V. CONCLUSIONS

- 1. The five runs made with CM&S catalysts resulted in wide variations in yield of liquid product.
- 2. The liquid yields did not show the same correlation with space velocity and catalyst particle size that was exhibited with magnetite and mill scale catalysts.
- 3. The best run, Number 59, had a C_3 + yield of approximately 9.0 lbs/MCF H_2 +CO. The distinguishing features of the catalyst in Run 59 were:
 - a) The catalyst had previously been used in ammonia synthesis.

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- b) It was essentially fully reduced when received at Montebello.
- c) No potassium carbonate was added to the catalyst as received.

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WIS-EW

REPORT APPROVED BY Signed: duBois Eastman/RAB

(WEK-WAMcM)-GK-WJC(2)-RWH-RLSr(2)-HDM(2)-duBE(2) JCW-CEL WMS

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(WEK-WAMCM)-GK-WJC(2)-RWH-RLSr(2)-HDM(2)-duBE(2) JCW-CEL WMS