OIL & GAS CONSERVATION COMMISSION
Meeting: January 15, 1978
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

## AGENDA

Meeting January 15, 1971 4515 N. 7th Avenue, Phoenix, Arizona

10:00 a.m.

Call to order

Owens absent

Approval of minutes of meeting of December 18, 1970

2. Executive Secretary report

Legislation

- 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.



# Much of oil's future rests with attitudes of people

BOARD CHAIRMAN A. R. Nielsen of the Canadian Petroleum Association has a warning for his country that bears hearing in this country as well. He says that federal Government policies and regulations and the attitudes of the Canadian people are the keys to developing Canada's petroleum potential in the 1970's.

The decade of the '70's has not started with a vintage year for petroleum in Canada. There have been no confirmed major wildcat successes. Exploratory drilling is off 10% in number of wells and 15% in footage. At the same time, reserves have been tapped when liquids production increased 12% and natural-gas sales 11.5%.

The exploration outlook for 1971 is heavily dependent on success in wildcatting programs in the Northwest Territories, Arctic islands, and the Atlantic offshore. Oil activity in these areas, given a hospitable investment climate and workable regulations, could double the size of existing producing areas, Nielsen claims.

Nielsen made these observations while new government policy was being formulated on such critical issues affecting petroleum as foreign investment in Canada, taxation, and land regulations. Adverse decision in any area could cripple oil-industry expansion.

CRITICS of Canadian oil constantly complain of the dominance by American investors and the heavy profits that flow out of the country into the United States.

They fail to realize that without outside capital it would be impossible to develop Canada's immense petroleum potential. The fact is more money has been invested in Canada by the oil-producing industry than has been received in revenue, and the largest part of the revenue has been put back into financing further exploration and expansion.

Critics also overlook the large number of jobs created by the oil industry, the big demand for goods and services generated, and the revenues paid to various levels of government. The oil industry has become a dynamic element of the economy. It can become even greater. With the improving outlook for oil and gas exports to the United States, there is greater incentive to step up exploration unless governmental policies chill the investment climate:

OILMEN face a similar circumstance in the United States. Much of their future depends on government policies and public attitudes.

O

32×4.

The inclinative to make the heavy investments needed for new contains the partie of ceding pollution obtains the partie of ceding pollution of cedi

FROM: OIL & 🦱 S JOURNAL

1-11-71

**EDITORIAL** 

# State oil regulators are not price fixers

THE ECONOMIC advisors to President Nixon for a long time have exhibited a serious "hang up" on the prorationing activities of state oil regulatory agencies. So, it was no surprise that when these economists attacked the recent crude-price increases they also leveled a blast at the so-called price-fixing posture of oil-state regulators.

They contended that the groundwork was laid for the price raises with the cutback in production ordered earlier by the state regulation authorities. In fact, these men apparently believed that the entire state regulatory structure was designed and is operated solely to control crude markets and prices.

Such ideas reveal a lack of understanding how state regulation actually works. The truth is if the states hadn't stepped in some 35 years ago to bring order to chaotic oil-field practices, it's doubtful if such states as Texas, Louisiana, Oklahoma, or Kansas would have any significant oil reserves left to produce by now. Flush fields would have been gutted by excessive production. Associated gas would have been lost by flaring. Prices would have been on a roller coaster—dirt cheap during brief flush production and sky high after the boom faded.

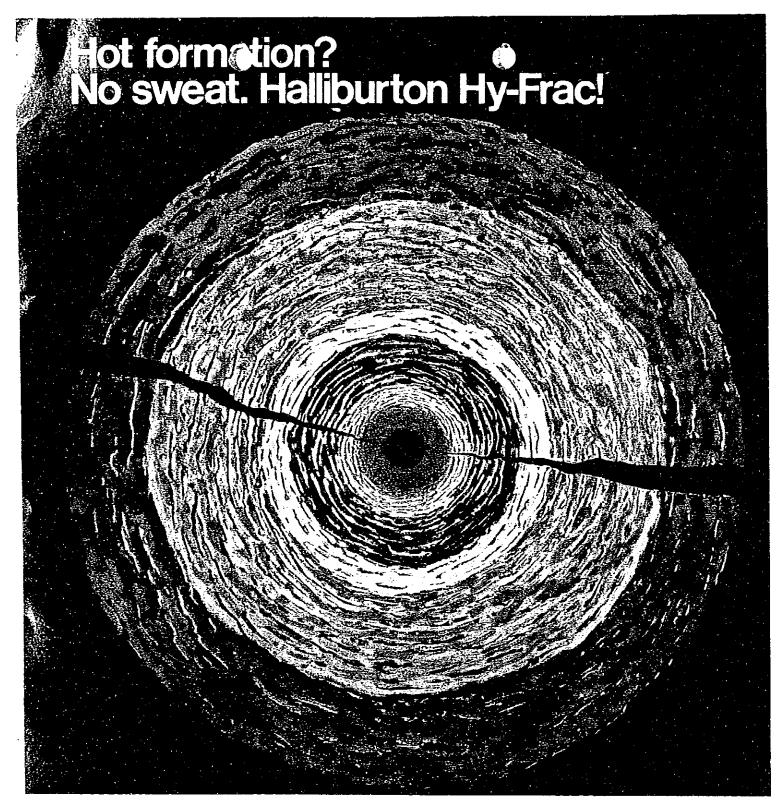
WHAT then is the pricing role of state regulators?

The agencies have no direct pricing role. The Texas Railroad Commission, for instance, never fixes prices. Its actions in fact have no short-term bearing whatever on crude prices. During the years of state regulation, oil prices have declined about as often as they have risen. If the regulators could rig prices in favor of oilmen, why would they ever permit prices to drop?

The only pricing role of the state agencies is indirect and long-term and stems from their conservation activities. In states where proration is practiced, production is geared to demand. This prevents prolonged over-production which is wasteful. Thus, by preventing overproduction, these states prevent markets being flooded with oil and prices being swamped. By the same token, they at other times authorize greater production to meet new and sudden spurts in demand; and this tends to put the brakes on price increases.

STATE REGULATION, however, has brought greater benefits than orderly marketing. Conservation rules have almost ended wasteful gas flaring, have sponsored wider well spacing, have prolonged the life of oil fields in other ways, such as setting maximum efficient producing rates and encouraging early secondary recovery measures. The states have pioneered antipollution work with salt-water disposal rules, well-plugging regulations, and stricter drilling practices.

The states have proven themselves good regulators and have achieved a fair balance of the equities among interests of oilmen, the public, and consumers of oil products. It would be tragic to undermine this structure in the mistaken notion that its aim is price fixing.



Halliburton's new Hy-Frac<sup>IM</sup> fracturing process keeps its cool where conventional fracturing methods fall apart . . . in those deep, hot formations.

The Hy-Frac process has already been used, successfully, in deep formations where temperatures reach 325-350°F.

The unique method of formulating Hy-Gel<sup>TM</sup> fluid provides increasing viscosities at high bottom hole temperatures during fracturing treatment, while the viscosity of other fluids decrease.

Friction during pumping is that of a lower effective viscosity fluid. As a result, downhole efficiency in deep hot formations is not sacrificed for pumpability.

Hy-Gel fluid properties help create wider fractures and provide better proppant distribution for greater fracture flow capacity hot formations. In applications where placement of 1 lb/gal of small proppant previously had been a marginal possibility, Hy-Gel fluid has transported 5 lb/gal of coarse sand.

When fracturing deep hot formations has you in a sweat, call your Halliburton service specialist. He is the only one who has the new no sweat Hy-Frac process.

FRACTURING



DUNCAN, OKLA 73533 A **FEELISTINGS PERSON** Company

vonue de la Osein

# Shortage of gascloses smelter

HAYDEN (AP) — The American Smelting and Refining Co. announced late yesterday that it would shut down its smelter here because of a shortage of natural gas.

"It has become necessary to discontinue all plant operations and go on standby service" said Jack Winkel, general manager.

"All operations are completely down," he added We will resume as soon as gas restrictions are lifted."

He said about 350 workers would be affected by the shittdown

Meanwhile nearly 1,000 employes rebirned to work yesterday at Magma Copper Company's operation in San Manuel The plant had been closed for a day because of the gas shortage.





OFFICE OF

## Oil and Cas Conservation Commission

STATE OF ARIZONA

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

#### CONFIDENTIAL

January 8, 1971

Memo: Commission Only From: John Bannister

Re: Dr. Pye

On a recent visit to Tucson, I contacted Dr. MacCullough and discussed our Pye situation in depth. The action taken by the Commission in writing to Dr. Pye was received with appreciation by Dr. MacCullough and he expressed the view that both he and Jerry and Dr. Zumberg had been concerned with Pye's actions during the Commission meeting in Tucson.

I explained to Dr. MacCullough that Dr. Pye's "intrusion" was uninvited and that the Commission made the best of the situation.

As a result of our action in writing to Pye, our relationship with Dr. MacCullough and the Department of Geology is stronger than ever.

December 21, 1970

Dr. Willard Pye 3418 N. Forgeus Tucson, Arizona 85716

Dear Dr. Pye:

The Commissioners have requested that I express their deep appreciation for the many valuable services you have rendered us in the past and that I express their sincere respect for you. However, inasmuch as you are now engaged as a full-time geological consultant, they feel you should no longer have the privileged position you have had in the past.

In no way do they desire that you absent yourself from our meetings, but merely wish to advise that due to the change in your circumstances we will have to regard you as "a member of the public" and not as one entitled to confidential or privileged communications.

I am sure that you will receive this in the spirit it is intended.

The Commissioners and Staff join me in wishing you, Margaret and your children a Merry Christmas and a Happy New Year.

Sincerely,

John Bannister Executive Secretary

JB/yb



OFFICE OF

#### Oil and Gas Conservation Commission

STATE OF ARIZONA

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

January 8, 1971

学を記述されて

Memo: Commissioners From: John Bannister

Re: Report of Activity

As previously reported to you, additional problems have arisen with the salt mine surveillance being conducted by this Commission. Pursuant to this, a meeting is being held in Tucson on January 12 to look into the subsidence problem. In order to fully alert the Governor's Office to the problems faced by this Commission, they have been contacted and the Governor will be represented at this meeting. The purpose of this particular meeting is to establish if there is a critical subsidence problem existing in the area of the ponding operations and, if so, what additional studies will be needed to determine the method of control, the cost of such studies, and the funding of same. I will be able to report in detail to you concerning this at our regular meeting.

In your meeting folder you will find a preliminary schedule of projects and completion times concerning the geology investigations to be made by this Commission. The purpose of the schedule is to assure an orderly and timely development of our investigations and the fixing of time goals. It is to be stressed that this schedule, of necessity, must be somewhat flexible, however it will be adhered to to the fullest practical extent.

I am pleased to report that in all probability a master "scout ticket" type report will be published for all key wells upon which this Commission has information prior to the end of June, 1971. This is a joint project of the Commission and the Bureau of Mines through Dr. Wes Peirce. We shall make every effort to set the publications up in such manner as it may be periodically updated. It is felt that this can become sort of a bible of Arizona wells. Through this, the Commission will have made a major accomplishment in compilation and distribution of well data. I feel that Wes Peirce and Jim Scurlock deserve much credit and thanks for this effort.

Page 2 Executive Secretary Report 1-8-71

0

Our sample library is proving to be "a can of worms", as was expected. The filing system used by the Museum of Northern Arizona leaves much to be desired. Jack Conley is doing a wonderful job in cataloging and identifying samples, however he is running into problems with samples being misplaced in boxes, etc., consequently it will involve time to really accurately catalog and identify samples on hand.

An exchange program is being set up with Dr. Wes Peirce of the Bureau of Mines concerning duplicate samples which he may have and we do not have and vice-versa. When cataloging and filing samples has been completed, we will have available for the first time an accurate description of the samples of wells in existence and their exact location.

At some later date it is my intention to bring in some student labor, perhaps, to physically rearrange our sample library in a more orderly manner. This, of course, will be done under Mr. Conley's supervision. The time involved in this area will not be of any great magnitude or expense but will result in a much desired and necessary orderliness.

Activity within the State has been slow, as it always will be at the year's end, primarily involving the fact that budgets for the year have been exhausted and bad weather, as well. I feel that Arizona will enjoy some significant exploration during 1971. At present, Mr. Ed Obele has scheduled a test for southeastern Arizona for March of 1971. Indications are that exploratory will be drilling in the southern part of the State and at an all-time high. As our geology investigation program gets under way and results of our efforts are felt, I think we can look forward to a more consistent exploration throughout our State.

Also in your meeting folder you will find the legislation which is change the staff feels should be made. If your approval is obtained, we will take immediate steps to get a bill introduced requesting the necessary corrective legislation. Should this legislation succeed, we will propose some rule changes at a later date based upon the corrected legislation.

It is my feeling that we should again request appearances before the budget committee for our 1971-72 budget. This budget, of course, has been submitted and I am sure no appearance will be arranged for this Commission unless we so request.



# Oil and Gas Conservation Commission

STATE OF ARIZONA

4515 NORTH 7th AVE.

SPHOENIX, AZ. 85013

Phoenix, Arizona H5007

PHONE: 271-5161

ACTIVITY REPORT

January 7, 1971

C

Memo from W. E. Allen Director, Enforcement Section

The drilling activity within the State for 1970 was very disappointing. There were twenty-two permits issued during the year. In 1969 there were forty-four permits issued. There were two strat tests drilled by El Paso Natural Gas Company. Aritex Corporation drilled two holes to be used in connection with an LPG storage project. Southwest Salt Company drilled two wells for salt mining purposes. There were two wells completed as helium producers, one from the Shinarump and one from the Coconino formations. One well drilled in Section 14, Township 37 north, Range 29 east had a small show of oil and remains on a temporary abandoned status. The Tenney #3 State in the SE/4 SW/4 Section 36, Township 9 south, Range 27 east in Graham County is at 3500'. Drilling has been stopped. The remainder of holes drilled have been completed as dry holes. All production for the first eleven months of 1970 totaled 1,652,907 barrels. Gas produced for the same period was 1,476,392 MCF and helium was 706,887 MCF. A large increase in the production of helium is assured for 1971 due to the start up of the helium extraction plant at Navajo by Western Helium Corporation

My next report will contain full information on the production for the past year, complete drilling information, and so forth.

The annual request from World Oil for information regarding the producing oil and gas wells, also, the shut-in helium wells has been received. The files have been researched and the requested information has been supplied.

It is believed that we have reason to expect an increase in activity for the coming year. This assumption is based in part on the leasing activity that transpired during 1970. We have companies that have temporarily abandoned all operations within the State but indicate that they Page 2 January 7, 1971 W. E. Allen Activity Report

e 232

have no desire to cancel their blanket drilling bonds. This should be an indication that these companies still have some interest in the State. Also, as has been reported earlier, Standard Oil Company of California is still searching for information on the lease play that took place during 1970.

AAA Fishing Tool Company has started injecting all their produced water. This should eliminate the pit seepage reported previously. AAA has also requested permission to co-mingle the production from their #E-3 and #E-4 wells. This request poses no problems as both wells are on the same lease, in the same section, and have the same royalty interest. There was never a reason for separate tank batteries on this lease.

A study of the Statutes and "Rules and Regulations" has been made for the purpose of recommending various changes that will enable the Commission to function more efficiently. As you know, the statutes are rather broad and allow the Commission considerable latitude. A few minor changes and additions here will enable us to make several needed changes in the rules. Our primary purpose is to have the authority to request reports and information on a timely basis.

Southwest Salt Company is still attempting to clean up the fishing job on their #2 well. There is some 600' of 6" pipe remaining in the well. We are informed that this is in several sections. The upper section is lodged at approximately 1900' and is in such position in the hole that the operators are unable to get a fishing tool in the pipe or under the pipe.

The Tenney #3 State is bottomed at 3500' in brown shale, anhydrite, and salt. Seven-inch casing is set at 2090'. Mr. Schooler has informed me that Mr. Tenney will meet with his group in the next few days to decide on the course of action to pursue. The geologist that ran samples on this well has informed the operators that they are still in valley fill. It was previously thought that this well went out of valley fill at 1200'. The Tenney group have 30,000 acres in this block. Mr. Schooler appears to be of the opinion that if the Tenney group decided not to carry this well deeper, that some other group might be persuaded to do so for a sizable interest in this drilling block. As of now some \$68,000 has been expended in carrying this well to 3500'.

0.50



# Gil and Cas Conservation Commission

STATE OF ARIZONA

4515 NORTH 7th AVE.
PHOENIX, AZ. 85013
Phoenix, Arizona 85007

PHONE: 271-5161

PHONE: 271-5161

January 8, 1971

ACTIVITY REPORT

TO: COMMISSIONERS

FROM: JAMES R. SCURLOCK

We geologists have been mainly occupied this month with gathering and studying the geologic literature. We intend to build a respectable library to supplement our sample library and log files. We now feel that our basic geologic orientation is sufficiently complete in some areas to commence work on specific projects.

Ed Koester has been reading through the mass of reports and published articles on southern Arizona. Ed will be attending a meeting of the Geological Society of America in Riverside, California in March to hear some papers and attend a field trip dealing with the geology of the Salton Sea area of California which has a direct bearing on the geology of Yuma County. Ed also will attend the National Conference of The American Association of Petroleum Geologists during the last of March in Houston, where he is to be named as an honorary member of the Association. This is a signal honor from the Association of which he is a past President.

Jack Conley continues to work on the sample library. By contacting some old friends, Jack is being given the chance to look through the geologic files of Monsanto Company covering Arizona.

We are in the process now of planning our future projects.



# Oil and Gas Consernation Commission

STATE OF ARIZONA

4515 NORTH 7th AVE. SPHOENIX, AZ. 85013

Phoenix, Arizona 85007

PHONE: 271-5161

January 8, 1971

MEMO TO: John Bannister

FROM: James R. Scurlock

SUBJECT: Geologic Projects: Tentative Schedule

The enclosed memo from Jack Conley is such a well formulated plan that our staff has decided to adopt it as our tentative schedule of future publications. By June of this year we plan to have ready for publication (1) a catalog of our samples, (2) most of the county maps showing the location of all oil tests, (3) and a revision of our regional structure map on the Pennsylvanian Coconino Formation. In addition to these three projects we also plan to complete by July 1 a project which is to be published by The Arizona Bureau of Mines under the direction of Dr. Wes Peirce. This will be a compilation of the "scout" and other data in our files and should become the well reference bible of Arizona.

This should get us off to a good start. By late summer of this year we should be working on the regional correlation cross-sections (see Conley #3) in the Plateau province (north of the Rim) and preliminary isopachous maps in the Basin and Range province (south of the Rim) with the Cochise area as the site of initial effort.

In the distant future I hope that we will be able to obtain financial grants for gravity meter and airborne magnetometer surveys for portions of the Basin and Range province of southern Arizona, particularly Cochise and Yuma counties.

32×11

January 7, 1971

TO: J. R. Scurlock

FROM: J. N. Conley

SUBJECT: TENTATIVE FORECAST OF PROJECTS AND TIMING

### **Projects**

- 1. Sample catalogs
- 2. County maps showing location of all geologically critical boreholes and keyed list of such holes
- 3. Series of regional correlation cross-sections Plateau province
- 4. Regional structural and isopachous maps Plateau province
- 5. Detailed geologic investigations of local areas in Plateau province on non-Indian lands that offer traps favorable for hydrocarbon or helium accumulations
- 6. Magnetic and gravimetric investigations of most promising areas of interest developed by Project 5

### Timing

- Project 1 Can be completed by May 15, 1971 or sooner.
- Project 2 Can be completed for most of the counties in the state prior to May 15, 1971. Apache, Navajo and Coconino counties can be completed by December, 1971, or sooner.
- Project 3 Can be completed for most of the overall Black Mesa basin by May 15, 1972.
- Project 4 No firm estimate can be made as to final completion date; some of the maps can be prepared in preliminary form, however, by December, 1972. Integration of all maps, cross-sections, surface control, geophysical control, sample examinations, and preparation of manuscript will possibly require 24 to 30 months total time.
- Project 5 No estimate of total time; dependent to large degree upon results of Project 4.
- Project 6 No estimate of time.

Page 2

#### DISCUSSION

#### Project 1

- (a) Catalog of all samples of well-cuttings and cores of holes drilled in Arizona for oil, flammable gas, helium and stratigraphic information. Location of samples, Phoenix or Tucson, to be shown.
- (b) Catalog of all samples of well-cuttings and cores of holes drilled for water or rock mechanical information (Bureau of Reclamation dam sites, Highway Department bridge sites, etc.), deep enough to furnish significant geological information.
- (c) Catalog of samples of critical holes drilled in states adjacent to Arizona.

A format for the catalog has not been determined. It should list: 1) Name(s) (a) of operator, farm name(s), location (county, township, range, section and quarter section); 2) total depth of well; and 3) O&GCC permit number, if permitted. Some sets of samples are complete; most are not. It would be desirable to indicate the actual footage intervals. Determining this information would be a tedious and time-consuming job, and may not be necessary.

Operator's name and farm name on samples frequently differ from names reported to the O&GCC. In some instances it might be helpful to list both sets of names.

# Project 2

Preparation of county maps showing all oil, flammable gas, helium and strat holes that we know about. These maps should also show water wells in sparsely drilled areas for which there is some geological information available, such as samples, lithologic logs or descriptions, and electric logs. The wells on the map will be numbered, and type indicated by appropriate symbols. A tabulation on the right side of the map, keyed to the well numbers, will present information as to name, OXGCC permit number (if permitted), elevation, total depth, and location within the quarter section. If the quarter section location is standard, it will be so indicated by the customary letter designation (example, NW NW); if irregular, the actual footage figures will be listed. It may be desirable to also show the age of the rock at total depth.

Based on a recent 'phone conversation with Wesley Peirce, it appears that the Bureau of Mines will have suitable base maps. The bases utilized by the Bureau (scale 1" = 6 miles) would be excellent for our purposes as to overall dimensions, sufficiently large scale to allow accurate posting, and reference by users to the county geologic maps at the same scale. In a few comparatively densely drilled areas, such as Pinta Dome, Navajo Springs, East Navajo Springs, Dineh-bi-Keyah and the Four Corners area, it may be necessary to prepare inserts at a larger scale.

Project 2 cannot be fully completed by May of this year because of the large number of water wells involved. For example, the Arizona State Land Department's

092

32× 🖠

Page 3

Water Resources Report, Number Twelve-A, Part 1, Records of Ground-Water Supplies, April, 1963, lists more than 2100 wells. Part 1-A, a supplemental list published in November, 1966 has more than 1100 wells. Many wells have been drilled since 1966. Checking these lists to determine which wells warrant posting on the maps will require considerable time. Posting as accurately as possible will also be a time-consuming task.

In addition to presenting the water well control in a manner that an exploration geologist can effectively utilize, this particular project will be of great value in subsequent geological investigations. A large number of wells bottom in Permian, Permo-Pennsylvanian and Pennsylvanian rocks; a few reached Mississippian and older rocks.

### Project 3

In my opinion some regional geological investigations of the Plateau province must be made before any localized or semi-localized investigations are attempted on non-Indian lands. Turner, McKee and Peirce, and probably some other investigators, have published some isopachous maps of several systems or portions of systems in the Plateau province. These and other authors have published a few correlation and structural cross-sections, and paleogeologic maps. With the exception of a limited number of the cross-sections, all of the published material has been highly generalized in nature, and of limited value to an exploration geologist. I have not noted any published subsurface structure maps, with the exception of Scurlock's Coconino map.

One of the first absolute requirements in preparing structural and isopachous maps is the determination of correlatable formation tops and markers within the various geologic systems present in an area. The best approach to this problem is the preparation of numerous correlation sections, utilizing electric, radioactivity and lithologic logs. In addition to establishing reliable markers for various types of structural studies, such sections help resolve formational boundary and nomenclature problems. They frequently reveal or furnish clues to facies changes, local pinchouts, regional depositional and erosional boundaries, paleogeomorphic features such as limestone reef buildups and sand bars, shoreline "standstills" offering favorable environments for sandbar development, deltas, anomalously thin or thick intervals, reservoir zones, and collapsed sections resulting from salt solution. All of these items are of significance in searching for traps offering hydrocarbon accumulations.

### Project 4

The number and types of subsurface maps to be prepared under this project will be largely dependent upon the results of Projects 2 and 3.

# Projects 5 and 6

Dependent upon results of Project 4.

For all of the projects except 1 and 2 the fact that some investigations will be non-productive of material that can be published, but time-consuming nevertheless, must be kept in mind.



# Oil and Gas Conservation Commission

STATE OF ARIZONA

4515 NORTH 7th AVE.

PHONE: 271-5161

January 8, 1971

TO: James R. Scurlock

FROM: J. N. Conley

SUBJECT: Sample Library - Arizona Boreholes - Status Report

To date 498 sets of the samples from the Museum of Northern Arizona have been inventoried. They consist of:

OAGCC permitted boreholes (oil, flammable gas, helium and stratigraphic tests) 259

Non-permitted boreholes (oil, flammable gas, helium and stratigraphic tests) 74

Boreholes drilled for water or rock information in connection with dam sites or bridges 165

Approximately 20 sets of samples indexed by MNA have not been found to date. A few sets of samples (water wells), several crates of cores and some samples of holes drilled in meteor craters have not been inventoried.

No attempt has been made yet to check the contents of several boxes reportedly containing duplicate sets of samples in several states. An inventory of these samples will be made in the near future, as some of them may be of wells in Arizona.

Two preliminary master lists have been prepared. One lists all O&GCC permitted wells in numerical order. It shows the location of the wells geographically, name, MNA sample number, and the location of the samples in our storage room. The MNA sample numbers have been added to the data sheet in our permitted well file.

The other list consists of all non-permitted boreholes drilled for oil, flammable gas, helium, and stratigraphic information plus those drilled for water or other purposes. This list also shows the geographic location (if known) name, sample number, and the location of the samples in our storage room. The total depth of the samples has been added to this list, to facilitate future selection of those that we may wish to examine microscopically for subsurface geologic information.

Page 2

Memo Continued

The Museum of Northern Arizona gave the Commission its ledger listing samples in their library and a cross-indexed card file system. All of the cards in the geographic file (section, township and range within the four quadrants of the state) have been checked against the Commission's well permit files as to correct location and total depth. Our permit numbers have been added to the cards.

We are now checking the alphabetical cards, which are filed by operator's name and farm name, with a cross index to the geographical location cards. These cards are being corrected, when necessary, to conform with the location card.

No attempt has been made yet to inventory the out-of-state samples.

AN

**AGÉNCY** & Gas Cons ~vation Comm. DIVISION **IDENTIFICATION CODE NO.** CLAIMS PAID OBJECT CLAIMS PAID DISTRIBUTION OF EXPENDITURES YEAR TO DATE CODE NO. MONTH OF **CLASSIFICATION** Dec, 1970 1,220 00,7111.0 1 Per diem: board members 15000 30 99/00 7112.0 <sup>2</sup> Salaries, wages: employees 6,429 00 <sup>3</sup> <u>Industrial</u> Insurance .7151.0 922 39 7153.0 4 F.I.C.A. 1.536 94 7155.0 <sup>5</sup> State Retirement 321.48 7159.0 6 Personnel Commission 7 Professional Services - Engineer 7215.0 7219.0 8 Professional Services - Court Reporter 73414 7221.0 9 Travel - State: Mileage 1,389 25 7222.0 : 10 Subsistence 22416 Public Transportation 11 11 43232 7224.1 12 Gas - 011 12 \_\_\_113 52597225.0 Reg.Fees, Tel, Rental, etc. Preventative Mtn. 45.16 7224.3 14 5/32 7224.4 15 Repairs (Usage) 100,00 7224.5 16 Repairs (Damage) 16 100 00 3088 7224.6 56536 7232.0 17 Strg, Parking, Washing, etc.17 18 Travel - Out of State: Subsistence 18 19 693 22 7233.0 Public Trans., Taxi, etc. 19 14/130 7239.0 20 Reg. Fees, Telephone, other 20 30 00 9,247 3c 7251.0 21 Occupancy: Rent 21 783 15 7253.0 Maintenance & Repairs 22 Other (Misc. Rental) 23 Repair Furniture 24 25 Maintenance & Repairs: 25 45 45 7272.0 26 Furniture & Equipment 7272.1 27 Maintenance Typewriters 7272.2 28 28 Overhaul Typewriters 4956 7272.4 29 Repair Adding Machines 30 28 08 7280.1 31 Printing Stationery 1900 7280.2 <u>32 Printing Forms</u> 32 7280.3 33 Carbon Paper & Typewriter Ribbons 33 47976 7280.9 34 Other Misc. Office Supplies 34 7296.3 35 Coarse Paper (Towels, etc.) 36 Janitor Supplies 35 48 05 7296.0 7296.5 37 Brooms, etc. 7296.6 38 Light Bulbs, etc. 38 449507300.0 39 Film, Field Supplies, Tools, under \$10 86 80 60 38 7349.0 40 Rental, Misc. 43 28 414 25 7333.0 495 40 7332.9 41 Printing, Other 41 228,00 42 Court Reporter 42 777 72, 7335.0 43 Stamps 43 44 Telephone <sup>45</sup> Drayage 46 Rental Equipment 45 3,289,87,7337.0 342,00,7342.2 46 30 00 7360.0 780 06 7431.1 47 Dues & Subscriptions 47 48 Capital Outlay: Typewriter 48 2,470 95 7431.4 772 14 7431.5 4,51441 7436.1 Desks, Tables, Chairs, etc. 49 Files, Storage Cabinets, etc50 Passenger Cars\_\_\_\_ 40567490.0 Misc. (Blackboard) 53 Revolving Fund 53 25000 7913.0 700 00 7912.0 54 Transfer to Other Funds 54 <sup>55</sup> Capital Outlay: Outdoor Sign 55 12000 7410.0 65 34197 12,383 00

€;

O

STEERS AND A

: New Market

i	RECEIPTS MONTH OF	70	RECEIPTS  CLASSIFICATION			APPROPRIATED RECEIPTS		UNAPPROPRIATED RECEIPTS		TOTAL ALL RECEIPTS YEAR TO DATE	
=	-0-		1 Permits to vrill	- <u></u> -	-	· · · · · · · · · · · · · · · · · · ·		-0-		125	1
-			2								
_			3								
_			4								
_			_ 5								L
_			6								
			_7	<del> </del>						, - <del></del>	
_			8								ļ
_			9								ļ
_			10								ļ
-			11								<del> </del>
_			12					-			}
-			13							! !	+-
	·		15	<u>.</u>						 	
-			16			<del>-</del>		<del></del>			╁─
-			17	•						į ————————————————————————————————————	$\dagger$
-	-0-		TOTAL CURRENT MONTH RECEIPTS					- 0-		XXXXX	1
-	-0-		TRANSFERS TH. Prev. entered in					700			1^
-	XXXXX	X	BALANCES BROUGHT FORWARD				<del></del> -	100	70	XXXXX	<b>∤</b> √
į-			TOTALS - MONTH AND YEAR TO	O DATE							1
		<u></u> :						1,920	06	".ss://www.c/ 562.2	155
l	6		7	8		9		10		11	
ľ	CLAIMS PAID		EVDENDITUDES	TOTAL AMOUN	r	· -				1	===:
	MONTH OF		EXPENDITURES	AVAILABLE		CLAIMS PAID		OUTSTANDIN		UNENCUMBERED	1
	19		FUND TITLES	YEAR TO DATE	.	YEAR TO DA	16	ENCUMBRANC	ES	BALANCE	
L	6,579	00	1 Personal Services	40,185	00	32,2//	00			7,974	00
	514	76	2 Emp. Related Exp.	3 644	50	2,449	.3.3			1,195	
_	2.27/	68	g utner uperating Exp.	17 215	00	17,245	7.5	423	99	125	
L	-0-		<u>4 Prof. &amp; Outside Serv.</u>	1,500	00					1,500	
١.			5 Travel - State	4000		2,962	76	9/3	12		
	43/	87	6Travel - Out of State	1.750						350	
	2,028	25	7 Cap. Outlay - Equip.	8 700	00	8,698	12			/	88
ļ.		-	8 Consery. Fund - Other 9 Operating Exp.	1,770	00	353	19	421	37	993	4
-			9 Operating Exp.						<u> </u>		辶
ļ.	<del> </del>	<b></b>	10						<u> </u>		<u> </u>
-		ļ	11						ļ		┷
-			12			ļ			ļ	<u> </u>	丄
-		<del> </del> -	13			 	<b> </b>	ļ			╀
-		<del> </del>	15								4-
-		<del> </del>	16				_	<del> </del>	-		-
-	<del></del>	<del> </del>	17		<u> </u>	<del> </del>		-	<del> </del>		
-		<del> </del>	18				-	<del> </del>	┼	1	+
	· · · · · · · · · · · · · · · · · · ·		19	<del> </del>		<del> </del>	-	· <del> </del>	<del> </del>	<u> </u>	+
•	<del> </del>	<del> </del>	20		· ·	<del> </del>	<del> </del> -	-		<u> </u>	
-	·	ļ	21	<del> </del>	-	<del> </del>	<del> </del>	<del> </del>		<del> </del>	+
			22	<del> </del>		<del> </del>	<del> </del>	<del></del>	+	<b> </b>	+-
ĺ			23			<del> </del>			<del> </del>	-	+
	<del></del>	1	24	<del> </del>			1-	<del> </del>	-		-}
ľ		1	25			<del>                                     </del>	<del> </del> -	<del> </del>	†	<u> </u>	+
ľ			26			<del> </del>	1	† <del></del>			+
١			27		i		1	·	+	<b>  </b>	+-
ĺ			28		<u> </u>						+
ĺ			29				1		1	1	+
ĺ			30		i	<del></del>			-		+
	12,383	bo	TOTALS	79 314	3-1	65,341	97	1,758	110	12,264	1,
				<u></u>	<u></u>	<u> </u>		· 1, 138	<u>. 70</u>	"!~!\~\!\ <u>\</u>	, , , ,
	AGENCY_	011	& Gas Conservation Comm	ı. iDE	MTIE	ICATION CO	DE N				

\_\_ IDENTIFICATION CODE NO.