

**STATE OF NEW MEXICO
ENERGY, MINERALS, AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION DIVISION**

**IN THE MATTER OF THE HEARING
CALLED BY THE OIL CONSERVATION
DIVISION FOR THE PURPOSE OF
CONSIDERING:**

**CASE NO. 12812
ORDER NO. R-11769**

**APPLICATION OF AGAVE ENERGY COMPANY FOR APPROVAL OF A
DISPOSAL WELL, EDDY COUNTY, NEW MEXICO.**

ORDER OF THE DIVISION

BY THE DIVISION:

This case came on for hearing at 8:15 a.m. on March 7, 2002, at Santa Fe, New Mexico, before Examiner David R. Catanach.

NOW, on this 21st day of May, 2002, the Division Director, having considered the testimony, the record, and the recommendations of the Examiner,

FINDS THAT:

(1) Due public notice has been given, and the Division has jurisdiction of this case and its subject matter.

(2) The applicant, Agave Energy Company ("Agave"), seeks authority to utilize its Metropolis "AZL" State Com Well No. 1 (**API No. 30-015-31905**) located 1650 feet from the South and West lines (Unit K) of Section 36, Township 18 South, Range 25 East, NMPM, Eddy County, New Mexico, to dispose of produced water and acid gas into the Devonian and Ellenburger formations from a depth of 9,900 feet to 11,400 feet.

(3) Agave originally filed the subject application for administrative approval on December 28, 2001.

(4) Ms. Gretchen E. Ainsworth ("Ms. Ainsworth"), a mineral interest owner within the NW/4 of Section 1, Township 19 South, Range 25 East, NMPM, filed a letter of objection to the application on December 26, 2001. Additionally, on January 7, 2002, the Division received a letter of objection to the application from Fred C. Alley Testimonial Trust, Margaret E. Alley, and Frederick C. Alley.

(5) Ms. Ainsworth appeared at the hearing through legal counsel to oppose the application.

(6) The applicant presented evidence that demonstrates:

- (a) the subject well was drilled by Yates Petroleum Corporation in September, 2001 to test the Morrow formation;
- (b) the well tested dry in the Morrow formation and was subsequently plugged and abandoned;
- (c) Agave, a wholly owned subsidiary of Yates Petroleum Corporation, proposes to:
 - i) re-enter and deepen the well from its current total depth of 9,360 feet to 11,400 feet;
 - ii) set 5 ½ inch casing at a depth of 9,900 feet and cement this casing to the surface;
 - iii) set 2 7/8 inch L-80 internally plastic-lined tubing in a packer at a depth of 9,800 feet; and
 - iv) inject into the Devonian and Ellenburger formations through the open-hole interval from approximately 9,900 feet to 11,400 feet;
- (d) approximately 2,500 barrels of produced water and 375 MCF of acid gas, a mixture of carbon dioxide, hydrogen sulfide, and hydrocarbons, will be mixed and injected daily into the Metropolis “AZL” State Com Well No. 1; and
- (e) the nearest well producing from the Devonian/Ellenburger interval is located

approximately 30 miles from the proposed disposal well. Additionally in 1992, Yates drilled the Roy "AET" Well No. 3 located in Section 7, Township 19 South, Range 25 East, NMPM, to test the Devonian/Ellenburger interval. The well was non-productive and is currently being utilized as a disposal well in this interval.

(7) Ms. Ainsworth expressed concern that Agave did not present sufficient evidence to demonstrate that the Devonian and Ellenburger formations are non-productive in this area, and that approval of the application would not result in the contamination of fresh water aquifers.

(8) Ms. Ainsworth presented no evidence in this case.

(9) The evidence presented demonstrates that the Metropolis "AZL" State Com Well No. 1 will be adequately cased and cemented so as to preclude the movement of fluid from the injection zone into other formations, including any fresh water aquifers.

(10) Approval of the application will prevent the drilling of unnecessary wells and will otherwise prevent waste and protect correlative rights.

IT IS THEREFORE ORDERED THAT:

(1) The applicant, Agave Energy Company, is hereby authorized to utilize its Metropolis "AZL" State Com Well No. 1 (**API No. 30-015-31905**) located 1650 feet from the South and West lines (Unit K) of Section 36, Township 18 South, Range 25 East, NMPM, Eddy County, New Mexico, to dispose of produced water and acid gas into the Devonian and Ellenburger formations from a depth of 9,900 feet to 11,400 feet.

(2) The operator shall take all steps necessary to ensure that the injected fluids enter only the proposed injection interval and are not permitted to escape to other formations or onto the surface from injection, production, or plugged and abandoned wells.

(3) Injection shall be accomplished through 2 7/8 inch internally plastic-lined tubing installed in a packer set at approximately 9,800 feet. The casing-tubing annulus shall be filled with an inert fluid and a gauge or approved leak-detection device shall be attached to the annulus in order to determine leakage in the casing, tubing, or packer.

(4) The injection well or pressurization system shall be equipped with a pressure control device or acceptable substitute that will limit the surface injection pressure to no more than 1980 psi.

(5) The Division Director may administratively authorize a pressure limitation in excess of the above upon a showing by the operator that such higher pressure will not result in the fracturing of the injection formation or confining strata.

(6) Prior to commencing injection operations and annually thereafter, the casing shall be pressure tested throughout the interval from the surface down to the proposed packer setting depth to assure the integrity of such casing.

(7) During drilling operations, the applicant shall monitor the well for hydrocarbon shows, and, if hydrocarbons are detected, shall conduct drill stem tests on any potentially productive formations. Any hydrocarbon shows within the Devonian and Ellenburger formations shall be reported to the Division prior to commencing injection operations into the well.

(8) The applicant shall obtain native formation water samples from both the Devonian and Ellenburger formations subsequent to completion of drilling operations. These water samples shall be analyzed and the results sent to the Santa Fe Office of the Division.

(9) The operator shall give advance notice to the Supervisor of the Division's Artesia District Office of the date and time disposal equipment will be installed and the mechanical integrity pressure test will be conducted on the Metropolis "AZL" State Com Well No. 1, so these operations may be witnessed.

(10) The operator shall immediately notify the Supervisor of the Division's Artesia District Office of the failure of the tubing, casing or packer in the disposal well or the leakage of water, oil or gas from or around any producing or plugged and abandoned well within the area, and shall take all steps as may be timely and necessary to correct such failure or leakage.

(11) The operator shall submit monthly reports of the disposal operations on the appropriate form in accordance with Division Rules No. 706 and 1120.

(12) The injection authority granted herein for the Metropolis "AZL" State Com Well No. 1 shall terminate one year after the date of this order if the operator has not commenced injection operations into the well; provided, however, the Division, upon written request by the operator, may grant an extension for good cause.

(13) Jurisdiction is hereby retained for the entry of such further orders as the Division may deem necessary.

DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION

LORI WROTENBERY
Director

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