MOB I

LIEBHERR

OIL ANALYSIS REPORT

WEAR	ABNORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

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

RECOMMENDATION

The oil change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

WEAR

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

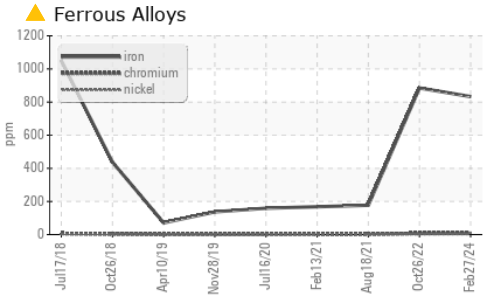
CONTAMINATION

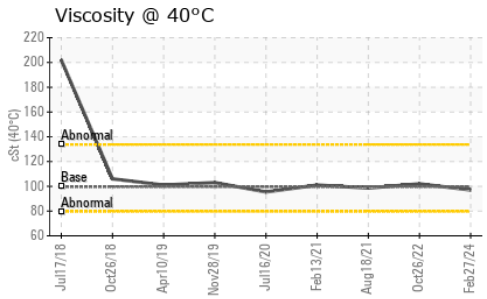
There is no indication of any contamination in the oil.

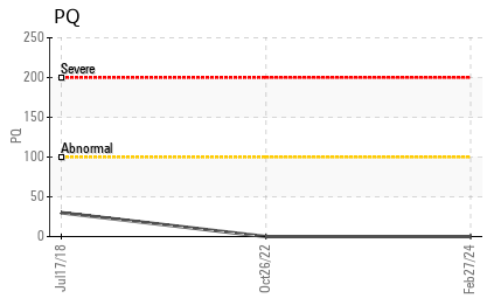
FLUID CONDITION

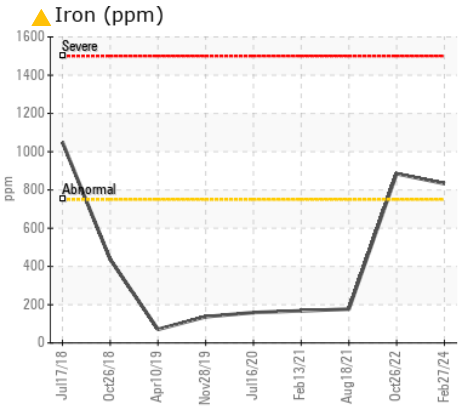
The oil is no longer serviceable as a result of the abnormal and/or severe wear.

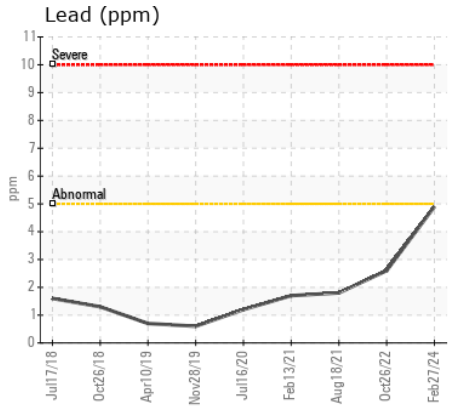
Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		LH0274861	LH0242524	LH
Sample Date		Client Info		27 Feb 2024	26 Oct 2022	18 Aug 2021
Machine Age	hrs	Client Info		12877	10545	7998
Oil Age	hrs	Client Info		0	0	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		None	None	None
Sample Status				ABNORMAL	ABNORMAL	NORMAL
PQ		ASTM D8184*		0	0	---
Iron	ppm	ASTM D5185(m)	>750	▲ 833	▲ 885	177
Chromium	ppm	ASTM D5185(m)	>10	9	8	2
Nickel	ppm	ASTM D5185(m)	>5	3	2	<1
Titanium	ppm	ASTM D5185(m)		0	0	0
Silver	ppm	ASTM D5185(m)		<1	0	0
Aluminum	ppm	ASTM D5185(m)	>20	<1	<1	0
Lead	ppm	ASTM D5185(m)	>5	5	3	2
Copper	ppm	ASTM D5185(m)	>250	155	92	72
Tin	ppm	ASTM D5185(m)	>10	<1	<1	2
Vanadium	ppm	ASTM D5185(m)		0	0	0
White Metal	scalar	Visual*	NONE	NONE	NONE	VLITE
Yellow Metal	scalar	Visual*	NONE	NONE	NONE	NONE
Silicon	ppm	ASTM D5185(m)	>15	4	4	2
Potassium	ppm	ASTM D5185(m)	>20	1	<1	<1
Water		WC Method	>0.2	NEG	NEG	NEG
Silt	scalar	Visual*	NONE	NONE	NONE	VLITE
Debris	scalar	Visual*	NONE	NONE	NONE	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	▲ .2%	NEG
Sodium	ppm	ASTM D5185(m)		1	1	<1
Boron	ppm	ASTM D5185(m)	328	156	200	311
Barium	ppm	ASTM D5185(m)	1	0	0	0
Molybdenum	ppm	ASTM D5185(m)		<1	<1	<1
Manganese	ppm	ASTM D5185(m)		5	6	1
Magnesium	ppm	ASTM D5185(m)	1	2	2	2
Calcium	ppm	ASTM D5185(m)	7	12	11	10
Phosphorus	ppm	ASTM D5185(m)	1145	1127	1332	1289
Zinc	ppm	ASTM D5185(m)	3	21	16	12
Sulfur	ppm	ASTM D5185(m)	17909	19541	21771	21836
Visc @ 40°C	cSt	ASTM D7279(m)	99.6	97.0	102	98.6

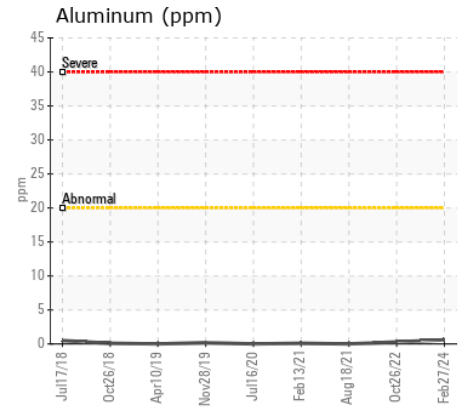


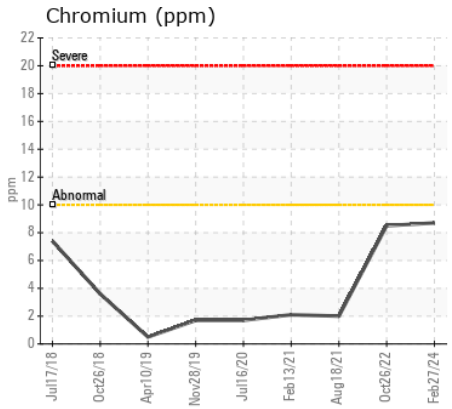


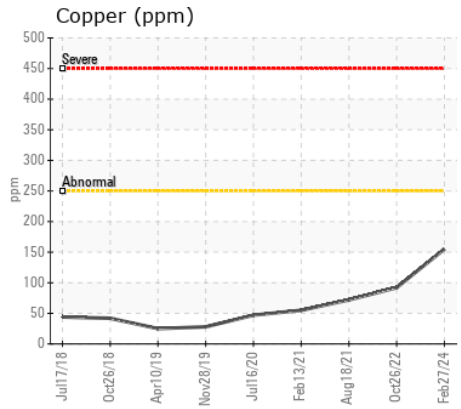


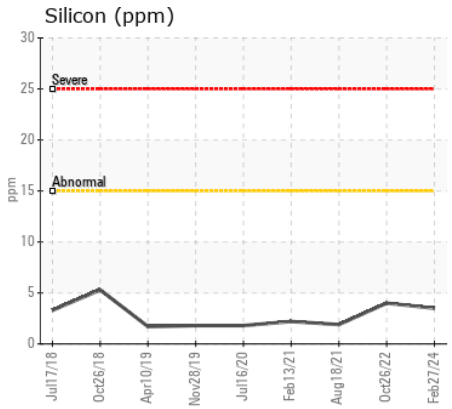


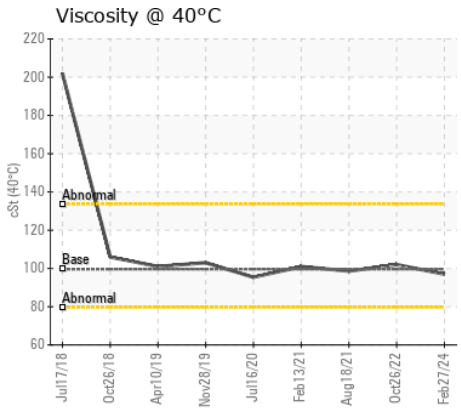


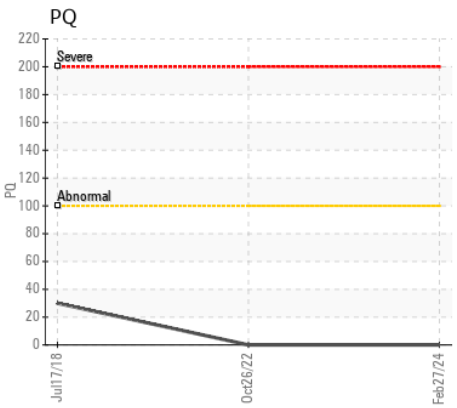












ISO 17025:2017 Accredited Laboratory

Laboratory	: WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9		
Sample No.	: LH0274861	**Received**	: 28 Feb 2024
Lab Number	: 02618769	**Tested**	: 28 Feb 2024
Unique Number	: 5735879	**Diagnosed**	: 29 Feb 2024 - Kevin Marson
Test Package	: MOB 1 (Additional Tests: Bottom, 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.

BEN-MET STEEL & METAL INC.
415 ELIZABETH STREET
GUELPH, ON
CA N1E 2Y2
Contact: Andy Sakool
asakool@benmetsteel.com
T: (519)763-1209
F: (519)763-9174