



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Area
[W/O 11078]
Machine Id
VOLVO L110H 632191
Component
Diesel Engine
Fluid
CHEVRON 15W40 (5 GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		ML0002023	ML0000087	VCP367862
Sample Date		Client Info		28 Jun 2024	06 Feb 2024	17 Jul 2023
Machine Age	hrs	Client Info		3510	2995	2117
Oil Age	hrs	Client Info		515	878	0
Filter Age	hrs	Client Info		515	878	0
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	ABNORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	5	12	20
Chromium	ppm	ASTM D5185m	>10	<1	<1	2
Nickel	ppm	ASTM D5185m	>10	0	0	<1
Titanium	ppm	ASTM D5185m		<1	2	<1
Silver	ppm	ASTM D5185m	>2	0	<1	<1
Aluminum	ppm	ASTM D5185m	>10	4	7	▲ 11
Lead	ppm	ASTM D5185m	>20	0	<1	3
Copper	ppm	ASTM D5185m	>15	3	6	15
Tin	ppm	ASTM D5185m	>10	0	<1	2
Vanadium	ppm	ASTM D5185m		0	<1	<1
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

There is no indication of any contamination in the oil.

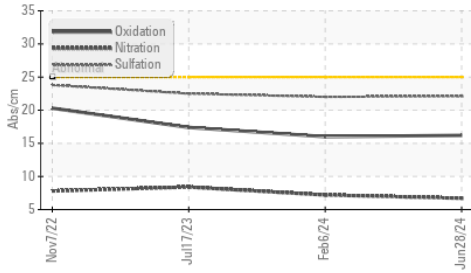
Silicon	ppm	ASTM D5185m	>20	5	6	9
Potassium	ppm	ASTM D5185m	>20	0	2	<1
Fuel		WC Method	>6.0	<1.0	<1.0	<1.0
Water		WC Method	>0.1	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.1	0.2	0.3
Nitration	Abs/cm	*ASTM D7624	>20	6.7	7.2	8.4
Sulfation	Abs/.1mm	*ASTM D7415	>30	22.1	22.0	22.5
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

FLUID CONDITION

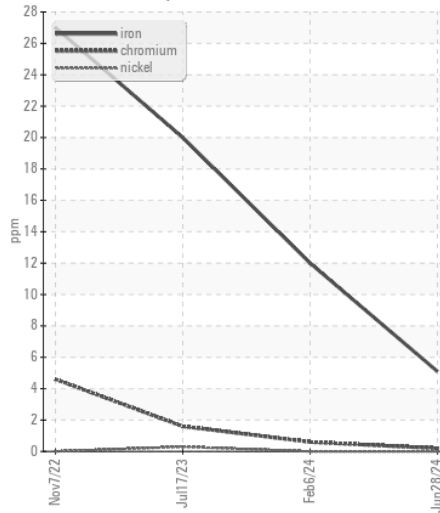
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185m	>50	2	0	2
Boron	ppm	ASTM D5185m		269	409	285
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		99	86	89
Manganese	ppm	ASTM D5185m		<1	0	<1
Magnesium	ppm	ASTM D5185m		562	382	499
Calcium	ppm	ASTM D5185m		1651	1346	1532
Phosphorus	ppm	ASTM D5185m		878	1030	976
Zinc	ppm	ASTM D5185m		1012	1175	1198
Sulfur	ppm	ASTM D5185m		3190	3378	3742
Oxidation	Abs/.1mm	*ASTM D7414	>25	16.2	16.0	17.4
Base Number (BN)	mg KOH/g	ASTM D2896		8.8	7.5	7.5
Visc @ 100°C	cSt	ASTM D445	14.4	13.0	13.3	13.3

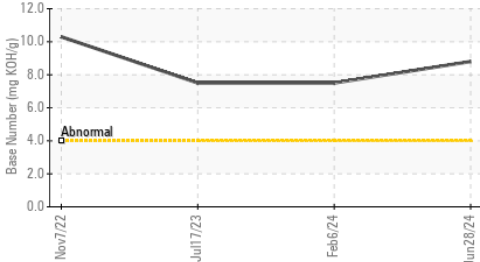
FT-IR (Direct Trend)



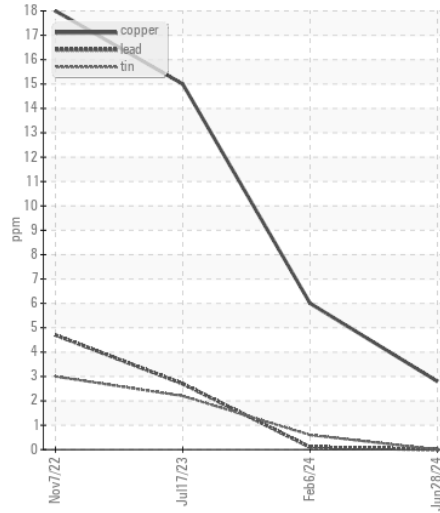
Ferrous Alloys



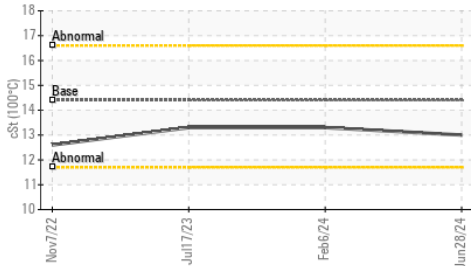
Base Number



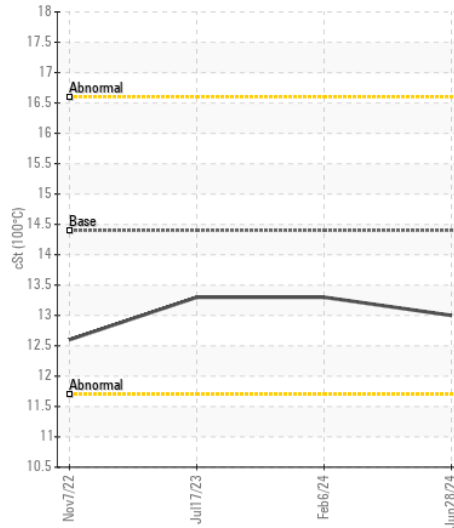
Non-ferrous Metals



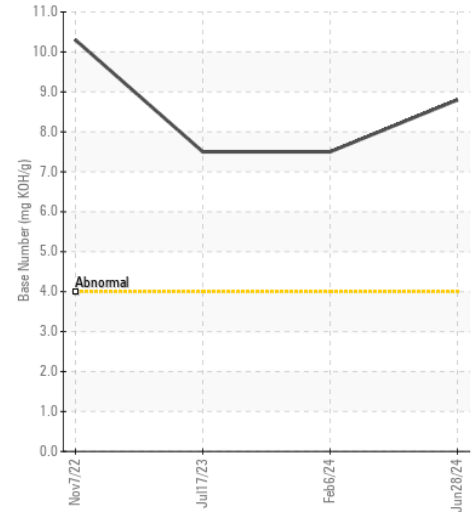
Viscosity @ 100°C



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : ML0002023
Lab Number : 06234227
Unique Number : 11123061
Test Package : CONST (Additional Tests: TBN)

MCCLUNG-LOGAN EQUIPMENT CO - BALTIMORE
 4601 WASHINGTON BOULEVARD
 BALTIMORE, MD
 US 21227

Contact: MARK CIULLA
 mciulla@mcclung-logan.com

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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