



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Area
[W02008184]
Machine Id
VOLVO L70H 622516
Component
Diesel Engine
Fluid
DIESEL ENGINE OIL SAE 15W40 (5 GAL)

RECOMMENDATION

Resample at the next service interval to monitor. (Customer Sample Comment: W02008184)

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		ML0001089	---	---
Sample Date		Client Info		12 Apr 2024	---	---
Machine Age	hrs	Client Info		10145	---	---
Oil Age	hrs	Client Info		500	---	---
Filter Age	hrs	Client Info		500	---	---
Oil Changed		Client Info		Changed	---	---
Filter Changed		Client Info		Changed	---	---
Sample Status				NORMAL	---	---

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	9	---	---
Chromium	ppm	ASTM D5185m	>10	<1	---	---
Nickel	ppm	ASTM D5185m	>10	<1	---	---
Titanium	ppm	ASTM D5185m		<1	---	---
Silver	ppm	ASTM D5185m	>2	0	---	---
Aluminum	ppm	ASTM D5185m	>10	6	---	---
Lead	ppm	ASTM D5185m	>20	<1	---	---
Copper	ppm	ASTM D5185m	>15	1	---	---
Tin	ppm	ASTM D5185m	>10	<1	---	---
Vanadium	ppm	ASTM D5185m		<1	---	---
White Metal	scalar	*Visual	NONE	NONE	---	---
Yellow Metal	scalar	*Visual	NONE	NONE	---	---

CONTAMINATION

There is no indication of any contamination in the oil.

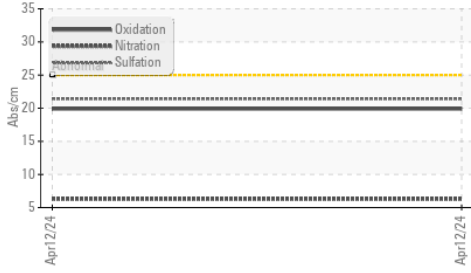
Silicon	ppm	ASTM D5185m	>20	8	---	---
Potassium	ppm	ASTM D5185m	>20	1	---	---
Fuel		WC Method	>6.0	<1.0	---	---
Water		WC Method	>0.1	NEG	---	---
Glycol		WC Method		NEG	---	---
Soot %	%	*ASTM D7844	>3	0.2	---	---
Nitration	Abs/cm	*ASTM D7624	>20	6.3	---	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	21.4	---	---
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	---	---

FLUID CONDITION

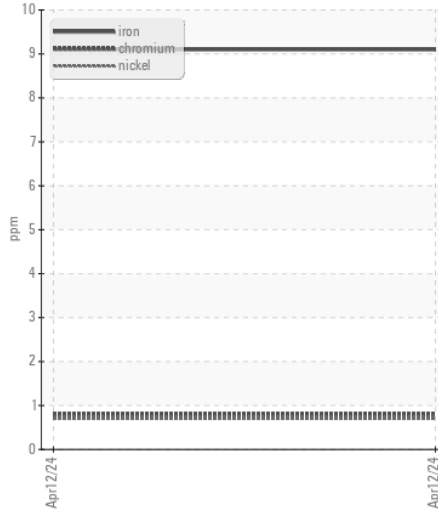
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m	>158	2	---	---
Boron	ppm	ASTM D5185m	250	77	---	---
Barium	ppm	ASTM D5185m	10	1	---	---
Molybdenum	ppm	ASTM D5185m	100	48	---	---
Manganese	ppm	ASTM D5185m		<1	---	---
Magnesium	ppm	ASTM D5185m	450	527	---	---
Calcium	ppm	ASTM D5185m	3000	1740	---	---
Phosphorus	ppm	ASTM D5185m	1150	838	---	---
Zinc	ppm	ASTM D5185m	1350	959	---	---
Sulfur	ppm	ASTM D5185m	4250	2919	---	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	19.9	---	---
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	10.3	---	---
Visc @ 100°C	cSt	ASTM D445	14.4	12.8	---	---

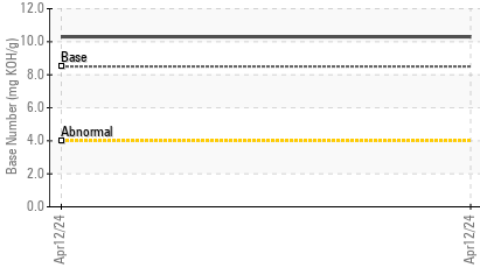
FT-IR (Direct Trend)



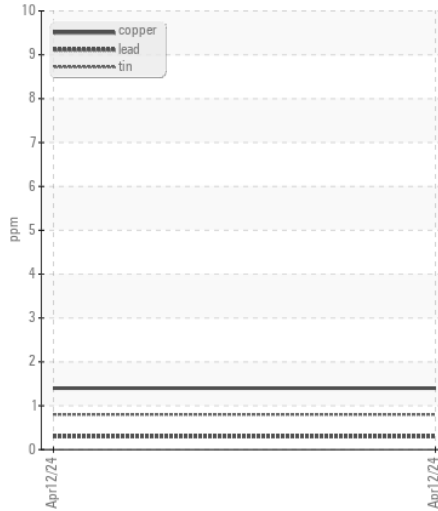
Ferrous Alloys



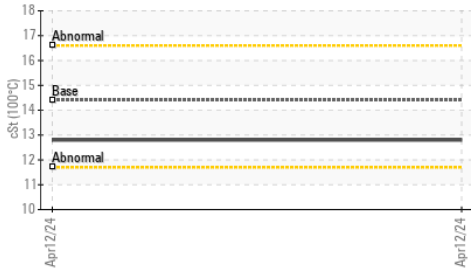
Base Number



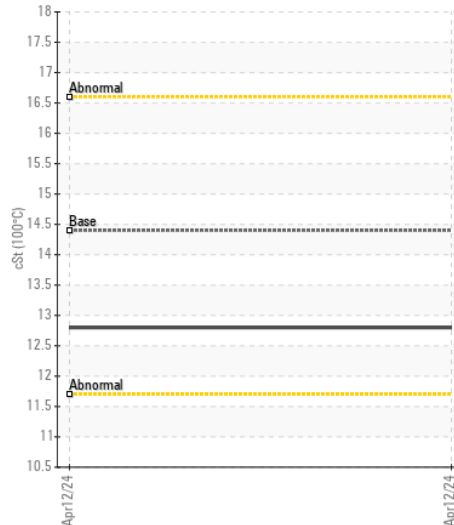
Non-ferrous Metals



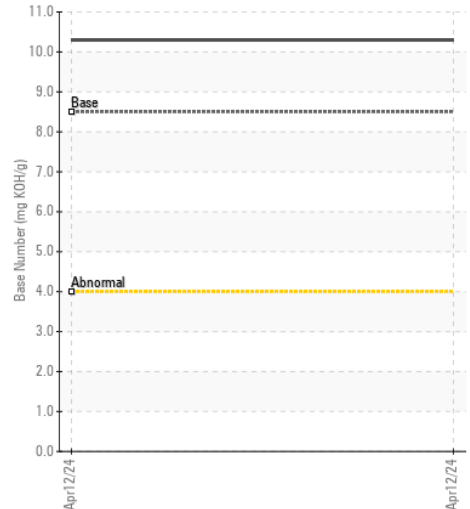
Viscosity @ 100°C



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
 Sample No. : ML0001089
 Lab Number : 06149824
 Unique Number : 10979902
 Test Package : CONST (Additional Tests: TBN)

Received : 16 Apr 2024
 Tested : 17 Apr 2024
 Diagnosed : 18 Apr 2024 - Don Baldrige

WILLIAM HAZEL
 PO BOX 600
 CHANTILLY, VA
 US 20153
 Contact: SERVICE MANAGER

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)

T: (703)378-8300

F: