



WEAR	<b>NORMAL</b>
CONTAMINATION	<b>NORMAL</b>
FLUID CONDITION	<b>ABNORMAL</b>



Area  
**Scoop 10 Yard**  
Machine Id  
**LHD1502**  
Component  
**Rear Axle**  
Fluid  
**PETRO CANADA TRAXON 80W90 (--- LTR)**

**RECOMMENDATION**

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

**WEAR**

All component wear rates are normal.

**CONTAMINATION**

There is no indication of any contamination in the oil.

**FLUID CONDITION**

Viscosity of sample indicates oil is within SAE 75W90 range, advise investigate. This plus the additive levels indicates that this is not the same brand, or type of oil as reported. The condition of the oil is acceptable for the time in service.

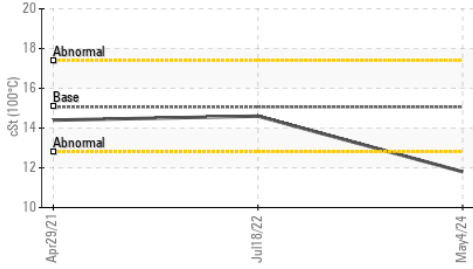
Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>PC0048750</b>	PC0047744	PC0046791
Sample Date		Client Info		<b>04 May 2024</b>	18 Jul 2022	29 Apr 2021
Machine Age	hrs	Client Info		<b>2699</b>	6438	1958
Oil Age	hrs	Client Info		<b>0</b>	0	0
Filter Age	hrs	Client Info		<b>0</b>	0	0
Oil Changed		Client Info		<b>N/A</b>	Changed	N/A
Filter Changed		Client Info		<b>N/A</b>	Changed	N/A
Sample Status				<b>ABNORMAL</b>	NORMAL	NORMAL

Iron	ppm	ASTM D5185(m)	>500	<b>228</b>	327	261
Chromium	ppm	ASTM D5185(m)	>10	<b>2</b>	3	3
Nickel	ppm	ASTM D5185(m)	>10	<b>&lt;1</b>	<1	<1
Titanium	ppm	ASTM D5185(m)		<b>&lt;1</b>	<1	0
Silver	ppm	ASTM D5185(m)		<b>0</b>	0	<1
Aluminum	ppm	ASTM D5185(m)	>25	<b>8</b>	3	<1
Lead	ppm	ASTM D5185(m)	>25	<b>0</b>	0	0
Copper	ppm	ASTM D5185(m)	>50	<b>5</b>	2	1
Tin	ppm	ASTM D5185(m)	>10	<b>0</b>	0	0
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	0	0
White Metal	scalar	Visual*	NONE	<b>NONE</b>	NONE	LIGHT
Yellow Metal	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE

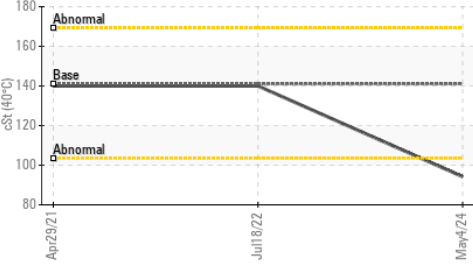
Silicon	ppm	ASTM D5185(m)	>75	<b>40</b>	13	5
Potassium	ppm	ASTM D5185(m)	>20	<b>3</b>	3	<1
Water		WC Method	>0.2	<b>NEG</b>	NEG	NEG
Silt	scalar	Visual*	NONE	<b>LIGHT</b>	LIGHT	NONE
Debris	scalar	Visual*	NONE	<b>VLITE</b>	NONE	NONE
Sand/Dirt	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE
Appearance	scalar	Visual*	NORML	<b>NORML</b>	NORML	NORML
Odor	scalar	Visual*	NORML	<b>NORML</b>	NORML	NORML
Emulsified Water	scalar	Visual*	>0.2	<b>NEG</b>	NEG	NEG

Sodium	ppm	ASTM D5185(m)		<b>3</b>	2	<1
Boron	ppm	ASTM D5185(m)	243	<b>153</b>	42	42
Barium	ppm	ASTM D5185(m)	1	<b>&lt;1</b>	1	<1
Molybdenum	ppm	ASTM D5185(m)		<b>0</b>	<1	<1
Manganese	ppm	ASTM D5185(m)		<b>2</b>	5	4
Magnesium	ppm	ASTM D5185(m)	2	<b>10</b>	4	<1
Calcium	ppm	ASTM D5185(m)	6	<b>1206</b>	17	7
Phosphorus	ppm	ASTM D5185(m)	987	<b>981</b>	639	595
Zinc	ppm	ASTM D5185(m)	1	<b>468</b>	10	5
Sulfur	ppm	ASTM D5185(m)	21530	<b>12548</b>	22632	19516
Visc @ 40°C	cSt	ASTM D7279(m)	141.0	<b>94.2</b>	140	140
Visc @ 100°C	cSt	ASTM D7279(m)	15.06	<b>11.8</b>	14.6	14.4
Viscosity Index (VI)	Scale	ASTM D2270*	108	<b>115</b>	103	100

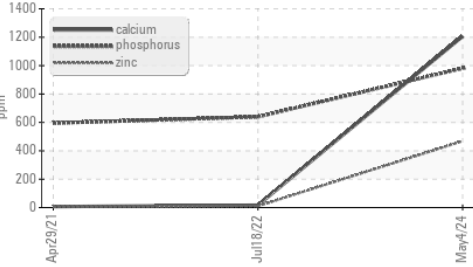
▲ Viscosity @ 100°C



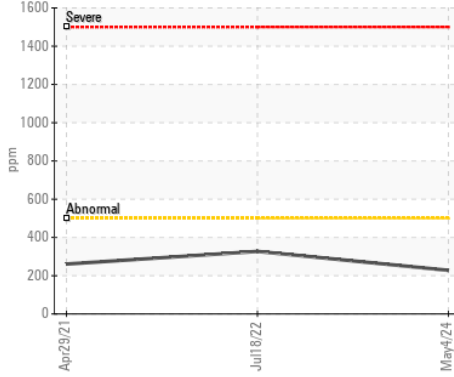
▲ Viscosity @ 40°C



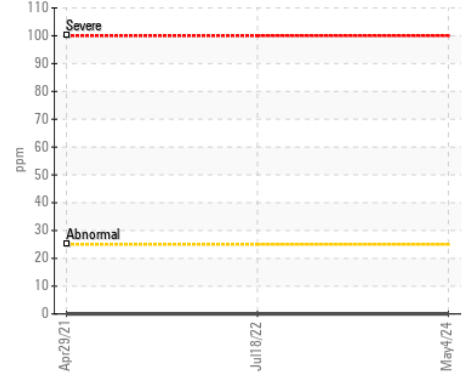
● Additives



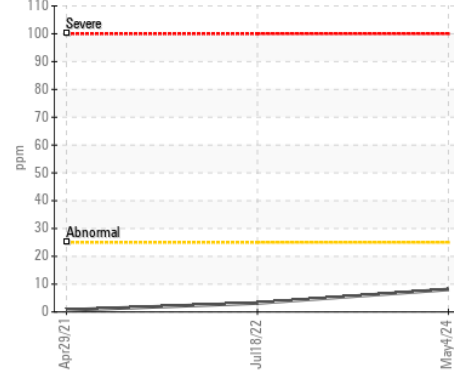
Iron (ppm)



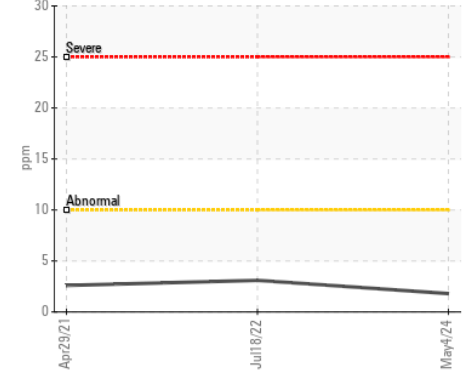
Lead (ppm)



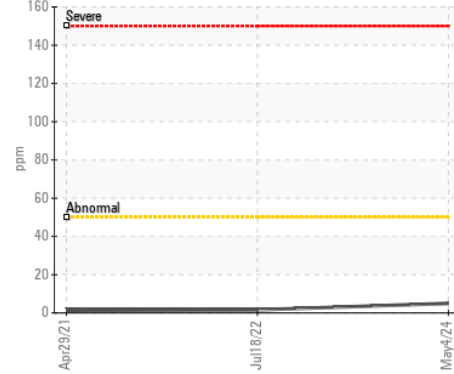
Aluminum (ppm)



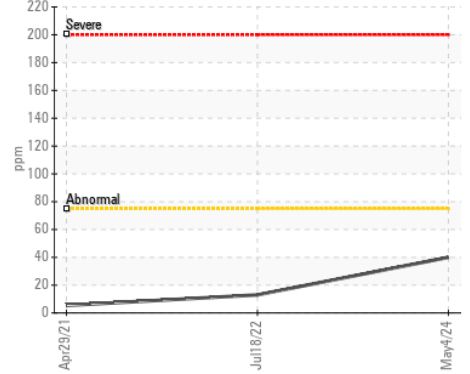
Chromium (ppm)



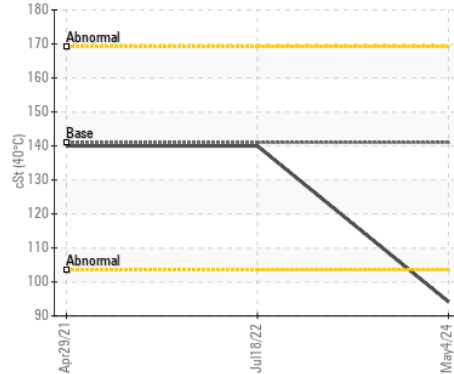
Copper (ppm)



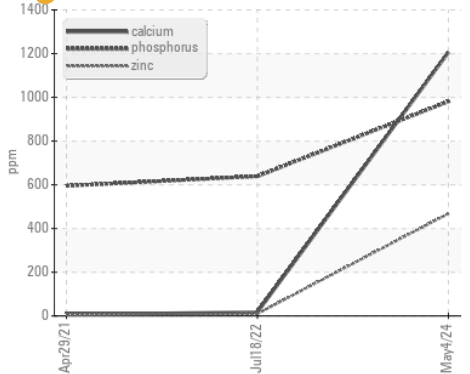
Silicon (ppm)



▲ Viscosity @ 40°C



● Additives



ISO 17025:2017  
Accredited  
Laboratory

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

Sample No. : PC0048750

Lab Number : 02638671

Unique Number : 5787833

Test Package : MOB 1 ( Additional Tests: KV100, VI )

Received : 29 May 2024

Tested : 30 May 2024

Diagnosed : 31 May 2024 - Kevin Marson

Lakeshore Gold Timmins West

Timmins, ON  
CA

Contact: Dale Arseneau  
darseneau@ca.panamericansilver.com

T: (705)269-4344

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.