



VOLVO

OIL ANALYSIS REPORT

WEAR	ABNORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Area

[2412]

Machine Id

VOLVO L70H 623339

Component

Diesel Engine

Fluid

VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3 (--- GAL)

RECOMMENDATION

The oil 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.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		VCP454167	VCP424190	VCP371210
Sample Date		Client Info		15 Jun 2024	30 Sep 2023	11 Mar 2023
Machine Age	hrs	Client Info		9741	8740	7850
Oil Age	hrs	Client Info		0	0	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		N/A	N/A	N/A
Sample Status				ABNORMAL	NORMAL	NORMAL

WEAR

The aluminum level is abnormal. All other component wear rates are normal.

Iron	ppm	ASTM D5185m	>200	11	8	12
Chromium	ppm	ASTM D5185m	>20	<1	<1	1
Nickel	ppm	ASTM D5185m	>5	0	0	0
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m	>2	0	0	0
Aluminum	ppm	ASTM D5185m	>30	▲ 32	18	22
Lead	ppm	ASTM D5185m	>40	0	0	<1
Copper	ppm	ASTM D5185m	>20	0	0	1
Tin	ppm	ASTM D5185m	>20	<1	<1	<1
Vanadium	ppm	ASTM D5185m		0	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

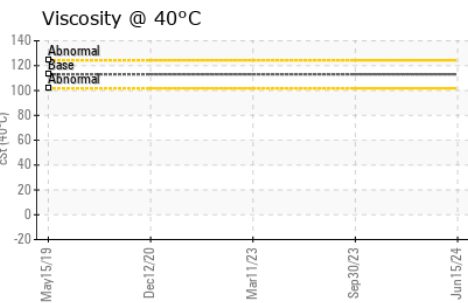
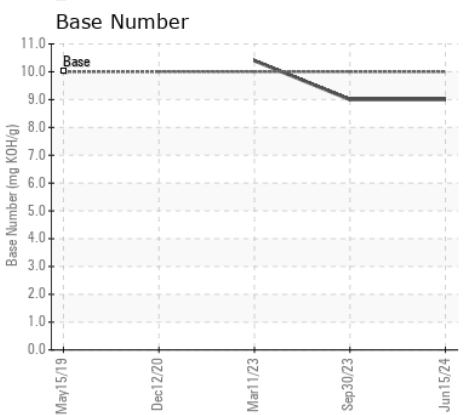
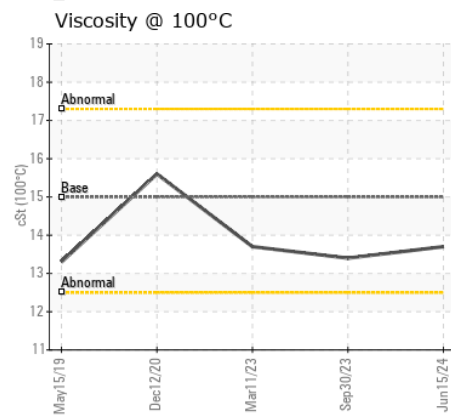
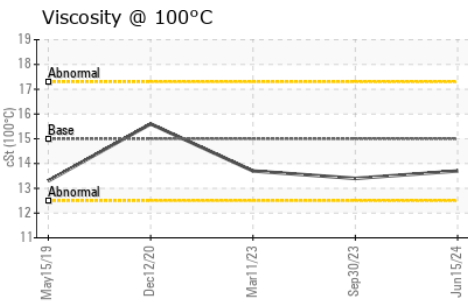
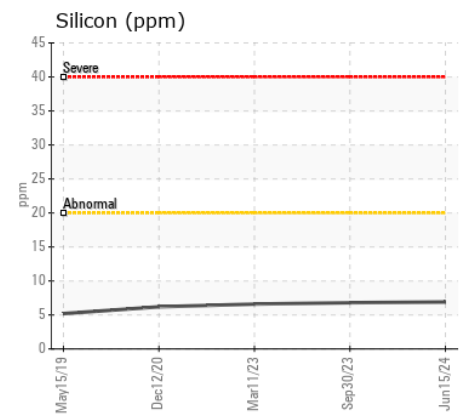
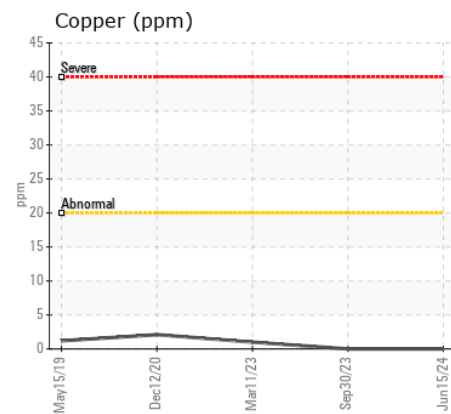
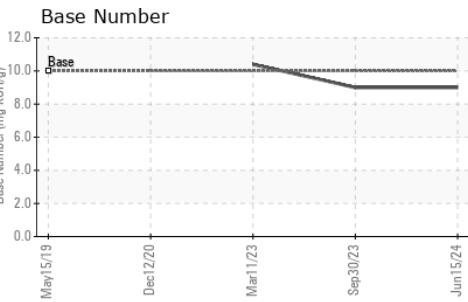
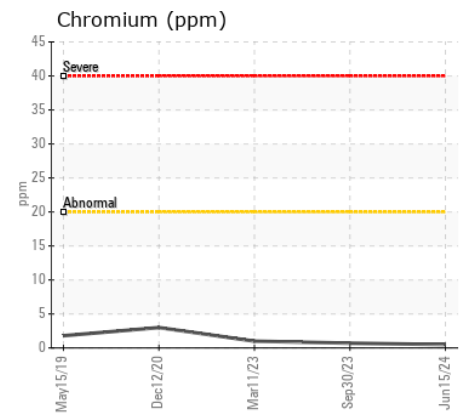
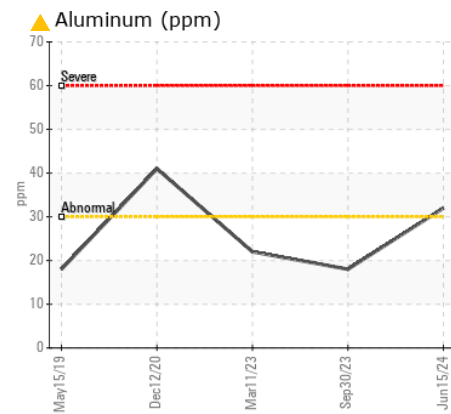
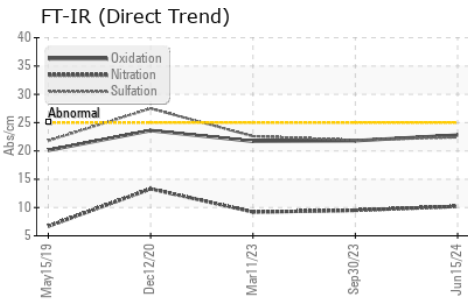
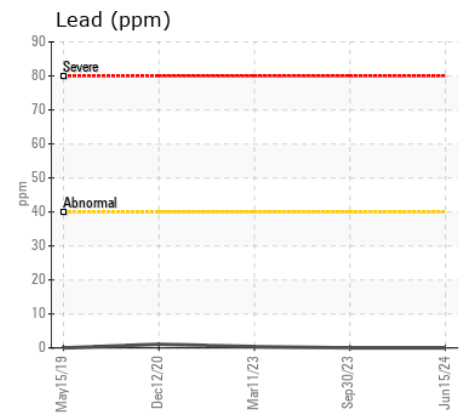
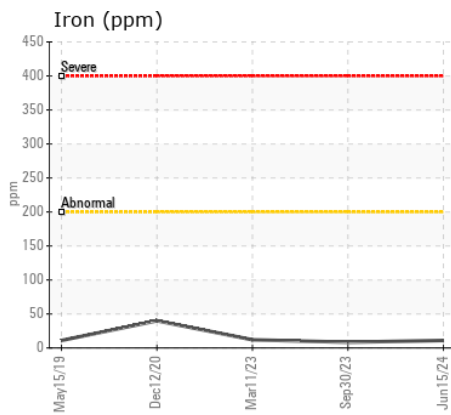
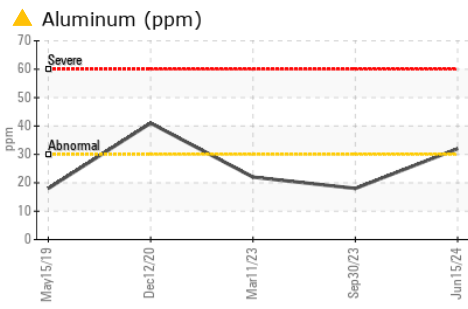
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>20	7	7	7
Potassium	ppm	ASTM D5185m	>20	<1	0	<1
Fuel		WC Method	>6.0	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.5	0.5	0.4
Nitration	Abs/cm	*ASTM D7624	>20	10.2	9.5	9.2
Sulfation	Abs/.1mm	*ASTM D7415	>30	22.4	21.9	22.6
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	NEG

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.

Sodium	ppm	ASTM D5185m		3	2	1
Boron	ppm	ASTM D5185m	2.5	22	25	37
Barium	ppm	ASTM D5185m	0.0	0	<1	0
Molybdenum	ppm	ASTM D5185m	0.7	40	41	44
Manganese	ppm	ASTM D5185m	0.0	<1	<1	<1
Magnesium	ppm	ASTM D5185m	256	549	539	501
Calcium	ppm	ASTM D5185m	2057	1795	1702	1772
Phosphorus	ppm	ASTM D5185m	935	1027	1003	1058
Zinc	ppm	ASTM D5185m	1223	1210	1207	1244
Sulfur	ppm	ASTM D5185m	4079	3394	2858	2937
Oxidation	Abs/.1mm	*ASTM D7414	>25	22.8	21.8	21.7
Base Number (BN)	mg KOH/g	ASTM D2896	10	9.0	9.0	10.4
Visc @ 100°C	cSt	ASTM D445	15.0	13.7	13.4	13.7



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : VCP454167 **Received** : 03 Jul 2024
Lab Number : 06227137 **Tested** : 05 Jul 2024
Unique Number : 11110630 **Diagnosed** : 05 Jul 2024 - Don Baldridge
Test Package : MOB 1 (Additional Tests: TBN, KV40)

SIMS METAL
 130 NORTH 12TH ST
 SACRAMENTO, CA
 US 95814
 Contact: EVERT

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: (916)769-7864

F: