



VOLVO

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Machine Id
VOLVO L90H 05625448
Component
Diesel Engine
Fluid
VALVOLINE 15W40 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		VCP453886	VCP436481	VCP407114
Sample Date		Client Info		13 Jun 2024	24 Apr 2024	06 Mar 2024
Machine Age	hrs	Client Info		6806	0	6296
Oil Age	hrs	Client Info		258	0	237
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>200	0	4	4
Chromium	ppm	ASTM D5185m	>20	<1	<1	<1
Nickel	ppm	ASTM D5185m	>5	0	0	0
Titanium	ppm	ASTM D5185m		0	<1	0
Silver	ppm	ASTM D5185m	>2	0	0	0
Aluminum	ppm	ASTM D5185m	>30	2	2	1
Lead	ppm	ASTM D5185m	>40	0	0	0
Copper	ppm	ASTM D5185m	>20	0	5	<1
Tin	ppm	ASTM D5185m	>20	0	<1	0
Vanadium	ppm	ASTM D5185m		0	<1	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

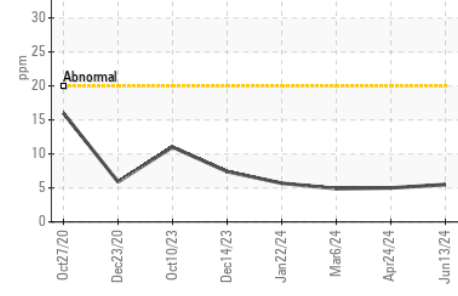
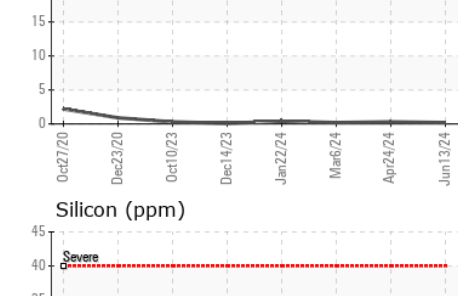
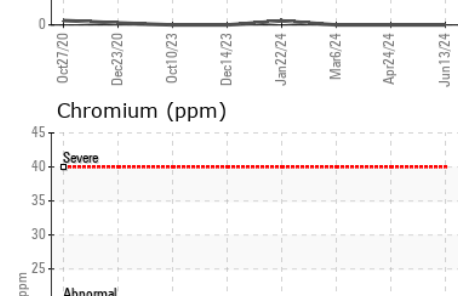
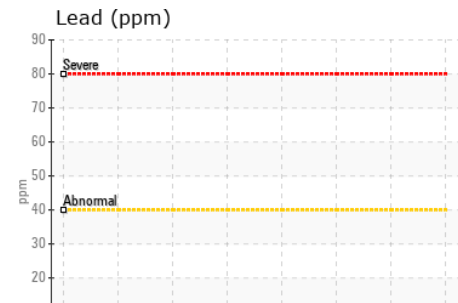
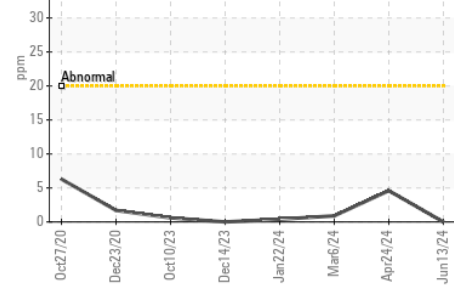
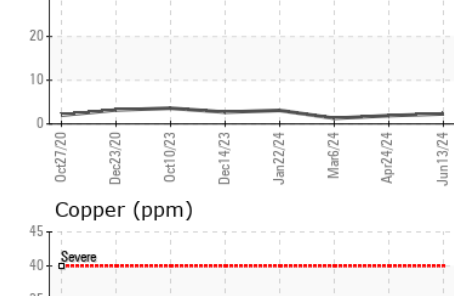
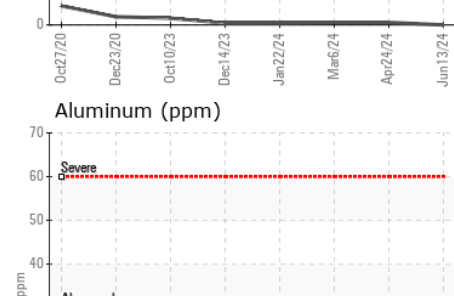
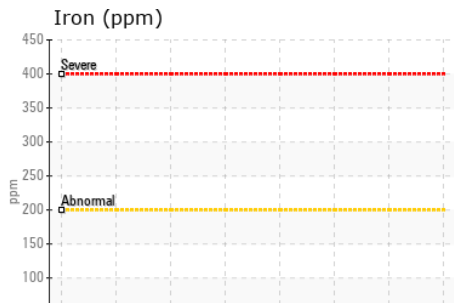
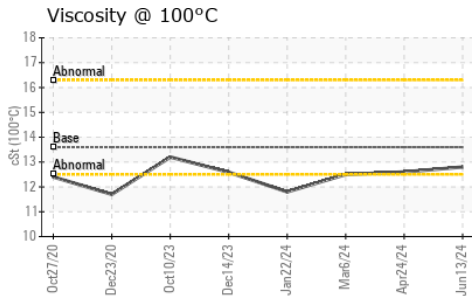
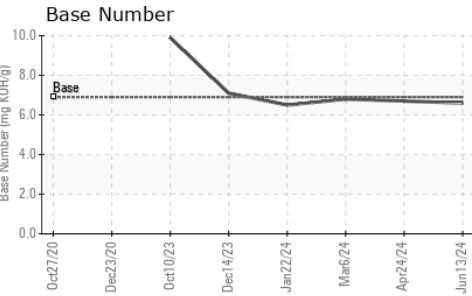
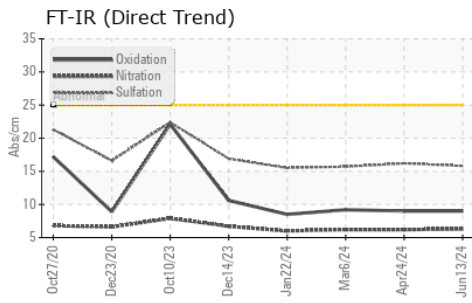
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>20	6	5	5
Potassium	ppm	ASTM D5185m	>20	2	2	0
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	0.1	0.1	0.1
Nitration	Abs/cm	*ASTM D7624	>20	6.3	6.2	6.2
Sulfation	Abs/.1mm	*ASTM D7415	>30	15.8	16.2	15.7
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 suitable for further service.

Sodium	ppm	ASTM D5185m		1	<1	<1
Boron	ppm	ASTM D5185m	39	23	29	34
Barium	ppm	ASTM D5185m	1	0	0	0
Molybdenum	ppm	ASTM D5185m	49	35	26	30
Manganese	ppm	ASTM D5185m	1	0	0	<1
Magnesium	ppm	ASTM D5185m	616	126	148	172
Calcium	ppm	ASTM D5185m	1554	2041	1891	1855
Phosphorus	ppm	ASTM D5185m	899	826	832	851
Zinc	ppm	ASTM D5185m	1069	1063	963	941
Sulfur	ppm	ASTM D5185m	2624	3344	3392	3519
Oxidation	Abs/.1mm	*ASTM D7414	>25	9.0	9.0	9.2
Base Number (BN)	mg KOH/g	ASTM D2896	6.9	6.6	6.7	6.8
Visc @ 100°C	cSt	ASTM D445	13.6	12.8	12.6	12.5



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : VCP453886 **Received** : 26 Jun 2024
Lab Number : 06220768 **Tested** : 27 Jun 2024
Unique Number : 11098965 **Diagnosed** : 27 Jun 2024 - Wes Davis
Test Package : MOB 1 (Additional Tests: TBN)

CITY CARTING
 221 OLD GATE LN
 MILFORD, CT
 US 06460
 Contact: TAVINS BANKS
 tavins@citycart.net
 T: (203)223-3885
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Certificate L2367
 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)