



Amoco Production Company

Southern Division
1670 Broadway
P.O. Box 800
Denver, Colorado 80201
303-830-4040

T. D. Autry
Division Production Manager

February 7, 1991

New Mexico Oil Conservation Division
P. O. Box 2088
Santa Fe, NM 87504

File: KJK - 67 - WF

Pritchard SWD No. 1

Request for Injection Pressure Increase

NW/4, Section 34, T31N, R9W

RECEIVED

FEB 15 1991

**OIL CON. DIV.
DIST. 3**

Per Administrative Order SWD No. 405, the injection well or system shall be equipped with a pressure limiting device which will limit the wellhead pressure on the injection well to no more than 1500 psi. Amoco requests that the pressure limitation be increased to 1670 psi. The requested pressure is based on the current perforated Entrada interval of 8382 to 8600 feet and 0.2 psi per foot. In our original permit application Amoco had intended to also complete the Bluff and Morrison formations which would have resulted in the lower permitted pressure of 1500 psi. However, at this time Amoco does not intend to complete the Bluff or the Morrison formations.

In addition Order SWD No. 405 requires that prior to commencing injection operations the operator shall obtain a formation water analysis from the completed disposal horizon and send the results to the Santa Fe Division office. An Entrada formation water sample was taken while swabbing immediately following perforating and prior to fracture stimulation. The water analysis from the Entrada formation showed a total dissolved solids (TDS) level of 11,735 parts per million (ppm). Find attached the documented water analysis.

Should you have any questions please contact Brooke Bell at (303) 830-5341 in Denver.

Sincerely,

T. D. Autry /k/k

Attachment

cc: New Mexico Oil Conservation Division w/ attachment
1000 Rio Brazos Road
Aztec, NM 87410
Attention: Ernie Bush

Buddy Shaw - San Juan Operation Center w/ attachments
J. W. Hawkins - Building w/ attachments

API WATER ANALYSIS REPORT FORM

100

City

Company		Sample No.		Date Sampled	
AMOCO				1-24-91	
Field	Legal Description			County or Parish	State
Lease or Unit	Well	Depth	Formation	Water, B/D	
PRITCHARD	SW/D #1				
Type of Water (Produced, Supply, etc.)	Sampling Point		Sampled By		
Entrada	(Swab after perforating, prior to frac)				

DISSOLVED SOLIDS

CATIONS

Sodium, Na (calc.)	3.11	173.5
Calcium, Ca	12.6	60.4
Magnesium, Mg	3.9	3.2
Barium, Ba		

PH

Specific Gravity, 60/60 F.

Resistivity (ohm-meters) 5.6 F.

7.13

151

Q. 434

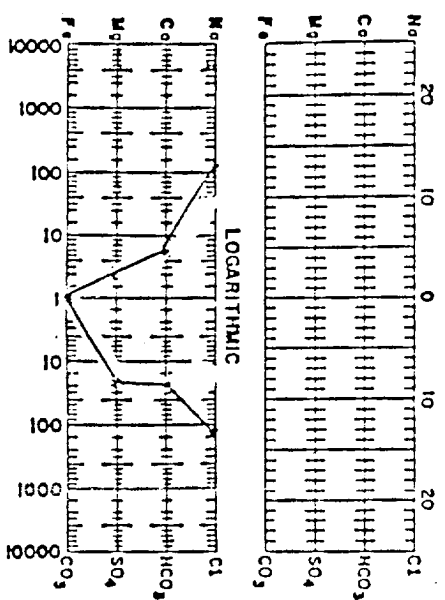
OTHER PROPERTIES

ANIONS

Chloride, Cl	4530	127.5
Sulfate, SO_4	1227	25.6
Carbonate, CO_3	1830	30
Bicarbonate, HCO_3		

STANDARD

WATER PATTERNS — me//



Total Dissolved Solids (calc.)

11735-

Iron, Fe (total)
Sulfide, as H₂S

REMARKS & RECOMMENDATIONS:

1. π_1 is a \mathbb{Z} -module

SAMPLE HEAVY DISCOVERED

Date Received _____

1-24-91

Preserved

Date Analyzed

1-24-91

Analyzed By

2142

TECH, Inc.

333 East Main

Farmington

New Mexico

87401

505/327-3311

III. CON. DIV.
DIST. 3

FEB 5 1991

REGISTRATION