

OIL & GAS CONSERVATION COMMISSION
Meeting: November 30, 1973
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
November 30, 1973
Room 138 Mines Building
(Deans Conference Room)
University of Arizona
Tucson, Arizona

10:00 a.m.

Call to order

- 1 ✓ Approval of minutes of meeting
of October 17, 1973
- 2 ✓ Report of Executive Secretary
- 3 ✓ Report of Enforcement Section
- 4 ✓ Report of Geology Section
- 5 ✓ Old Business *New Orleans*
6. New Business *Kali*
7. Adjourn *Dec. Meeting*
12-21-73

THANK YOU TO B. TRAYS -
" " " WRIGHT -

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



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

December 3, 1973

Dr. Dennis Norton
Department of Geosciences
University of Arizona
Tucson, Arizona 85721

Dear Dr. Norton:

On behalf of the Oil and Gas Commission I would like to express our deep appreciation for your excellent presentation to us on Thursday afternoon. The Commissioners were most enlightened on some of the problems present in exploration for geothermal energy sources, as was the staff.

I feel that such endeavors by your department are most worthwhile and certainly in the best interest of our State.

Let me personally add my appreciation for your most meritorious effort.

Sincerely,

John Bannister
Executive Secretary

JB/vb



OFFICE OF

Oil and Gas Conservation Commission

STATE OF ARIZONA

ROOM 202

1624 WEST ADAMS

Phoenix, Arizona 85007

PHONE: 271-5161

December 3, 1973

Dr. J. J. Wright
Department of Geosciences
University of Arizona
Tucson, Arizona 85721

Dear Jerry:

I cannot do much more than say "thank you" for the excellent program you put on for the Commission on Thursday. I am sure that you have heard the many "rave reviews" that resulted.

All of us are most appreciative of your efforts in our behalf.

Most sincerely,

John Bannister
Executive Secretary

JB/vb



OFFICE OF
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STATE OF ARIZONA
ROOM 202
1624 WEST ADAMS
Phoenix, Arizona 85007
PHONE: 271-5161

December 3, 1973

Dr. John S. Sumner
Department of Geosciences
University of Arizona
Tucson, Arizona 85721

Dear John:

On behalf of the Commissioners and staff I would like to express our appreciation for the program you gave us on geophysical methods. Our Commissioners were made much more aware of some of the problems facing Arizona and the exploration industry. Needless to say, we were encouraged by the rapid advancement of techniques as described by you.

Your exceptional cooperation with this Commission throughout the past year is certainly appreciated and your department should be commended for allowing you to help us in this manner.

Sincerely,

John Bannister
Executive Secretary

JB/vb



OFFICE OF
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1624 WEST ADAMS
Phoenix, Arizona 85007
PHONE: 271-5161

December 3, 1973

Dr. Edgar J. McCullough, Jr.
Head, Department of Geosciences
University of Arizona
Tucson, Arizona 85721

Dear Ed:

I would like to express my sincere appreciation for the time you and your staff have devoted to making our Thursday meeting with you such a success. Drs. Wright, Sumner and Norton did a beautiful job in explaining the various phases of oil and gas exploration, geothermal exploration and geophysical techniques. The Commissioners as well as the staff were greatly enlightened.

I would like to again express my appreciation that your excellent department is interested in serving your state and its agencies through such endeavors as this.

Sincerely,

John Bannister
Executive Secretary

JB/vb

OIL AND GAS CONSERVATION COMMISSION
4515 N. 7th Avenue
Phoenix, Arizona 85013

Minutes of Meeting
October 17, 1973

Present:

Mr. Ralph W. Bilby, Chairman
Mr. W. Roger Hafford, Vice Chairman
Mr. Robert A. Bledsoe, Member
Mr. F. Keith Benton, Member

The regular Commission meeting for the month of October, 1973 was called to order by Chairman Ralph Bilby at 10:00 a.m.

Minutes of meeting of September 21, 1973 were approved as written.

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

Executive Secretary reported that in accordance with instructions at the September meeting, arrangements have been made with Dr. Edgar McCullough, Head of the Department of Geosciences at the University of Arizona, for the Commission and staff to attend a program at the University covering new techniques, new developments in geothermal, seismic work, etc. Executive Secretary was instructed to proceed with arrangements for the program on November 29, 1973. The Commission meeting will be held on November 30, 1973 in Tucson.

Meeting adjourned at 11:15 a.m.

APPROVED

Ralph W. Bilby, Chairman

Also present at meeting:

Dr. J. J. Wright
Department of Geosciences
University of Arizona
Tucson, Arizona



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November 21, 1973

Memo: Commissioners
From: John Bannister

First, I would remind you of our plans to meet in Tucson on November 28, 29 and 30, 1973. You will recall that I advised you of Mr. Bilby's invitation for a cocktail party the night of the 28th and our dinner following at the Arizona Inn. All reservations have been made at the Ramada Inn, just off the freeway. Should there be any change in your plans, please advise me at your earliest convenience.

The Geology Department's program on November 29 and the Commission meeting at 9 a.m. on November 30th will both be held in Room 138 (Dean's Conference Room), Mines Building, at the University of Arizona.

The Interstate Oil Compact Commission is meeting in New Orleans December 2, 3 and 4. Governor Jack Williams has indicated he will attend this function and our Chairman likewise will be present. This meeting should be particularly interesting in view of our current energy crisis. We are hoping for excellent participation by the Compact Governors.

Activity in the State has been extremely quiet, partially due to the approaching end of the year when budgets are closed out. However, the general increase in drilling activity expected by the industry in view of the energy shortage has not been forthcoming. Part of this has been blamed on the fact that drilling rigs are not plentiful at this time and drilling crews are hard to come by. In addition, uncertainty of price for the production is a deterrent.

The Governor's Office is engaged at this time in allocation of critical fuel oils. Some time in the near future it is anticipated that the allocation program will be assigned to one of the State agencies. It is my opinion that the Division of Emergency Services or the Department of Environmental Protection and Development will be assigned this responsibility. Should the Nation go on gasoline rationing, I would anticipate the same agency would be responsible for rationing within Arizona.



OFFICE OF

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ACTIVITY REPORT

November 14, 1973

Memo from W. E. Allen, Director
Enforcement Section

At long last it appears that Washington has got the message that the oil companies, utilities and others have been voicing for years--there really is a fuel problem. Price increases in both crude oil and natural gas has apparently begun to stimulate drilling activity. The price increase should allow drilling contractors to receive more pay for their services. This will enable the drilling people to raise the wages of drilling crews. There is a large number of rigs stacked because crews at the prevailing wage rates just are not available. Several contractors have recently increased the hourly rate for rough necks to \$5 per hour and drillers to \$5.75 per hour. The increase will make oil industry earnings more competitive with other industries.

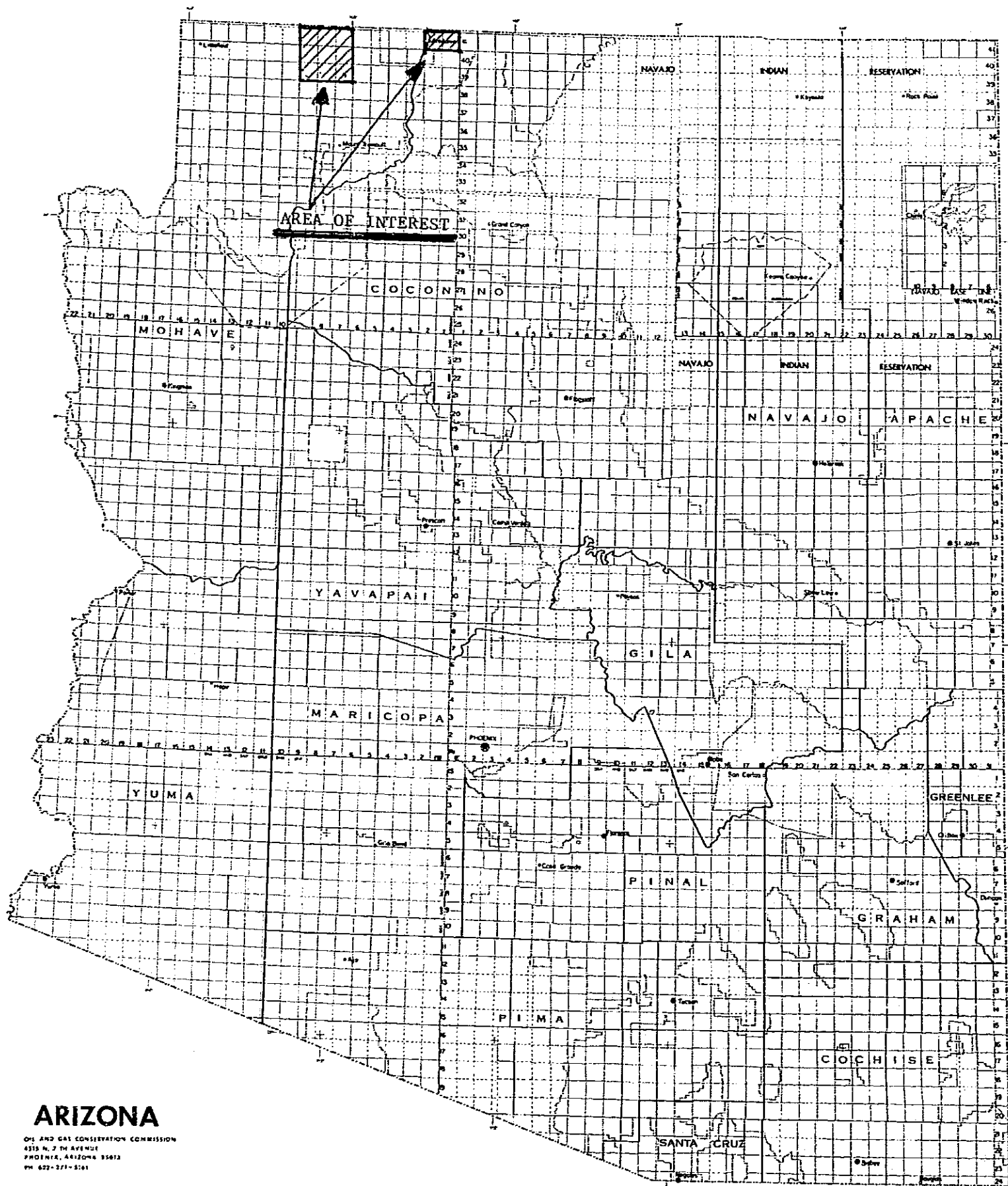
The price of oil will probably continue its gradual upturn but it has a long way to go to reach record levels set in the Rocky Mountain Region. In 1851, oil from a seep in the Oil Mountain anticline in Wyoming brought \$168 per barrel. Packaged by Kit Carson and other entrepreneurs, it was carried by pony to the California Trail and sold for \$1 per quart to freighters who mixed it with flour for axle grease.

Fenix and Scisson has completed the drilling of their LPG Storage Well situated in the SW/NW Section 2-T2N-R1W in Maricopa County. This hole was bottomed at 3200' in salt. Survey equipment is presently being installed. The contractor expects to start completion operations in early December. This salt project is being constructed for California Liquid Gas Corporation.

Activity Report
November 14, 1973
Page 2

Some leasing activity has been taking place recently in the Strip Country of Mohave County, also to a lesser extent in Northwestern Coconino County. Some 65,000 acres have been acquired in Mohave County and 6500 in the extreme Northwestern Coconino County. These recent acquisitions have been taken in the names of various lease brokers. We have been unable to determine if these leases were taken on a speculation basis or if the brokers are representing some company. The 70,000 acres do not represent a huge block of acreage; however, to me, it signifies renewed interest in that area by someone. A plat is attached indicating the area of recent leasing activity.

For your information, we are also attaching a tabulation of Arizona's production history.



ARIZONA - HISTORY OF PRODUCTION STATISTICS
Arizona Oil and Gas Conservation Commission

Year	Annual Production Thousands of bbls.			Prod. Oil Wells End of Yr.	Avg. Daily Oil Prod. BPM	Annual Gas Prod. (MMCF)			Prod. Gas Wells End of Yr.
	Oil	Gas Liq.	Total			From Oil Wells	From Gas Wells	Total Gas Prod.	
1955	-	-	-	-	-	-	15	15	1
1956	-	-	-	-	-	-	21	21	1
1957	-	-	-	-	-	-	-	-	-
1958	12	-	12	1	32.9	6	-	6	-
1959	43	-	43	3	58.9	22	-	22	-
1960	72	-	72	6	43.8	180	-	180	-
1961	73	-	73	5	36.4	182	-	182	-
1962	50	48	98	4	30.4	141	378	519	2
1963	68	50	118	5	41.4	150	759	909	4
1964	58	35	93	4	63.4	54	1,378	1,432	7
1965	84	13	97	4	66.5	-	1,786	1,786	8
1966	107	25	132	4	90.5	26	1,787	1,813	7
1967	2,906	18	2,924	18	442.3	320	1,202	1,522	6
1968	3,343	27	3,370	21	436.1	408	878	1,286	4
1969	2,423	10	2,433	31	214.1	567	1,073	1,639	6
1970	1,745	30	1,775	27	177.1	772	833	1,605	5
1971	1,218	18	1,236	29	115.1	517	698	1,215	4
1972	991	2	993	28	97.2	364.6	428.7	793.3	5



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ACTIVITY REPORT

November 21, 1973

J. N. Conley
Director, Geology Section

PUBLICATIONS

"Publications Available from Arizona Oil and Gas Conservation Commission, Price List No. 1." Receipts from sale of maps to date total \$91.50. Several major companies have had reproductions of unpublished reports and maps made at their expense.

CURRENT INVESTIGATIONS AND PROJECTS

Paleozoic Stratigraphic Sections. Drafting of final map and final typing of tables are approximately 50 per cent completed. This report of investigation will be published in 1974.

Holbrook Area Map. The final map and tabulation of wells has been completed; copies are printed as needed to fill orders.

Pool Maps. Most of the drafting of base maps for East Boundary Butte, Dineh-bi-Keyah, and the Pinta Dome-Navajo Springs-East Navajo Springs pool maps has been completed. These maps will be published during the third quarter of this fiscal year.

Report of Investigation Number Five. "Arizona Well Information, Supplement 1," records of wells drilled for oil, natural gas, helium, stratigraphic information, and other objectives since publication of Arizona Bureau of Mines, Bulletin 185, 1972, entitled "Arizona Well Information." Publishing date tentatively has been scheduled for next January.

Subsurface Studies.

Dineh-bi-Keyah Pool. Ed Koester has finished his preliminary manuscript pertaining to the importance of fracture systems in the oil-productive igneous sill. The most prolific oil production is from wells situated on strong linear fracture systems.

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Activity Report
November 21, 1973
Page Two

Southeast Arizona Valleys. Considerable progress has been made in an investigation directed toward semi-isolation of areas possibly favorable for petroleum accumulations.

* * * * *

Yuma Area. A recent U. S. Geological Survey publication, Professional Paper 726-D, presents the results of gravity, aeromagnetic, seismic refraction, seismic reflection, and resistivity surveys made during 1963-67 in the Yuma area, Arizona and California. One of the principal objectives of the study was to investigate the thickness of Cenozoic sediments.

The greatest thickness of Cenozoic fill within the area investigated occurs in the "Fortuna" basin (west of and parallel to the Gila Mountains). Gravity data indicates a thickness of about 13,000 feet. The lower seven-eighths of this thickness consists of pre-Colorado River marine and non-marine deposits. The marine sediments possibly contain oil accumulations.

Another basin of potential interest, "San Luis" (center due south of Yuma, along border with Sonora, Mexico), based on gravity data, has a maximum fill of about 13,500 feet. This fill consists of alluvium, transition zone rocks, Bouse Formation, and Tertiary non-marine rocks. No shows of oil or gas, however, were reported by Humble in the stratigraphic test hole drilled near the west edge of this basin.

GENERAL

Geological Meetings. Ed Koester attended earlier this month a Gas Exploration Symposium sponsored by the West Texas Geological Society. His report on the meeting has been submitted to John Bannister. One of the papers presented dealt with the gas potential of the Pedregosa basin in Arizona, New Mexico and Mexico. This paper will be published next spring.

I attended one day's session of the Fourth Annual Conference on Remote Sensing of Arid Land Resources and Environments while in Tucson this past week. Of interest to us were the preliminary reports on the geological investigations being made by the U. S. Geological Survey Center for Astrogeology in Flagstaff.

* * * * *

Uranium Exploration. An article in the November issue of NATURAL RESOURCES SERVICES states that Exxon Corp., U.S.A., has taken an option to lease for uranium 463,000 acres in northeastern Arizona. Reportedly, a photo geologic reconnaissance survey is to be started soon. If a subsequent follow-up stratigraphic hole exploratory program is made, we will get electric logs and other data at the expiration of the confidentiality period. Ranchers Exploration & Development Corp. has taken a similar option to lease 51,094 acres west of Exxon's optioned block. Both options were granted by New Mexico and Arizona Land Company.

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Activity Report
November 21, 1973
Page Three

Among our visitors this past month was Gilbert Stern, a geologist-geophysicist with Woodward-McNeill & Associates, who are consultants to Salt River Project and Arizona Public Service Co., on a project for desalinization of water in the Yuma area. They have conducted some seismic surveys north-east of Yuma and done other geological work. There seems to be some connection of their work to the proposed refinery contemplated south of Yuma by Thor International Energy Co. Woodward-Envicon, Inc., another subsidiary of Woodward-Clyde Consultants, has offices with Woodward-McNeill in Scottsdale, and is doing considerable environmental work for various clients in Arizona.

* * * * *

A California consulting geophysicist, C. R. Partridge, recently retired from Superior Oil Company, has expressed to Jim Scurlock his interest in promoting test holes in two "old plays" in Arizona. One is located in north-western Maricopa County (T.4-7N., R.10W.); the other one is in northeastern Apache County (T.35N., R.27E.).

* * * * *

At the October meeting of the Commission there was some discussion concerning oil shale resources in the United States. According to a U. S. Department of Interior news release, August 30, 1973, the organic-rich sedimentary rocks of the Green River Formation in Colorado, Utah and Wyoming offer the greatest promise for oil shale production. About 17,000 square miles of a 25,000-square mile area contain oil shale deposits with potential value for commercial production. The known Green River Formation deposits include high-grade shales that represent about 600 billion barrels of oil.


In the past, experimental pilot plants have not been able to produce oil from the shales at a cost competitive to conventional oil wells in the area. But according to new items in trade journals, Occidental Petroleum Corporation's subsidiary, Garrett Research and Development Co., Inc., has developed a new shale oil producing method that is consistently pumping 25 to 30 barrels of oil per day from underground shale using in situ retort. Reportedly, this new method will produce competitively priced oil, with investment similar to an offshore drilling program. Commercialization is thought to be possible within three to four years.

* * * * *

Wasted Energy. The U. S. Department of Interior reports that a large portion of our most common energy uses serves no useful purpose. Examples: 1) in the generation of electricity, only about 40 per cent of the fuel energy input comes out as useful energy; 2) in converting coal into liquid or gas, a loss of 20 to 25 per cent of the energy originally contained in the coal will be encountered.

In this connection, the University of Arizona's Environmental Research Laboratory has accomplished some noteworthy results in scavenging "waste heat" for useful work. This laboratory uses a "total energy system;" other users include the Pima County Morgue and the main Phoenix post office.

JNC:os


J.N.C.

November 14, 1973

TO: John Bannister

FROM: E. A. Koester

The Gas Exploration Symposium on November 7, 1973, at Midland, Texas, was sponsored by the West Texas Geological Society under the General Chairmanship of Eugene Greenwood. It attracted over 350 participants from all parts of the United States. The program included speakers who appeared to be well versed in their subjects.

The papers dealing with gas exploration naturally also discussed oil exploration and were in two major categories: new methods that might be used to alleviate the present energy shortage and descriptions of areas in which increased gas and oil production might be developed. The latter included the Delaware Basin in west Texas, including the Gomez field which contains the greatest concentration of 20,000-foot producing wells in the world (over 100), the Anadarko basin deep play, the Sutton to Edwards County, Texas, Pennsylvanian play, and frontier areas in the American Southwest.

The latter paper by Greenwood covered mainly the southern part of New Mexico, Southeastern Arizona, and adjacent parts of Texas and Chihuahua, Mexico. Although there was little new in this paper, the subject was well covered and maps of the potential petroleum producing rocks were brought to the attention of the audience. The area included that part of the Pedregosa basin lying in Cochise County. The Potential Gas Committee, which has conducted an extensive study of the gas potential of 49 states, has assigned 6 trillion cubic feet of "probable" gas to this area and an additional 18 trillion cubic feet of gas which it classifies as "potential." The latter term is used to represent the amount of gas that might be found in the sedimentary basins of an area based on the volume of sediments found therein and the amount of gas historically found in such volumes of sediments in gas producing areas throughout the world.

The exploration papers dealing with new methods may best be described as "sales talks" designed to push some techniques which the speaker hopes will be beneficial in finding or developing new petroleum reserves. Not all of them are new; many of them only have not been universally used. These include (a) seismic techniques which have proved effective, according to the speaker, in the ultra-deep Delaware and Anadarko basins, (b) new logging techniques in some areas, and (c) digitized logging techniques in Morrow sand plays. No important new exploration technique, such as the introduction of geophysical methods in the late 1920's or electrical logging of wells in the 1930's, seems to be available now.

Nearly half of the program was devoted to the various facets of the energy crisis. The caliber of the speakers is indicated by the fact that the program included, among others, Leroy Culbertson, Vice-President in charge of the gas and liquids department of Phillips Petroleum Co.; Harry Fair, President of Coastal States Gas Producing Co.; Willis Strauss, Chairman of the Board, Northern Natural Gas Company;

John Bannister
November 14, 1973
Page 2

Major General Maurice Casey, Deputy Director for Logistics of the U. S. Joint Chiefs of Staff; and Daniel Busch, President of the American Association of Petroleum Geologists. These men also served on a panel which answered questions from the audience.

Without attempting to describe each paper in detail, I will attempt to give some of the highlights of their comments. All of these speakers emphasized in one way or another the seriousness of the energy shortage, that it was not something that could be solved in weeks or months, that it was international in scope due to the Arab boycott and that the national Administration had done very little until recently to do anything about it.

Some quotes from Mr. Culbertson's paper are typical: "The day of cheap, plentiful energy is gone. We will soon be seeing important low-sulphur crude oil being delivered to this country at a price of \$10 per barrel ... more than twice the price of U. S. oil. Anyone predicting that just six months ago would have surely been laughed at." "Regulation of interstate wellhead gas prices hasn't worked for the past 19 years -- it won't work in the future, and extending similar regulation to all gas and oil would be a disaster of enormous proportion." "The public must be convinced that their most pressing need is for adequate, secure supplies of energy, and that our industry can be trusted to deliver this energy at a reasonable price if the government will only get out of the way and let us get on with the job." He favors immediate deregulation of gas prices at the wellhead in order to encourage exploration and production of areas that cannot be produced under present controlled prices. He said he will make a deal now for delivery two years hence of unregulated gas at \$1.50 per million cubic feet. Most field prices are in the 35-50 cent price range now.

Fair stated that we are coming to a "BTU economy." Prices of oil, gas, and coal must equalize to a level based on their energy value. He described a recent case in which his company had made an oral bid of \$12.50 per barrel for Arab oil. He was told to submit a sealed bid and now expects this oil to command \$14.00 per barrel. German company personnel indicated they would pay that much and French officials thought the price could go as high as \$30.00 per barrel, according to Mr. Strauss. The latter favors a gradual deregulation of gas prices and thinks an immediate deregulation is politically unfeasible.

The address of General Casey included a projection of military needs for a war in 1975 and in 1980. He pointed out that energy needs for the Vietnam war were almost three times the military needs of World War II. Future wars will require much more oil and gas.

Another speaker estimated that public utilities and other users of petroleum had already made or committed advance payments of two billion dollars toward exploration programs in the Arctic, Alaska, offshore Atlantic and offshore Gulf coast as well as onshore United States.

John Bannister
November 14, 1973
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Condemnation of the delay in allowing for the building of the Alyeska Pipeline was unanimous but it was stressed that the completion of this line will only partly solve our energy problems.

Closer to home, I found some interest among the participants in exploration in Arizona. Several requested a list of the publications of the Commission and these have been sent out. Due to shortages of rigs, casing, supplies and drilling personnel, we cannot expect any increase in exploratory activities here in the immediate future. Companies prefer to use their resources and personnel in states where production can be more quickly developed.

Edmund A. Kauter.

CC: J. N. Conley



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

November 8, 1973

MEMO: Commissioners
FROM: John Bannister

JB

You will recall that this Commission will hold its November meeting in Tucson in conjunction with a program under the auspices of the Geological Department. Reservations have been made at the Ramada Inn for the nights of Wednesday, November 28 and Thursday, November 29. The Ramada Inn is located at 404 North Freeway and is reached by taking the Saint Mary's exit.

Chairman, Ralph Bilby, has invited all of us and our wives to a cocktail party to be held at his home at 4440 North Camino Del Santo at 6:30, Wednesday, the 28th. I suggest that we all meet at the Lobby of the Ramada Inn at 6:15 Wednesday evening to go to Mr. Bilby's.

I have arranged for our usual Commission dinner (dutch treat) at the Arizona Inn which is located at 2200 East Elm. Dinner will commence somewhere between 7:30 - 8:00, Wednesday. We can, of course, journey together from Mr. Bilby's.

The Geology Department (Dr. McCullough and Dr. Wright) have arranged a program for the Commission on Thursday, November 29 at the University. I anticipate that this program will begin around 9:00 - 9:30 and I will advise you at the earliest possible opportunity as to the specific time. Again, I would suggest that we meet at the Lobby of the Ramada Inn at approximately one-half hour prior to the commencement of the program. We can all go to the University together.

The regular Commission Meeting will be held at 9:00 AM on November 30 at a meeting room at the University. I would suggest that this Commission leave the Ramada Inn together about one-half hour prior to the commencement of the meeting. Specific rooms as to the meeting will be announced as soon as possible.

Should you have any questions, please advise.



Oil and Gas Conservation Commission

STATE OF ARIZONA
4515 NORTH 7TH AVE.
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October 26, 1973

Memo: Commissioners
From: John Bannister

Pursuant to your authority, I attended the Independent Petroleum Association of America annual meeting in Houston October 21 - 23, 1973. The operators seem more optimistic than I have seen them in a long time. This is primarily due to the increase in pricing being allowed for crude petroleum and natural gas. Needless to say, the theme was the need for greater economic incentive to develop more petroleum products.

The operators seemed to be "smiling through their tears", however the Productive Capacity Committee estimated that the total production capacity of the United States through 1973 would be about 10.9 million barrels per day and, through 1974, approximately 10.7 million barrels a day, with the demand being estimated at approximately 18.7 million barrels a day during 1974. As you can see, indications are that the United States needs to import approximately 8 million barrels daily to meet its anticipated needs.

The Cost Study Committee of the IPAA indicated it now costs about \$8 per barrel to bring to market Middle East light crude, thus totally wiping out any advantage foreign oil might have over domestic crude. The IPAA estimated that refineries will run to near full capacity and will distill as much of the lighter ends as possible.

It is felt that the demand for heating oils of all types can be met this coming winter provided our weather remains in the average category. A fluctuation of one degree below average would increase the demand on an average of 25,000 barrels of heating oil per day.

The National Stripper Well Association, as usual, met during the IPAA convention and as part of it. They have now completed a cost price study for producing stripper wells. This study has long been sought after by the industry.

Memo: Commissioners
10-26-73
Page Two

Currently, our stripper wells produce between 12 and 13% of our total production. However, this rate is falling rapidly. In 1961, approximately 405,000 stripper wells (a well producing ten barrels of oil per day or less) were operating and had dropped at the end of 1972 to approximately 350,000 wells. It is estimated that in 1980 there will be only about 305,000 stripper wells. Production from stripper wells dropped from 600 million barrels in 1961 to 410 million barrels in 1972 and is expected to drop to 305 million barrels in 1980. Apparently the price structure of stripper oil is being studied in Washington and it is felt that a somewhat better price paid for stripper oil would prolong the life of stripper wells and increase ultimate recovery.

On a five year average, it costs the operator approximately \$2,700 per year to produce his well. This brings an average of \$1.96 as his cost per barrel of oil in the ground. This cost, i.e. \$1.96, concerns only operator cost and does not concern itself with such cost as lease acquisition, replacing equipment, workover, etc.

I was only able to secure one copy of the cost price study of producing stripper wells and it is available in the office. I strongly urge you gentlemen to review this study when you can. I hope to secure additional copies in the near future.

MONTHLY FINANCIAL REPORT

RECEIPTS MONTH OF	CLASSIFICATION	RECEIPTS	APPROPRIATED RECEIPTS	UNAPPROPRIATED RECEIPTS	TOTAL ALL RECEIPTS YEAR TO DATE
Oct 1973					
25 00	1			25 00	50 00
	2				
	3				
	4				
	5				
	6				
	7				
	8				
	9				
	10				
	11				
	12				
	13				
	14				
	15				
	16				
	17				
25 00	TOTAL CURRENT MONTH RECEIPTS			25 00	XXXXXX
XXXXXX	TRANSFERS IN				
XXXXXX	BALANCES BROUGHT FORWARD			3,151 83	XXXXXX
25 00	TOTALS - MONTH AND YEAR TO DATE			3,176 83	50 00

CLAIMS PAID MONTH OF	FUND TITLES	TOTAL AMOUNT AVAILABLE YEAR TO DATE	CLAIMS PAID YEAR TO DATE	OUTSTANDING ENCUMBRANCES	UNENCUMBERED BALANCE
Oct 1973					
3,939 22	1 Personal Services	50,450 00	28,670 38		21,779 62
404 55	2 Emp. Related Exp.	6,250 00	3,223 68		3,026 32
237 00	3 Professional Serv.	1,100 00	423 00		677 00
389 37	4 Travel-State	4,200 00	1,377 72	11,587 75	1,234 53
-0-	5 Travel-Out of State	3,400 00	429 51	551 32	2,419 17
2,940 34	6 Other Operating Exp.	28,400 00	14,463 00	12,196 03	1,740 97
-0-	7 Capital Outlay-Equip.	2,800 00	1,955 20	317 30	527 50
	8				
	9				
	10				
	11				
	12				
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	23				
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	25				
	26				
	27				
	28				
	29				
	30				
7,910 48	TOTALS	96,600 00	50,542 49	14,652 40	31,405 11

1 CLAIMS PAID YEAR TO DATE	2 OBJECT CODE NO.	3 DISTRIBUTION OF EXPENDITURES CLASSIFICATION	4 CLAIMS PAID MONTH OF <i>Oct</i> 1973
540.00	7111	1 Per Diem: Commission Members	1 210.00
28,130.38	7112	2 Salaries: Employees	2 3,729.22
	7151	3 Industrial Insurance	3
1,255.40	7153	4 F.I.C.A.	4 190.50
1,650.66	7155	5 Retirement	5 214.05
230.12	7156	6 Health Insurance	6
87.50	7159	7 Personnel Commission	7
		8	8
	7215	9 Professional Services: Engineer	9
423.00	7219	10 Professional Services: Other	10 237.00
		11	11
233.60	7221	12 Travel - State: Mileage	12 87.80
543.00	7222	13 Subsistence	13 130.00
	7223	14 Public Transp.	14
511.62	7224	15 Vehicle Expense	15 145.67
89.50	7225	16 Reg. Fees; Parking; etc.	16 26.50
		17	17
168.00	7232	18 Travel - Out of State: Subsistence	18
231.06	7233	19 Public Transp.	19
	7234	20 Airport Parking	20
30.45	7235	21 Reg. Fees; Telephone; etc.	21
		22	22
11,096.76	7251	23 Occupancy: Office Rent	23 1,849.46
	7261	24 Warehouse Rent	24
	7263	25 Warehouse Mtn. & Repair	25
460.00	7272	26 Mtn. & Repairs: Furn. & Equip.	26 200.00
1,139.90	7280	27 Office Supplies	27 280.66
74.40	7300	28 Field Supplies; Film; Am.Strat; P.I., etc.	28 30.90
321.56	7331	29 Printing: Reports; Large Maps; etc.	29 321.56
	7332	30 Legal Advertisement	30
	7333	31 Court Reporter, Notary Commission, etc.	31
172.70	7334	32 Postage	32 110.41
687.47	7335	33 Telephone	33 147.35
	7337	34 Drayage; Express; etc.	34
65.21	7349	35 Rental, Misc.	35
	7360	36 Dues & Subscriptions	36
		37	37
1,955.20	7431	38 Capital Outlay: Office Equip; Tpr; etc.	38
	7434	39 Spec. Equip. (Geol.)	39
	7436	40 Automobile	40
		41	41
250.00	7913	42 Revolving Fund	42
		43	43
195.00		44	44
		45	45
		46	46
		47	47
		48	48
		49	49
		50	50
		51	51
		52	52
		53	53
		54	54
		55	55
50,542.49		TOTAL	7,919.48