AGENDA

Meeting
February 25, 1972
4515 N. 7th Avenue, Phoenix, Arizona

10:00 a.m. Call to order
1. Approval of minutes of meeting of January 21, 1972
2. Executive Secretary report
3. Enforcement Section activity report
4. Geology Section activity report
5. Old business Lovato Claim
6. New business
7. Adjourn
State smelters are unlikely to pay sulfur emission tax

By GRANT E. SMITH

If Arizona's air pollution control regulations are complied with by the 1974 deadline, Presbyter Nimmer's proposed tax on sulfur emissions would not be imposed on the state's copper smelters, electric generating plants and industry.

Edmund C. Garber, assistant administrator of environmental health services, yesterday said he understood the tax would be imposed in areas that did not meet federal air quality standards.

More-Arizona air quality standards are much stricter than federal standards. Garber said, because of sulfur emissions the state should meet federal standards.

Garber also faced some problems.

The federal agency responsible has asked the Arizona Public Service Commission for a larger amount of sulfur gas to be added industrially for testing.

There is a possibility of increasing the possibility of adding enough sulfur gas at the smelters of Arizona, New Mexico and Texas.

If the commission were to cut Arizona's allotment, smelters generating plants and industrial plants would probably have to use oil instead of natural gas during the winter.

Garber pointed out that the use of oil would increase the sulfur emissions.

"At that time," he said, "we might have to choose between operating or paying the tax."

Another possible problem might arise, he said, if state air pollution control regulations were made less stringent as the copper companies have asked.

The State Board of Health is studying the regulations on sulfur emissions and the copper companies' problem of meeting the 1974 deadline.

Under the Nixon proposal, a company would have to pay 10 cents for each pound of sulfur emitted if the company was located in an area that did not meet federal primary air quality standards, which are the least restrictive of the two federal standards.

A company would have to pay 10 cents for each pound of sulfur emitted if the company was located in an area that did not meet the secondary air quality standards.

The state health board has vowed to keep Arizona's standards at least as strict as federal secondary standards.

As an example of the proposed tax, Ken- nesott Copper Corp. estimates its smelter at Hayden will emit 15 tons of sulfur a day after the work is completed in 1978, to bring it into compliance with Arizona standards.

If the 15-cent-a-pound tax were imposed, Kennecott would have to pay $1,950 a day. If the 10-cent tax were imposed, Kennecott would have to pay $1,160 a day.

Kennecott's smelter is one of the smaller ones in the state.

"We are opposed to the sulfur tax per se," said Wayne R. Hueli, president of Magna Copper Co., which operates one of the state's larger smelters, at San Manuel.

Lee Ybarra, general manager of the western smelting department of American Smelting and Refining Co., at Salt Lake City, said the proposed emissions tax "would work to reduce the amount of minerals that can be mined and refined in the U.S. and make us more dependent on foreign sources of supply."

"This seems like a license to pollute and seems inconsistent with the overall objectives we are all working for. We would have to be opposed until we see all the details."

A Salt River Project spokesman said the project's massive Navajo Power Project outside Page would meet state and federal requirements.

"The tax would not seem to affect us," he said.

In a related action, BHP, Arizona Public Service Co. and Thomas Gas & Electric Co., this week, announced a $200,000 research project aimed at reducing sulfur emissions.
Atom blast studies near Kingdom are called off
February 9, 1972

Memo: Commissioners
From: John Bannister

I met yesterday with the House Appropriation Subcommittee composed of Mr. Sam McConnell, Mrs. Etta Mae Hutcheson and Mr. Peter Kay. The meeting was most favorable. The Committee decided they would recommend one car be allowed to this Commission and that our "Other Operating Expenses" be given to us in lump sum so that there would be no question that sufficient monies for publications would be available.

As usual, great interest was shown in the affairs of this Commission and I was pleased to note that the opinion was expressed that we are a very well run Commission and seem to have the greatest potential to offer. Mr. Kay expressed the opinion that a blank check should be written for the Commission.

I would note in passing that the Sub-Committee definitely expressed the idea that our efforts to encourage industry to come to the State should be continued and that the Department of Economic Planning and Development would be instructed to cooperate with us in every way possible in this endeavor, apparently including some publication monies, if necessary. The Sub-Committee indicated that further instructions as to DEPAD and this Commission cooperating for the purpose of encouraging industry will be forthcoming. The Committee expressed the opinion that the encouragement efforts should be directed primarily by us and not by others not familiar with our problems.

Our geothermal bill was introduced as House Bill 2302. There haven't as yet been committee meetings on this bill, but of course there will be in the future.

The Executive Committee of the Interstate Oil Compact Commission is meeting in Denver, Colorado in March. This meeting has been called by Governor Hathaway of Wyoming. Arizona is a member of the Executive Committee and I should be present to represent our State. This is one of the four yearly trips necessitated by our membership in the Interstate Oil Compact Commission. I might mention that this membership is authorized by State Statute.
February 8, 1972

Memo: Commissioners
From: John Bannister

PLEASE NOTE THAT THE NEXT MEETING OF THIS COMMISSION WILL BE HELD ON FEBRUARY 25, 1972 AT 10:00 A.M. RATHER THAN OUR NORMAL DATE OF FEBRUARY 18TH. THIS CHANGE IS DUE TO THE FACT THAT SOME OF THE STAFF MUST BE AT THE GEOTHERMAL MEETING IN EL CENTRO, CALIFORNIA ON THE 18TH.

The Governor’s Office will shortly reassign the monitoring duties of the Southwest Salt Company’s project at Glendale Avenue and Dysart Road to the Environmental Health Section of the Health Department. This will relieve the Commission of the duties of monitoring this operation for potential seepage and possible damage to the fresh water aquifer. The Commission will retain its duties as to the two wells drilled for water to conduct the mining operations, however. You will recall that $2000 was allotted in our 1971-1972 budget for monitoring purposes and we have further requested $2000 for monitoring purposes in the 1972-1973 budget. We have not as yet received instructions from the Governor’s Office as to these amounts of money however, in all likelihood, we will be directed to assign this money to the Environmental Health Section or surrender to the General Fund.

For some period we have been experiencing considerable difficulties with our tape recorder. We have secured permission to trade our old one in on a new cassette-type recorder. We hope this can be done prior to our next meeting. The reproducing quality of the old machine is very poor and we have been advised that it is not economically feasible to continue repairs.

As reported to you at the last meeting and as approved by our Chairman, I will be attending the geothermal conference at El Centro, California on Tuesday, February 15th through Saturday, the 19th. In the month of March, i.e. 1, 2 and 3, Mr. Conley proposes to attend the joint meeting of the Southwest Section
of the American Association of Petroleum Geologists and the
Permian Basin Section of SEPM. Several of the papers being
given have direct bearing on the geology of Arizona and others
an indirect bearing. Your permission to attend this meeting
is requested.

I have been requested to appear before the House Appropriations
Committee on February 8th at approximately 3:45 p.m. concerning
the Commission budget request for 1972-1973. I anticipate that
nothing unusual will occur. I have reported this request im-
mediately to our Chairman and was instructed to appear.

In February, 1971, a Commission car driven by Mr. Koester was
in a collision. The occasion, of course, was on State business.
This accident was duly reported to all proper authorities, in-
cluding the State insurance carrier. We have recently been
notified that the occupant of the other car involved is seeking
damages in the amount of $30,000 from the State. This has been
turned over to the Attorney General. It is interesting to note
that the day following the accident and on other occasions Mr.
Koester checked with the gentleman involved and found him at
work and was assured repeatedly that no injuries had occurred.
There has been no progress other than the request for damages.
February 9, 1972

Memo from W. E. Allen, Director
Enforcement Section

The pessimistic forecast recently made by the Department of Interior and U. S. Geological Survey regarding the prospects of the United States ever again becoming self-sufficient in oil production has been refuted by the American Association of Petroleum Geologist. Dr. Hubert Risser, U.S.G.S., Mineral Economist, reported that there "appears to be little or not likelihood that the United States will ever again become self-sufficient in oil." Dr. Sherman Wengard, A.A.P.G., president and spokesman for the group, said that while the "economic theories" of Dr. Risser, might be correct, the facts of the matter are that the Federal Government has allowed exploration for oil and gas to fall so far behind consumer demand since the middle 1950's, that it will take a superhuman effort to catch up—but it can be done. Dr. Wengard also pointed to the recently completed 3 year study made by 177 top U.S. Geologist that stated "Three to six times present U.S. oil reserves of 39 billion barrels may yet be discovered, and from two to four times the present natural gas reserves of 290 trillion cubic feet." This study was made at the request of the Department of Interior, by the A.A.P.G. under direction of the National Petroleum Council.

So long as the Government continues to sanction restrictive legislation and directives that discourage exploration for oil or gas, we cannot expect to become once again "self-sufficient."

Several reports have recently reached this office regarding the drilling of an oil test in the Dateland-Tacna area of Yuma County. These reports were checked by making a trip to the area. The only drilling activity that could be found was the drilling of water wells on a new lot development.

Following request for bond releases on the V. R. Smith #1 State, NE/SW, Section 23-T9S-R19W, Yuma County and the Tenney #3 State, SE/SW, Section 36-T9S-R27E, Graham County, we checked these drilling sites and found that the operators had not complied fully
with the Rules and Regulations concerning abandonment. The release of bonds have been denied pending compliance with the Commission's rules.

In addition to our regular duties we have two projects under way. (1) The remaking of our Plat Book and (2) compiling a directory of the location and availability of the various services and supplies that are required in the drilling and completing of an oil or gas well. You are aware that the source of most services and supplies needed in exploration for oil or gas must come from New Mexico or California. This directory may be of some benefit to the operators that are strangers to Arizona.

At the sale of oil and gas leases by the Navajo Tribe on February 2, 1972, there were 92 tracts offered for sale in Arizona, comprising some 44,800 acres. Bids were offered on 25 tracts totaling some 16,000 acres. Davis Oil Company of Denver bid on 10 tracts totaling 6,400 acres. Cities Service was next with 9 tracts for approximately 5,760 acres. Universal Resources was high bidder with a bonus of $35.22 per acre on Section 15-T40N-R29E, Apache County. This section is immediately northeast of the Cities Service gas discovery in Section 21-T40N-R29E. It is interesting to note that practically all the acreage was acquired by active exploration companies.

The Western Helium Plant at Navajo has been put on stream. Indications are that sufficient helium is now available to supply the Plant.

Eastern Petroleum Company Santa Fe Fee #1-25, SW/NE, Section 25-T20N-R27E, Apache County, has been completed and is on production.

The Ceci Cope #1 Bradshaw Fee, NW/NE, Section 34-T18N-R4E, is drilling below 2,700 feet.

The P & H Development Company, No. 1 Federal, NW/SE, Section 30-T25-R9W, has set 12" surface casing at 505 feet and is drilling below 580 feet.
1. Cecil Cope &1 Bradshaw Fee
2. P & H Development &1 any No. 1 Federal
3. Eastern Petroleum Company Santa Fe Fee 1-25
6. Tenney &3 State
5. V. R. Smith &1 State
J.N. Conley

February 9, 1972

OUT-OF-STATE CATALOG

As a result of the distribution of these catalogs of out-of-state sets of well samples we have disposed of 60 plus sets. Recipients have been the New Mexico Bureau of Mines, Shell Oil Co., and American Stratigraphic Co.

SOURCES OF INFORMATION -- OIL & GAS, ARIZONA

This pamphlet continues to be very useful in supplying answers to various types of written and oral inquiries concerning oil and gas in Arizona.

SALT DOMES, ARIZONA

The demand for this report by Edward Koester continues to be good. He has received, incidentally, many favorable comments concerning the report.

EXPLORATION INTEREST

As a result of Humble Oil & Refining Company's large acquisition of oil and gas leases in several portions of the Basin and Range province, this company's current seismograph exploratory program, both of which have been given excellent publicity by THE OIL & GAS JOURNAL, and Koester's salt dome report, interest by companies and persons continues to grow. The numerous mail and phone requests received by The Commission for information are answered as promptly, and fully, as possible. Most of the inquiries come from oil companies, geophysical exploration companies, independent operators, lease brokers and consultants. We have had a few inquiries from non-oil oriented firms, such as a Kansas underground storage (hydrocarbons) company and a bank in Chicago, Illinois.
Among our visitors this past month were geologists from Phillips Petroleum Co., Denver, Colorado, and Sun Oil Company, Dallas, Texas, a geologist from Amarillo, Texas, and two geophysicists working for Sabre Exploration Co., Addison, Texas. The last named company, incidentally, is apparently working for Arizona Public Service Co., in search of geothermal and hydrocarbon energy resources.

STATE WELL LOCATION MAP

Based on inquiries, and for our own geological investigative efforts, there is a definite need for a new map to replace the map and well tabulations published by the Commission in June, 1965. Much of the Geology Section's efforts this past month have been devoted to this project. The new map and tabulations will present not only all of the test holes drilled for oil, natural gas, helium, and stratigraphic information, but also geologically significant holes drilled for water or other purposes. There are large areas in the State, particularly the Basin and Range province, where such holes furnish the only available subsurface information.

The map and tabulation of wells on the reverse side will be about four times larger than the 1969 edition. This will make it much more legible and useful. As "by-products" in producing the map we will be able to get a base map of the State at a scale of 1:1,000,000 to be used in geological investigations, and a small (8½" x 11") "hand-out" map.

ARIZONA RESIDUAL AEROMAGNETIC MAP

Based on a brief conversation with one of the Sabre Exploration Company representatives, this map and the magnetic survey material in Dr. John Summer's office in Tucson have been very useful to them in selecting areas to investigate for hydrocarbon and geothermal energy resources. Among the exploratory tools this company plans to utilize will be the airborne magnetometer. Their surveys, however, will use more sophisticated equipment and flight procedures than employed by Dr. Summer.

EXPLORATION

In addition to geophysical exploratory efforts by Sabre Exploration Company, Humble still has two seismograph crews operating in the Basin and Range province; present locations, however, not known. Geothermal Kinetics, Inc., a local firm, has been very active in searching for geothermal resources in the Basin and Range province. This firm is using various tools, including the gravity meter, magnetometer, seismometer and high-altitude photography. The president, Mike O'Donnell, reports (unofficially) that they are developing numerous prospects warranting additional exploration. The firm is concentrating
exploratory efforts on those prospects where the bulk of the land
involved is owned privately.

There have been some unconfirmed reports that an unknown firm is
making some sort of airborne exploratory surveys in the State.

GENERAL

The Geology Section of The Commission is continuing its efforts
to assemble published and unpublished information pertaining to the
gеological and geophysical phases of exploration for hydrocarbon and
gеothermal resources in the State. A recent bit of information
received orally from a U.S.G.S. geologist indicates that exposures of
the Pliocene Bouse Formation have been found along the Colorado River
northwest of Kingman interbedded with beds of the Muddy Creek
Formation. Koester reports that this is of significance in extending
northward the occurrence of this formation and in supporting correlation
with the Muddy Creek Formation, in which salt has been found in
northwest Arizona.
OIL AND GAS CONSERVATION COMMISSION
4515 N. 7th Avenue
Phoenix, Arizona  85013

Minutes of Meeting
January 21, 1972

Present:
Mr. Ralph W. Bilby, Chairman
Mr. W. Roger Hafford, Member
Mr. Frank E. Moore, Member
Mr. Robert A. Bledsoe, Member

Absent:
Mr. Lucien B. Owens, Member

The regular Commission meeting for the month of January, 1972 was called to order by Chairman Ralph Bilby at 10:00 a.m.

Minutes of the meeting of December 17, 1971 were approved as written.

Reports of Executive Secretary, Enforcement Section and Geology Section were accepted.

Executive Secretary reported that Mr. Stan Turley, Chairman of the Natural Resources Committee of the House of Representatives has requested that this Commission prepare proposed legislation for the legislation and control for exploration and production of all geothermal power within this State. Executive Secretary indicated that this work is now under way.

The 1972-73 budget recommendations of the Joint Legislative Budget Committee and the Governor were reported and the differences discussed. Executive Secretary was instructed to contact both the Senate and House Appropriation Committees and advise that the Commission would appear before them if so requested.

Members of the Commission staff were instructed to prepare a report for the Commissioners concerning out of state meetings upon completion of the travel.

The Commission's publication "Salt Domes in Arizona" and its review in the Oil and Gas Journal was discussed.

The possibility of securing basic seismic, magnetic and gravity work for the State was discussed.

Meeting adjourned at 11:30 a.m.

APPROVED  February 25, 1972

Ralph W. Bilby, Chairman
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**TOTAL CURRENT MONTH RECEIPTS**

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February 1, 1972

Memorandum

To: Commissioners and Other Interested Parties

From: John Bannister

Commission meeting for the month of February, 1972, which ordinarily would be scheduled for February 21, 1972, will be held in the Commission Hearing Room on February 25, 1972, at 10:00 a.m.
February 15, 1972

INNER OFFICE MEMO

TO: JOHN BANNISTER
FROM: EDWARD A. KOESTER

I wish to apply for permission for out-of-state travel to the annual meeting of the American Association of Petroleum Geologists, to be held in Denver, Colorado, April 16th to 19th.

My paper entitled, "New Light on Petroleum Potential of the Basin and Range Province in Arizona" is scheduled for delivery on Monday, April 17, 1972. The program also includes a large variety of papers dealing with new techniques in petroleum exploration, including remote sensing as well as petroleum developments throughout the world. This association is the largest organization of geologists in the world.

SAX: lb
cc: file

John to Denver 1060 Mar
Koester to Denver Apr
Conley - May 15
Midland