

OIL & GAS CONSERVATION COMMISSION  
Meeting: November 21, 1975  
Mr. John Bannister, Exec. Sec.



OFFICE OF  
Oil and Gas Conservation Commission  
STATE OF ARIZONA

PHOENIX, ARIZONA 850...  
PHONE: (602) 271-5151

A G E N D A

Meeting  
November 21, 1975  
8686 North Central Avenue, Suite 106

10:00 a.m.

Call to order

- 1  Approval of minutes of meeting of September 19, 1975
- 2  Report of Executive Secretary
- 3  Report of Enforcement Section
- 4  Report of Geology Section
- 5  Old Business
- 6  New Business  
BIRMINGHAM - OCC 12-7
- 7. Adjourn

*A.K. DOSS*  
*USGS classifies*  
*Geothermal as*  
*mineral*  
*US Dist. Court - water*

*Next Meeting June*  
*June 16, 76*

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  
8686 N. Central Ave. Ste. 106  
~~101 N. Central Ave.~~  
PHOENIX, ARIZONA 85020  
PHONE: (602) 271-5161

November 12, 1975

Memo: Commissioners  
From: John Bannister

The proposed Commission Order, prepared by Kerr-McGee Corporation at your request at their appearance before the Commission on September 19, 1975, has been furnished you. This should be acted on at our November 21, 1975 meeting.

As you are aware, the energy situation is becoming quite prominent in Arizona and, as a result, I have been called upon to speak to several groups. I have recently spoken to the Arizona Administrators Association, the Arizona Emergency Services Association, one of the Kiwanis groups and on November 13th I will speak to the Western Oil and Gas Association meeting here at Mountain Shadows. I was specifically asked to address this association on the "climate" the California operators might expect if they come to Arizona for exploration purposes. I was told that many independent operators in California are getting disillusioned by the unrealistic requirements made upon them by environmental groups calling for expensive impact studies, etc.

As I have previously advised you, our taxing situation on production on the Indian Reservation has gotten out of hand and the Western Oil and Gas Association wants to hear something about this situation. For your information, the Governor's Office will probably reintroduce the taxing legislation this Commission sought in January of this year.

Dr. George Davis of the University of Arizona has completed a study on the folds and fractures in northeastern Arizona. Working with the University of Arizona, we are seeking financing by the Four Corners Regional Commission to expand this study to the south and west, covering all the Holbrook Basin and most of the Colorado Plateau Province. We feel this is our most potential oil and gas area. In addition, this study will be of tremendous value for the study of uranium and geothermal occurrences. It should be noted that studies of this nature

Memo: Commissioners  
November 12, 1975  
Page 2

will be of value to the hardrock mining industry and those interested in our State's water situation. Dr. McCullough and I met with Governor Castro this morning and he indicated that this proposal, together with a proposal to do additional gravity meter work in the State, resulting in a restructured state gravity map, will be funded. Consequently, the Four Corners Regional Commission will be called upon for approximately \$125 thousand for these purposes. As soon as the proposal is in more final form, copies will be circulated to you.

As a direct offshoot of this meeting, the Governor's staff requested that a geological program for state financing be prepared for possible inclusion in the Governor's 1976-77 budget. Consequently, I have called a meeting for November 17th at this office involving the three State Universities, the Bureau of Mines, Interagency Economic Planning Office, Water Commission, State Land Department, State Bureau of Mines, Department of Mineral Resources, Arizona Resources Information System, Atomic Energy Commission and the Solar Energy Research Commission, to see if some broad suggestions and costs could be suggested. In the initial telephone contacts, such things as to complete the geological mapping of the State, further expanding the study of Dr. Davis, have been offered on a casual basis. At the meeting, it is hoped that more specifics can be arrived at, including consensus as to the priorities which may be involved. You will be kept informed of the progress of this effort.

There has been no change in the production tax as levied by the Chinle School District, however you will recall that many of the companies have filed suit against the school district. The cause of the suits seems to be improper and unrealistic items included in the school budget and the main theme being that the levy of the tax is confiscatory.

The request of Southern Union Gas Company to increase the billings of its customers by 15¢ and more per month in order to finance a joint drilling program with Webb Resources was approved by the Corporation Commission.

It should be noted that the annual meeting of the Interstate Oil Compact Commission will be held December 7 through 10, 1975 in Birmingham, Alabama. This trip has been budgeted for and permission for the Executive Secretary to attend is requested.

Mrs. Lorenzo has returned to work from her leave of absence.



OFFICE OF  
**Oil and Gas Conservation Commission**

STATE OF ARIZONA

4515 NORTH 7TH AVE.

PHOENIX, ARIZONA 85013  
PHONE: (602) 271-5161

8686 N. CENTRAL, SUITE 100  
PHOENIX, ARIZONA 85020

November 12, 1975

Memo from W. E. Allen  
Enforcement Section

The State Corporation Commission has approved Southern Union Gas Company's request to raise the utility rates of their customers in northern Arizona in order to raise \$700,000 to conduct an exploratory program for gas in the Holbrook Basin. If gas is found in commercial quantities, the \$700,000 will be returned to their customers; if no gas is discovered, Southern Union is home free insofar as their share of the cost of this exploratory program is concerned.

About one year ago, the New Mexico Oil and Gas Commission authorized operators to drill gas wells on 160 acre spacing in the Blanco-Mesaverde field in San Juan and Rio Arriba Counties. The spacing had formerly been one well to 320 acres. It is estimated that this greater density of drilling yields an additional 6.3 trillion cubic feet of gas that would have been lost under the wider spacing program. I mention this only because, as you know, I oppose wide spacing of wells drilled for oil or gas.

Richard Buhr, representing Global Marine, Inc., out of Los Angeles, was a recent visitor. His company is taking a look at Arizona. He purchased several pieces of geological information and also copies of a considerable number of logs and various well information. Hunt Energy Corporation, one of H. L. Hunt's Companies, from Dallas has requested copies of our Rules and Regulations and also copies of forms needed to apply for a drilling permit. Whether this means that they will apply for a drilling permit only time will tell.

A group of independents are making noises like they plan to drill an oil test just south of Whitman. One of the principles in this group was the driller on a 4600' test drilled in this area in 1946. There were reports of good oil shows found

November 12, 1975  
Page 2

before the hole was lost because of mechanical difficulties. This driller claims that the well flowed oil on a drill stain test. Enough oil that it ran from the wellsite into a draw some 300' from the well. I recently checked this out and there is considerable oil stains around the old well location and also into this draw. Simple test of the oil stained earth indicate the stains to be from unrefined crude hydrocarbons.

Part of last month was spent checking field operations. Kerr McGee had not started construction on their proposed water-flood project. Merrion and Bayless, operators in the East Boundary Butte Field, have tentative plans to re-work some of their shut-in gas wells and put them back on production. This program apparently depends on two things: 1, negotiating a favorable contract for the sale of their gas and 2, the tax situation in Apache County.



OFFICE OF

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STATE OF ARIZONA  
8686 N. Central Ave., Suite 106  
4515 NORTH 7TH AVE.  
PHOENIX, ARIZONA 85018 85020  
PHONE: (602) 271-5161

ACTIVITY REPORT

November 10, 1975

J. N. Conley  
Director, Geology Section

PUBLICATIONS

Sales for the past month amounted to \$84.00. Purchasers were:

HFC Oil Co., Inc., Casper  
Great Western Energy Corp., Denver  
Wirth Associates, Phoenix  
Fugro, Inc., Long Beach  
Shell Oil, Houston  
Marathon Oil, Casper  
Exxon Exploration Library, Denver  
Phoenix West, Ventura  
Cleary Petroleum Corp., Oklahoma City  
Global Marine, Inc., Los Angeles  
Clinton Oil Co., Wichita  
Air Products and Chemicals, Cryogenics Systems Div.,  
Allentown, Penn.  
Petroleum Inv. & Research, Salt Lake City  
Ranchaire Corp., Colorado Springs  
Sohio Petroleum Co., Oklahoma City  
Western Reserves Oil Co., Midland  
National Coop. Refinery Assn., Denver  
Peter J. Farrelly, Denver  
T. T. Hayes, Scottsdale  
Joseph Faull, Phoenix

INVESTIGATIVE PROJECTS

"Macrofold" Map. The printing of this map, entitled Structure Map of Folds in Phanerozoic Rocks, Colorado Plateau Tectonic Province of Arizona, was completed this past month. Notification of its availability from this Commission has been sent to various trade journals and geological associations.

OALS Bulletin 9. The printing of this bulletin, entitled Tectonic Analysis of Folds in the Colorado Plateau of Arizona, by George H. Davis, was completed this past month. It is a report of work performed under a NASA grant in cooperation with this Commission and the Arizona Resources Information System. It includes a copy of the "folds" map mentioned in the preceding paragraph. It was published (100 copies only) by the Department of Geosciences and Office of Arid Lands Studies, University of Arizona.

Activity Report  
November 10, 1975  
Page 2

The primary purpose of the project was to map large-scale folds in Arizona which, in association with favorable non-structural geologic factors, might serve as exploration targets for hydrocarbons.

#### GEOHERMAL

Roosevelt Hot Springs KGRA-Utah. To date Phillips Petroleum Co. has completed two geothermal wells, suspended one, and has one active drilling operation in this KGRA located in Township 27 South, Range 9 West, S.L.B. & M., Beaver County, Utah. The discovery well, 55-3, was completed this past May in section 3 at a total depth of 831.49 meters (2744 feet). During testing it produced 94,000 kg./hr. (206,800 lbs.) of mixed steam and water at a temperature above 200°C (392°F).

The Roosevelt Hot Springs KGRA is about 100 miles north-northwest of Fredonia, Arizona. It is in the Mineral Mountains between the towns of Milford and Beaver. The U.S. Geological Survey Circular 726, Assessment of Geothermal Resources in the United States-1975, lists several hot springs in the general area with temperatures ranging from 41° to 87°C (106°-189°F). Indicated subsurface temperatures of the reservoirs range from 105° to 140°C (221° to 284°F).

The geologic map of Utah shows that the wells drilled by Phillips are in an area of exposed Mesozoic plutonic rocks intruded into a local upfaulted block of Permian-Pennsylvanian rocks. Regionally, the area is on the downthrown side of the Hurricane fault, which extends southward into Mohave County, Arizona.

Identified Hot-Water Convection Systems in Arizona. U.S. Geological Survey Circular 726 lists seven hot spring areas with indicated subsurface temperatures ranging from 90° to 150°C (194° to 302°F). Two of these are in Yavapai County, one at Castle Hot Springs and the other one about 10 miles southeast of Camp Verde. The other systems are in the general Clifton and Safford areas, Greenlee and Graham Counties, respectively. The highest indicated subsurface temperature listed, 150°C, is for the Verde hot spring system.

Both the surface temperatures and the indicated subsurface reservoir temperatures of these Arizona hot spring areas compare favorably with those in the general Roosevelt Hot Spring area in Utah.

Identified Volcanic Systems. Union Oil Co., operator of a joint geothermal exploration venture, has to date drilled 5 wells in the Redondo Canyon area of the Valles Caldera near Los Alamos, New Mexico. Three of the wells have commercial potential; two are marginal producers. At least 10 wells with commercial potential will be needed for a proposed 50 MW (1,000 KW) pilot plant.

In Arizona, the U.S. Geological Survey has made extensive investigations of the geothermal potential of the San Francisco Mountains, Kendrick Peak, Sitgreaves Peak, and Bill Williams Mountain in the Flagstaff area, but more data is needed.

Possible Geothermal Legal Problem Facing Arizona. A. K. Doss has informed me that the U.S. Department of Interior considers geothermal waters to be minerals. Union Oil Co. has contested this interpretation successfully in two courts of law. Interior has appealed the case to the U.S. Supreme Court.

Activity Report  
November 10, 1975  
Page 3

Arizona's Supreme Court has ruled that geothermal water is not a mineral.

ENERGY MATTERS -- GENERAL

State Hearings

1. Arizona Interagency Energy Planning Office, October 15.

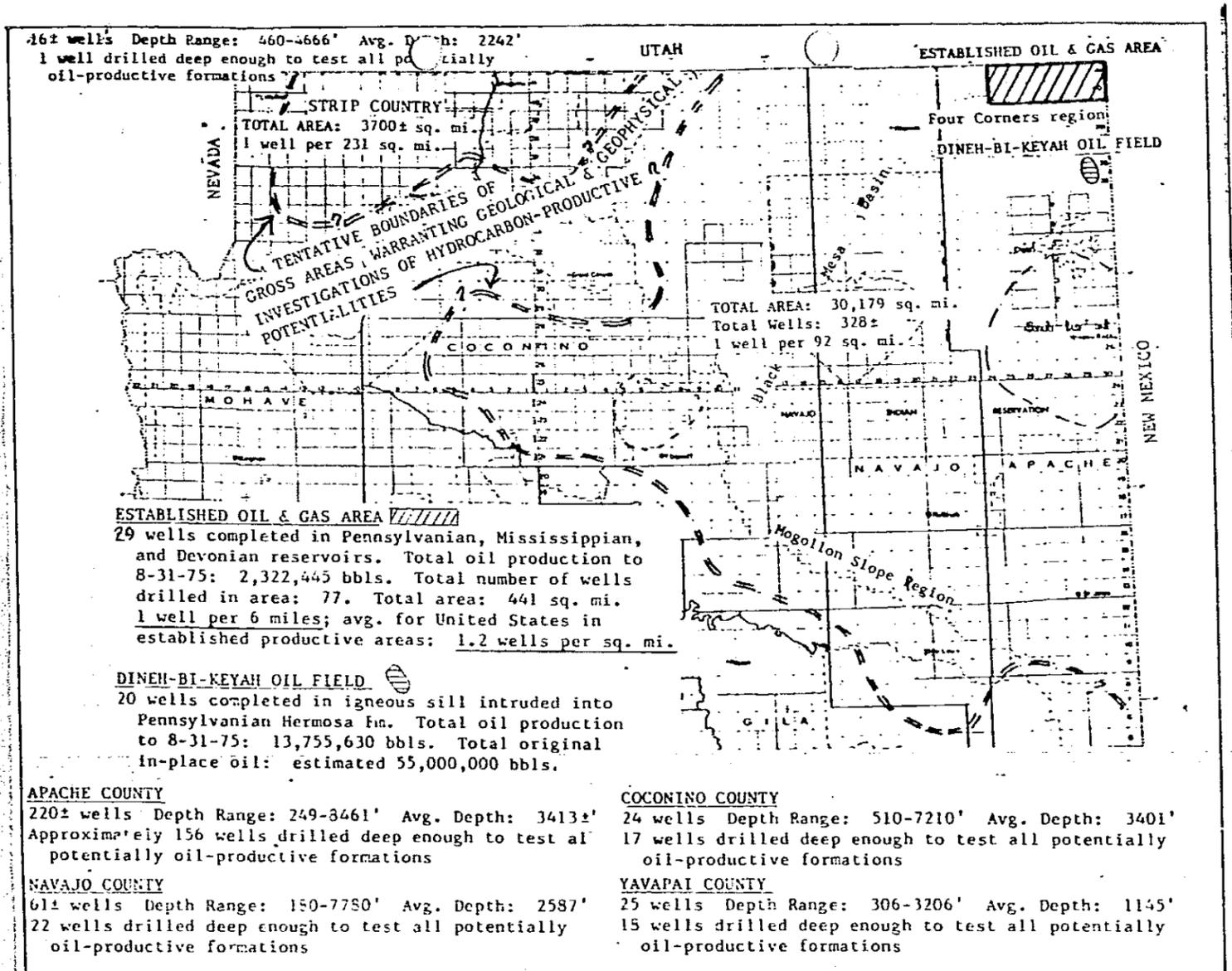
At this hearing Dr. George H. Davis discussed briefly the Structure Map of Folds in Phanerozoic Rocks, Colorado Plateau Province of Arizona and OALS Bulletin 9, Tectonic Analysis of Folds in the Colorado Plateau of Arizona, with respect to petroleum exploration. This Commission cooperated in the preparation and publishing of this map and report.

I made a brief presentation of the results of petroleum exploration to date in the Colorado Plateau province. I mentioned that this province constitutes one of the few remaining unexplored potentially oil- and gas-productive onshore areas in the contiguous 48 states. The sparse drilling exploration to date has proved the presence of oil and gas accumulations in northeastern Apache County. Oil shows have been recorded in widely scattered wells in other portions of the Plateau. Outcrops of Paleozoic rocks are petroliferous along a 100-plus-mile band near the south border of Navajo County and the southeast border of Coconino County, and in the Strip Country north of the Colorado River. The proved hydrocarbon production and the subsurface and surface hydrocarbon occurrences establish the presence of paleo source rocks. Both surface and subsurface occurrences of Paleozoic rocks indicate that locally they have the lithological characteristics required for oil and gas reservoirs. Timely reservoirs and traps, well-positioned with relation to source rocks, were probably present in portions of the Plateau in addition to those that trapped hydrocarbons in northeastern Apache County. Some of these paleo accumulations may have been destroyed by later orogenic movements and erosion, but many of them should be preserved in the subsurface.

One of my exhibits was a map showing data pertaining to the number of exploratory wells drilled, number of wells drilled per square mile, number of wells penetrating all potentially oil-productive formations, depth ranges, average depths, and cumulative oil production as of August 31, 1975, in the Colorado Plateau province of Arizona. A reduced-scale copy of this map, Figure 14, is presented on page 4 of this report. With all of the apparent plus factors listed in the preceding paragraph, this map shows that we need more wells drilled in the right places. To encourage such drilling, we need more geological/geophysical research to semi-isolate those areas in the Plateau offering the most attractive drilling targets.

Some of the areas semi-isolated to date in sparsely drilled or undrilled areas that warrant investigation, in addition to the Four Corners and Holbrook regions where more subsurface control is available, are indicated by the arrows shown on Figure 13, page 5.

On a state-wide basis, Figure 1, page 6, presents a map showing a preliminary evaluation of the petroleum potential in tentatively defined gross areas. Table 1, page 7, lists some well statistics by counties as of October 1, 1975.



**THICKNESSES OF PALEOZOIC ROCKS**

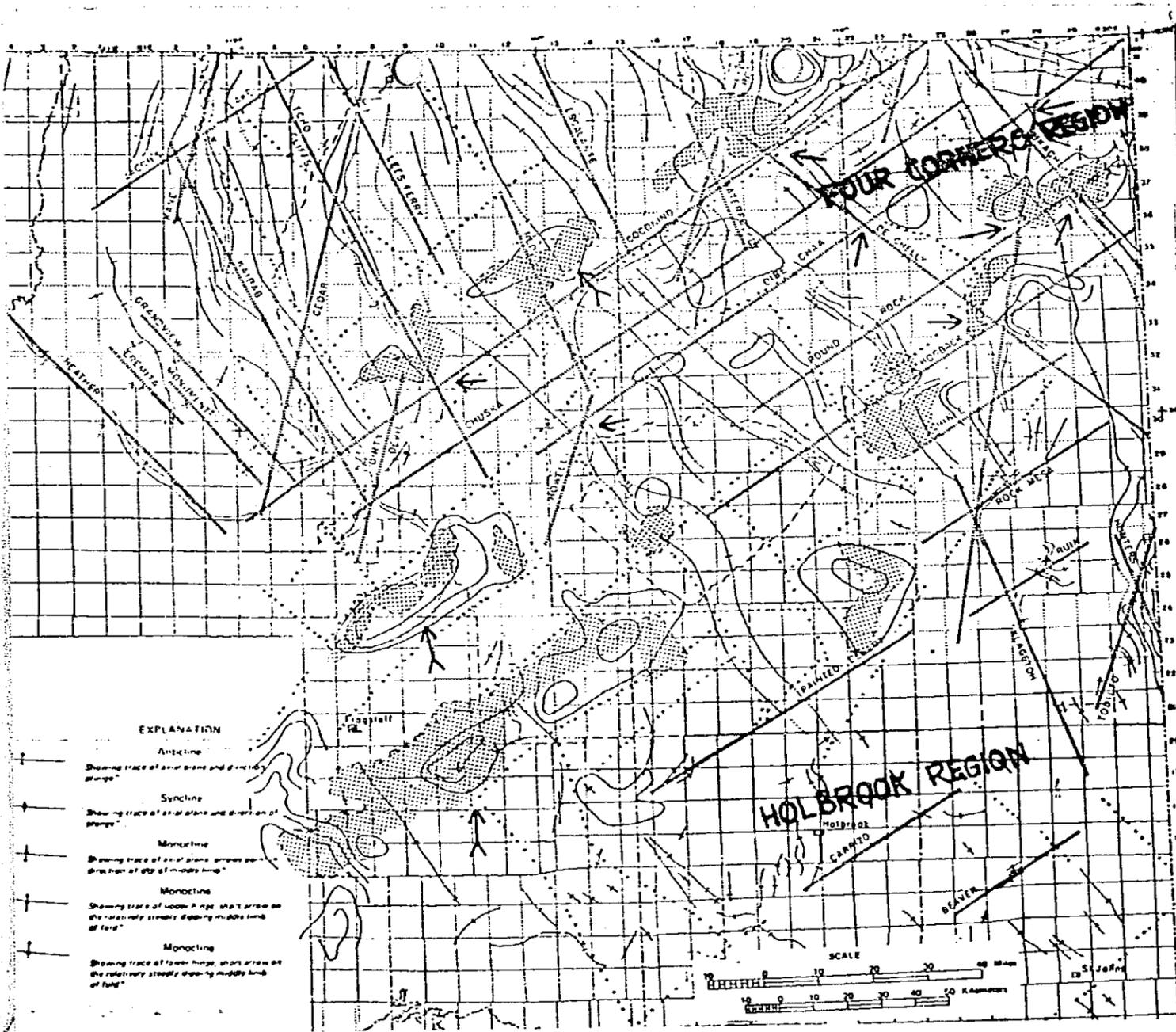
Four Corners region: Permian-Pennsylvanian, 2200-3600';  
Mississippian, 100-400'; Devonian, 2200-3600'; Cambrian, 0-350'

Black Mesa basin: Permian-Pennsylvanian, 2670-3200';  
Mississippian-Devonian, 460-1030'; Cambrian, 80-367'

Mogollon Slope region: Permian, 1150-2400'; Pennsylvanian, 0-1200';  
Mississippian, 0-150'; Devonian, 0-500'; Cambrian, 0-200'

Strip Country region: Permian, 2400-2900'; Pennsylvanian, 300-750';  
Mississippian, 180-700'; Devonian, 140-800+; Cambrian, ?-800+

Fig. 14. - Map showing data pertaining to number of exploratory wells drilled, number of wells drilled per square mile, number of wells penetrating all potentially oil-productive formations, depth ranges, average depths, and cumulative oil production as of August 31, 1975, in the Colorado Plateau province of Arizona.



EXPLANATION - SUPERIMPOSED DATA

- Inferred fracture zone system, Davis, 1975.
- ..... Inferred fracture zone systems based on geophysical data, Conley, 1975
- Bouguer gravity contours outlining maximum anomalies
- Residual aeromagnetic maximum anomalies within or closely adjacent to gravity maximum anomalies
- Indicate some of the intersections of fracture zones where structural conditions might be favorable for petroleum entrapment
- ↘ Drag folds or paleohighs

FIGURE 13. - Map showing tentatively defined areas of exploratory interest based on inferred fracture zone systems, geophysical (gravity and magnetics), and subsurface geological information currently available, superimposed on structure map of folds in Phanerozoic rocks in a portion of the Colorado Plateau tectonic map of Arizona (Davis and Kiven, 1975).

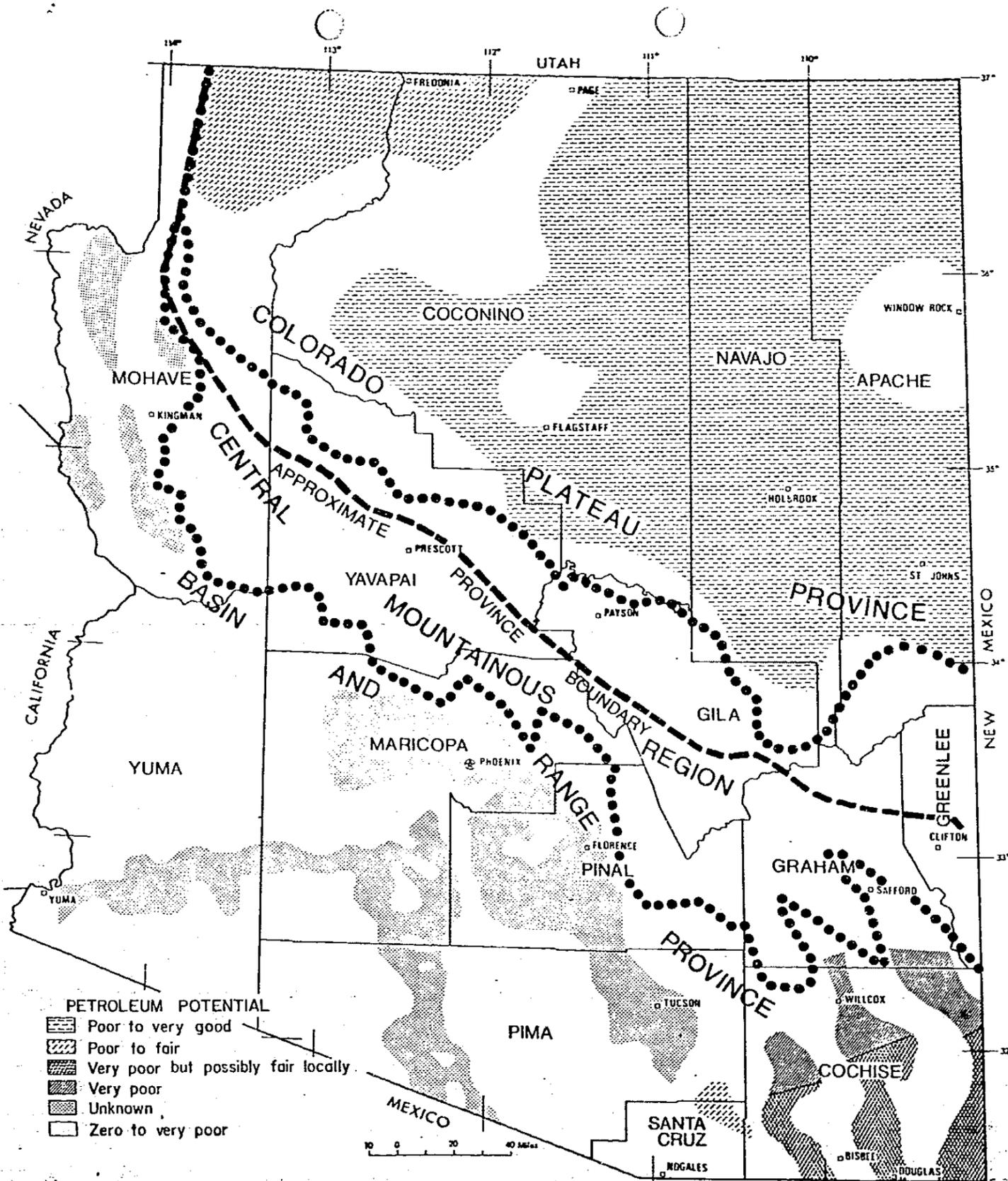


Fig. 1. Map showing tentatively defined gross areas having varying degrees of potentialities for oil and gas accumulations in the State of Arizona, October, 1975.

	WELLS DRILLED FOR HYDROCARBON ENERGY	WELLS DRILLED FOR GEOTHERMAL ENERGY	WELLS DRILLED FOR INFORMATION PURPOSES <sup>1</sup>
Apache	220 <sup>2</sup>	0	112
Cochise	39	0	0
Coconino	25	0	10
Gila	2	0	0
Graham	17	0	2
Greenlee	0	0	0
Maricopa	20	2	11
Mohave	18	0	19
Navajo	59	0	19
Pima	9	0	17
Pinal	12	1	9
Santa Cruz	2	0	0
Yavapai	28	0	5
Yuma	8	0	18
Totals	459	3	222

Table 1. Wells drilled for oil, natural gas, and geothermal energy in the state of Arizona to October 1, 1975.

<sup>1</sup> Includes holes drilled for potash and miscellaneous geologic information. The Commission has no record of numerous deep holes drilled for metallic minerals.

<sup>2</sup> Approximately 102 holes have also been drilled for helium in the general Pinta Dome area in Apache County.

10/10/50  
October 10, 1950  
Page 2

2. This report was prepared by the Bureau of Mines, Bureau of

Geology, in connection with the activities of the Technology Section of this Commission relating to energy resources. In conducting my assignment, I recognized that in view of the fact that there is a general and increasing demand for energy resources, it is especially important that the Government be adequately supported financially in maintaining all of the country's energy resources.

11-11000

During the past month, interested in geology, geology and well data pertaining to oil and gas, were representatives of the following:

- Harry Smith / Operator
- Raymond and Giffle Co.
- Belmore and Mitchell
- West Coast Exploration, Inc.

In addition to visitors, we received several telephone and mail requests for information.

11-11000



Activity Report  
November 10, 1975  
Page 8

2. Joint Legislative Interim Committee on Energy, October 16.

At this hearing I presented a brief statement pertaining to the activities of the Geology Section of this Commission relating to energy matters. On concluding my statement, I mentioned that in view of the fact that here in Arizona we are faced with an ever-increasing demand for energy and a complete dependence upon dwindling outside sources for our energy requirements, it is therefore of impelling importance that the earth scientists and related technologists in our State agencies and academic institutions be adequately supported financially in evaluating all of the State's energy resources.

VISITORS

Visitors this past month, interested in getting some geological and well data pertaining to oil and gas, were representatives of the following:

Hardy Scott Associates  
Page Land and Cattle Co.  
DeLange and Mitchell  
Deer Creek Exploration, Inc.

In addition to visitors, we received several telephone and mail requests for information.

JNC:os

  
J.N.C.

**MONTHLY FINANCIAL REPORT**

2

3

4

5

RECEIPTS MONTH OF <i>Oct 1975</i>	CLASSIFICATION	RECEIPTS	APPROPRIATED RECEIPTS	UNAPPROPRIATED RECEIPTS	TOTAL ALL RECEIPTS YEAR TO DATE
-0-	1	Permits to Drill		-0-	75.00
	2				
	3				
	4				
	5				
	6				
	7				
	8				
	9				
	10				
	11				
	12				
	13				
	14				
	15				
	16				
	17				
-0-	TOTAL CURRENT MONTH RECEIPTS			-0-	XXXXXX
	TRANSFERS IN				
XXXXXX	BALANCES BROUGHT FORWARD			4,026.83	XXXXXX
-0-	TOTALS - MONTH AND YEAR TO DATE			4,026.83	75.00

CLAIMS PAID MONTH OF <i>Oct 1975</i>	FUND TITLES	TOTAL AMOUNT AVAILABLE YEAR TO DATE	CLAIMS PAID YEAR TO DATE	OUTSTANDING ENCUMBRANCES	UNENCUMBERED BALANCE
13,031.25	1 Personal Services	61,400.00	37,505.33	-	23,894.67
1,868.26	2 Emp. Related Exp.	8,650.00	5,214.95	-	3,435.05
1,944.18	3 Other Operating Exp.	22,629.84	9,672.20	12,025.39	932.25
51.00	4 Prof. & Outside Serv	1,500.00	219.75		1,280.25
351.07	5 Travel - State	3,850.00	1,912.90	1,858.23	78.87
420.43	6 Travel - Out of St.	2,200.00	420.43	513.47	1,266.10
20.00	7 Cap. Outlay - Equip.	400.00	390.91	-	9.09
	8				
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	30				
17,686.19	TOTALS	100,629.84	55,336.47	14,397.09	30,896.28

AGENCY Oil & Gas Conservation Comm.

DIVISION \_\_\_\_\_ IDENTIFICATION CODE NO. \_\_\_\_\_

1		2		3		4		
CLAIMS PAID YEAR TO DATE		OBJECT CODE NO.	DISTRIBUTION OF EXPENDITURES CLASSIFICATION			CLAIMS PAID MONTH OF		
						<i>Oct 1975</i>		
240	00	7111	1	Per Diem: Commission Members	1	240	00	
37,265	33	7112	2	Salaries: Employees	2	12,791	25	
			3		3			
259	30	7151	4	Industrial Insurance	4	259	30	
		7152	5	Unemployment Insurance	5			
1,862	12	7153	6	F.I.C.A.	6	508	58	
2,668	53	7155	7	Retirement	7	895	38	
380	00	7156	8	Health Insurance	8	100	00	
105	00	7159	9	Personnel Comm.	9	105	00	
			10		10			
		7215	11	Professional Services: Engineer	11			
219	75	7219	12	Professional Services: Other	12	51	00	
			13		13			
591	91	7221	14	Travel-State: Mileage	14	351	07	
599	50	7222	15	Subsistence	15			
		7223	16	Public Transportation	16			
716	99	7224	17	Vehicle Expense	17			
4	50	7225	18	Reg. Fees; Parking; etc.	18			
			19		19			
87	00	7232	20	Travel-Out of State: Subsistence	20	87	00	
333	43	7233	21	Public Transportation	21	333	43	
		7234	22	Airport Parking	22			
		7235	23	Reg. Fees; Telephone; etc.	23			
			24		24			
8,044	40	7251	25	Occupancy: Office Rent	25	1,608	88	
		7261	26	Warehouse Rent	26			
		7263	27	Maintenance & Repairs	27			
170	00	7272	28	Mtn. & Repairs: Furniture & Equipment	28			
198	34	7280	29	Office Supplies	29	67	71	
		7280.1	30	Orthophoto Quads.	30			
		7300	31	Field Supplies: Film; Am.Strat; P.I.; etc.	31			
		7331	32	Printing: Reports; Large Maps; etc.	32			
184	75	7332	33	Legal Advertisement	33			
106	60	7333	34	Court Reporter	34	106	60	
		7334	35	Postage	35			
718	11	7335	36	Telephone	36	160	99	
		7337	37	Drayage; Express; etc.	37			
		7339	38	Rental, Misc.	38			
		7360	39	Dues & Subscriptions	39			
			40		40			
390	91	7431	41	Capital Outlay: Office Equip.	41	20	00	
		7434	42	Spec. Equip. (Geol.)	42			
		7436	43	Automobile	43			
			44		44			
250	00	7913	45	Revolving Fund	45			
			46		46			
			47		47			
			48		48			
			49		49			
			50		50			
			51		51			
			52		52			
			53		53			
			54		54			
			55		55			
55,336	47		TOTAL				17,686	17

OFFICE

DO NOT WRITE BELOW THIS LINE

FIELD



OFFICE OF

**Oil and Gas Conservation Commission**

STATE OF ARIZONA  
8686 N. Central, Ste. 106  
4615 NORTH TULSA  
PHOENIX, ARIZONA 85020  
PHONE: (602) 271-5161

October 16, 1975

Memo: Commissioners  
From: John Bannister

Attached is copy of an article appearing in today's Arizona Republic.

I was advised of this situation this past Tuesday. It seems that the Chinle School District No. 24, which covers approximately the northern 2/3 of the Navajo Reservation in Apache County, has financial troubles and, in seeking a way out, has set the school tax at 45.39+%. This, together with other county taxes, places our oil and gas producing property under a total tax to the county of 51+%. You must remember that in addition to this tax to the county, the operator must pay 1/6 of the gross value of his production at the wellhead to the Indians. Also, he is faced with income tax, etc.

I have been advised by Mr. Jerome P. McHugh of Denver that he is canceling, or at least delaying, drilling exploration within the State of approximately \$250,000, since he will in no way face such a taxing situation.

I have advised the Governor's Office of this situation. I have also spoken to various county and school officials in Apache County and our taxing authorities here concerning this problem. I am appearing today before an interim joint energy committee of the House and Senate and will expound upon this problem to them, also.

The Governor's Office and others have indicated a renewed interest in the proposed tax legislation sponsored by the Commission the first of this year. You will recall that this failed. The legislation basically provided a total tax on the production of oil and gas of 5% in lieu of any other taxes by any other taxing authority, and further provided additional incentive by excusing the operator from paying this tax on the first producing well on each lease until such time as the operator recovered 200% of the cost for drilling and completing the well, or three years, whichever came first.

Memo: Commissioners  
October 16, 1975  
Page 2

Needless to say, this sort of taxation could completely drive oil and gas exploration from our State and negate all efforts being currently made by this Commission.

I will keep you advised of this situation.

## Oil firm in property-tax dispute threatens to halt Chinle drilling

Fear was expressed Wednesday that the Chinle School District's \$45.39 property tax rate will dry up all Arizona oil production and destroy a third of the district's small tax base.

J. Gregory Merrion of Farmington, N.M., an oil operator with wells in the district, said his firm, of Merrion and Eayles, has received a 1975 Arizona property tax bill of \$46,969 on wells with gross sales of \$91,359 last year.

If the firm is unsuccessful in contesting the tax rate, it will have to plug and abandon its wells because operating them at that rate means an annual loss of \$30,000, Merrion said.

He expressed fear that the same alternatives confront all oil operators in the district on the Navajo Indian Reservation because federal oil price controls prevent passing the tax increase on to buyers.

He also told The Arizona Republic by telephone from Farmington that his firm's Arizona oil leases from the Navajo tribe will expire if the wells are abandoned.

The situation has led oil industry sources in Phoenix to speculate that the tribe may be seeking ways to dislodge leaseholders and recapture the leases for operation as a tribal enterprise.

One source said the Chinle district has Arizona's only oil production. He said the producers, in addition to Merrion, and Bayless, include Kerr-McGee Corp., Clinton Oil Co. and Monsanto Chemical Co.

Merrion said the oil operators' tax problems also are discouraging coal and distillaceous earth mining ventures in the area.

Chinle school officials have blamed their tax rate of \$45.39 per \$100 of assessed valuation on erosion of federal funding and inadequate state aid for more than 4,200 students in the 7,200-square-mile district, where bus transportation eats up much of the budget.

Located on tax-exempt Indian land, the district last fiscal year had \$7.3 million worth of property to tax, with 80 per cent of it in the hands of nine pipeline, utility and oil companies.

THE ARIZONA REPUBLIC  
10-16-75 Pg 1

October 14, 1975

Mr. Robert Hathaway  
Office of the Governor  
State Capitol  
Phoenix, Arizona 85007

Re: Taxation of oil and gas production within the Chinle  
School District No. 24

Dear Mr. Hathaway:

Mr. Jerome P. McHugh of Nassau Resources, Inc., Denver, Colorado, called me today. Mr. McHugh advised that he was on the verge of instrumenting an exploration drilling program in Arizona until he talked to Mr. Greg Merrion. Mr. Merrion had just received a tax bill in excess of 51% of the gross value of his production at the wellhead. Mr. McHugh stated that he would not drill in Arizona while facing such taxation on production.

I contacted Mr. Greg Merrion of Merrion and Bayless, producers of oil within Arizona. During the year 1974, they produced approximately 21,000 barrels of oil at an approximate value of \$91,000. They have just received a tax bill for 1974 in the amount of \$93,000. Mr. Merrion contacted the County Assessor and was advised that this was a mistake and that the tax bill should have been \$47,000. Mr. Merrion said the percentages of taxation involved are as follows:

<u>Tax</u>	<u>Percent</u>
General County	.6953
State	1.6000
Teachers' Retirement	1.5972
High School District	2.1251
	<u>6.0176%</u>
Chinle School Dist #24 (up from 3.54)	45,3935
Total	<u>51.4111%</u>

Mr. Robert Hathaway  
October 14, 1975  
Page 2

Mr. Merrion told me that in 1973 his taxes on production, other than Chinle School District tax, amounted to 4.794%, with District 24 taxes at 2.58%, for a total of 7.374%. In 1974, these taxes were 5.3053%, plus District 24 taxes of 3.54%, or a total of 8.8453%.

I contacted Mr. Ben Slade, Apache County Tax Assessor. He said that the budget adopted by Chinle School District No. 24 was within the guidelines laid down by the Legislature for such budgets and he felt there was no relief available.

Mr. Slade referred me to Mr. C. L. Haws, Apache County Manager. Mr. Haws felt this was partially a political problem in that non-taxpaying Indians had gained control of the school board and voted on unrealistic taxes to cover poor financial management. Of course, I make no comment as to this.

I then talked to Mr. Avarad Hall of the County School Superintendent's Office. Mr. Hall advised that the Chinle School District No. 24 covers the northern 2/3 of the Navajo Reservation within Apache County. This, in effect, covers all the oil and natural gas currently produced within the State. Mr. Hall further advised that the school board had this year adopted a budget somewhat in excess of \$10 million, which included prior and estimated current deficits totaling \$3.55 million. A tax base of 45.3935% was consequently adopted. The total current taxes will be 51.411%. This practically amounts to confiscation of property.

It is the feeling of this Commission that such unrealistic taxation will bring an end to exploration and production of oil and gas within the State. The Commission feels that this problem should be met immediately.

It is suggested that the Legislature adopt the necessary laws to provide for a total tax on production in lieu of any other tax by any other taxing authority of 5% of 100% of the gross value of production at the wellhead. This tax should be collected by this Commission on a monthly basis. A simplified method of collection would be to have the producer submit his tax check monthly, along with his production report, as now required by the Commission.

It is further felt that this taxation could also be made an incentive by providing that the operator would not be liable for this tax on the first producing well on a lease until such time as 100% of the value of the gross production from this well equaled 100% of the operator's cost of drilling and completing the well or for three years, whichever

Mr. Hobert Hathaway  
October 14, 1975  
Page 3

came first. Proposed legislation to this effect was introduced this year, but failed to pass the Legislature. I am enclosing a copy of this proposed legislation for your information.

The Commission feels that this is a most urgent and vital matter.

Sincerely,

John Bannister  
Executive Secretary

JB/vb

Enc.



OFFICE OF

**Oil and Gas Conservation Commission**

STATE OF ARIZONA  
4515 NORTH 7TH AVE.  
PHOENIX, ARIZONA 85013  
PHONE: (602) 271-5161

October 8, 1975

Memo: Commissioners  
From: John Bannister

As authorized by you, I attended the Executive Committee Meeting of the Interstate Oil Compact Commission in Washington, D.C. the 1st of October. While in Washington, I made a point to talk to some of our Congressional representatives and found them very concerned with the energy situation, both state-wide and national. A cocktail party was given on Wednesday, October 1st, and Senator Paul Fannin and representatives of Congressmen Steiger and Conlan's offices attended. We had very interesting discussions on our problems and some of the problems involving federal participation.

As previously mentioned, part of the reason for the fall meeting of the Compact's Executive Committee in Washington is to encourage personal contact with our representatives and we were certainly most successful in that 50% of our delegation was represented. Also at that meeting many programs for the forthcoming annual meeting of the IOCC were designed and firmed up.

The Attorney General advised this office that we are not to regulate the drilling on land fills. As you will recall, we reported the situation where companies are drilling wells 30 to 40 feet in land fills and drawing off methane gas. The regulation of this activity was not contemplated in establishing this Commission and consequently the Attorney General report was to that effect.

Mr. Francis Irvine, Kerr-McGee, has not as yet submitted the proposed order to be adopted by the Commission. As soon as this order is received, it will be forwarded to you, together with staff comments. You will recall that Mr. Irvine explained it would be some time after the first of the month before he would be able to comply with your direction to submit a proposed order.

Memo: Commissioners  
October 8, 1975  
Page 2

On October 8th, at the request of Governor Castro, I briefed his staff on the activities of this Commission, including what steps we are taking to encourage development of the resources under our jurisdiction. I was with his staff for approximately three hours and felt that this meeting was quite successful. Governor Castro's office, through various committees, is evidencing great interest in the energy problems of this state. It is likely that as a result of this meeting this office will be requested to submit a program for funding based upon the accomplishment of geology intending to encourage industry within the state.

The Governor has established an Interagency Energy Planning Office, of which I have been appointed a member. This group will meet on October 15th and this Commission will present a program to the body, showing some of the work we are doing together with the University of Arizona and the Office of Arid Land Studies in using high altitude photography for the purpose of locating folds and structural faults in north-eastern Arizona. We anticipate that this project, which has now been mapped and printed, will be a success and that this study will be expanded into other sections of the state.

The Auditor General's office has requested a time in the near future in which they will go over the findings of their recent audit. All indications are that the Commission's affairs are in very good shape and I expect no significant criticism as a result.



William E. Allen  
Activity Report  
October 8, 1975  
Page 2

Williams Energy has completed their 9th well for LPG storage at Adamana. Williams Energy had a bad primary cement job on their No. 8 well. I plan to check on the repair of this cementing job tomorrow and then go on to the Dineh-Bi-Keyah and check Kerr-McGee's progress on their waterflood installations.

Recent legislation has required a uniform system of numbering rules and regulations of all state agencies and commissions. I am presently involved in the re-numbering bit. We have a fair supply of rules and regulations printed up, so we will continue with our original numbering system for the time being. The master file of rules and regulations in the Secretary of State's office will carry our new file numbers.



OFFICE OF

**Oil and Gas Conservation Commission**

STATE OF ARIZONA  
8686 N. Central Ave., Suite 106  
4515 NORTH 7TH AVENUE  
PHOENIX, ARIZONA 85015 85020  
PHONE: (602) 271-5161

ACTIVITY REPORT

October 7, 1975

J. N. Conley  
Director, Geology Section

PUBLICATIONS

Sales for the past month were \$84.50. Purchasers were:

Patrick Petroleum Corp., Jackson, Mich.  
Richey's, Inc., Scottsdale  
J. W. Bolds, Phoenix  
Joseph Black, Aurora, Colo.  
James O. Bruce, Jr., Denver  
R. H. Rudolph, Scottsdale  
Gulf Research & Development, Pittsburgh  
Webb Resources, Inc., Denver  
TransOcean Oil, Inc., Denver  
Amoco Production Co., Denver

INVESTIGATIVE PROJECTS

"Macrofold" Map. The numerous plates for this map have been delivered to Imperial Lithographers for printing. The accompanying text is being printed this week.

Miscellaneous In-House Projects. Most of the projects are progressing on schedule.

STATE ENERGY HEARINGS

Two hearings are scheduled this month:

1. Arizona Interagency Energy Planning Office, October 15
2. Joint Legislative Interim Committee on Energy, October 16 and 17

At the first hearing Dr. George H. Davis will present his "Macrofold Map" and discuss the results of his studies, particularly with respect to exploration for oil and gas in Arizona. I shall talk briefly as to the applications of the results of his studies and the need for additional surface and subsurface studies of various types to evaluate the energy potential of northern Arizona.

At the second meeting Mr. William Allen and I will make a 15-minute presentation concerning this Commission's activities in the energy field.

Activity Report  
October 7, 1975  
Page 2

The first meeting of Governor Castro's Citizens Energy Task Force was held recently. Dr. E. M. Bond, Associate Professor of Economics at Arizona State University was elected chairman.

#### EXPLORATION

Holbrook Area. Webb Resources, Inc., has made a deal with Southern Union Gas Co. for the drilling of seven exploratory wells in the general Holbrook-Winslow area. Southern Union in turn requested a hearing before the Arizona Corporation Commission with respect to allowing it to recover the expense of the proposed exploratory program for oil and gas. The Corporation Commission requested that one of our geologists attend the hearing to furnish it an interpretation of matters pertaining to geology and exploration technology.

Charles Druitt of our staff attended the hearings held September 19, 23, and 24 in Flagstaff. He was called upon to balance in testimony the apparently contradictory statements of the two geological witnesses. There appears to be cause for hope that the commission will render a timely decision allowing the utility to participate in the exploration program in the Holbrook basin and that the utility will be allowed to recover its expenses from its customers, although not in precisely the manner originally requested.

A total of 1,055,000 acres of oil and gas leases is involved in this play. Approximately 735,000 acres of this total are lands owned or controlled by New Mexico & Arizona Land Co. The remainder are mostly state and federal lands.

East of the Holbrook area TransOcean Oil, Inc., has a block of leases totaling about one million acres in Valencia and Catron Counties, New Mexico.

#### GENERAL

Energy Items. According to a recent news release by the United States Geological Survey, remote sensing from satellites has begun to play a key role in geologic exploration for fuels and minerals. Remote sensing, for example, cannot pinpoint underground fuel and mineral deposits with certainty, but it can identify surface features and rock types that can give scientists indications of where they are most likely to find exploitable deposits.

Dr. George H. Davis utilized satellite imagery extensively in the preparation of his "Macrofolds" Map of the Colorado Plateau tectonic province of Arizona. His map and accompanying text has furnished us some clues as to several areas warranting additional studies.

Phillips Petroleum Co. has completed a confirmation geothermal well, 54-3KGRA, a twin to an earlier test hole that indicated a commercial potential. These holes are near Milford, Utah. The 54-3KGRA on a 24-hour flow through a steam-water separator showed it to be capable of about 250,000 pounds per hour of steam under producing conditions for electrical generation.

#### VISITORS

William A. Falconer, geologists, Webb Resources, Inc., Denver  
Charles S. Pierson, Attorney General's Office, Arizona  
Thomas Auld and Craig Cheevers, graduate students, NAU  
Lee Martin and Dave Mikesh, TransOcean Oil, Inc., Denver  
John S. Sumner and James S. Schmidt, Laboratory of Geophysics, U. of A.

Activity Report  
October 7, 1975  
Page 3

Falconer wished to compare geological "notes" concerning the prospects of oil and gas accumulations being present in the general Winslow-Holbrook area.

Auld and Cheevers wanted logs and drill-bit cuttings for facies studies of the Virgin and Kaibab limestones of northern Arizona.

Martin and Mikesh are interested in checking the oil and gas potentialities of Arizona's basins. Their company is making large acreage plays in frontier areas throughout the world.

Phillips Petroleum Co. is sending two geologists here next week to further check the oil and gas potentialities of the Black Mesa Basin in northeastern Arizona.

JNC:os

  
J.N.C.

AGENCY Oil & Gas Conservation Comm.

DIVISION \_\_\_\_\_ IDENTIFICATION CODE NO. \_\_\_\_\_

1	2	3	4
CLAIMS PAID YEAR TO DATE	OBJECT CODE NO.	DISTRIBUTION OF EXPENDITURES CLASSIFICATION	CLAIMS PAID MONTH OF Sept 1975
	7111	1 Per Diem: Commission Members	1
24,474.08	7112	2 Salaries: Employees	2 9,064.46
		3	3
	7151	4 Industrial Insurance	4
	7152	5 Unemployment Insurance	5
1,353.54	7153	6 F.I.C.A.	6 452.06
4,713.15	7155	7 Retirement	7 634.50
280.00	7156	8 Health Insurance	8 115.00
	7159	9 Personnel Comm.	9
		10	10
	7215	11 Professional Services: Engineer	11
168.75	7219	12 Professional Services: Other	12
		13	13
240.84	7221	14 Travel-State: Mileage	14 238.44
599.50	7222	15 Subsistence	15 460.50
	7223	16 Public Transportation	16
716.99	7224	17 Vehicle Expense	17 329.68
4.50	7225	18 Reg. Fees; Parking; etc.	18 3.60
		19	19
	7232	20 Travel-Out of State: Subsistence	20
	7233	21 Public Transportation	21
	7234	22 Airport Parking	22
	7235	23 Reg. Fees; Telephone; etc.	23
		24	24
6,435.52	7251	25 Occupancy: Office Rent	25 1,608.88
	7261	26 Warehouse Rent	26
	7263	27 Maintenance & Repairs	27
170.00	7272	28 Mtn. & Repairs: Furniture & Equipment	28
130.63	7280	29 Office Supplies	29 130.63
	7280.1	30 Orthophoto Quads.	30
	7300	31 Field Supplies: Film; Am.Strat; P.I.; etc.	31
	7331	32 Printing: Reports; Large Maps; etc.	32
184.75	7332	33 Legal Advertisement	33 184.75
	7333	34 Court Reporter	34
	7334	35 Postage	35
557.12	7335	36 Telephone	36 226.12
	7337	37 Drayage; Express; etc.	37
	7339	38 Rental, Misc.	38
	7360	39 Dues & Subscriptions	39
		40	40
370.91	7431	41 Capital Outlay: Office Equip.	41
	7434	42 Spec. Equip. (Geol.)	42
	7436	43 Automobile	43
		44	44
250.00	7913	45 Revolving Fund	45
		46	46
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37,650.28		TOTAL	13,448.62

OFFICE

DO NOT WRITE BELOW THIS LINE

FIELD

**MONTHLY FINANCIAL REPORT**

1 RECEIPTS MONTH OF SEPT 1975	2 RECEIPTS CLASSIFICATION	3 APPROPRIATED RECEIPTS	4 UNAPPROPRIATED RECEIPTS	5 TOTAL ALL RECEIPTS YEAR TO DATE
-0-	1 Permits to Drill		-0-	75 00
	2			
	3			
	4			
	5			
	6			
	7			
	8			
	9			
	10			
	11			
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	15			
	16			
	17			
-0-	TOTAL CURRENT MONTH RECEIPTS		-0-	XXXXXX
XXXXXX	TRANSFERS IN			
XXXXXX	BALANCES BROUGHT FORWARD		4,026 83	XXXXXX
-0-	TOTALS - MONTH AND YEAR TO DATE		4,026 83	75 00

6 CLAIMS PAID MONTH OF SEPT 1975	7 EXPENDITURES FUND TITLES	8 TOTAL AMOUNT AVAILABLE YEAR TO DATE	9 CLAIMS PAID YEAR TO DATE	10 OUTSTANDING ENCUMBRANCES	11 UNENCUMBERED BALANCE
9,064 46	1 Personal Services	28,370 00	24,474 08		3,895 92
1,201 56	2 Emp. Related Exp.	3,990 00	3,346 69		643 31
2,150 38	3 Other Operating Exp.	21,057 59	7,728 02	13,156 63	172 94
	4 Prof. & Outside Serv	750 00	168 75		581 25
1,032 22	5 Travel - State	1,925 00	1,561 83	235 50	127 62
	6 Travel - Out of St.	2,200 00		437 73	1,762 27
	7 Cap. Outlay - Equip.	400 00	370 91		29 09
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	30				
13,448 62	TOTALS	58,692 59	37,650 28	13,829 86	7,212 45

WESTERN OIL AND GAS ASSOCIATION  
609 SOUTH GRAND AVENUE • LOS ANGELES, CALIFORNIA 90017  
(213) 624-6386

November 21, 1975

Mr. John Bannister  
Executive Officer  
Arizona Oil and Gas Conservation Commission  
8686 No. Central Avenue (Ste. 106)  
Phoenix, Arizona 85020

Dear John:

Many thanks for your excellent presentation at our Public Lands Committee meeting in Phoenix last week. You created considerable interest among our members by your concise, encouraging remarks pertaining to the general business climate in Arizona and, more specifically, the climate for oil and gas and geothermal exploration.

The Oil and Gas Conservation Commission is fortunate in having such an able executive officer.

Kindest regards,



HWW/jt

HENRY W. WRIGHT

RECEIVED  
NOV 26 1975  
O & G CONS. COMM.