



# VOLVO

## OIL ANALYSIS REPORT

WEAR	<b>NORMAL</b>
CONTAMINATION	<b>NORMAL</b>
FLUID CONDITION	<b>NORMAL</b>



Area

**[SWA528995 IAA JUP]**

Machine Id

**VOLVO L90H 625961**

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		<b>VCP438856</b>	VCP449015	VCP383224
Sample Date		Client Info		<b>12 Apr 2024</b>	16 Jan 2024	18 Sep 2023
Machine Age	hrs	Client Info		<b>3550</b>	3126	2502
Oil Age	hrs	Client Info		<b>0</b>	0	0
Filter Age	hrs	Client Info		<b>0</b>	0	0
Oil Changed		Client Info		<b>Changed</b>	Changed	Changed
Filter Changed		Client Info		<b>Changed</b>	Changed	Changed
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

### WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>200	<b>53</b>	77	89
Chromium	ppm	ASTM D5185m	>20	<b>2</b>	2	2
Nickel	ppm	ASTM D5185m	>5	<b>1</b>	<1	0
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
Silver	ppm	ASTM D5185m	>2	<b>&lt;1</b>	0	0
Aluminum	ppm	ASTM D5185m	>30	<b>3</b>	4	4
Lead	ppm	ASTM D5185m	>40	<b>2</b>	<1	0
Copper	ppm	ASTM D5185m	>20	<b>8</b>	<1	<1
Tin	ppm	ASTM D5185m	>20	<b>2</b>	<1	<1
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

### CONTAMINATION

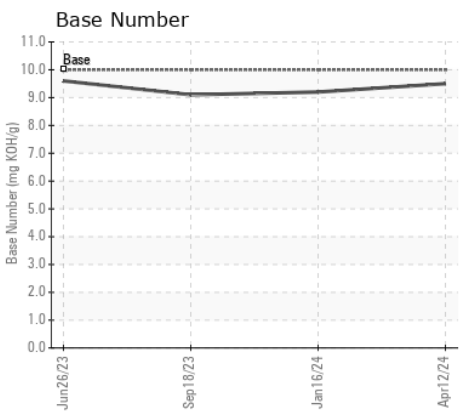
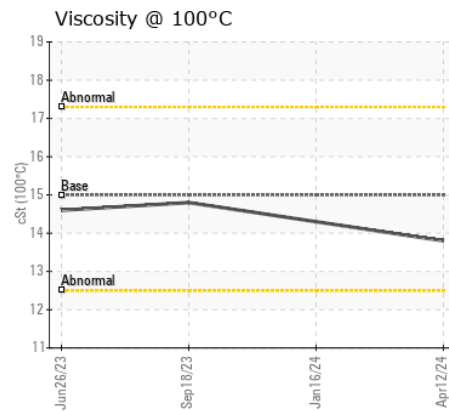
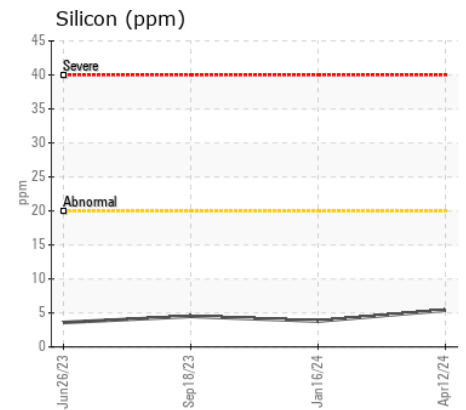
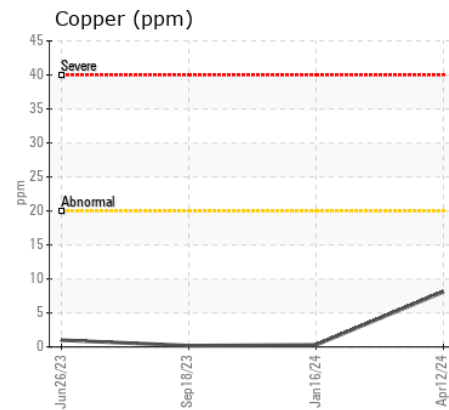
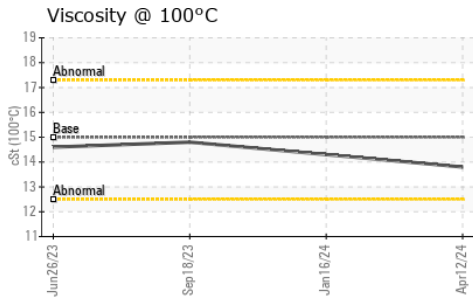
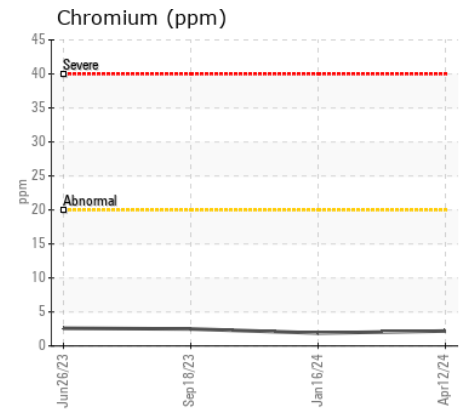
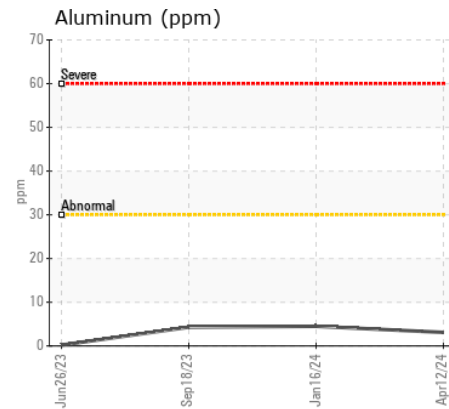
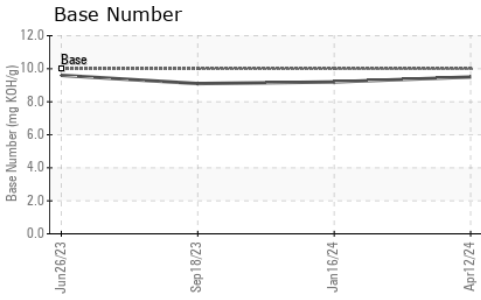
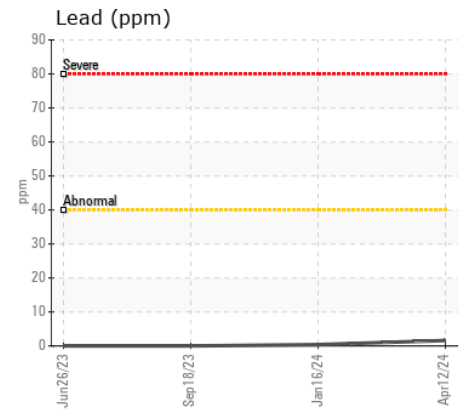
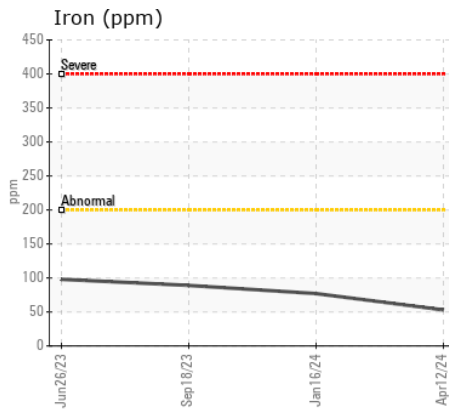
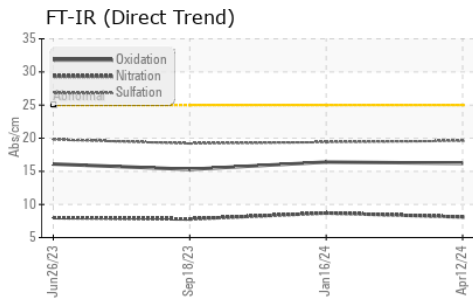
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>20	<b>5</b>	4	4
Potassium	ppm	ASTM D5185m	>20	<b>2</b>	0	<1
Fuel		WC Method	>6.0	<b>&lt;1.0</b>	<1.0	<1.0
Water		WC Method	>0.2	<b>NEG</b>	NEG	NEG
Glycol		WC Method		<b>NEG</b>	NEG	NEG
Soot %	%	*ASTM D7844	>3	<b>0.3</b>	0.3	0.3
Nitration	Abs/cm	*ASTM D7624	>20	<b>8.1</b>	8.7	7.8
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>19.6</b>	19.4	19.2
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Appearance	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Odor	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	<b>NEG</b>	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		<b>1</b>	<1	1
Boron	ppm	ASTM D5185m	2.5	<b>4</b>	3	<1
Barium	ppm	ASTM D5185m	0.0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	0.7	<b>63</b>	60	65
Manganese	ppm	ASTM D5185m	0.0	<b>2</b>	1	2
Magnesium	ppm	ASTM D5185m	256	<b>952</b>	987	1097
Calcium	ppm	ASTM D5185m	2057	<b>1209</b>	1092	1209
Phosphorus	ppm	ASTM D5185m	935	<b>1136</b>	1058	1151
Zinc	ppm	ASTM D5185m	1223	<b>1262</b>	1318	1406
Sulfur	ppm	ASTM D5185m	4079	<b>3435</b>	3019	3982
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>16.2</b>	16.4	15.3
Base Number (BN)	mg KOH/g	ASTM D2896	10	<b>9.5</b>	9.2	9.1
Visc @ 100°C	cSt	ASTM D445	15.0	<b>13.8</b>	14.3	14.8



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : VCP438856 **Received** : 18 Apr 2024  
**Lab Number** : 06152719 **Tested** : 18 Apr 2024  
**Unique Number** : 10982797 **Diagnosed** : 22 Apr 2024 - Don Baldrige  
**Test Package** : MOB 1 ( Additional Tests: TBN )

**ALTA EQUIPMENT COMPANY**  
 5210 REESE ROAD  
 DAVIE, FL  
 US 33314  
 Contact: N. FACEY  
 nfacey@altaequipfl.com  
 T: (954)581-4744  
 F: (954)583-0318

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)