CONST ASCENDUM

OIL ANALYSIS REPORT

WEAR	ATTENTION
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area
Ascendum Machinery
Machine Id
VOLVO L110H 631866

Component
Diesel Engine
Fluid
DIESEL ENGINE OIL SAE 40 (--- GAL)

RECOMMENDATION

Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

WEAR

A decrease in the aluminum level is noted. All other component wear rates are normal.

CONTAMINATION

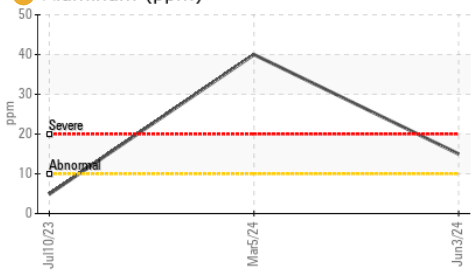
There is no indication of any contamination in the oil.

FLUID CONDITION

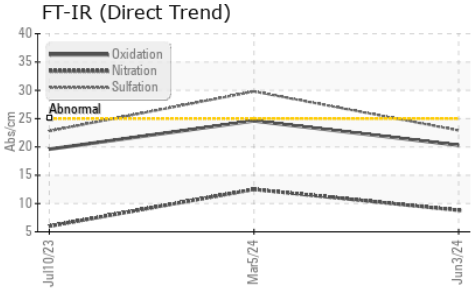
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is acceptable for the time in service.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		ASC0009539	ASC0007354	ASC0000163
Sample Date		Client Info		03 Jun 2024	05 Mar 2024	10 Jul 2023
Machine Age	hrs	Client Info		8452	7756	6033
Oil Age	hrs	Client Info		696	1723	6033
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				ATTENTION	SEVERE	NORMAL
Iron	ppm	ASTM D5185m	>100	19	67	11
Chromium	ppm	ASTM D5185m	>10	<1	3	<1
Nickel	ppm	ASTM D5185m	>10	<1	1	<1
Titanium	ppm	ASTM D5185m		12	23	3
Silver	ppm	ASTM D5185m	>2	0	0	0
Aluminum	ppm	ASTM D5185m	>10	15	40	5
Lead	ppm	ASTM D5185m	>20	<1	5	<1
Copper	ppm	ASTM D5185m	>15	2	6	1
Tin	ppm	ASTM D5185m	>10	1	2	<1
Vanadium	ppm	ASTM D5185m		0	<1	<1
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Silicon	ppm	ASTM D5185m	>20	10	26	7
Potassium	ppm	ASTM D5185m	>20	2	7	4
Fuel		WC Method	>6.0	<1.0	<1.0	<1.0
Water		WC Method	>0.1	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.8	2.1	0.3
Nitration	Abs/cm	*ASTM D7624	>20	8.8	12.5	6.0
Sulfation	Abs/.1mm	*ASTM D7415	>30	22.9	29.8	22.8
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.1	NEG	NEG	NEG
Sodium	ppm	ASTM D5185m	>216	<1	1	8
Boron	ppm	ASTM D5185m	250	36	32	55
Barium	ppm	ASTM D5185m	10	0	0	0
Molybdenum	ppm	ASTM D5185m	100	36	23	42
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m	450	455	253	518
Calcium	ppm	ASTM D5185m	3000	1756	2296	1761
Phosphorus	ppm	ASTM D5185m	1150	867	1145	964
Zinc	ppm	ASTM D5185m	1350	1156	1346	1171
Sulfur	ppm	ASTM D5185m	4250	3195	3502	3634
Oxidation	Abs/.1mm	*ASTM D7414	>25	20.3	24.6	19.6
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	9.8	5.7	10.5
Visc @ 100°C	cSt	ASTM D445	14.4	13.7	15.6	13.3

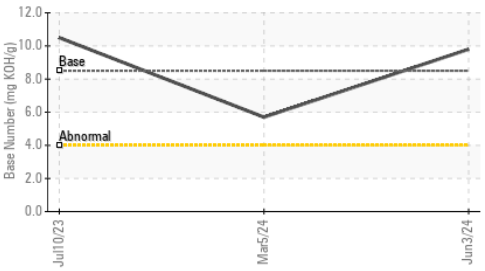
Aluminum (ppm)



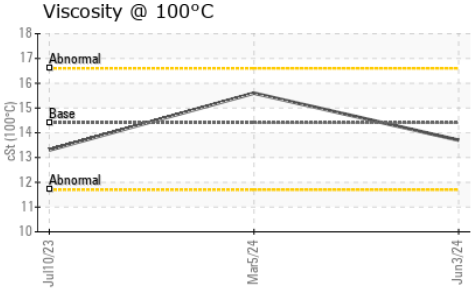
FT-IR (Direct Trend)



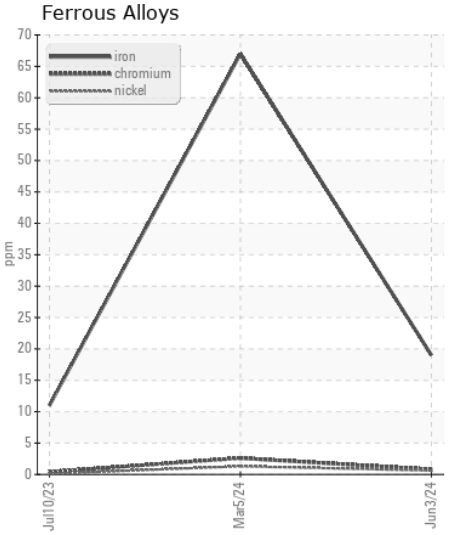
Base Number



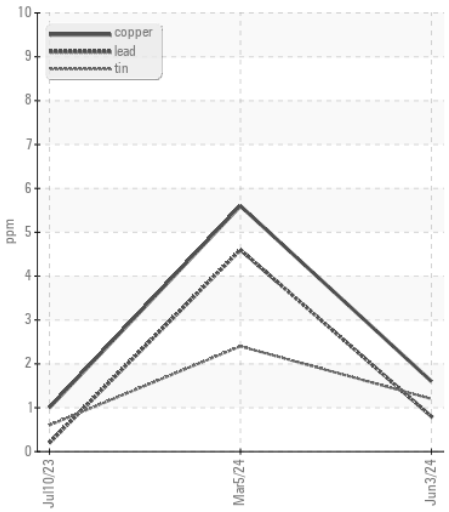
Viscosity @ 100°C



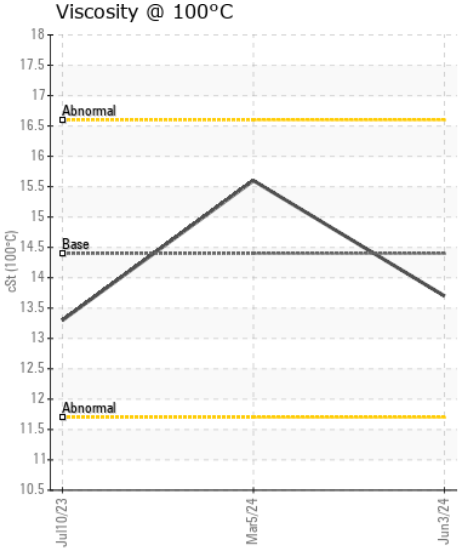
Ferrous Alloys



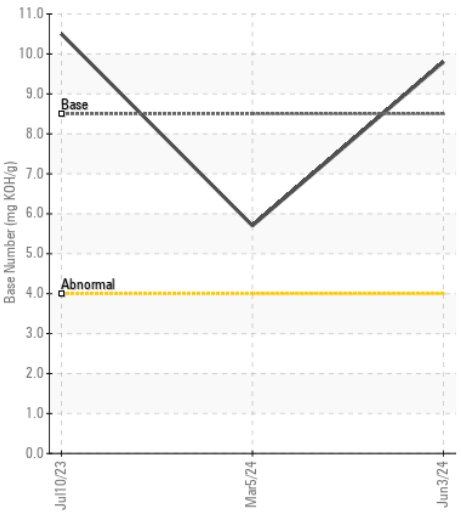
Non-ferrous Metals



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : ASC0009539
Lab Number : 06209887
Unique Number : 11082751
Test Package : CONST (Additional Tests: TBN)

Received : 14 Jun 2024
Tested : 17 Jun 2024
Diagnosed : 17 Jun 2024 - Angela Borella

ENDURANCE ENVIRONMENTAL SOLUTIONS LLC
10275 WEST HIGGINS ROAD
ROSEMONT, IL
US 60018
Contact: Service Manager

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)

T:
F: