

HALLIBURTON DIVISION LABORATORY

HALLIBURTON SERVICES
MIDLAND DIVISION
HOBBS, NEW MEXICO 88240

116133

LABORATORY WATER ANALYSIS

No. W81-361To Harper Oil CompanyDate 5-5-81904 Hightower BuildingOklahoma City, Oklahoma 73702

This report is the property of Halliburton Company and neither it nor any part thereof nor a copy thereof is to be published or disclosed without first securing the express written approval of laboratory management; it may however, be used in the course of regular business operations by any person or concern and employees thereof receiving such report from Halliburton Company.

Submitted by _____ Date Rec. 5-5-81Well No. Warfield Y-1 Depth 9,940' Formation Bough "B"County Lea Field _____ Source DSI #1

	<u>Sampler</u>	<u>Tool Top</u>	<u>Top of Recovery</u>
Resistivity	<u>0.122 @ 74°F.</u>	<u>0.125 @ 74°F.</u>	<u>0.194 @ 74°F.</u>
Specific Gravity	<u>1.076</u>		
pH	<u>6.2</u>		
Calcium (Ca)	<u>6,250½</u>		<u>*MPL</u>
Magnesium (Mg)	<u>Nil</u>		
Chlorides (Cl)	<u>65,000</u>	<u>65,000</u>	<u>34,000</u>
Sulfates (SO ₄)	<u>2,200</u>		
Bicarbonates (HCO ₃)	<u>390</u>		
Soluble Iron (Fe)	<u>120</u>		
API Gr of Oil -	<u>48.8 @ 60°F.</u>		<u>47.1 @ 60°F.</u>

Middle of Recovery - Res. @ 74°F. - 0.190 Chlorides, mpl - 34,000

Pit Sample - Res. @ 74°F. - 0.172 Chlorides, mpl - 36,000

Remarks:

*Milligrams per liter

Respectfully submitted,

Analyst: Brewer

HALLIBURTON COMPANY

cc:

By _____

CHEMIST

NOTICE

THIS REPORT IS LIMITED TO THE DESCRIBED SAMPLE TESTED. ANY USER OF THIS REPORT AGREES THAT HALLIBURTON SHALL NOT BE LIABLE FOR ANY LOSS OR DAMAGE, WHETHER IT BE TO ACT OR OMISSION, RESULTING FROM SUCH REPORT OR ITS USE.