



**McCLUNG-LOGAN**  
EQUIPMENT COMPANY, INC.

**OIL ANALYSIS REPORT**

WEAR	<b>NORMAL</b>
CONTAMINATION	<b>NORMAL</b>
FLUID CONDITION	<b>NORMAL</b>



Area  
**[W02008045]**  
Machine Id  
**VOLVO L70H 624420**  
Component  
**Diesel Engine**  
Fluid  
**MOBIL 15W40 (5 GAL)**

**RECOMMENDATION**

Resample at the next service interval to monitor. ( Customer Sample Comment: W02008045 500 hour service )

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>ML0886331</b>	VCP418327	VCP397808
Sample Date		Client Info		<b>23 Feb 2024</b>	02 Oct 2023	15 Mar 2023
Machine Age	hrs	Client Info		<b>3490</b>	3009	2500
Oil Age	hrs	Client Info		<b>500</b>	500	500
Filter Age	hrs	Client Info		<b>500</b>	0	0
Oil Changed		Client Info		<b>Changed</b>	Changed	Changed
Filter Changed		Client Info		<b>Changed</b>	Changed	Changed
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

**WEAR**

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>200	<b>&lt;1</b>	7	8
Chromium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185m	>5	<b>0</b>	<1	0
Titanium	ppm	ASTM D5185m		<b>0</b>	<1	0
Silver	ppm	ASTM D5185m	>2	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>30	<b>6</b>	5	4
Lead	ppm	ASTM D5185m	>40	<b>1</b>	0	0
Copper	ppm	ASTM D5185m	>20	<b>&lt;1</b>	<1	<1
Tin	ppm	ASTM D5185m	>20	<b>0</b>	<1	<1
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

**CONTAMINATION**

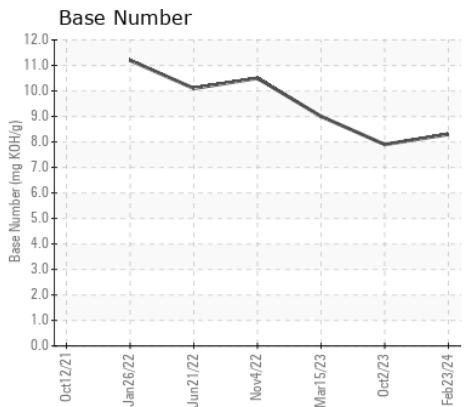
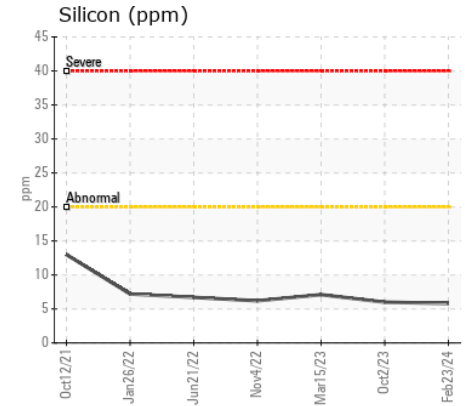
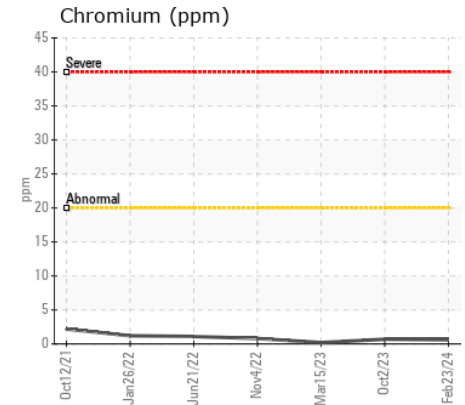
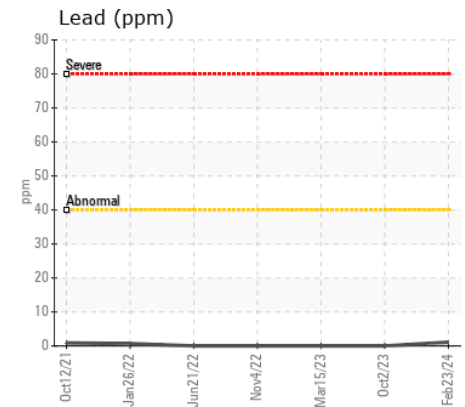
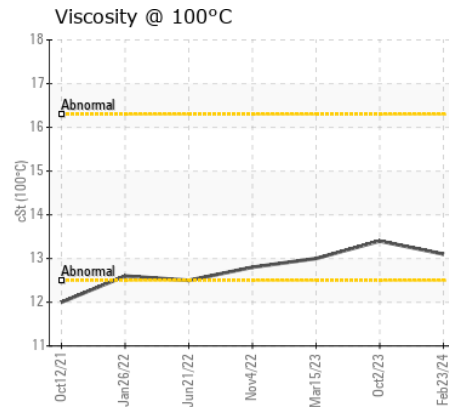
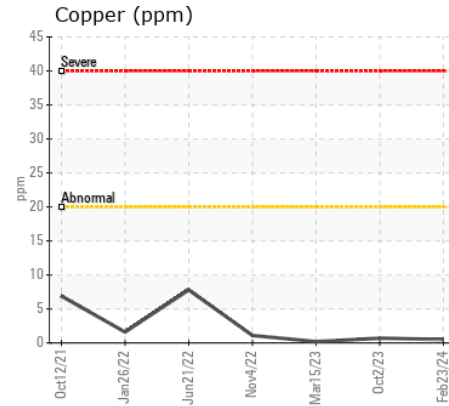
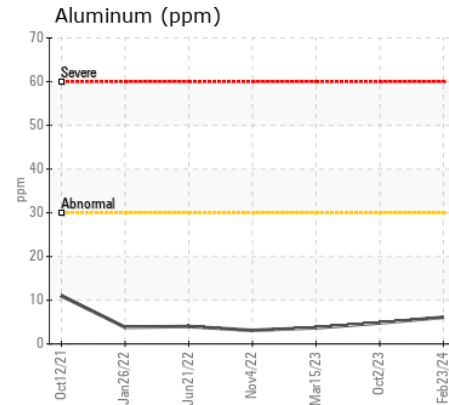
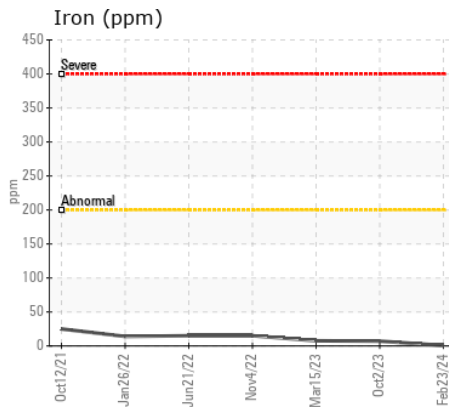
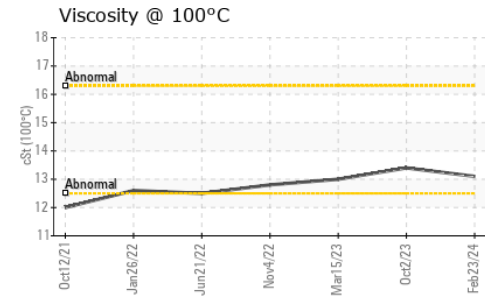
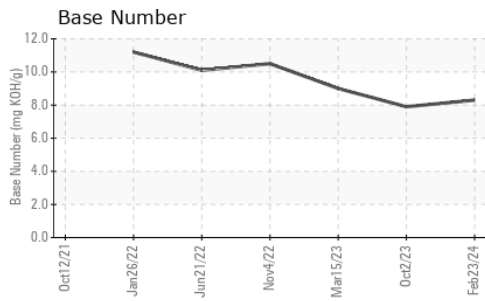
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>20	<b>6</b>	6	7
Potassium	ppm	ASTM D5185m	>20	<b>1</b>	0	0
Fuel		WC Method	>6.0	<b>&lt;1.0</b>	<1.0	<1.0
Water		WC Method	>0.2	<b>NEG</b>	NEG	NEG
Glycol		WC Method		<b>NEG</b>	NEG	NEG
Soot %	%	*ASTM D7844	>3	<b>0.1</b>	0.1	0.2
Nitration	Abs/cm	*ASTM D7624	>20	<b>6.8</b>	6.7	6.8
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>22.5</b>	21.4	22.1
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Appearance	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Odor	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	<b>NEG</b>	NEG	NEG

**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.

Sodium	ppm	ASTM D5185m	>118	<b>2</b>	2	2
Boron	ppm	ASTM D5185m		<b>401</b>	300	271
Barium	ppm	ASTM D5185m		<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m		<b>129</b>	119	120
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m		<b>674</b>	616	619
Calcium	ppm	ASTM D5185m		<b>1653</b>	1479	1624
Phosphorus	ppm	ASTM D5185m		<b>787</b>	669	711
Zinc	ppm	ASTM D5185m		<b>933</b>	788	877
Sulfur	ppm	ASTM D5185m		<b>2539</b>	2303	2785
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>15.9</b>	15.5	15.6
Base Number (BN)	mg KOH/g	ASTM D2896		<b>8.3</b>	7.9	9.0
Visc @ 100°C	cSt	ASTM D445		<b>13.1</b>	13.4	13.0



Certificate L2367

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

Sample No. : ML0886331

Lab Number : 06100730

Unique Number : 10898960

Test Package : MOBCE ( Additional Tests: TBN )

Received : 26 Feb 2024

Tested : 27 Feb 2024

Diagnosed : 28 Feb 2024 - Don Baldrige

MCCCLUNG-LOGAN EQUIPMENT CO - MANASSAS

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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)