



VOLVO

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Area

[2625 IAA FREMONT]

Machine Id

VOLVO L90H 624601

Component

Diesel Engine

Fluid

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

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		VCP440837	VCP440839	VCP345487
Sample Date		Client Info		26 Jun 2024	18 Mar 2024	30 May 2023
Machine Age	hrs	Client Info		9298	8988	7208
Oil Age	hrs	Client Info		0	0	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Changed	N/A	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	9	11	10
Chromium	ppm	ASTM D5185m	>10	<1	<1	<1
Nickel	ppm	ASTM D5185m	>10	0	0	0
Titanium	ppm	ASTM D5185m		<1	<1	0
Silver	ppm	ASTM D5185m	>2	0	0	0
Aluminum	ppm	ASTM D5185m	>10	3	5	4
Lead	ppm	ASTM D5185m	>20	0	<1	0
Copper	ppm	ASTM D5185m	>15	<1	<1	<1
Tin	ppm	ASTM D5185m	>10	0	<1	<1
Vanadium	ppm	ASTM D5185m		<1	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

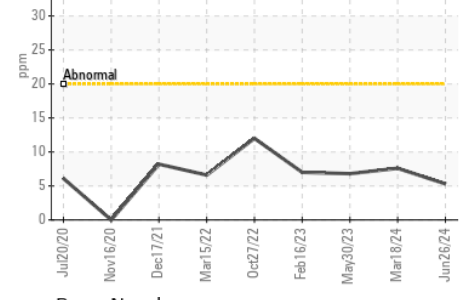
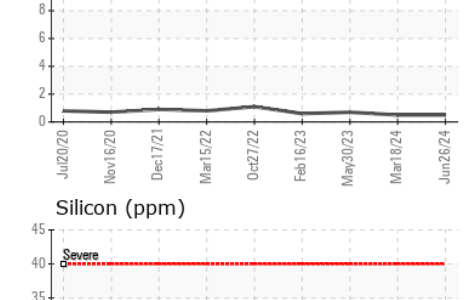
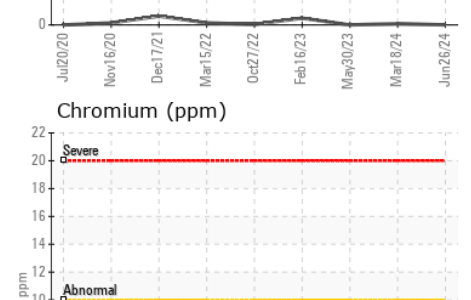
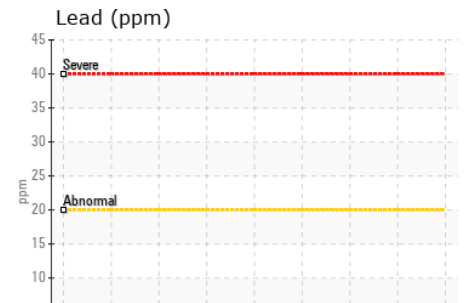
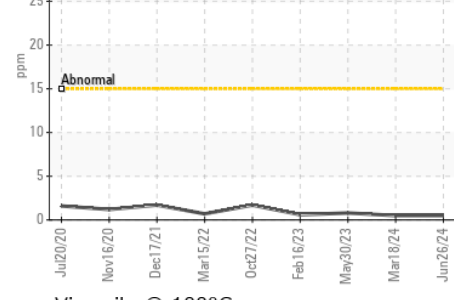
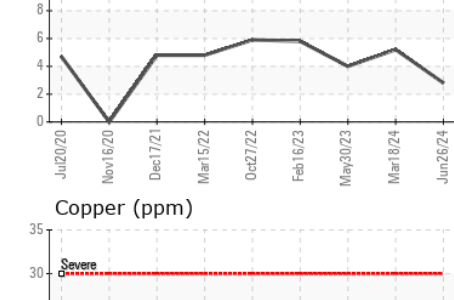
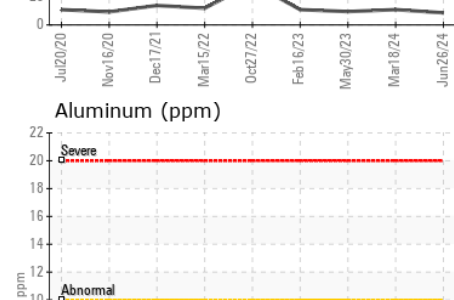
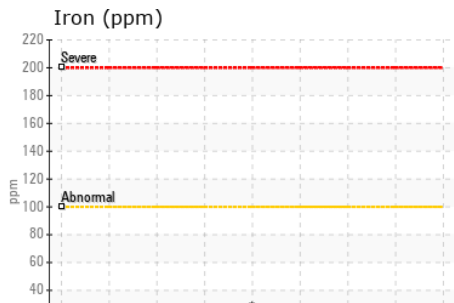
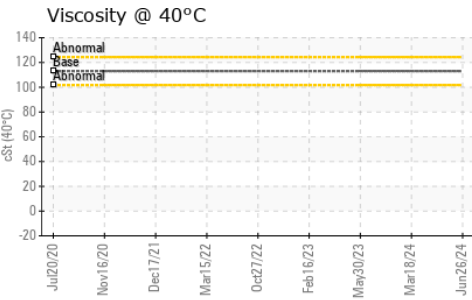
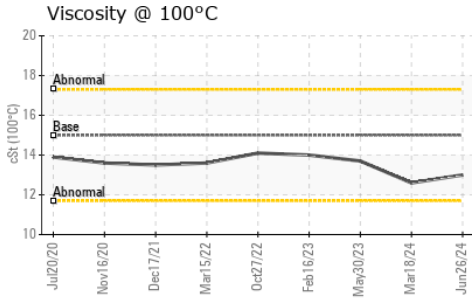
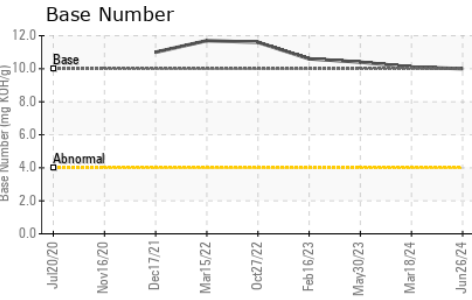
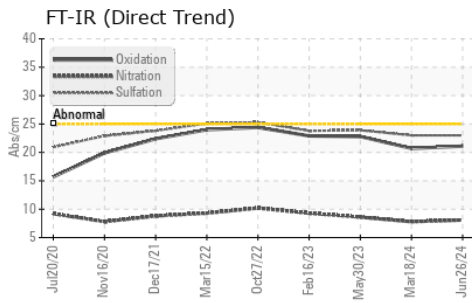
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>20	5	8	7
Potassium	ppm	ASTM D5185m	>20	<1	1	<1
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	0.5	0.7	0.5
Nitration	Abs/cm	*ASTM D7624	>20	8.1	7.8	8.6
Sulfation	Abs/.1mm	*ASTM D7415	>30	23.0	23.0	23.9
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 acceptable for the time in service.

Sodium	ppm	ASTM D5185m		2	1	2
Boron	ppm	ASTM D5185m	2.5	26	36	33
Barium	ppm	ASTM D5185m	0.0	0	0	0
Molybdenum	ppm	ASTM D5185m	0.7	46	43	41
Manganese	ppm	ASTM D5185m	0.0	<1	<1	<1
Magnesium	ppm	ASTM D5185m	256	622	522	554
Calcium	ppm	ASTM D5185m	2057	2174	1787	1812
Phosphorus	ppm	ASTM D5185m	935	1156	939	1003
Zinc	ppm	ASTM D5185m	1223	1467	1183	1253
Sulfur	ppm	ASTM D5185m	4079	3994	2838	3556
Oxidation	Abs/.1mm	*ASTM D7414	>25	21.1	20.7	22.8
Base Number (BN)	mg KOH/g	ASTM D2896	10	10.0	10.1	10.4
Visc @ 100°C	cSt	ASTM D445	15.0	13.0	12.6	13.7



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : VCP440837
Lab Number : 06223289
Unique Number : 11101486
Test Package : MOB 1 (Additional Tests: KV40, TBN)

VCES- VOLVO CONSTRUCTION EQUIPMENT
 1944 MARINA BLVD
 SAN LEANDRO, CA
 US 94577
 Contact: JOHN BUDESILICH
 john.budesilich@vcesvolvo.com
 T:

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) F: (925)294-9240