

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. 10433  
Order No. R-9629

APPLICATION OF GEODYNE OPERATING  
COMPANY TO AMEND DIVISION ORDER  
NO. SWD-449, EDDY COUNTY, NEW  
MEXICO.

ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 8:15 a.m. on January 9, 1992, at Santa Fe, New Mexico, before Examiner David R. Catanach.

NOW, on this 24th day of January, 1992, the Division Director, having considered the testimony, the record, and the recommendations of the Examiner, and being fully advised in the premises,

FINDS THAT:

(1) Due public notice having been given as required by law, the Division has jurisdiction of this cause and the subject matter thereof.

(2) By Administrative Order No. SWD-449, dated November 18, 1991, the Division authorized Geodyne Operating Company (Geodyne) to utilize its PFI Amoco "19" Federal Well No. 2 located 1687 feet from the South line and 2041 feet from the West line (Unit K) of Section 19, Township 22 South, Range 26 East, NMPM, Eddy County, New Mexico, as a salt water disposal well, injection to occur into the Delaware formation at approximately 2332 feet to 4538 feet.

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(3) Said Order No. SWD-449 also contained a provision whereby Geodyne was required, prior to commencing injection operations, to cement the Mitchell Energy Corporation McKittrick "30" Federal Well No. 1 located in Unit C of Section 30, Township 22 South, Range 26 East, NMPM, above, below and across the proposed injection interval in a manner satisfactory to the supervisor of the Division's Artesia district office in order to assure that said wellbore would provide a conduit for the migration of fluid from the injection zone.

(4) The applicant, Geodyne Operating Company, seeks to amend said Order No. SWD-449 by contracting the proposed injection zone to include only that interval within the Delaware formation from approximately 2332 feet to 2446 feet, and to delete the requirement to perform remedial cement operations on the above-described McKittrick "30" Federal Well No. 1.

(5) The applicant's evidence and testimony indicates that the McKittrick "30" Federal Well No. 1 has 13 3/8 inch surface casing set at 605 feet, said casing circulated to surface, and also has 9 5/8 inch intermediate casing set at 2845 feet, said casing also circulated to surface.

(6) The McKittrick "30" Federal Well No. 1 is adequately cased and cemented across the newly proposed injection interval so as to prevent the migration of the injected fluid from the injection zone.

(7) The applicant should not be required to perform remedial cement operations on the above-described McKittrick "30" Federal Well No. 1.

(8) The applicant proposes to inject approximately 110 barrels of water per day into the subject well, said water originating from Geodyne's PFI Amoco "19" Federal Well Nos. 3Y and 4, both producing from the Filaree Dome-Delaware Oil Pool, and both located in said Section 19.

(9) The proposed amendment of the injection interval in the subject well should be approved.

(10) Prior to commencing injection operations, the applicant should be required to demonstrate that the subject well contains adequate cement behind the production casing, and that such cement is of adequate quality so as to confine the injected fluid to the proposed injection interval, to the satisfaction of the supervisor of the Division's Artesia district office.

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(11) Injection should be accomplished through 2 3/8 inch plastic-lined tubing installed in a packer located at approximately 2300 feet; the casing-tubing annulus should be filled with an inert fluid; and a pressure gauge or approved leak detection device should be attached to the annulus in order to determine leakage in the casing, tubing or packer.

(12) Prior to commencing injection operations, the casing in the subject well should be pressure-tested throughout the interval from the surface down to the proposed packer setting depth, to assure the integrity of such casing.

(13) The injection well or system should be equipped with a pressure limiting switch or other acceptable device which will limit the surface pressure on the injection well to no more than 466 psi.

(14) The Director of the Division should be authorized to administratively approve an increase in the injection pressure upon a proper showing by the operator that such higher pressure will not result in migration of the injected fluid from the Delaware formation.

(15) The operator should notify the supervisor of the Artesia district office of the Division of the date and time of the installation of disposal equipment, of the mechanical integrity pressure test, and of the conductance of additional tests to determine adequate cement (as described in Finding No. 10 above) in order that the same may be witnessed.

(16) The operator should take all steps necessary to ensure that the injected water enters only the proposed injection interval and is not permitted to escape to other formations or onto the surface.

(17) Approval of the subject application will prevent the drilling of unnecessary wells, protect underground sources of drinking water, and otherwise prevent waste and protect correlative rights.

(18) Division Order No. SWD-449 should be superseded by this order.

IT IS THEREFORE ORDERED THAT:

(1) The applicant, Geodyne Operating Company, Inc., is hereby authorized to utilize its PFI Amoco "19" Federal Well No. 2 located 1687 feet from the South line and 2041 feet from the West line (Unit K) of Section 19, Township 22 South, Range 26 East, NMPM, Eddy County, New Mexico, to dispose of produced salt water into the Delaware formation, injection to be accomplished through 2 3/8 inch plastic-lined tubing installed in a packer set at approximately 2300 feet, with injection into the perforated interval from approximately 2332 feet to 2446 feet.

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PROVIDED HOWEVER THAT, the casing-tubing annulus shall be filled with an inert fluid and a pressure gauge or approved leak detection device shall be attached to the annulus in order to determine leakage in the casing, tubing or packer.

PROVIDED FURTHER THAT, prior to commencing injection operations, the casing in the subject well shall be pressure-tested throughout the interval from the surface down to the proposed packer setting depth, to assure the integrity of such casing.

(2) The injection well or system shall be equipped with a pressure limiting switch or other acceptable device which will limit the surface pressure on the injection well to no more than 466 psi.

(3) The Director of the Division shall be authorized to administratively approve an increase in the injection pressure upon a proper showing by the operator that such higher pressure will not result in migration of the injected fluid from the Delaware formation.

(4) Prior to commencing injection operations, the applicant shall be required to demonstrate that the subject well contains adequate cement behind the production casing, and that such cement is of adequate quality so as to confine the injected fluid to the proposed injection interval, to the satisfaction of the supervisor of the Division's Artesia district office.

(5) The operator shall notify the supervisor of the Artesia district office of the Division of the date and time of the installation of disposal equipment, of the mechanical integrity pressure test, and of the conductance of additional tests to determine adequate cement (as described in Finding No. 10 above) in order that the same may be witnessed.

(6) The operator shall take all steps necessary to ensure that the injected water enters only the proposed injection interval and is not permitted to escape to other formations or onto the surface.

(7) The operator shall immediately notify the supervisor of the Division's Artesia district office of the failure of the tubing, casing, or packer in said well or the leakage of water from or around said well and shall take such steps as may be timely and necessary to correct such failure or leakage.

(8) The applicant shall conduct disposal operations and submit monthly reports in accordance with Rules 702 through 706, 708 and 1120 of the Division Rules and Regulations.

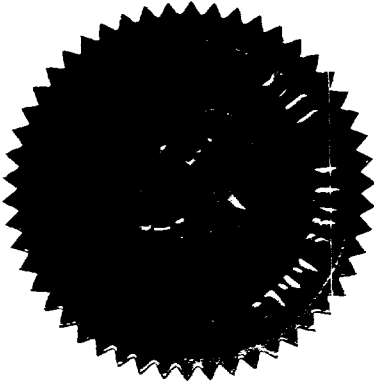
(9) Division Order No. SWD-449 is hereby superseded by this order.

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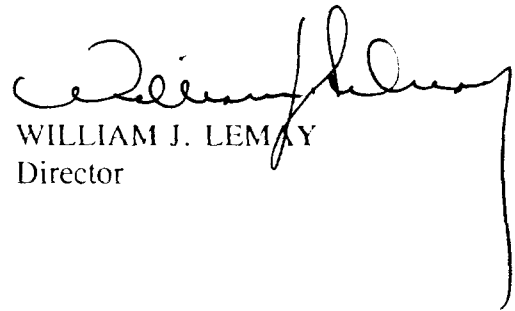
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(10) Jurisdiction is hereby retained for the entry of such further orders as the Division may deem necessary.

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



STATE OF NEW MEXICO  
OIL CONSERVATION DIVISION

  
WILLIAM J. LEMAY  
Director

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