



McCLUNG-LOGAN
EQUIPMENT COMPANY, INC.

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	ATTENTION



Area
[W02008442]
Machine Id
VOLVO A25G 742297
Component
Diesel Engine
Fluid
MOBIL 15W40 (11 GAL)

RECOMMENDATION

Oil and filter change at the time of sampling has been noted. No corrective action is recommended at this time. Resample at the next service interval to monitor. (Customer Sample Comment: W02008442)

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		ML0001143	VCP388661	VCP375115
Sample Date		Client Info		19 Jun 2024	13 Jun 2023	12 Aug 2022
Machine Age	hrs	Client Info		3400	2933	2430
Oil Age	hrs	Client Info		467	500	500
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				ABNORMAL	ATTENTION	ATTENTION

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>200	9	7	6
Chromium	ppm	ASTM D5185m	>20	<1	<1	<1
Nickel	ppm	ASTM D5185m	>10	0	0	0
Titanium	ppm	ASTM D5185m		<1	<1	0
Silver	ppm	ASTM D5185m	>2	0	0	<1
Aluminum	ppm	ASTM D5185m	>30	2	1	<1
Lead	ppm	ASTM D5185m	>40	<1	0	0
Copper	ppm	ASTM D5185m	>20	2	<1	1
Tin	ppm	ASTM D5185m	>20	<1	<1	<1
Vanadium	ppm	ASTM D5185m		0	<1	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

Elemental level of silicon (Si) above normal.

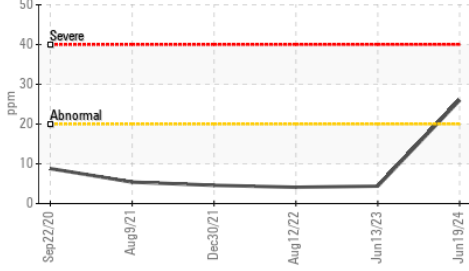
Silicon	ppm	ASTM D5185m	>20	▲ 26	4	4
Potassium	ppm	ASTM D5185m	>20	2	1	0
Fuel		WC Method	>3.0	<1.0	<1.0	▲ 2.2
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.3	0.3	0.3
Nitration	Abs/cm	*ASTM D7624	>20	7.2	7.7	8.4
Sulfation	Abs/.1mm	*ASTM D7415	>30	21.4	21.2	21.8
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

FLUID CONDITION

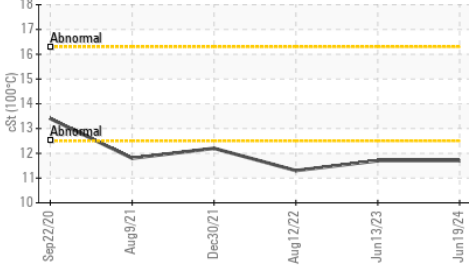
The oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil. Confirm oil type.

Sodium	ppm	ASTM D5185m	>118	0	1	<1
Boron	ppm	ASTM D5185m		208	115	62
Barium	ppm	ASTM D5185m		0	0	<1
Molybdenum	ppm	ASTM D5185m		109	68	38
Manganese	ppm	ASTM D5185m		0	<1	<1
Magnesium	ppm	ASTM D5185m		656	626	445
Calcium	ppm	ASTM D5185m		1430	1576	1549
Phosphorus	ppm	ASTM D5185m		797	873	814
Zinc	ppm	ASTM D5185m		970	1052	992
Sulfur	ppm	ASTM D5185m		2644	3425	2540
Oxidation	Abs/.1mm	*ASTM D7414	>25	15.2	17.6	19.3
Base Number (BN)	mg KOH/g	ASTM D2896		7.8	8.2	10.5
Visc @ 100°C	cSt	ASTM D445		● 11.7	● 11.7	● 11.3

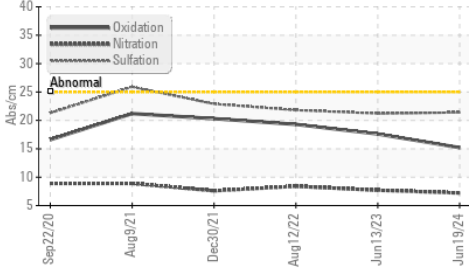
▲ Silicon (ppm)



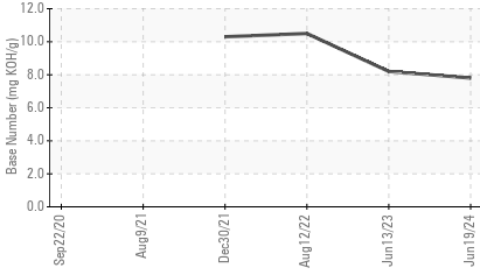
● Viscosity @ 100°C



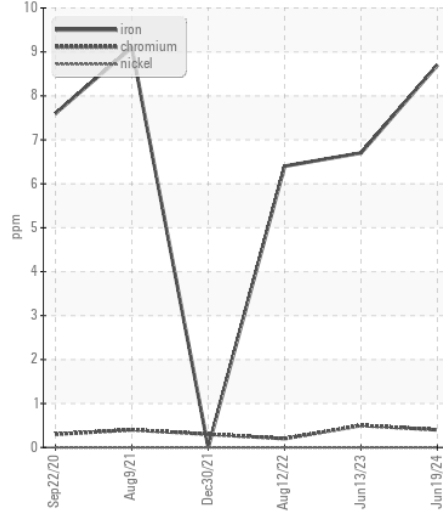
FT-IR (Direct Trend)



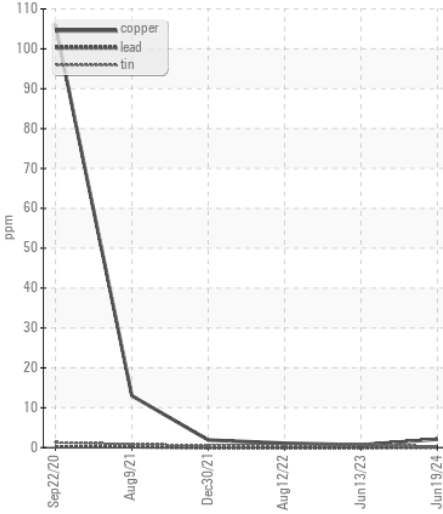
Base Number



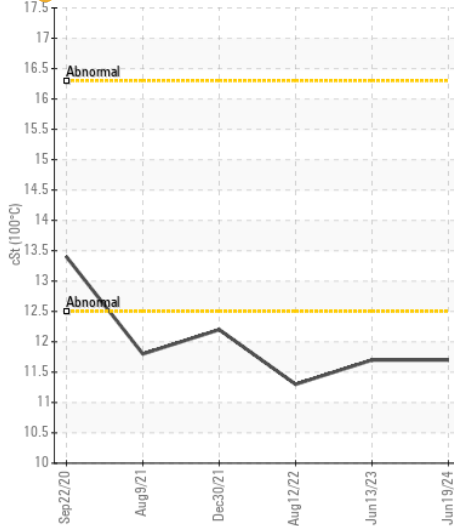
Ferrous Alloys



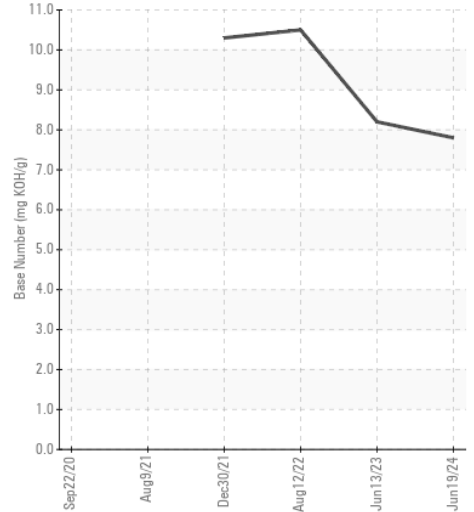
Non-ferrous Metals



● Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513

Sample No. : ML0001143

Lab Number : 06216501

Unique Number : 11089365

Test Package : CONST (Additional Tests: TBN)

Received : 20 Jun 2024

Tested : 22 Jun 2024

Diagnosed : 23 Jun 2024 - Don Baldrige

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US 20110

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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)