



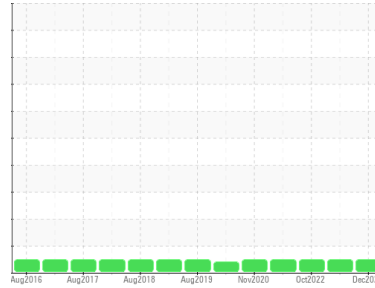
# OIL ANALYSIS REPORT

Sample Rating Trend

**NORMAL**



Machine Id  
**LIEBHERR A904CLI 075959-1005**  
 Component  
**Diesel Engine**  
 Fluid  
**CHEVRON DELO 400 LE 15W40 (30 LTR)**



## DIAGNOSIS

### Recommendation

Resample at the next service interval to monitor.

### Wear

All component wear rates are normal.

### Contamination

There is no indication of any contamination in the oil.

### Fluid Condition

The condition of the oil is acceptable for the time in service.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number	Client Info			<b>WC0107849</b>	LH0107848	LH0107847
Sample Date	Client Info			<b>28 Dec 2023</b>	28 Mar 2023	04 Oct 2022
Machine Age	hrs	Client Info		<b>4593</b>	4127	3931
Oil Age	hrs	Client Info		<b>466</b>	0	0
Oil Changed	Client Info			<b>Changed</b>	Changed	Changed
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

CONTAMINATION		method	limit/base	current	history1	history2
Fuel	WC Method	>5		<b>&lt;1.0</b>	1.2	1.3
Water	WC Method	>0.2		<b>NEG</b>	NEG	NEG
Glycol	WC Method			<b>NEG</b>	NEG	NEG

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>100	<b>5</b>	3	6
Chromium	ppm	ASTM D5185(m)	>5	<b>0</b>	0	0
Nickel	ppm	ASTM D5185(m)	>5	<b>&lt;1</b>	0	0
Titanium	ppm	ASTM D5185(m)		<b>0</b>	<1	0
Silver	ppm	ASTM D5185(m)	>3	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185(m)	>15	<b>2</b>	2	2
Lead	ppm	ASTM D5185(m)	>30	<b>&lt;1</b>	<1	<1
Copper	ppm	ASTM D5185(m)	>125	<b>4</b>	3	3
Tin	ppm	ASTM D5185(m)	>5	<b>0</b>	<1	<1
Antimony	ppm	ASTM D5185(m)		<b>0</b>	0	0
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	0	0
Beryllium	ppm	ASTM D5185(m)		<b>0</b>	0	0
Cadmium	ppm	ASTM D5185(m)		<b>0</b>	0	0

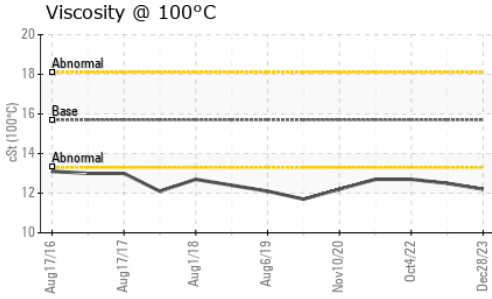
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)		<b>47</b>	59	49
Barium	ppm	ASTM D5185(m)		<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185(m)		<b>46</b>	46	41
Manganese	ppm	ASTM D5185(m)		<b>0</b>	<1	<1
Magnesium	ppm	ASTM D5185(m)		<b>501</b>	507	494
Calcium	ppm	ASTM D5185(m)		<b>1615</b>	1781	1701
Phosphorus	ppm	ASTM D5185(m)	1200	<b>734</b>	799	782
Zinc	ppm	ASTM D5185(m)	1300	<b>852</b>	887	838
Sulfur	ppm	ASTM D5185(m)	3200	<b>2210</b>	2219	2083
Lithium	ppm	ASTM D5185(m)		<b>&lt;1</b>	<1	<1

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>60	<b>7</b>	11	8
Sodium	ppm	ASTM D5185(m)		<b>2</b>	2	2
Potassium	ppm	ASTM D5185(m)	>20	<b>&lt;1</b>	<1	<1

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	ASTM D7844*	>3	<b>0.1</b>	0	0
Nitration	Abs/cm	ASTM D7624*	>20	<b>6.4</b>	5.9	6.7
Sulfation	Abs.1mm	ASTM D7415*	>30	<b>21.4</b>	25.1	23.3



# OIL ANALYSIS REPORT



### FLUID DEGRADATION

method	limit/base	current	history1	history2
Abs./1mm	ASTM D7414*	>25	20.2	20.7

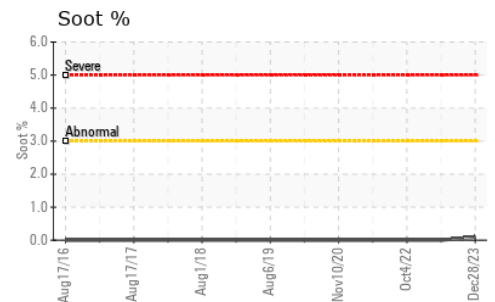
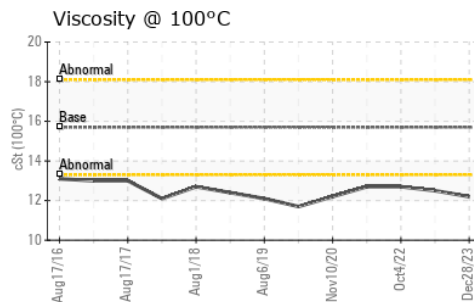
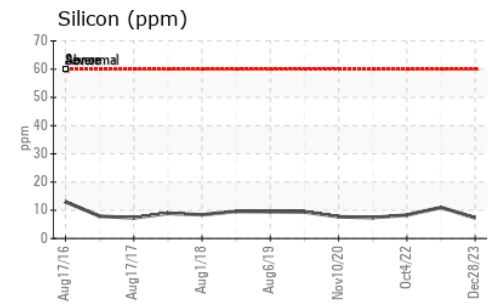
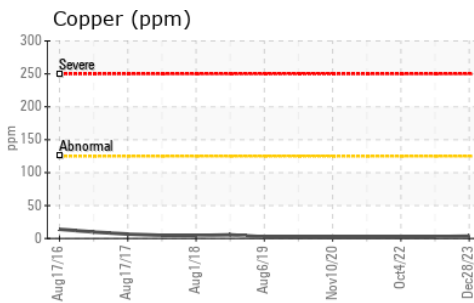
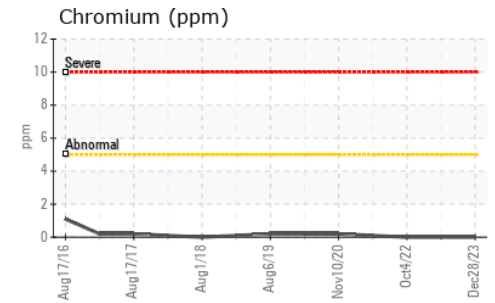
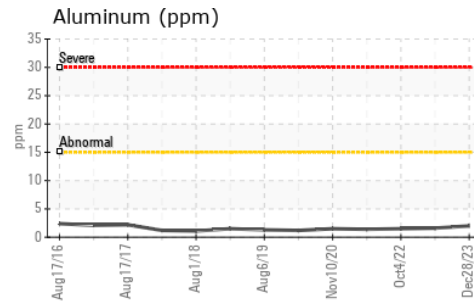
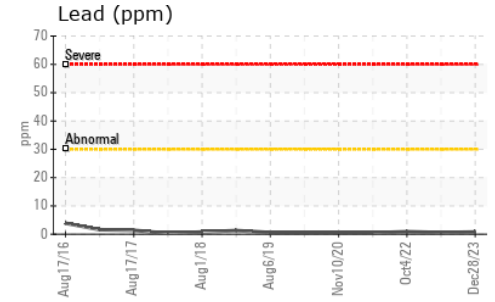
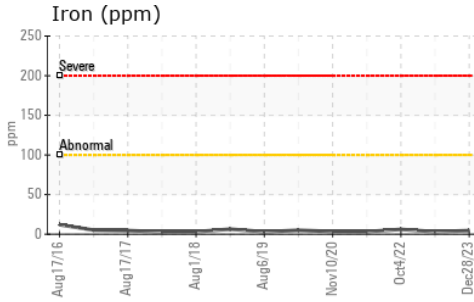
### VISUAL

method	limit/base	current	history1	history2
scalar	Visual*	>0.2	NEG	NEG
scalar	Visual*	NEG	NEG	NEG

### FLUID PROPERTIES

method	limit/base	current	history1	history2
cSt	ASTM D7279(m)	15.7	12.5	12.7

### GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 **The Corporation of the Township of Hamilton**  
**Sample No.** : WC0107849 **Received** : 03 Jan 2024 8285 Majestic Hills Drive  
**Lab Number** : 02606185 **Diagnosed** : 03 Jan 2024 Cobourg, ON  
**Unique Number** : 5707271 **Diagnostician** : Wes Davis CA K9A 4J7  
**Test Package** : MOB 1 **Contact:** Craig McMurray

To discuss this sample report, contact Customer Service at 1-800-268-2131.

Test denoted (\*) outside scope of accreditation, (m) method modified, (e) tested at external lab.

Validity of results and interpretation are based on the sample and information as supplied.

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