



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

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	ATTENTION



Machine Id  
**VOLVO A30G 752456**  
Component  
**Diesel Engine**  
Fluid  
**MOBIL 15W40 (--- GAL)**

**RECOMMENDATION**

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>ML0000465</b>	VCP379096	VCP338136
Sample Date		Client Info		<b>18 Jan 2024</b>	22 Sep 2022	14 Jun 2022
Machine Age	hrs	Client Info		<b>2977</b>	1537	1280
Oil Age	hrs	Client Info		<b>0</b>	500	0
Filter Age	hrs	Client Info		<b>0</b>	0	0
Oil Changed		Client Info		<b>N/A</b>	Changed	Changed
Filter Changed		Client Info		<b>N/A</b>	Changed	N/A
Sample Status				<b>ATTENTION</b>	NORMAL	MARGINAL

**WEAR**

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	<b>5</b>	4	10
Chromium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185m	>2	<b>&lt;1</b>	0	1
Titanium	ppm	ASTM D5185m		<b>0</b>	0	0
Silver	ppm	ASTM D5185m	>2	<b>0</b>	0	1
Aluminum	ppm	ASTM D5185m	>25	<b>1</b>	<1	2
Lead	ppm	ASTM D5185m	>40	<b>0</b>	<1	<1
Copper	ppm	ASTM D5185m	>330	<b>&lt;1</b>	30	▲ 191
Tin	ppm	ASTM D5185m	>15	<b>&lt;1</b>	<1	2
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	<1
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

**CONTAMINATION**

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

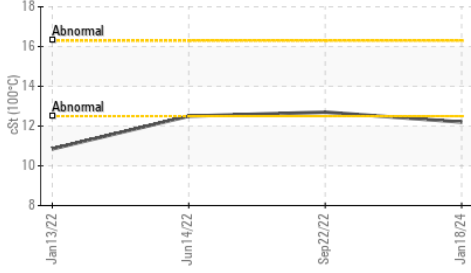
Silicon	ppm	ASTM D5185m	>25	<b>4</b>	4	8
Potassium	ppm	ASTM D5185m	>20	<b>0</b>	<1	3
Fuel	%	ASTM D3524	>6.0	<b>0.6</b>	<1.0	<1.0
Water		WC Method	>0.2	<b>NEG</b>	NEG	NEG
Glycol		WC Method		<b>NEG</b>	NEG	NEG
Soot %	%	*ASTM D7844	>3	<b>0.1</b>	0.1	0.1
Nitration	Abs/cm	*ASTM D7624	>20	<b>6.7</b>	8.4	9.6
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>21.9</b>	21.5	20.7
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**

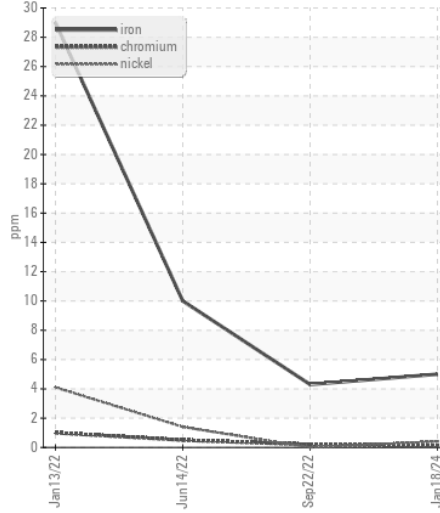
The oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil. Confirm oil type.

Sodium	ppm	ASTM D5185m	>118	<b>2</b>	2	3
Boron	ppm	ASTM D5185m		<b>58</b>	33	48
Barium	ppm	ASTM D5185m		<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m		<b>38</b>	47	57
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m		<b>493</b>	704	608
Calcium	ppm	ASTM D5185m		<b>1576</b>	1162	1369
Phosphorus	ppm	ASTM D5185m		<b>943</b>	667	816
Zinc	ppm	ASTM D5185m		<b>1102</b>	812	1014
Sulfur	ppm	ASTM D5185m		<b>2838</b>	2599	2762
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>19.7</b>	18.1	18.1
Base Number (BN)	mg KOH/g	ASTM D2896		<b>10.3</b>	9.9	7.6
Visc @ 100°C	cSt	ASTM D445		<b>▲ 12.2</b>	12.7	12.5

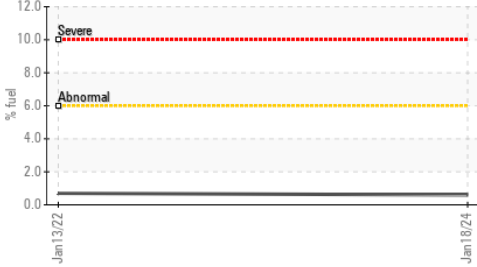
▲ Viscosity @ 100°C



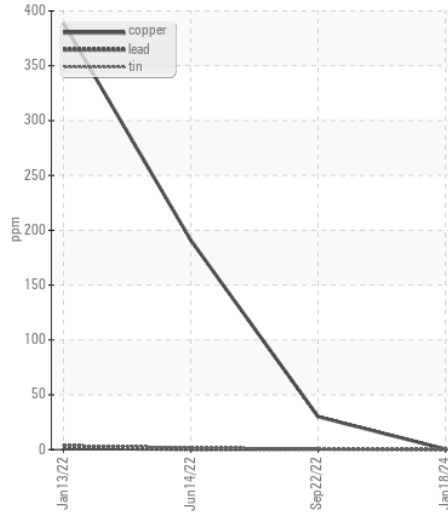
Ferrous Alloys



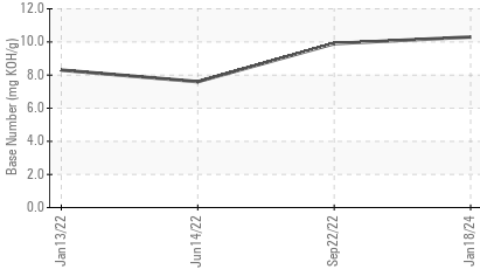
Fuel Dilution



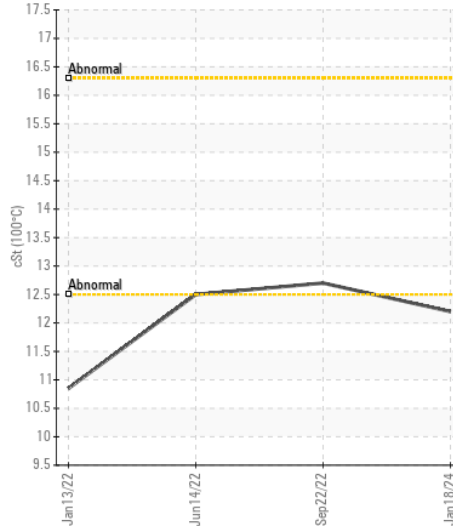
Non-ferrous Metals



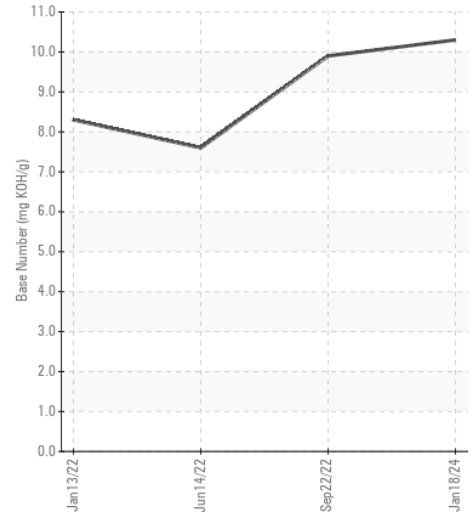
Base Number



▲ Viscosity @ 100°C



Base Number



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : ML0000465  
**Lab Number** : 06082927  
**Unique Number** : 10870372  
**Test Package** : CONST ( Additional Tests: FuelDilution, PercentFuel, TBN )

**MCCLUNG-LOGAN EQUIPMENT CO - CHESAPEAKE**  
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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)