

DRAFT RECLAMATION MANUAL RELEASE
Comments on this draft release must be submitted to Talmadge Oxford
(toxford@usbr.gov) by October 2, 2012.

The FIST 4-12, “Diesel Oil Sampling and Rotation Program” is being retired because it is out of date and no longer viable for use in the Reclamation Operations and Maintenance Program. In accordance with Reclamation Manual procedures this FIST will be posted for a minimum of 30 days.

See the following pages for the FIST 4-12, “Diesel Oil Sampling and Rotation Program”.

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**DIESEL OIL SAMPLING AND
ROTATION PROGRAM**

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Diesel Oil Sampling and Rotation Program

Experience has shown that diesel oil may deteriorate during long term storage. In the sedentary state, microorganisms in the form of bacteria, fungi or algae flourish in the oil if water is present. The presence of the organisms causes the evaporation of the lighter fractions of oil, thereby increasing the flashpoint of the oil and causing retarded firing. These organisms can also reach a concentration severe enough to plug filters and small orifice valves. In the tanks, the organisms can act as blotters. Their affinity for water could, when on the tank surface, cause corrosion.

In order to ensure the oil to be of usable quality, we recommend a sampling program concurrently with annual maintenance checks. If the oil is found contaminated, its disposal can be accomplished by incineration in oil furnaces or salamander heaters.

For oil not presently deteriorated, we recommend a rotation program. Oils contained in seldom used equipment such as standby engine-generators should be periodically removed and used in heavily used equipment such as dozers and graders. This rotation will not only ensure the immediate usability of critical standby equipment but will also eliminate the needless waste of diesel fuel.

As an alternative to an oil rotation program, fuel may be purchased with additives to inhibit both oxidation and growth of microorganisms, or an additive may be procured to add to existing fuel oil. One such additive is: "PRIST" PRIST Div., Houston Chemical Co., Division of PPG Industries. The Phillips Petroleum Company is one supplier of inhibited fuel oil.