CONST

McCLUNG-LOGAN EQUIPMENT COMPANY, INC.

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	ATTENTION

Area
[W/O 10848]
Machine Id
VOLVO L90H 623915
Component
Diesel Engine
Fluid
CHEVRON 15W40 (5 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

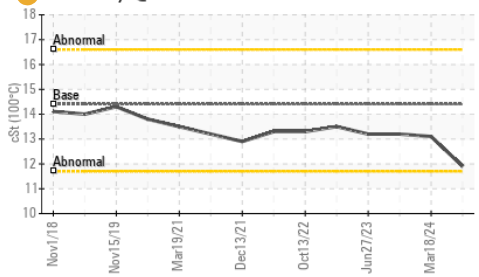
Fuel content negligible. There is no indication of any contamination in the oil.

FLUID CONDITION

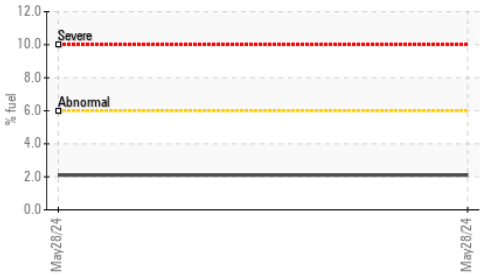
The oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil. Confirm oil type.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		ML0001276	ML0000067	VCP413935
Sample Date		Client Info		28 May 2024	18 Mar 2024	18 Oct 2023
Machine Age	hrs	Client Info		11224	10883	10514
Oil Age	hrs	Client Info		341	369	0
Filter Age	hrs	Client Info		341	369	0
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				ATTENTION	NORMAL	NORMAL
Iron	ppm	ASTM D5185m	>100	3	6	2
Chromium	ppm	ASTM D5185m	>10	0	<1	0
Nickel	ppm	ASTM D5185m	>10	0	0	0
Titanium	ppm	ASTM D5185m		<1	2	3
Silver	ppm	ASTM D5185m	>2	0	0	0
Aluminum	ppm	ASTM D5185m	>10	4	6	3
Lead	ppm	ASTM D5185m	>20	0	0	0
Copper	ppm	ASTM D5185m	>15	0	<1	<1
Tin	ppm	ASTM D5185m	>10	<1	0	0
Vanadium	ppm	ASTM D5185m		0	<1	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Silicon	ppm	ASTM D5185m	>20	5	4	5
Potassium	ppm	ASTM D5185m	>20	0	0	0
Fuel	%	ASTM D3524	>6.0	2.1	<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	0.4
Nitration	Abs/cm	*ASTM D7624	>20	6.5	6.2	7.1
Sulfation	Abs/.1mm	*ASTM D7415	>30	20.6	20.8	21.0
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	2	3
Boron	ppm	ASTM D5185m		205	380	336
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		83	92	85
Manganese	ppm	ASTM D5185m		<1	0	<1
Magnesium	ppm	ASTM D5185m		558	412	409
Calcium	ppm	ASTM D5185m		1416	1442	1350
Phosphorus	ppm	ASTM D5185m		895	1071	977
Zinc	ppm	ASTM D5185m		1025	1279	1257
Sulfur	ppm	ASTM D5185m		3166	4043	3312
Oxidation	Abs/.1mm	*ASTM D7414	>25	15.7	14.5	15.2
Base Number (BN)	mg KOH/g	ASTM D2896		8.5	7.1	5.9
Visc @ 100°C	cSt	ASTM D445	14.4	11.9	13.1	13.2

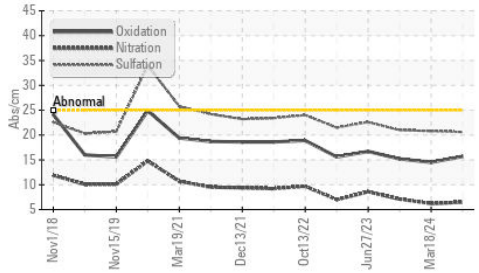
Viscosity @ 100°C



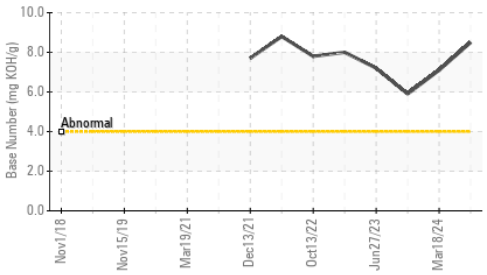
Fuel Dilution



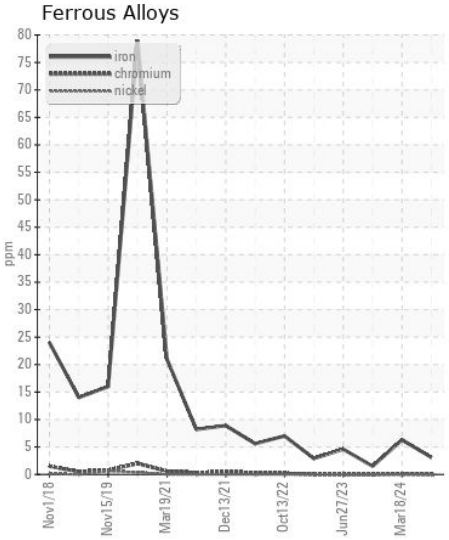
FT-IR (Direct Trend)



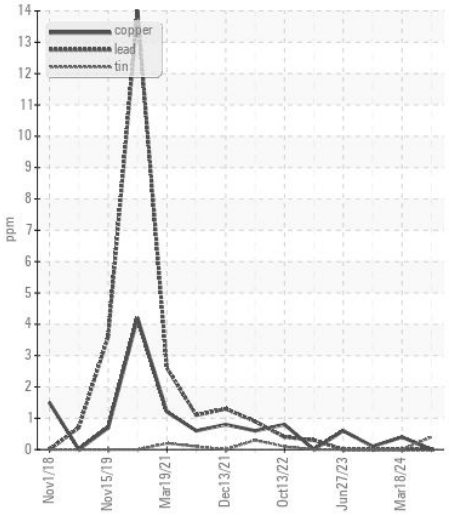
Base Number



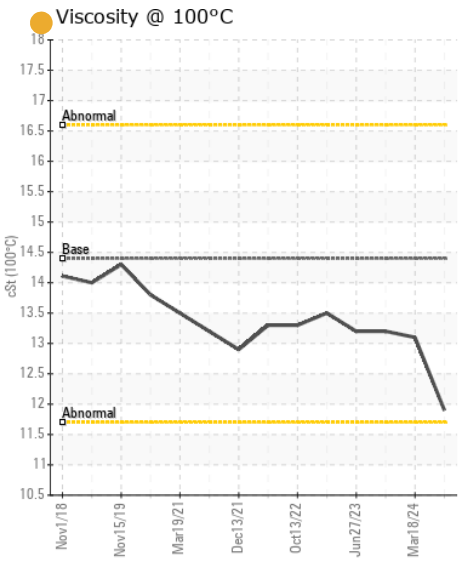
Ferrous Alloys



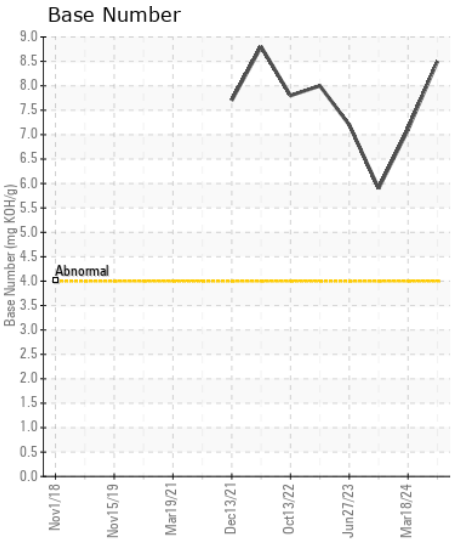
Non-ferrous Metals



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : ML0001276
Lab Number : 06196244
Unique Number : 11058367
Test Package : CONST (Additional Tests: FUELDILUTION, PercentFuel, TBN)

Received : 31 May 2024
Tested : 05 Jun 2024
Diagnosed : 05 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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