



VOLVO

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Machine Id
VOLVO L90H 627063
Component
Diesel Engine
Fluid
SHELL ROTELLA T3 15W40 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		VCP440508	VCP441735	VCP432424
Sample Date		Client Info		15 Apr 2024	19 Feb 2024	17 Jan 2024
Machine Age	hrs	Client Info		609	272	94
Oil Age	hrs	Client Info		337	178	94
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

Metal levels are typical for a new component breaking in.

Iron	ppm	ASTM D5185m	>100	7	7	17
Chromium	ppm	ASTM D5185m	>10	0	1	5
Nickel	ppm	ASTM D5185m	>10	0	0	0
Titanium	ppm	ASTM D5185m		0	<1	<1
Silver	ppm	ASTM D5185m	>2	0	<1	0
Aluminum	ppm	ASTM D5185m	>10	2	5	48
Lead	ppm	ASTM D5185m	>20	0	0	1
Copper	ppm	ASTM D5185m	>15	8	2	14
Tin	ppm	ASTM D5185m	>10	0	<1	2
Vanadium	ppm	ASTM D5185m		0	0	<1
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

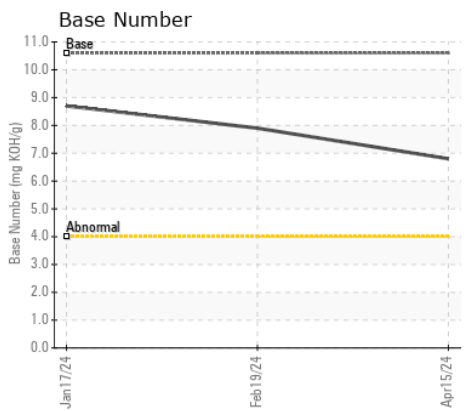
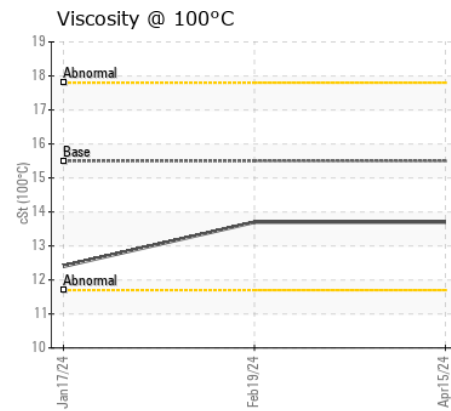
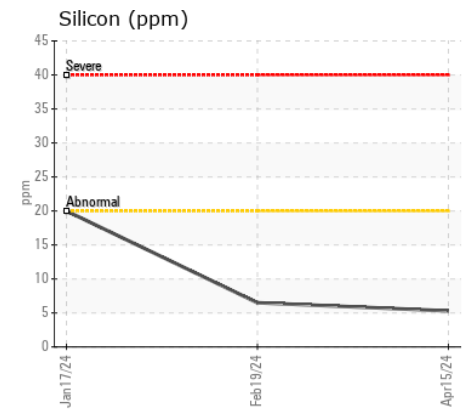
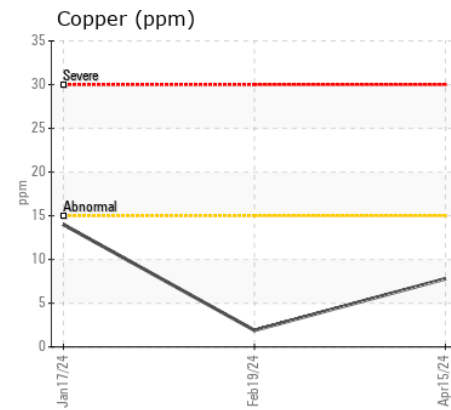
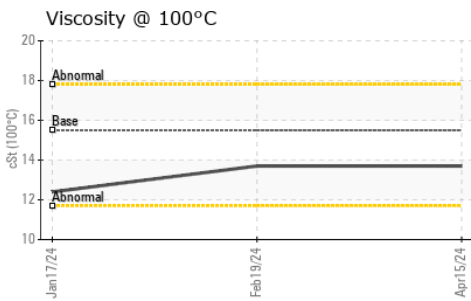
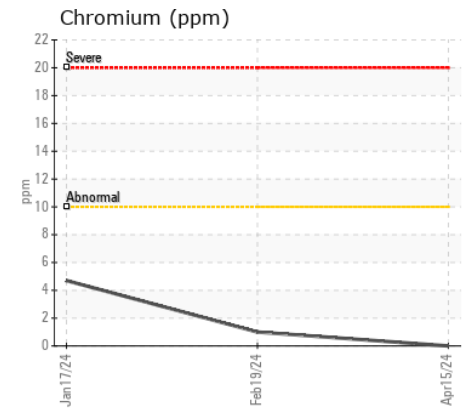
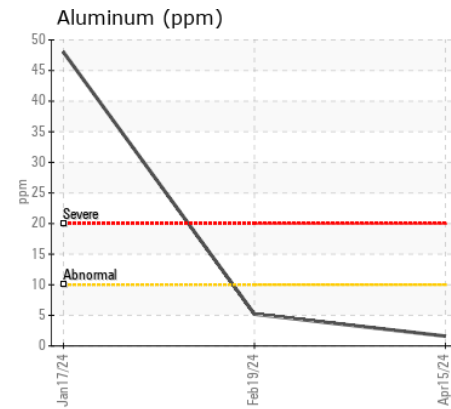
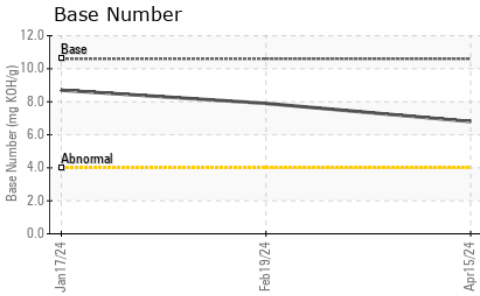
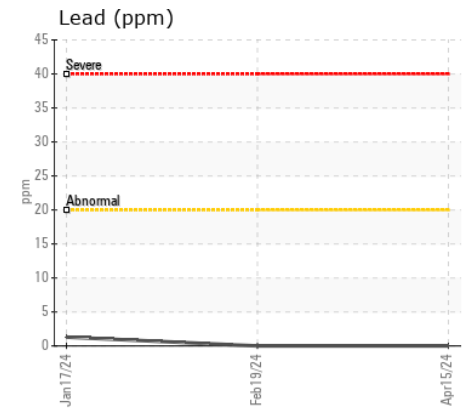
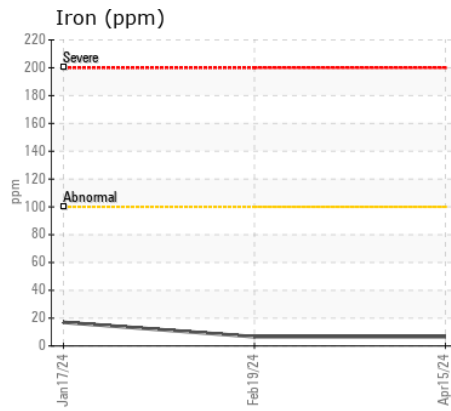
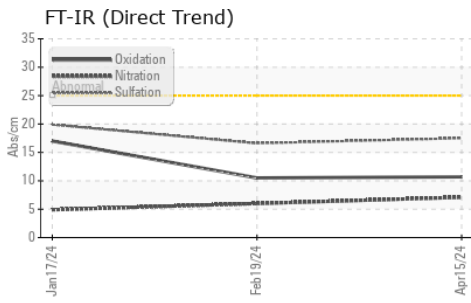
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>20	5	6	20
Potassium	ppm	ASTM D5185m	>20	1	3	23
Fuel		WC Method	>6.0	<1.0	<1.0	<1.0
Water		WC Method	>0.1	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.2	0.1	0.1
Nitration	Abs/cm	*ASTM D7624	>20	7.1	6.0	4.9
Sulfation	Abs/.1mm	*ASTM D7415	>30	17.5	16.6	19.9
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	>0.1	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		0	0	8
Boron	ppm	ASTM D5185m	10	14	24	72
Barium	ppm	ASTM D5185m	0	0	<1	3
Molybdenum	ppm	ASTM D5185m	10	16	15	39
Manganese	ppm	ASTM D5185m		0	<1	4
Magnesium	ppm	ASTM D5185m	10	95	118	598
Calcium	ppm	ASTM D5185m	2600	2540	1988	1553
Phosphorus	ppm	ASTM D5185m	1050	1063	887	1050
Zinc	ppm	ASTM D5185m	1250	1268	989	1174
Sulfur	ppm	ASTM D5185m	3900	4681	3607	3644
Oxidation	Abs/.1mm	*ASTM D7414	>25	10.7	10.5	17.0
Base Number (BN)	mg KOH/g	ASTM D2896	10.6	6.8	7.9	8.7
Visc @ 100°C	cSt	ASTM D445	15.5	13.7	13.7	12.4



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : VCP440508 **Received** : 24 Apr 2024
Lab Number : 06158694 **Tested** : 25 Apr 2024
Unique Number : 10994117 **Diagnosed** : 25 Apr 2024 - Wes Davis
Test Package : MOB 1 (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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