it was not supported by substantial evidence; that it caused net uncompensated drainage away from the thick pay sections to the thin pinch-out sections; and that the formula was confiscatory. Presumably, an appeal will be taken from the Trial Court's judgment.

#### TENTH CIRCUIT TO WEIGH HELIUM OWNERSHIP PLEAS

The entire Tenth Circuit Court of Appeals en banc heard oral arguments and took under advisement appeals from the U. S. District Court on the issues of ownership of helium produced from gas from the Oklahoma and Kansas portions of the Hugoton field. Issue in the appeals, by royalty owners and Pan American, primarily refer to the jurisdiction of the federal district courts in Kansas and Oklahoma to decide ownership of helium and judgments for those entitled to receive them. Central issue is whether royalty owners, producing companies, or extracting companies own the helium extracted from natural gas taken from fields.

INTERSTATE OIL COMPANY

GEOLOGICAL SURVEY

Forrester - 343-4646

For Release FEBRUARY 24, 1964

FEATURE MATERIAL

**MEASURING A MIGHTY RIVER--HYDROLOGISTS TACKLE THE AMAZON**

Man is continually meeting the challenge of his natural environment. He has challenged Everest--the highest mountain on earth; he has explored the depths of the Mariana Trench--the deepest of the Oceans; and now the Amazon--the giant among World rivers has presented its challenge to the hydrologist who concedes that the Amazon is BIG but has never answered the question "How Big?"

A Department of the Interior Geological Survey team was organized in 1963 to visit the Amazon Basin, work with the assistance of the Brazilian Navy, and return with some precise data. Their report was impressive. Using the Mississippi River as their yardstick for bigness, the team found that in rate of flow the Amazon is 12 times that of the Mississippi.

"This is the king of all rivers," Roy Oltman, Geological Survey team leader, noted in his report. "Every measurement we made shattered previous estimates."

The average discharge of the Amazon into the ocean is 3,400,000,000 gallons per minute which amounts to enough water in a single day to cover the entire State of Texas to a depth of over one inch. This is somewhat greater than was expected.

"We have assembled for the first time in history," said Oltman, "basic information on the Amazon's rate of flow, its chemical composition, physical characteristics, and other vital data long sought after by the earth scientist and the geographer."

"It is inconceivable," Oltman continued, "that science has been playing an Amazon guessing game all these years, waiting until 1963 to undertake this pioneering survey."

Mld to Commissioners & EIK 2/

2/25/64

Hydrologists have been observing United States rivers for many years. Their "river sense" has become so astute, for instance, that they can predict stream pattern behavior. That is, certain streams under certain conditions behave similarly and predictably conforming to a theoretical pattern.

Thus, one of their reasons for the investigation of the Amazon was to determine if this "colossus" of World rivers conformed to this predicted pattern of behavior. The best scientific predictions regarding the rate of discharge of the Amazon had ranged from 3 to 5 million cubic feet per second. Geological Survey hydrologists on the basis of their theoretical projection had estimated 7 million cubic feet per second. Actual measurement in 1963 revealed an average flow estimated at 7,500,000 cubic feet per second.

In a more practical sense, however, hydrologists are seeking answers to the problem of massive transport of salts and sediments from the continents to the oceans. Billions of tons of soil, mineral resources, and stream-bed substances are flushed into the oceans continually. A multinational effort is now in progress to learn more about this movement by gaging the amount of salts and sediments actually moved and determining where they are ultimately deposited.

The Amazon accounts for about 18 percent of the discharge of all rivers into the World oceans.

Professor Hilgard O'Reilly Sternberg of the University of Brazil collaborated with the Geological Survey in making the Amazon study and became an active sponsor of the project. His associate Fernando Andrade accompanied the United States team on the second or low-stage investigation in November 1963.

The two-phase study was planned to coincide with the high and low stages of the River. This resulted in two sets of statistics for the Amazon at each station measured. At Obidos, for instance, 500 miles from the Atlantic Ocean, the high-stage flow (July) was clocked at 7,640,000 cubic feet per second. During the dry season, the low-stage measurement (November) was 2,560,000 feet per second.

The Geological Survey team, including Oltman, Frank Ames, Curt Davis, and George Staeffler, worked and lived aboard a Brazilian Navy vessel during most of the expedition. They were ably assisted by technicians of the Brazilian Hydrographic Office and the officers and crew of the ship.

In July 1963, the Brazilian Navy Corvette MEARIM began its upstream journey from Belem to the much-storied Amazon commercial port at Manaus, a distance of almost 900 miles. Midway, Obidos, the site of an abandoned river gage used from 1928 to 1947, was selected as a measurement station because the river here is not appreciably affected by the tide. Data on suspended sediment concentrations, dissolved solids, pH, dissolved oxygen, and temperature were collected at Obidos and on tributary rivers (the Solimoes and Rio Negro) near Manaus.

Using a fathometer, the United States scientists found that there are at least ten locations between Obidos and the mouth of the Amazon where the depth exceeds 300 feet, putting the bed of the river well below sea level.

In contrast to its size and the area of its drainage basin, which exceeds 2,300,000 square miles, the Amazon is one of the purest rivers on earth. The Survey team found the chemical purity of the Rio Negro above Manaus nearly equivalent to distilled water.

"There was no hesitation on the part of the scientific personnel or the ship's complement to drink this water directly from the river," Oltman added.

"It had a conductivity of 9 micromhos which is purer than most of the tap water we get in the United States," he concluded.

Profiles taken of the Amazon bed with a fathometer showed the bottom to be a series of sand dunes moving, rippling slowly over long reaches of the River. The ship's anchor, which penetrated the sand layers, brought up dense gray clay.

The investigating team made cross section studies of the Amazon at Obidos and Manaus. The River at Obidos is approximately 7,500 feet wide. The ship's crew faced a most difficult task in maneuvering the ship precisely on the line of measurement against a restless and powerful river.

One of the essential correlations in marine studies of this kind is the establishment of ship to shore control. Precise distance measurements are made from the ship to a selected point on shore. The Geological Survey party used an electronic distance measuring instrument--the Tellurometer, used by topographers for mapping, and conventional surveyor's theodolites to do the job. Voice communication between ship and shore station was facilitated by the radio units on the Tellurometer.

George Staeffler, the party's topographic engineer, was responsible for these Tellurometer operations.

"Whenever we went ashore," said Staeffler, "we became a curiosity to the local population, particularly the children, who would gather around our instruments and inquire in Portuguese about our mission."

Brasilian survey technicians helped to bridge the language barrier.

Scientific measurements taken from the ship (and in the case of shoal reaches of the river from launches) were difficult work. Frank Ames and Curt Davis, Geological Survey hydrologic engineers, operated the fathometer, the bow winch, made notes, analyzed samples of river water and sediments, and catalogued their specimens.

"In the tropic and humid Amazon Basin, it didn't take much physical exertion to work up a sweat," said Oltman, noting the long hours required to complete a

cross section of the big river. The River was very inviting with water temperatures a comfortable 84 to 86 degrees F. between Belem and Manaus, but personnel were warned not to bathe in it. It was not the dreaded Piranha, they were told, for this killer-fish had not been observed in the Amazon. Rather, it was a microorganism that flourished in near-shore areas and proved irritating to the skin.

One of the ship's crewmen, who ignored the warning, broke out in an agonizing itch.

During 1963, the Amazon Basin experienced its severest drought in more than a half century. The November observations were in marked contrast to those made in July. The highest river stage ever recorded at Manaus was 29.70 meters in June 1953. The Geological Survey-Brazilian Navy measurements in 1963 were 26.46 meters (July) and 16.10 meters (November).

One more outstanding feature of the Amazon flow--the ratio of highest known flow to lowest known flow at Manaus is about five to one, much lower than that observed on other large rivers of the world. The small difference between flood and drought flows on the Amazon is the result of its natural reservoir system. There are thousands of lakes flanking the River occupying abandoned meanders in the flood plain, all connected with the river via small channels. These lakes are filled during the flood season, and they slowly release their stored water as the river falls in the dry season.

At the invitation of the Brazilian Government and with the assistance of AID and State Department officials, the Geological Survey team undertook a survey of the Tocantins River at Maraba about 300 miles south of Belem. Brazilian and United States agencies are interested in the hydropower potential of the Tocantins Basin.

"We spent the afternoon on the river in an outboard power boat looking for a suitable measuring section and finally selected a section in two channels directly opposite Maraba," said Oltman.

The measurements reveal a flow of 52,500 cubic feet per second. But the Amazon itself, five times larger than the Congo and 12 times the flow of the Mississippi, was the real challenge for these United States hydrologists. They had recorded the mighty Amazon at last--harnessing it statistically and closing the data gap that previously existed in the library of world hydrology.

A fact sheet, charts, and photo sheet are attached.

x x x

FEATURE MATERIAL PREPARED BY:  
DEPARTMENT OF THE INTERIOR GEOLOGICAL SURVEY INFORMATION OFFICE  
Washington, D. C. 20240

#### FACTS ABOUT THE AMAZON RIVER

The 1963 hydrologic investigations of the Amazon River by a four-man U. S. Geological Survey team revealed:

- The Amazon is the mightiest river on earth, draining a 2,300,000 square mile basin and discharging 3,400,000,000 gallons of water per minute at its mouth.
- Its discharge is five times larger than the Congo River and 12 times that of the Mississippi.
- The rate of flow on the Amazon at Manaus was 5,970,000 cubic feet per second (July 1963); at Obidos 7,640,000 cubic feet per second (July 1963), as compared to a mean annual flow of 560,000 cubic feet per second on the Mississippi at Vicksburg.
- The Amazon expels enough water in one day at its mouth to cover the entire state of Texas to a depth of 1 inch.
- Prior to the 1963 investigations, the best professional estimates on the Amazon average flow was 3 to 5 million cubic feet per second. Actual measurement in 1963 revealed an estimated average flow of 7½ million cubic feet per second.
- Two seasonal measurements were made of the Amazon. The first in July during the high or flood stage of the river and the second in November during the low or drought stage so that extreme conditions could be noted.
- Flow at Obidos was clocked at 7,640,000 cubic feet per second in July (high stage) and 2,360,000 feet per second in November (low stage).
- The distance from Belem, where the 1963 expedition began to Manaus, the terminal area of study, is 900 miles; Obidos is about 500 miles from Belem.
- At least ten locations between Obidos and the mouth of the Amazon were found to have depths of 300 feet or more, putting the bed of the river well below sea level.
- The Amazon is one of the purest rivers on earth, having a chemical purity near that of distilled water--better than that coming from most public water supplies in the United States.

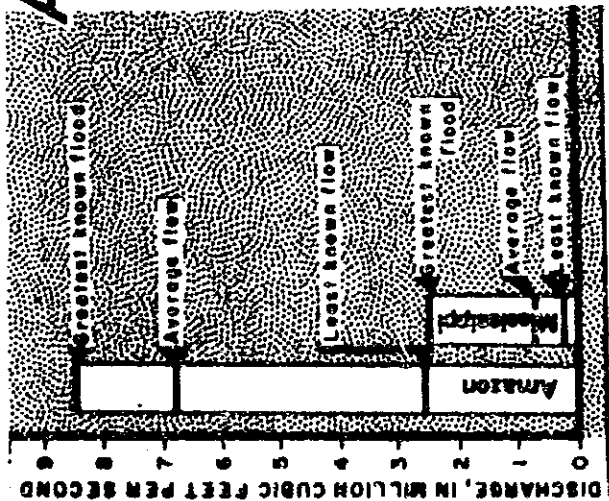


- The bed of the Amazon, observed with a fathometer, was found to be a series of sand dunes moving, rippling over long reaches of the river. Beneath the sand layers is a dense gray clay.
- The Amazon is 7,500 feet wide (July) at Obidos; the Rio Negro, upstream from Manaus, is 7,730 feet wide (July); and the Parana do Carlero near Manaus is 2,240 feet wide (July).
- Ship to shore control was facilitated by the Tellurometer, a precise electronic distance-measuring instrument, insuring highly accurate data from the measured river stations.
- The average year around water temperature of the Amazon between Belem and Manaus was 84 to 86 degrees F.; the temperature profiles taken from surface to bottom show that mixing of the river by turbulence maintains a constant temperature throughout.
- In 1963, the Amazon Basin experienced its severest drought since 1906. The November or low stage readings in 1963 were the lowest on record.
- The Rio Tapajos and Rio Negro, upstream from Manaus, carry little or no suspended sediment. The water of the Rio Negro is light black in color and has a slight acid composition. The dark color is caused by decaying fronds from one species of palm.
- Current water observations show unusually uniform distribution of velocities in the vertical and horizontal currents at each measured station. Large scale eddies predominate however.

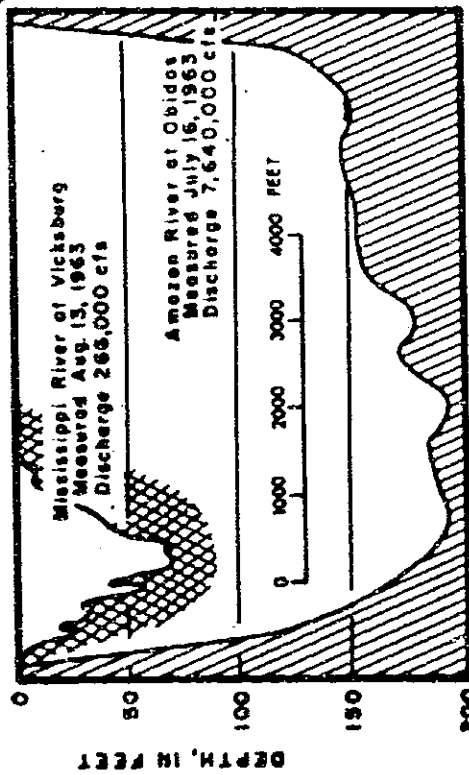
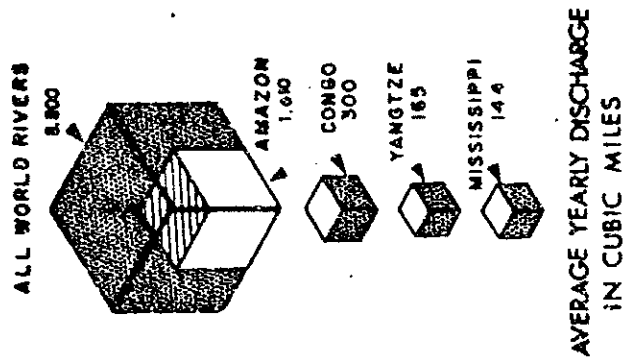
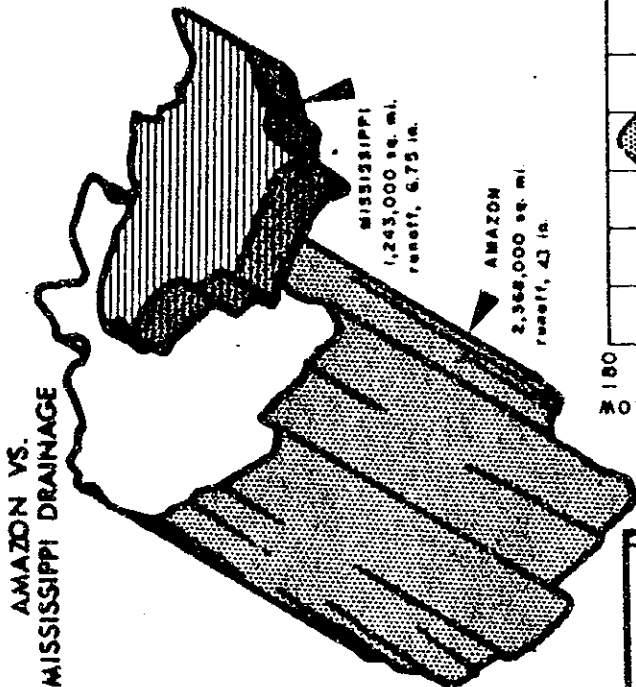
USGS  
February 1964

# AMAZON

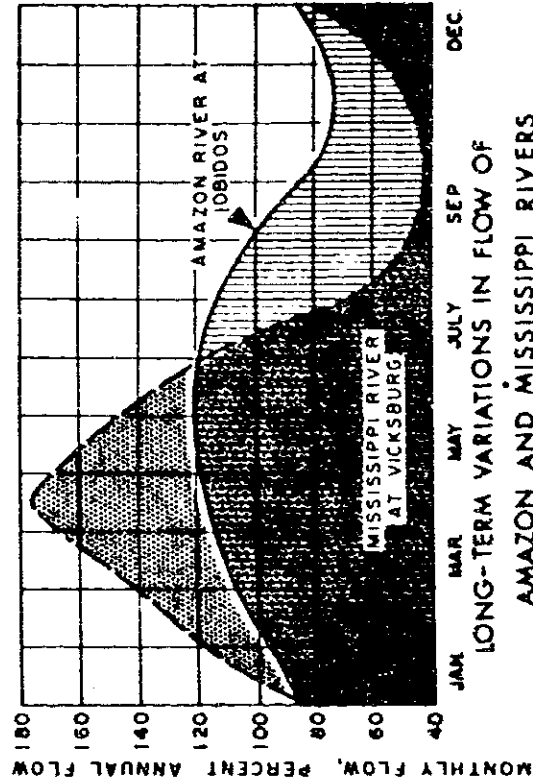
## —a statistical view



AMAZON RIVER AT OBIDOS  
VS.  
MISSISSIPPI RIVER AT VICKSBURG



COMPARISON OF MISSISSIPPI AND AMAZON CROSS SECTIONS

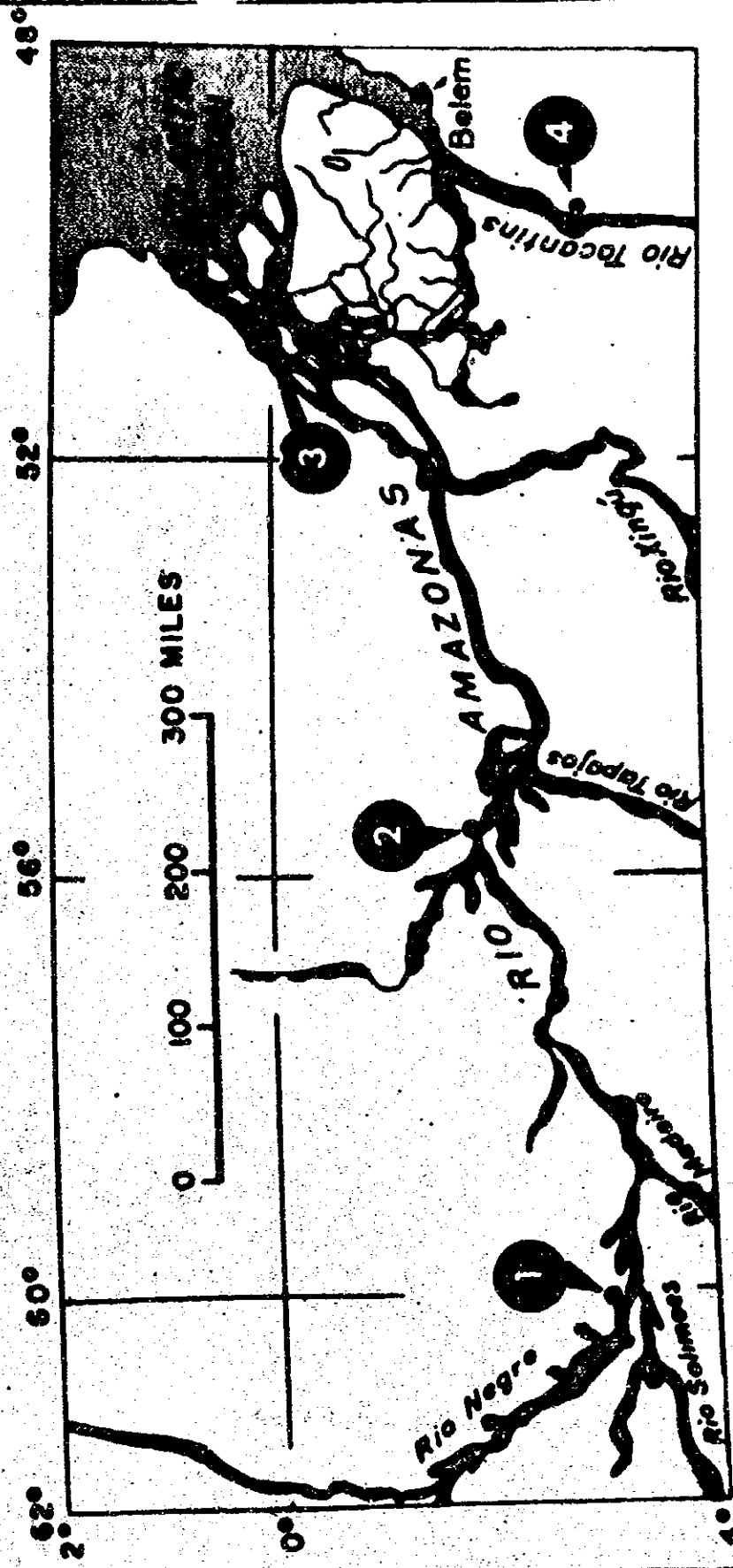


LONG-TERM VARIATIONS IN FLOW OF  
AMAZON AND MISSISSIPPI RIVERS

# AMAZON RIVER INVESTIGATIONS

## U. S. Geological Survey

July and November 1963



### MANAUS

**1** RIVER WIDTH  
6,700 ft. (July)

FLOW:  
(cubic feet per second)  
July - 3,970,000  
November - 2,504,000

### OBIDOS

**2** RIVER WIDTH  
7,500 ft. (July)

FLOW:  
July - 7,640,000  
Nov. - 2,340,000

### AVERAGE

**3** FLOW  
est. 7,500,000  
cubic feet per second

### MARABA

**4** FLOW:  
(October)  
52,500  
cubic feet per second

# U.S. GEOLOGICAL SURVEY

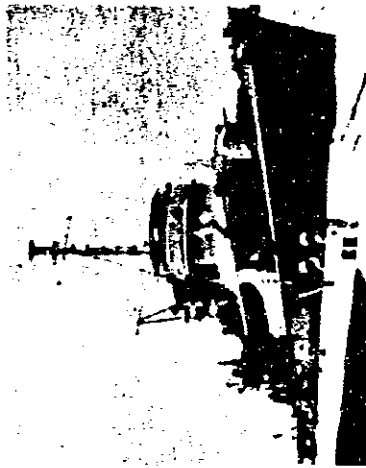
## AMAZON RIVER INVESTIGATION 1963



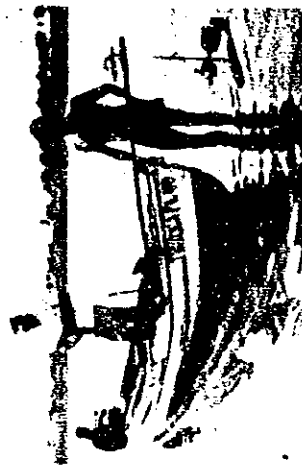
Curt Davis reporting instruments on ship to shore team in



Curt Davis, George Beaudry, and Olman,  
Frasco Area



Brazilian Corvette "Moujica" used by USGS  
from the Amazon



Curt Davis and Brazilian technician using a  
current meter and water sampler from boat



Frasco Area aboard Corvette (parallel  
latitudes)



Amazon River "Moujica" getting underway  
with USGS water sampler



Technician preparing to use current meter  
and sampler from boat

EDICONS INDIVIDUAL PICTOR 10-10, AVAILABLE ON REQUEST.  
P.L.N. (P.L. 871) U.S. GEOLOGICAL SURV. WASH. D. C.

STATE OF ARIZONA  
OIL, GAS & HELIUM PRODUCTION  
January 1964

COMPANY	WELL NAME & NUMBER	FIELD	BBL'S.	CUMULATIVE
<b>OIL</b>				
Humble Oil & Refining Co.	Navajo Tribe of Indians "E"	E. Boundary Butte	76	28,706
Humble Oil & Refining Co.	Navajo Tribe of Indians	E. Boundary Butte	112	2,006
Pan American Petroleum Co.	Navajo Tribal "F"	Undesignated Paradox	165	5,900
Shell Oil Company	Navajo Tribal #23-11	E. Boundary Butte #8	259	7,529
Shell Oil Company	Navajo Tribal #14-16	North Toh-Atin	0	334
Shell Oil Company	Navajo Tribal #14-16	Twin Falls Creek	180	208
The Superior Oil Company	Navajo Tract 138	Dry Mesa	581	117,257
Texas Pacific Coal & Oil	Navajo Tract 138	Dry Mesa	2,494	113,749
Texas Pacific Coal & Oil	Navajo Tribe "AG"	Undesignated	1,863	22,337
Texaco, Inc.				
*****				
<b>HELIUM GAS</b>				
*****				
Kerr-McGee Oil Industries	Fee #1 Unit III	Pinta Dome	7,523	160,487
	Fee #2 Unit VIII		4,825	127,810
	State #1 Unit VI		6,338	82,342
	State #3 Unit IV		134	4,631
	State #2 Unit V		12,660	281,391
	State #4 Unit I		549	38,011
*****				
Eastern Petroleum Company	State #1-28 Unit IX	Pinta Dome	5,219	118,518
	State #1-2 Unit IX		4,102	51,113
	State #1-10 Unit X		138	14,012
*****				
<b>NATURAL GAS</b>				
*****				
Humble Oil & Refining Co.	Navajo Tribe of Indians "E"	E. Boundary Butte	19,051	256,041
Humble Oil & Refining Co.	Navajo Tribal - Rita Peak #1	E. Boundary Butte	5,012	406,528
El Paso Natural Gas Co.	Navajo Tribal #23-11	Undesignated	4,786	281,424
Shell Oil Company	Navajo Tribal #2	E. Boundary Butte #8	17,977	334,418
Shell Oil Company	Navajo Tribal #1	E. Boundary Butte #7	9,670	175,202
Shell Oil Company	Navajo Tribal #1	North Toh Atin	19,805	218,233
The Superior Oil Company	Navajo "H" #14-16	Twin Falls Creek	28,872	33,990
*****				

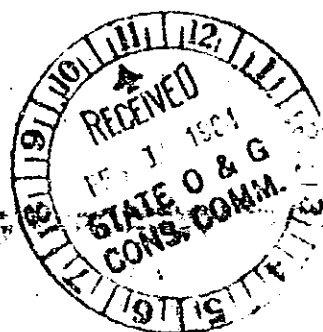
Mailed 2/21/64

WY-85751

WILBERT FLYING SA  
APPROBATING SEEDING APPARATUS

P.O. Box 807  
LEMOORE, CALIFORNIA  
February 15, 1964

State of Arizona  
Oil & Gas Commission  
Mr. John Petty  
1624 W. Adams  
Phoenix, Arizona



Dear John:

I wish to thank you for the courtesy that you and your people extended to me and my guests on my last visit to Arizona. It was most appreciative and interesting. I am extremely sorry for not having more time than I did. I have been operating a very extreme tight schedule. However in not to distant future the pressure will let up then at that time I will be in position to concentrate more on our holdings in Arizona.

John, I am indeed sorry that I did not have ample time while in Phoenix, this last time to explain my feelings on the so called proposed reward bill S&B-43.

As I mentioned in my prior letter that I think the cash reward is a wonderful gesture on the part of the people in the State of Arizona. I also see several stumbling blocks in it's path, if it is intended to be paid out in cash. First I wish to point out the disadvantages: #1. If it does go up for a vote, I feel it may get turned down because a lot of people will start screaming do mainly to misunderstanding or lack of knowledge. It's almost impossible to educate the average public to any thing but unemployment pay and retirement pay. Those are the only two factors that seem to be outstanding in today's pork barrels. #2. A quarter of a million pay out by the State Treasurer would have considerable effect on the Treasury. #3. It would induce every promoter of the "Seven for a Nichol Variety", who at the present time are on relief to start fleecing the public of funds through cash donations and cheap stock promotions with the idea of lining there own pockets through that media, whether they discover anything or not is immaterial, through the mere fact that the Golden Goose has life on a silver incrustated cloud and for a few bucks we could build a ladder to get up there on that beautiful silvery cloud decorated with all colors of the rainbow and pluck that Golden Goosey, net result could be a lot of law suits, a lot of headaches

Mailed to 5 Commissioners & EIK 2/20/64

To Arizona State Stock Commission and somewhat of a black eye to the State in general and if a bonified operator was fortunate to qualify for the subject cash reward he would only get stuck for federal taxes on same. The State of Arizona would lose lot of the subject money to the Federal Government.

I wish to make a suggestion that, lets assume that a minimum of 50 barrel well per day is discovered on State lands rather than 25, which I don't feel would be to difficult to find, this will more or less tighten the situation up a little and give the State a better break and let the State allow say 10% credit to the fortunate operator until \$250,000 worth of reward is pumped out of the subject lease or leases from State lands. In this manner State of Arizona would not be compelled to pay out any cash, it would give the lucky operator a break on 10% of royalty credit and the State would still receive 2 1/2% while the subject reward was being paid out. In this manner everyone would stand a opportunity to gain from this kind of a setup. It would be a tremendous opportunity for a solid and solvent little fellow, medium sized fellow and a big fellow. It would under this suggested measure eliminate a lot of trouble and headaches and embarrassment that could very easily crop out.

I hope that you or anyone in Arizona doesn't feel that I'M sticking my nose in places where maybe it shouldn't be. Please don't take any offense. I have a large investment in your state and I feel it my duty to help the assistant, to the assistant, to the assistant chief. This is about all for time being, Thank you again.

Yours Truly

*George Willett*  
George Willett

I believe George Willett is sincere in what he proposes because he does have 28,500 acres plus near Flagstaff and three sections in the Strip Country.

JKP



# Petroleum Information

## ROCKY MOUNTAIN REGION REPORT

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### OIL RECOVERED AT LONG ISLAND UNIT WYOMING MESAVERDE TEST

Pan American Petroleum recovered 30 ft of gas cut mud with specks of oil, 55 ft of oil cut mud (20 per cent oil) and 115 ft of yellow, high gravity, high pour point oil on a drillstem test at 12-9 Long Island Unit, sw sw 9-29n-112w, Sublette County, Wyoming. Tops are not reported at the scheduled 4800 ft Mesaverde test. Gas flowed in 35 minutes at the rate of 2110 cu ft per day and remained steady to the end of the two hour test from 4231-50 ft. Flowing pressure rose from 19 to 72 psi and final one hour shut in pressure was 1072 psi. Pan American is running logs at a total depth of 4690 ft. The wildcat, on the western edge of the 48,967 acre Long Island unit, is three and a half miles northwest of the unit's Mesaverde gas discovery and is four miles northwest of a Wasatch oil discovery on the unit. There has been no drilling directly between the Pan American well and the gas discovery but it is separated from the oil discovery by a dry hole. Nearest production is in Big Piney field, two miles to the west.

### YAVAPAI COUNTY ARIZONA WILDCAT SCHEDULED TO PRECAMBRIAN

Richard F. Harless, Phoenix independent, has location for a 3000 ft test to preCambrian at 27 Harless-Federal, nw nw 4-17n-4e, Yavapai County, Arizona. It is a north offset to the operator's rumored Supai (Permian and Pennsylvanian?) prospect. That well, 1 Federal, sw nw 4-17n-4e, is reportedly testing on pump. Total depth is 1763 ft. Rumors last October credited the well with a 38 ft section on Supai oil shows. Harless admitted some encouragement, did not confirm the rumors. This area is 28 miles southwest of Flagstaff.

### CROOK COUNTY WYOMING MINNELUSA DISCOVERY COMPLETED

True Oil has completed 7-1 Climax, nw ne 7-50n-68w, Crook County, Wyoming, pumping 288 bbls of oil per day. Production is from selective perforations in Minnelusa between 7680-97 ft and 7707-24 ft. Log top of Minnelusa is at 7671 ft and the well is plugged back to 7768 ft from total depth of 7794 ft. The discovery is a mile southwest of Cretaceous production in Kummerfeld field and three and a half miles north of Minnelusa production at North Donkey Creek field.

### OIL RECOVERED FROM RIERDON AT NORTHERN MONTANA WILDCAT

Juniper Oil & Gas recovered five ft of oil, some oil and water cut mud and 120 ft of slightly oil cut water on drillstem test of Rierdon and is waiting on orders at total depth of 1795 ft at 1 Jacobs, sw sw 14-36n-2w, Teton County, Montana. Sample top of Rierdon is at 1774 ft. Tool was open three hours on the test from 1718-95 ft. Recovery included five ft of oil, 30 ft of highly oil cut mud, 60 ft of oil and water cut mud, 30 ft of highly water cut mud and 120 ft of slightly oil cut water. The wildcat is two miles north of production in Kevin-Sunburst field. Earlier test recovered gas cut mud with a trace of oil on drillstem test in Sunburst.

2-18-64

Mailed to 5 Commissioners & EIK 2/20/64.