

3R - 51

APPROVALS

YEAR(S):

1993



STATE OF NEW MEXICO

ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION



BRUCE KING
GOVERNOR

September 20, 1993

ANITA LOCKWOOD
CABINET SECRETARY

POST OFFICE BOX 2088
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO 87504
(505) 827-5800

CERTIFIED MAIL
RETURN RECEIPT NO. P-667-242-386

Mr. John A. Harju
Energy & Environmental Research Center
University of North Dakota
15 North 23rd Street
P.O. Box 9018
Grand Forks, North Dakota 58202-9018

**RE: MONITOR WELL PUMP TEST DISCHARGE
TAPP LS-3 AND FEE NO.8 LEASE SITES
SAN JUAN COUNTY, NEW MEXICO**

Dear Mr. Harju:

The New Mexico Oil Conservation Division has reviewed your September 1, 1993 correspondence requesting authorization for onsite discharge of ground water from pump tests of monitor wells on the Tapp LS-3 and Fee No.8 lease sites.

Based upon the water quality analyses provided, the above referenced request is approved with the following condition:

1. Water will not be discharged to any "waters of the United States".

Please be advised that OCD approval does not relieve you of liability should this discharge result in actual pollution of surface water, ground water or the environment. In addition, OCD approval does not relieve you of responsibility for compliance with any other federal, state or local laws and/or regulations.

If you have any questions, please contact me at (505) 827-5885.

Sincerely,

William C. Olson
Hydrogeologist
Environmental Bureau

xc: OCD Aztec Office

P 667 242 386



Certified Mail Receipt

No Insurance Coverage Provided
Do not use for International Mail
(See Reverse)

Sent to	
Street & No.	
P.O., State & ZIP Code	
Postage	\$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, & Address of Delivery	
TOTAL Postage & Fees	\$
Postmark or Date	

PS Form 3800, June 1990

Fold at line over top of envelope to the right of the return address.



Energy &
Environmental
Research
Center

OIL CONSERVATION DIVISION
RECEIVED

'93 SEP 7 AM 2 09

UNIVERSITY OF NORTH DAKOTA

15 North 23rd Street — P.O. Box 9018 / Grand Forks, ND 58202-9018 / Phone: (701) 777-5000 Fax: 777-5181

September 1, 1993

Mr. Roger Anderson
Environmental Bureau Chief
New Mexico Oil Conservation Division
P.O. Box 2088
Santa Fe, NM 87504-2088

Dear Roger:

As part of a research project sponsored by the Gas Research Institute and U.S. Department of Energy, I would like to conduct pumping tests in shallow groundwater monitoring wells on two oil lease sites in the Farmington, New Mexico area and discharge the water on-site. Results of previous analyses of major and minor ions in groundwater samples from the sites have indicated water qualities that should allow for considering surface disposal of the groundwater generated during the pumping tests. I have also sampled the monitor wells for subsequent purge and trap analyses, with BTEX compounds quantified, and the results of these analyses indicate no concentrations above their respective detection limits. The following tables provide a summary of the locations of the two leases and groundwater quality observed thus far.

Tapp LS-3 Mesa Verde and Pictured Cliffs Dual Completion
SW 1/4 Sec. 15, T. 28 N, R. 8 W., San Juan County, New Mexico

<u>Parameter</u>	<u>Concentration, mg/L</u>
Na	140
K	1.5
Ca	490
Mg	30
Fe	<0.20
SO ₄	1500
NO ₃	<1.0
PO ₄	<1.0
Cl	9.7
HCO ₃ Alkalinity	251
Mn	<0.05
Si	7.4
Sr	7.3
Al	<1.0
Hg	<0.001
Benzene	<0.005
Toluene	<0.005
Ethylbenzene	<0.005
Total Xylenes	<0.015

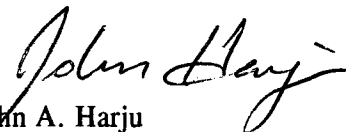
Mr. Anderson/2
September 1, 1993

Fee No. 8 Mesa Verde and Pictured Cliffs Dual Completion
NE 1/4 Sec. 8, T. 30 N., R. 11 W., San Juan County, New Mexico

<u>Parameter</u>	<u>Concentration (mg/L)</u>
Na	36
K	4.3
Ca	220
Mg	21
Fe	<0.20
SO ₄	350
NO ₃	<1.0
PO ₄	<1.0
Cl	30
HCO ₃ Alkalinity	362
Mn	0.26
Si	5.6
Sr	2.5
Al	<1.0
Hg	<0.001
Benzene	<0.005
Toluene	<0.005
Ethylbenzene	<0.005
Total Xylenes	<0.015

I hope to conduct the pumping tests during the month of October, with your approval. Should you have any questions, require further information, or would simply like to discuss this matter further, please feel free to give me a call, at any time, at (701) 777-5208.

Sincerely,



John A. Harju
Geologist
Groundwater & Waste Management

JAH/skr

c: Frank Beaver, EERC
Craig Schmit, EERC
David Charlton, EERC

Willie

6/26/92

Mr. Denny Foost
New Mexico OCD

As we discussed by phone on Monday, June 22, 1992, I have installed several monitor wells at an Amoco Production Co. Site near Blanco, NM. These wells are part of a groundwater research program funded by the Gas Research Institute and the U.S. Department of Energy. The site name is Tapp LS-3, located in section 15 of Township 28 N, Range 8 W. ownership of the wells rests with the Energy and Environmental Research Center, located in Grand Forks, ND. Should you need to contact me, for any reason, I can be contacted at the following address.

Mr. John Hanjra
UND Energy and Environmental Research Center
Box 8213 University Station
Grand Forks, North Dakota
58202

(701) 777-5208

Sincerely,

John Hanjra

NA District
10/27/92
MD

OIL CONSERVATION DIVISION

RECEIVED

'92 JUN 29 AM 4 33

44-381 30 SHEETS 3 SQUARE
42-382 100 SHEETS 5 SQUARE
42-389 200 SHEETS 5 SQUARE

