CONST

McCLUNG-LOGAN EQUIPMENT COMPANY, INC.

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	ATTENTION

Area
[W/O 11030]
Machine Id
VOLVO A40G 353306
Component
Diesel Engine
Fluid
MOBIL 15W40 (13 GAL)

RECOMMENDATION

Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

WEAR

All component wear rates are normal.

CONTAMINATION

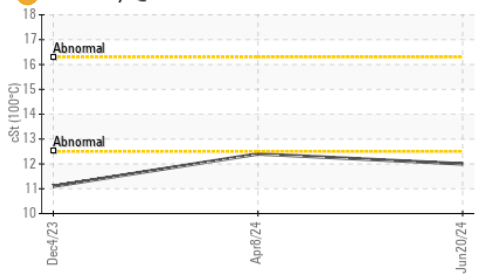
There is no indication of any contamination in the oil.

FLUID CONDITION

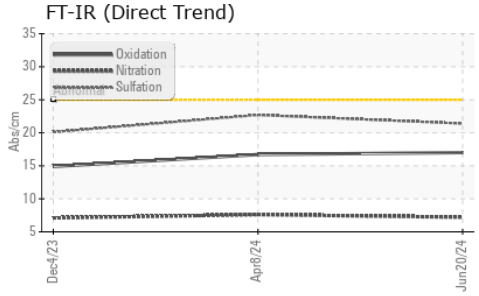
The oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil. Confirm oil type.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		ML0002089	ML0001188	VCP319130
Sample Date		Client Info		20 Jun 2024	08 Apr 2024	04 Dec 2023
Machine Age	hrs	Client Info		1336	955	530
Oil Age	hrs	Client Info		381	955	530
Filter Age	hrs	Client Info		381	955	0
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				ATTENTION	NORMAL	ATTENTION
Iron	ppm	ASTM D5185m	>100	6	12	7
Chromium	ppm	ASTM D5185m	>20	0	<1	0
Nickel	ppm	ASTM D5185m	>2	1	1	0
Titanium	ppm	ASTM D5185m		<1	<1	0
Silver	ppm	ASTM D5185m	>2	<1	0	0
Aluminum	ppm	ASTM D5185m	>25	3	4	2
Lead	ppm	ASTM D5185m	>40	0	1	0
Copper	ppm	ASTM D5185m	>330	4	18	<1
Tin	ppm	ASTM D5185m	>15	0	2	0
Vanadium	ppm	ASTM D5185m		<1	<1	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Silicon	ppm	ASTM D5185m	>25	6	9	4
Potassium	ppm	ASTM D5185m	>20	3	2	<1
Fuel	%	ASTM D3524	>6.0	<1.0	<1.0	0.4
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.2	0.1	0.2
Nitration	Abs/cm	*ASTM D7624	>20	7.2	7.6	7.1
Sulfation	Abs/.1mm	*ASTM D7415	>30	21.4	22.7	20.1
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	>118	2	0	27
Boron	ppm	ASTM D5185m		130	315	1
Barium	ppm	ASTM D5185m		0	<1	0
Molybdenum	ppm	ASTM D5185m		76	117	56
Manganese	ppm	ASTM D5185m		1	2	<1
Magnesium	ppm	ASTM D5185m		618	573	918
Calcium	ppm	ASTM D5185m		1641	1515	1071
Phosphorus	ppm	ASTM D5185m		909	789	1014
Zinc	ppm	ASTM D5185m		1103	857	1232
Sulfur	ppm	ASTM D5185m		3480	2653	2990
Oxidation	Abs/.1mm	*ASTM D7414	>25	17.0	16.7	14.9
Base Number (BN)	mg KOH/g	ASTM D2896		8.8	8.1	7.2
Visc @ 100°C	cSt	ASTM D445		12.0	12.4	11.1

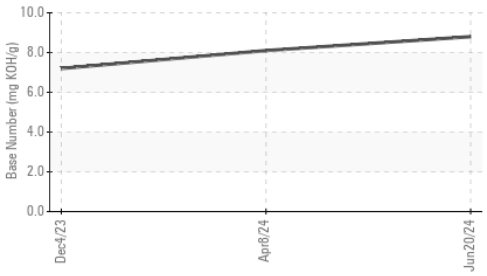
Viscosity @ 100°C



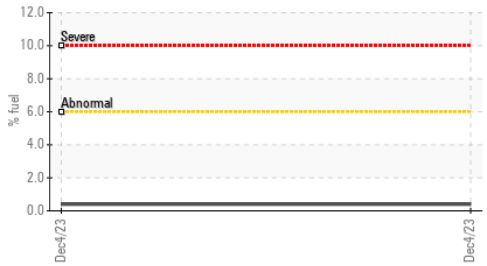
FT-IR (Direct Trend)



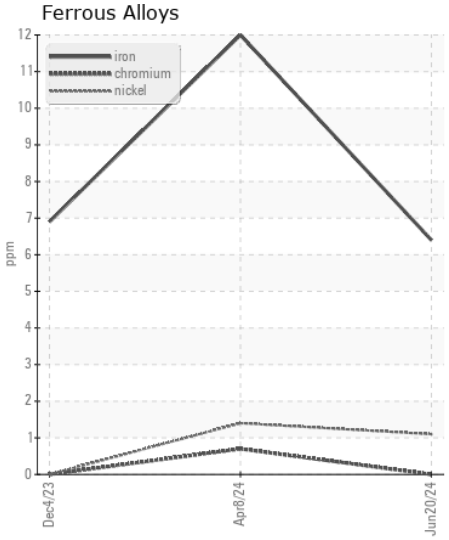
Base Number



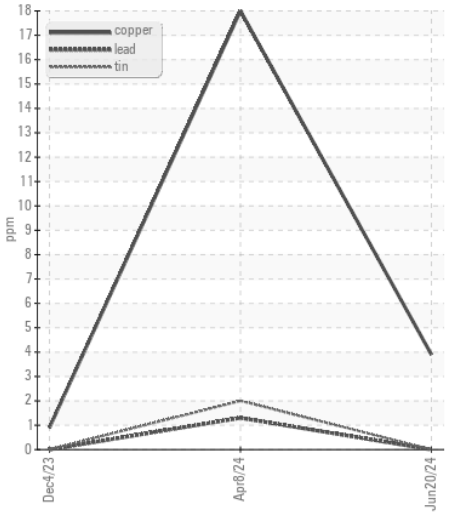
Fuel Dilution



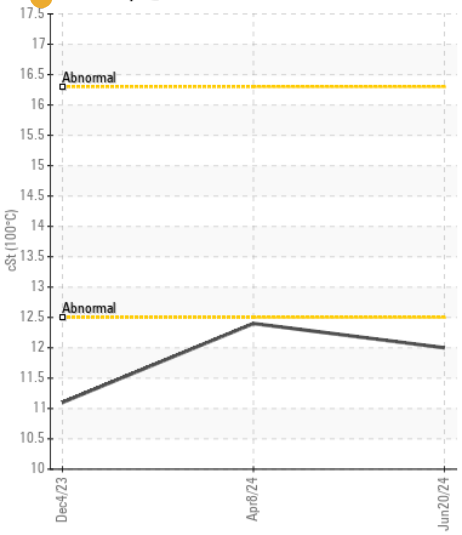
Ferrous Alloys



Non-ferrous Metals



Viscosity @ 100°C



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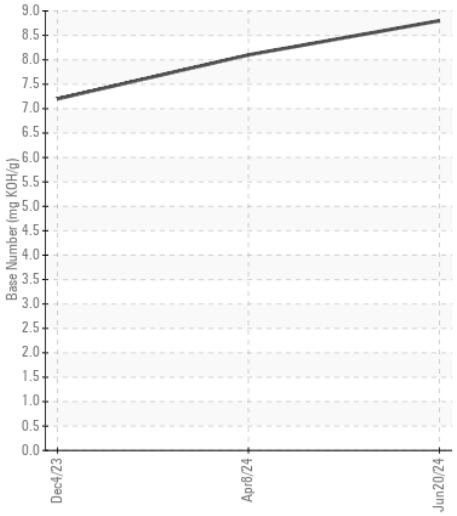

Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : ML0002089
Lab Number : 06223019
Unique Number : 11101216
Test Package : CONST (Additional Tests: FuelDilution, PercentFuel, TBN)

Received : 27 Jun 2024
Tested : 01 Jul 2024
Diagnosed : 01 Jul 2024 - Jonathan Hester

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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