



WEAR	ABNORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Area
Scoop 6 Yard
Machine Id
LHD6102
Component
Front Left Wheel Hub
Fluid
PETRO CANADA TRAXON 80W90 (4 LTR)

RECOMMENDATION

We recommend that you drain the oil from the component if this has not already been done. Confirm the source of the lubricant being utilized for top-up/fill. We recommend an early resample to monitor this condition.

WEAR

Copper ppm levels are abnormal. A sharp increase in the copper level is noted. Bearing and/or bushing wear is indicated.

CONTAMINATION

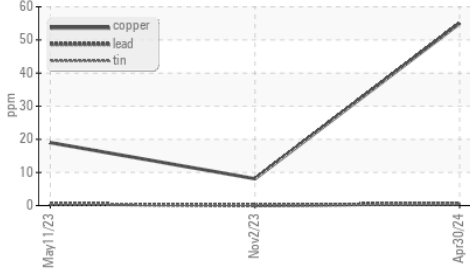
There is no indication of any contamination in the oil.

FLUID CONDITION

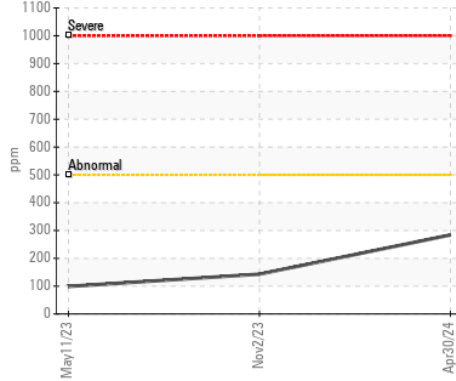
Additive levels indicate the addition of a different brand, or type of oil. The oil is no longer serviceable as a result of the abnormal and/or severe wear.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		PC0084672	PC0075091	PC0066828
Sample Date		Client Info		30 Apr 2024	02 Nov 2023	11 May 2023
Machine Age	hrs	Client Info		4879	3868	2662
Oil Age	hrs	Client Info		0	0	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		N/A	N/A	N/A
Filter Changed		Client Info		N/A	N/A	N/A
Sample Status				ABNORMAL	NORMAL	NORMAL
Iron	ppm	ASTM D5185(m)	>500	284	143	99
Chromium	ppm	ASTM D5185(m)	>8	2	<1	<1
Nickel	ppm	ASTM D5185(m)	>5	<1	<1	<1
Titanium	ppm	ASTM D5185(m)		<1	0	0
Silver	ppm	ASTM D5185(m)		0	<1	0
Aluminum	ppm	ASTM D5185(m)	>5	3	<1	<1
Lead	ppm	ASTM D5185(m)	>5	<1	0	<1
Copper	ppm	ASTM D5185(m)	>50	▲ 55	8	19
Tin	ppm	ASTM D5185(m)		<1	0	<1
Vanadium	ppm	ASTM D5185(m)		0	0	0
White Metal	scalar	Visual*	NONE	VLITE	NONE	VLITE
Yellow Metal	scalar	Visual*	NONE	NONE	NONE	NONE
Silicon	ppm	ASTM D5185(m)	>25	10	3	3
Potassium	ppm	ASTM D5185(m)	>20	2	0	<1
Water		WC Method	>0.2	NEG	NEG	NEG
Silt	scalar	Visual*	NONE	LIGHT	NONE	NONE
Debris	scalar	Visual*	NONE	VLITE	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	NEG
Sodium	ppm	ASTM D5185(m)		1	<1	<1
Boron	ppm	ASTM D5185(m)	243	6	6	31
Barium	ppm	ASTM D5185(m)	1	<1	4	0
Molybdenum	ppm	ASTM D5185(m)		0	0	<1
Manganese	ppm	ASTM D5185(m)		4	1	1
Magnesium	ppm	ASTM D5185(m)	2	3	<1	3
Calcium	ppm	ASTM D5185(m)	6	84	23	32
Phosphorus	ppm	ASTM D5185(m)	987	534	634	841
Zinc	ppm	ASTM D5185(m)	1	52	17	18
Sulfur	ppm	ASTM D5185(m)	21530	18255	22458	21447
Visc @ 40°C	cSt	ASTM D7279(m)	141.0	138	139	138
Visc @ 100°C	cSt	ASTM D7279(m)	15.06	14.4	14.5	14.5
Viscosity Index (VI)	Scale	ASTM D2270*	108	102	102	103

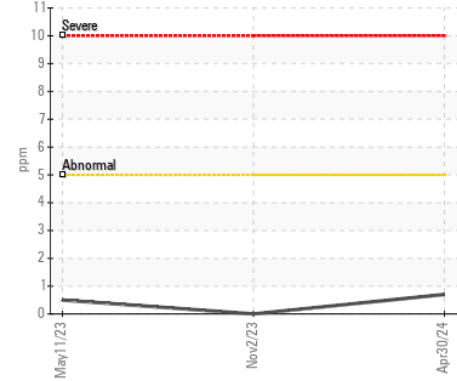
▲ Non-ferrous Metals



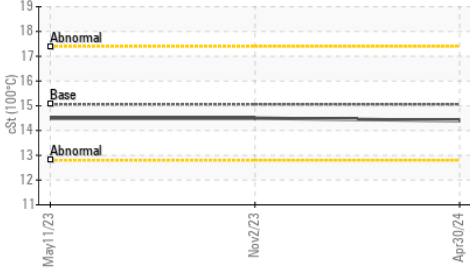
Iron (ppm)



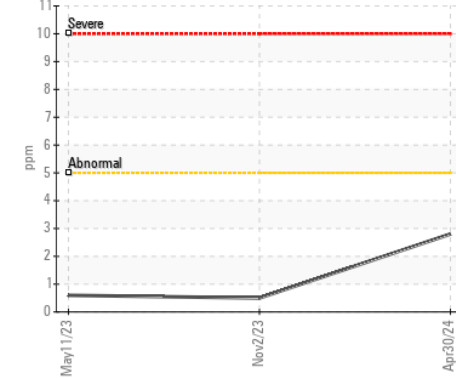
Lead (ppm)



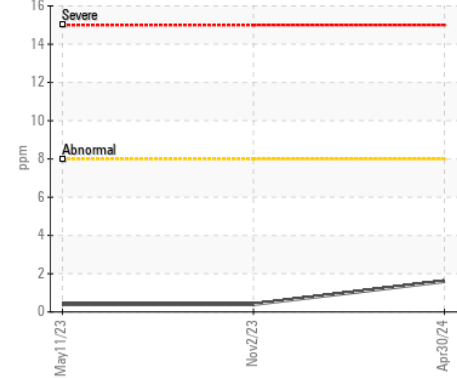
Viscosity @ 100°C



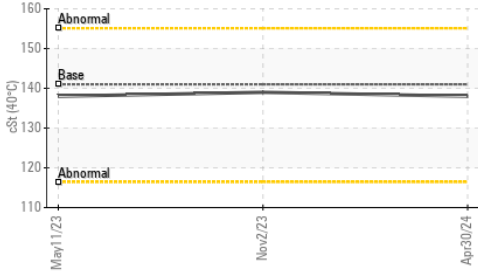
Aluminum (ppm)



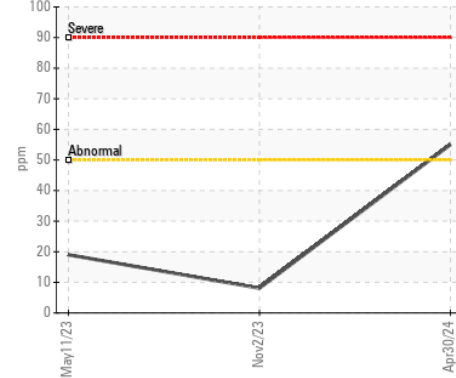
Chromium (ppm)



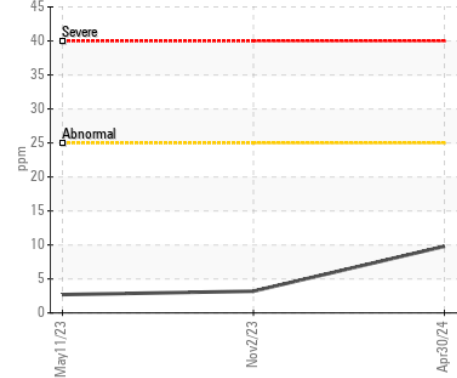
Viscosity @ 40°C



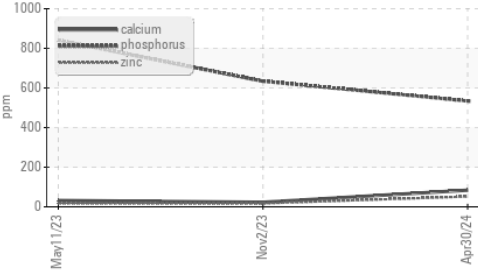
▲ Copper (ppm)



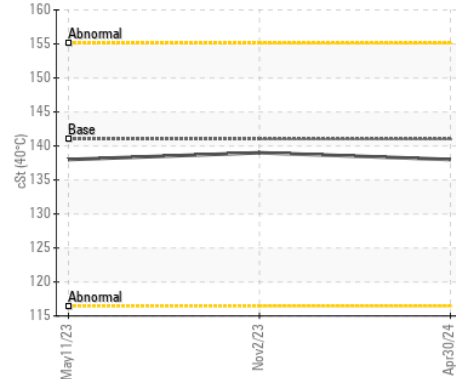
Silicon (ppm)



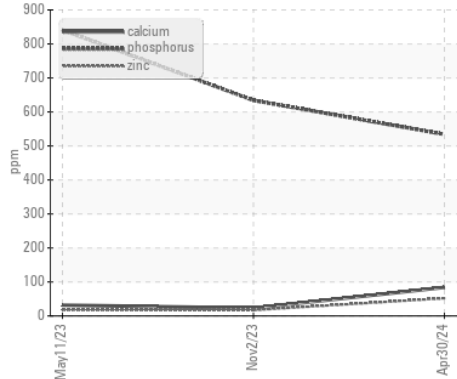
Additives



Viscosity @ 40°C



Additives



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : PC0084672 **Received** : 29 May 2024
Lab Number : 02638566 **Tested** : 30 May 2024
Unique Number : 5787728 **Diagnosed** : 30 May 2024 - Kevin Marson
Test Package : MOB 1 (Additional Tests: KV100, VI)

Lakeshore Gold Timmins West

Timmins, ON
CA

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F:

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.