



OIL ANALYSIS REPORT

Sample Rating Trend



WEAR



Area
SEAGATE TERMINALS
 Machine Id
VOLVO L120H 633354



Component
Diesel Engine
 Fluid
VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3 (--- GAL)

DIAGNOSIS

Recommendation

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.

Wear

The aluminum level is abnormal. All other metal levels are typical for a new component breaking in.

Contamination

There is no indication of any contamination in the oil.

Fluid Condition

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.

SAMPLE INFORMATION

method	limit/base	current	history1	history2
Sample Number	Client Info	ML0000712	---	---
Sample Date	Client Info	03 Apr 2024	---	---
Machine Age	hrs	754	---	---
Oil Age	hrs	0	---	---
Oil Changed	Client Info	Changed	---	---
Sample Status		ABNORMAL	---	---

CONTAMINATION

method	limit/base	current	history1	history2
Fuel	WC Method >6.0	<1.0	---	---
Water	WC Method >0.1	NEG	---	---
Glycol	WC Method	NEG	---	---

WEAR METALS

method	limit/base	current	history1	history2
Iron	ppm ASTM D5185m >100	70	---	---
Chromium	ppm ASTM D5185m >10	6	---	---
Nickel	ppm ASTM D5185m >10	0	---	---
Titanium	ppm ASTM D5185m	<1	---	---
Silver	ppm ASTM D5185m >2	1	---	---
Aluminum	ppm ASTM D5185m >10	▲ 94	---	---
Lead	ppm ASTM D5185m >20	3	---	---
Copper	ppm ASTM D5185m >15	21	---	---
Tin	ppm ASTM D5185m >10	6	---	---
Vanadium	ppm ASTM D5185m	0	---	---
Cadmium	ppm ASTM D5185m	0	---	---

ADDITIVES

method	limit/base	current	history1	history2
Boron	ppm ASTM D5185m 2.5	30	---	---
Barium	ppm ASTM D5185m 0.0	8	---	---
Molybdenum	ppm ASTM D5185m 0.7	47	---	---
Manganese	ppm ASTM D5185m 0.0	2	---	---
Magnesium	ppm ASTM D5185m 256	653	---	---
Calcium	ppm ASTM D5185m 2057	1419	---	---
Phosphorus	ppm ASTM D5185m 935	952	---	---
Zinc	ppm ASTM D5185m 1223	1076	---	---
Sulfur	ppm ASTM D5185m 4079	3360	---	---

CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185m >20	18	---	---
Sodium	ppm ASTM D5185m	5	---	---
Potassium	ppm ASTM D5185m >20	7	---	---

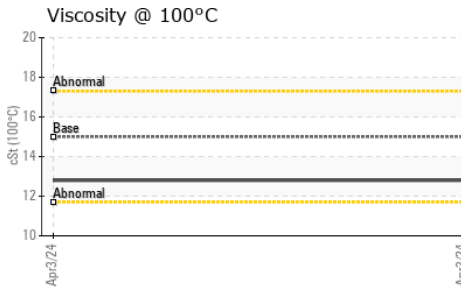
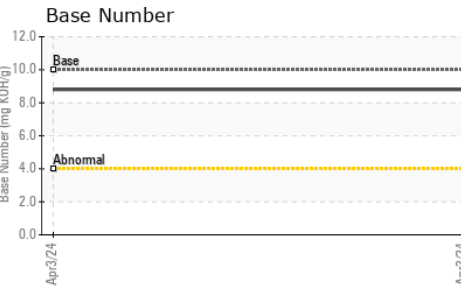
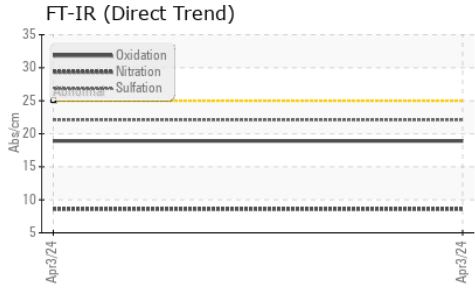
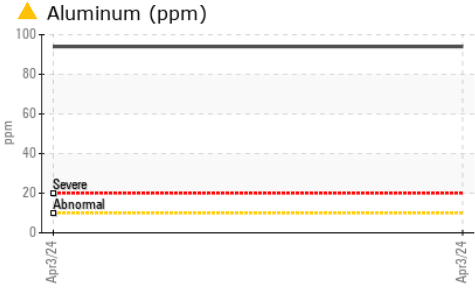
INFRA-RED

method	limit/base	current	history1	history2
Soot %	% *ASTM D7844 >3	0.7	---	---
Nitration	Abs/cm *ASTM D7624 >20	8.6	---	---
Sulfation	Abs/.1mm *ASTM D7415 >30	22.1	---	---

FLUID DEGRADATION

method	limit/base	current	history1	history2
Oxidation	Abs/.1mm *ASTM D7414 >25	18.9	---	---
Base Number (BN)	mg KOH/g ASTM D2896 10	8.8	---	---

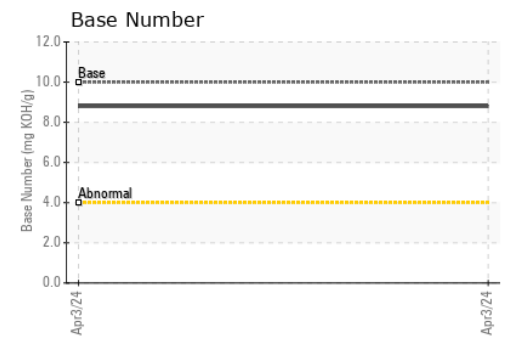
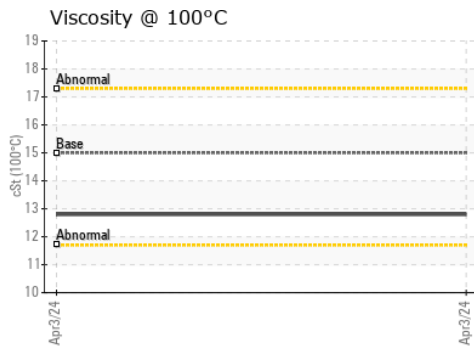
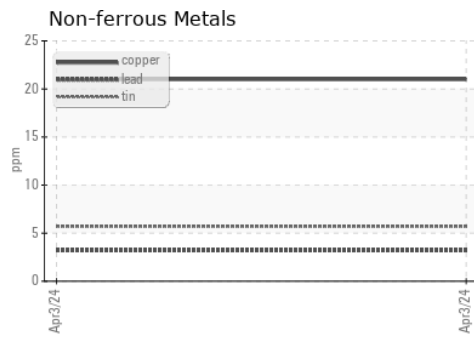
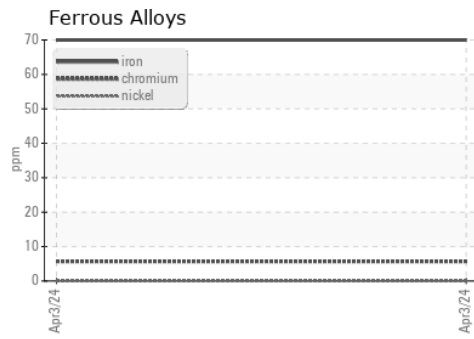
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VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	---
Precipitate	scalar	*Visual	NONE	NONE	---
Silt	scalar	*Visual	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---
Appearance	scalar	*Visual	NORML	NORML	---
Odor	scalar	*Visual	NORML	NORML	---
Emulsified Water	scalar	*Visual	>0.1	NEG	---
Free Water	scalar	*Visual		NEG	---

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	15.0	12.8	---

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : ML0000712 **Received** : 17 Apr 2024
Lab Number : **06151502** **Tested** : 18 Apr 2024
Unique Number : 10981580 **Diagnosed** : 19 Apr 2024 - Don Baldrige
Test Package : CONST (Additional Tests: TBN)

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To discuss this sample report, contact Customer Service at 1-800-237-1369.
 * - Denotes test methods that are outside of the ISO 17025 scope of accreditation.
 Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)