

**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. 13511
ORDER NO. R-12375**

**APPLICATION OF SMITH & MARRS, INC. FOR APPROVAL OF A SALT
WATER DISPOSAL WELL, LEA COUNTY, NEW MEXICO.**

ORDER OF THE DIVISION

BY THE DIVISION:

This case came on for hearing at 8:15 a.m. on June 16, 2005, at Santa Fe, New Mexico, before Examiner David R. Catanach.

NOW, on this 28th day of June, 2005, 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, Smith & Marrs, Inc. ("Smith & Marrs" or "applicant"), seeks authority to utilize its **Anderson** Well No. 1 (**API No. 30-025-29962**), located 330 feet from the South line and 1980 feet from the East line (Unit O) of Section 8, Township 20 South, Range 37 East, **NMPM**, Lea County, New Mexico, to dispose of produced water into the Lower San **Andres** and **Glorieta** formations from a depth of 4,350 feet to 5,180 feet.

(3) Smith & Marrs originally filed the subject application for administrative approval on December 8, 2004. On December 13, 2004, the Division received a letter of objection to the application from Rice Operating Company. On December 15, 2004, the Division also received a letter of objection to the application from Amerada Hess Corporation, an offset operator to the proposed disposal well. The subject application was subsequently set for hearing before a Division examiner.

(4) Rice Operating Company ("Rice") appeared at the hearing through legal counsel in opposition to the application. Rice cross-examined Smith & Marrs' witness, but presented no evidence or testimony.

(5) Amerada Hess Corporation did not appear at the hearing.

(6) Smith & Marrs presented evidence that demonstrates that:

- (a) the injection interval in the **Anderson** Well No. 1 was originally proposed to encompass the Lower San Andres, **Glorieta**, **Blinebry** and **Tubb** formations; however, due to concerns expressed by Amerada Hess Corporation regarding injection into the **Blinebry** and **Tubb** intervals, the injection interval in the well is to be contracted to include only the Lower San Andres and **Glorieta** intervals from a depth of 4,350 feet to 5,180 feet;
- (b) the **Anderson** Well No. 1 is cased and cemented adequately to preclude the movement of fluid from the injection zone into other formations, including any fresh water aquifers;
- (c) the **Anderson** Well No. 1 will be utilized for the commercial disposal of produced water from various oil and gas pools in this area. Approximately 3,000-5,000 barrels of water per day will be disposed of in the subject well; and
- (d) all "area of review" wells are cased and cemented **and/or** plugged and abandoned adequately so as to confine the injected fluid to the proposed injection interval.

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(7) Rice currently operates three (3) commercial disposal wells in this area. These wells are identified as the: i) EME SWD Well No. 5 (API No. 30-025-05902) located in Unit M of Section 5, Township 20 South, Range 37 East, NMPM; ii) EME SWD Well No. 8 (API No. 30-025-06017) located in Unit G of Section 8, Township 20 South, Range 37 East, NMPM, and; iii) EME SWD Well No. 9 (API No. 30-025-12801) located in Unit M of Section 9, Township 20 South, Range 37 East, NMPM. Testimony in this case demonstrates that all of Rice's wells are injecting into the same interval that will be utilized in the Anderson Well No. 1.

(8) Rice's concern is that approval of the subject application will adversely affect its ability to inject water into its EME SWD Wells No. 5, 8 and 9 due to the finite reservoir capacity of the San Andres formation.

(9) The Division is not **statutorily** obligated to protect the rights of operators with regards to conducting produced water disposal operations, unless such injection activities impair an operator's ability to produce hydrocarbons.

(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, Smith & Marrs, Inc., is hereby authorized to utilize its Anderson Well No. 1 (API No. 30-025-29962), located 330 feet from the South line and 1980 feet from the East line (Unit O) of Section 8, Township 20 South, Range 37 East, NMPM, Lea County, New Mexico, to dispose of produced water into the Lower San Andres and Glorieta formations from a depth of 4,350 feet to 5,180 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 3-1/2 inch internally plastic-lined tubing installed in a packer set at approximately 4,250 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 870 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, the applicant shall effectively isolate all formations deeper than the Glorieta formation in the well. This shall be accomplished by setting a cast iron bridge plug (**CIBP**) with cement on top at a depth of approximately 5,300 feet; provided however, that the supervisor of the Division's Hobbs District Office may approve an alternate method to isolate these formations in the well.

(7) Prior to commencing injection operations and every five years 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.

(8) The operator shall give advance notice to the Supervisor of the Division's Hobbs District Office of the date and time the following operations are to be conducted on the Anderson Well No. 1 in order that these operations may be witnessed; i) disposal equipment installed; ii) all formations deeper than the Glorieta formation isolated; and iii) the conductance of the **mechanical** integrity pressure test.

(9) The operator shall immediately notify the Supervisor of the Division's Hobbs 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.

(10) The operator shall submit monthly reports of the disposal operations on Form C-120-A in accordance with Division Rules No. 19.15.9.706 and 19.15.13.1120.

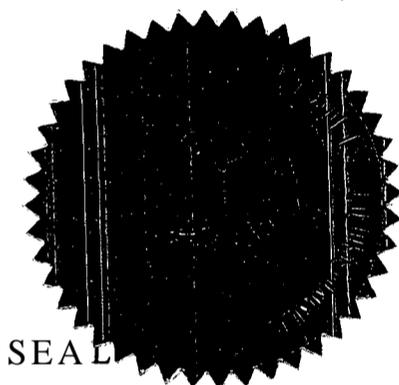
(11) The injection authority granted herein for the Anderson Well No. 1 shall terminate one year after the date of this order if the operator has not commenced injection operations into the well; provided, however, the Division, upon written request by the operator, may grant an extension for good cause.

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(12) Pursuant to the requirements set forth on Part VI(4) of Division Form C-108, the applicant shall provide the Division an analysis of all source water that is to be disposed of in the Anderson Well No. 1. This shall be accomplished within six months after commencement of injection operations, and each time thereafter a new source of injected fluid is placed in the well.

(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



MARK E. FESMIRE, P. E.
Director