State of New Mexico ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT Santa Fe, New Mexico 87505





February 6, 1995

Mr. Ray Leissner, Program Manager Water Division (6W-SU) U.S. Environmental Protection Agency Region VI 1445 Ross Avenue Dallas, Texas 75202-2733

Re: Aquifer Exemption Entrada Formation San Juan Basin

Rio Arriba County, New Mexico

Dear Mr. Leissner:

Pursuant to the Underground Injection Control Program Memorandum of Agreement executed between the State of New Mexico and the United States Environmental Protection Agency, the Oil Conservation Division of the Energy, Mineral and Natural Resources Department hereby formally applies for EPA approval of an Entrada formation aquifer exemption comprising the following described 1,440-acres in Rio Arriba County, New Mexico. The purpose of the proposed aquifer exemption is to allow the disposal of produced water into the Entrada formation through the Meridian Oil Inc. Jillson Well No. 1 located in Unit F of Section 8, Township 24 North, Range 3 West, NMPM:

TOWNSHIP 24 NORTH, RANGE 3 WEST, NMPM

Section 4: SW/4 SW/4

Section 5: S/2

Section 6: SE/4 SE/4 Sections 7 & 8: All Section 9: W/2 W/2 Section 17: N/2 N/2 Section 18: NE/4 NE/4

Pursuant to Oil Conservation Division Rules and Regulations, Meridian Oil Inc. received approval on August 25, 1994 to drill its Jillson Well No. 1 to the Entrada formation for the purpose of disposing produced water at a depth of 8,441 feet to 8,683 feet. Upon drilling the subject well and obtaining appropriate water samples, Meridian discovered that the Entrada formation in this area contains water with less than 10,000 mg/l total dissolved solids.

VILLAGRA BUILDING - 408 Galisteo

Forestry and Resources Conservation Division P.O. Box 1948 87504-1948 827-5830

Park and Recreation Division P.O. Box 1147 87504-1147 827-7465 2040 South Pacheco

Office of the Secretary 827-5950

Administrative Services 827-5925

Energy Conservation & Management 827-5900

Mining and Minerals 827-5970

Oil Conservation 827-7131 The Entrada formation, which is frequently utilized in the San Juan Basin as a disposal zone, generally contains water with total dissolved solids greater than 10,000 mg/l. In addition, the Entrada formation is hydrocarbon productive in certain areas of the San Juan Basin.

A public hearing was held in Santa Fe, New Mexico, on January 5, 1995 before Examiner David R. Catanach, UIC Program Director, to hear evidence and testimony regarding the proposed aguifer exemption. Representatives of Meridian Oil Inc., including a landman, geologist, and a petroleum engineer, presented technical evidence and testimony at the hearing. addition, Mr. Ray Leeson, a landowner in the vicinity of the Jillson Well No. 1, appeared at the hearing and cross examined Meridian's witnesses and made a statement in the case. appears that Mr. Leeson's primary objection concerned the road conditions in this area due to increased oil-field related traffic. In addition, Mr. Leeson expressed concern regarding the need to protect, from contamination by injection, shallow fresh water resources currently being utilized by ranchers in this It was expressed to Mr. Leeson by the Division that protection of shallow fresh water resources was of paramount importance to the Division and that this issue had been thoroughly examined at the time the injection permit was issued. Mr. Leeson did not present any evidence or testimony with regards to the actual aquifer exemption.

Enclosed please find the following documents in support of our request:

- 1) Original application for aquifer exemption hearing filed by Meridian Oil Inc. on December 12, 1994;
- 2) Division Order No. R-10168 which authorized Meridian Oil Inc. to inject into the Jillson Well No. 1. This order was issued in Case No. 11042 on August 25, 1994;
- 3) Objection letter from Mr. Ray Leeson regarding the proposed aquifer exemption received by the Division on January 4, 1995;
- 4) Pre-hearing statement filed by Meridian Oil Inc. on January 4, 1995, as required by Division Rules and Regulations;
- 5) Copy of notice of publication. This case was advertised in the Rio Grande Sun newspaper on December 22, 1994.
- 6) Copy of Division Docket No. 1-95 which lists the cases to be heard at the January 5, 1995 hearing. Among these cases is the subject aquifer exemption (Case No. 11179);
- 7) Copy of Meridian Oil Inc.'s Exhibit Nos. 1-8 submitted at the hearing;

- 8) Copy of Meridian Oil Inc.'s Exhibit No. 9, being the affidavit showing that all parties entitled to personal notice of the case received such notice;
- 9) List of wells currently being utilized as Entrada disposal wells in the San Juan Basin;
- 10) Map showing wells currently being utilized as Entrada disposal wells in the San Juan Basin;
- 11) Copy of a resistivity log run on the Jillson Well No. 1 submitted subsequent to the hearing;
 - 12) Transcript of hearing.

This evidence should constitute all the information needed to process the aquifer exemption request. If additional information is needed, please contact Mr. David Catanach at (505) 827-8184. We appreciate your consideration and request that the review process be expedited to the extent possible.

Sincerely,

William J. LeMay Division Director

xc: Case File-11179

Mr. W. Thomas Kellahin OCD-Aquifer Exemption File