



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Area
[W2008518]
Machine Id
VOLVO L70H 622433
Component
Diesel Engine
Fluid
DIESEL ENGINE OIL SAE 40 (5 GAL)

RECOMMENDATION

Resample at the next service interval to monitor. (Customer Sample Comment: W02008518)

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		ML0002342	ML0001136	---
Sample Date		Client Info		09 Jul 2024	07 May 2024	---
Machine Age	hrs	Client Info		12089	11739	---
Oil Age	hrs	Client Info		350	500	---
Filter Age	hrs	Client Info		0	500	---
Oil Changed		Client Info		Changed	Changed	---
Filter Changed		Client Info		Changed	Changed	---
Sample Status				NORMAL	NORMAL	---

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	3	6	---
Chromium	ppm	ASTM D5185m	>10	0	<1	---
Nickel	ppm	ASTM D5185m	>10	0	0	---
Titanium	ppm	ASTM D5185m		0	0	---
Silver	ppm	ASTM D5185m	>2	0	0	---
Aluminum	ppm	ASTM D5185m	>10	1	3	---
Lead	ppm	ASTM D5185m	>20	0	0	---
Copper	ppm	ASTM D5185m	>15	0	0	---
Tin	ppm	ASTM D5185m	>10	0	<1	---
Vanadium	ppm	ASTM D5185m		0	0	---
White Metal	scalar	*Visual	NONE	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	---

CONTAMINATION

There is no indication of any contamination in the oil.

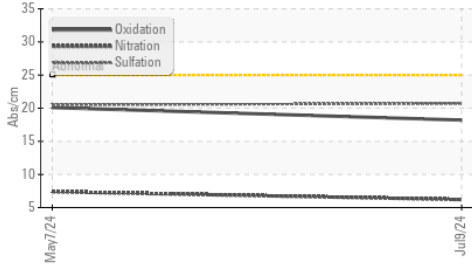
Silicon	ppm	ASTM D5185m	>20	4	7	---
Potassium	ppm	ASTM D5185m	>20	0	0	---
Fuel		WC Method	>6.0	<1.0	<1.0	---
Water		WC Method	>0.1	NEG	NEG	---
Glycol		WC Method		NEG	NEG	---
Soot %	%	*ASTM D7844	>3	0.1	0.2	---
Nitration	Abs/cm	*ASTM D7624	>20	6.2	7.4	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	20.7	20.5	---
Silt	scalar	*Visual	NONE	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	---
Appearance	scalar	*Visual	NORML	NORML	NORML	---
Odor	scalar	*Visual	NORML	NORML	NORML	---
Emulsified Water	scalar	*Visual	>0.1	NEG	NEG	---

FLUID CONDITION

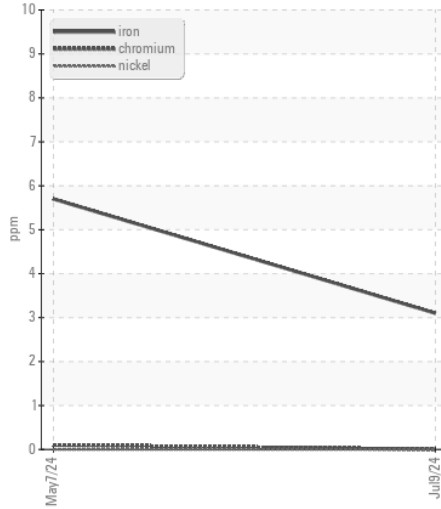
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m	>216	3	1	---
Boron	ppm	ASTM D5185m	250	42	59	---
Barium	ppm	ASTM D5185m	10	0	<1	---
Molybdenum	ppm	ASTM D5185m	100	43	48	---
Manganese	ppm	ASTM D5185m		0	<1	---
Magnesium	ppm	ASTM D5185m	450	516	546	---
Calcium	ppm	ASTM D5185m	3000	1746	1833	---
Phosphorus	ppm	ASTM D5185m	1150	944	822	---
Zinc	ppm	ASTM D5185m	1350	1109	967	---
Sulfur	ppm	ASTM D5185m	4250	3290	3065	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	18.2	20.1	---
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	10.0	8.1	---
Visc @ 100°C	cSt	ASTM D445	14.4	12.7	13.2	---

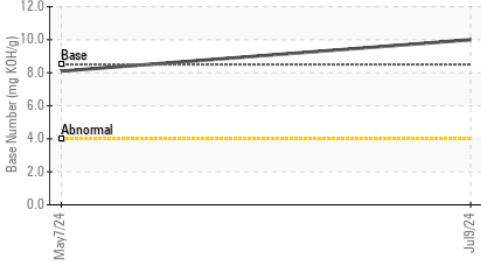
FT-IR (Direct Trend)



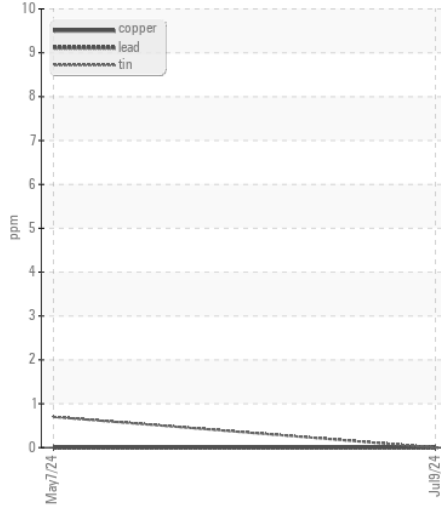
Ferrous Alloys



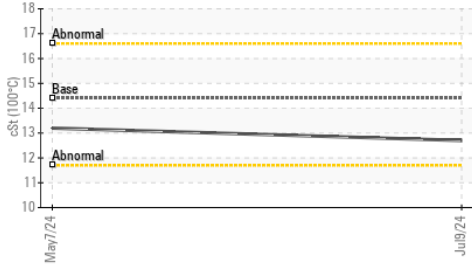
Base Number



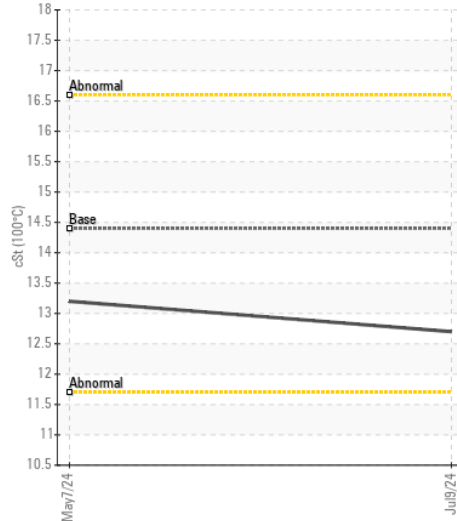
Non-ferrous Metals



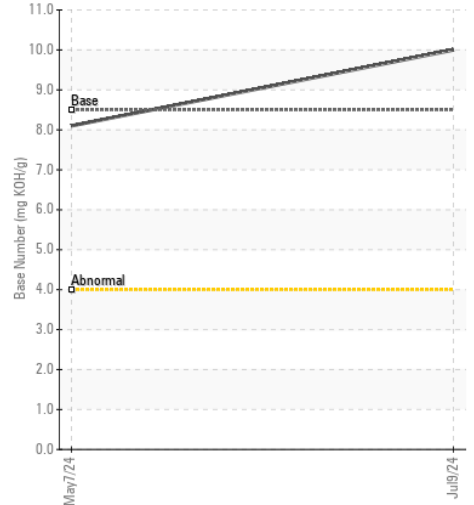
Viscosity @ 100°C



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : ML0002342 **Received** : 11 Jul 2024
Lab Number : 06234264 **Tested** : 12 Jul 2024
Unique Number : 11123098 **Diagnosed** : 14 Jul 2024 - Don Baldridge
Test Package : CONST (Additional Tests: TBN)

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)

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