



# ASCENDUM

## OIL ANALYSIS REPORT

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



Machine Id  
**VOLVO L90H 626449**  
Component  
**Diesel Engine**  
Fluid  
**VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3 (--- GAL)**

### RECOMMENDATION

No corrective action is recommended at this time. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		ASC0008723	---	---
Sample Date		Client Info		13 Mar 2024	---	---
Machine Age	hrs	Client Info		1588	---	---
Oil Age	hrs	Client Info		1588	---	---
Filter Age	hrs	Client Info		0	---	---
Oil Changed		Client Info		N/A	---	---
Filter Changed		Client Info		N/A	---	---
Sample Status				ABNORMAL	---	---

### WEAR

The aluminum level is abnormal. All other component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	87	---	---
Chromium	ppm	ASTM D5185m	>10	13	---	---
Nickel	ppm	ASTM D5185m	>10	<1	---	---
Titanium	ppm	ASTM D5185m		<1	---	---
Silver	ppm	ASTM D5185m	>2	0	---	---
Aluminum	ppm	ASTM D5185m	>10	▲ 86	---	---
Lead	ppm	ASTM D5185m	>20	3	---	---
Copper	ppm	ASTM D5185m	>15	14	---	---
Tin	ppm	ASTM D5185m	>10	5	---	---
Vanadium	ppm	ASTM D5185m		0	---	---
White Metal	scalar	*Visual	NONE	NONE	---	---
Yellow Metal	scalar	*Visual	NONE	NONE	---	---

### CONTAMINATION

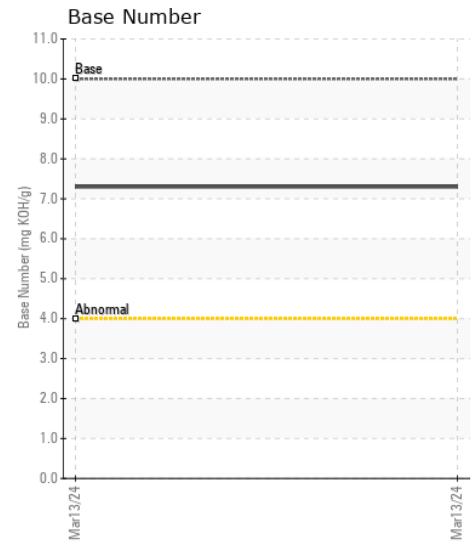
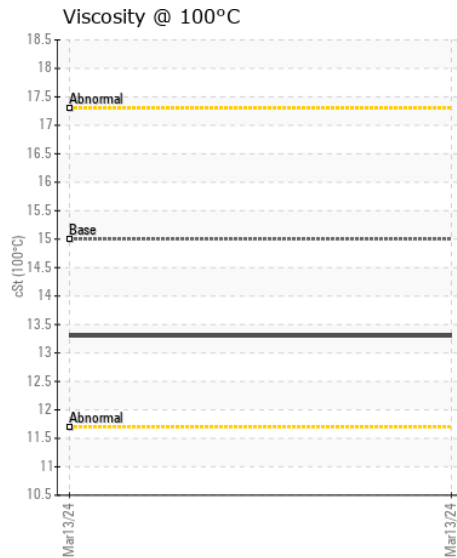
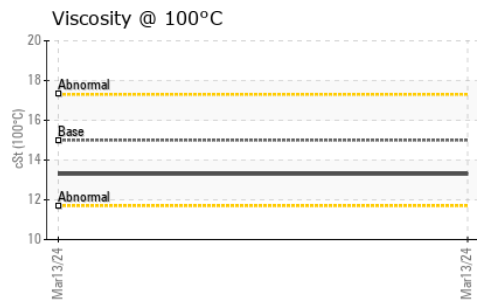
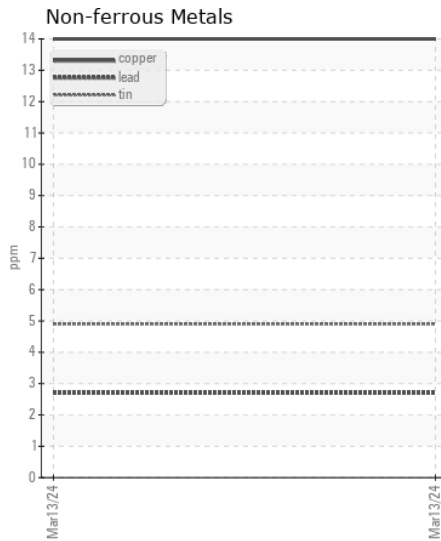
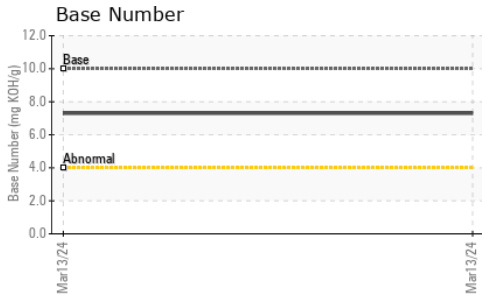
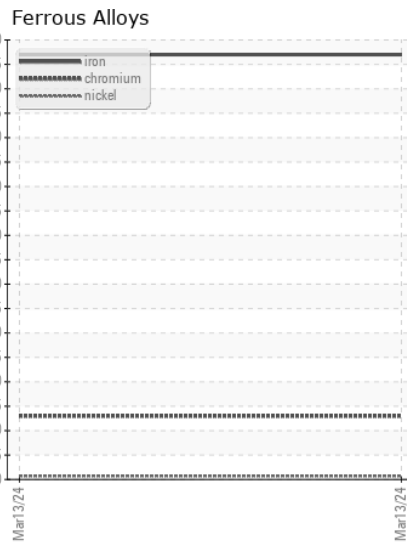
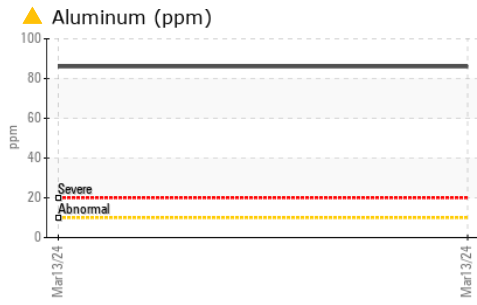
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>20	18	---	---
Potassium	ppm	ASTM D5185m	>20	9	---	---
Fuel		WC Method	>6.0	<1.0	---	---
Water		WC Method	>0.1	NEG	---	---
Glycol		WC Method		NEG	---	---
Soot %	%	*ASTM D7844	>3	0.8	---	---
Nitration	Abs/cm	*ASTM D7624	>20	10.6	---	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	22.7	---	---
Silt	scalar	*Visual	NONE	NONE	---	---
Debris	scalar	*Visual	NONE	NONE	---	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---	---
Appearance	scalar	*Visual	NORML	NORML	---	---
Odor	scalar	*Visual	NORML	NORML	---	---
Emulsified Water	scalar	*Visual	>0.1	NEG	---	---

### FLUID CONDITION

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

Sodium	ppm	ASTM D5185m		8	---	---
Boron	ppm	ASTM D5185m	2.5	24	---	---
Barium	ppm	ASTM D5185m	0.0	2	---	---
Molybdenum	ppm	ASTM D5185m	0.7	45	---	---
Manganese	ppm	ASTM D5185m	0.0	5	---	---
Magnesium	ppm	ASTM D5185m	256	626	---	---
Calcium	ppm	ASTM D5185m	2057	1665	---	---
Phosphorus	ppm	ASTM D5185m	935	1001	---	---
Zinc	ppm	ASTM D5185m	1223	1250	---	---
Sulfur	ppm	ASTM D5185m	4079	3636	---	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	21.1	---	---
Base Number (BN)	mg KOH/g	ASTM D2896	10	7.3	---	---
Visc @ 100°C	cSt	ASTM D445	15.0	13.3	---	---



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513

**Sample No.** : ASC0008723

**Lab Number** : 06121416

**Unique Number** : 10930249

**Test Package** : CONST ( Additional Tests: TBN )

**Received** : 18 Mar 2024

**Tested** : 19 Mar 2024

**Diagnosed** : 20 Mar 2024 - Don Baldrige

**117 - ASCENDUM MACHINERY INC - GREENVILLE**

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US 27834

Contact: ALLEN WILLIAMS

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T:

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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