OIL ANALYSIS REPORT

US NAVY 205559 CUMMINS 73463854 - DIESEL ENGINE

Sample No: VPA059902

Oil Type: CUMMINS CUMMINS BLUE 2000 15W40

| SAMPLE INFORMAT | | | | |
|------------------|------------|--------------|-------------|------|
| | | | | |
| Sample Number | | VPA059902 | VPA059900 | |
| Sample Date | | 23 Apr 2024 | 13 Feb 2024 | |
| Machine Hours | | 3 | 0 | |
| Oil Hours | | 3 | | |
| Oil Changed | | Not Changd | Not Changd | |
| Sample Status | | NORMAL | NORMAL | |
| OIL CONDITION | | | | |
| Visc @ 100°C | cSt | 14.9 | 15.0 | |
| Base Number (BN) | mg KOH/g | 8.3 | 8.1 | |
| Oxidation (PA) | % | 63 | 63 | |
| CONTAMINATION | | | | |
| Water | % | NEG | NEG | |
| Soot % | % | 0.1 | 0 | |
| Nitration (PA) | % | 41 | 41 | |
| Sulfation (PA) | % | 54 | 55 | |
| Glycol | % | NEG | NEG | |
| Fuel | % | <1.0 | <1.0 | |
| Silicon | ppm | 12 | 9 | |
| Sodium | ppm | 3 | | |
| Potassium | ppm | 9 | 9 | |
| | F F | | - | |
| WEAR METALS | | | | |
| Iron | ppm | 4 | 3 | |
| Copper | ppm | 8 | 8 | |
| Lead | ppm | 2 | 1 | |
| Tin | ppm | 1 | <1 | |
| Aluminum | ppm | 2 | 1 | |
| Chromium | ppm | <1 | <1 | |
| Molybdenum | ppm | 4 | 5 | |
| Nickel | ppm | ∎1 | <1 | |
| Titanium | ppm | 1 | 1 | |
| Silver | ppm | | <1 | |
| Manganese | ppm | 2 | 1 | |
| Vanadium | ppm | <1 | <1 | |
| ADDITIVES | | | | |
| Calcium | ppm | 1979 | 1993 | |
| Magnesium | ppm | 52 | 42 | |
| Zinc | ppm | 1063 | 1055 | |
| Phosphorus | ppm | 884 | 988 | |
| Barium | | 004 <1 | 0 | |
| Boron | ppm | ■<1 ■195 | 208 | |
| DOIOII | ppm | - ISS | 200 | |

 Depot:
 VP152133

 Unique No:
 10995613

 Signed:
 Don Baldridge

 Report Date:
 26 Apr 2024

Contact/Location: Mitchell Cogswell - VP152133

Cogswell Marine & Motorsports, Inc 865 Stella Street CHULA VISTA, CA US 91911 Contact: Mitchell Cogswell Cogswellmarinemotorsports@gmail.com T: F:

Diagnosis

Resample at the next service interval to monitor.All component wear rates are normal. There is no indication of any contamination in the oil. The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

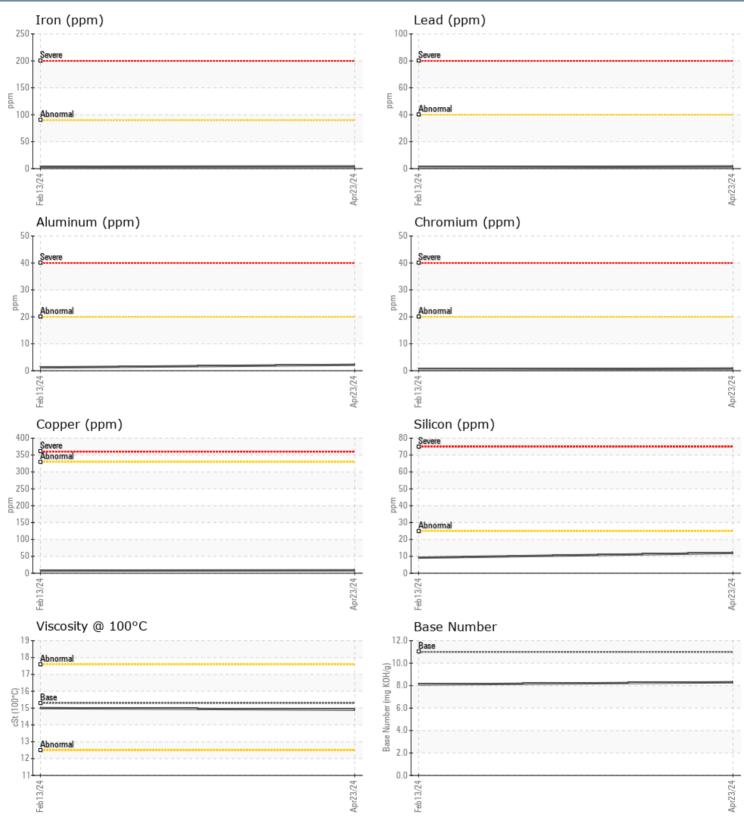


Dana 1 -f

OIL ANALYSIS REPORT



GRAPHS



Report Id: VP152133 [WUSCAR] 06160190 (Generated: 04/26/2024 18:18:50) Rev: 1

Contact/Location: Mitchell Cogswell - VP152133