

DIVISION LABORATORY
FARMINGTON, NEW MEXICO

ATTACHMENT NO. 12

LABORATORY WATER ANALYSIS

Report No: _____

To: Amoco Production Co.

Date: 3/8/82

501 Airport Dr.

Farmington, NM 87401

Attn: Mr. Dave Schott

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Submitted By: Dave Schott

Date Received: 10/2/81

Well No: Jack Frost B #1E

Depth: 4000'

Formation: Gallup

Location: San Juan County, NM

Swab Sample

Resistivity	<u>0.42</u>	ohms/m ² /m
Temperature	<u>73.°F</u>	
Specific Gravity(Sp.Gr.)	<u>1.007</u>	
pH	<u>6.7</u>	
Total Dissolved Solids	<u>15,533</u>	parts per million*
Calcium (Ca ⁺⁺)	<u>326</u>	parts per million
Magnesium (Mg ⁺⁺)	<u>21</u>	parts per million
Chlorides (Cl ⁻)	<u>6,229</u>	parts per million
Carbonates (CO ₃ ⁻⁻)	<u>0</u>	parts per million
Bicarbonates (HCO ₃ ⁻)	<u>355</u>	parts per million
Sulfates (SO ₄ ⁻⁻)	<u>1,606</u>	parts per million
Iron (Fe ⁺⁺⁺)	<u>present</u>	parts per million
Potassium (K ⁺)	<u>~6,000 (Estimated)</u>	parts per million
Sodium (Na ⁺)(Difference)	<u>996</u>	parts per million
Stability Index (SI)	<u>Not required</u>	

REMARKS: There appears to be about 1% KCL in water

* indicates parts per million by weight; uncorrected for Specific Gravity

LABORATORY ANALYST:

Clarion Cochran

Respectfully submitted,
National Cementers Corporation

By: Clarion A. Cochran

