



# ASCENDUM

## OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Area

**Ascendum Machinery/500 Hour CSA**

Machine Id

**VOLVO L150H 2328 (S/N L150HV7200)**

Component

**Diesel Engine**

Fluid

**DIESEL ENGINE OIL SAE 40 (--- GAL)**

### RECOMMENDATION

Resample at the next service interval to monitor. Please specify the brand, type, and viscosity of the oil on your next sample.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>ASC0011447</b>	ASC0008955	VCP414091
Sample Date		Client Info		<b>17 May 2024</b>	31 Jan 2024	06 Oct 2023
Machine Age	hrs	Client Info		<b>4104</b>	3550	2070
Oil Age	hrs	Client Info		<b>500</b>	1550	0
Filter Age	hrs	Client Info		<b>500</b>	1550	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>11</b>	33	11
Chromium	ppm	ASTM D5185m	>10	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185m	>10	<b>&lt;1</b>	<1	<1
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	0
Silver	ppm	ASTM D5185m	>2	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>10	<b>3</b>	4	4
Lead	ppm	ASTM D5185m	>20	<b>0</b>	0	<1
Copper	ppm	ASTM D5185m	>15	<b>13</b>	8	19
Tin	ppm	ASTM D5185m	>10	<b>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

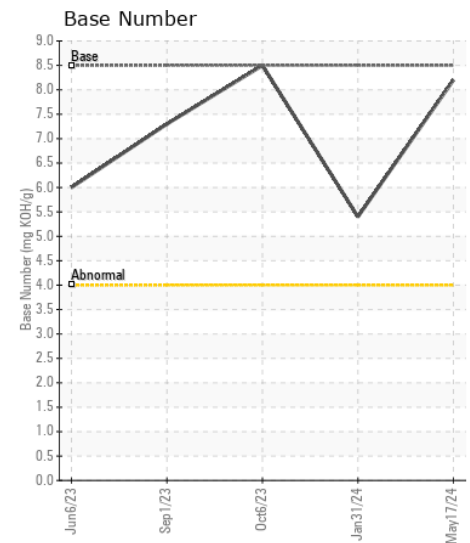
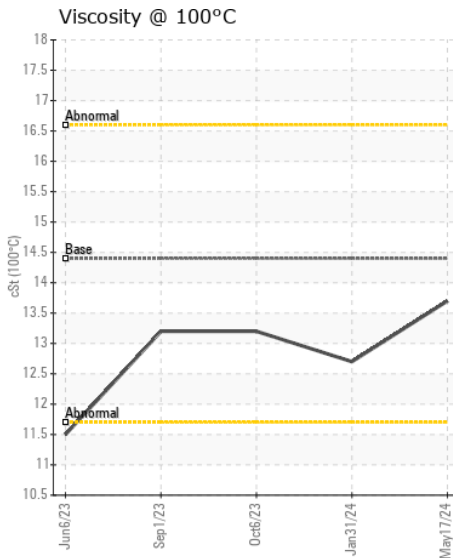
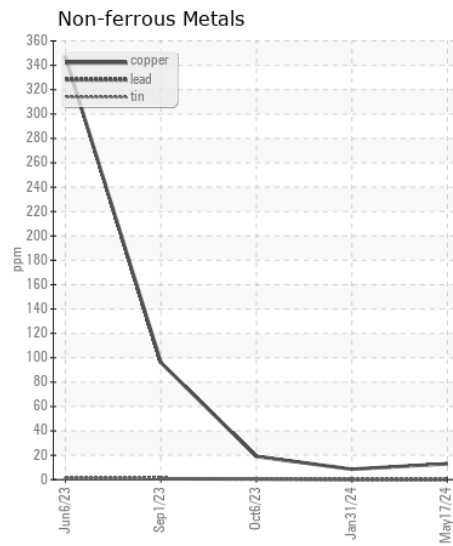
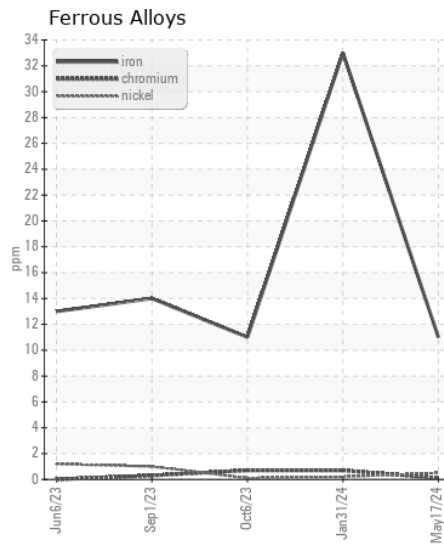
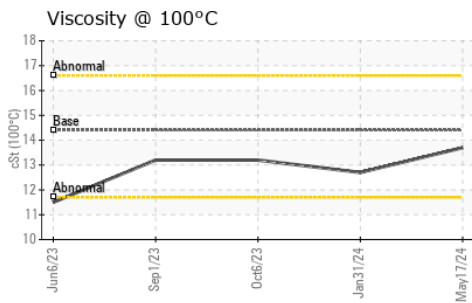
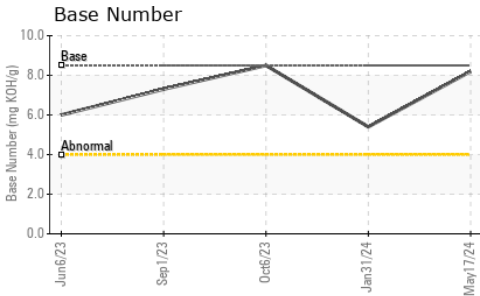
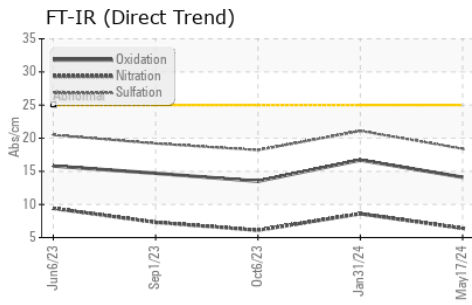
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>20	<b>8</b>	23	15
Potassium	ppm	ASTM D5185m	>20	<b>1</b>	2	0
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>	0.3	0.1
Nitration	Abs/cm	*ASTM D7624	>20	<b>6.4</b>	8.6	6.1
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>18.4</b>	21.1	18.2
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	>0.1	<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	>216	<b>2</b>	0	2
Boron	ppm	ASTM D5185m	250	<b>2</b>	2	8
Barium	ppm	ASTM D5185m	10	<b>0</b>	5	0
Molybdenum	ppm	ASTM D5185m	100	<b>60</b>	68	63
Manganese	ppm	ASTM D5185m		<b>1</b>	0	<1
Magnesium	ppm	ASTM D5185m	450	<b>980</b>	1000	987
Calcium	ppm	ASTM D5185m	3000	<b>1097</b>	1106	1103
Phosphorus	ppm	ASTM D5185m	1150	<b>1061</b>	823	1037
Zinc	ppm	ASTM D5185m	1350	<b>1295</b>	1255	1295
Sulfur	ppm	ASTM D5185m	4250	<b>3625</b>	2553	3126
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>14.1</b>	16.7	13.5
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	<b>8.2</b>	5.4	8.5
Visc @ 100°C	cSt	ASTM D445	14.4	<b>13.7</b>	12.7	13.2



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : ASC0011447 **Received** : 21 May 2024  
**Lab Number** : 06185833 **Tested** : 22 May 2024  
**Unique Number** : 11042585 **Diagnosed** : 22 May 2024 - Wes Davis  
**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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