ASCENDUM

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area
[OLDCASTLE]
Machine Id
VOLVO L70H 623761
Component
Diesel Engine
Fluid
DIESEL ENGINE OIL SAE 40 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor. Please specify the brand, type, and viscosity of the oil on your next sample.

WEAR

All component wear rates are normal.

CONTAMINATION

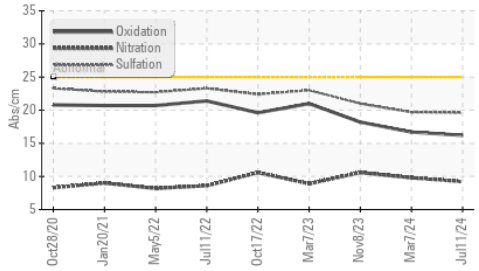
There is no indication of any contamination in the oil.

FLUID CONDITION

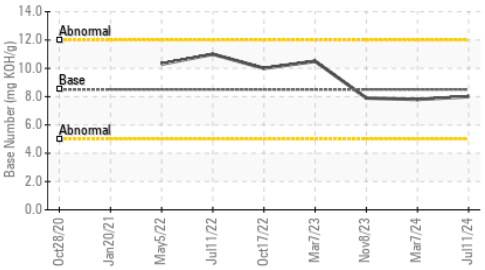
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		ASC0011118	ASC0008803	ASC0002926
Sample Date		Client Info		11 Jul 2024	07 Mar 2024	08 Nov 2023
Machine Age	hrs	Client Info		10800	10040	9439
Oil Age	hrs	Client Info		800	500	0
Filter Age	hrs	Client Info		800	500	0
Oil Changed		Client Info		Changed	Changed	N/A
Filter Changed		Client Info		Changed	Changed	N/A
Sample Status				NORMAL	NORMAL	NORMAL
Iron	ppm	ASTM D5185m	>200	10	15	18
Chromium	ppm	ASTM D5185m	>20	<1	0	<1
Nickel	ppm	ASTM D5185m	>5	0	0	0
Titanium	ppm	ASTM D5185m		0	0	<1
Silver	ppm	ASTM D5185m	>2	0	0	0
Aluminum	ppm	ASTM D5185m	>30	3	4	7
Lead	ppm	ASTM D5185m	>40	0	0	<1
Copper	ppm	ASTM D5185m	>20	<1	0	2
Tin	ppm	ASTM D5185m	>20	0	0	<1
Vanadium	ppm	ASTM D5185m		0	0	<1
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Silicon	ppm	ASTM D5185m	>20	4	4	6
Potassium	ppm	ASTM D5185m	>20	1	<1	1
Fuel		WC Method	>6.0	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.5	0.7	0.9
Nitration	Abs/cm	*ASTM D7624	>20	9.2	9.8	10.6
Sulfation	Abs/.1mm	*ASTM D7415	>30	19.6	19.7	21.0
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	>0.2	NEG	NEG	NEG
Sodium	ppm	ASTM D5185m	>216	0	<1	1
Boron	ppm	ASTM D5185m	250	6	2	2
Barium	ppm	ASTM D5185m	10	0	0	7
Molybdenum	ppm	ASTM D5185m	100	60	68	66
Manganese	ppm	ASTM D5185m		0	0	0
Magnesium	ppm	ASTM D5185m	450	896	1119	1002
Calcium	ppm	ASTM D5185m	3000	1185	1179	1220
Phosphorus	ppm	ASTM D5185m	1150	930	1091	1102
Zinc	ppm	ASTM D5185m	1350	1261	1333	1329
Sulfur	ppm	ASTM D5185m	4250	2713	3299	3763
Oxidation	Abs/.1mm	*ASTM D7414	>25	16.2	16.7	18.2
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	8.0	7.8	7.9
Visc @ 100°C	cSt	ASTM D445	14.4	13.9	14.3	14.5

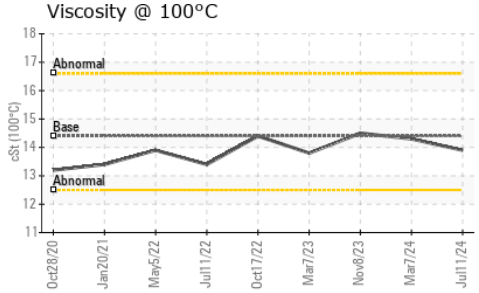
FT-IR (Direct Trend)



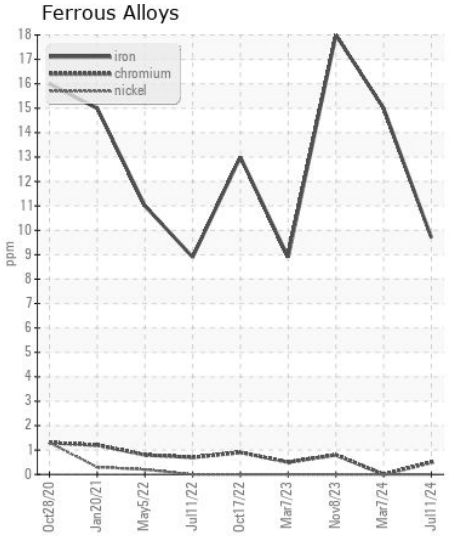
Base Number



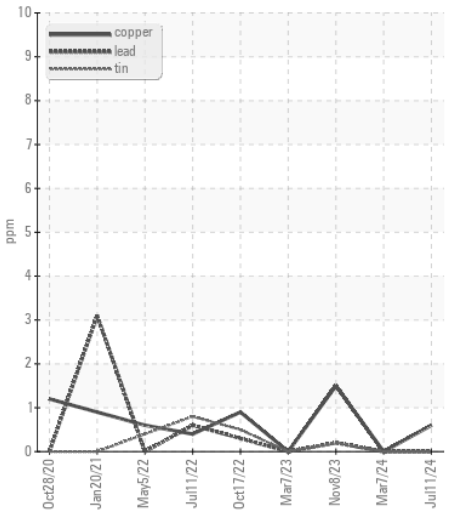
Viscosity @ 100°C



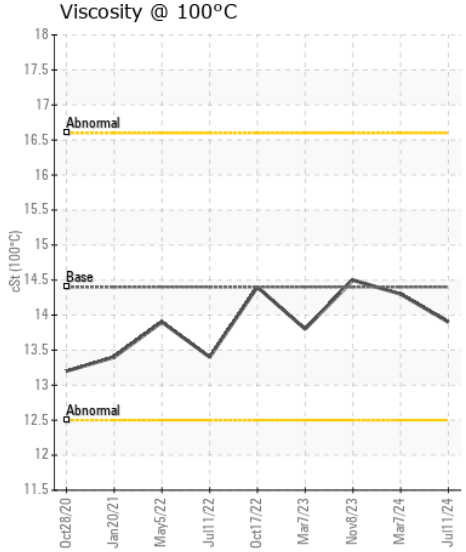
Ferrous Alloys



Non-ferrous Metals



Viscosity @ 100°C



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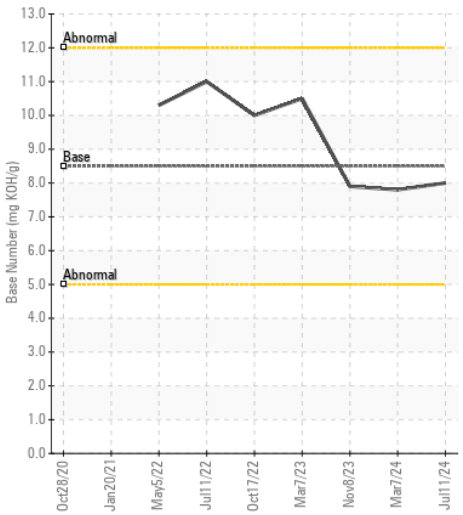

Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : ASC0011118
Lab Number : 06237594
Unique Number : 11126428
Test Package : CONST (Additional Tests: TBN)

Received : 16 Jul 2024
Tested : 17 Jul 2024
Diagnosed : 17 Jul 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)

113 - ASCENDUM MACHINERY INC - GARNER
3561 JONES SAUSAGE ROAD
GARNER, NC
US 27529
Contact: TRENT BROADWELL
trent.broadwell@ascendummachinery.com
T: (919)661-8817
F: (919)661-9038