



LIEBHERR

OIL ANALYSIS REPORT



Area

(371127)

Machine Id

137622-1216

Component

Transmission

Fluid

PETRO CANADA SUPREME 5W30 (4 LTR)

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		LH0288309	LH0250746	---
Sample Date		Client Info		07 Jun 2024	09 Mar 2023	---
Machine Age	hrs	Client Info		4549	2000	---
Oil Age	hrs	Client Info		0	0	---
Filter Age	hrs	Client Info		0	0	---
Oil Changed		Client Info		Changed	Changed	---
Filter Changed		Client Info		N/A	N/A	---
Sample Status				NORMAL	NORMAL	---

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>148	23	39	---
Chromium	ppm	ASTM D5185(m)	>4	<1	<1	---
Nickel	ppm	ASTM D5185(m)	>4	<1	<1	---
Titanium	ppm	ASTM D5185(m)		0	<1	---
Silver	ppm	ASTM D5185(m)		<1	0	---
Aluminum	ppm	ASTM D5185(m)	>5	2	2	---
Lead	ppm	ASTM D5185(m)	>203	0	<1	---
Copper	ppm	ASTM D5185(m)	>520	17	22	---
Tin	ppm	ASTM D5185(m)	>7	<1	2	---
Vanadium	ppm	ASTM D5185(m)		0	0	---
White Metal	scalar	Visual*	NONE	NONE	NONE	---
Yellow Metal	scalar	Visual*	NONE	NONE	VLITE	---

CONTAMINATION

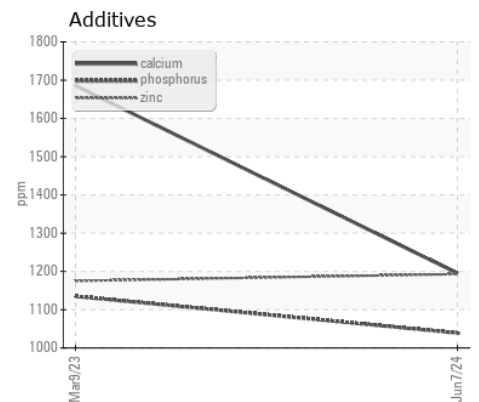
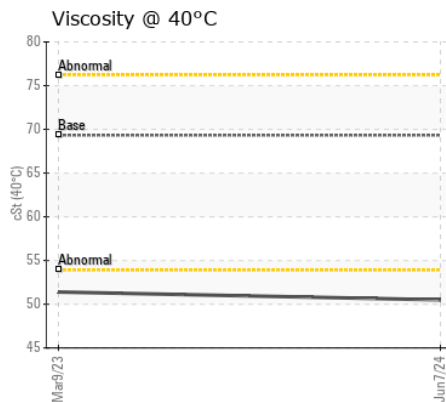
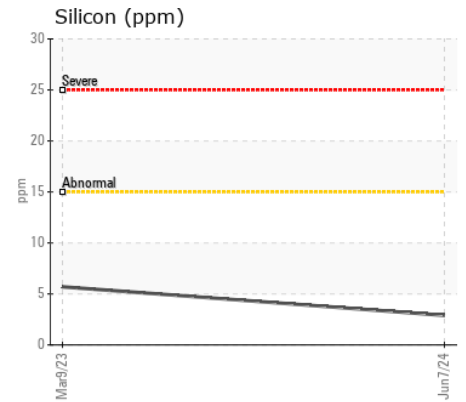
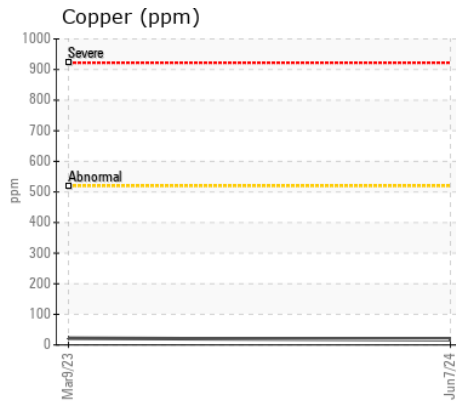
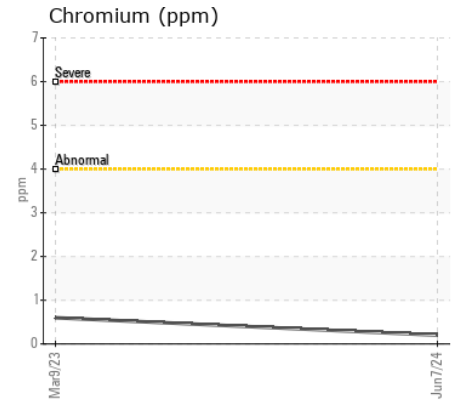
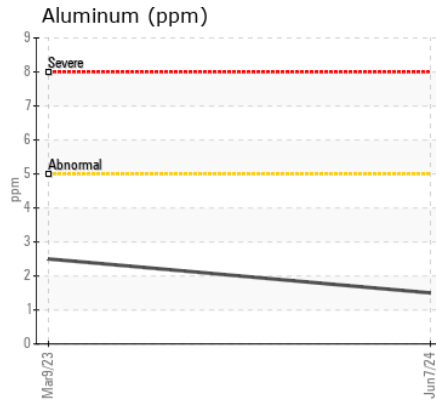
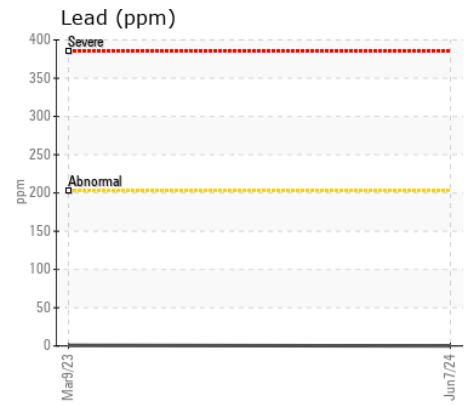
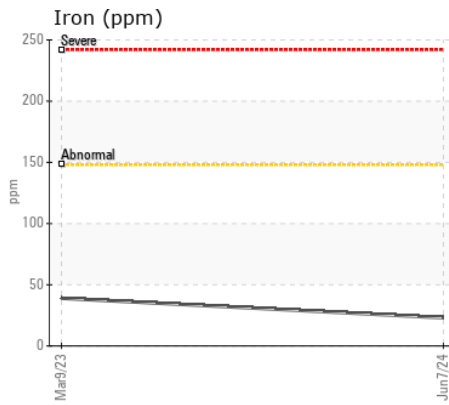
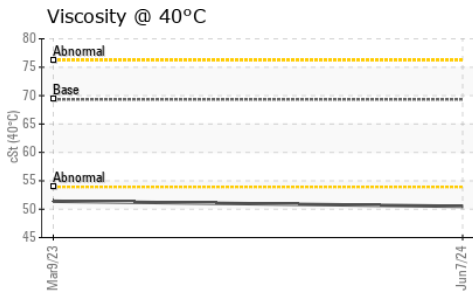
There is no indication of any contamination in the fluid.

Silicon	ppm	ASTM D5185(m)	>15	3	6	---
Potassium	ppm	ASTM D5185(m)	>20	<1	<1	---
Water		WC Method	>0.1	NEG	NEG	---
Silt	scalar	Visual*	NONE	NONE	VLITE	---
Debris	scalar	Visual*	NONE	NONE	VLITE	---
Sand/Dirt	scalar	Visual*	NONE	NONE	NONE	---
Appearance	scalar	Visual*	NORML	NORML	NORML	---
Odor	scalar	Visual*	NORML	NORML	NORML	---
Emulsified Water	scalar	Visual*	>0.1	NEG	NEG	---

FLUID CONDITION

Viscosity of sample indicates oil is within SAE 10W range, advise investigate. The condition of the fluid is acceptable for the time in service.

Sodium	ppm	ASTM D5185(m)		8	16	---
Boron	ppm	ASTM D5185(m)	186	37	32	---
Barium	ppm	ASTM D5185(m)	<1	<1	<1	---
Molybdenum	ppm	ASTM D5185(m)	79	52	42	---
Manganese	ppm	ASTM D5185(m)	0	12	27	---
Magnesium	ppm	ASTM D5185(m)	578	947	752	---
Calcium	ppm	ASTM D5185(m)	1002	1195	1686	---
Phosphorus	ppm	ASTM D5185(m)	745	1039	1135	---
Zinc	ppm	ASTM D5185(m)	837	1193	1175	---
Sulfur	ppm	ASTM D5185(m)	2502	3461	4263	---
Visc @ 40°C	cSt	ASTM D7279(m)	69.33	50.5	51.4	---



ISO 17025:2017
Accredited
Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9

Sample No. : LH0288309

Lab Number : 02644623

Unique Number : 5802162

Test Package : MOB 1

Received : 28 Jun 2024

Tested : 28 Jun 2024

Diagnosed : 28 Jun 2024 - Kevin Marson

American Iron and Metal

100 INDUSTRIAL ROAD

NORTH BAY, ON

CA P1B 8K3

Contact: Service Manager

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.

T:

F: