

OIL & GAS CONSERVATION COMMISSION
Meeting: October 15, 1969
Mr. John Bannister, Exec. Secy.



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

A G E N D A

Meeting
 October 15, 1969
 Room 204, Arizona State Office Bldg.

10:00 a.m.

Hearing, Case 39
 Consolidated Oil & Gas, Inc.

*Postponed until
 1-21-70 JB*

Immediately
 following
 Hearing

Call to order 10-AM

- OK* 1. Approval of minutes of meeting of September 17, 1969
- ✓* 2. Executive Secretary report
- ✓* 3. Geologist report
- 4. Old business ←
- 5. New business - Salary Implementation
- 6. Adjourn

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

OIL AND GAS CONSERVATION COMMISSION
1624 West Adams - Suite 202
Phoenix, Arizona 85007

Minutes of Meeting
September 17, 1969

Present:

Mr. Ralph W. Bilby, Chairman
Mr. Kenneth G. Bentson, Vice Chairman
Mr. George T. Siler, Member
Mr. Lucien B. Owens, Member
Mr. Frank E. Moore, Member
Mr. John Bannister, Executive Secretary
Mr. James R. Scurlock, Geologist
Mr. James A. Lambert, Administrative Assistant
Dr. Willard Pye, University of Arizona

Chairman Ralph Bilby called the meeting to order at 10:00 a.m.

The minutes of the previous meeting were approved.

Reports of the Executive Secretary and Geologist were accepted.

The Executive Secretary reported that the Economic Planning and Development Board indicated they are in favor of the Commission playing an expanded role in the development of the industry and have expressed their desire to assist in any way possible.

Discussion was held on the possibility of the Commission making promotional trips out of the State.

The budget for the fiscal year 1970-71 was discussed in detail.

Meeting adjourned at 11:45 a.m.

APPROVED October 15, 1969



Ralph W. Bilby, Chairman



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

October 7, 1969

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

Consolidated Oil and Gas, Inc., has made application to re-enter the old Shell #2 Navajo well located in the SE/4 NW/4 of Section 3, Township 41 North, Range 28 East, and to dually complete the well so as to (a) produce oil from the Akah formation and (b) to continue producing gas from the Ismay and Desert Creek formations. In addition to the dual completion of the well, they are asking for this location to be approved as an unorthodox location for the Akah formation oil production.

This area is in the East Boundary Buttes field wherein we authorized an unorthodox location at our last meeting for A.A.A. Fishing Tool, Inc. The location of this well as a gas well and the dedication of 640 acres to the gas production is satisfactory, however by producing the Akah formation from this well would constitute an unorthodox location for oil production, particularly considering that there is a Consolidated well (same company) in the adjoining south 40 acres. Consolidated will, I am sure, point out that to allow them the unorthodox location for an oil well will permit greater recovery of oil in that it would not be economically feasible to drill a well solely for Akah production.

I anticipate that Humble will probably oppose Consolidated's request. I have had detailed discussions with Humble oil concerning development of this East Boundary Butte field and I indicated to them that should the operators in this field not take the initiative to bring about an orderly development situation, this Commission must in the near future (January or February) call, on its own motion, a hearing to outline this field and to establish specific field rules governing location, casing program, etc. etc.

If the Commission chooses to grant Consolidated's request it would,

at this time, put two oil wells, i.e., the #2 Navajo, the subject of this hearing, and the A.A.A. Fishing Tool well, off pattern. This situation could be accepted. However, if this exception is allowed, I feel certain that Humble will request permission to dually complete its #1 Navajo well located to the south and east of Consolidated's well and we would really have no reason to deny this request. It is my personal feeling that at this state in the development of Arizona's oil and gas industry any reasonable effort the Commission can make to increase production of oil and gas is in the best interest of this State in that the more production we can report the more encouraging it is to the companies to come into the State.

As above indicated, in my talk with Humble I urged they lead the way in attempting to unitize this field, consequently I feel we could grant the current request and, in a later hearing on the field, take into cognizance the two irregularly located oil wells as exceptions to the then to be established field rules.

Consolidated probably does have a legitimate argument that this would result in the ultimate recovery of more oil at a smaller cost.

I hope we can informally meet in my office prior to the hearing to discuss this at somewhat greater length.

Shortly after our last meeting a report appeared in the local newspaper concerning our budget. I consequently contacted Stan Womer of the Governor's office and briefly explained to him what the Commission is attempting to do and why, and explained to him that at some later date we would request an appointment with the Governor to explain our plans in detail. Mr. Womer indicated his support of the Commission's position. I have had numerous phone calls from various people connected with the oil and gas industry and all have indicated their unqualified support of our proposed increase and its purpose.

As you are aware, in the Glendale area somewhat northwest of Phoenix a large salt dome has been discovered. El Paso Natural Gas Company has indicated an interest in washing this dome out to create underground gas storage. The salt area lies in the vicinity and below the water aquifer from which Luke Air Force Base draws its drinking water. It has recently been announced that the Southwestern Salt Company has been formed to produce the salt from this dome for local commercial consumption.

Colonel E. L. Marcum, presently Vice Commander of Luke Air Force Base (will become Commander in November) wrote to Obed Lassen, Land Commissioner, indicating great concern of the Air Force of the potential contamination of the source of their drinking water. Mr. Lassen, after studying the problem and after consultation with me, is going to recommend to Governor Williams that this operation

be placed under the Oil and Gas Conservation Commission for supervision, citing as authority A.R.S. 27-501.20 wherein the term "well" as used in the statute is defined and wherein authority is given this Commission to protect the best interest of the State by determining any hole drilled or spudded shall be included under us, and specifically referring to Section 27-516 wherein, under our powers to establish rules and regulations, we are charged with seeing all drilling, casing and plugging of wells shall be done in a manner to "prevent pollution of fresh water supplies by oil, gas or salt water".

I anticipate that by the time of our meeting we will have been ordered by the Governor to assume regulatory control of this situation. Consequently, I have had an unofficial talk with Colonel Marcum and have arranged that the President of Southwestern Salt Company, Luke Air Force Base engineer, U.S.G.S., and Jim Scurlock meet informally on October 13th at the site to consider the problem together. I have carefully explained that at this time we have no official standing but are attempting to work together with all parties concerned to bring about a suitable situation for the benefit of all.

The most potential problem seems to be the pits into which the salt brine will be placed for evaporative purposes and the potential danger of the pits leaking and cracking and consequently allowing brine to percolate into the fresh water aquifer. It has been noted that there is already some subsidence in the area due to ground water withdrawal.

A potential solution to this problem would be to cement all evaporative pits and to require the placing of a plastic liner on top of the cement. (This is a standard oil industry procedural method in handling the same problem and works quite satisfactorily.)

However, until we have a full report of the situation, no determination, of course, can be made. In my talk with Colonel Marcum I indicated I would personally contact him at a later date once we have the facts in hand and make certain he is fully satisfied with any action this Commission may take.

It is to be noted that the first permit for a well in Gila County has been granted by this Commission. This well will be located some three miles north of Roosevelt Lake. This deal has been put together by Mr. Gene Carpenter, a geologist who has primarily operated in the eastern portion of the country, however I feel the test has considerable merit.

On Friday, October 3rd, the Phoenix Gazette printed an article concerning Arizona's oil and gas which I felt was most favorable to the Commission. It commented somewhat upon the Commission's desire to "push oil and gas exploration".

Your cooperation in reducing long distance telephone calls is requested. You will recall that in many cities around the State there are local numbers whereby, for the cost of a local call, you can get the Capitol operator and be transferred to this office. If you are not within one of these areas, it is requested you call the office on your credit card but, should the call appear to be of long duration, allow us to call you back on the WATS line. By using the WATS line to the fullest extent, we can greatly reduce the expense of our telephone calls.

I am placing in your folders a study of the Pedregosa basin covering southeastern Arizona and the southwestern basin of New Mexico. This is an area which has been responsible for the recent leasing activity in Cochise County.

New Permits:

- 517 - Continental Energy Corp #E-2 Navajo (8821), SE/4 SW/4 19-36N-30E, Apache County.
- 518 - Consolidated Oil & Gas #2-11 Navajo (227), SW/4 NW/4 11-41N-28E, Apache County.
- 519 - Union Oil of California #1-11 Navajo (643), SE/4 SW/4 11-36N-29E, Apache County.

October 8, 1969

You have been advised that Case 39 referred to in Page 1 of this report has been rescheduled until January 21, 1970.



OFFICE OF
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STATE OF ARIZONA
ROOM 202
1624 WEST ADAMS
Phoenix, Arizona 85007
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October 7, 1969

GEOLOGIST'S REPORT

FROM: JAMES SCURLOCK
TO : COMMISSIONERS

APACHE COUNTY

Consolidated #2-11 Navajo (227)

T41N, R28E, G & SRM

Sec. 11: SW/4 NW/4

Permit #518

East Boundary Butte Field

Still a location. Ground elevation is 5474'.

Consolidated Oil & Gas #3-3 Navajo (226)

T41N, R28E, G & SRM

Sec. 3: SW/4 SW/4

Permit #514

East Boundary Butte Field

DST #1 4681'-96'. Open 30 minutes. Shut in 30 minutes. Tool open again for 180 minutes. Gas to surface in 2 hours, too small to measure. Final shut in 60 minutes. Pulled tool and recovered 1680' of heavily gas-cut and slightly oil-cut mud.

IH 2429

FH 2436

IF 264-440

ISI 1573

FF 483-791

FSI 1443

DST #2 4725-4773' (Desert Creek Zone). Tool open 30 minutes, shut in 30 minutes; open 3 hours, gas to surface immediately. After 30 minutes flow gauged at 28 MCFPD. After 60 minutes flow gauged at 18 MCFPD. Pulled tool and recovered 1070' of total fluid:

120' of heavily gas-cut mud

710' of free oil

240' of water-cut oil

1070' total recovery

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Geologist's Report
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Consolidated Oil & Gas #3-3 Navajo (226) (Cont.)

HH 2267-2267
FP 175-175 (30 minutes)
ISIP 1227 (30 minutes)
FP 175-395 (180 minutes)
FSIP 1227 (60 minutes)

DST #3 4800-4851' (Akah). Open 15 minutes. Shut in 30 minutes. Open 120 minutes. Final shut in 30 minutes. Recovered 930' of fluid consisting of:

186' gas-cut mud
120' gas and oil-cut mud
394' highly gas and oil-cut mud
230' highly gas and oil-cut water
930' total recovery

Pressures:

IHP 2354 psi
FP 175-219 psi (15 minutes)
ISI 1401 psi
FF 307-439 psi
FSI 1271 psi
FHP 2311 psi

Total depth 4853' (corrected depth). Ran Induction Electrical Log, Gamma Ray Log, Acoustic and Microsiesmogram Logs. Perforated Akah zone from 4837-4843. Treated perforations with 1000 gallons of 15% HCL acid. Swabbed and recovered water with a scum of oil. Perforated 4746-56' and 4698-4706'. Spotted acid across lower Desert Creek perforations 4746-56'. Swabbed and recovered 128 barrels of fluid (100 barrels of water plus 28 barrels of oil) in 9 hours. Acidized perforations 4698-4708' with 15 gallons of mud acid. Flowed 118 barrels of fluid, 70% oil (82.6 barrels of oil plus 35.4 barrels of water). Acidized well with 4000 gallons of mud acid. Heavy paraffin in tubing. Will cut paraffin and swab well.

Humble #3 Navajo (413)
T41N, R28E, G & SRM
Sec. 4: SW/4 SE/4
Permit #515

East Boundary Butte Field

Ground elevation 5400'. KB elevation 5410'. Set 8-5/8" casing

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Geologist's Report
October 7, 1969

Humble #3 Navajo (413) (cont.)

at 995'. Set 5-1/2" casing at 5000' with 178 sacks.

Formation tops:	
Coconino	1952'
Organ Rock	2334'
Cedar Mesa	2919'
Hermosa	3914'
Ismay	4573'
Desert Creek	4737'
Akah	4839'

Ran Induction Electrical and Sidewall Neutron Porosity Caliper Logs. Perforated 4848-52' and 4862-66'. Acidized with 1500 gallons of mud acid. Plugged back to 4965'. Swabbed 5 barrels of oil, 31 barrels of water in 24 hours. Acidized with 5000 gallons of regular acid. Currently swabbing.

Little #1 Navajo 2193
T40N, R28E, G & SRM
Sec. 9: NW/4 NW/4
Permit #513

Spudded 9-14-69. Contractor is Mesa Drillers. Set 9-5/8" at 195' with 110 sacks. Elevation 5837' ground.

Formation tops:	
Cutler	2500'
Hermosa	4155'
Akah	5030'

DST #1 5110-5163'. Tool open 2 hours. Recovered 200' slightly oil and gas cut drilling mud.

ISIP 266 psi (45 minutes)
FSIP 889 psi (1 hour)
IFP 89 psi increased to 111 psi
FFP 89 psi
HP 2431

Bottom hole temperature - 122° F.

Currently drilling at 5592. Expect the top of the Mississippian about 5685'.

Monsanto #1 Navajo 717
T39N, R29E, G & SRM
Sec. 1: SE/4 SE/4
Permit #503

Top of the Ismay 6908'. Top of the Akah 7118'. Base of the Akah 7406'. Well is running 671' high structurally to the Pan

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October 7, 1969

Monsanto #1 Navajo 717 (Cont.)

American Navajo Moko (Section 15-T40N-R29E) which lies 6 miles to the northwest. Currently drilling at 7406'.

Continental Energy #E-2 Navajo
T36N, R30E, G & SRM
Sec. 19: SE/4 SW/4
Permit #517

Dineh bi Keyah Development Field Well

Contractor: Signal Oilfield Service. Supd 9-27-69. Ground Elevation 8620'. Drilling at 72'. Farmout from Kerr-McGee Corporation. This location would appear to be an edge well; that is, located near the edge of the productive sill.

Thoureen #1 Santa Fe
T21N, R26E, G & SRM
Sec. 27: NE/4 SW/4
Permit #504

"TIGHT HOLE"

Total depth (corrected) 1237'. Set 7" casing at 31' with 6 sacks. Set 4-1/2" at 1226' with 75 sacks. Shut down. Will attempt Shinarump completion.

Thoureen #1 Navajo 1767
T21N, R25E, G & SRM
Sec. 25: NE/4 SW/4
Permit #505

"TIGHT HOLE"

Drilling at 880'.

MOHAVE COUNTY

Harris #1 Federal 2758A
T38N, R7W, G & SRM
Sec. 29: NW/4 NE/4
Permit #502

Well had been shut down for some time at a depth of 350'. Drilling in chert at 4 to 5 feet per day. Working days only. Have to re-shape cable tool bit about 3 times per day. Presently drilling 10" hole at 380' in the Timpowep formation.

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Geologist's Report
October 7, 1969

SCUTTLEBUTT:

I will represent the Commission as an unofficial observer at a meeting of Luke Air Force Base engineers with Southwest Salt Company at the well site (Southwest #1 Salt Test, SW/4 SW/4 of Section 2, T2N, R1W, Maricopa County) on Monday, October 13th. Luke Base which has two water wells in the immediate area is concerned lest the brine well cause their fresh water wells to be contaminated.

The salt well, which was drilled to approximately 4500' penetrating roughly 3600' of Halite salt (NaCl), appears to have been well cased; however, the USGS thinks that there is a possibility of contamination of the fresh water aquifers (which in this area lie at a depth of about 600') by the seepage of the brine waters from the evaporating ponds. At present the ponds are being excavated and lined.

El Paso Natural Gas Company, which supported the drilling of the salt well, plans to excavate on the order of 10 million tons of Halite from this salt deposit in order to provide underground gas storage along their pipeline which lies close at hand. Southwest Salt Company plans to market the salt locally.



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Phoenix, Arizona 85007
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October 2, 1969

To : Commissioners
From: J. A. Lambert, Administrative Assistant

MEMORANDUM REPORT

Navajo Tribal Lands

Oil and Gas Lease Sale held at Window Rock, Arizona, September 16, 1969.

There were 114 tracts containing 102,294.94 acres offered at the sale. Thirty-five tracts (26,485.92 acres) were sold. Twelve tracts were located in Utah, 27 tracts were located in New Mexico and 75 tracts were in Arizona. Phil McGrath, Division Petroleum Engineer for USGS, was the BLM official present. P. K. Hurlbut, Mineral Officer for the Navajos with his staff members Harry Tome, Jeffrey Henry and Ernest Gilbert, attended the sale. BIA officials Tommy Lynch and Wilson Barbour conducted the sale.

Arizona Lands

There were 75 tracts containing 75,119.80 acres. Twenty-one tracts were sold containing 17,734.00 acres. The 21 tracts brought a total of \$73,111.03 to the Navajos plus a first year rental of approximately \$22,167.00.

The highest bid on Arizona land was \$8.19 per acre made by Skelly. The lowest successful bidder was Texaco who bid \$2.60 bonus per acre for one tract. The average high bonus per acre bid was \$4.13 up from the \$3.42 average received at the February 27, 1969, sale.

Curtis Little was an active bidder, winning each of the 5 tracts he bid. El Paso Natural Gas Company was a successful bidder on 5 tracts. Thomas Congdon, Skelly, W. T. Blackburn each won 3 tracts, M. P. Grace won 1 tract. A Depco-Midwest Petroleum Company-Occidental combine were unsuccessful bidders.

R E C A P

Oil and Gas Lease Sale
Navajo Tribal Lands Within Arizona

Offered 75 tracts - 75,119.80 acres
Taken 21 tracts - 17,734.00 acres

Total bids received 36
Total bids successful 21

Average price per acre \$4.13

Low bid: Texaco
\$2.60 per acre

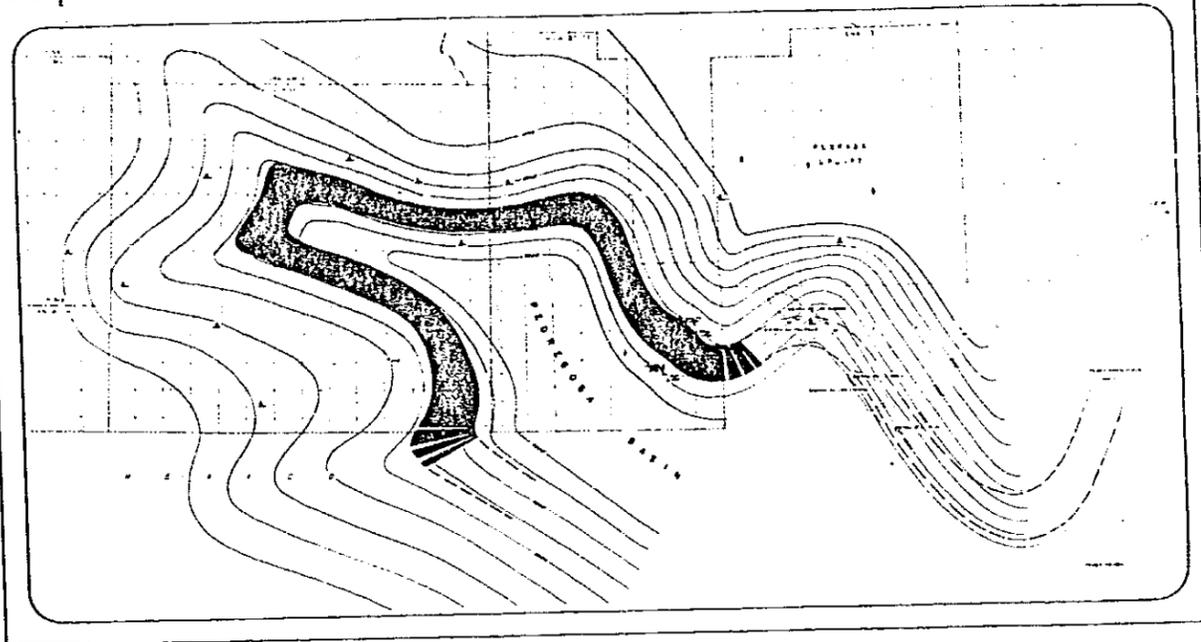
High bid: Skelly Oil Co., Tulsa,
Oklahoma.
\$8.19 per acre

Proceeds to Navajos - approximately \$95,000.00

Successful Bidders

Name	No. of Tracts	Won
1. Curtis Little	5	5
2. El Paso Natural Gas Co.	6	5
3. Congdon	4	3
4. Skelly Oil Co.	3	3
5. W. T. Blackburn	7	3
6. M. P. Grace	3	1
7. Texaco	2	1
8. Depco Combine	6	0

Map of the Miss-Hueco



Oil and gas in the Pedregosa basin

THE PEDREGOSA basin is located in southeastern Arizona, southwestern New Mexico, and then southeastward into Mexico.

It is more than 200 miles northwest-southeast and 150 miles northeast-southwest. A total sedimentary section is not present at any point, but an excess of 25,000 ft of Paleozoic, Mesozoic, and Tertiary sediments will be found in the deeper parts of the basin.

The most important fact about the Pedregosa basin is that in Paleozoic time it was similar to the well-known Midland and Delaware basins of West Texas and New Mexico.

From that statement, some startling facts are obvious.

Many data are available and many oil and gas fields have been found in the Midland and Delaware basins.

In the latter, more than 15 billion bbl of oil and many tens of trillion cu ft of gas have been recovered to date and exploration of parts of the Delaware basin is still in a youthful posture; i.e., only the big bull seismic anticlines and the surface highs have been drilled. A similar prize may be present in the Pedregosa basin.

EUGENE GREENWOOD
Midland, Tex.

Another important fact is that the source rock, reservoir rock, and in part, some of the trapping mechanisms are identical with those documented in the West Texas fields.

Once this is realized, exploration for oil can proceed with many of the same techniques that have made West Texas one of the leading oil provinces of North America.

There are differences between the basins after Paleozoic time and these must be understood and allowance made in an exploration program. I know of no geologist who has worked the Pedregosa basin that believes that oil or gas fields will not be found there.

On the contrary, the most enthusiastic boosters for the basin are Arseno Navarro and Santiago Reynolds geologists with Pemex of Mexico, Drs. Frank Kottowski and Roy Foster of the Bureau of Mines of New Mexico, and Dr. Wesley Pierce of the Bureau of Mines of Arizona, and the inde-

pendent and major company geologists who have worked the basin in detail.

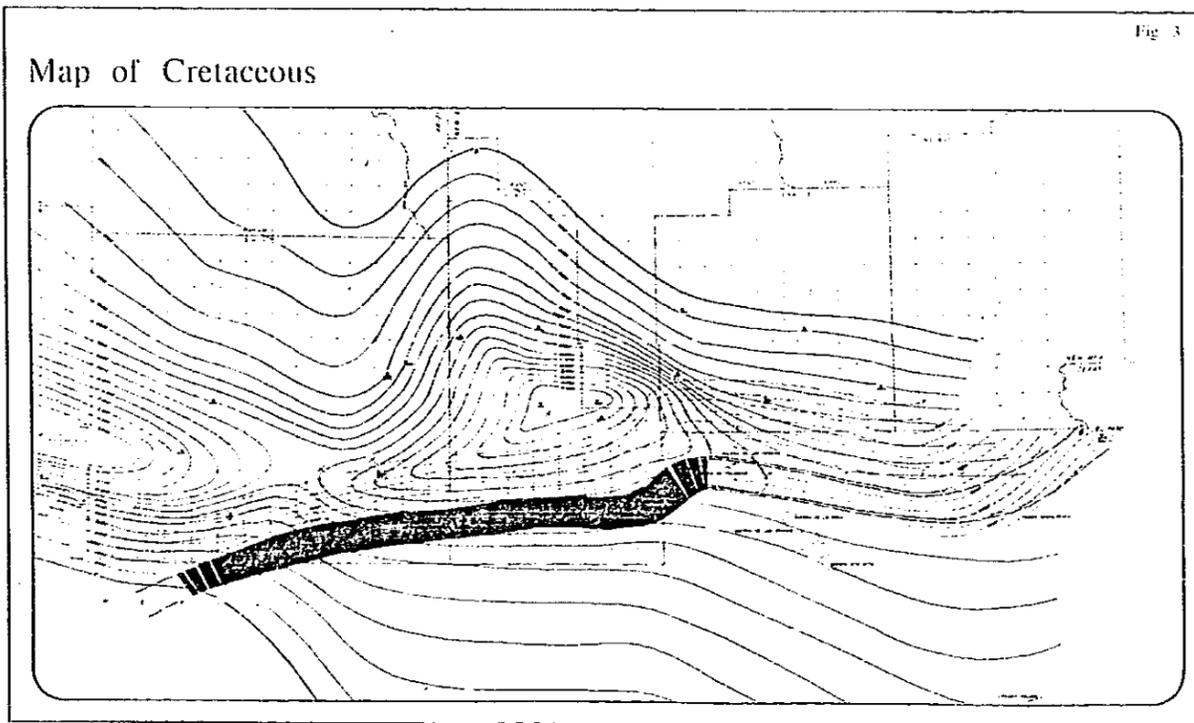
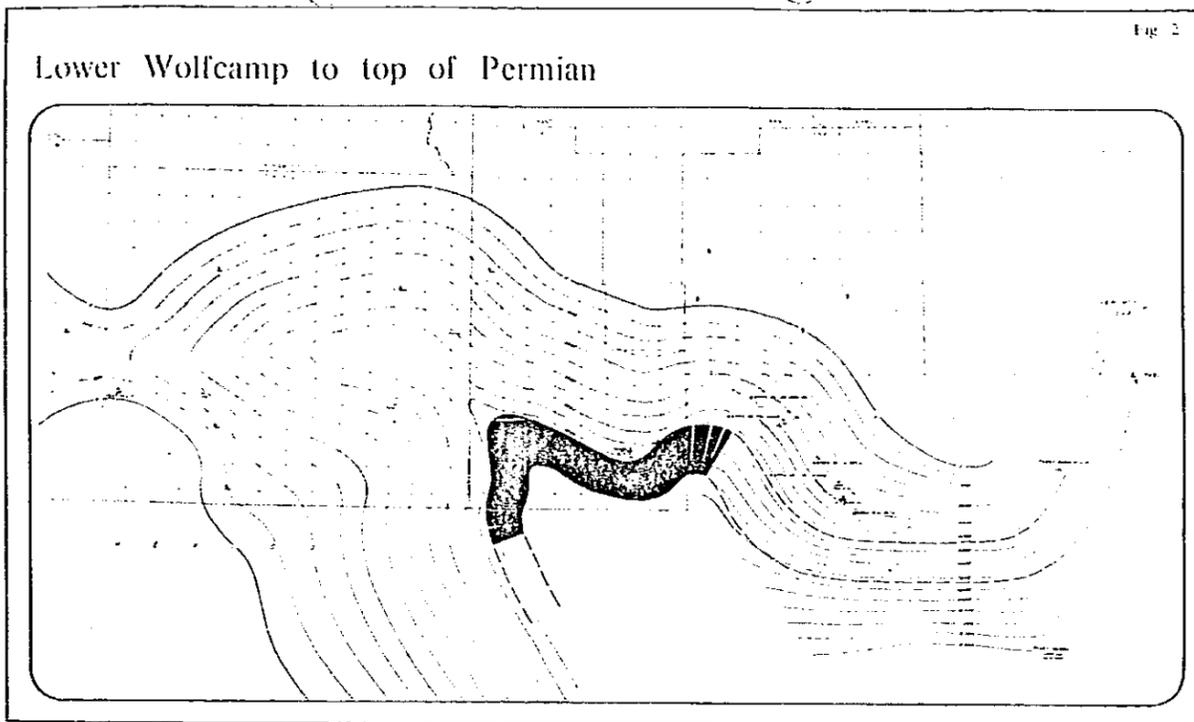
Many oil companies have acquired leases in 1968-69 with some acreage selling for \$5/acre.

A majority of the more favorably located acreage has been leased. Major companies with the largest leaseholds in the Pedregosa basin are, Sun, Amerada, Humble, Standard of Texas, Mobil, Forest, Gulf, El Paso Natural Gas, Conoco, etc.

Among the largest leaseholds owned by Independents, are E. Cochrell of Houston, who announced a four-well drilling program, J. H. Essman and Mike Roberts of Midland, and Virginia Oil & Gas of Abilene, Tex., who has approximately 25,000 acres in southeast Cochise County and are reported to be planning to drill at least two tests.

A group geophysical shoot by GSI with 10 companies picking up the tab is trying to establish regional subsurface control to add to the sparse well control.

A major company that belongs to the group effort also has a crew of its own trying to evaluate extensive



holdings. In Mexico seismic surveys are actively proceeding and a drilling program has been initiated.

Although subsurface data are sparse some data are available. The two deepest wells are the 14,503 ft Humble 1 State B. A. located in southern Hi-

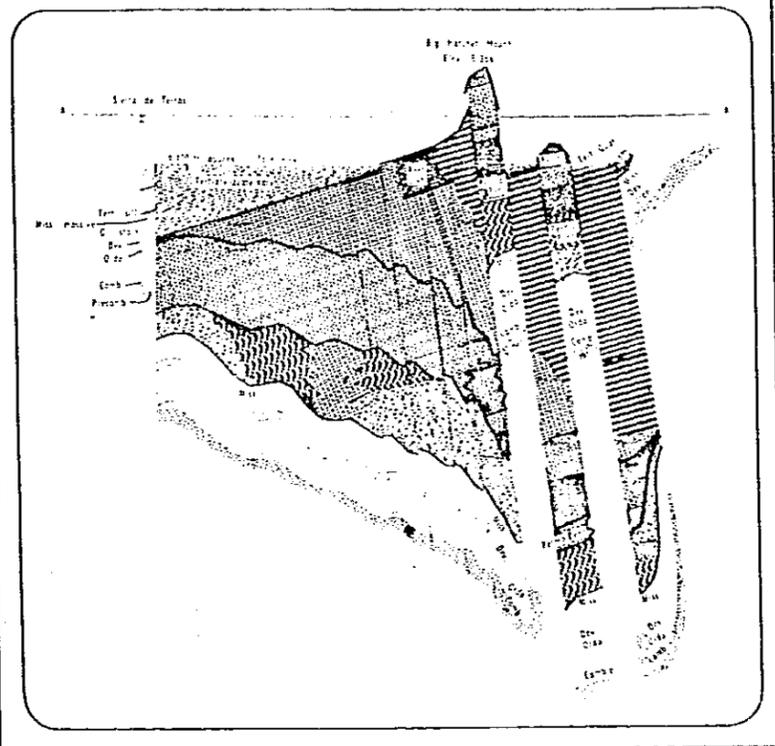
dalgo County, N.M., and the recently abandoned 16,500 ft Pemex well drilled 100 km south and 30 km west of Juarez, Mexico.

The Humble well recovered gas in a drill-stem test from the Permian. No reports of oil or gas were reported

from the Pemex well that was drilling in Permian Wolfcamp when drilling was stopped.

Another Pemex is drilling some 30 km south and west of Juarez that could provide structural information about southeast extension of the posi-

Area Cross Section



tive area separating the Pedregosa and Orogrande basins.

Other wells of interest are the Hatchita Dome 1 Tidball-Berry "Federal" drilled east of the Big Hatchet Mountains in Hidalgo County. This well reported shows of oil and gas while drilling. Cochrell is drilling a well in Grant County near the Hidalgo County line in 14-26s-16w.

Best guess of drilling activity in the next year would be 12 wells in New Mexico and Arizona and two more wells in Mexico. At least one of the wells in Mexico should be another deep test.

What are the major oil and gas zones where the 15 plus billion bbl of oil and tens of trillions of cu ft of gas will be found? I believe they are:

Fig. 1. Bioclastic carbonate banks with frequent algal reefoidal mounds of Pennsylvanian and Lower Wolfcampian. These are found along a shelf margin of a basin that is rich in dark organic source rock. In fact, these reefs exposed in the vicinity of the Big Hatchet Mountains in Hidalgo County, N.M., are 1,600 ft thick and are remarkably similar to those in Scurry County reef in West Texas. They are also associated with near-

shore and shoreline sand lenses and bars.

Fig. 2. Porous Permian Leonardian dolomite bank similar to the Abo of southeast of New Mexico are interbedded with evaporites and clastics to help form the oil trap. In 1958 Humble recovered gas on a drill-stem test from these rocks in their well in southern Hidalgo County, N.M.

Fig. 3. Lower Cretaceous rocks contain coralline bioclastic carbonate banks and reefs up to 500 ft. Thick sand wedges on the shelf and basin

Michigan wildcat now on production

IN MICHIGAN Dulong and Good 1 Spavin SW SW SW 16-9n-9e, Marathon Township, Lapeer County, a deeper-pay wildcat that was spudded in October 1966, has been placed on production at an estimated flow rate of 65 b/d oil and some water.

Production is from the Detroit River section between 3,042 and 3,081 ft, total depth. Gas has been estimated in excess of 1,000 Mcfd.

The test is located in the same area as a relatively small Berea sand field

side are also similar to those producing in East Texas.

Fig. 4. Porous Ordovician-Ellenburger and Silurian-Fusselman dolomites overlain by dark Devonian shales and shaley limestone also offer stratigraphic and structural trap possibilities.

Biotherms of Mississippian Crinoidal limestone hash provide additional reservoirs.

Although the Paleozoic structural and stratigraphic history was the same or similar in the several basins of West Texas, New Mexico, Arizona, and Mexico, the Mesozoic and Tertiary history was different.

In Mesozoic-Early Cretaceous time, a thick wedge of sands and shale poured down from highlands to the north. Massive wave resistant coralline reefs are present in the Little and Big Hatchet Mountains of southern Hidalgo County of New Mexico and in the Douglas-Bisbee area of Arizona. These reefs are not present in any of the basins of West Texas and New Mexico.

During the upper Cretaceous, up-thrust blocks deformed the area. Late Tertiary basin and range faults that crossed the Paleozoic and Mesozoic structure and strata are concealed under bolson deposits.

None of these data preclude oil and gas accumulation of commercial quantities. There are problems to be solved and dry holes will be drilled.

Oilmen know and expect this. The fact remains that a large sedimentary basin with more than 25,000 ft of rock is located between West Texas and the West Coast.

A market exists and a probable source of supply for that market is defined. The rest is in the capable hands of the petroleum industry.

where since 1955 four 1,450-ft deep oil wells have been completed. All-time production has been less than 500 bbl according to state records.

Adding interest to the Dulong and Good test is a more recently drilled test nearly 1 mile to the southeast at T. J. Hobson 1 Odishooe SE SE NE 21-9n-9e, Marathon Township. On preliminary testing after 5,000-gal acid treatment at perforations between 2,927 and 2,937 ft, the well flowed oil by heads.

AGENCY: Oil & Gas Conservation Commission

DIVISION: _____ IDENTIFICATION CODE NO. 1-7-10-000-0000

1	2	3	4
CLAIMS PAID YEAR TO DATE	OBJECT CODE NO.	DISTRIBUTION OF EXPENDITURES CLASSIFICATION	CLAIMS PAID MONTH OF 19
11,350.00	110	1 Salaries, wages: employees	1 3,650.00
675.00	150	2 Per diem: board members	2 375.00
		3	3
-0-	211	4 Postage	4 -0-
273.75	212	5 Telephone, telegraph	5 142.94
353.00	221	6 Travel -State meals and lodging	6 174.88
297.60	222	7 mileage reimbursed private car	7 76.60
168.00	223	8 fares for planes, trains, etc.	8 29.00
412.22	224	9 State-owned auto expense	9 349.72
10.40	225	10 telephone, taxi, etc.	10 3.00
-0-	226	11 registration fees at meetings	11 -0-
		12	12
		13	13
47.44	231	14 Travel-out of State meals and lodging	14 -0-
440.00	233	15 fares for plane, train	15 362.60
-0-	234	16 State-owned auto expense	16 -0-
22.30	235	17 telephone, taxi, etc.	17 -0-
-0-	236	18 registration - meetings	18 -0-
		19	19
324.00	240	20 Professional services	20 324.00
		21	21
	262	22 Mntns/repairs to office equip., furniture	22
186.65	294	23 Legal advt., notary, court, recording fees	23 -0-
-0-	295	24 Transportation of things (well samples)	24 -0-
1,252.07	299	25 Miscellaneous (blueprint service, Ariz Bu	25 625.00
		26 Mines, Museum N. Arizona)	26
		27	27
		28	28
89.28	310	29 Office supplies	29 34.72
165.44	360	30 Scientific supplies	30 165.44
35.18	370	31 Mntns supplies (duplicate keys)	31 14.38
	390	32 Other supplies (film)	32
		33	33
		34	34
	411	35 Rent, office equip: copy machine	35
		36	36
	421	37 Bond (notary public)	37
	430	38 Subscription/organization dues	38
		39	39
		40	40
480.17	611	41 Office equipment/furniture	41 -0-
		42	42
		43	43
		44	44
		45	45
250.00	995	46 To create revolv fund	46 -
		47	47
		48	48
		49	49
		50	50
		51	51
		52	52
		53	53
		54	54
		55	55
16,832.50		TOTAL	6,326.68

MONTHLY FINANCIAL REPORT

1 RECEIPTS MONTH OF <i>Sept. 1969</i>	2 CLASSIFICATION RECEIPTS	3 APPROPRIATED RECEIPTS	4 UNAPPROPRIATED RECEIPTS	5 TOTAL ALL RECEIPTS YEAR TO DATE
50 00	1 Permits to drill		50 00	275 00
	2			
	3			
	4			
	5			
	6			
	7			
	8			
	9			
	10			
	11			
	12			
	13			
	14			
	15			
	16			
	17			
50 00	TOTAL CURRENT MONTH RECEIPTS		50 00	XXXXXX
	TRANSFERS <i>in Out</i>		(175 00)	
XXXXXX	BALANCES BROUGHT FORWARD		3,695 25	XXXXXX
	TOTALS - MONTH AND YEAR TO DATE		3,570 25	275 00

6 CLAIMS PAID MONTH OF <i>Sept. 1969</i>	7 EXPENDITURES FUND TITLES	8 TOTAL AMOUNT AVAILABLE YEAR TO DATE	9 CLAIMS PAID YEAR TO DATE	10 OUTSTANDING ENCUMBRANCES	11 UNENCUMBERED BALANCE
	1 Personal Services:				
3,650 00	2 General Fund	11,432 00	11,350 00		82 00
375 00	3 Conservation Fund	75 00	675 00		75 00
512 18	4 Current Expenditures	1,503 75	1,157 07	183 95	162 73
478 50	5 Travel - State	6,090 00	1,086 52	832 64	4,170 84
362 00	6 Travel - Out of State	3,496 00	509 74	175 00	2,811 26
-0-	7 Current Fixed Charges	500 00	-0-	22 00	478 00
324 00	8 Professional Services	2,000 00	324 00	250 00	1,426 00
-0-	9 Capital Outlay	2,150 00	480 17	-0-	1,669 83
625 00	10 Museum N. Arizona	625 00	625 00	-0-	-0-
-0-	11 Arizona Bureau Mines	625 00	625 00	-0-	-0-
	12				
	13				
	14				
	15				
	16				
	17				
	18				
	19				
	20				
	21				
	22				
	23				
	24				
	25				
	26				
	27				
	28				
	29				
	30				
6,326 68	TOTALS	29,171 75	16,832 50	1,463 59	10,875 66