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McCLUNG-LOGAN EQUIPMENT COMPANY, INC.

OIL ANALYSIS REPORT

WEAR	ABNORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area
[W/O 10833]
Machine Id
VOLVO L90G 617183
Component
Diesel Engine
Fluid
CHEVRON 15W40 (5 GAL)

RECOMMENDATION

No corrective action is recommended at this time. Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

WEAR

The aluminum level is abnormal. All other component wear rates are normal.

CONTAMINATION

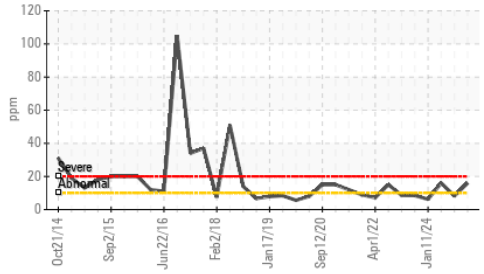
There is no indication of any contamination in the oil.

FLUID CONDITION

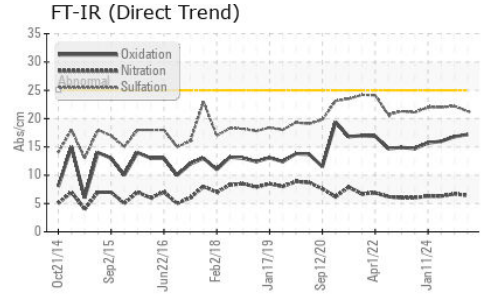
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is acceptable for the time in service.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		**ML0001345**	ML0000025	ML0000033
Sample Date		Client Info		**21 May 2024**	08 Apr 2024	29 Feb 2024
Machine Age	hrs	Client Info		**29630**	29078	29078
Oil Age	hrs	Client Info		**552**	250	260
Filter Age	hrs	Client Info		**552**	250	260
Oil Changed		Client Info		**Changed**	Changed	Changed
Filter Changed		Client Info		**Changed**	Changed	Changed
Sample Status				**ABNORMAL**	NORMAL	ABNORMAL
Iron	ppm	ASTM D5185m	>100	**12**	10	11
Chromium	ppm	ASTM D5185m	>10	**1**	1	<1
Nickel	ppm	ASTM D5185m	>10	**<1**	2	2
Titanium	ppm	ASTM D5185m		**<1**	<1	<1
Silver	ppm	ASTM D5185m	>2	**<1**	0	0
Aluminum	ppm	ASTM D5185m	>10	▲ **16**	8	▲ 16
Lead	ppm	ASTM D5185m	>20	**<1**	1	0
Copper	ppm	ASTM D5185m	>15	**1**	1	<1
Tin	ppm	ASTM D5185m	>10	**1**	1	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	>20	**11**	8	7
Potassium	ppm	ASTM D5185m	>20	**2**	1	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	**0.3**	0.3	0.3
Nitration	Abs/cm	*ASTM D7624	>20	**6.4**	6.7	6.3
Sulfation	Abs/.1mm	*ASTM D7415	>30	**21.3**	22.2	22.0
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	>0.1	**NEG**	NEG	NEG
Sodium	ppm	ASTM D5185m	>50	**<1**	<1	<1
Boron	ppm	ASTM D5185m		**139**	289	329
Barium	ppm	ASTM D5185m		**0**	<1	0
Molybdenum	ppm	ASTM D5185m		**73**	107	106
Manganese	ppm	ASTM D5185m		**<1**	1	<1
Magnesium	ppm	ASTM D5185m		**593**	565	672
Calcium	ppm	ASTM D5185m		**1623**	1503	1655
Phosphorus	ppm	ASTM D5185m		**828**	819	934
Zinc	ppm	ASTM D5185m		**1101**	913	1048
Sulfur	ppm	ASTM D5185m		**2995**	2702	3161
Oxidation	Abs/.1mm	*ASTM D7414	>25	**17.2**	16.8	16.0
Base Number (BN)	mg KOH/g	ASTM D2896		**8.8**	8.7	8.4
Visc @ 100°C	cSt	ASTM D445	14.4	**12.6**	13.2	13.2

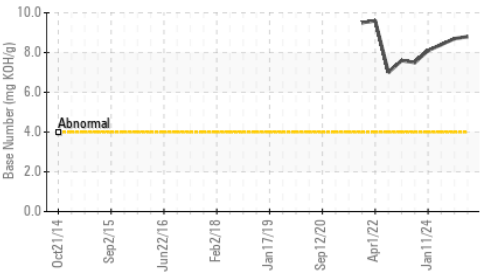
Aluminum (ppm)



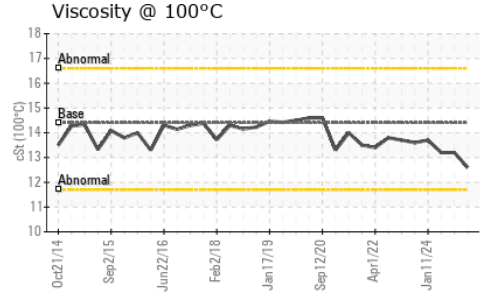
FT-IR (Direct Trend)



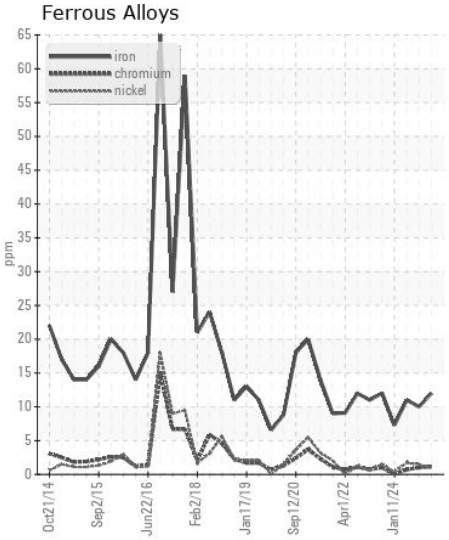
Base Number



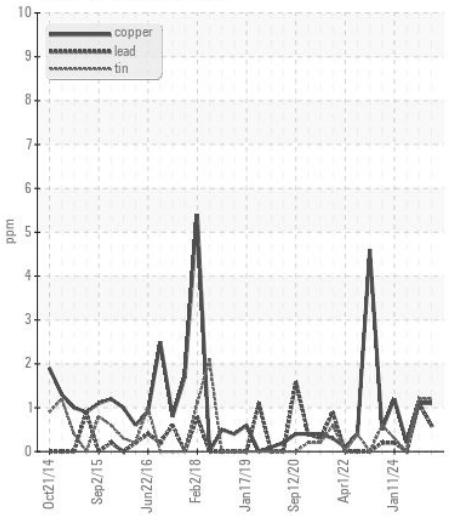
Viscosity @ 100°C



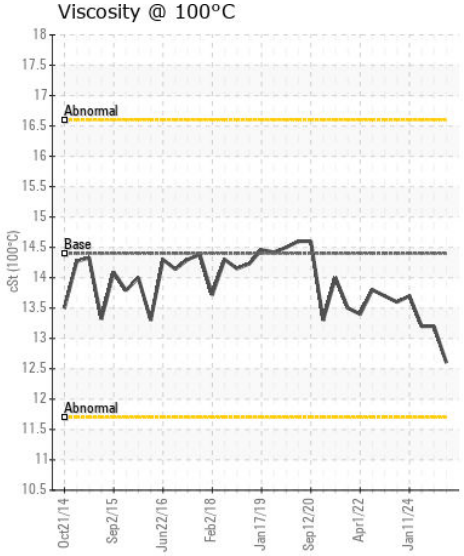
Ferrous Alloys



Non-ferrous Metals



Viscosity @ 100°C



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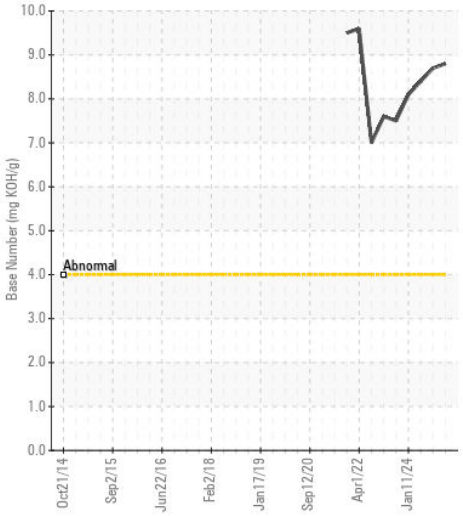

Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : ML0001345
Lab Number : 06190357
Unique Number : 11047109
Test Package : CONST (Additional Tests: TBN)

Received : 24 May 2024
Tested : 29 May 2024
Diagnosed : 29 May 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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