McCLUNG-LOGAN EQUIPMENT COMPANY, INC.

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area
[W02008096]
Machine Id
VOLVO ECR235 314620
Component
Diesel Engine
Fluid
MOBIL 15W40 (8 GAL)

RECOMMENDATION

Resample at the next service interval to monitor. (Customer Sample Comment: W02008096)

WEAR

All component wear rates are normal.

CONTAMINATION

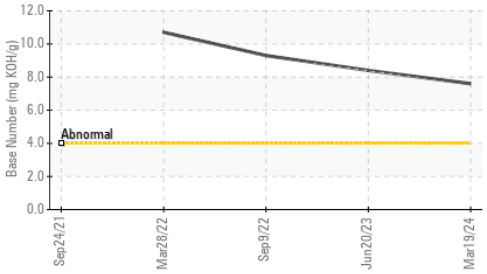
There is no indication of any contamination in the oil.

FLUID CONDITION

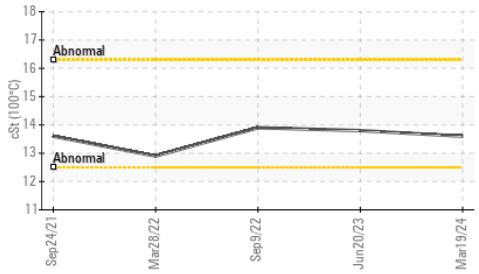
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		ML0001069	VCP416225	VCP375121
Sample Date		Client Info		19 Mar 2024	20 Jun 2023	09 Sep 2022
Machine Age	hrs	Client Info		2441	1948	1451
Oil Age	hrs	Client Info		500	500	500
Filter Age	hrs	Client Info		500	0	0
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL
Iron	ppm	ASTM D5185m	>100	27	28	20
Chromium	ppm	ASTM D5185m	>10	<1	1	1
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	7	4	4
Lead	ppm	ASTM D5185m	>20	2	<1	<1
Copper	ppm	ASTM D5185m	>15	1	1	2
Tin	ppm	ASTM D5185m	>10	<1	<1	1
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	8	8	6
Potassium	ppm	ASTM D5185m	>20	0	0	0
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	0.2	0.2
Nitration	Abs/cm	*ASTM D7624	>20	10.0	10.1	11.5
Sulfation	Abs/.1mm	*ASTM D7415	>30	23.5	23.4	22.7
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	1	4	2
Boron	ppm	ASTM D5185m		195	126	7
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		129	103	62
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m		688	765	870
Calcium	ppm	ASTM D5185m		1607	1564	1421
Phosphorus	ppm	ASTM D5185m		792	859	1077
Zinc	ppm	ASTM D5185m		953	1046	1306
Sulfur	ppm	ASTM D5185m		3026	3231	3758
Oxidation	Abs/.1mm	*ASTM D7414	>25	19.9	20.3	20.8
Base Number (BN)	mg KOH/g	ASTM D2896		7.6	8.4	9.3
Visc @ 100°C	cSt	ASTM D445		13.6	13.8	13.9

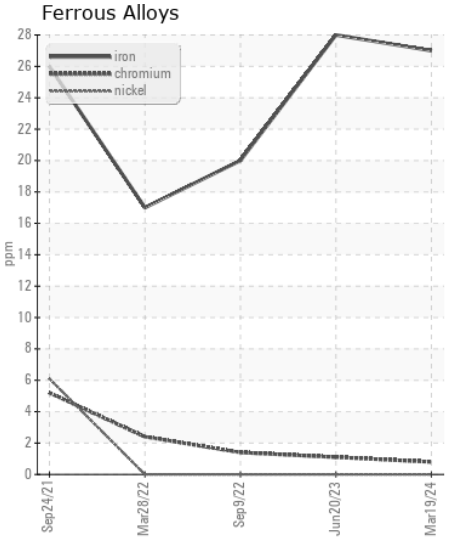
Base Number



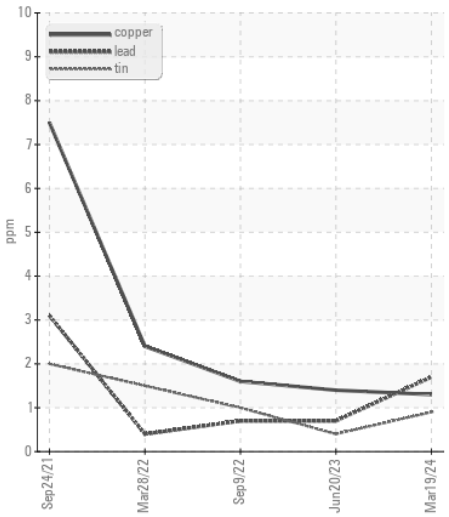
Viscosity @ 100°C



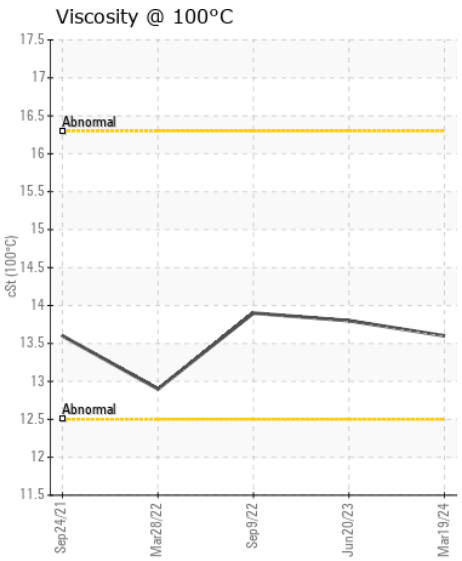
Ferrous Alloys



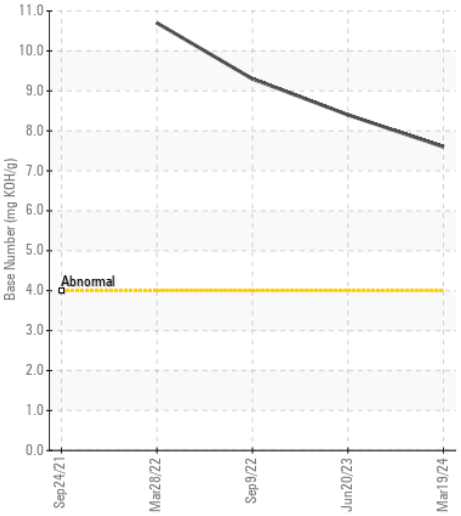
Non-ferrous Metals



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : ML0001069
Lab Number : 06124192
Unique Number : 10938343
Test Package : CONST (Additional Tests: TBN)

Received : 20 Mar 2024
Tested : 21 Mar 2024
Diagnosed : 23 Mar 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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