



LIEBHERR

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Machine Id
LIEBHERR A934C 057446-1007
Component
Diesel Engine
Fluid
KLONDIKE HEAVY DUTY 15W40 (35 LTR)

RECOMMENDATION

No corrective action is recommended at this time. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		LH0276178	LH0281194	LH0213841
Sample Date		Client Info		21 Apr 2024	22 Jan 2024	11 Jul 2023
Machine Age	hrs	Client Info		26815	26482	25673
Oil Age	hrs	Client Info		0	0	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		N/A	N/A	N/A
Sample Status				NORMAL	ABNORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>66	5	16	4
Chromium	ppm	ASTM D5185(m)	>4	0	<1	0
Nickel	ppm	ASTM D5185(m)	>4	0	0	0
Titanium	ppm	ASTM D5185(m)		0	0	0
Silver	ppm	ASTM D5185(m)	>3	0	0	0
Aluminum	ppm	ASTM D5185(m)	>8	<1	2	1
Lead	ppm	ASTM D5185(m)	>10	0	8	<1
Copper	ppm	ASTM D5185(m)	>74	<1	3	1
Tin	ppm	ASTM D5185(m)	>4	0	0	0
Vanadium	ppm	ASTM D5185(m)		0	0	0

CONTAMINATION

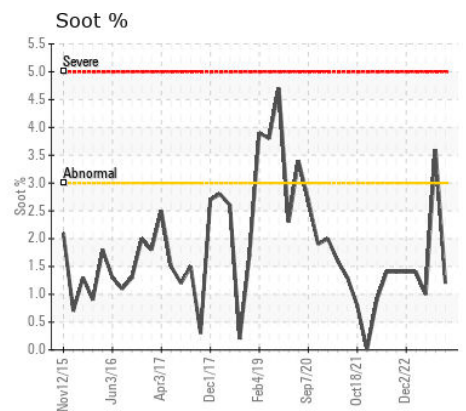
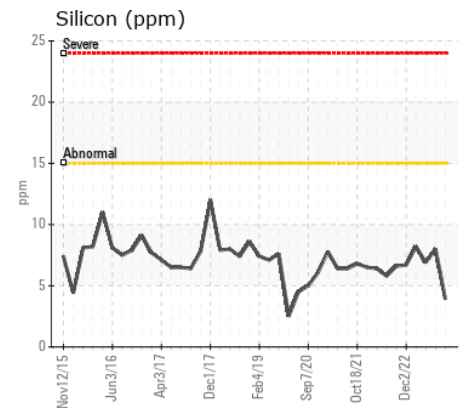
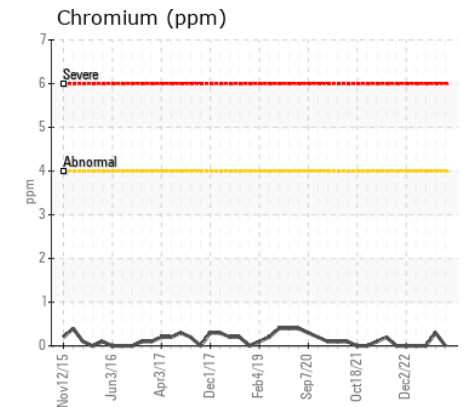
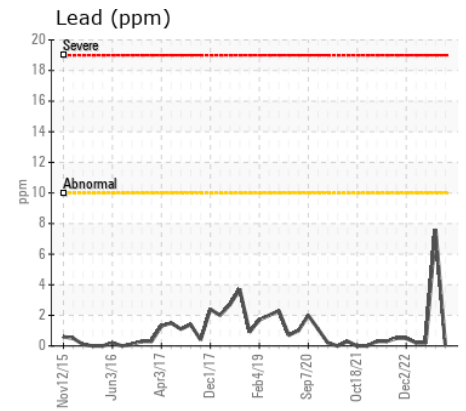
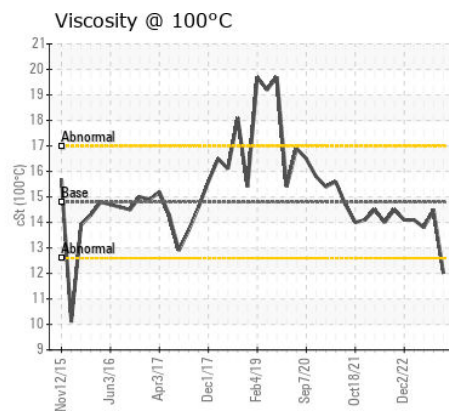
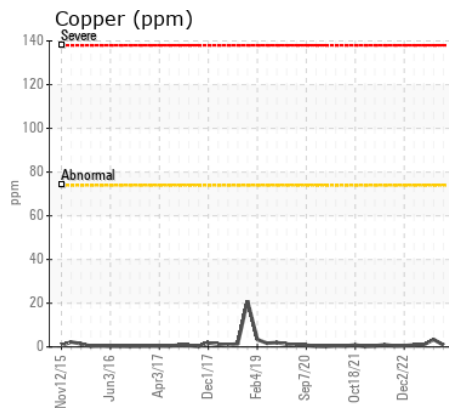
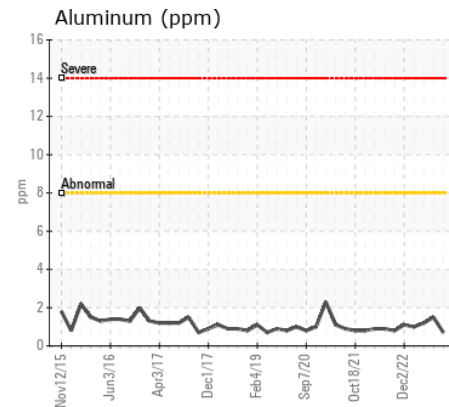
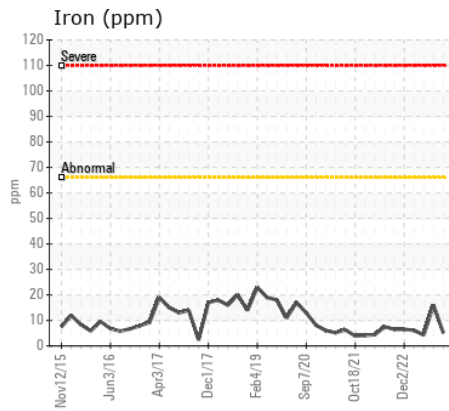
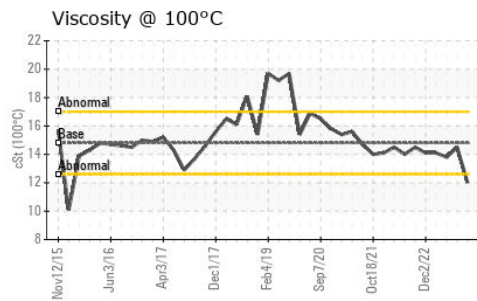
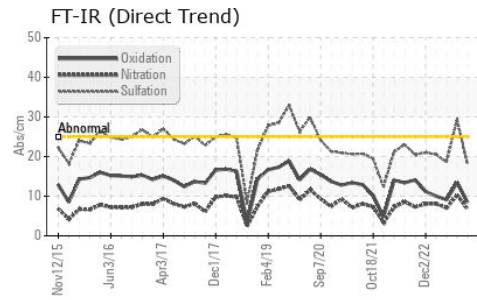
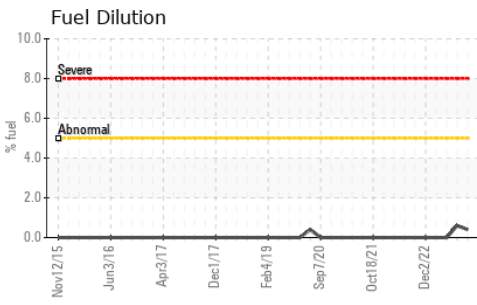
Fuel content negligible. There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>15	4	8	7
Potassium	ppm	ASTM D5185(m)	>20	<1	2	<1
Fuel	%	ASTM D7593*	>5	0.4	0.6	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	ASTM D7844*	>3	1.2	▲ 3.6	1
Nitration	Abs/cm	ASTM D7624*	>20	6.7	10.3	7.0
Sulfation	Abs/.1mm	ASTM D7415*	>30	18.1	29.3	18.6
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)		<1	2	2
Boron	ppm	ASTM D5185(m)	70	1	1	2
Barium	ppm	ASTM D5185(m)		0	0	0
Molybdenum	ppm	ASTM D5185(m)		<1	4	1
Manganese	ppm	ASTM D5185(m)		0	0	0
Magnesium	ppm	ASTM D5185(m)	50	18	71	18
Calcium	ppm	ASTM D5185(m)	2000	1867	2265	2287
Phosphorus	ppm	ASTM D5185(m)	1000	695	851	902
Zinc	ppm	ASTM D5185(m)	1100	829	1011	990
Sulfur	ppm	ASTM D5185(m)	3400	2431	2842	2916
Oxidation	Abs/.1mm	ASTM D7414*	>25	8.4	13.4	9.1
Visc @ 100°C	cSt	ASTM D7279(m)	14.8	12.0	14.5	13.8



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : LH0276178 **Received** : 23 Apr 2024
Lab Number : 02630867 **Tested** : 24 Apr 2024
Unique Number : 5772020 **Diagnosed** : 24 Apr 2024 - Wes Davis
Test Package : MOB 1 (Additional Tests: FuelDilution, PercentFuel)

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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.