McCLUNG-LOGAN EQUIPMENT COMPANY, INC.

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	ATTENTION

Area
[W02008527]
Machine Id
VOLVO EC350 314481
Component
Diesel Engine
Fluid
MOBIL 15W40 (14 GAL)

RECOMMENDATION

Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor. (Customer Sample Comment: W02008527)

WEAR

All component wear rates are normal.

CONTAMINATION

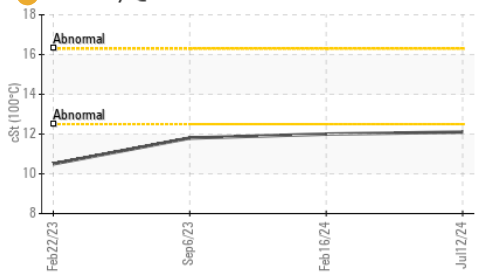
There is no indication of any contamination in the oil.

FLUID CONDITION

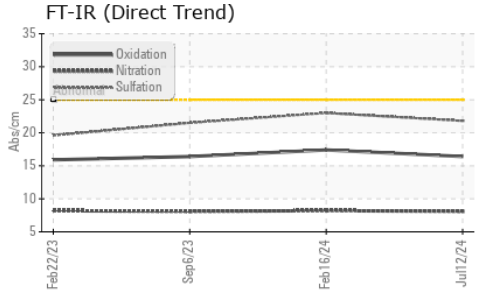
The oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil. Confirm oil type.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		ML0002345	ML0886301	VCP425048
Sample Date		Client Info		12 Jul 2024	16 Feb 2024	06 Sep 2023
Machine Age	hrs	Client Info		2064	1536	1008
Oil Age	hrs	Client Info		528	500	500
Filter Age	hrs	Client Info		0	500	0
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				ATTENTION	ATTENTION	ATTENTION
Iron	ppm	ASTM D5185m	>100	5	4	6
Chromium	ppm	ASTM D5185m	>10	0	0	<1
Nickel	ppm	ASTM D5185m	>10	<1	0	<1
Titanium	ppm	ASTM D5185m		0	<1	0
Silver	ppm	ASTM D5185m	>2	0	0	0
Aluminum	ppm	ASTM D5185m	>10	3	3	<1
Lead	ppm	ASTM D5185m	>20	<1	<1	1
Copper	ppm	ASTM D5185m	>15	<1	3	8
Tin	ppm	ASTM D5185m	>10	<1	<1	2
Vanadium	ppm	ASTM D5185m		0	<1	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Silicon	ppm	ASTM D5185m	>20	7	9	13
Potassium	ppm	ASTM D5185m	>20	0	0	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	0.1	0.1	0.1
Nitration	Abs/cm	*ASTM D7624	>20	8.1	8.2	8.1
Sulfation	Abs/.1mm	*ASTM D7415	>30	21.8	23.0	21.5
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	>118	2	0	2
Boron	ppm	ASTM D5185m		152	257	209
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		106	114	113
Manganese	ppm	ASTM D5185m		<1	0	1
Magnesium	ppm	ASTM D5185m		692	719	634
Calcium	ppm	ASTM D5185m		1488	1616	1613
Phosphorus	ppm	ASTM D5185m		848	756	775
Zinc	ppm	ASTM D5185m		976	913	915
Sulfur	ppm	ASTM D5185m		3191	2505	3243
Oxidation	Abs/.1mm	*ASTM D7414	>25	16.4	17.4	16.4
Base Number (BN)	mg KOH/g	ASTM D2896		8.0	7.5	7.3
Visc @ 100°C	cSt	ASTM D445		12.1	12.0	11.8

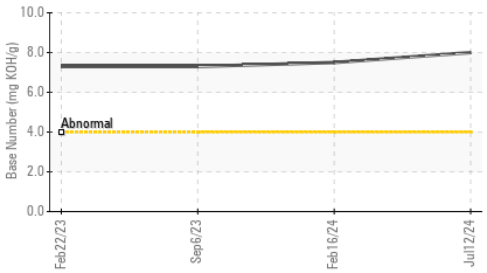
Viscosity @ 100°C



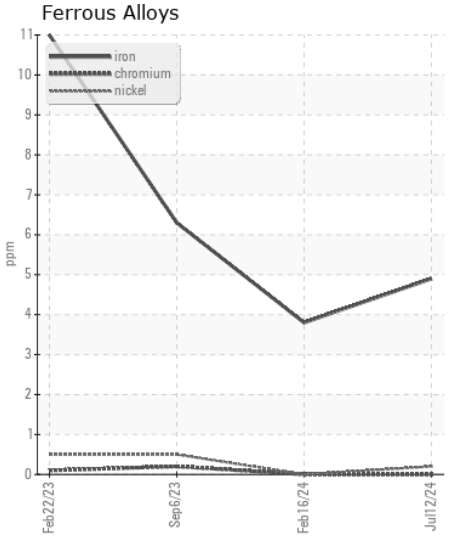
FT-IR (Direct Trend)



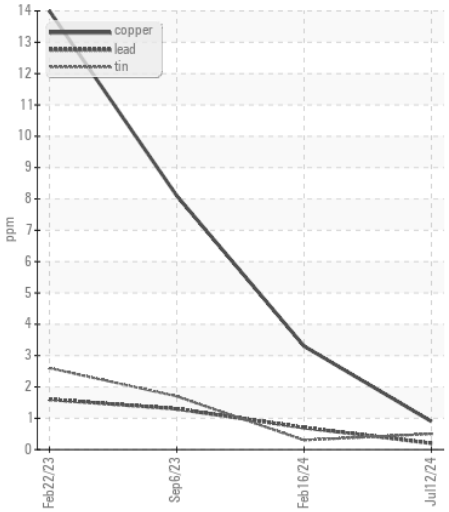
Base Number



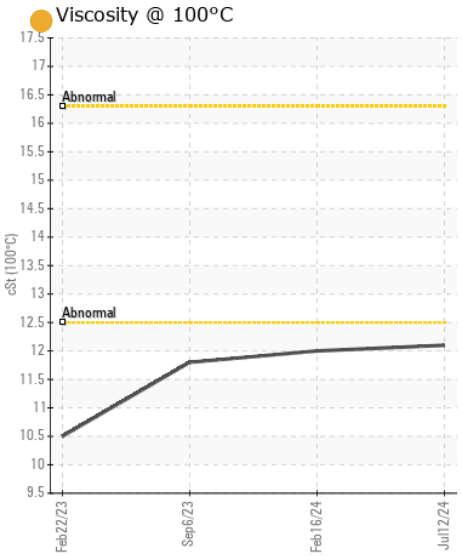
Ferrous Alloys



Non-ferrous Metals



Viscosity @ 100°C



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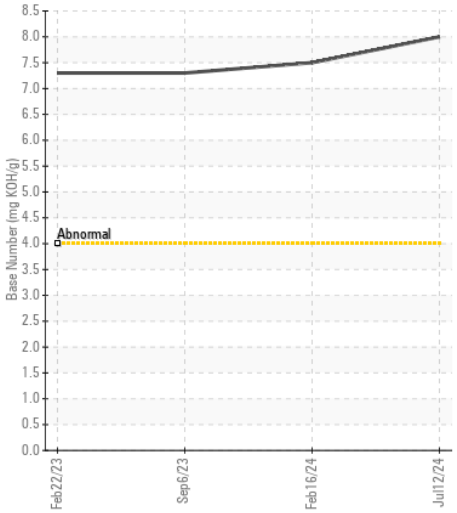

Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : ML0002345
Lab Number : 06237244
Unique Number : 11126078
Test Package : CONST (Additional Tests: TBN)

Received : 15 Jul 2024
Tested : 17 Jul 2024
Diagnosed : 17 Jul 2024 - Don Baldridge

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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