



LIEBHERR

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Machine Id
LIEBHERR LH30M 112349-1253
Component
Diesel Engine
Fluid
PETRO CANADA DURON UHP E6 10W40 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		LH0278705	LH0279004	LH0274755
Sample Date		Client Info		22 Feb 2024	06 Nov 2023	30 Aug 2023
Machine Age	hrs	Client Info		11476	0	10003
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	NORMAL	NORMAL

WEAR

All component wear rates are normal.

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

CONTAMINATION

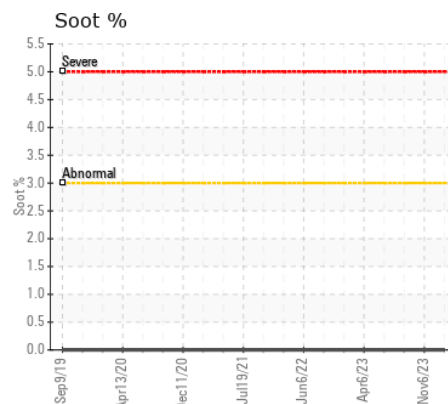
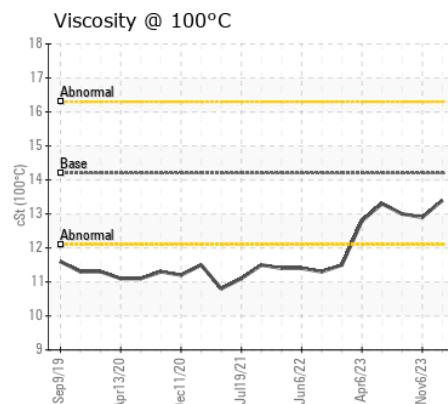
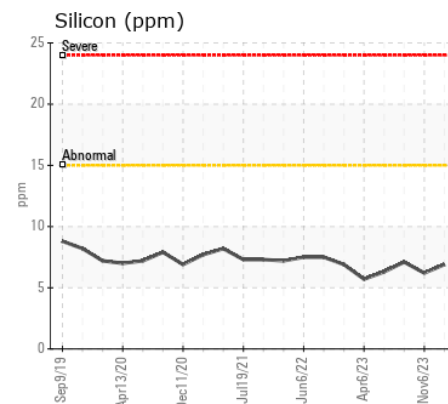
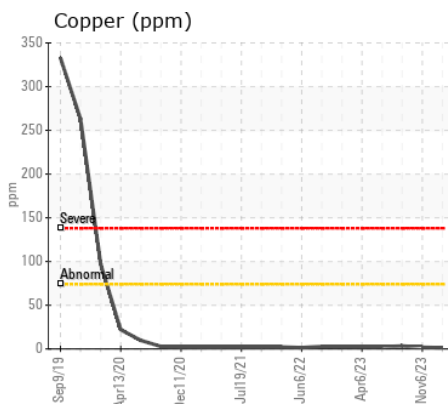
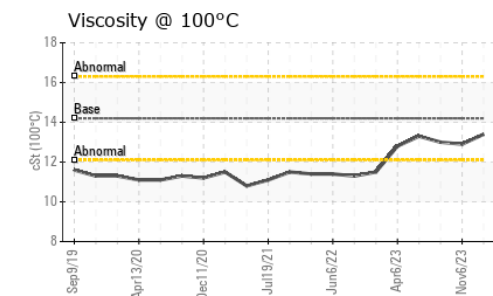
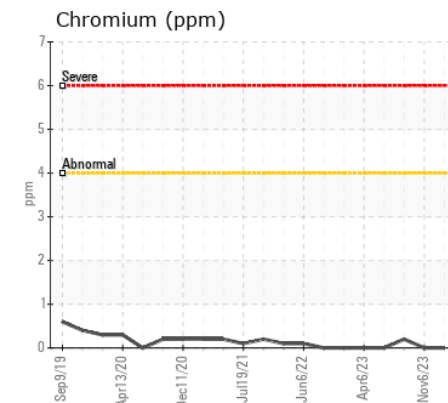
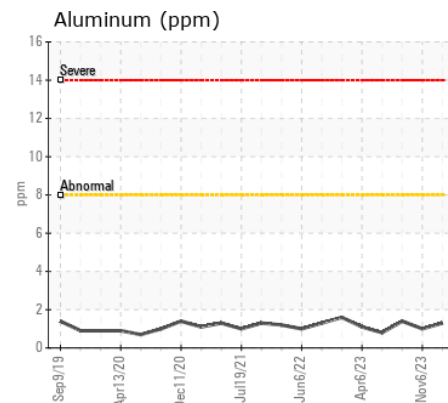
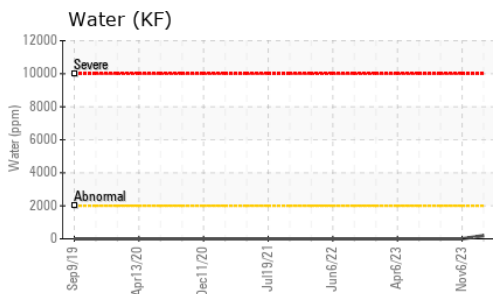
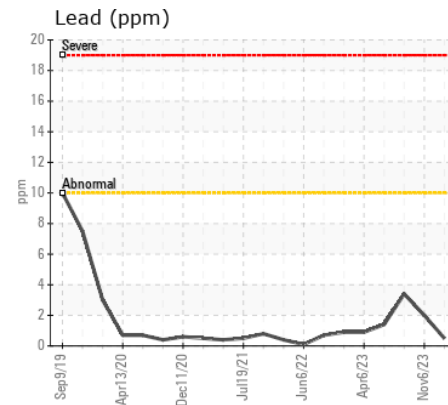
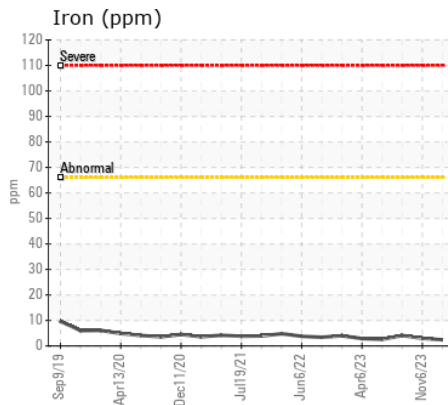
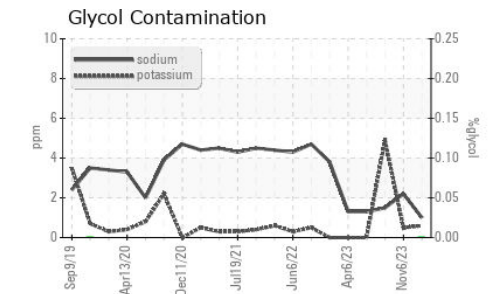
The water content is negligible. There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>15	7	6	7
Potassium	ppm	ASTM D5185(m)	>20	<1	<1	5
Fuel		WC Method	>5	<1.0	<1.0	<1.0
Water	%	ASTM D6304*	>0.2	0.019	---	---
ppm Water	ppm	ASTM D6304*	>2000	195	---	---
Glycol	%	ASTM D7922*		0.0	NEG	NEG
Soot %	%	ASTM D7844*	>3	0	0	0
Nitration	Abs/cm	ASTM D7624*	>20	7.5	8.9	9.5
Sulfation	Abs/.1mm	ASTM D7415*	>30	18.6	19.7	21.3
Emulsified Water	scalar	Visual*	>0.2	.2%	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)	0	<1	3	1
Barium	ppm	ASTM D5185(m)	0	0	<1	0
Molybdenum	ppm	ASTM D5185(m)	0	58	59	61
Manganese	ppm	ASTM D5185(m)	0	0	0	<1
Magnesium	ppm	ASTM D5185(m)	80	968	966	1030
Calcium	ppm	ASTM D5185(m)	2400	1087	1069	1086
Phosphorus	ppm	ASTM D5185(m)	750	1032	987	1101
Zinc	ppm	ASTM D5185(m)	840	1207	1206	1242
Sulfur	ppm	ASTM D5185(m)	2130	2766	2499	2645
Oxidation	Abs/.1mm	ASTM D7414*	>25	15.4	17.7	18.0
Visc @ 100°C	cSt	ASTM D7279(m)	14.2	13.4	12.9	13.0



ISO 17025:2017
Accredited
Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : LH0278705 **Received** : 23 Feb 2024
Lab Number : 02617621 **Tested** : 27 Feb 2024
Unique Number : 5734731 **Diagnosed** : 27 Feb 2024 - Wes Davis
Test Package : MOB 1 (Additional Tests: Glycol, KF)

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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