



# ASCENDUM

## OIL ANALYSIS REPORT

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



Machine Id  
**VOLVO L120H 633262**  
Component  
**Diesel Engine**  
Fluid  
**VOLVO 10W40 (--- GAL)**

### RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>ASC0003150</b>	ASC0003387	ASC0003494
Sample Date		Client Info		<b>31 May 2024</b>	05 Apr 2024	25 Jan 2024
Machine Age	hrs	Client Info		<b>4037</b>	3546	3046
Oil Age	hrs	Client Info		<b>4037</b>	3546	2021
Filter Age	hrs	Client Info		<b>0</b>	3546	2021
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>10</b>	14	8
Chromium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	0	<1
Nickel	ppm	ASTM D5185m	>5	<b>&lt;1</b>	0	0
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
Silver	ppm	ASTM D5185m	>2	<b>0</b>	0	<1
Aluminum	ppm	ASTM D5185m	>30	<b>4</b>	7	8
Lead	ppm	ASTM D5185m	>40	<b>&lt;1</b>	0	<1
Copper	ppm	ASTM D5185m	>20	<b>3</b>	<1	<1
Tin	ppm	ASTM D5185m	>20	<b>&lt;1</b>	<1	<1
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.

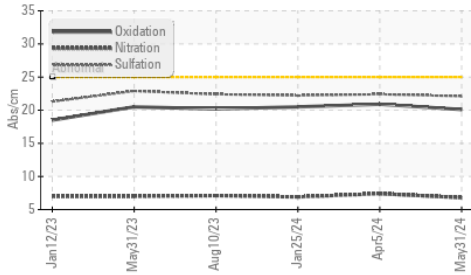
Silicon	ppm	ASTM D5185m	>20	<b>4</b>	6	5
Potassium	ppm	ASTM D5185m	>20	<b>5</b>	7	12
Fuel		WC Method	>6.0	<b>&lt;1.0</b>	<1.0	<1.0
Water		WC Method	>0.2	<b>NEG</b>	NEG	NEG
Glycol		WC Method		<b>NEG</b>	NEG	NEG
Soot %	%	*ASTM D7844	>3	<b>0.3</b>	0.3	0.2
Nitration	Abs/cm	*ASTM D7624	>20	<b>6.8</b>	7.4	6.9
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>22.1</b>	22.4	22.2
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

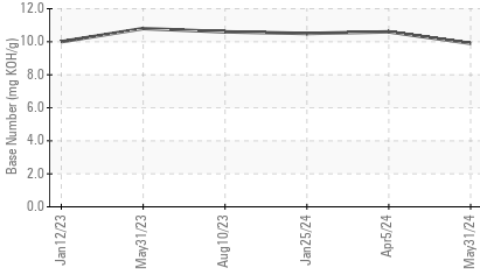
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		<b>&lt;1</b>	2	2
Boron	ppm	ASTM D5185m		<b>35</b>	35	46
Barium	ppm	ASTM D5185m		<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m		<b>43</b>	41	40
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m		<b>514</b>	526	533
Calcium	ppm	ASTM D5185m		<b>1699</b>	1728	1703
Phosphorus	ppm	ASTM D5185m		<b>977</b>	970	963
Zinc	ppm	ASTM D5185m		<b>1170</b>	1154	1156
Sulfur	ppm	ASTM D5185m		<b>3138</b>	3330	2878
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>20.1</b>	20.9	20.5
Base Number (BN)	mg KOH/g	ASTM D2896		<b>9.9</b>	10.6	10.5
Visc @ 100°C	cSt	ASTM D445		<b>12.9</b>	12.8	13.0

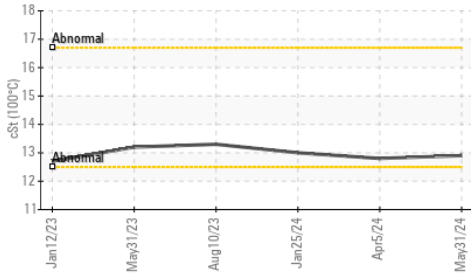
**FT-IR (Direct Trend)**



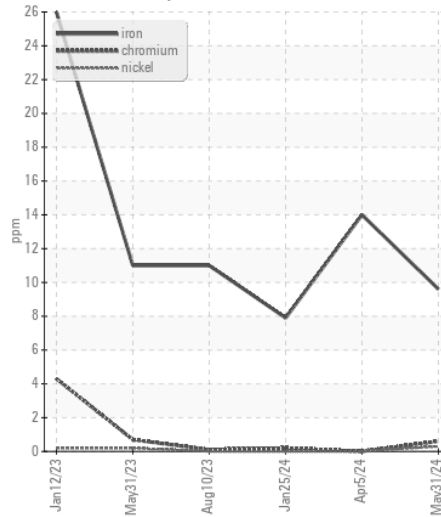
**Base Number**



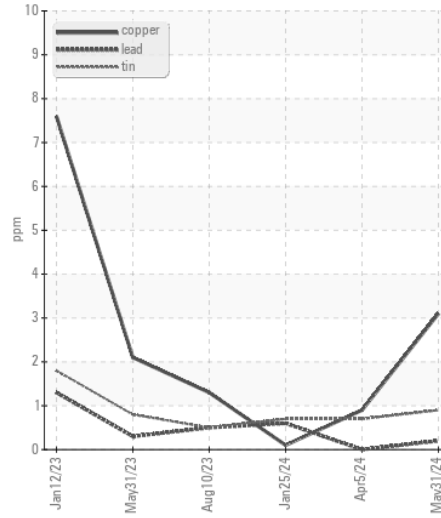
**Viscosity @ 100°C**



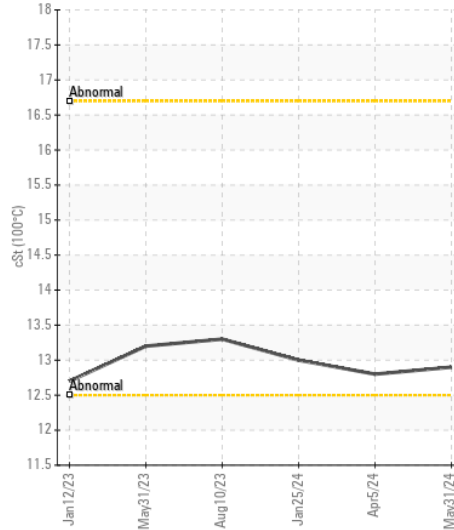
**Ferrous Alloys**



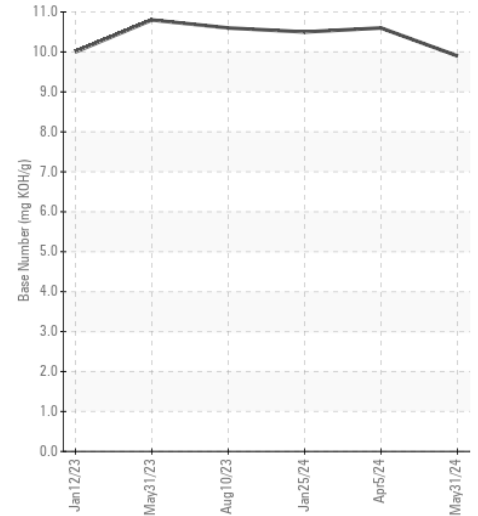
**Non-ferrous Metals**



**Viscosity @ 100°C**



**Base Number**



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : ASC0003150 **Received** : 03 Jun 2024  
**Lab Number** : 06197426 **Tested** : 04 Jun 2024  
**Unique Number** : 11059549 **Diagnosed** : 04 Jun 2024 - Wes Davis  
**Test Package** : CONST ( Additional Tests: TBN )

**PARTON LUMBER CO**  
 251 PARTON RD  
 RUTHERFORDTON, NC  
 US 28139  
 Contact: SERVICE MANAGER

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)

T:  
F: