ABSTRACT

Oil Used Analysis is one of methods from predictive maintenance used for determining of oil condition that used on electric and mechanic properties. This method established by analyzing the change of oil properties, contamination of products, and level of oil obsolescence.

So the object of this research is MEDITRAN SAE - 40 oil used for Diesel - Cummins NT/NTA 885 Big Cam III - Alternator on Rubber Tyred Gantry Cranes. Test include viscosity test using ASTM D 445 method, Total Base Number's test (TBN) using ASTM D 1744 method, degree of sulfur using ASTM D 1551, degree of ashes using ASTM D 482 test, and ASTM D 3605 test or be widely known as Atomic Absorption Spectrometer.

From result of the test done, it can be conclude that condition of oil Diesel - Alternator on Rubber Tyred Gantry Cranes for using a period of 250 operation hours still has a good condition, but there is problem in storage and new oil handling.