



ASCENDUM

OIL ANALYSIS REPORT



Area
[W520021279]
 Machine Id
VOLVO L90H 627099
 Component
Diesel Engine
 Fluid
DIESEL ENGINE OIL SAE 15W40 (--- QTS)

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	ATTENTION

RECOMMENDATION

The oil change at the time of sampling has been noted. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		ASC0006021	VCP280354	---
Sample Date		Client Info		27 Feb 2024	16 Nov 2023	---
Machine Age	hrs	Client Info		1036	548	---
Oil Age	hrs	Client Info		0	0	---
Filter Age	hrs	Client Info		0	0	---
Oil Changed		Client Info		Changed	Changed	---
Filter Changed		Client Info		N/A	N/A	---
Sample Status				ATTENTION	NORMAL	---

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>200	25	25	---
Chromium	ppm	ASTM D5185m	>20	2	2	---
Nickel	ppm	ASTM D5185m	>5	<1	1	---
Titanium	ppm	ASTM D5185m		<1	<1	---
Silver	ppm	ASTM D5185m	>2	0	<1	---
Aluminum	ppm	ASTM D5185m	>30	6	9	---
Lead	ppm	ASTM D5185m	>40	<1	1	---
Copper	ppm	ASTM D5185m	>20	3	1	---
Tin	ppm	ASTM D5185m	>20	2	1	---
Vanadium	ppm	ASTM D5185m		<1	<1	---
White Metal	scalar	*Visual	NONE	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	---

CONTAMINATION

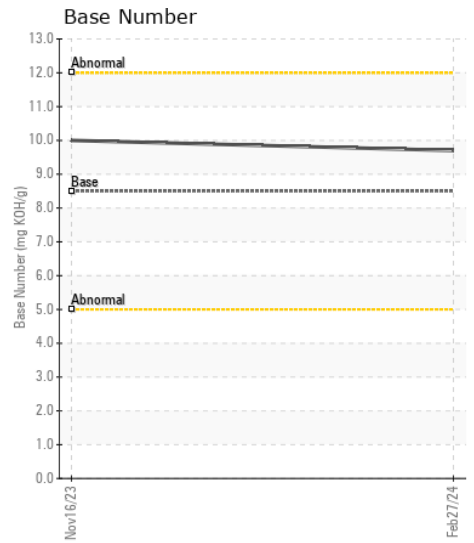
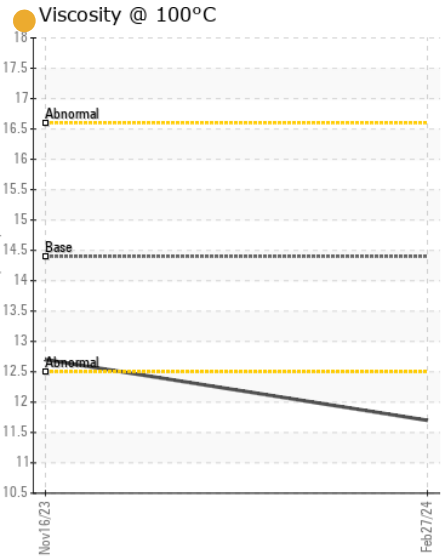
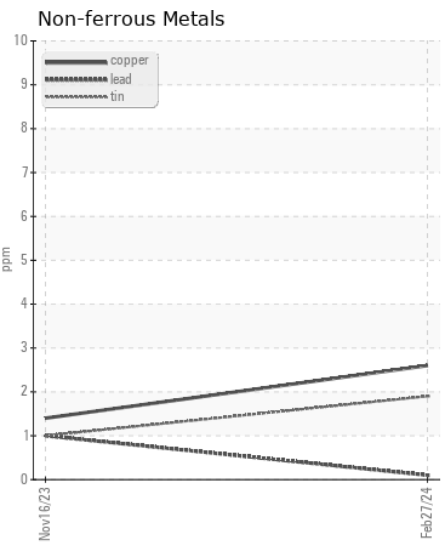
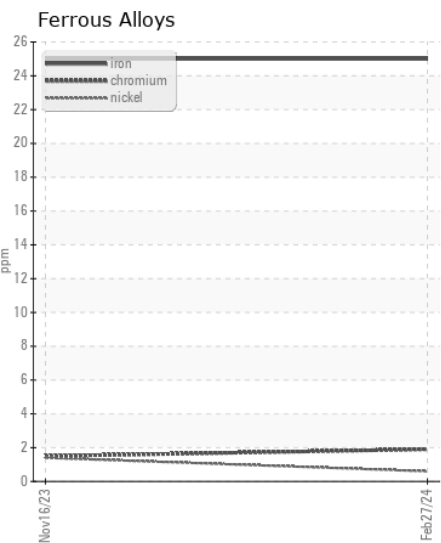
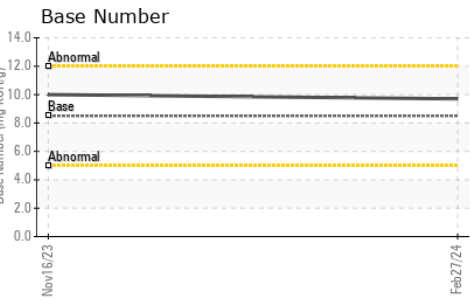
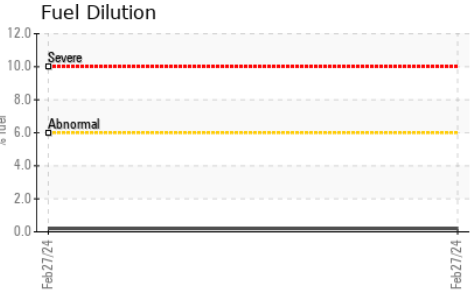
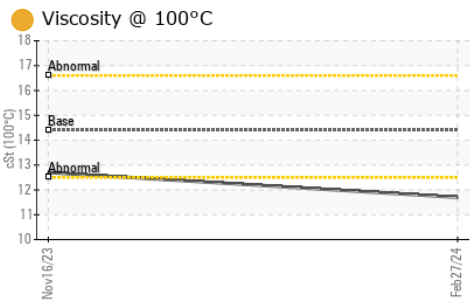
Fuel content negligible. There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>20	10	6	---
Potassium	ppm	ASTM D5185m	>20	2	4	---
Fuel	%	ASTM D3524	>6.0	0.2	<1.0	---
Water		WC Method	>0.2	NEG	NEG	---
Glycol		WC Method		NEG	NEG	---
Soot %	%	*ASTM D7844	>3	0.4	0.4	---
Nitration	Abs/cm	*ASTM D7624	>20	6.9	7.6	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	21.7	20.6	---
Silt	scalar	*Visual	NONE	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	---
Appearance	scalar	*Visual	NORML	NORML	NORML	---
Odor	scalar	*Visual	NORML	NORML	NORML	---
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	---

FLUID CONDITION

The oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil. Confirm oil type.

Sodium	ppm	ASTM D5185m	>158	3	3	---
Boron	ppm	ASTM D5185m	250	40	48	---
Barium	ppm	ASTM D5185m	10	0	0	---
Molybdenum	ppm	ASTM D5185m	100	42	38	---
Manganese	ppm	ASTM D5185m		2	2	---
Magnesium	ppm	ASTM D5185m	450	512	520	---
Calcium	ppm	ASTM D5185m	3000	1520	1633	---
Phosphorus	ppm	ASTM D5185m	1150	948	845	---
Zinc	ppm	ASTM D5185m	1350	1107	1127	---
Sulfur	ppm	ASTM D5185m	4250	2985	2467	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	19.0	17.9	---
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	9.7	10.0	---
Visc @ 100°C	cSt	ASTM D445	14.4	11.7	12.7	---



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : ASC0006021 **Received** : 01 Mar 2024
Lab Number : 06105720 **Tested** : 05 Mar 2024
Unique Number : 10903950 **Diagnosed** : 05 Mar 2024 - Don Baldrige
Test Package : CONST (Additional Tests: FuelDilution, PercentFuel, TBN)

520 - ASCENDUM MACHINERY INC - KNOXVILLE
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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)