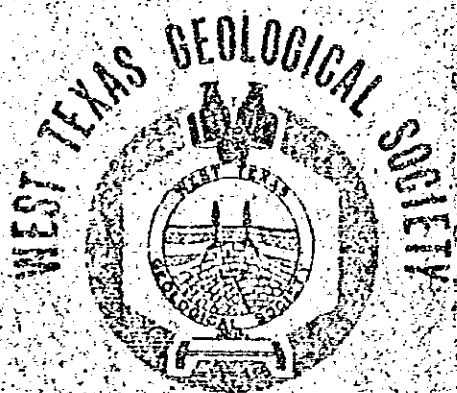


OIL & GAS CONSERVATION COMMISSION
Meeting: October 15, 1971
Mr. John Bannister, Exec. Sec.

SEPTEMBER

1971

NEWSLETTER



Midland, Texas

"ATTENTION EXPLORERS"

I would like to direct the attention of oil explorationists to a 1970 publication by The Arizona Bureau of Mines, Bulletin 182, entitled "Coal, Oil, Natural Gas, Helium and Uranium in Arizona", by H. Wesley Peirce, Stanton B. Keith and Jan Carol Wilt. This publication presents a comprehensive treatment of past exploration, proved accumulations of oil, gas and helium, and the geology of various provinces offering hydrocarbon-productive potentialities. This bulletin is available from The Arizona Bureau of Mines, Tucson, Arizona 85721, at a cost of \$3.00.

"ATTENTION ROCKHOUNDS"

Oil and Gas Conservation Commission, State of Arizona, 4515 North 7th Ave, Phoenix, Arizona 85013.

The Commission has available for free distribution to earth scientists and other interested persons an index of samples of drill-bit cuttings and/or cores of 448 wells drilled for oil, flammable gas, helium or stratigraphic information and 1,523 wells drilled for water in the State of Arizona.

The drill-bit cuttings and/or cores of the wells listed in the index are available for examination in the Commission's library in Phoenix or in The Arizona Bureau of Mines' library in Tucson.

Our thanks to Jack Conley!

"KICK THE OIL MAN"

An essay by C. D. Cantrell, Jr., 508 C & I Bldg., Houston, Texas 77002, was published in the Houston Geological Bulletin, Volume 13, No. 7, March, 1971. Available by request from the author.

Our thanks to Phillip M. Jones



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
October 15, 1971
4515 N. 7th Avenue, Phoenix, Arizona

10:00 a.m.

Call to order

1. Approval of minutes of meeting of September 17, 1971
2. Executive Secretary report
3. Enforcement Section activity report
4. Geology Section activity report
5. Old business
6. New business
7. Adjourn

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

NOTE: MEETING CANCELLED

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

Minutes of Meeting
September 17, 1971

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 September, 1971, was called to order by Chairman Ralph Bilby at 11:00 a.m., immediately following hearing on Case No. 46.

Minutes of the meeting of August 20, 1971 were adopted as written.

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

Executive Secretary advised that copy of an Attorney General opinion requested by Mr. Andrew Bettwy, State Land Commissioner, has been received. This opinion states that a state department is responsible for the expenses of its ex-officio members when they attend a meeting of that department, thus the Oil and Gas Conservation Commission would be responsible for the expenses of Mr. Bettwy or his representative at an out of town meeting. Commission agreed to honor such expenses, if so requested.

Executive Secretary read a letter dated August 31, 1971, addressed to Mr. Ralph Bilby, Chairman of the Commission, from Mr. Andrew Bettwy, State Land Commissioner, requesting suggestions as to what type of basic information might be developed by the State Land Department in the field of geothermal resources. Executive Secretary advised that a reply has been sent to Mr. Bettwy, suggesting the gathering of information as to water temperatures and gradients.

Dr. Wesley Peirce of the Arizona Bureau of Mines advised that work is progressing on the well information bulletin and final typing has begun.

Dr. J. J. Wright, Department of Geosciences, University of Arizona, spoke on new aspects of geothermals in the State.

Meeting adjourned at 11:45 a.m.

APPROVED

Ralph W. Bilby, Chairman



OFFICE OF

Oil and Gas Conservation Commission

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

October 6, 1971

Memo: Commissioners
From: John Bannister
Re: Report of Activity

Printing has commenced on our rules and regulations. It has been promised that delivery will be made by October 15th, the date of our meeting. Needless to say, great care has been exercised in preparing the information for printing. At the suggestion of the Purchasing Department, two thousand copies of the regulations have been ordered. Initially, copies will be sent out through our normal mailing list and it is anticipated thereafter that we will have a two to three-year supply on hand.

As you are probably aware, the oil and gas industry is in the last quarter of its fiscal year and activity is light, however much of the adverse happenings to the industry, such as the official attitude in Washington, seems to be changed and I feel 1972 should see a much more favorable climate for oil and gas activity.

I am sure all of you noticed the transfer of some 900,000 acres of leases into Humble Oil Company. This is a portion of that play begun in April of 1970. As I previously advised, my feeling was that either Humble or El Paso Natural Gas was the "big boy" behind the play and it now develops Humble gave financing to most operations. Extensive seismic work has been done across the area and I anticipate some drilling across this vast area during 1972.

You will receive a report from Mr. Allen concerning Guadalupe Exploration Corporation securing a permit to drill in the southeast corner of Cochise County. This well has caused quite a stir in the industry news media, as well as in the Tucson area, as you will note from the enclosed copy of an article from the Oil and Gas Journal.

Page 2
Executive Secretary Report
10-6-71

Jack Conley has had to have an eye operation and presently is in Doctors Hospital in Phoenix. It is anticipated he will be released from the hospital the latter part of this week, but it is unlikely he will be back to work by the 15th.

Duane Norton of the Joint Legislative Budget Committee was in the office on October 5th and went over our budget in detail. This may very well be our budget hearing unless we decide to request appearances before the committees.

VIRGINIA GAS & OIL, LTD.,

PETROLEUM BUILDING, ABILENE, TEXAS 79601 915-673-4731

OCTOBER 4, 1971

JOHN E. CARSON
WINFRED H. TUCKER
GENERAL PARTNERS

RECEIVED

OCT 6 1971

Q & G CONS. COMM.

MR. JOHN BANNISTER, EXECUTIVE SECRETARY
ARIZONA OIL & CONSERVATION COMMISSION
4515 NORTH 7TH AVENUE
PHOENIX, ARIZONA 85013

DEAR JOHN:

RELATIVE TO OUR PHONE CONVERSATION THIS MORNING REGARDING THE ARTICLE ON ARIZONA EXPLORATION IN THE OCTOBER 4, 1971 ISSUE OF THE OIL AND GAS JOURNAL, COULD YOUR OFFICE KEEP US ADVISED OF THE PROGRESS GUADALUPE EXPLORATION CORP. MAKES IN THE DRILLING OF THEIR PROJECTED WELL?

SINCE GUADALUPE'S DRILLING FUNDS ARE RAISED, THEIR DRILLING PERMIT ISSUED AND THEIR DRILLING CONTRACT LET TO AS REPUTABLE A CONTRACTOR AS CACTUS DRILLING COMPANY, I CAN'T HELP BUT FEEL THAT THE DRILLING OF THIS TEST WILL BE COMMENCED AND CONTINUED WITH ALL DUE DILIGENCE ACCORDING TO GOOD OILFIELD PRACTICE. IN ADDITION, IT IS DOUBTFUL THAT GUADALUPE WOULD BE IN THE PROCESS OF DRILLING A WATER SUPPLY WELL IF THEY DIDN'T INTEND TO PROCEED WITH THE TEST IN THE IMMEDIATE FUTURE.

IN JANUARY 1970, I SPOKE WITH ARSENIO NAVARRO (PEMEX) AT JUAREZ, AND WAS ADVISED BY HIM THAT THE PEMEX WELL IN CHIHUAHUA 50 KILOMETERS (APPX. 31 MILES) SOUTH OF THE U.S. BORDER, WAS 1800 METERS (APPX. 5900') DEEP. AS I REMEMBER, AT THAT TIME PEMEX HAD ANOTHER WELL IN CHIHUAHUA, SOUTH OF COLUMBUS, NEW MEXICO, WHICH HAD REPORTED A VERY THICK SECTION OF ASPHALTIC OIL AND WAS DRILLING BELOW 11,000 FEET. WOULD YOU KNOW THE EXACT LOCATIONS OF THESE WELLS, OR ANY OTHER WELLS PEMEX MAY HAVE DRILLED IN CHIHUAHUA, IF THEY DRILLED ON ANY TRENDS IN THE BASIN, IF THEY PROVED OR DISPROVED ANY POTENTIAL REEFING IN THE DEVONIAN, MISSISSIPPIAN, PENNSYLVANIAN, PERMIAN OR CRETACEOUS, AND IF ANY OF THEIR WELLS IN ANY WAY AFFECTED PREVIOUS INFORMATION ON THE PEDREGOSA BASIN?

ANY DATA YOU CAN GIVE US WOULD BE HELPFUL IN GETTING OUR OWN EXPLORATION PROGRAM OFF THE GROUND, AND WE WOULD SURELY APPRECIATE IT.

BEST PERSONAL REGARDS,

John
JOHN E. CARSON

cc: MR. WALLACE B. LANGSTON
SUN OIL COMPANY
POST OFFICE BOX 2880
DALLAS, TEXAS 75221

564

32 x 1

Arizona surprises may outdo Dineh bi Keyah

ONE OF the quietest, yet extensive, lease plays to be made in recent years has occurred in the past 18 months in southern Arizona.

This play follows that of several years ago in the Pedregosa basin that laps over from southwestern New Mexico into Cochise County (OGJ, Aug. 2, p. 117). This county is now tightly leased up, according to Edward Koester, staff geologist of the Arizona Oil and Gas Conservation Commission. Santa Cruz Minerals Inc., with over 1 million acres in a rough arc extending from Yuma to near Tucson, is the largest lease holder in the play which covers 3 million acres. Sun, Gulf, Texaco, Mobil, Chevron, Aztec, Champlin, and Cities Service are represented as well as large independents. Geophysical work has been done. Oil and gas shows in Paleozoic rocks in New Mexico and Chihuahua have "kept the pot boiling," Koester says. Across the border, Pemex continues its exploration program.

One field. The region of such intense interest is in the Basin and Range province whose only oil field, Eagle Springs in Nevada, has produced about 3 million bbl of oil.

In Arizona, this province is characterized by faulted mountain blocks separating broad valleys. It is thought that the thick sections of valley fill in some of these valleys overlie Mesozoic and Paleozoic rocks that are potential source rocks and reservoirs.

In an untested area. Why the interest?

1. Oil companies recognize that Mesozoic and Paleozoic rocks in southeastern Arizona are apt to be petroliferous. Attractive are the 10,000 ft of Cretaceous sediments and 7,000 ft of Paleozoic beds in the Pedregosa basin.

2. Water wells have proved that a Pliocene marine embayment of the Gulf of California extends through Yuma at least as far as Parker and may be more extensive in southwest-

A quiet but extensive lease play



ern Arizona.

3. New field work in unmapped mountains in western Arizona has confirmed old postulations that Paleozoic marine sediments do underlie the intermontane valleys.

4. Pliocene salt has been found in three separated areas on the edge of the Basin and Range province.

Near Luke Air Force Base, penetration of over 3,600 ft of salt in a gravity minimum has all the earmarks of a salt dome. In a well south of Florence, palynologists date a caprock core overlying salt as Pliocene(?). One of three tests in the Red Lake area north of Kingman drilled over 4,100 ft

of salt and quit in it.

Arizona supplied the surprise of 1967 when a syenite sill at Dineh bi Keyah served as the "pay" for an oil field that has made over 10.6 million bbl. When major companies realize they can drill a really deep test in Arizona valleys for less than it costs to rig up on an offshore platform, they may find some more profitable surprises that will outdo Dineh bi Keyah.

Location has been made for a 7,000-ft Cambrian test by Guadalupe Exploration Corp. at 1 Geco-State in 2-24s-31e, Cochise County. Cactus Drilling Co. will be contractor on this start-off wildcat.



OFFICE OF

Oil and Gas Conservation Commission

STATE OF ARIZONA

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

ACTIVITY REPORT

October 5, 1971

Memo from W. E. Allen, Director
Enforcement Section

Following the Hearing of September 17, 1971, when the various rule changes were adopted, the writer met with a representative of the printing firm that has the contract to print our new Rules and Regulations, to present the editing that will be required in the reprinting of this booklet. It is expected that the printing will be complete on or about October 15th.

El Paso Natural Gas Company has announced plans for a \$250 million coal-to-gas conversion plant south of Farmington, New Mexico. The plant, which will be built adjacent to the company's existing pipeline system, will be the first commercial plant for the conversion of coal-to-gas suitable for pipeline transmission.

The new plant will be designed to produce 250 million cubic feet of gas per day. It will help the company maintain its present level of deliveries for an additional period of time.

Initial work on the plant is expected to begin shortly after the authorization by the Federal Power Commission. Assuming prompt approvals, first deliveries could begin by 1976.

Gasification of coal is a technology for the conversion of coal deposits into a synthetic gas. This is a relatively pollution-free form of energy.

El Paso Natural Gas Company has acquired recoverable coal deposits in the magnitude of 900 million tons in the area served by its pipeline.

The writer attended a hearing on the proposed wilderness area for the Cabeza Prieta Game Range recently in Phoenix. Statements given during this segment of the hearing were overwhelming in favor of declaring this Game Range a wilderness area. Statements made in separate hearings held in

Page 2
Activity Report - October 5, 1971
Mr. W. E. Allen

Tucson and Ajo also favored the wilderness area.

A field trip was started on September 28, but was cut short by the heavy rains in the northeast portion of the State. Flooding in the Holbrook, Sanders, and Four-Corners area made it impossible to reach the various well locations.

You are aware that Humble Oil and Refining Company has taken title to some 916 thousand acres of oil and gas leases from Santa Cruz Minerals. This is a portion of the leases taken during 1970 and 1971 by Mesa Southwest Corporation. Mr. Jim Pickett, one of the brokers involved in this transaction, has agreed to give us the location of these leases as quickly as possible. I hope to have this information before our meeting of October 15. Perhaps things are looking up for Arizona.

At long last a permit has been issued to Guadalupe Exploration Corporation to drill their GECO State #1, located in the NE/SW Section 2-T24S-R31E, Cochise County (this well is approximately 25 miles east of Douglas.) This is to be a 7,000 foot test. As you are well aware, we have been looking forward to this test almost a year and now that it is going to be drilled, the results are anxiously awaited.

Mr. Obele, President of GECO, had a spud date target of October 7th. However, he informed me yesterday that the rig that will drill the hole wouldn't be available until approximately the week of October 11th. Cactus Drilling Company of Midland, Texas, has been employed to drill this test. I have had considerable personal experience with Cactus Drilling and can recommend them very highly.

Eastern Petroleum lost the hole on their re-entry of Santa Fe 6X, located in the center of Section 25-T20N-R28E, Apache County, and has filed an Application to Drill Santa Fe 6X-1, located in the SE/NW Section 25-T20N-R28E, Apache County. This well has been spudded and surface casing set. Mr. Fullop, President of Eastern, has informed me that he plans to drill five additional wells in the Chambers-Sanders area.

At the last report the Cecil Cope Bradshaw Fee #1 NW/NE Section 24-T18N-R4E, Yavapai County, was drilling at 1725'. This well entered into a formation at 1110' that has been variously described as dolomite and also basement rocks. The well is still drilling in this same formation. Mr. Cope has enlisted the aid of Wes Peirce to help determine the actual formation in which they are drilling. At this writing, we do not have Dr. Peirce's analysis of the samples.

Page 3
Activity Report - October 5, 1971
Mr. W. E. Allen

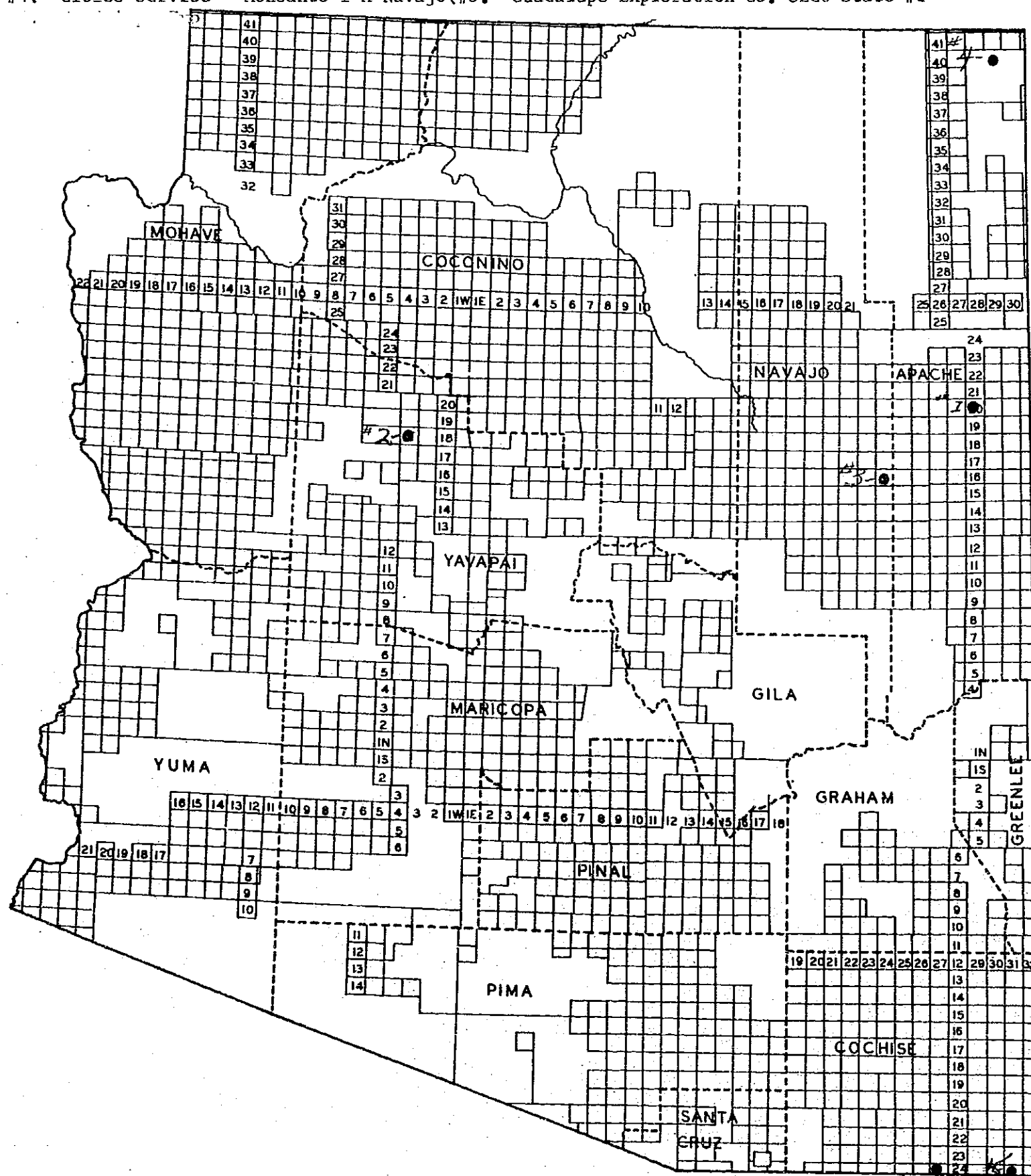
Drilling has been temporarily suspended on the Ruell Little #1-
State NW/NW Section 34-T16N-R23E, Navajo County. At the last
report the well was bottomed at 790'. We have been unable to
contact any one regarding this well for several weeks.

No recent word has been received from Cities Service concern-
ing their future plans for additional drilling in the State.
It is believed that they are taking time to thoroughly evaluate
their well that was just recently completed in the SE/NE Section-21
T-40N-29E, Apache County, before starting any more wells.
This well had an absolute open flow potential of 7 MMCF.

Republic Minerals Corporation of Houston, Texas called for infor-
mation on drilling requirements in Arizona. They also told me
that they would file an Application to Drill in the very near
future. This well, exact location not yet determined, will be
near the Deneh Bi Keyah Field in Apache County.

Lou Purigraski has also indicated he intended to drill a test
well in Section 30-T2S-R9W, Maricopa County. Apparently his
intentions are serious as I have been contacted for informa-
tion by the surveyor that is staking the location.

- #1. Eastern Petroleum Santa Fe -1
- #2. Cecil Cope-Bradshaw Fee #1
- #3. Ruell Little- State No. 1
- #4. Cities Service - Monsanto 1-A Navajo(#5. Guadalupe Exploration Co. GECO State #1





OFFICE OF
Oil and Gas Conservation Commission

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

October 6, 1971

ACTIVITY REPORT

TO: COMMISSIONERS

FROM: GEOLOGICAL STAFF, EDWARD KOESTER

Accumulation of additional data on the subsurface conditions in the valleys of Southern Arizona has continued. We now have data on nearly all wells of every kind in this area. Some of it is very poor, some of it is excellent and the remainder may be classed as usable. If it is true that about half the water wells are drilled without a permit, it is obvious that there are thousands of points of geologic control about which we know nothing. Fortunately many of these unreported wells are shallow, so would not supply much additional vital information.

Important data on the wells at Red Lake in Northern Mohave County has been received from El Paso Natural Gas Company. They have dated the rocks in their well in the range from 157 to 202 million years and reported that palynology studies of the cores of one of the Kerr-McGee wells yielded Triassic-Jurassic fossils (Palynology is a relatively new phase of paleontology and is concerned with the study of pollen and other spores). Heretofore the salt beds and associated rocks have been considered as Pliocene, a much younger age.

The significance of the above information is that further evidence is accumulating that our intermontane valleys may contain thick accumulations of sedimentary rocks, potential oil-bearing strata. Moreover this and other data accumulated during the month convinces me that there is no doubt that we have salt dome conditions in our state. A report describing these conditions is in preparation and may be completed by the next Commission Meeting.

MONTHLY FINANCIAL REPORT

1 RECEIPTS MONTH OF <i>Sept. 1971</i>	2 CLASSIFICATION	3 APPROPRIATED RECEIPTS	4 UNAPPROPRIATED RECEIPTS	5 TOTAL ALL RECEIPTS YEAR TO DATE
25 00	1 Permits to Drill			125 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	XXXXXXXX
	TRANSFERS IN		- 0 -	
XXXXXXXX	BALANCES BROUGHT FORWARD		1,801 83	XXXXXXXX
25 00	TOTALS - MONTH AND YEAR TO DATE		1,826 83	125 00

6 CLAIMS PAID MONTH OF <i>Sept. 1971</i>	7 EXPENDITURES FUND TITLES	8 TOTAL AMOUNT AVAILABLE YEAR TO DATE	9 CLAIMS PAID YEAR TO DATE	10 OUTSTANDING ENCUMBRANCES	11 UNENCUMBERED BALANCE
7,060 06	1 Personal Services	22,593 00	21,972 92		620 08
632 49	2 Emp. Related Exp.	2,190 00	1,808 69		381 31
432 06	3 Other Operating Exp.	9,350 00	8,993 74	147 28	208 98
	4 Prof. & Outside Serv.	1,700 00			1,700 00
533 98	5 Travel - State	2,100 00	1,112 10	782 32	205 58
	6 Travel - Out of State	3,500 00			3,500 00
	7 Cap. Outlay - Equip.	2,100 00	907 92	112 24	1,079 84
	8 Salt Monitoring	2,000 00			2,000 00
	9				
	10				
	11				
	12				
	13				
	14				
	15				
	16				
	17				
	18				
	19				
	20				
	21				
	22				
	23				
	24				
	25				
	26				
	27				
	28				
	29				
8,658 59	TOTALS	45,533 00	34,795 37	1,041 84	9,695 79

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. 1971
390 00	7111	1 Per Diem: Board Members	1 180 00
21,370 76	7112	2 Salaries: Employees	2 6,880 06
212 16	7113	3 Wages: Summer Aides	3
	7151	4 Industrial Insurance	4
664 82	7153	5 F.I.C.A.	5 213 21
1,068 62	7155	6 Retirement	6 344 03
75 25	7159	7 Personnel Commission	7 75 25
	7215	8 Professional Services: Engineer	8
	7219	9 Other	9
211 00	7221	10 Travel-State: Mileage	10 79 60
465 00	7222	11 Subsistence	11 193 00
38 18	7223	12 Public Transp.	12 38 18
396 02	7224	13 Vehicle Exp.	13 221 30
1 90	7225	14 Reg. Fees, Parking, etc.	14 1 90
	7232	15 Travel-Out of State: Subsistence	15
	7233	16 Public Transp., Taxi	16
	7234	17 Airport Parking	17
	7235	18 Reg. Fees, Tel., etc.	18
7,397 84	7251	19 Occupancy: Office Rent	19
	7261	20 Warehouse Rent	20
	7263	21 Warehouse Mtn. & Repair	21
120 00	7272	22 Mtn. & Repairs: Furn. & Equip.	22
175 75	7280	23 Office Supplies	23 30 14
138 72	7300	24 Field Supplies, Film, Am. Strat. P.I., etc.	24 34 32
	7331	25 Printing: Reports, Large Maps, etc.	25
93 35	7332	26 Legal Advertisement	26 93 35
63 00	7333	27 Court Reporter	27 63 00
	7334	28 Postage	28
669 06	7335	29 Telephone	29 201 25
8 75	7337	30 Drayage, express, etc.	30
67 27	7349	31 Rental, Misc.	31
10 00	7360	32 Dues and Subscriptions	32 10 00
	7431:	33 Capital Outlay: Office Equipment, Tpr, etc.	33
907 92	7433	34 Reproduction Equip.	34
	7434	35 Spec. Equip.	35
250 00	7913	36 Revolving Fund	36
		37	37
		38	38
		39	39
		40	40
		41	41
		42	42
		43	43
		44	44
		45	45
		46	46
		47	47
		48	48
		49	49
		50	50
		51	51
		52	52
		53	53
		54	54
		55	55
34,795 37		TOTAL	8,658 57