



ASCENDUM

OIL ANALYSIS REPORT



Area
Ascendum Machinery/250 Hour CSA
 Machine Id
VOLVO EC330B 2287 (S/N 10518)
 Component
Diesel Engine
 Fluid
VOLVO VDS-4.5 Premium Motor Oil 15W40 (--- GAL)

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	ATTENTION

RECOMMENDATION

Oil and filter 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		ASC0007742	VCP0005718	---
Sample Date		Client Info		30 Jan 2024	01 Jun 2023	---
Machine Age	hrs	Client Info		5500	546	---
Oil Age	hrs	Client Info		4954	546	---
Filter Age	hrs	Client Info		0	0	---
Oil Changed		Client Info		Changed	Changed	---
Filter Changed		Client Info		Changed	Changed	---
Sample Status				ATTENTION	ATTENTION	---

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	8	8	---
Chromium	ppm	ASTM D5185m	>10	0	0	---
Nickel	ppm	ASTM D5185m	>10	<1	<1	---
Titanium	ppm	ASTM D5185m		0	0	---
Silver	ppm	ASTM D5185m	>2	0	0	---
Aluminum	ppm	ASTM D5185m	>10	2	0	---
Lead	ppm	ASTM D5185m	>20	1	<1	---
Copper	ppm	ASTM D5185m	>15	2	7	---
Tin	ppm	ASTM D5185m	>10	<1	<1	---
Vanadium	ppm	ASTM D5185m		<1	0	---
White Metal	scalar	*Visual	NONE	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	---

CONTAMINATION

There is no indication of any contamination in the oil.

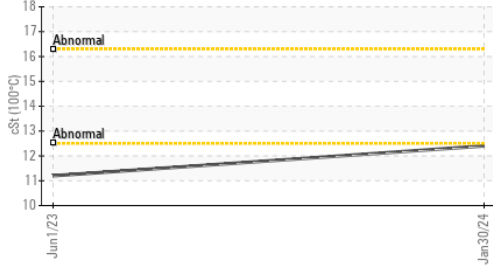
Silicon	ppm	ASTM D5185m	>20	5	3	---
Potassium	ppm	ASTM D5185m	>20	3	1	---
Fuel	%	ASTM D3524	>6.0	<1.0	1.1	---
Water		WC Method	>0.1	NEG	NEG	---
Glycol		WC Method		NEG	NEG	---
Soot %	%	*ASTM D7844	>3	0.2	0.2	---
Nitration	Abs/cm	*ASTM D7624	>20	6.9	8.1	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	21.8	19.1	---
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	>0.1	NEG	NEG	---

FLUID CONDITION

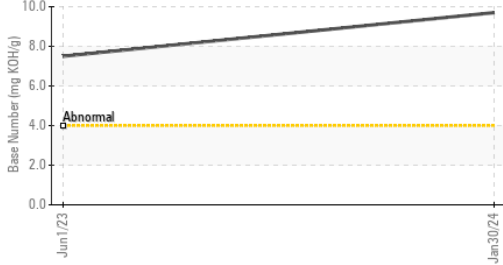
The oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil. Confirm oil type.

Sodium	ppm	ASTM D5185m		2	3	---
Boron	ppm	ASTM D5185m		59	51	---
Barium	ppm	ASTM D5185m		0	0	---
Molybdenum	ppm	ASTM D5185m		35	46	---
Manganese	ppm	ASTM D5185m		<1	<1	---
Magnesium	ppm	ASTM D5185m		449	637	---
Calcium	ppm	ASTM D5185m		1630	1598	---
Phosphorus	ppm	ASTM D5185m		953	951	---
Zinc	ppm	ASTM D5185m		1121	1161	---
Sulfur	ppm	ASTM D5185m		3014	4077	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	19.8	13.9	---
Base Number (BN)	mg KOH/g	ASTM D2896		9.7	7.5	---
Visc @ 100°C	cSt	ASTM D445		▲ 12.4	▲ 11.2	---

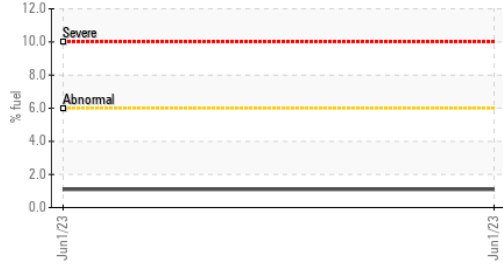
▲ Viscosity @ 100°C



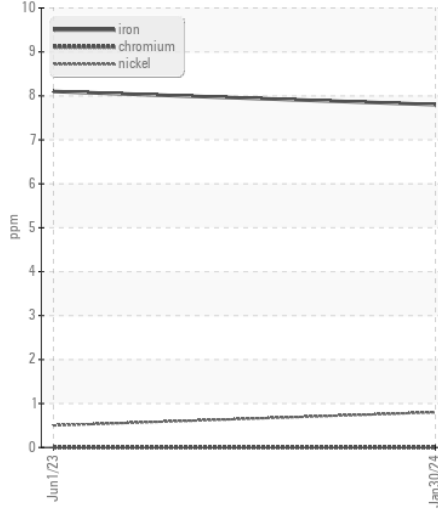
Base Number



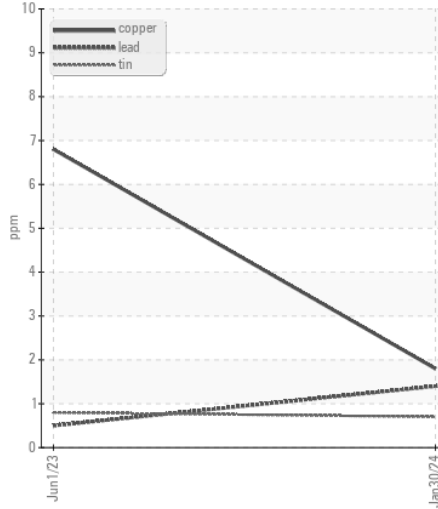
Fuel Dilution



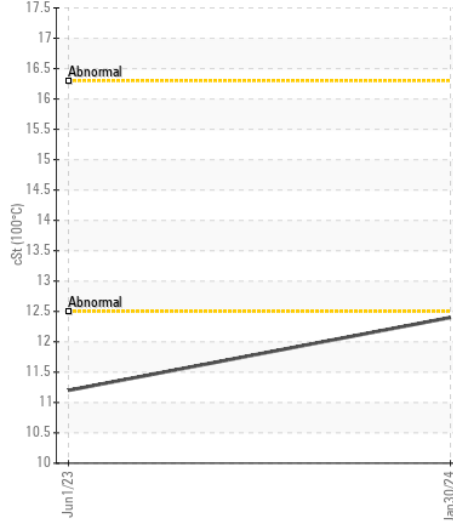
Ferrous Alloys



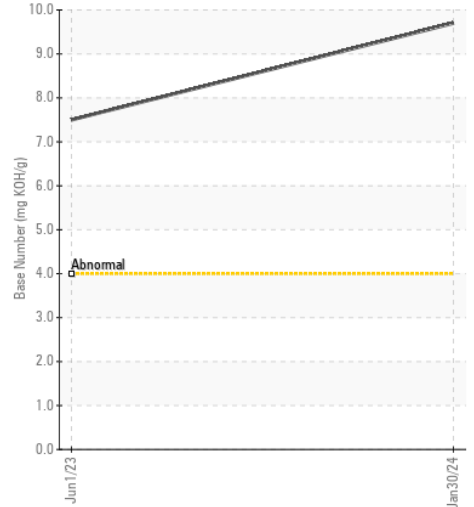
Non-ferrous Metals



▲ Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : ASC0007742 **Received** : 31 Jan 2024
Lab Number : 06075528 **Diagnosed** : 01 Feb 2024
Unique Number : 10857619 **Diagnostician** : Don Baldrige
Test Package : CONST (Additional Tests: FuelDilution, TBN)

TRIANGLE GRADING AND PAVING INC
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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)