

OIL AND GAS CONSERVATION COMMISSION
1645 West Jefferson Street
Suite 420
Phoenix, Arizona 85007

Minutes of Meeting
February 15, 1985

Present:

Dr. J. Dale Nations, Vice-Chairman
Mr. Forrest R. Rickard, Member
Mr. Watson M. Tomerlin, Member
Mr. James E. Warne, Jr., Member

The regular Commission meeting of February 15, 1985 was called to order by Dr. J. Dale Nations, Vice-Chairman, in the absence of Ralph W. Bilby, Chairman.

Mr. Rickard moved that the minutes of the September 21, 1984 meeting be approved with Mr. Warne's seconding the motion. Motion carried.

Dr. Nations suggested that copies of the two articles submitted by him, Mr. Doss and Mr. Ybarra for "Volume III of Oil and Gas Fields of the Four Corners Area" be made for the Commission members. Mr. Doss stated that we will also add this data to our Publication List, after checking for a final release date.

Mr. Doss reviewed his Activity Report. He commented on two speaking engagements he presented to the Phoenix Chapter of the AIME and to the Sun City Engineers Club. He advised that the Sunset Review and Audit of this Commission has been completed and the Commission is to continue for another ten years until 1996. He related how Mr. Rickard spoke in behalf of the Commission at the meeting of the Joint Committee of Reference. The Senate Natural Resources Committee held a hearing this past week to pass the bill continuing the Oil and Gas Commission. The final step will be for the Natural Resources Committee of the House to finalize the continuing existence of the Commission.

Mr. Warne suggested that a letter be written with Dr. Nations' signature requesting representation from the State Land Department and the Department of Water Resources at the Commission meetings in order to establish a better system of

communication among these agencies. A copy of the letter is to be sent to the Governor's office. Mr. Ybarra advised that he has a contact person with Water Resources when he needs information from that department.

Mr. Doss reviewed the situation with Dr. J. R. Brathovde regarding competitive and noncompetitive bidding for geothermal leasing. If geothermal resource is considered to be a mineral, then land may be leased under the Mineral Leasing Act. It will be up to the State Land Department to handle problems of this nature regarding geothermal resources.

Mr. Doss advised that \$1,900.00 was approved toward the IOCC dues by the Executive Budget Office, but that the Joint Legislative Budget Committee only allowed \$500.00 toward the out-of-state travel. The request for an extra geologist position was denied by the Executive Budget Office. Dr. Nations suggested keeping the request for another geologist on an active basis as it may be needed in an emergency. Dr. Nations also gave a brief explanation of the IOCC and the monetary problems involved in his representing the Governor at their meetings as there hasn't been budget allocation for this expense. He commented on the fact that the dues of \$2,000.00 for belonging to the IOCC had been reinstated. Mr. Doss explained the possibility of meetings being held in Arizona if we were a paid-up member and the economy of the state could be increased.

Mr. Doss explained the political controversy between the Water Quality Control Council and the Department of Health Services and the Department of Water Resources. It is Mr. Doss' feeling that the Department of Water Resources may take over Water Quality Control.

Mr. Doss reported on the Central Oil Company's #1 Aman well in Yuma County being full of water with a salty content. When their pumping unit is set, he plans to go there to witness their disposing of the water. Their six sets of perforations ranged from 2,390' to 2,582'.

The situation of the Dowling well remains status quo. Mr. Doss is not aware of any recent developments with this well.

Mr. Ybarra reviewed his Activity Report and showed the location of ARCO's drilling in Hildago County. A depth of 15,000' is contemplated. Mr. Ybarra advised that after

plotting the production of the Dineh-bi-Keyah field, it has gone down about 21% in three years or 25% in the last year. There is not much water production. Mr. Doss stated that Kerr-McGee is having a time trying to reach an agreement with the Indians on secondary recovery.

Mr. Ybarra reported that Jay Shields is going to abandon five of his wells and keep three. In the Monsanto operation, it was affected by the school tax bill. It is considered a semi-development well, but a look at the Devonian was contemplated. Regarding the abandonment of the Gustin well, there was not much of a rig involved. Many breakdowns took place including the elevator and slips. Logs were reviewed for Bradshaw's Central Oil Company's #1 Aman well with regard to water saturation and porosity. There was a show of oil at 2,390' of about 2.7% and the balance water. Mr. Doss stated that in the Dowling operation that the oil shows at 3,500' were legitimate shows.

John Karabees, state Vice-President for the Independent Petroleum Association of Mountain States, and an oil-and-gas land man representing 28 companies in Arizona, gave an update of the oil-and-gas activity in Arizona. "ARCO, a client of his, and he worked last year in the Cochise County area. The rig drilling in Hidalgo County in 1984 is scheduled to be drilling in Cochise County in 1985. Some farm-out agreements were not finalized by the end of the year and they moved to Hidalgo County. If budget money still exists in 1985, they are to go to the Douglas area where a deep test is expected. There is a possibility of activity in all four corners of the state plus in the middle. Mr. Karabees represents the largest lease holder, Roberts & Koch, in the Yuma area. INEXCO is the second largest lease holder. INEXCO, Roberts & Koch and one other partner participated in a group shoot of 120 miles in 1984. More shooting is likely in 1985. Roberts & Koch is a partnership out of Midland, Texas. They have been very successful and like to keep a low-key profile. They do not seek any publicity, and just want to do their thing. They foresee two deep tests in the Yuma area, at least to 13,000'. They will not be involved with Central Oil Company.

Mr. Karabees stated that Dowling Petroleum is in bankruptcy. With so many bankruptcies in the Midland-Odessa area in 1984, the San Antonio Division of the Federal Bankruptcy Court has set up a sub-division for this area. The trustee handling Dowling is also handling 300 other cases. Dowling's leases are expiring because of nonpayment of the

rentals. Wanbishi, a Houston, Texas company, a Japanese outfit, has been paying the rentals for the acreage in which they have an interest. One by one, for not paying the rentals, is being picked up by Roberts & Koch if it is in their interests. Not one land owner got burned from not paying the rentals where Dowling is concerned. Every draft issued by Dowling was paid, which involved 52,000 acres under lease. The only ones who suffered were the suppliers who participated in the drilling of the well. The only negative in this area of the Yuma Valley where there is not too much traffic except it is a spot where the illegal aliens coming across from Mexico have used it for a stop-ping-off point. Last year John and two hired hands picked up every piece of gum wrapper and cigarette butt around the well site. The site as of a month ago is a complete mess, and because of the pits, and in all this activity, it has become a place where car oil is being changed as well as old tires. From a land man's point of view, he would like to see the Commission take an interest in having the area restored as there has been objection to the oil-and-gas exploration due to the bad appearance of the Dowling location. The fence is gone because of nonpayment of the fence bill. The razor ribbon is lying on the ground. Gravel was bought from the state because the pad is sitting on a gravel pit, and that has to be restored. With rental payments coming up, possibly Wanbishi will make a deal with someone and they will take over. There are several people who are interested in trying for an attempted completion of that well. Wanbishi is willing to sell all their interests, but there is the other 15% that belongs to Dowling, and they can't get clear title to it yet. In time this whole thing will resolve itself, because you either go one way or the other. Either someone will be able to go in and get the title from the Bankruptcy Court, or the leases will terminate and there will be new leaseholders in there, so that all we have is the restoration of that site.

Sid Woods, of the 210 Corporation, who is in the lettuce business, has been putting leases together in T9S - the Dowling well is in T10S - in an attempt to be in a position to attract various clients of mine who would like to go into the area but because of the small fee parcels don't want to spend the money unless it attracts other speculators that would prevent them from putting a block together. So quietly, 210 Corporation is putting it together and it will be able to bring in some other operators for drilling. This is going to be a key spot. John displayed a map where Pemex is currently drilling. They are drilling the Pozo Victoria.

The Pozo Altar is below the Dowling location. I visited the Pozo Altar site in 1983 where they had a Christmas tree on the hole. In June 1983, they had a nice dry hole marker on it - what we call a dry hole marker in the states. This was taken three weeks ago, and I haven't been there since June 1983. They have now cemented in a cellar around the hole. Pictures of the Pozo Victoria were shown which has been drilling for six months. The map shows that the Pozo Victoria location is a step out from the Pozo Cocupah well. In 1984 I've been back and forth to Washington, D. C. several times visiting with Pemex because we are trying to establish an exchange-of-data agreement between Roberts & Koch and Pemex - the seismic data, etc., their geological work with Pemex, and we're getting closer on an exchange. We know that they have drilled nine wells in the area. When de la Madrid took over, and the World Bank got involved, Pemex was forced to distribute information on what's going on - general type information. They now put out a monthly 8-page information letter. From heresay, the depth of wells being drilled range between 9,000' and 15,000'. Pozo Altar has concrete lined mud pits. When I was working on the Dowling well we took a sample of the oil in those pits of Pozo Altar, ran it through the mud log, and determined that it was not refined crude. We hear that the production is gas and gas condensate. In the latest publication of January 1985, Pemex gave a presentation to President de la Madrid and announced that the Altar Desert, an area of about 7,300 acres, is considered number one among nine different exploratory areas for 1985 monies. A copy of this publication will be made available to A. K. The activity starts at El Gulfo where their discovery well is. Pemex has confirmed to me that they have one onshore and one offshore field in the area. I'm going there on Monday, (February 18) to visit the wells between Pozo Victoria and the Gulf. They are drilling two more wells in the area now. Pemex puts signs up on their highways telling how many kilometers to each well site for the various service companies. We know they at least have nine. They show as of through 1984 - 18 wells drilled in the area in this region, but we are trying to get confirmation on how big the region is. We know that nine of the wells drilled are in this area just below Yuma-San Luis. So it holds a lot of promise.

Up in the strip in addition to Jay Shields' activities, there is Charles Lawrence out of Lake Charles, Louisiana. He was the first drilling superintendent for the Hunts in the Tuscaloosa trend and assembled over the last five years a 60,000-acre block. In fact in the 60,000 acres, there are only 320 acres

that are missing, and a gentleman from the Bronx wants \$100.00 an acre and a 5% override for his 320 acres. We told him it wasn't Powder River, but Charles Lawrence plans this summer to go in and drill approximately a 4,000' test in the Fredonia area. Also 210 Corporation from Yuma has assembled 18,000 acres in the strip just offsetting the Brooks' area. They are just about to conclude a drilling commitment with Western Sun Exploration out of Billings to go in and drill a series of shallow holes to tap the potential that was found on the drill stem test by Brooks at the 600' interval. We have got confirmation the refinery in Fredonia is now operational. Wouldn't it be good publicity to have a discovery there and be able to use that refinery?

From AZTX Exploration, Inc., we have just acquired 550,000 acres from the Feds and the state in the past month in Coconino County - the Coconino plateau. When finished, we'll have approximately one million acres. What that means in the short run is that the state will receive in the neighborhood of three-fourths of \$1,000,000.00 from rentals paid to the state and also the 50% share of the Federal rentals. We can't take any more Federal acreage because of the chargeability. The plans are to drill some strat tests this year.

With the Salt Grass Exploration, their plans for north of Springerville and also the Coconino Plateau, we can see some significant drilling in all areas. There was a lot of feeling when Phillips pulled the plug on the consortium and pulled out, that there was going to be bad news for Arizona. I was optimistic and looking at it as an opportunity for others to come in and pick up where they left off and sure enough, dollarwise into the trust, the increase in rentals from 25¢ to \$1.00 an acre for the primary term, have already brought in more money than what was being brought in when Phillips and Anschutz had the 5,000,000 acres. The opportunity has been there. Arco would not have been able to put their prospects together in Cochise County if that had not happened, and as Anschutz was dropping the acreage, we were there picking it up so the state never missed a beat, and the BLM got a share in the action too. In 1985 we will be seeing the last of the 25¢ rentals. They now go to \$1.50, so someone like Salt Grass who has a large block is looking at that, and will have to do something or otherwise their rentals are going to increase by a factor of 6, so that should help the activity too. We have been seeing that there are various companies who are going to do business in Arizona. For instance, Ladd Petroleum which is a unit of General

Electric has applied to do business in Arizona; C&G Petroleum out of Louisiana is looking in the corner of the strip near the Virgin Mountains. We can have activity in 1985 pretty much all over the state. Mac Moran of Freeport held only BLM leases, now wants to expand its block and acquire state leases also. I started out with Shell in 1968 and have represented most of the majors except for Shell. They have their land work done by Fuzzy Henderson out of Farmington. Last week they applied for more Federal acreage. The BLM is not processing the leases quickly, because they have a problem in their drafting department, and in terms of manpower, they have one person and they have five open requisitions and no funding to fill them, and that's hurting from an industry standpoint because people are wanting to get on with it and they can't get the leases processed, so what Shell is doing is shooting seismic on applications and picking and choosing acreage, and staying under the chargeability so they just drop some Federal acreage and pick up new Federal acreage. They are currently coming across the state and have shot seismic in the Kingman area, Greenlee County and Graham County. They have just picked up a large block in southern Apache County. They're dropping state acreage in the Safford area so their seismic must have told them something. They are spending large sums of money and really shooting up the countryside. This is my seventh year in Arizona and 1985 holds the most promise of it all, because the areas are going to be so diverse. It's like all the geological areas in Arizona will be tested instead of just the overthrust as we saw in 1980 - 1981 by the Phillips' group. Having been closely involved with the Dowling well doing the land work, I've had various other production managers of majors and large independents look at it. The consensus of opinion is that there are hydrocarbons there. The only question is can they make a well out of that hole. My sources say there is too much water saturation to make a successful well. There's no question about it that there are definitely hydrocarbons present. I was in the mud log wagon when they had the two big gas kicks that kicked right off the scale so I firmly believe too along with the experts that know what they're looking at in terms of the logs that there is something there based on what's happening in Mexico and that boundary fence is no geological barrier so it looks like the Yuma area holds a lot of promise for Arizona. With the high concentration of Federal and state lands there, the state can really make out well if something is discovered there."

Mr. Ralph J. Pomeroy of Cam-Roy Research and Development

Corporation in Chandler briefed the Commission on his plan to rehabilitate the two geothermal wells in the Higley area. These wells were drilled in 1973 by Geothermal Kinetics, Inc. in a joint venture with Arizona Public Service. Additional depth to well #1 is planned which originally went to 9,207'. The #2 well was originally drilled to a depth of 10,454' and is in a better position with better heat and productive capacity. A limited amount of drilling is planned for the #2 well, in order to complete it in a larger productive interval. The closer they can get to the Ocotillo Fault, there is more permeability as well as greater potential from the heat and fluids. Two wells could probably handle a generation of 10MWe per unit. Industrialization uses of the energy could also be realized. Laura Scudder Potato Chip Company in California is a prospect for this type of energy. Most of their potatoes are secured from the Queen Creek area. Land would be cheaper for them here in Arizona as the taxes in California are quite high and they are experiencing a backhauling problem. A brewery business in Missouri was also considered for geothermal application. There is less time required in design and construction of these types of units. They are easily movable. The unit he is most interested in is by Ben Holt of Pasadena since it can be operated by one man.

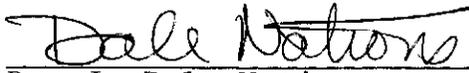
Mr. Pomeroy has experienced difficulty in arranging financing for this project. He recently attended a ground breaking ceremony by Kennecott and Bechtel Corp. who are planning to drill a 10,000' hole in the south Salton Sea area. Geothermal exploration has been more prominent in California than in Arizona especially in the El Centro area. Mr. Pomeroy feels that he will lose some surface rights in this area, but there is land adjacent to this which he has and can be used for development. Their rig is to be brought in from Texas in about 30 days or around the first of April. He feels that this source of energy is very viable for the state of Arizona.

Dr. Nations inquired of the disposal of the water in this area, and Mr. Pomeroy responded that the Queen Creek Irrigation District would be a possible purchaser; Mesa has its own power system; wants to avoid getting involved with water users or Arizona Public Service. If both of these wells are activated, the drilling of an injection well will be necessary. The population projected for the Queen Creek area is 25,000 by 1990.

The next Commission meeting is scheduled for April 19, 1985.

Mr. Rickard moved for adjournment, and Mr. Warne seconded the motion. Motion carried.

APPROVED

A handwritten signature in cursive script that reads "Dale Nations". The signature is written in dark ink and is positioned above a horizontal line.

Dr. J. Dale Nations
Vice-Chairman

Guests in attendance:

John Haas
John Karabees
Ralph J. Pomeroy

Bureau of Land Management
Land Man
Cam-Roy Research and
Development Corporation