



INTERNATIONAL AUTOMOTIVE
TESTING LABORATORIES

8/23/88

Mr. Bob Alexander, V.P.
American President Lines Ltd.
1800 Harrison Street
Oakland, Ca. 94612

RE: Final report of a six month study of Omstar D1280X and Engine Shield products in American President Lines diesel equipment.

Dear Mr. Alexander,

The testing of Omstar D1280X and Engine Shield products started at APL's, San Pedro terminal on March 21, 1988 then moved to APL's, Oakland terminal on June 12, 1988 and was concluded on August 19, 1988 at APL's Seattle, Washington terminal. The equipment used for these tests were Trailer Jockey Tractors utilizing Detroit Diesel 453 and Catapillar 3208 engines and Generator Sets.

All tests were conducted or supervised by Lawrence Swiencki Laboratory Manager of California Environmental Engineering, an EPA recognised and Air Resources Board certified testing laboratory. The tests were performed in accordance with the New Jersey State Department of Environmental Protection Smoke Opacity testing procedure 7:27B-4.4.

The results are conclusive as per the attached data sheets. On the fast idle to maximum throttle the overall emission reduction was 50.3%. On the slow idle to maximum throttle the overall emission reduction was 33.5%. In addition the overall emission reduction on the Generator Sets was 51%. The results are astounding. In all my years of testing additives and devices I have never seen these types of results. These encouraging reduction figures coupled with a reduction in the gallons per hour usage of fuel reported by each terminal substantiate the manufacture's claims.

C.E.E. is currently conducting additional tests on APL's overhead lifts equipped with the Volvo Turbo Diesel engine's. These engine's are heavy polluters and the results thus far have been notably positive. These test should be completed in approximately five to six weeks at the APL Seattle and Oakland terminals.

C.E.E. feels that the Omstar D1280X and Engine Shield products do what the manufacture's claim. Any product that can make such an impact on reducing the overall pollutants being emitted into our atmosphere should be considered an environmental and technological break through in our efforts to clean the air we all breathe.

