



LIEBHERR

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	ABNORMAL



Machine Id
LIEBHERR LH40M 116354-1215
Component
Transmission (Manual)
Fluid
PETRO CANADA SUPREME 5W30 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		LH0289660	LH0277615	LH0150659
Sample Date		Client Info		05 Jun 2024	25 Jan 2024	23 Nov 2021
Machine Age	hrs	Client Info		11257	10071	5042
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	ABNORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>200	13	21	31
Chromium	ppm	ASTM D5185(m)	>5	0	0	<1
Nickel	ppm	ASTM D5185(m)	>5	0	<1	<1
Titanium	ppm	ASTM D5185(m)		0	0	0
Silver	ppm	ASTM D5185(m)	>7	0	0	0
Aluminum	ppm	ASTM D5185(m)	>25	1	2	2
Lead	ppm	ASTM D5185(m)	>45	0	<1	2
Copper	ppm	ASTM D5185(m)	>225	6	9	62
Tin	ppm	ASTM D5185(m)	>10	0	<1	2
Vanadium	ppm	ASTM D5185(m)		0	0	0
White Metal	scalar	Visual*	NONE	NONE	NONE	VLITE
Yellow Metal	scalar	Visual*	NONE	NONE	LIGHT	NONE

CONTAMINATION

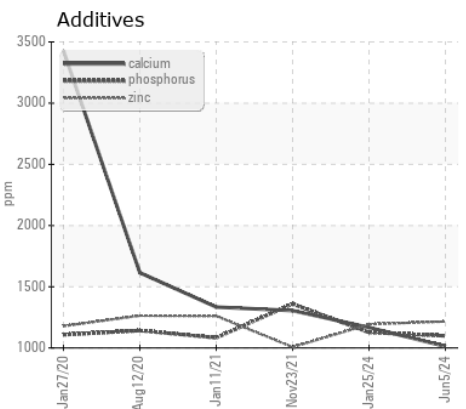
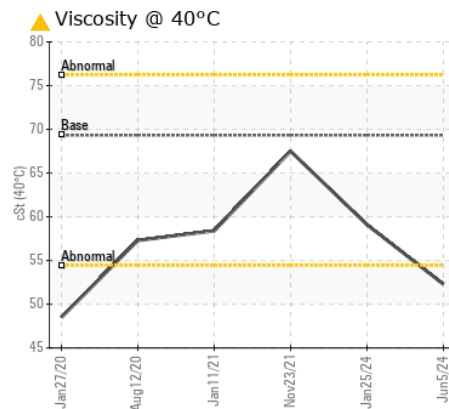
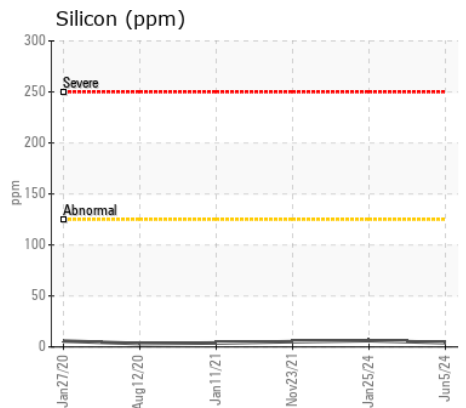
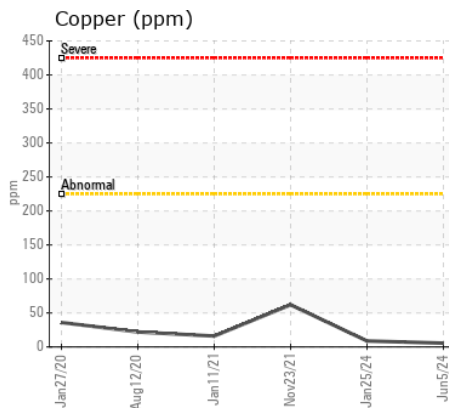
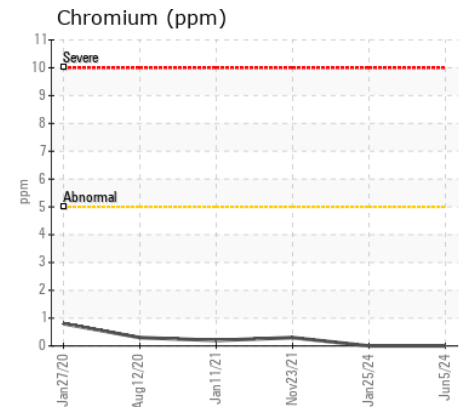
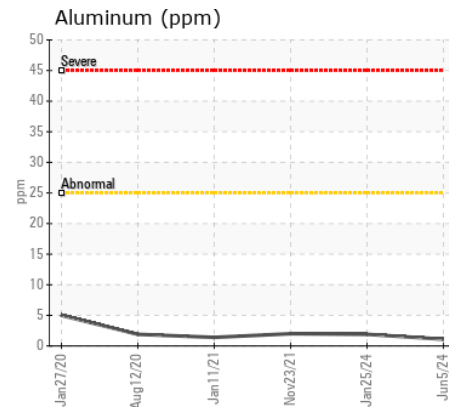
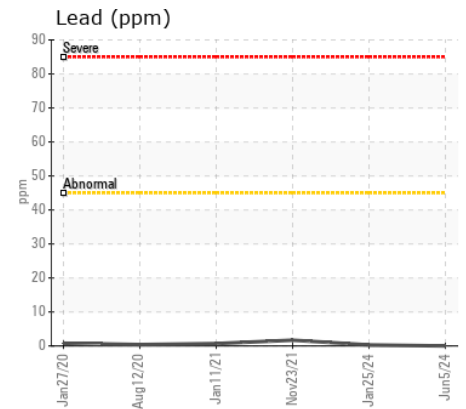
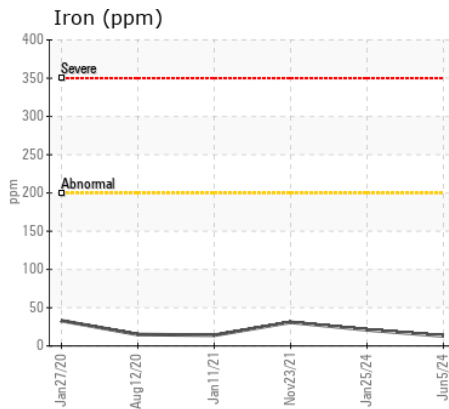
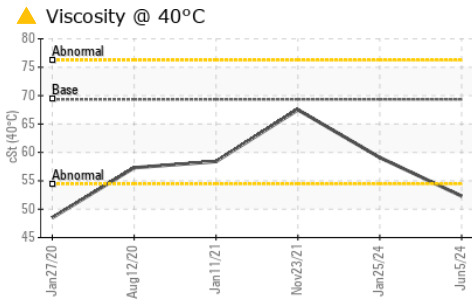
There is no indication of any contamination in the fluid.

Silicon	ppm	ASTM D5185(m)	>125	4	6	5
Potassium	ppm	ASTM D5185(m)	>20	<1	<1	<1
Water		WC Method	>0.1	NEG	NEG	NEG
Silt	scalar	Visual*	NONE	NONE	NONE	NONE
Debris	scalar	Visual*	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	Visual*	NONE	NONE	NONE	VLITE
Appearance	scalar	Visual*	NORML	NORML	NORML	NORML
Odor	scalar	Visual*	NORML	NORML	NORML	NORML
Emulsified Water	scalar	Visual*	>0.1	NEG	NEG	NEG

FLUID CONDITION

Viscosity of sample indicates oil is within SAE 20 range, advise investigate. The condition of the fluid is acceptable for the time in service.

Sodium	ppm	ASTM D5185(m)		3	2	7
Boron	ppm	ASTM D5185(m)	186	41	10	24
Barium	ppm	ASTM D5185(m)	<1	0	0	0
Molybdenum	ppm	ASTM D5185(m)	79	62	62	53
Manganese	ppm	ASTM D5185(m)	0	1	1	7
Magnesium	ppm	ASTM D5185(m)	578	1057	910	560
Calcium	ppm	ASTM D5185(m)	1002	1013	1167	1305
Phosphorus	ppm	ASTM D5185(m)	745	1099	1127	1360
Zinc	ppm	ASTM D5185(m)	837	1216	1193	1007
Sulfur	ppm	ASTM D5185(m)	2502	3140	3449	7802
Visc @ 40°C	cSt	ASTM D7279(m)	69.33	▲ 52.3	▲ 59.1	▲ 67.5



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : LH0289660
Lab Number : 02640559
Unique Number : 5789721
Test Package : MOB 1
Received : 07 Jun 2024
Tested : 07 Jun 2024
Diagnosed : 10 Jun 2024 - Kevin Marson

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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.