



LIEBHERR

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Machine Id
LIEBHERR HS895 188176-895
Component
Diesel Engine
Fluid
CHEVRON 15W40 (40 LTR)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		LH0242041	LH0136987	LH0218452
Sample Date		Client Info		02 May 2024	25 Aug 2023	14 Apr 2023
Machine Age	hrs	Client Info		36381	0	34814
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	N/A
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>100	7	8	5
Chromium	ppm	ASTM D5185(m)	>5	<1	<1	<1
Nickel	ppm	ASTM D5185(m)	>5	<1	2	<1
Titanium	ppm	ASTM D5185(m)		0	0	<1
Silver	ppm	ASTM D5185(m)	>3	0	0	0
Aluminum	ppm	ASTM D5185(m)	>15	1	2	2
Lead	ppm	ASTM D5185(m)	>30	0	<1	<1
Copper	ppm	ASTM D5185(m)	>125	2	3	1
Tin	ppm	ASTM D5185(m)	>5	0	0	0
Vanadium	ppm	ASTM D5185(m)		0	0	0

CONTAMINATION

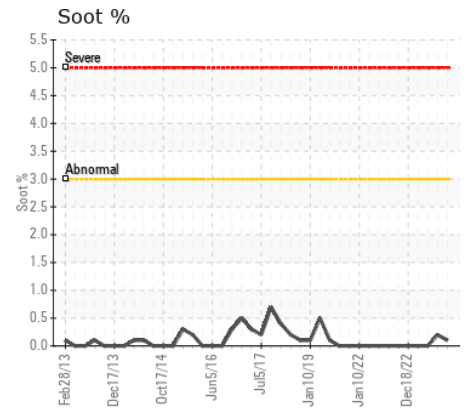
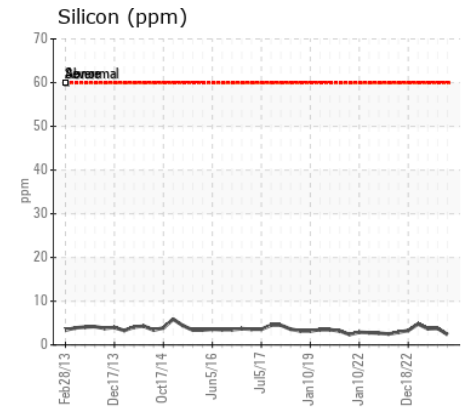
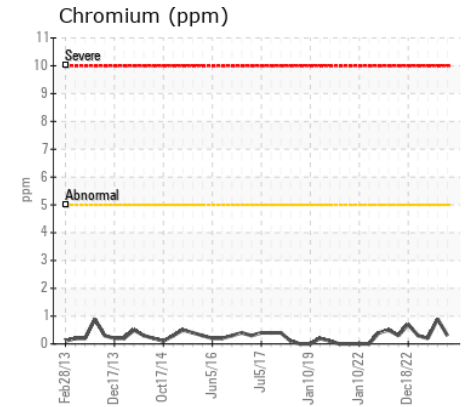
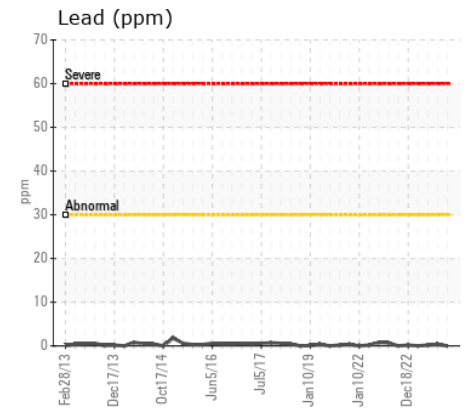
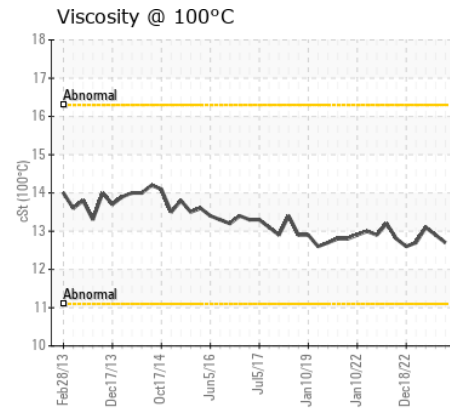
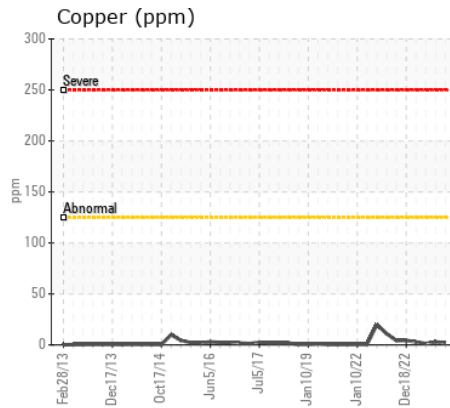
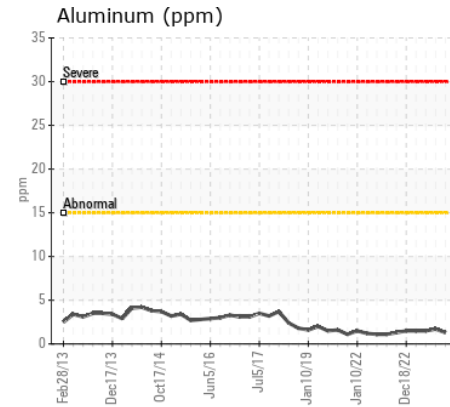
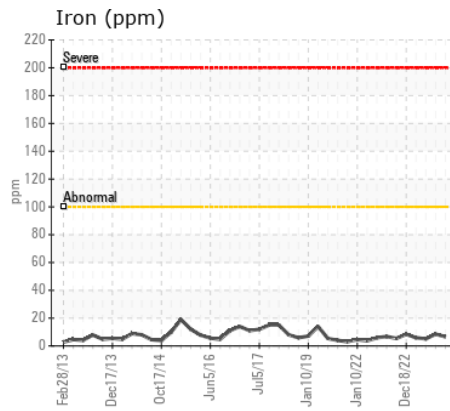
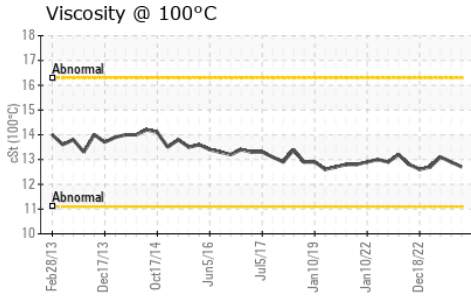
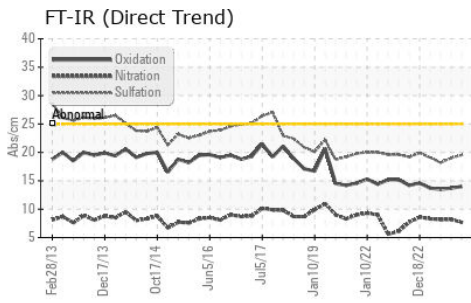
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>60	2	4	4
Potassium	ppm	ASTM D5185(m)	>20	1	3	2
Fuel		WC Method	>5	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	ASTM D7844*	>3	0.1	0.2	0
Nitration	Abs/cm	ASTM D7624*	>20	7.7	8.2	8.2
Sulfation	Abs/.1mm	ASTM D7415*	>30	19.5	19.0	18.2
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	2	3	3
Boron	ppm	ASTM D5185(m)		185	109	86
Barium	ppm	ASTM D5185(m)		0	0	0
Molybdenum	ppm	ASTM D5185(m)		33	17	<1
Manganese	ppm	ASTM D5185(m)		0	<1	<1
Magnesium	ppm	ASTM D5185(m)		635	711	748
Calcium	ppm	ASTM D5185(m)		1361	1346	1427
Phosphorus	ppm	ASTM D5185(m)		841	806	764
Zinc	ppm	ASTM D5185(m)		935	869	785
Sulfur	ppm	ASTM D5185(m)		2582	2629	2682
Oxidation	Abs/.1mm	ASTM D7414*	>25	14.0	13.7	13.5
Visc @ 100°C	cSt	ASTM D7279(m)		12.7	12.9	13.1



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : LH0242041 **Received** : 29 May 2024
Lab Number : 02638374 **Tested** : 29 May 2024
Unique Number : 5787536 **Diagnosed** : 29 May 2024 - Wes Davis
Test Package : MOB 1

Fraser River Pile & Dredge
 1830 River Drive
 New Westminister, BC
 CA V3M 2A8
 Contact: Nate Stafiej
 nstafiej@frpd.com
 T: (604)528-9355
 F: (604)520-0943

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.