MOB I

LIEBHERR

OIL ANALYSIS REPORT

WEAR	ABNORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	NORMAL

Machine Id
LIEBHERR LH60C 102201
Component
Left Final Drive
Fluid
PETRO CANADA TRAXON 75W90 SYNTHETIC (--- GAL)

RECOMMENDATION

We advise that you check all areas where dirt can enter the system. The oil change at the time of sampling has been noted. Confirm the source of the lubricant being utilized for top-up/fill. We recommend an early resample to monitor this condition.

WEAR

Iron ppm levels are abnormal. Aluminum ppm levels are noted. The low ferrous density (PQ) index indicates the wear metal levels are due to corrosion.

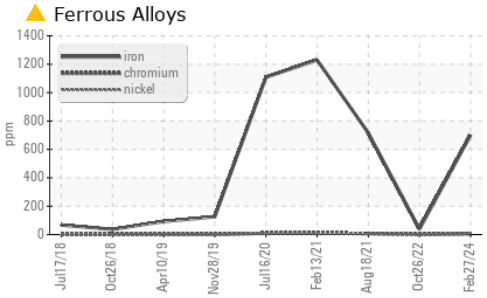
CONTAMINATION

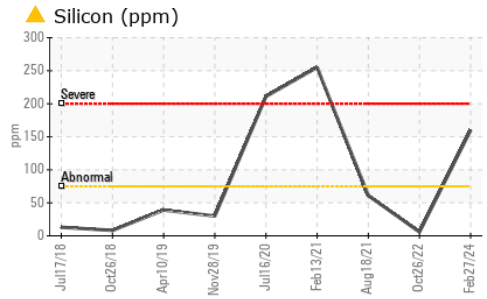
Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress. High amount of ingressed dirt has caused abrasive wear to the component.

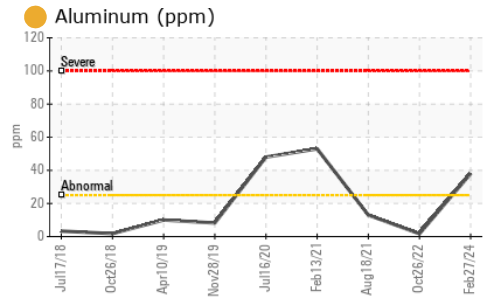
FLUID CONDITION

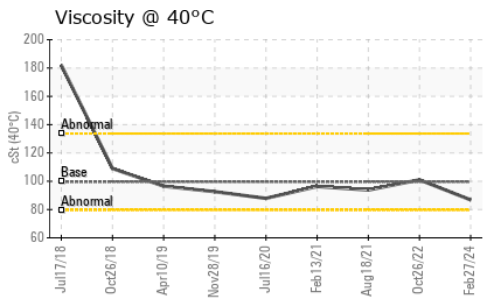
Additive levels indicate the addition of a different brand, or type of oil. The oil is no longer serviceable as a result of the abnormal and/or severe wear.

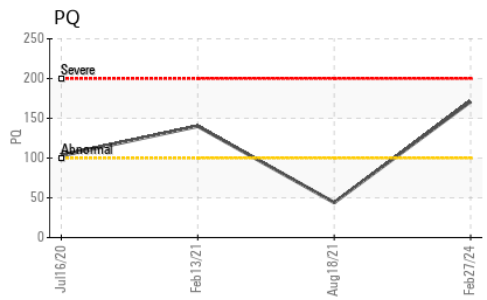
Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		LH0274858	LH0242528	LH
Sample Date		Client Info		27 Feb 2024	26 Oct 2022	18 Aug 2021
Machine Age	hrs	Client Info		12877	10545	7998
Oil Age	hrs	Client Info		0	0	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		None	None	None
Sample Status				ABNORMAL	NORMAL	ABNORMAL
PQ		ASTM D8184*		171	---	44
Iron	ppm	ASTM D5185(m)	>500	▲ 701	38	▲ 716
Chromium	ppm	ASTM D5185(m)	>10	6	<1	6
Nickel	ppm	ASTM D5185(m)	>10	3	<1	3
Titanium	ppm	ASTM D5185(m)		2	<1	<1
Silver	ppm	ASTM D5185(m)		0	0	<1
Aluminum	ppm	ASTM D5185(m)	>25	● 38	2	13
Lead	ppm	ASTM D5185(m)	>25	2	<1	2
Copper	ppm	ASTM D5185(m)	>50	29	3	52
Tin	ppm	ASTM D5185(m)	>10	2	<1	2
Vanadium	ppm	ASTM D5185(m)		0	0	<1
White Metal	scalar	Visual*	NONE	NONE	NONE	VLITE
Yellow Metal	scalar	Visual*	NONE	NONE	NONE	NONE
Silicon	ppm	ASTM D5185(m)	>75	▲ 160	6	61
Potassium	ppm	ASTM D5185(m)	>20	3	14	4
Water		WC Method	>0.2	NEG	NEG	NEG
Silt	scalar	Visual*	NONE	NONE	NONE	VLITE
Debris	scalar	Visual*	NONE	NONE	VLITE	NONE
Sand/Dirt	scalar	Visual*	NONE	NONE	NONE	NONE
Appearance	scalar	Visual*	NORML	NORML	NORML	NORML
Odor	scalar	Visual*	NORML	NORML	NORML	NORML
Emulsified Water	scalar	Visual*	>0.2	NEG	NEG	NEG
Sodium	ppm	ASTM D5185(m)		11	6	4
Boron	ppm	ASTM D5185(m)	328	150	122	149
Barium	ppm	ASTM D5185(m)	1	<1	<1	<1
Molybdenum	ppm	ASTM D5185(m)		0	0	<1
Manganese	ppm	ASTM D5185(m)		6	<1	6
Magnesium	ppm	ASTM D5185(m)	1	91	6	33
Calcium	ppm	ASTM D5185(m)	7	280	74	76
Phosphorus	ppm	ASTM D5185(m)	1145	908	942	1291
Zinc	ppm	ASTM D5185(m)	3	31	21	26
Sulfur	ppm	ASTM D5185(m)	17909	16685	18107	21690
Visc @ 40°C	cSt	ASTM D7279(m)	99.6	86.8	101	93.8

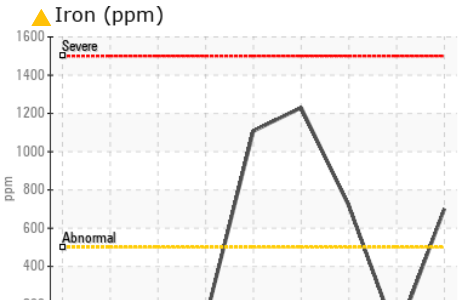


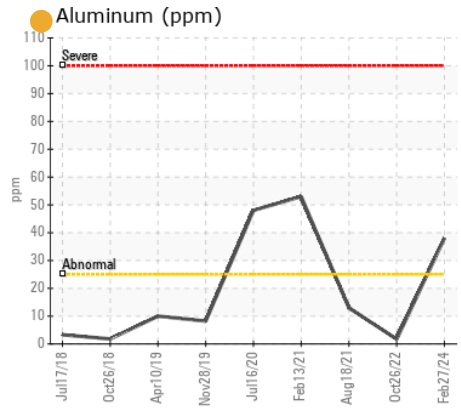


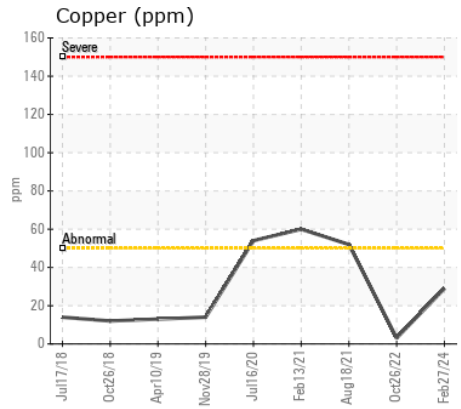


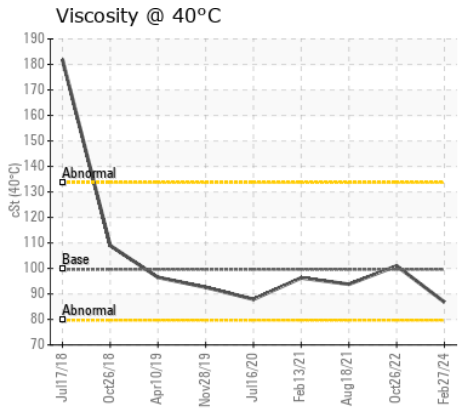


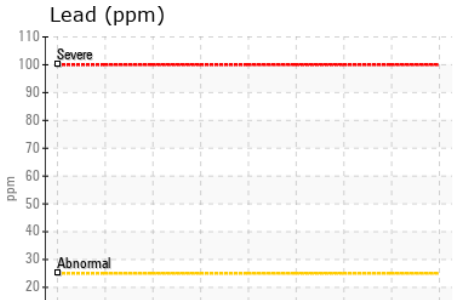


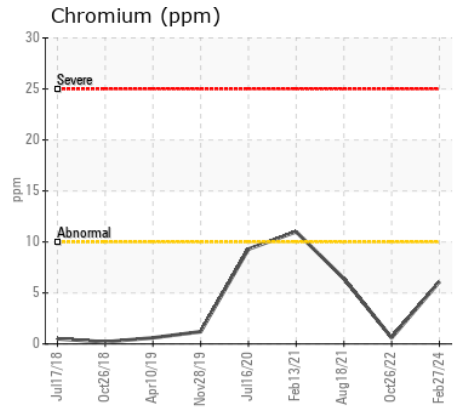


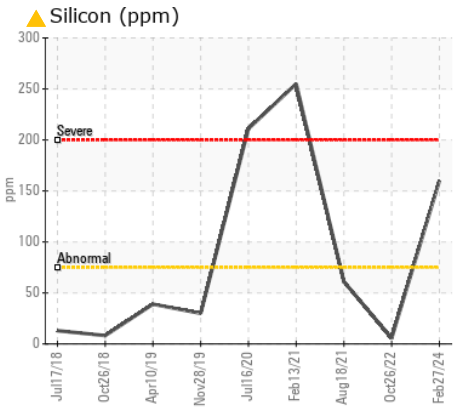


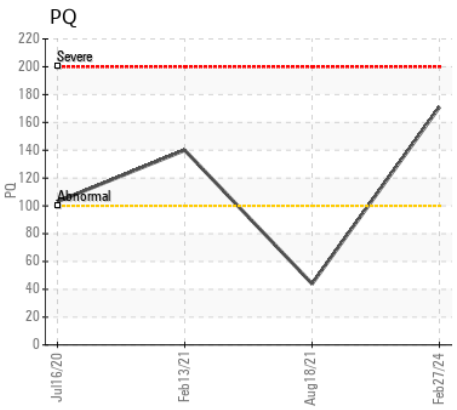












ISO 17025:2017 Accredited Laboratory

Laboratory	: WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9		
Sample No.	: LH0274858	**Received**	: 28 Feb 2024
Lab Number	: 02618755	**Tested**	: 28 Feb 2024
Unique Number	: 5735865	**Diagnosed**	: 29 Feb 2024 - Kevin Marson
Test Package	: MOB 1 (Additional Tests: PQ)		

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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