CONST ASCENDUM

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
VOLVO L110H 10018
Component
Diesel Engine
Fluid
VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

WEAR

All component wear rates are normal.

CONTAMINATION

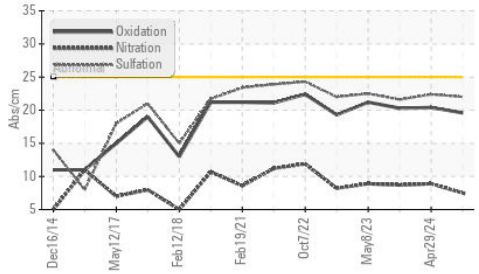
There is no indication of any contamination in the oil.

FLUID CONDITION

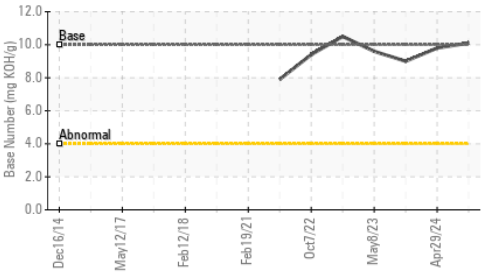
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		ASC0004317	ASC0004277	VCE250091
Sample Date		Client Info		19 Jun 2024	29 Apr 2024	26 Oct 2023
Machine Age	hrs	Client Info		21634	21266	20222
Oil Age	hrs	Client Info		0	21266	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	N/A
Sample Status				NORMAL	NORMAL	NORMAL
Iron	ppm	ASTM D5185m	>100	8	18	12
Chromium	ppm	ASTM D5185m	>10	0	<1	<1
Nickel	ppm	ASTM D5185m	>10	<1	0	<1
Titanium	ppm	ASTM D5185m		0	<1	4
Silver	ppm	ASTM D5185m	>2	0	0	0
Aluminum	ppm	ASTM D5185m	>10	3	4	4
Lead	ppm	ASTM D5185m	>20	0	<1	0
Copper	ppm	ASTM D5185m	>15	0	1	2
Tin	ppm	ASTM D5185m	>10	<1	<1	<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	5	5	7
Potassium	ppm	ASTM D5185m	>20	4	1	1
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	0.4	0.7	0.3
Nitration	Abs/cm	*ASTM D7624	>20	7.5	8.9	8.7
Sulfation	Abs/.1mm	*ASTM D7415	>30	22.0	22.4	21.6
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		15	29	3
Boron	ppm	ASTM D5185m	2.5	38	16	30
Barium	ppm	ASTM D5185m	0.0	0	0	0
Molybdenum	ppm	ASTM D5185m	0.7	41	47	46
Manganese	ppm	ASTM D5185m	0.0	<1	<1	<1
Magnesium	ppm	ASTM D5185m	256	539	532	520
Calcium	ppm	ASTM D5185m	2057	1722	1824	1818
Phosphorus	ppm	ASTM D5185m	935	1009	994	1044
Zinc	ppm	ASTM D5185m	1223	1190	1150	1303
Sulfur	ppm	ASTM D5185m	4079	3392	3411	3229
Oxidation	Abs/.1mm	*ASTM D7414	>25	19.6	20.4	20.3
Base Number (BN)	mg KOH/g	ASTM D2896	10	10.1	9.8	9.0
Visc @ 100°C	cSt	ASTM D445	15.0	12.2	12.6	13.2

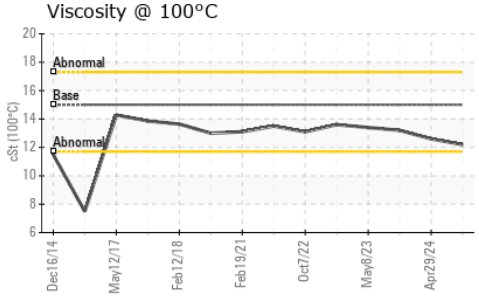
FT-IR (Direct Trend)



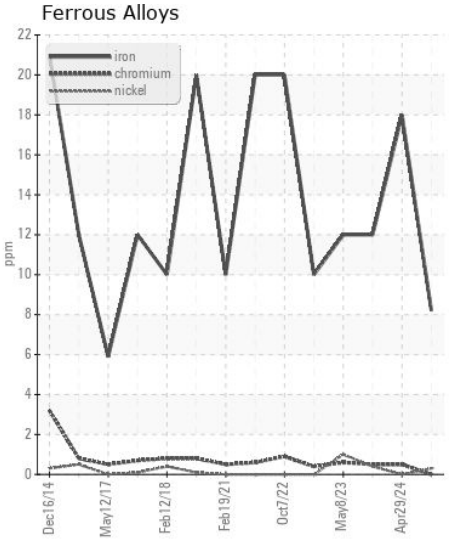
Base Number



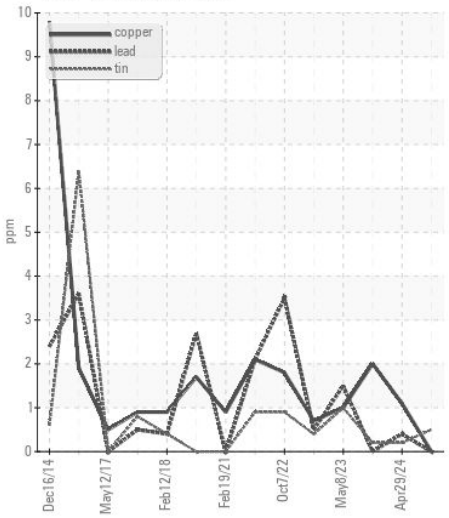
Viscosity @ 100°C



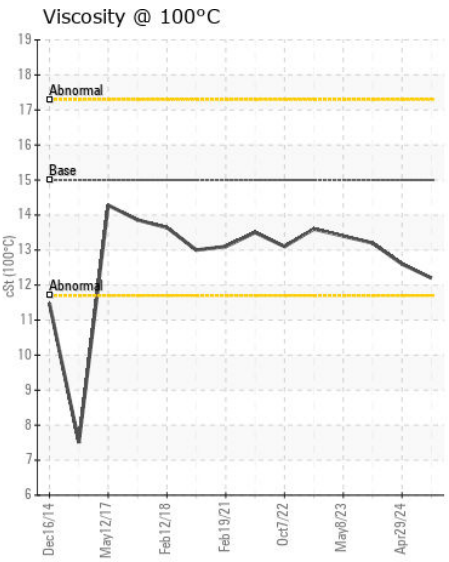
Ferrous Alloys



Non-ferrous Metals



Viscosity @ 100°C



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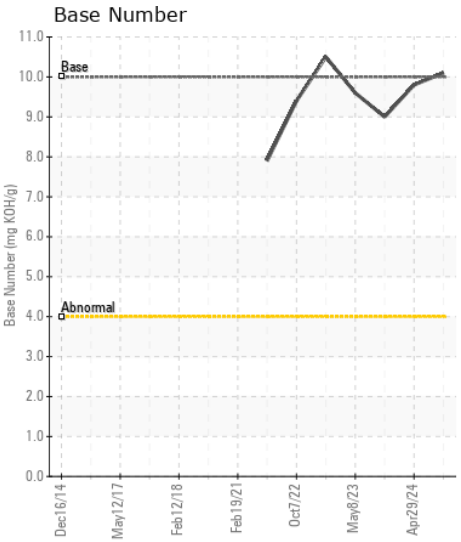

Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : ASC0004317
Lab Number : 06215432
Unique Number : 11088296
Test Package : CONST (Additional Tests: TBN)

Received : 20 Jun 2024
Tested : 21 Jun 2024
Diagnosed : 21 Jun 2024 - Wes Davis

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)

520 - ASCENDUM MACHINERY INC - KNOXVILLE
5730 RUTLEDGE PIKE
KNOXVILLE, TN
US 37924
Contact: BRANDON GRANT
brandon.grant@ascendummachinery.com
T: (865)525-1845
F: (865)525-0251