APPENDIX - A

CF-4 1990 Diesel Engine Service

Describes oil used in high-speed, four-stroke-cycle, diesel engines. API CF-4 oils exceed the requirements for the CE category providing improved control of oil consumption and piston deposits. These oils should be used in place of CE oils. They are particularly suited for on-highway, heavy-duty truck applications.

CG-4 for Severe Duty Diesel Engine Service

API Service Category CG-4 describes oils for use in high-speed, four-stroke cycle diesel engines used in highway and off-road applications where the fuel sulphur content may vary from less than 0.05% wt. to less than 0.5% wt. CG-4 oils provide effective control over high temperature piston deposits, wear, corrosion, foaming, oxidation, and soot accumulation. These oils are especially effective in engines designed to meet 1994 exhaust emission standards and may also be used in engines requiring API Service Categories CD, CE and CF-4. Engine Oils that meet the API Service Category CG-4 designation have been tested in accordance with the CMA Code.

CH-4 1998 Severe Duty Diesel Engine Service

API Service Category CH-4 oils are suitable for high-speed, four-stroke diesel engines designed to meet 1998 exhaust emission standards and are specifically compounded for use with diesel fuels ranging in sulphur content up to 0.5% weight. CH-4 oils are superior in performance to those meeting API CF-4 and can effectively lubricate engines calling for those API Service Categories.

CI-4 2002 Severe Duty Diesel Engine Service

The API CI-4 Service category describes oils for use in those high-speed, four-stroke cycle diesel engines designed to meet 2004 exhaust emission standards. These oils are compounded for use in all applications with diesel fuels ranging in sulphur content up to 0.05% by weight. These oils are especially effective at sustaining engine durability where Exhaust Gas Recirculation (EGR) and other exhaust emission devices may be used. Optimum protection is provided for control of corrosive wear tendencies, low and high temperature stability, soot handling properties, piston deposit control, valve-train wear, oxidative thickening, foaming and viscosity loss due to shear. API CI-4 oils are superior in performance to those meeting API CH-4, CC-4 and CF-4 and can effectively lubricate engines calling for those API Service Categories.