CONST

ASCENDUM

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area
Ascendum Machinery
Machine Id
VOLVO L90H 627098
Component
Diesel Engine
Fluid
VOLVO VDS-4.5 Premium Motor Oil 15W40 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

WEAR

All component wear rates are normal.

CONTAMINATION

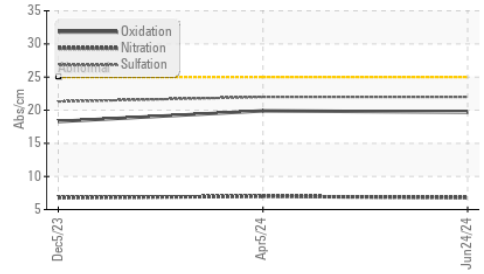
There is no indication of any contamination in the oil.

FLUID CONDITION

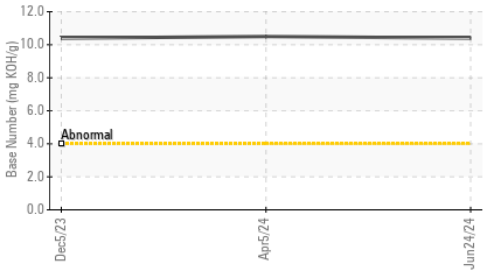
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		ASC0003326	ASC0003390	ASC0003466
Sample Date		Client Info		24 Jun 2024	05 Apr 2024	05 Dec 2023
Machine Age	hrs	Client Info		1554	1024	523
Oil Age	hrs	Client Info		530	1024	523
Filter Age	hrs	Client Info		0	0	523
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	ABNORMAL
Iron	ppm	ASTM D5185m	>100	10	17	35
Chromium	ppm	ASTM D5185m	>10	<1	1	4
Nickel	ppm	ASTM D5185m	>10	0	0	0
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m	>2	0	0	0
Aluminum	ppm	ASTM D5185m	>10	4	10	▲ 40
Lead	ppm	ASTM D5185m	>20	0	0	0
Copper	ppm	ASTM D5185m	>15	1	2	8
Tin	ppm	ASTM D5185m	>10	<1	1	2
Vanadium	ppm	ASTM D5185m		0	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Silicon	ppm	ASTM D5185m	>20	6	8	20
Potassium	ppm	ASTM D5185m	>20	2	0	3
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	0.3	0.3	0.4
Nitration	Abs/cm	*ASTM D7624	>20	6.8	7.0	6.8
Sulfation	Abs/.1mm	*ASTM D7415	>30	22.0	22.0	21.3
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		3	3	2
Boron	ppm	ASTM D5185m		32	41	47
Barium	ppm	ASTM D5185m		<1	0	8
Molybdenum	ppm	ASTM D5185m		39	39	38
Manganese	ppm	ASTM D5185m		1	1	3
Magnesium	ppm	ASTM D5185m		534	524	553
Calcium	ppm	ASTM D5185m		1753	1739	1547
Phosphorus	ppm	ASTM D5185m		963	989	882
Zinc	ppm	ASTM D5185m		1191	1134	1082
Sulfur	ppm	ASTM D5185m		3441	3389	3351
Oxidation	Abs/.1mm	*ASTM D7414	>25	19.7	19.9	18.3
Base Number (BN)	mg KOH/g	ASTM D2896		10.4	10.5	10.4
Visc @ 100°C	cSt	ASTM D445		12.7	12.8	12.6

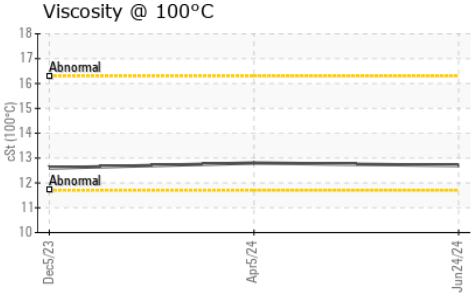
FT-IR (Direct Trend)



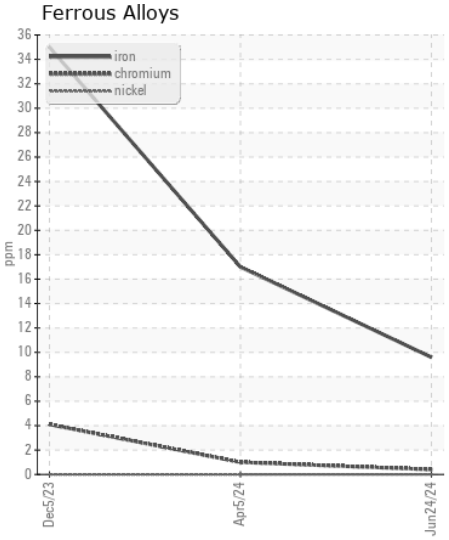
Base Number



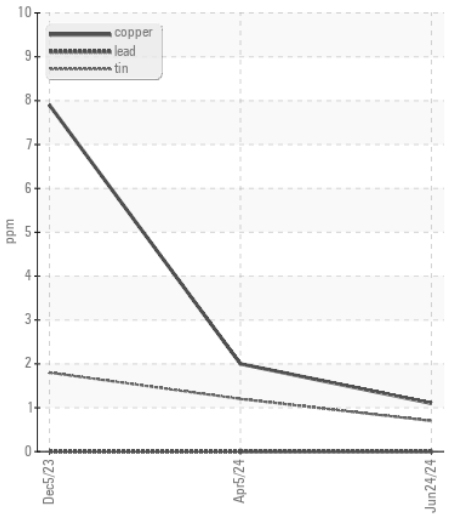
Viscosity @ 100°C



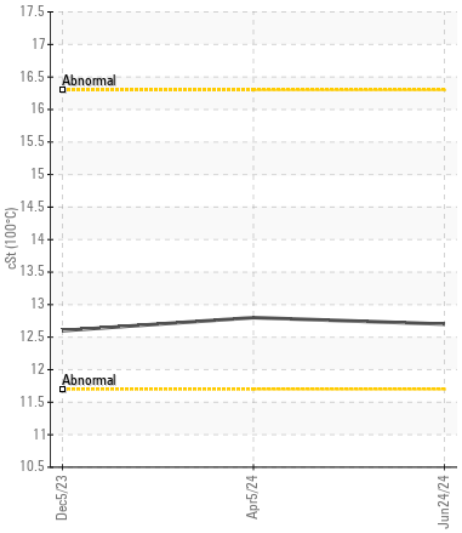
Ferrous Alloys



Non-ferrous Metals



Viscosity @ 100°C



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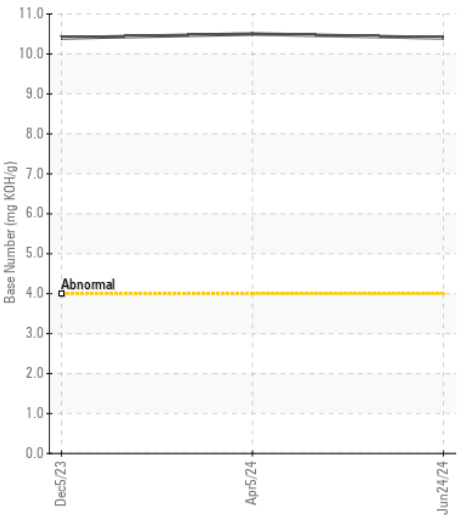

Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : ASC0003326
Lab Number : 06220650
Unique Number : 11098847
Test Package : CONST (Additional Tests: TBN)

Received : 26 Jun 2024
Tested : 27 Jun 2024
Diagnosed : 27 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)

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