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Subject: ANALYTICAL ANALYSES OF SUSPENSION OF FM-3924
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INTRODUCTION:

Reference: CCD Analytical Method #G-29-0381

Four samples of corn oil with suspended FM-3924 were received on March 16, 1981 from E. G. Gortner. The four samples labeled Placebo corn oil, T-2999 COC 25 mg/kg/day FM-3924, T-2999 COC 2.5 mg/kg/day and T-2999 COC 0.25 mg/kg/day were submitted for mg/ml concentration of FM-3924, for use in a rat feeding study. The samples were run by a GLC method using a methanol extraction and an internal standard.

GLC RESULTS:

<u>Sample</u>	<u>Mg/Ml FM-3924</u>
Placebo Corn Oil	No FM-3924 detected
T-2999 COC FM-3924 0.25 mg/kg/day	0.0459 mg/ml FM-3924
T-2999 COC FM-3924 2.5 mg/kg/day	0.4694 mg/ml FM-3924
T-2999 COC FM-3924 25 mg/kg/day	5.136 mg/ml FM-3924

SUMMARY:

All samples were within 10% of target and showed good reproducibility. The solubility of FM-3924 was found to be low. Standards used show signs of saturation at 0.5 mg/ml level. It was found that sonification would dissolve the FM-3924 into the corn oil. But after several days the 5 mg/ml standard showed some crystallization, but after sonification it would re-solubilize. The crystallization could cause problems in the feeding study corn oil.

TRM/hc

T. R. Mathisen