

RECEIVED

FEB 16 1977

U.S. GEOLOGICAL SURVEY
ARTESIA, NEW MEXICO

Artesia, New Mexico
February 11, 1977

Mr. [Name] [Address]

[City] [State] [Zip]

Ref: Cement Bond Log
Thornton Copper
Bradley Federal #6
Eddy County, N. Mex.
rRecorded on 2-5-77

The cement bond log is a measurement of the quality of the annular seal connection between the casing and the cement in the annular space, and the fractures. While the cement bond log interpretation can be made of Cement Bond Logs, it is desired to make qualitative interpretations which are usually supported by actual experience.

The cement bond log shows what appears to be good bonding from 1070-1080, 1100-1110 and 1180-1190' of well bonded cement. In addition, there is fair-to-good bond at 19.6-19.7' and at least fair bonding from 1100-1110' bonding over the 30' interval, 1010-1015'. Top of the cement bond is at 1120', with several intervals of good bonding, namely 1140-1150 and 1160-1170'.

The cement bond log shows 100' of well bonded cement at the bottom of the casing, plus the cement bond log at 1180' which is interspersed with zones of good bonding, should provide a seal against fluid flow behind the casing from zones below the bottom of the casing.

Cordially,

Jack C. Givens
President

All interpretations are opinions based on inferences from electrical or other measurements and Vann Tool Company can not, and does not, guarantee accuracy of any interpretations, and shall not, except in cases of gross negligence on our part, be liable or responsible for any loss, costs, damages, or expenses incurred or sustained by anyone resulting from any interpretation made by Vann Tool Company officers, agents, or employees. Interpretations are also subject to our General Terms and Conditions printed in our current price schedule.

J. C. G.