McCLUNG-LOGAN EQUIPMENT COMPANY, INC.

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area
[W/O 11006]
Machine Id
VOLVO L90G 617183
Component
Diesel Engine
Fluid
CHEVRON 15W40 (5 GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

WEAR

All component wear rates are normal.

CONTAMINATION

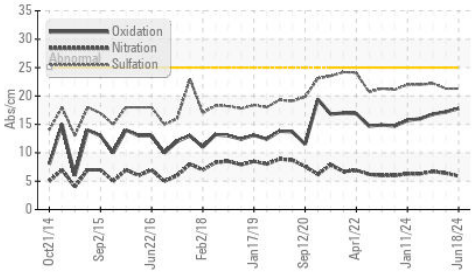
There is no indication of any contamination in the oil.

FLUID CONDITION

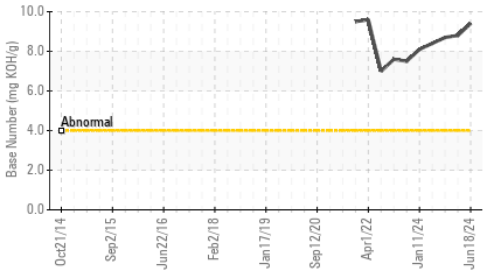
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		ML0002092	ML0001345	ML0000025
Sample Date		Client Info		18 Jun 2024	21 May 2024	08 Apr 2024
Machine Age	hrs	Client Info		29859	29630	29078
Oil Age	hrs	Client Info		229	552	250
Filter Age	hrs	Client Info		229	552	250
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	ABNORMAL	NORMAL
Iron	ppm	ASTM D5185m	>100	7	12	10
Chromium	ppm	ASTM D5185m	>10	<1	1	1
Nickel	ppm	ASTM D5185m	>10	<1	<1	2
Titanium	ppm	ASTM D5185m		<1	<1	<1
Silver	ppm	ASTM D5185m	>2	0	<1	0
Aluminum	ppm	ASTM D5185m	>10	7	▲ 16	8
Lead	ppm	ASTM D5185m	>20	0	<1	1
Copper	ppm	ASTM D5185m	>15	<1	1	1
Tin	ppm	ASTM D5185m	>10	0	1	1
Vanadium	ppm	ASTM D5185m		0	<1	<1
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Silicon	ppm	ASTM D5185m	>20	8	11	8
Potassium	ppm	ASTM D5185m	>20	1	2	1
Fuel	%	ASTM D3524	>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	5.9	6.4	6.7
Sulfation	Abs/.1mm	*ASTM D7415	>30	21.3	21.3	22.2
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		58	139	289
Barium	ppm	ASTM D5185m		0	0	<1
Molybdenum	ppm	ASTM D5185m		62	73	107
Manganese	ppm	ASTM D5185m		0	<1	1
Magnesium	ppm	ASTM D5185m		499	593	565
Calcium	ppm	ASTM D5185m		1607	1623	1503
Phosphorus	ppm	ASTM D5185m		903	828	819
Zinc	ppm	ASTM D5185m		1119	1101	913
Sulfur	ppm	ASTM D5185m		2806	2995	2702
Oxidation	Abs/.1mm	*ASTM D7414	>25	17.8	17.2	16.8
Base Number (BN)	mg KOH/g	ASTM D2896		9.4	8.8	8.7
Visc @ 100°C	cSt	ASTM D445	14.4	12.4	12.6	13.2

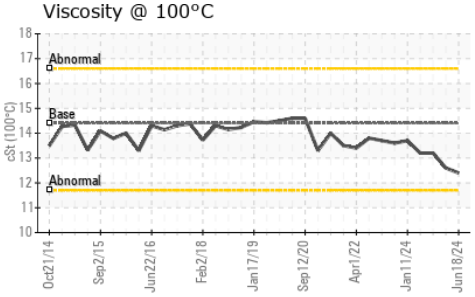
FT-IR (Direct Trend)



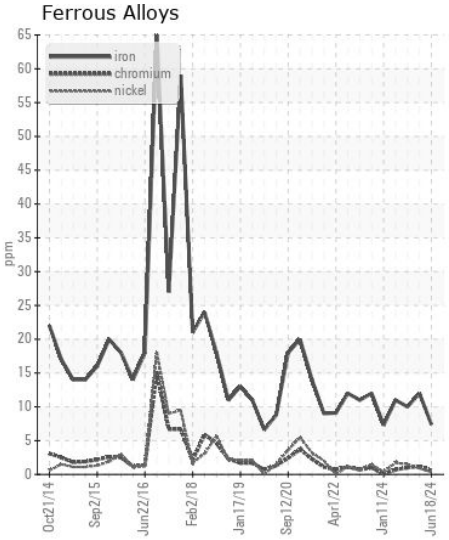
Base Number



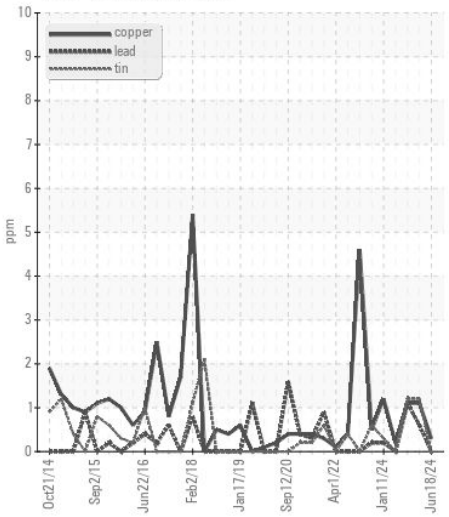
Viscosity @ 100°C



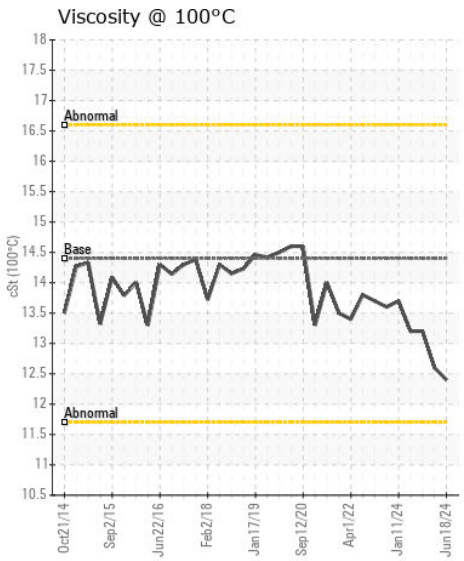
Ferrous Alloys



Non-ferrous Metals



Viscosity @ 100°C



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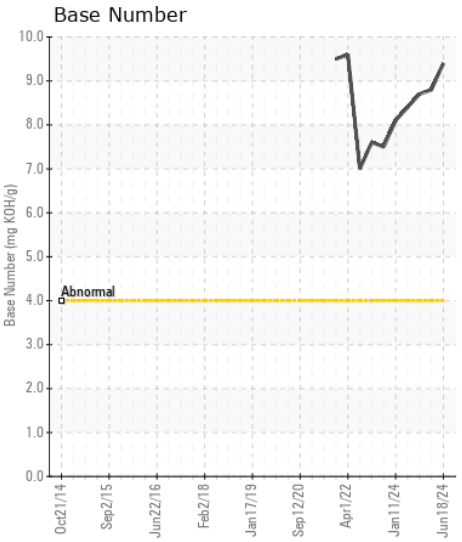

Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : ML0002092
Lab Number : 06216429
Unique Number : 11089293
Test Package : CONST (Additional Tests: FuelDilution, PercentFuel, TBN)

Received : 20 Jun 2024
Tested : 23 Jun 2024
Diagnosed : 23 Jun 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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