

This Research Report is issued under the fixed designation RR:D02-1266. You agree not to reproduce or circulate or quote, in whole or part, this document outside of ASTM International Committee/Society activities, or submit it to any other organization or standards body (whether national, international or other) except with the approval of the Chairman of the Committee having jurisdiction and the written authorization of the President of the Society. If you do not agree to these conditions, please immediately destroy all copies of this document. *Copyright ASTM International, 100 Barr Harbor Drive, West Conshohocken, PA 19428. All rights reserved.*

24 February 1994

Committee D02 on Petroleum Products and Lubricants

Research Report D02-1266

Interlaboratory Study to Establish Precision Statements for ASTM D5501, Test for Determination of Ethanol Content of Denatured Fuel Ethanol by Gas Chromatography

ASTM International
100 Barr Harbor Drive
West Conshohocken, PA 19428-2959

Salores

R R submitted

by D 2 for D5501

202. D5

Test for Determination of Ethanol content of
Aerated Fruit
Ethanol by Gas
Chromatography

Joanne R

System Lab Services

A Division of Williams Pipe Line Company

February 11, 1994

Joanne G. Kramer
Editor
ASTM
1916 Race Street
Philadelphia, PA 19103

Subject: Research Report D 5501
ASTM Committee D-02, Subcommittee D, Section 5 on C5's Hydrocarbons &
Oxygenated Hydrocarbons, Denatured Fuel Ethanol Study Group

Enclosed you will the documents and results generated in the development of D 5501. There were four drafts of the method. The first dated 12/2/92 was presented at the December D-02 meeting. Comments received from subcommittee members were then incorporated into the second draft which accompanied the round robin samples. A copy of the letter and instructions sent to labs participating in the round robin is enclosed. An error in the calculation of the percentage of ethanol in two of the samples was discovered just after sending the round robin instructions. The corrected value was used in the statistical evaluation.

Thirteen labs were sent 11 samples, 8 laboratories followed the procedure and returned results. Copies of the results returned by these eight labs are included. Three labs returned results utilizing a different procedure and were not included.

David Lawrey of Lawrey, Inc. was sent the results from the round robin and performed the statistical analysis. His reports are included.

Sincerely,



Charles L. Haber
Senior Research Chemist