



LIEBHERR

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Machine Id
062154-1049
Component
Transmission (Manual)
Fluid
PETRO CANADA 10W40 (3 LTR)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		LH0291117	LH0123031	LH0202956
Sample Date		Client Info		13 May 2024	26 Oct 2023	22 Jun 2023
Machine Age	hrs	Client Info		12610	12421	12090
Oil Age	hrs	Client Info		0	0	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Not Changd	N/A	Not Changd
Filter Changed		Client Info		N/A	N/A	N/A
Sample Status				NORMAL	NORMAL	ABNORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>200	6	8	7
Chromium	ppm	ASTM D5185(m)	>5	0	0	0
Nickel	ppm	ASTM D5185(m)	>5	0	0	<1
Titanium	ppm	ASTM D5185(m)		0	0	0
Silver	ppm	ASTM D5185(m)	>7	0	<1	0
Aluminum	ppm	ASTM D5185(m)	>25	<1	<1	<1
Lead	ppm	ASTM D5185(m)	>45	0	<1	<1
Copper	ppm	ASTM D5185(m)	>225	7	13	9
Tin	ppm	ASTM D5185(m)	>10	0	0	0
Vanadium	ppm	ASTM D5185(m)		0	0	0
White Metal	scalar	Visual*	NONE	NONE	NONE	NONE
Yellow Metal	scalar	Visual*	NONE	NONE	NONE	NONE

CONTAMINATION

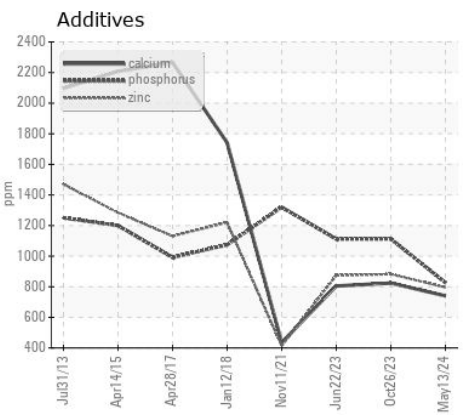
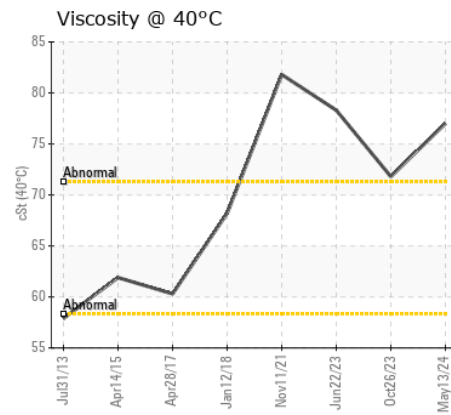
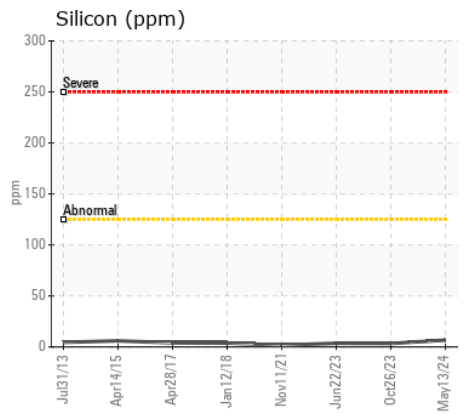
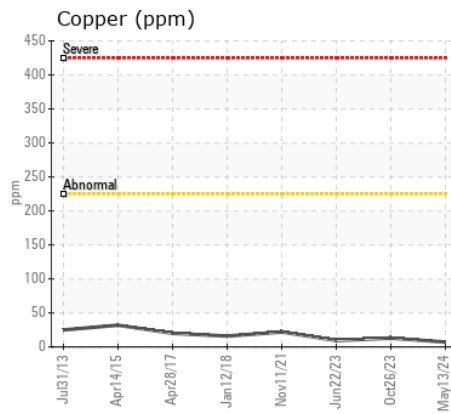
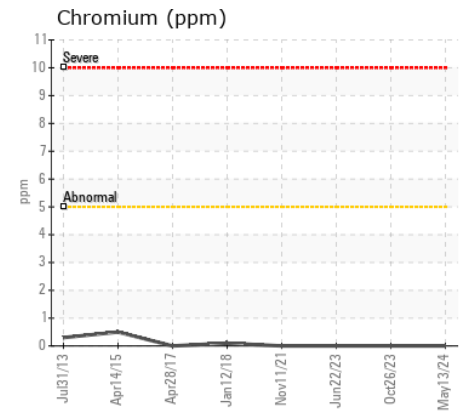
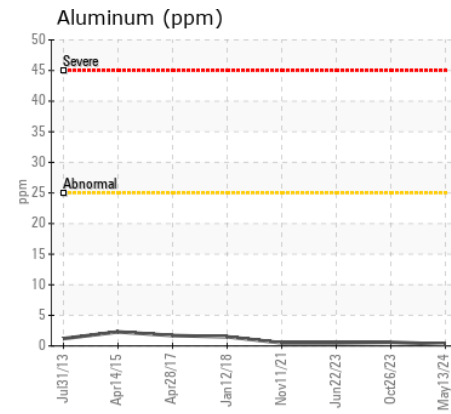
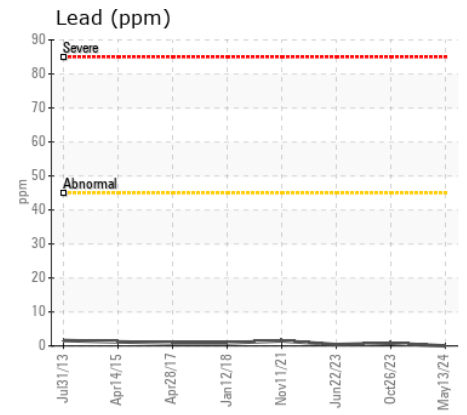
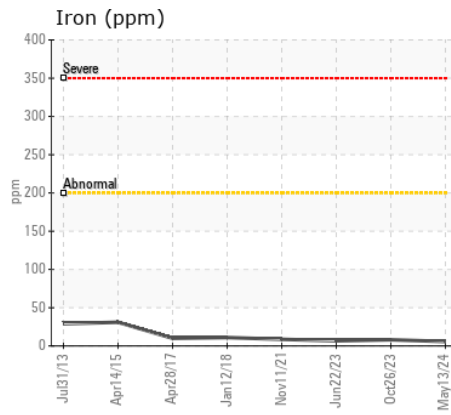
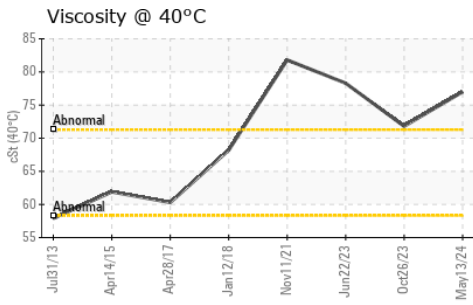
There is no indication of any contamination in the fluid.

Silicon	ppm	ASTM D5185(m)	>125	7	3	4
Potassium	ppm	ASTM D5185(m)	>20	0	0	0
Water		WC Method	>0.1	NEG	NEG	NEG
Silt	scalar	Visual*	NONE	NONE	NONE	NONE
Debris	scalar	Visual*	NONE	NONE	NONE	VLITE
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*	>0.1	NEG	NEG	NEG

FLUID CONDITION

The condition of the fluid is acceptable for the time in service.

Sodium	ppm	ASTM D5185(m)	>20	3	3	3
Boron	ppm	ASTM D5185(m)		37	66	64
Barium	ppm	ASTM D5185(m)		0	<1	0
Molybdenum	ppm	ASTM D5185(m)		36	42	40
Manganese	ppm	ASTM D5185(m)		1	1	1
Magnesium	ppm	ASTM D5185(m)		627	674	662
Calcium	ppm	ASTM D5185(m)		740	824	805
Phosphorus	ppm	ASTM D5185(m)		827	1113	1112
Zinc	ppm	ASTM D5185(m)		796	882	874
Sulfur	ppm	ASTM D5185(m)		4665	7518	7115
Visc @ 40°C	cSt	ASTM D7279(m)		77.0	71.8	▲ 78.3



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : LH0291117
Lab Number : 02635857
Unique Number : 5785019
Test Package : MOB 1
Received : 15 May 2024
Tested : 15 May 2024
Diagnosed : 16 May 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.