



CONSTRUCTION EQUIPMENT

42067 - DIESEL ENGINE



Sample No: VCP433010
Oil Type: VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3
Job No: 42067



SAMPLE INFORMATION

Sample Number	VCP433010	VCP392539	---	---
Sample Date	07 May 2024	16 Mar 2023	---	---
Machine Hours	3131	3503	---	---
Oil Hours	0	500	---	---
Oil Changed	Changed	Changed	---	---
Sample Status	SEVERE	NORMAL	---	---

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OIL CONDITION

Visc @ 100°C	cSt	12.6	13.3	---	---
Base Number (BN)	mg KOH/g	8.0	10.3	---	---
Oxidation (PA)	%	87	71	---	---

Diagnosis

We advise that you check for the source of the coolant leak. Check for low coolant level. Oil and filter change at the time of sampling has been noted. We recommend an early resample to monitor this condition. All component wear rates are normal. Sodium and/or potassium levels are high. Test for glycol is positive. There is a high concentration of glycol present in the oil. The BN result indicates that there is suitable alkalinity remaining in the oil. The oil is no longer serviceable due to the presence of contaminants.



CONTAMINATION

Water	%	NEG	NEG	---	---
Soot %	%	0.4	0.1	---	---
Nitration (PA)	%	93	40	---	---
Sulfation (PA)	%	66	59	---	---
Glycol	%	0.10	NEG	---	---
Fuel	%	<1.0	<1.0	---	---
Silicon	ppm	8	6	---	---
Sodium	ppm	793	10	---	---
Potassium	ppm	42	3	---	---



WEAR METALS

Iron	ppm	41	2	---	---
Copper	ppm	13	<1	---	---
Lead	ppm	0	0	---	---
Tin	ppm	0	0	---	---
Aluminum	ppm	5	1	---	---
Chromium	ppm	<1	0	---	---
Molybdenum	ppm	69	38	---	---
Nickel	ppm	8	<1	---	---
Titanium	ppm	0	0	---	---
Silver	ppm	0	0	---	---
Manganese	ppm	<1	<1	---	---
Vanadium	ppm	0	<1	---	---



ADDITIVES

Calcium	ppm	1738	1568	---	---
Magnesium	ppm	449	473	---	---
Zinc	ppm	979	1047	---	---
Phosphorus	ppm	882	868	---	---
Barium	ppm	0	2	---	---
Boron	ppm	26	62	---	---

Depot: LANNOR
Unique No: 11019683
Signed: Don Baldrige
Report Date: 11 May 2024



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GRAPHS

