



# VOLVO

## OIL ANALYSIS REPORT

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



Area

**[25684]**

Machine Id

**VOLVO L70 624995**

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>VCP452649</b>	VCP418497	VCP389127
Sample Date		Client Info		<b>16 May 2024</b>	18 Dec 2023	07 Jun 2023
Machine Age	hrs	Client Info		<b>1489</b>	1065	533
Oil Age	hrs	Client Info		<b>0</b>	0	500
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>11</b>	14	20
Chromium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	1	2
Nickel	ppm	ASTM D5185m	>5	<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	>30	<b>4</b>	4	4
Lead	ppm	ASTM D5185m	>40	<b>0</b>	0	<1
Copper	ppm	ASTM D5185m	>20	<b>2</b>	<1	7
Tin	ppm	ASTM D5185m	>20	<b>2</b>	2	4
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

### CONTAMINATION

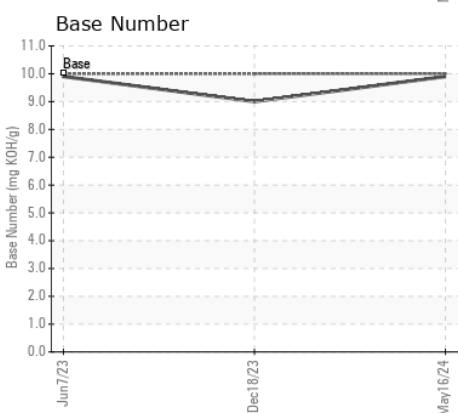
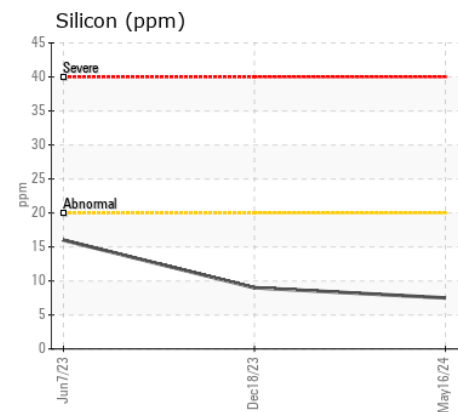
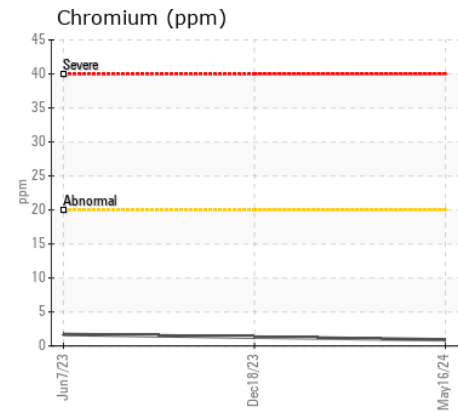
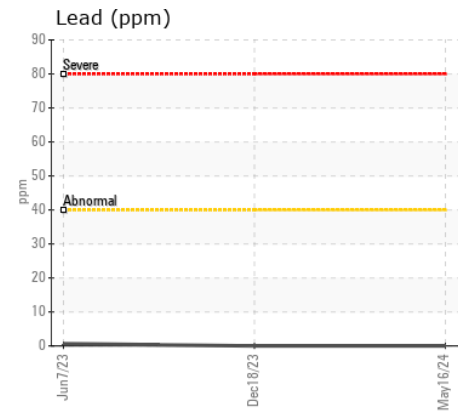
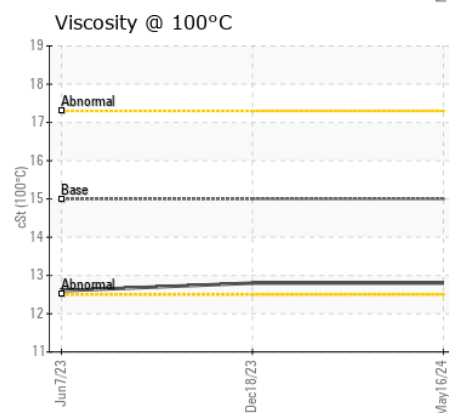
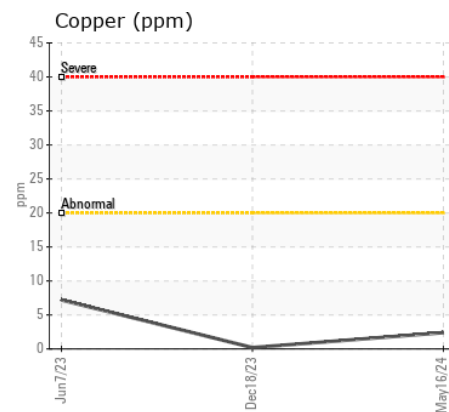
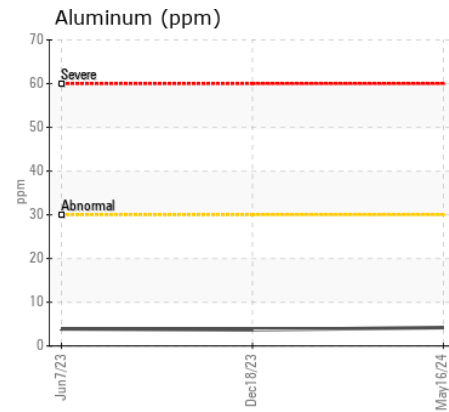
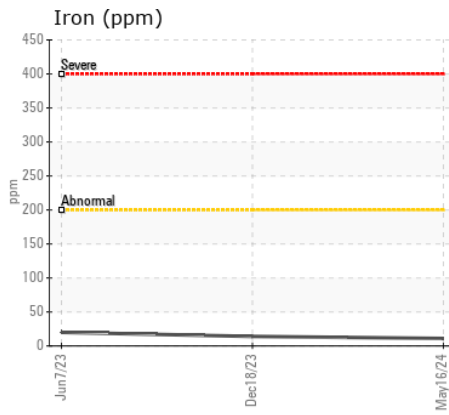
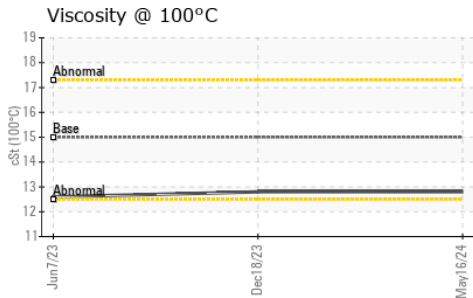
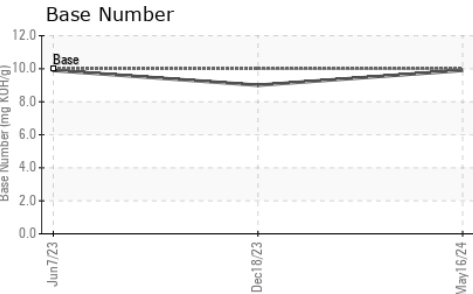
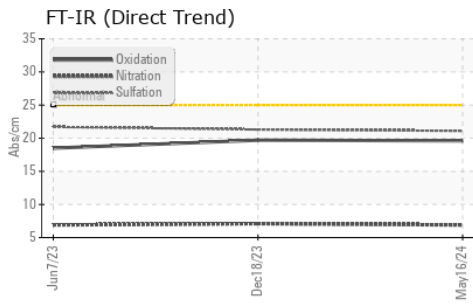
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>20	<b>8</b>	9	16
Potassium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	0	3
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>0.2</b>	0.2	0.2
Nitration	Abs/cm	*ASTM D7624	>20	<b>6.9</b>	7.1	6.9
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>21.1</b>	21.3	21.7
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>3</b>	<1	2
Boron	ppm	ASTM D5185m	2.5	<b>53</b>	42	77
Barium	ppm	ASTM D5185m	0.0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	0.7	<b>44</b>	41	44
Manganese	ppm	ASTM D5185m	0.0	<b>1</b>	<1	4
Magnesium	ppm	ASTM D5185m	256	<b>523</b>	551	546
Calcium	ppm	ASTM D5185m	2057	<b>1722</b>	1781	1488
Phosphorus	ppm	ASTM D5185m	935	<b>959</b>	1036	944
Zinc	ppm	ASTM D5185m	1223	<b>1137</b>	1197	1108
Sulfur	ppm	ASTM D5185m	4079	<b>3500</b>	3354	3400
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>19.6</b>	19.7	18.5
Base Number (BN)	mg KOH/g	ASTM D2896	10	<b>9.9</b>	9.0	9.9
Visc @ 100°C	cSt	ASTM D445	15.0	<b>12.8</b>	12.8	12.6



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : VCP452649 **Received** : 21 May 2024  
**Lab Number** : 06185792 **Tested** : 22 May 2024  
**Unique Number** : 11042544 **Diagnosed** : 22 May 2024 - Wes Davis  
**Test Package** : MOB 1 ( Additional Tests: TBN )

**218 - ASCENDUM MACHINERY INC - N. CHARLESTON**  
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 NORTH CHARLESTON, SC  
 US 29418  
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 matt.mitcham@ascendummachinery.com

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: (843)414-1129