



# VOLVO

## OIL ANALYSIS REPORT

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



Area

[SWO073151]

Machine Id

**VOLVO A60H 350021**

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>VCP450578</b>	VCP444465	VCP427434
Sample Date		Client Info		<b>26 Jun 2024</b>	15 Feb 2024	25 Sep 2023
Machine Age	hrs	Client Info		<b>8427</b>	7887	7398
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	>100	<b>5</b>	5	4
Chromium	ppm	ASTM D5185m	>10	<b>0</b>	0	0
Nickel	ppm	ASTM D5185m	>10	<b>0</b>	0	<1
Titanium	ppm	ASTM D5185m		<b>0</b>	0	0
Silver	ppm	ASTM D5185m	>2	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>10	<b>3</b>	4	3
Lead	ppm	ASTM D5185m	>20	<b>&lt;1</b>	<1	<1
Copper	ppm	ASTM D5185m	>15	<b>1</b>	1	<1
Tin	ppm	ASTM D5185m	>10	<b>&lt;1</b>	0	<1
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	<1
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

### CONTAMINATION

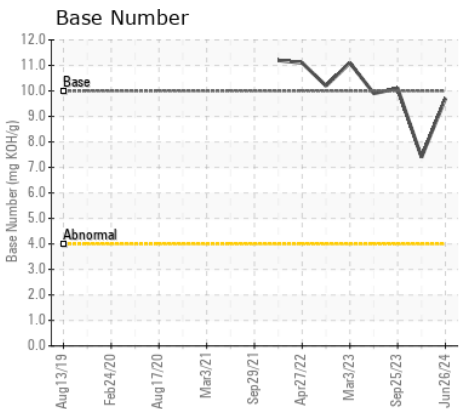
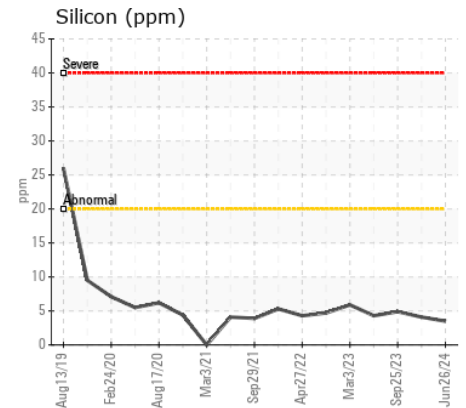
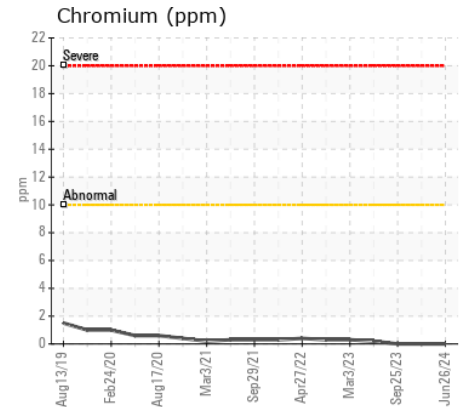
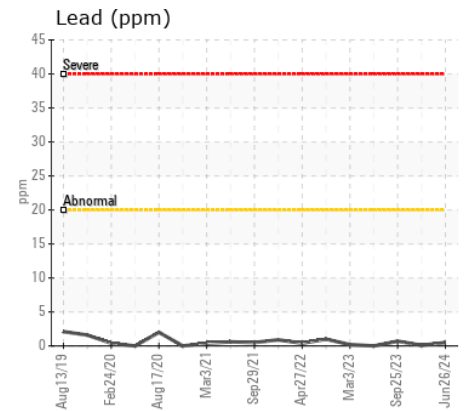
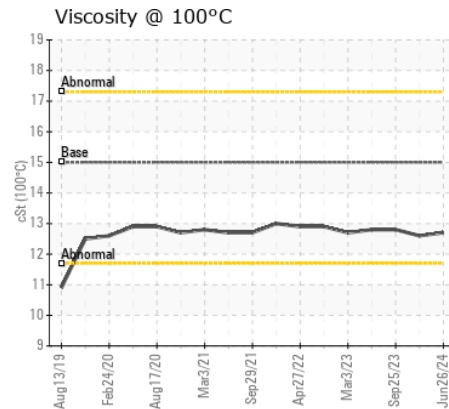
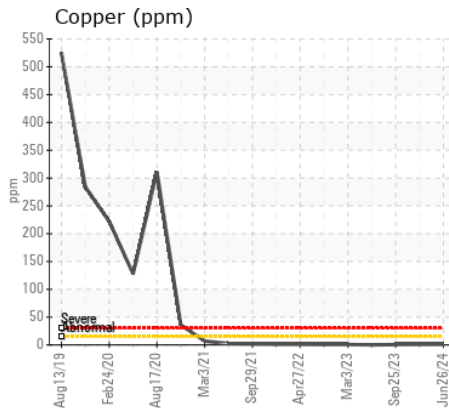
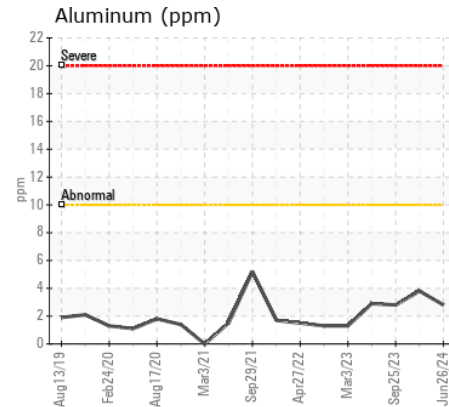
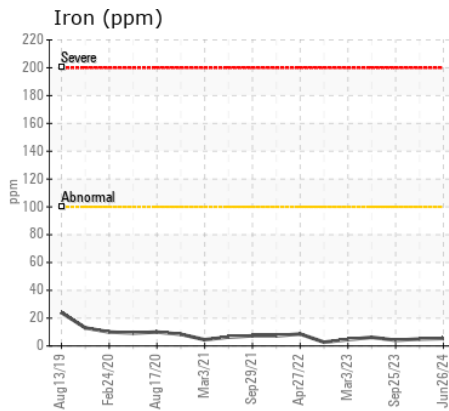
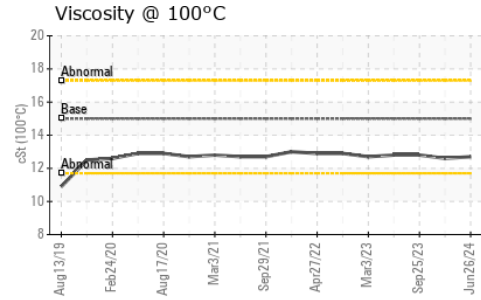
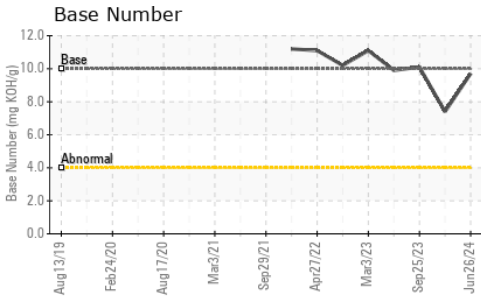
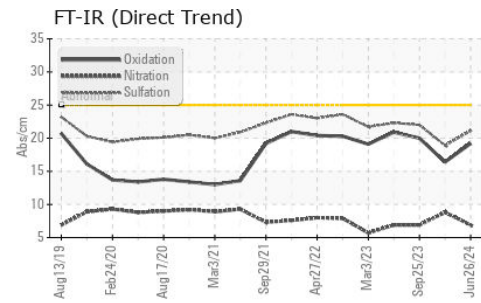
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>20	<b>4</b>	4	5
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	>0.1	<b>NEG</b>	NEG	NEG
Glycol		WC Method		<b>NEG</b>	NEG	NEG
Soot %	%	*ASTM D7844	>3	<b>0.2</b>	0.2	0.3
Nitration	Abs/cm	*ASTM D7624	>20	<b>6.9</b>	8.8	6.9
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>21.1</b>	18.9	22.0
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	>0.1	<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>2</b>	2	4
Boron	ppm	ASTM D5185m	2.5	<b>56</b>	74	51
Barium	ppm	ASTM D5185m	0.0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	0.7	<b>50</b>	100	43
Manganese	ppm	ASTM D5185m	0.0	<b>0</b>	0	<1
Magnesium	ppm	ASTM D5185m	256	<b>509</b>	632	554
Calcium	ppm	ASTM D5185m	2057	<b>1735</b>	1447	1851
Phosphorus	ppm	ASTM D5185m	935	<b>969</b>	786	997
Zinc	ppm	ASTM D5185m	1223	<b>1131</b>	902	1220
Sulfur	ppm	ASTM D5185m	4079	<b>3526</b>	3261	3070
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>19.2</b>	16.4	20.0
Base Number (BN)	mg KOH/g	ASTM D2896	10	<b>9.7</b>	7.4	10.1
Visc @ 100°C	cSt	ASTM D445	15.0	<b>12.7</b>	12.6	12.8



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : VCP450578 **Received** : 08 Jul 2024  
**Lab Number** : 06229786 **Tested** : 09 Jul 2024  
**Unique Number** : 11113279 **Diagnosed** : 09 Jul 2024 - Sean Felton  
**Test Package** : MOB 1 ( Additional Tests: TBN )

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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)