



LIEBHERR

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Machine Id
LIEBHERR HS883 3069
Component
Diesel Engine
Fluid
CHEVRON 15W40 (22 LTR)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		LH0281145	LH0144840	LH0122229
Sample Date		Client Info		25 Nov 2023	10 Sep 2019	23 Oct 2018
Machine Age	hrs	Client Info		250	31322	29768
Oil Age	hrs	Client Info		0	0	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Changed	N/A	Changed
Filter Changed		Client Info		N/A	N/A	Changed
Sample Status				NORMAL	ABNORMAL	ABNORMAL

WEAR

Metal levels are typical for a new component breaking in.

Iron	ppm	ASTM D5185(m)	>100	6	13	10
Chromium	ppm	ASTM D5185(m)	>5	0	2	<1
Nickel	ppm	ASTM D5185(m)	>5	<1	<1	0
Titanium	ppm	ASTM D5185(m)		0	<1	0
Silver	ppm	ASTM D5185(m)	>3	0	<1	0
Aluminum	ppm	ASTM D5185(m)	>15	2	2	3
Lead	ppm	ASTM D5185(m)	>30	0	2	2
Copper	ppm	ASTM D5185(m)	>125	2	10	<1
Tin	ppm	ASTM D5185(m)	>5	0	1	0
Vanadium	ppm	ASTM D5185(m)		0	0	<1

CONTAMINATION

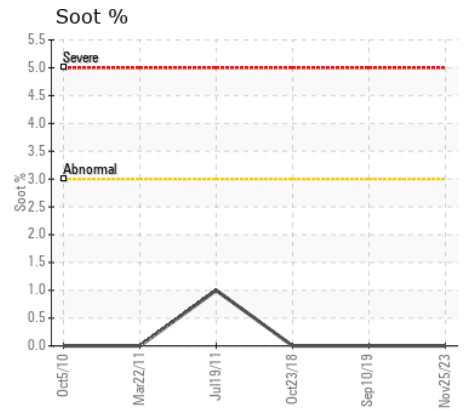
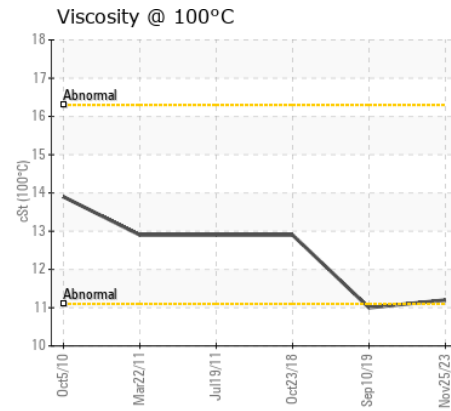
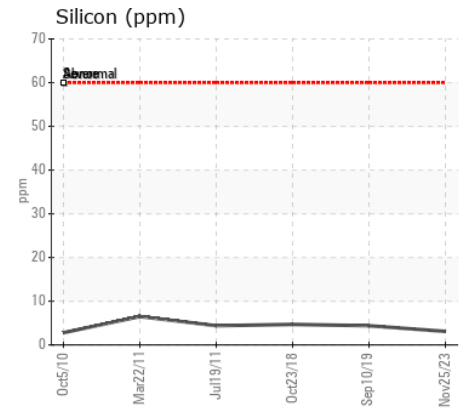
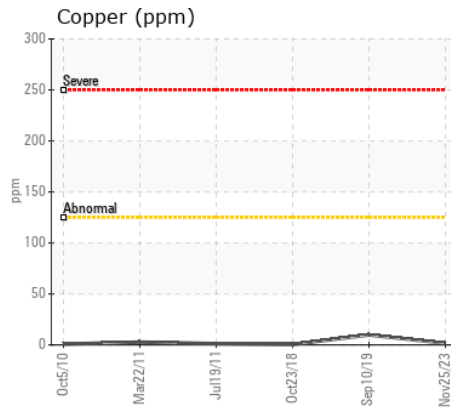
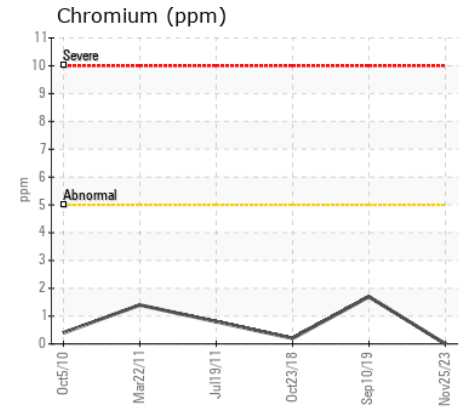
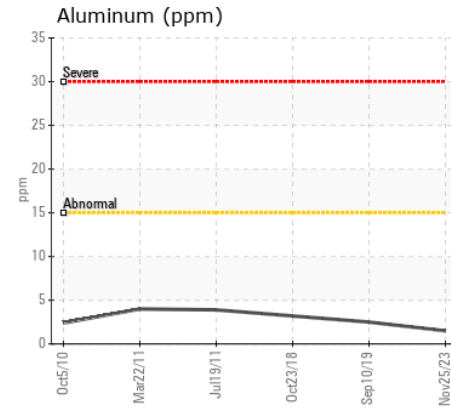
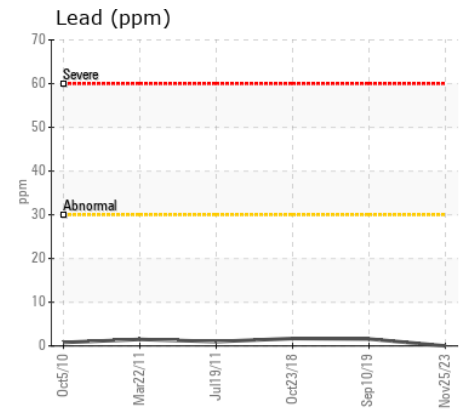
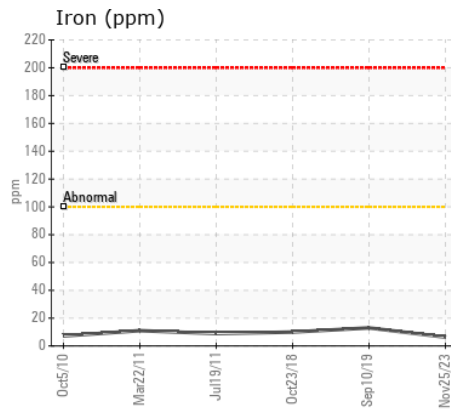
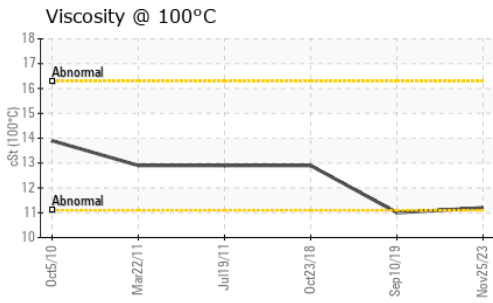
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>60	3	4	5
Potassium	ppm	ASTM D5185(m)	>20	2	13	▲ 7
Fuel		WC Method	>5	<1.0	▲ 3	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	0.0	▲ 0.006
Soot %	%	ASTM D7844*	>3	0	0	0
Nitration	Abs/cm	ASTM D7624*	>20	8.7	11.0	10.8
Sulfation	Abs/.1mm	ASTM D7415*	>30	19.5	25.5	23.9
Emulsified Water	scalar	Visual*	>0.2	NEG	NEG	NEG

FLUID CONDITION

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

Sodium	ppm	ASTM D5185(m)	>50	3	3	8
Boron	ppm	ASTM D5185(m)		75	2	284
Barium	ppm	ASTM D5185(m)		0	2	0
Molybdenum	ppm	ASTM D5185(m)		<1	3	72
Manganese	ppm	ASTM D5185(m)		0	<1	<1
Magnesium	ppm	ASTM D5185(m)		668	15	391
Calcium	ppm	ASTM D5185(m)		1203	2289	1418
Phosphorus	ppm	ASTM D5185(m)		625	632	923
Zinc	ppm	ASTM D5185(m)		696	723	1109
Sulfur	ppm	ASTM D5185(m)		2363	1730	2738
Oxidation	Abs/.1mm	ASTM D7414*	>25	16.7	22.3	25.2
Visc @ 100°C	cSt	ASTM D7279(m)		11.2	▲ 11.0	12.9



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : LH0281145 **Received** : 10 Jan 2024
Lab Number : 02607771 **Diagnosed** : 10 Jan 2024
Unique Number : 5708857 **Diagnostician** : Wes Davis
Test Package : MOB 1

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 New Westminster, BC
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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.