

bcc: AG Eades
GR Buchanan
2nd Street - Don Roush
RA Garcia - RGARC
TC Tupper - TTUPP

June 17, 1965

Mr. C. E. Carlson
Kellogg Company
P. O. Box 3866
Omaha, Nebraska

Dear Mr. Carlson:

Here is the analysis results from your recent THERMINOL FR-2 sample:

<u>PROPERTY</u>	<u>SAMPLE</u>
Acid Number	0.10 mgKOH/gm
Moisture	410 ppm
Viscosity @ 100°F.	75 centipoise

The fluid is in suitable condition for continued service. However, I would like to point out that the moisture content is unusually high. Our production specification calls for a maximum moisture limit of 50 ppm. Your 410 parts per million may indicate either a moisture contaminated sampling container, or the leakage of moisture into the system via water-cooled bearing seals, leaking heat exchangers, or an excessive amount of moisture aspiration via the expansion tank vent line when your system is cycled frequently. Not being knowledgeable regarding your system, I suggest you look at the aforementioned as possibilities. Moisture can be detrimental since it will cause pump malfunction (cavitation) and the consequent loss of flow through the heater with subsequent overheating of the fluid due to high film temperatures.

I suggest you submit another sample in two or three months. We will check the fluid then to ascertain its performance. Let me know when I can be of service, or contact our Fluids Specialist for your area, Mr. Raleigh Garcia (also located at the above address in St. Louis).

Sincerely,

S. Shaw
Market Specialist
Functional Fluids

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