



STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
 OIL CONSERVATION DIVISION

TONY ANAYA
 GOVERNOR

November 12, 1986

POST OFFICE BOX 2088
 STATE LAND OFFICE BUILDING
 SANTA FE, NEW MEXICO 87501
 (505) 827-5800

Thornton Hopper
 P. O. Box 953
 Midland, Texas 79702

Re: Injection Pressure Increase
 Bradley Federal No. 6 Well
 Eddy County, New Mexico

Dear Sir:

Reference is made to your request of October 29, 1986 to increase the surface injection pressure on your Bradley Federal No. 6 Well. This request is based on a step rate test conducted on the well on September 11, 1986. The results of the test have been reviewed by my staff and we feel an increase in injection pressure on this well is justified at this time.

You are therefore authorized to increase your surface injection pressure on the following well:

<u>Well & Location</u>	<u>Maximum Injection Surface Pressure</u>
Bradley Federal Well No. 6 1650 FSL & 990 FEL, Sec. 11 T-24 South, R-26 East, NMPM Eddy County, New Mexico.	640 PSIG

The Division Director may rescind this injection pressure increase if it becomes apparent that the injected water is not being confined to the injection zone or it is endangering any fresh water aquifers.

Sincerely,

R. L. STAMETS
 Director

RLS/DRC/et

cc: Oil Conservation Division - Artesia

File 5823
D. McDonald
D. Catanach

9-11-86

Bardley Federal #6

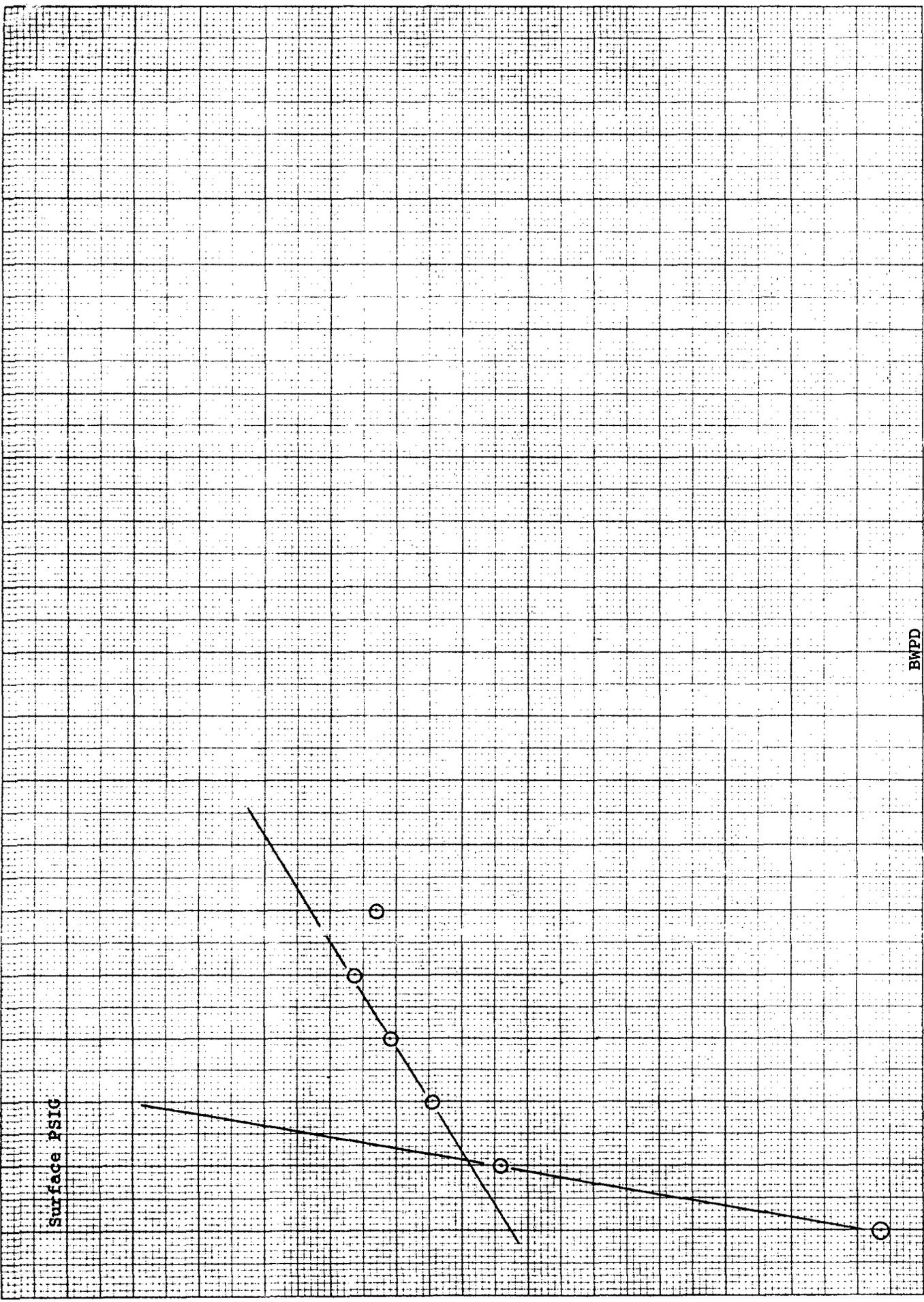
Thornton Hopper

Surface PSIG

BWPD

1300
1200
1100
1000
900
800
700
600
500
400
300
200
100

50 100 150 200 250 300 350 400 450 500 550 600 650 700 750 800 850 900 950

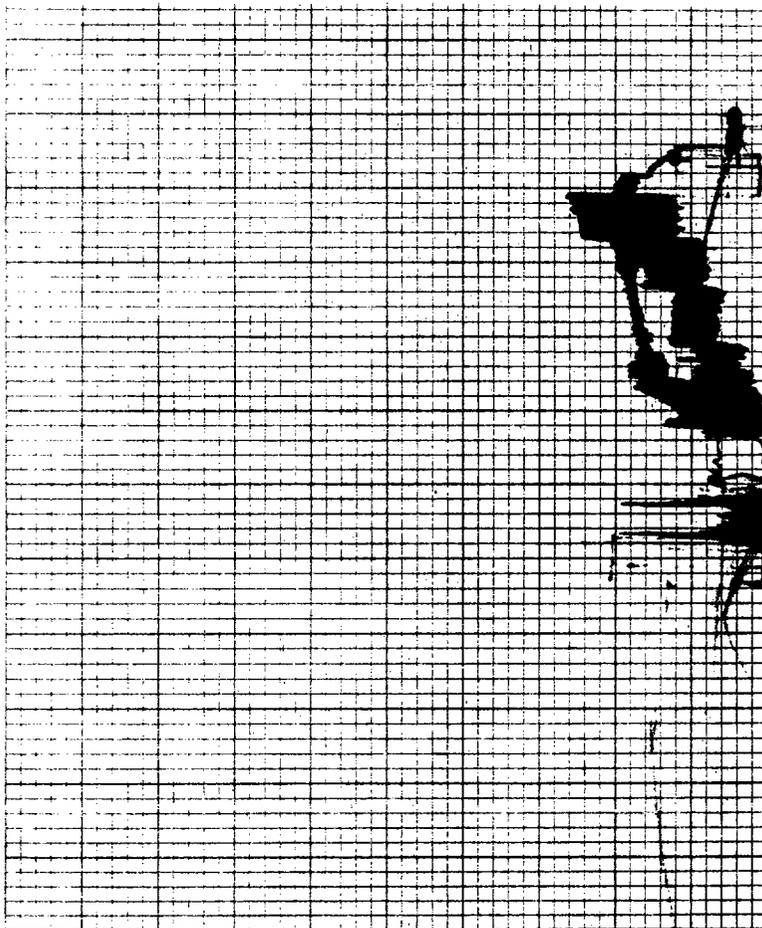


B & D WELL TESTERS, INC.

P.O. Box 5683
HOBBS, NEW MEXICO

505 397-3914

Thornton Hopper
Bradley Federal #6
9-11-86



NO. 1

BEFORE THE OIL CONSERVATION COMMISSION
OF THE STATE OF NEW MEXICO

IN THE MATTER OF THE HEARING
CALLED BY THE OIL CONSERVATION
COMMISSION OF NEW MEXICO FOR
THE PURPOSE OF CONSIDERING:

CASE NO. 5823
Order No. R-5348

APPLICATION OF THORNTON HOPPER
FOR SALT WATER DISPOSAL, EDDY
COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on December 15, 1976 at Santa Fe, New Mexico, before Examiner, Richard L. Stamets.

NOW, on this 17th day of January, 1977, the Commission, a quorum being present, having considered the testimony, the record, and the recommendations of the Examiner, and being fully advised in the premises,

FINDS:

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

(2) That the applicant, Thornton Hopper, is the owner and operator of the Bradley Federal Well No. 6, located in Unit I of Section 11, Township 24 South, Range 26 East, NMPM, Black River-Delaware Pool, Eddy County, New Mexico.

(3) That the applicant proposes to utilize said well to dispose of produced salt water into the Delaware formation, with injection into the open-hole interval from approximately 1987 feet to 2000 feet.

(4) That the injection should be accomplished through 2 3/8-inch plastic lined tubing installed in a packer set at approximately 1950 feet; that the casing-tubing annulus should be filled with an inert fluid; and that 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.

(5) That the injection well or system should be equipped with a pop-off valve or acceptable substitute which will limit the wellhead pressure on the injection well to no more than 400 psi.

(6) That an administrative procedure should be established whereby the Secretary-Director of the Commission may authorize higher wellhead injection pressures without notice and hearing.

(7) That prior to injection of water into said Bradley Federal Well No. 6 the applicant should verify the adequacy of cement around the production casing by means of a cement bond log, and perform remedial work as required.

(8) That the operator should notify the supervisor of the Artesia district office of the Commission of the date and time of the running of the cement bond log and installation of disposal equipment so that the same may be inspected.

(9) That 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.

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

IT IS THEREFORE ORDERED:

(1) That the applicant, Thornton Hopper, is hereby authorized to utilize his Bradley Federal Well No. 6, located in Unit I of Section 11, Township 24 South, Range 26 East, NMPM, Black River-Delaware Pool, Eddy County, New Mexico, to dispose of produced salt water into the Delaware formation, injection to be accomplished through 2 3/8-inch tubing installed in a packer set at approximately 1950 feet, with injection into the open-hole interval from approximately 1987 feet to 2000 feet;

PROVIDED HOWEVER, that the tubing shall be plastic-lined; that the casing-tubing annulus shall be filled with an inert fluid; that a pressure gauge shall be attached to the annulus or the annulus shall be equipped with an approved leak detection device in order to determine leakage in the casing, tubing, or packer; and that the casing-casing annulus shall be equipped with a riser to facilitate periodic testing of the bradenhead for pressure or fluid production.

(2) That the injection well or system shall be equipped with a pop-off valve or acceptable substitute which will limit the wellhead pressure on the injection well to no more than 400 psi.

(3) That the Secretary-Director of the Commission may administratively authorize a pressure limitation in excess of 400 psi upon a showing by the operator that such higher pressure will not result in fracturing the confining strata.

(4) That before said Bradley Federal Well No. 6 in said Section 11 may be converted to injection the operator shall cause a cement bond log to be run on the 7-inch casing therein; that he shall cause one copy of such bond log to be furnished to the supervisor of the Commission's Artesia district office; and that he shall, under the direction of such supervisor, recement such casing should the bond log reveal the same to be inadequately cemented.

(5) That the operator shall notify the supervisor of the Artesia district office of the Commission of the date and time of the running of the cement bond log and the installation of disposal equipment so that the same may be inspected.

(6) That the operator shall immediately notify the supervisor of the Commission'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 or any other evidence of fluid migration from the injection zone, and shall take such steps as may be timely and necessary to correct such failure or leakage.

(7) That the applicant shall submit monthly reports of its disposal operations in accordance with Rules 704 and 1120 of the Commission Rules and Regulations.

(8) That jurisdiction of this cause is retained for the entry of such further orders as the Commission may deem necessary.