



CONSTRUCTION EQUIPMENT

D12678 HALQUIST STON VOLVO L120G 31025 - DIESEL ENGINE



Sample No: VCE049410
Oil Type: VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3
Job No: D12678 HALQUIST STON



SAMPLE INFORMATION

Sample Number	VCE049410	---	---	---
Sample Date	02 Aug 2023	---	---	---
Machine Hours	16438	---	---	---
Oil Hours	238	---	---	---
Oil Changed	Not Chngd	---	---	---
Sample Status	SEVERE	---	---	---

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 PO BOX 5276
 DEPERE, WI
 US 54115
 Contact: DEL VAUGHN
 dvaughn@aring.com
 T:
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OIL CONDITION

Visc @ 100°C	cSt	▲ 12.0	---	---	---
Base Number (BN)	mg KOH/g	■ 13.3	---	---	---
Oxidation (PA)	%	■ 51	---	---	---



CONTAMINATION

Soot %	%	■ 2	---	---	---
Nitration (PA)	%	■ 71	---	---	---
Sulfation (PA)	%	■ 58	---	---	---
Glycol	%	◆ 0.10	---	---	---
Fuel	%	■ 0.8	---	---	---
Silicon	ppm	■ 5	---	---	---
Sodium	ppm	▲ 859	---	---	---
Potassium	ppm	▲ 6	---	---	---

Diagnosis

We advise that you check for the source of the coolant leak. We recommend that you drain the oil and perform a filter service on this component if not already done. We recommend an early resample to monitor this condition. All component wear rates are normal. Sodium and/or potassium levels are high. Fuel content negligible. There is a high concentration of glycol present in the oil. The oil viscosity is lower than normal. Confirm oil type. The oil is no longer serviceable due to the presence of contaminants.



WEAR METALS

Iron	ppm	■ 13	---	---	---
Copper	ppm	■ 2	---	---	---
Lead	ppm	■ 1	---	---	---
Tin	ppm	■ <1	---	---	---
Aluminum	ppm	■ 2	---	---	---
Chromium	ppm	■ <1	---	---	---
Molybdenum	ppm	■ 196	---	---	---
Nickel	ppm	■ <1	---	---	---
Titanium	ppm	0	---	---	---
Silver	ppm	■ 0	---	---	---
Manganese	ppm	■ <1	---	---	---
Vanadium	ppm	0	---	---	---



ADDITIVES

Calcium	ppm	■ 999	---	---	---
Magnesium	ppm	■ 854	---	---	---
Zinc	ppm	■ 1132	---	---	---
Phosphorus	ppm	■ 1021	---	---	---
Barium	ppm	■ 0	---	---	---
Boron	ppm	■ <1	---	---	---

Depot: VOLVO0072
Unique No: 10630064
Signed: Don Baldrige
Report Date: 01 Sep 2023

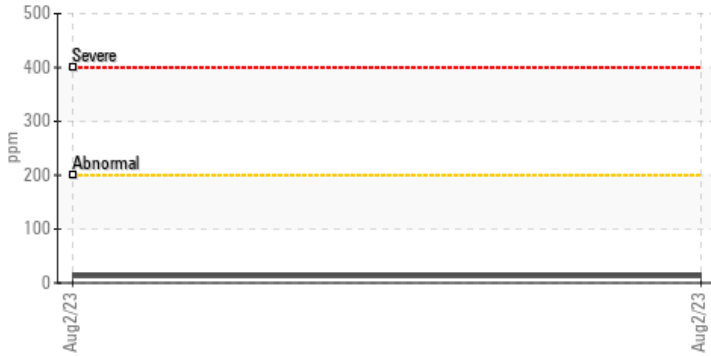


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GRAPHS

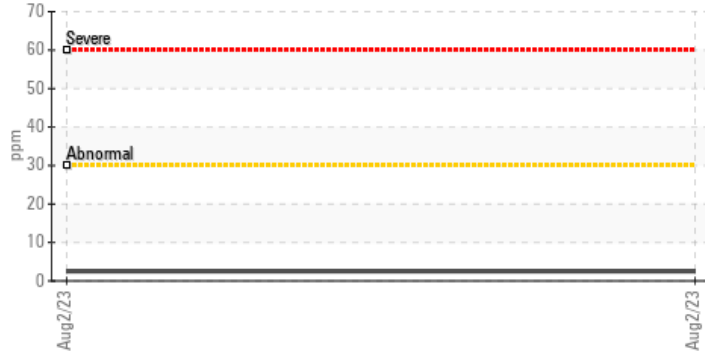
Iron (ppm)



Lead (ppm)



Aluminum (ppm)



Chromium (ppm)



Copper (ppm)



Silicon (ppm)



▲ Viscosity @ 100°C



Base Number

