

OIL & GAS CONSERVATION COMMISSION
Meeting: April 19, 1974
Mr. John Bannister, Exec. Sec.



OFFICE OF
Oil and Gas Conservation Commission
 STATE OF ARIZONA
 4515 NORTH 7TH AVE.
 PHOENIX, ARIZONA 85013
 PHONE: (602) 271-5161

A G E N D A

Meeting
 April 19, 1974
 4515 N. 7th Avenue, Phoenix, Arizona

10:00 a.m.

Call to order

*3 HAS } DEAD
 2222 }*

- 1 ✓ Approval of minutes of meeting of March 15, 1974
- 2 ✓ Report of Executive Secretary
- 3 ✓ Report of Enforcement Section
- 4 ✓ Report of Geology Section
- 5 ✓ Old Business
- 6 ✓ New Business - *3 letters*
- 7 ✓ Adjourn

IF YOU ARE UNABLE TO ATTEND THIS MEETING, PLEASE NOTIFY THIS OFFICE AS SOON AS POSSIBLE.

FUEL & ENG ADV. COUNCIL

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April 10, 1974

Memo: Commissioners
From: John Bannister

House Bill 2222, which imposes a severance tax on the production of oil, gas, helium and geothermal energies, has now passed the House and is in the Senate. The bill has been assigned to the Finance and Revenue Committee, and, of course, the Rules Committee. The Finance and Revenue Committee has had this bill on its last three calendars but it has not come up due to lack of time. I do anticipate that the bill will be on their agenda again on the 15th and more than likely will be heard then.

House Bill 2148, which is the supplemental appropriation to this Commission, has passed the Natural Resources and, I believe, the Appropriation Committee of the House, however I do not believe this bill will go any further. Apparently the lessening of the gasoline crisis has killed any motivating force behind this bill. So for all intents and purposes I believe this bill is now dead.

It is more than likely that one of the several bills setting up a natural resources coordinator will pass. As an example, Senate Bill 1283 has passed the Senate and gone to the House. This bill provides for an Office of Natural Resources Coordinator, who is charged with assisting some four or five boards and commissions, of which the Oil and Gas Commission is one. The bill calls for regular meetings of the administrative heads sitting as members of the board with the resource coordinator. The coordinator is appointed by the Governor. The authority of each of the commissions or agencies making up the board is in no way infringed upon.

House Bill 2245 which, in effect, established an energy department composed of those agencies dealing directly with energy, is apparently dead now and will not come out of committee. To all intents and purposes the lessening of the gasoline situation

Memo: Commissioners
4-10-74
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again has removed any further concern as to such a department.

I am pleased to report that Mr. Ralph Bilby has been requested by Governor Williams to accept reappointment as a member of this Commission. Based upon a most recent conversation, it appears that Mr. Bilby is willing to accept.

The Arizona Resources Information System held a meeting on April 9th whereby it presented to its elected group the potential use of the information being gathered by its high altitude photography. Mr. Bruce Howlett of Bruce Howlett, Inc., environmental planning consultants, and other members of this group spoke of the various land use measures they were involved in developing from accumulated information. It was interesting to note that the energy distribution system map developed by this Commission was displayed at this meeting and cited as an example of a use that could be made of this media. However, it is humorous to note that this map, while conforming to a scale adopted by ARIS (I am sure you will find Jack Conley had a large part in this decision) was in no way developed from ARIS information.

Some of the uses they felt will be made of this information are land use planning, mapping of water and mineral resources, soil types, vegetation areas, location of scarce resources - both human and natural, location of aesthetic areas, land ownership, etc. It is my feeling this information, as developed and eventually computerized, will be of great value to the State.



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ACTIVITY REPORT

April 10, 1974

Memo from W. E. Allen, Director
Enforcement Section

The latter part of March was spent in the field primarily checking the conditions of temporarily abandoned wells. It is our opinion that most of these wells that have been placed on a temporarily abandoned status should be permanently plugged and abandoned.

Kerr-McGee has completed their Navajo No. 17 located in the NW/SE Section 31-T36N-R30E. On a 24-hour potential test the well produced 24 barrels of oil, 15 barrels of water, 83.5 MCF and the GOR was 339 to 1. Kerr-McGee now plans to workover their Navajo No. 6 located SE/NE Section 31-T36N-R30E, Apache County. The operators will open up a new zone in this well and fracture treat the entire open pay zone. This well is a northeast offset to the newly completed well. The Navajo No. 6 is presently producing 240 barrels of oil and 1 barrel of water per day.

Two permits have been issued since the last report. One was for Nix Drilling Company for a 2000' geothermal test located in the NW/SW Section 16-T5S-R24E, Graham County. This location is about one mile southeast of the old hotel at Indian Hot Springs. The second permit was issued to American Fuels Corporation for a 6800' devonian test in the SW/SW Section 10-T40N-R29E, Apache County. This well offsets the operators "B" No. 1 well which is a small producer from the Pennsylvanian.

Activity Report
April 10, 1974
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We have received information that Geothermal Kinetics has made a deal with Amax Corporation to drill a geothermal test near Casa Grande. According to our information Amax is financing the deal for a 50% interest in Geothermal Kinetics' lease holdings in that area.

Morton Brothers, independent oil operators from Casper, Wyoming, have taken leases on some 80,000 acres of federal land in southern Navajo County. Sun Oil Company has dropped leases on some 58,000 acres of state land in Cochise County.

Attached to this report are a couple of pamphlets on the energy situation. We have found them both interesting and informative.



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ACTIVITY REPORT

April 10, 1974

J. N. Conley
Director, Geology Section

PUBLICATIONS

Selected Paleozoic Stratigraphic Sections in Arizona, by Edward A. Koester. The manuscript portion of this publication was received this past month soon after receipt of map. Distribution to the various governmental agencies and academia on our mailing list has been completed.

Well Location Map - County Series - Pima and Santa Cruz Counties. This map has been completed. It will be printed in the near future.

Well Location Map - County Series - Graham and Greenlee Counties. The "work" map has been completed. A copy-ready map is now being drafted for the printer.

A Geophysical Investigation of Potentially Favorable Areas for Petroleum Exploration in Southeastern Arizona. The final copy-ready maps and illustrations of this report will be completed by the end of this month. I expect to complete the final manuscript soon.

This report is an expanded version of the "Geophysical Investigations in Southeastern Arizona Valleys" report made for this Commission by Carlos L. V. Aiken and John S. Sumner, University of Arizona in 1973, with funds furnished by the Four Corners Regional Commission. The report will be printed in May or June.

Oil and Natural Gas Occurrence in Arizona. This chart has been updated to January 1, 1974, as to well statistics and cumulative oil and natural gas production. It will be re-printed next month.

Sources of Information on Exploration for Energy Resources in the State of Arizona. Our supply of this little publication (last re-print, October, 1973) is exhausted. It will be up-dated and revised extensively prior to re-printing later this fiscal year.

The Geological Survey of Wyoming this past September published a

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Directory of Sources of Wyoming Geological Information. It appears to be patterned in many respects to our publication.

Pinta Dome-Navajo Springs-East Navajo Springs and Dineh-bi-Keyah.
Development maps of these two fields will be completed and printed this fiscal year.

INVESTIGATIVE PROJECTS

The NASA funded investigation of ERTS imagery covering the Colorado Plateaus portion of Arizona is underway. George Davis, Geosciences Department, University of Arizona, is the principal investigator. This project is scheduled to be completed by August 30, 1974. This project, however, represents just the first phase of an originally planned three-phase project. Financing for the next two phases was to have been from funds we had hoped to obtain from the supplemental budget, H. B. 2148, requested of the Legislature. It now appears that this bill will not be acted upon. However, the completed first phase of the project will furnish us information that we can use to good advantage.

* * *

There is a possibility that some of the energy investigative projects included in our request for the supplemental budget might be undertaken by the U. S. Geological Survey, or funds furnished for state performance.

I represented Arizona at a U. S. Geological Survey-Western State Geologists Geothermal Planning Meeting in Menlo Park this past month. The Survey will have approximately \$9.4 million during fiscal year 1975 to spend on geothermal research programs. Approximate budgets for other resource investigations are:

| | |
|---------------------|-----------------|
| Coal | \$3 - 4 million |
| Oil and gas | 5 million |
| Uranium and thorium | 3½ million |
| Water | 12 million |

Most of the budgets will be spent on in-house research by the Survey. There may be some money grants available to academia and state agencies for energy resources investigations.

None of the Survey's in-house planned geothermal research programs presented at the meeting were within our state, although one speaker expressed some interest in the San Francisco Peaks volcanic field. I have furnished the Survey a list of the various energy investigative projects we had hoped to finance with state funds. I have not heard from the branch handling geothermal investigations. The Branch of Oil and Gas Resources, however, has advised me, "We will be happy to consider your projects ... both in terms of cooperation and funds for state performance."

Perhaps more consideration might be given to our projects if some of our congressmen in Washington expressed an interest to Secretary Rogers C. B. Morton, U. S. Department of Interior, relative Arizona being included in the Geological Survey's research program.

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April 10, 1974
Page Three

Several states have had problems in determining what agencies should handle geothermal resources. Idaho has adopted a set of rules and regulations, but no decision has been made yet as to which agency will have jurisdiction. Oregon has a split division of authority - State Engineer and State Geologist. In California four agencies will be involved: Division of Mines, Division of Oil and Gas Resources, Division of Water Resources, and the Conservation Commission. Utah has a strange division of authority which I did not understand. The oil and gas commission in Colorado will probably get authority over geothermal resources, but as this commission has only one geologist on the staff, it will have to rely on the State Geologist for geological matters.

* * *

All of the western states' representatives reported extensive geothermal leasing activity of state, federal, and privately owned lands. Utah, for example:

| | |
|---------------|---|
| Private lands | 500,000 acres |
| Federal lands | 293 applications for thousands of acres, period Jan. 1 - Mar. 15 |
| State lands | 173 applications from August 1973 to March 22, 1974, involving 229,400 acres |

Terms of state leases in Utah are \$1.00 per acre per year. Chevron, Union, and Phillips are the principal major companies actively leasing. Hunt Oil and associated family companies have leased thousands of acres, not only in Utah, but in other western states as well.

Most of the potentially favorable geothermal areas in Arizona have been designated as KGRA (Known Geothermal Resource Areas) by the State Land Department. Acquisitions of geothermal leases on state lands within these areas must be by competitive bidding.

* * *

Gresham Clacy of Gresham Geophysical Company has shown Jim Scurlock a geothermal prospect he has developed about five miles southwest of the town of Maricopa. He reports that he has the Maricopa Indian Reservation under lease plus some nearby fee lands, involving 20,000 acres. He hopes to drill a geothermal test hole on this prospect this summer.

OIL & GAS LEASING

We have heard reports, unconfirmed, that approximately 124,000 acres of state and federal lands have been filed on recently south of the town of Holbrook.

GENERAL

Among the requests for publications or information received this past month was one from Morrison-Maierle, Inc., a Helena, Montana, based consulting engineering firm. This firm is presently conducting a water resources


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investigation for the Bureau of Indian Affairs on the Navajo Indian Reservation.

* * *

NASA Photo coverage of Arizona. Coverage of the state was completed this past November. ARIS orthophotoquads of Arizona are continuing in production. Approximately 50% of the state is now complete. To date, we have purchased 56 quads.

JNC:os

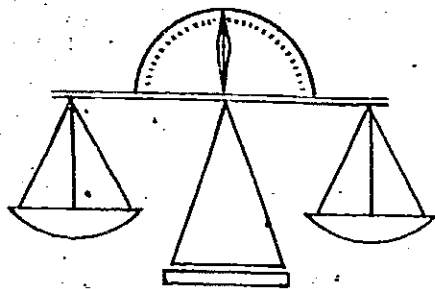

J.N.C.

MONTHLY FINANCIAL REPORT

| RECEIPTS MONTH OF <i>Mar 1974</i> | CLASSIFICATION | APPROPRIATED RECEIPTS | UNAPPROPRIATED RECEIPTS | TOTAL ALL RECEIPTS YEAR TO DATE |
|---|---------------------------------|--------------------------|----------------------------|---------------------------------------|
| -0- | 1 Permits to Drill | | | 50 00 |
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| -0- | TOTAL CURRENT MONTH RECEIPTS | -0- | -0- | XXXXXX |
| XXXXXX | TRANSFERS IN | | | |
| -0- | BALANCES BROUGHT FORWARD | | 3,176 83 | XXXXXX |
| | TOTALS - MONTH AND YEAR TO DATE | | 3,176 83 | 50 00 |

| CLAIMS PAID MONTH OF <i>Mar 1974</i> | FUND TITLES | TOTAL AMOUNT AVAILABLE YEAR TO DATE | CLAIMS PAID YEAR TO DATE | OUTSTANDING ENCUMBRANCES | UNENCUMBERED BALANCE |
|--|-------------------------|---|-----------------------------|-----------------------------|-------------------------|
| 7,331 24 | 1 Personal Services | 75,750 00 | 70,254 60 | | 5,495 40 |
| 1,035 11 | 2 Emp. Related Exp. | 9,375 00 | 8,509 05 | | 865 95 |
| 110 00 | 3 Professional Serv | 1,788 50 | 1,029 00 | | 759 50 |
| 531 99 | 4 Travel-State | 6,300 00 | 3,420 90 | 620 54 | 2,258 56 |
| 457 70 | 5 Travel-Out of State | 3,400 00 | 2,564 72 | 303 91 | 531 37 |
| 2,523 76 | 6 Other Operating Exp. | 31,524 71 | 26,915 17 | 2,802 48 | 1,857 06 |
| -0- | 7 Capital Outlay-Equip. | 2,800 00 | 1,955 20 | 317 30 | 527 50 |
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| 11,989 80 | TOTALS | 130,988 21 | 114,648 64 | 4,044 23 | 12,295 34 |

| CLAIMS PAID YEAR TO DATE | OBJECT CODE NO. | DISTRIBUTION OF EXPENDITURES | | CLASSIFICATION | CLAIMS PAID MONTH OF <i>Mar</i> 1974 |
|-----------------------------|--------------------|------------------------------|--|----------------------------|--|
| 1,440.00 | 7111 | 1 | Per Diem: | Commission Members | 210.00 |
| 68,814.60 | 7112 | 2 | Salaries: | Employees | 7,121.24 |
| 232.38 | 7151 | 3 | Industrial Insurance | | |
| 3,048.08 | 7153 | 4 | F.I.C.A. | | 428.87 |
| 3,985.85 | 7155 | 5 | Retirement | | 408.74 |
| 980.24 | 7156 | 6 | Health Insurance | | 110.00 |
| 262.58 | 7159 | 7 | Personnel Commission | | 87.50 |
| | | 8 | | | |
| | 7215 | 9 | Professional Services: | Engineer | |
| 1,029.00 | 7219 | 10 | Professional Services: | Other | 110.00 |
| | | 11 | | | |
| 538.00 | 7221 | 12 | Travel - State: | Mileage | 87.80 |
| 1,347.00 | 7222 | 13 | | Subsistence | 158.00 |
| 53.53 | 7223 | 14 | | Public Transp. | |
| 1,339.47 | 7224 | 15 | | Vehicle Expense | 284.69 |
| 142.90 | 7225 | 16 | | Reg. Fees; Parking; etc. | 1.50 |
| | | 17 | | | |
| 839.00 | 7232 | 18 | Travel - Out of State: | Subsistence | 125.00 |
| 1,575.22 | 7233 | 19 | | Public Transp. | 332.70 |
| 5.75 | 7234 | 20 | | Airport Parking | |
| 204.75 | 7235 | 21 | | Reg. Fees; Telephone; etc. | |
| | | 22 | | | |
| 20,344.06 | 7251 | 23 | Occupancy: | Office Rent | 1,849.46 |
| | 7261 | 24 | | Warehouse Rent | |
| | 7263 | 25 | | Warehouse Mtn. & Repair | |
| 521.99 | 7272 | 26 | Mtn. & Repairs: | Furn. & Equip. | 47.99 |
| 2,226.71 | 7280 | 27 | Office Supplies | | 342.26 |
| 242.71 | 7300 | 28 | Field Supplies; Film; Am.Strat; P.I., etc. | | 15.50 |
| 895.58 | 7331 | 29 | Printing: Reports; Large Maps; etc. | | |
| | 7332 | 30 | Legal Advertisement | | |
| | 7333 | 31 | Court Reporter | | |
| 309.29 | 7334 | 32 | Postage | | 56.43 |
| 1,805.12 | 7335 | 33 | Telephone | | 175.12 |
| | 7337 | 34 | Drayage; Express; etc. | | |
| 65.21 | 7349 | 35 | Rental, Misc. | | |
| 59.50 | 7360 | 36 | Dues & Subscriptions | | 37.00 |
| | | 37 | | | |
| 1,953.20 | 7431 | 38 | Capital Outlay: | Office Equip; Tpr; etc. | |
| | 7434 | 39 | | Spec. Equip. (Geol.) | |
| | 7436 | 40 | | Automobile | |
| | | 41 | | | |
| 250.00 | 7913 | 42 | Revolving Fund | | |
| | | 43 | | | |
| 195.00 | | 44 | | | |
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| 114,648.64 | | | TOTAL | | 11,989.80 |



"BALANCING REGULATION AND ENERGY"

Excerpts from an address

by

MAURICE F. GRANVILLE

Chairman of the Board and
Chief Executive Officer
TEXACO INC.

before the
INDEPENDENT NATURAL GAS
ASSOCIATION OF AMERICA
Scottsdale, Arizona

SCENARIO FOR SHORTAGE

I am indebted to an individual outside of our industry, Bruce Henderson of the Boston Consulting Group, for a succinct analysis of how a great nation can go about creating an energy shortage. Following is his scenario:

"First, with regard to natural gas, set a ceiling price. This discourages exploration and increases use. Keep the prices down in spite of inflation. This amplifies the effect and guarantees a shortage eventually.

"With regard to coal, ban the use of coal with sulfur content. This sharply restricts the supply. Sharply restrict strip mining for cosmetic reasons. This further restricts the supply. Then suddenly impose drastic new safety rules which will substantially cut output from existing mines. Freeze prices so no one can offset cost increase from reduced output or justify further investment.

"For atomic power, delay construction a matter of years by uncertainty about licensing requirements. Delay operation at full power after construction. Delay start of construction by environmentalist suits.

"With natural gas, coal and atomic power all severely restricted, that leaves only petroleum. First, grossly increase automotive consumption of gasoline by requiring drastic reductions in engine efficiency because of pollution-related modifications. That alone will insure a severe shortage of energy. Then ban the use of oil containing sulfur. This severely reduces refining capacity. Put into effect new pollution objectives which make refineries far more expensive. At the same time, introduce great uncertainty into the requirements that must be met. That will virtually stop refinery construction or expansion. Eliminate practically all new refinery sites because of environmental legal delaying tactics. Further curtail refinery investment by making supplies of crude oil very uncertain. Block the use of Alaska North Slope by arguments on the cosmetic effects in uninhabited and unreachable regions. Stop the use or search for oil offshore in California because of potential leaks. Slow all offshore operations for environmental reasons. For good measure, hold down the price of gasoline to half that in Europe. This encourages large cars.

"To be sure that all of the above is misunderstood by the general public,

bring a law suit which charges all the largest energy companies with being noncompetitive and therefore causing the energy shortage."

While the intention towards irony in this analysis is obvious, that recitation of events comes terribly close to the truth. A long series of well-intended but ill-advised governmental regulations has helped to disrupt our industry and create a near crisis for our economy.

To be more comprehensive, the author could have included one additional misstep on the part of our Government—the ill-conceived tax treatment of 1969 which reduced both the capital and the incentive that are needed to encourage petroleum exploration and development.



THE UNIVERSITY OF ARIZONA
TUCSON, ARIZONA 85721

DEPARTMENT OF GEOSCIENCES
TEL. (602) 884-1819

A handwritten signature in dark ink, appearing to be "Joe", written over a faint line.

April 15, 1974

Mr. John Bannister
Arizona Oil and Gas Conservation
Commission
4515 North 7th Avenue
Phoenix, Arizona
85013

Dear John:

I will be unable to attend the April 19th meeting of the Commission. The University scheduled an event requiring my participation this coming Friday and Saturday.

Sincerely,

A handwritten signature in dark ink, appearing to be "Joe", written in a cursive style.

Joseph F. Schreiber, Jr.
Professor and Assistant Head

JFS/dd

RECEIVED

O & G CONS. COMM.