



# ASCENDUM

## OIL ANALYSIS REPORT

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



Area  
**Ascendum Machinery**  
 Machine Id  
**VOLVO L120H RL84 (S/N L120HV633470)**  
 Component  
**Diesel Engine**  
 Fluid  
**VOLVO VDS-4.5 Premium Motor Oil 15W40 (--- GAL)**

### RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>ASC0011455</b>	ASC0008529	ASC0006201
Sample Date		Client Info		<b>10 May 2024</b>	15 Feb 2024	06 Jan 2024
Machine Age	hrs	Client Info		<b>1498</b>	971	717
Oil Age	hrs	Client Info		<b>527</b>	254	717
Filter Age	hrs	Client Info		<b>0</b>	0	0
Oil Changed		Client Info		<b>N/A</b>	Changed	Changed
Filter Changed		Client Info		<b>N/A</b>	Changed	Changed
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

### WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	<b>15</b>	9	23
Chromium	ppm	ASTM D5185m	>10	<b>&lt;1</b>	<1	2
Nickel	ppm	ASTM D5185m	>10	<b>&lt;1</b>	<1	0
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	2	11
Silver	ppm	ASTM D5185m	>2	<b>&lt;1</b>	<1	1
Aluminum	ppm	ASTM D5185m	>10	<b>7</b>	9	33
Lead	ppm	ASTM D5185m	>20	<b>1</b>	<1	2
Copper	ppm	ASTM D5185m	>15	<b>5</b>	3	15
Tin	ppm	ASTM D5185m	>10	<b>2</b>	1	3
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

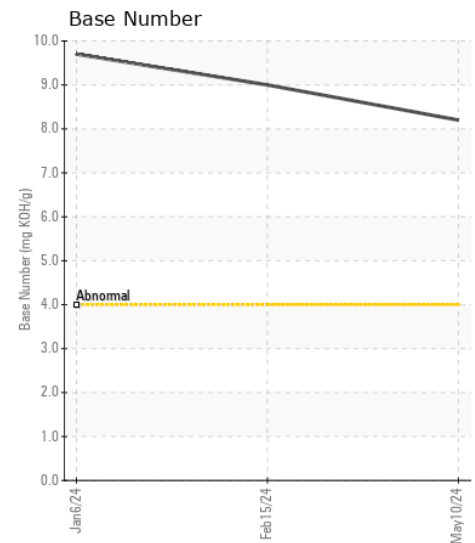
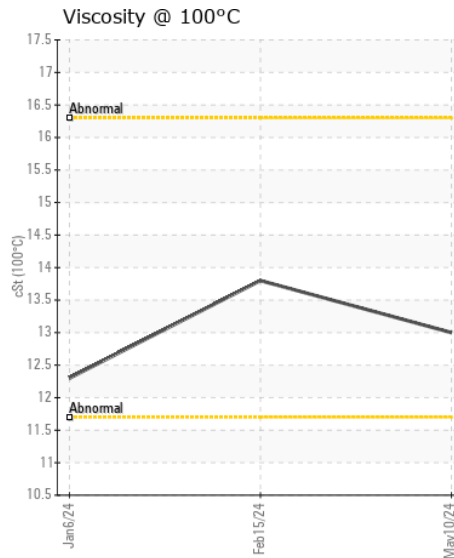
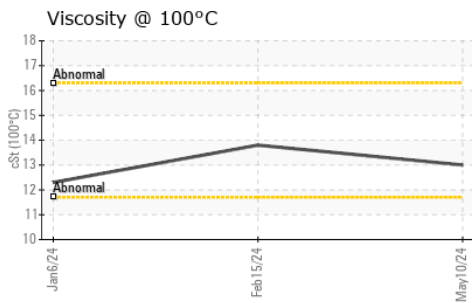
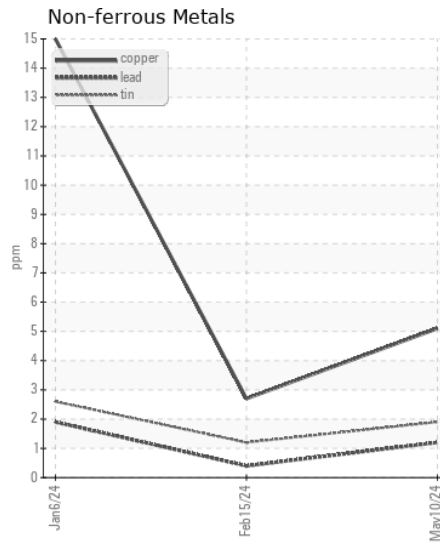
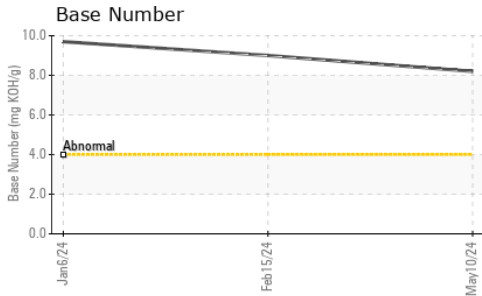
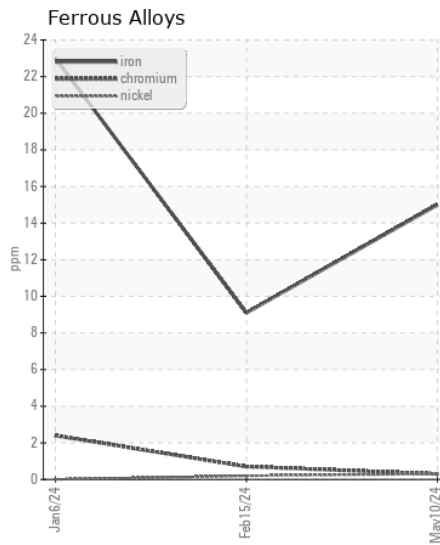
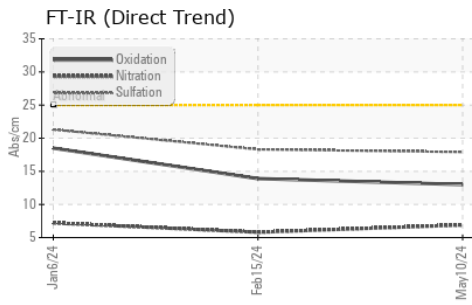
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>20	<b>18</b>	9	15
Potassium	ppm	ASTM D5185m	>20	<b>2</b>	1	1
Fuel		WC Method	>6.0	<b>&lt;1.0</b>	<1.0	0.3
Water		WC Method	>0.1	<b>NEG</b>	NEG	NEG
Glycol		WC Method		<b>NEG</b>	NEG	NEG
Soot %	%	*ASTM D7844	>3	<b>0.4</b>	0.2	0.2
Nitration	Abs/cm	*ASTM D7624	>20	<b>6.9</b>	5.8	7.2
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>17.9</b>	18.3	21.3
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>	1	4
Boron	ppm	ASTM D5185m		<b>34</b>	8	51
Barium	ppm	ASTM D5185m		<b>0</b>	2	21
Molybdenum	ppm	ASTM D5185m		<b>62</b>	51	30
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	<1	2
Magnesium	ppm	ASTM D5185m		<b>879</b>	814	548
Calcium	ppm	ASTM D5185m		<b>1050</b>	1032	1400
Phosphorus	ppm	ASTM D5185m		<b>973</b>	953	871
Zinc	ppm	ASTM D5185m		<b>1166</b>	1153	1086
Sulfur	ppm	ASTM D5185m		<b>3350</b>	2897	3285
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>13.0</b>	13.9	18.5
Base Number (BN)	mg KOH/g	ASTM D2896		<b>8.2</b>	9.0	9.7
Visc @ 100°C	cSt	ASTM D445		<b>13.0</b>	13.8	12.3



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : ASC0011455 **Received** : 29 May 2024  
**Lab Number** : 06193741 **Tested** : 30 May 2024  
**Unique Number** : 11050493 **Diagnosed** : 30 May 2024 - Sean Felton  
**Test Package** : CONST ( Additional Tests: TBN )

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)

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