

Phase 2 Reformulated Gasoline

Performance Subcommittee

Final
Meeting Summary
October 11, 1995

California Air Resources Board

I. Introduction

The performance subcommittee discussed the following key issues regarding the California Reformulated Gasoline (CaRFG) performance and compatibility testing program:

Summary Report for the Board
Texaco Test Programs
Preliminary CaRFG Performance and Compatibility Findings
Other Issues

Copies of presentations or materials given at this meeting are enclosed this summary.

II. Summary Report for the Board

This meeting was held to review what the Performance Subcommittee would be presenting to the Advisory Committee. The draft performance a compatibility presentation to the Advisory Committee was shown to subcommittee members for their comment and approval. The presentation included the description of the test program, its goals, limitations, a preliminary results. The results included the preliminary historical baseline repair analysis, the preliminary fuel economy analysis and the preliminary compatibility results from the test programs. The presenta is included with the attachments of meeting materials.

III. Texaco Test Programs

Texaco conducted two fleet test programs using very low aromatic gasoline; one in Bakersfield, California and the other in Beacon, New Y Mr. Mike Kulakowski, presented both test programs, but the preliminary results of the Bakersfield test were previously discussed at the July 18, 1995 Performance Subcommittee Meeting and will not be discusse part of the summary. However, the presentation given for both test pro is included with the attachments.

The Beacon test program was designed to test the effects of low aromatic gasoline on elastomer fuel system components during typical consumer service. The vehicles used in this test were operated by their owners in day-to-day service.

The test comprised 41 vehicles ranging from 1965 to 1992 model years for passenger cars and light and medium duty trucks in four technology classes. Each vehicle in the fleet was operated on three fuels: a commercially available gasoline ("break in" gasoline) with a typical aromatics concentration, a very low aromatic gasoline containing a 5% v concentration and a high aromatic gasoline containing a 48% volume concentration. All of the vehicles operated on the "break in" fuel for least 3 weeks prior to the test, and at the beginning of the test program half of the vehicles were fueled with low aromatic fuel and the other half was fueled with high aromatic fuel. After three weeks the vehicles on low aromatic gasoline switched to high aromatic gasoline and the vehicles on high aromatic gasoline switched to low aromatic gasoline for an additional two weeks. An evaporative emissions test was used on the vehicles before, during and after the test program to test for any leaks.

Texaco's R&D staff preliminarily judged that 3 of the fuel related incidents may be attributable, at least in part, to low gasoline aromatic concentration. The three incidents occurred on elastomer components when using the 5% aromatics fuel. The incidents occurred on the following vehicles: 1968 Chevrolet Chevelle, 1971 Plymouth Duster, and a 1987 Ford

IV. Preliminary CaRFG Performance and Compatibility Findings

The subcommittee discussed the preliminary findings drafted by the ARB, and made some recommendations for changes to be made. As a result of the discussion, an introduction will be added and Performance Subcommittee members will have another opportunity to review the findings and provide comments before they become final.

V. Other Issues

Results from the TRP Seep Task Group will be available soon. We are expecting to receive a letter from Loren Beard of Chrysler and the domestic auto manufacturers, stating that seeps documented during the test program are normal since they occurred in both test and control vehicles and on vehicles outside of the test program.

Attachments

[CBG Program Advisory and Subcommittee Activities](#)