McCLUNG-LOGAN EQUIPMENT COMPANY, INC.

OIL ANALYSIS REPORT

WEAR	ATTENTION
CONTAMINATION	ABNORMAL
FLUID CONDITION	NORMAL

Machine Id
VOLVO L70H 622038
Component
Diesel Engine
Fluid
CHEVRON 15W40 (--- GAL)

RECOMMENDATION

We advise that you check the air filter, air induction system, and any areas where dirt may enter the component. 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

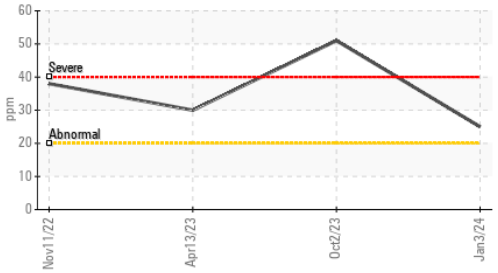
Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress.

FLUID CONDITION

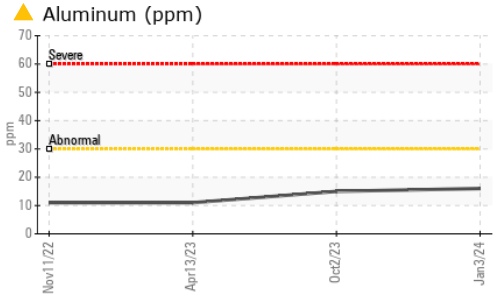
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is acceptable for the time in service.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		ML0000122	VCP426395	VCP401099
Sample Date		Client Info		03 Jan 2024	02 Oct 2023	13 Apr 2023
Machine Age	hrs	Client Info		8065	7606	6625
Oil Age	hrs	Client Info		500	0	0
Filter Age	hrs	Client Info		500	0	0
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				ABNORMAL	ABNORMAL	ABNORMAL
Iron	ppm	ASTM D5185m	>200	16	31	27
Chromium	ppm	ASTM D5185m	>20	<1	1	1
Nickel	ppm	ASTM D5185m	>5	0	<1	<1
Titanium	ppm	ASTM D5185m		2	1	2
Silver	ppm	ASTM D5185m	>2	0	0	0
Aluminum	ppm	ASTM D5185m	>30	▲ 16	▲ 15	▲ 11
Lead	ppm	ASTM D5185m	>40	0	2	1
Copper	ppm	ASTM D5185m	>20	<1	2	2
Tin	ppm	ASTM D5185m	>20	0	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
Silicon	ppm	ASTM D5185m	>20	▲ 25	▲ 51	▲ 30
Potassium	ppm	ASTM D5185m	>20	2	2	2
Fuel		WC Method	>6.0	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.3	1.1	0.6
Nitration	Abs/cm	*ASTM D7624	>20	8.8	8.9	8.8
Sulfation	Abs/.1mm	*ASTM D7415	>30	21.7	24.8	24.5
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	>0.2	NEG	NEG	NEG
Sodium	ppm	ASTM D5185m	>50	0	2	2
Boron	ppm	ASTM D5185m		386	106	175
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		91	98	91
Manganese	ppm	ASTM D5185m		0	1	<1
Magnesium	ppm	ASTM D5185m		424	465	482
Calcium	ppm	ASTM D5185m		1441	1554	1522
Phosphorus	ppm	ASTM D5185m		1045	1088	1078
Zinc	ppm	ASTM D5185m		1295	1370	1350
Sulfur	ppm	ASTM D5185m		3477	3267	3238
Oxidation	Abs/.1mm	*ASTM D7414	>25	20.6	18.9	19.0
Base Number (BN)	mg KOH/g	ASTM D2896		8.9	4.7	6.1
Visc @ 100°C	cSt	ASTM D445	14.4	13.4	13.6	13.9

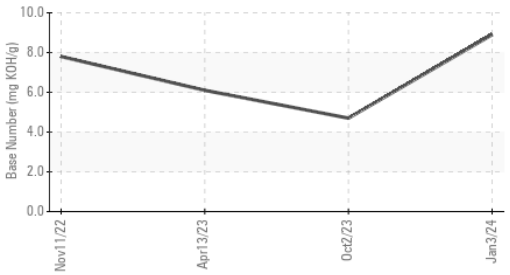
Silicon (ppm)



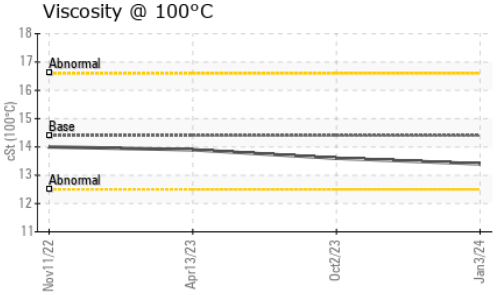
Aluminum (ppm)



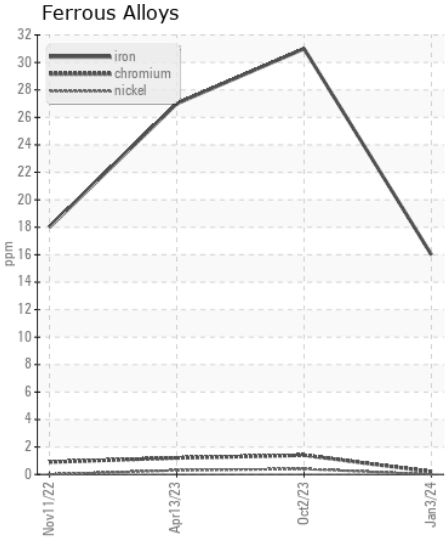
Base Number



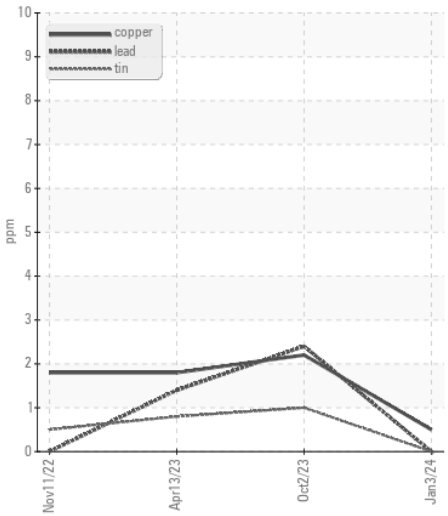
Viscosity @ 100°C



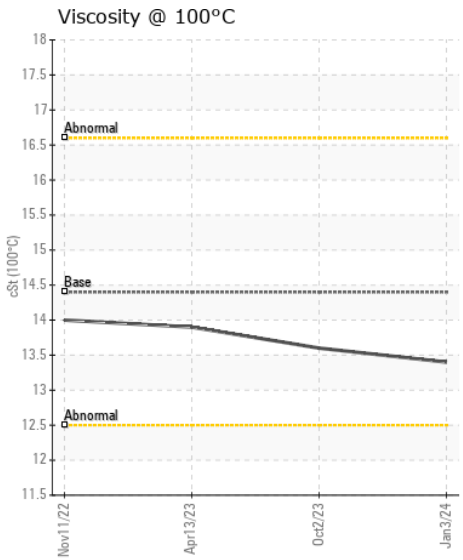
Ferrous Alloys



Non-ferrous Metals



Viscosity @ 100°C



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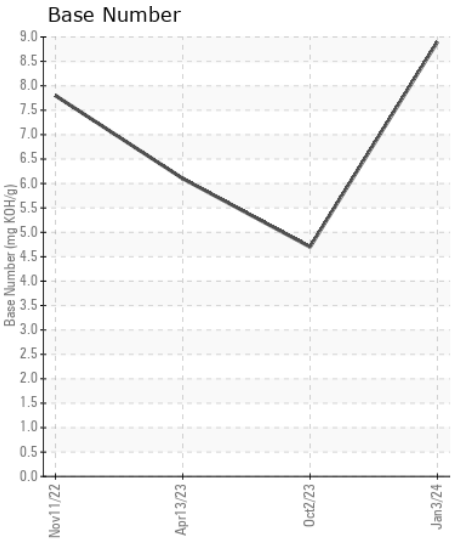

Certificate L2367

Laboratory	: WearCheck USA - 501 Madison Ave., Cary, NC 27513		
Sample No.	: ML0000122	**Recieved**	: 10 Jan 2024
Lab Number	: 06056297	**Diagnosed**	: 11 Jan 2024
Unique Number	: 10822246	**Diagnostician**	: Angela Borella
Test Package	: CONST (Additional Tests: TBN)		

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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