



LIEBHERR

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Area
(336342)
Machine Id
LIEBHERR A918 109052-1508
Component
Rear Right Wheel Hub
Fluid
PETRO CANADA TRAXON 75W90 SYNTHETIC (--- GAL)

RECOMMENDATION

Confirm the source of the lubricant being utilized for top-up/fill.
Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		LH0278901	LH0237732	LH0239638
Sample Date		Client Info		09 Jan 2024	15 Jun 2023	30 Aug 2022
Machine Age	hrs	Client Info		4997	3985	3011
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	N/A
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>650	36	82	29
Chromium	ppm	ASTM D5185(m)	>4	0	<1	<1
Nickel	ppm	ASTM D5185(m)	>4	0	<1	0
Titanium	ppm	ASTM D5185(m)	>4	0	<1	<1
Silver	ppm	ASTM D5185(m)		0	0	0
Aluminum	ppm	ASTM D5185(m)	>25	<1	<1	<1
Lead	ppm	ASTM D5185(m)	>4	<1	0	<1
Copper	ppm	ASTM D5185(m)	>60	9	10	7
Tin	ppm	ASTM D5185(m)	>4	<1	<1	<1
Vanadium	ppm	ASTM D5185(m)		0	0	0
White Metal	scalar	Visual*	NONE	NONE	VLITE	NONE
Yellow Metal	scalar	Visual*	NONE	NONE	NONE	NONE

CONTAMINATION

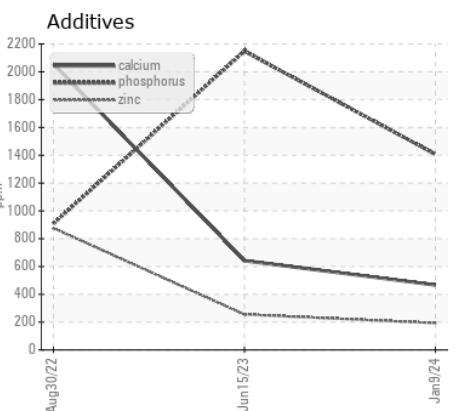
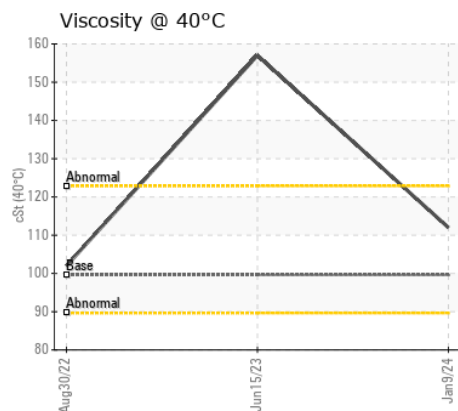
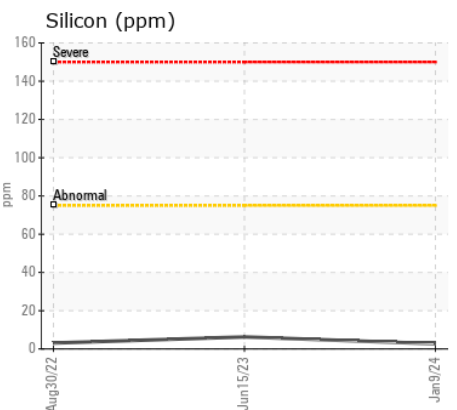
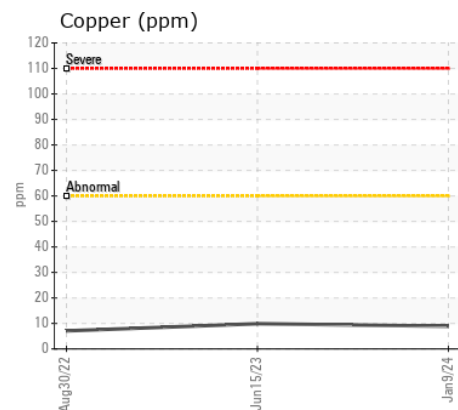
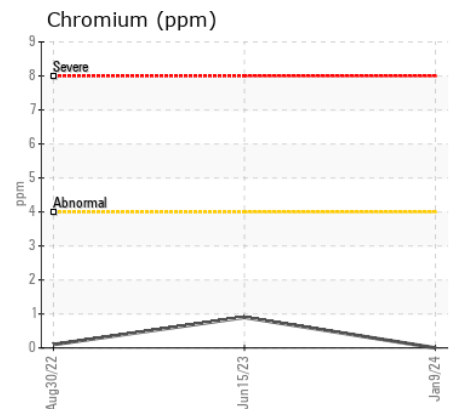
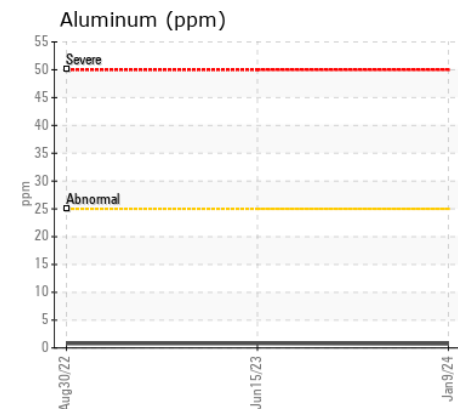
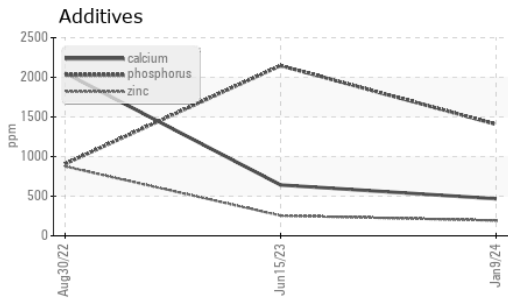
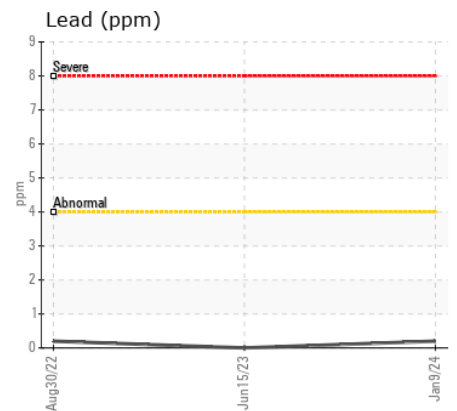
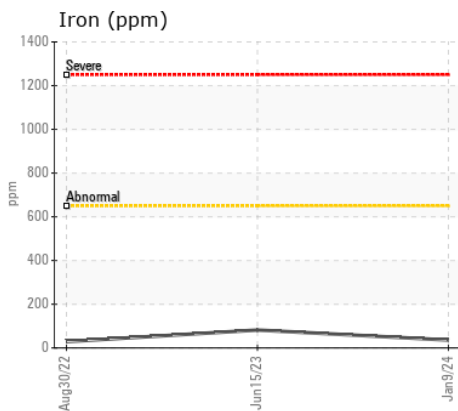
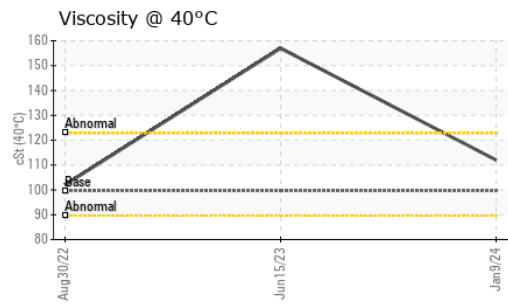
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>75	3	6	3
Potassium	ppm	ASTM D5185(m)	>20	1	<1	<1
Water		WC Method	>0.2	NEG	NEG	NEG
Silt	scalar	Visual*	NONE	NONE	VLITE	NONE
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	NEG	.2%

FLUID CONDITION

Additive levels indicate the addition of a different brand, or type of oil.
The condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185(m)		2	3	2
Boron	ppm	ASTM D5185(m)	328	195	27	49
Barium	ppm	ASTM D5185(m)	1	3	7	5
Molybdenum	ppm	ASTM D5185(m)		<1	<1	<1
Manganese	ppm	ASTM D5185(m)		<1	2	<1
Magnesium	ppm	ASTM D5185(m)	1	11	12	12
Calcium	ppm	ASTM D5185(m)	7	467	642	2056
Phosphorus	ppm	ASTM D5185(m)	1145	1407	2148	908
Zinc	ppm	ASTM D5185(m)	3	193	255	876
Sulfur	ppm	ASTM D5185(m)	17909	19087	20365	5739
Visc @ 40°C	cSt	ASTM D7279(m)	99.6	112	157	102



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 **THOMAS CAVANAGH CONSTRUCTION LTD**
Sample No. : LH0278901 **Received** : 23 Jan 2024 **RR # 2, 9094 CAVANAGH ROAD**
Lab Number : 02610659 **Diagnosed** : 23 Jan 2024 **ASHTON, ON**
Unique Number : 5711745 **Diagnostician** : Kevin Marson **CA K0A 1B0**
Test Package : MOB 1 **Contact:** Keith

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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