

**MINUTES OF THE MEETING
OF THE OIL CONSERVATION COMMISSION
HELD ON DECEMBER 8-9, 2011**

The Oil Conservation Commission met at 9 o'clock a.m. on December 8, 2011 in Porter Hall, Wendell Chino Building, 1220 S. St. Francis Drive, Santa Fe, New Mexico.

PRESENT: **SCOTT DAWSON, Commissioner**
 ROBERT BALCH, Commissioner
 JAMI BAILEY, Chair

Cheryl Bada served as the Commission attorney.

The meeting was called to order by Chairman Bailey. The minutes of the November 17, 2011 Commission meeting were approved and adopted.

Chairman Bailey announced that the deliberation of the rulemaking in Case 14744 will begin after the three cases on the docket are heard.

De Novo Case 14497, the application of David H. Arrington Oil & Gas, Inc. for compulsory pooling, Lea County, New Mexico and De Novo Case 14538, the application of Marshall & Winston, Inc. to cancel an operator's authority and terminate a spacing unit, and approve a change of operator, Lea County, New Mexico, both being heard De Novo upon the application of David H. Arrington Oil & Gas, Inc., were called. These cases were consolidated for purposes of hearing. Appearances were made by William F. Carr and Larry Montano for David H. Arrington Oil & Gas, Inc. (Arrington) and Jim Bruce for Marshall & Winston, Inc. (Marshall & Winston.)

Mr. Carr made an opening statement explaining the purpose of Arrington's application and its presentation, and Mr. Bruce made an opening statement explaining Marshall & Winston's position in these cases.

Mr. Montano's first witness was Monty Kastner, Vice President of Land and Legal with Arrington in Midland, Texas. He explained that Arrington is seeking a compulsory pooling order in order to re-enter their well to produce the Morrow formation. He summarized the efforts Arrington has made to develop the subject acreage. He described an easement entered into with the surface owner. He identified the ownership of the subject section. Mr. Bruce and Chairman Bailey cross-examined the witness, and he was excused.

The next witness was Brian Ball, Exploration Manager with Arrington in Midland. He stated that Arrington's primary objective is to reestablish production in the Morrow formation. He gave the production history of the subject well. Mr. Bruce, Commissioner Dawson, Commissioner Balch, and Chairman Bailey cross-examined the witness, and he was excused.

The next witness was Art Carrasco, Engineer and Operations Manager with Arrington in Midland. He said no work has been done on the well since 2007 and explained why Arrington decided to look again at the Morrow formation in the subject well. He gave an estimate of overhead costs of drilling and completing the well. He said that Arrington is requesting a risk charge limited to the costs of re-entering the well. He discussed the procedure of using artificial lift to assist in the production of the Morrow. He said that Arrington is requesting 90 days to re-commence operations on the well. Mr. Bruce,

Commissioner Dawson, Commissioner Balch, and Chairman Bailey cross-examined the witness, and he was excused.

The next witness was Keith Bucy, General Manager with Arrington in Midland. He described his experience with other Morrow producing wells involving the use of artificial lift. He presented economic data for the well. He discussed recovery projections for the well. Mr. Bruce, Commissioner Dawson, and Chairman Bailey cross-examined the witness, and he was excused.

Mr. Bruce's first witness was Kevin Hammit, Vice President of Land with Marshall & Winston in Midland. He listed the ownership of the mineral interests in the subject tract. He gave the production history of the subject well. He told of receiving a request for participation in the re-entry and discussed the JOA. He said that Marshall & Winston elected to participate in a Cisco recompletion attempt above the Morrow. He discussed Arrington's proposal to participate in the reestablishment of the Morrow production. He said Marshall & Winston informed Arrington that they were not interested in participating in the compulsory pooling application. He said that Marshall & Winston would like to move forward with the development of the Cisco reservoir. Mr. Carr cross-examined the witness, and he was excused.

The next witness was John Savage, Professional Petroleum Engineer with Williamson Petroleum Consultants, Inc. in Midland. He said that Williamson was hired by Marshall & Winston to evaluate this reservoir. He discussed the decline curve, cash flow, AFE, and gas prices. He stated that there is a large Morrow reservoir across Section 26. He talked of communication between the subject well and two other wells. He discussed a volumetric study he conducted. He explained his calculations of estimated recovery. Mr. Carr, Commissioner Dawson, and Commissioner Balch cross-examined the witness, and he was excused.

Closing statements were made by Mr. Bruce and Mr. Carr. After a motion by Commissioner Dawson and a second to the motion by Commissioner Balch, the Commission voted unanimously to close the meeting pursuant to NMSA 1978, Section 10-15-1 H to deliberate on the two cases. The meeting went back into open session, and Chairman Bailey announced that De Novo Cases 14497 and 14538 were the only matters discussed during the closed session. She announced that the Commission voted unanimously to grant the application of David H. Arrington for compulsory pooling of mineral interests from the surface to the base of the Morrow formation underlying the S/2 of Section 26 for all formations and/or pools developed on 320-acre spacing within this vertical extent, and the SE/4 for all formations and/or pools developed on 160-acre spacing within this vertical extent. The units are to be dedicated to the subject well to be re-entered with the provision that there will be a time limit of 90 days to test the Morrow formation. The Commission requested findings of fact and conclusions of law from all parties by January 9, 2012, and the final order will be signed at the Commission meeting scheduled for January 23, 2012.

Case 14720, the application of Agave Energy Company for authority to inject, Lea County, New Mexico, was called. Appearances were made by Gary Larson for Agave Energy Company (Agave) and Jim Bruce for Kaiser-Francis Oil Company (Kaiser-Francis). Opening statements were made by Mr. Larson explaining Agave's presentation and Mr. Bruce explaining Kaiser-Francis' concerns about the migration of the injection and the size of the plume.

Mr. Larson's first witness was Ivan Villa, Engineering Manager with Agave in Artesia, New Mexico. He told of Agave's business activities regarding the processing and

marketing of natural gas in Southeast New Mexico. He explained that Agave is seeking permission to inject CO₂ because of the potential for H₂S delivery into the Red Hills facility. He gave the location of the Red Hills Plant and the proposed AGI well. He said the plant is currently under construction and will be online in March, 2012. He described the design of the plant and discussed the plant capacity. He gave a summary of the plant operations and explained how both sweet and sour gas will be treated. He stated that if CO₂ and H₂S are not allowed to be injected, CO₂ would be vented and operators might be required to treat H₂S at the wellhead. Mr. Bruce, Commissioner Balch, and Chairman Bailey cross-examined the witness, and he was excused.

The next witness was Jennifer Knowlton, Environmental Manager with Agave in Artesia. She discussed the air quality permit for the plant. She said that there are no federal or state requirements for the volume of injected CO₂. She stated that if Agave is not authorized to inject H₂S, it could probably process very small amounts that could be flared, but it would not be economical. She explained the limits on flaring. She pointed out that the Red Hills Plant and injection well are located on the same site. Mr. Bruce, Commissioner Dawson, Commissioner Balch, and Chairman Bailey cross-examined the witness, and she was excused.

The next witness was Alberto Gutierrez, President, CEO, and Petroleum Geologist with Geolex Incorporated in Albuquerque, New Mexico. He explained that Agave is requesting authority to inject acid gas into the Cherry Canyon formation at a maximum rate of 13 MMCFD. He discussed the injection fluid volume, composition, and pressure. He listed the criteria used for finding a zone suitable for injection. He described the methodology used to determine the footprint of the plume. He discussed local stratigraphy and hydrocarbon production four to five miles away from the plant. He described the reservoir geology and identified zones of the Cherry Canyon formation that will be injected into. He described his calculations for determining the anticipated area of impact. He said his analysis shows that there is no potential for migration into the South Bell Lake Unit and into groundwater zones. He discussed the well design for the proposed AGI well and summarized the geologic factors that will assure the integrity and safety of the well. He stated that Agave has submitted a parallel application to the Bureau of Land Management and hopes to have it approved by the end of this year. Mr. Bruce, Commissioner Dawson, Commissioner Balch, and Chairman Bailey cross-examined the witness, and he was excused.

Mr. Bruce's witness was Jim Wakefield, Reservoir Engineering Manager for the Permian Basin with Kaiser-Francis in Oklahoma City, Oklahoma. He discussed the South Bell Lake Unit. He said that Kaiser-Francis is concerned about the proposed AGI well because its zone of injection, the Cherry Canyon, may be hydraulically connected to other zones. He gave geologic testimony on the Cherry Canyon zone. He disagreed with Agave's determination of a flow pattern. He talked of the proposed injection pressure and rate. He requested that the Commission deny approval of the AGI well.

The meeting was recessed at 5:00 p.m.

The meeting was reconvened by Chairman Bailey at 10:30 a.m. on Friday, December 9, 2012.

Mr. Wakefield was recalled to finish his direct testimony. He said he believes there is the possibility of communication between wells within the one-mile area of review and the proposed AGI well. He requested that if the Commission approves the well at this hearing, certain conditions of approval be imposed, including:

1. Furnish offset operators daily reports during the drilling
2. Furnish reports on volumes and pressures
3. Conduct annual shut-in buildup pressure tests and calculate bottomhole pressure
4. Re-enter and properly plug and abandon five wells

Mr. Larson and Commissioner Balch cross-examined the witness, and he was excused.

Mr. Larson recalled Mr. Villa for rebuttal testimony concerning the alternatives to drilling an AGI well, which include chemical scavenging and installing a sulfur recovery unit, and the issues operators confront when they treat AG at the wellhead. Mr. Bruce, Commissioner Dawson, and Commissioner Balch cross-examined the witness, and he was excused.

Ms. Knowlton was recalled as a rebuttal witness to address the issue of more flaring being required with a sulfur recovery unit than with an AGI well. She said it would also require more permits. Commissioner Dawson and Commissioner Balch cross-examined the witness, and she was excused.

Mr. Gutierrez was recalled as a rebuttal witness to address the issue of offset wells, location of vertical plume, amount of injection for plume to reach the South Bell Lake Unit, and the corrosive effect on AGI wells. Mr. Bruce, Commissioner Dawson, and Commissioner Balch cross-examined the witness, and he was excused.

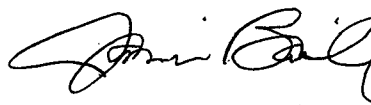
Mr. Larson and Mr. Bruce made closing statements. After a motion by Commissioner Dawson and a second to the motion by Commissioner Balch, the Commission voted unanimously to close the meeting pursuant to NMSA 1978, Section 10-14-1 H to deliberate on this matter. The Commission went back into open session, and Chairman Bailey announced that Case 14720 was the only matter discussed during the closed session. She said the Commission unanimously decided to grant approval for the AGI well with certain conditions to be met, including that approval for this well will expire 30 years from the date of first injection and then come back to the Commission for re-permitting, if necessary, and Agave must re-enter and plug four certain wells. If they cannot plug the wells, they will need to come back to the Commission. MITs must be conducted prior to disposal and first injection; subsurface safety valves must be installed; and packers and tubing must be corrosive-resistant. The parties were asked to submit findings of fact and conclusions of law by January 9, 2012. An order will be drafted and finalized to be signed at the Commission meeting scheduled for January 23, 2012.

Case 14744, the application of the New Mexico Oil Conservation Division for rulemaking concerning the repeal, adoption and amendment of rules issued pursuant to the Oil and Gas Act, NMSA 1978, Sections 70-2-1 through 70-2-38, was called for deliberation. Chairman Bailey announced that the record on this case was closed at the end of the hearing on November 17-18, 2012, so OCD's supplemental application and Jalapeno's response to the supplemental application will not be considered. The Commission went through the proposed rule and unanimously agreed to adopt it with certain changes to 19.15.16.7, the Definitions section; 19.15.16.14, the Deviation Tests; Deviated, Directional and Horizontal Wells section; and 19.15.16. 15, the Special Rules for Horizontal Wells section. The majority of the Commission adopted changes to Paragraph C, Existing and subsequent wells in project areas, in the Special Rules section. Patrick Fort, representing Jalapeno Corporation, stated that the Commission did not cover all of Jalapeno's proposed findings of fact. Chairman Bailey stated that this case does not address compulsory pooling so Jalapeno's proposed language is not properly addressed in this hearing. She said that if and when the compulsory pooling regulations are reviewed,

it can be taken into account then. The Commission counsel was directed to draft an order to be reviewed and signed at the January 23, 2012 Commission meeting.

The meeting was adjourned at 4:35 p.m.

**STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION**

A handwritten signature in cursive script, appearing to read "Jami Bailey", written in black ink.

JAMI BAILEY, Chair