



CONSTRUCTION EQUIPMENT

SW1021030 RANGO VOLVO EC950F 410018 - DIESEL ENGINE



Sample No: VCP406388
Oil Type: DIESEL ENGINE OIL SAE 15W40
Job No: SW1021030 RANGO



SAMPLE INFORMATION

Sample Number	VCP406388	---	---	---
Sample Date	08 Jul 2023	---	---	---
Machine Hours	6412	---	---	---
Oil Hours	0	---	---	---
Oil Changed	Changed	---	---	---
Sample Status	ABNORMAL	---	---	---

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 T:
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OIL CONDITION

Visc @ 100°C	cSt	█ 14.6	---	---	---
Base Number (BN)	mg KOH/g	█ 6.5	---	---	---
Oxidation (PA)	%	62	---	---	---

Diagnosis

Oil and filter change at the time of sampling has been noted. No corrective action is recommended at this time. Resample at the next service interval to monitor. The aluminum level is abnormal. Valve wear is indicated. 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 acceptable for the time in service.



CONTAMINATION

Soot %	%	█ 1.7	---	---	---
Nitration (PA)	%	87	---	---	---
Sulfation (PA)	%	64	---	---	---
Glycol	%	NEG	---	---	---
Fuel	%	<1.0	---	---	---
Silicon	ppm	█ 18	---	---	---
Sodium	ppm	█ 3	---	---	---
Potassium	ppm	█ 1	---	---	---



WEAR METALS

Iron	ppm	█ 21	---	---	---
Copper	ppm	█ 4	---	---	---
Lead	ppm	█ 1	---	---	---
Tin	ppm	█ 1	---	---	---
Aluminum	ppm	▲ 34	---	---	---
Chromium	ppm	█ <1	---	---	---
Molybdenum	ppm	█ 93	---	---	---
Nickel	ppm	▲ 5	---	---	---
Titanium	ppm	█ 2	---	---	---
Silver	ppm	█ 0	---	---	---
Manganese	ppm	█ <1	---	---	---
Vanadium	ppm	<1	---	---	---



ADDITIVES

Calcium	ppm	█ 2351	---	---	---
Magnesium	ppm	█ 78	---	---	---
Zinc	ppm	█ 1307	---	---	---
Phosphorus	ppm	█ 1022	---	---	---
Barium	ppm	█ 0	---	---	---
Boron	ppm	█ 22	---	---	---

Depot: VOLVO6174
Unique No: 10562278
Signed: Don Baldrige
Report Date: 19 Jul 2023



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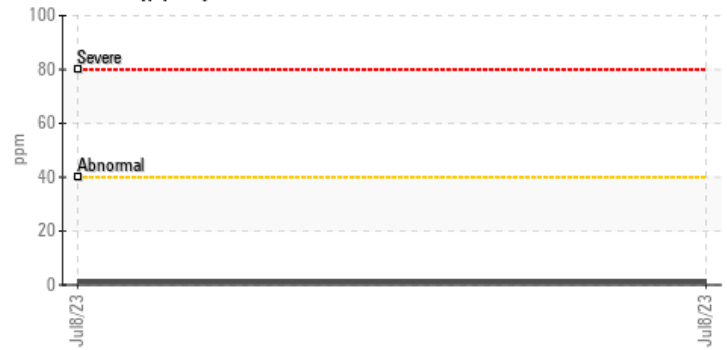


GRAPHS

Iron (ppm)



Lead (ppm)



Aluminum (ppm)



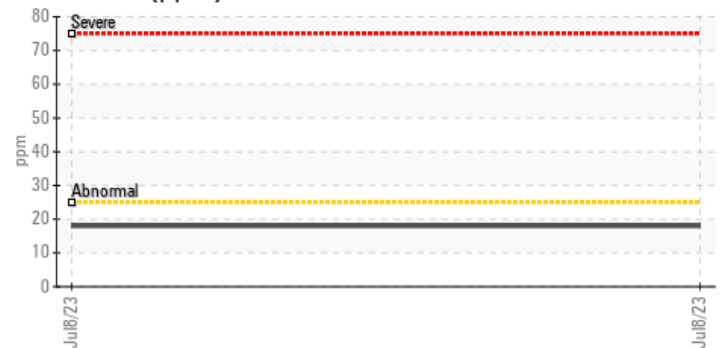
Chromium (ppm)



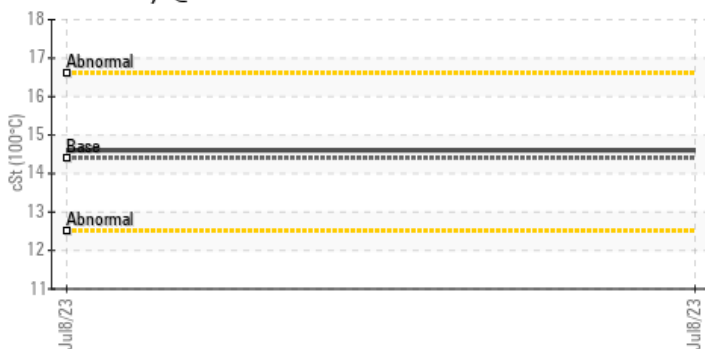
Copper (ppm)



Silicon (ppm)



Viscosity @ 100°C



Base Number

