



Area  
**Scoop 10 Yard**  
Machine Id  
**LHD1502**  
Component  
**Front Left Final Drive**  
Fluid  
**PETRO CANADA TRAXON 80W90 (--- LTR)**

**RECOMMENDATION**

We advise that you check for the source of water entry. We advise that you check all areas where dirt can enter the system. We recommend that you drain the oil from the component if this has not already been done. We recommend an early resample to monitor this condition.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>PC0048506</b>	PC0046787	---
Sample Date		Client Info		<b>04 May 2024</b>	29 Apr 2021	---
Machine Age	hrs	Client Info		<b>2699</b>	1958	---
Oil Age	hrs	Client Info		<b>0</b>	0	---
Filter Age	hrs	Client Info		<b>0</b>	0	---
Oil Changed		Client Info		<b>N/A</b>	N/A	---
Filter Changed		Client Info		<b>N/A</b>	N/A	---
Sample Status				<b>SEVERE</b>	NORMAL	---

**WEAR**

Chromium and iron ppm levels are abnormal. Aluminum ppm levels are noted. Gear wear is indicated.

PQ	UOM	Method	Limit/Abn	Current	History1	History2
		ASTM D8184*		<b>425</b>	---	---
Iron	ppm	ASTM D5185(m)	>500	<b>▲ 1431</b>	46	---
Chromium	ppm	ASTM D5185(m)	>10	<b>▲ 15</b>	<1	---
Nickel	ppm	ASTM D5185(m)	>10	<b>5</b>	<1	---
Titanium	ppm	ASTM D5185(m)		<b>10</b>	<1	---
Silver	ppm	ASTM D5185(m)		<b>0</b>	<1	---
Aluminum	ppm	ASTM D5185(m)	>25	<b>● 123</b>	13	---
Lead	ppm	ASTM D5185(m)	>25	<b>7</b>	1	---
Copper	ppm	ASTM D5185(m)	>50	<b>278</b>	44	---
Tin	ppm	ASTM D5185(m)	>10	<b>6</b>	<1	---
Vanadium	ppm	ASTM D5185(m)		<b>&lt;1</b>	<1	---
White Metal	scalar	Visual*	NONE	<b>VLITE</b>	NONE	---
Yellow Metal	scalar	Visual*	NONE	<b>NONE</b>	NONE	---

**CONTAMINATION**

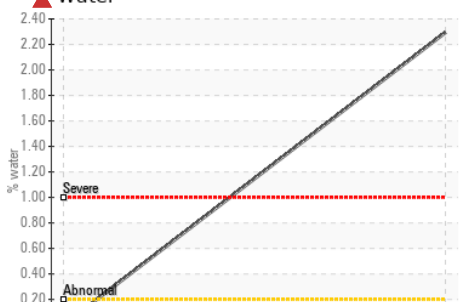
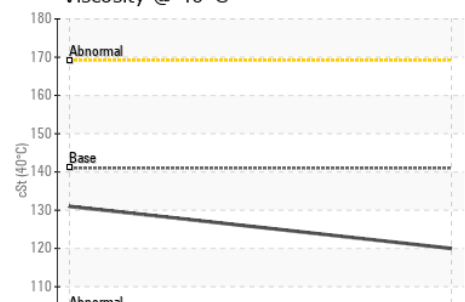
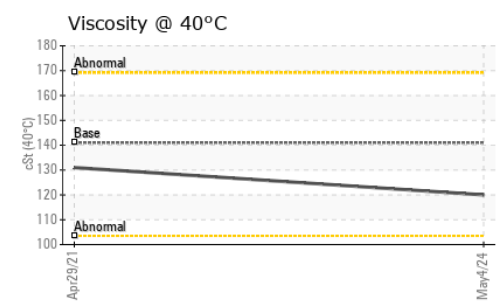
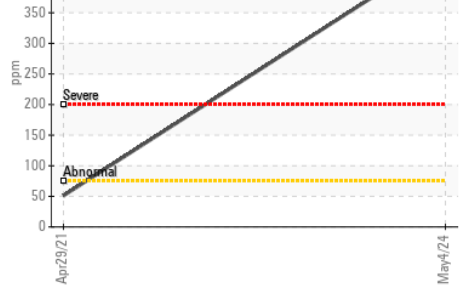
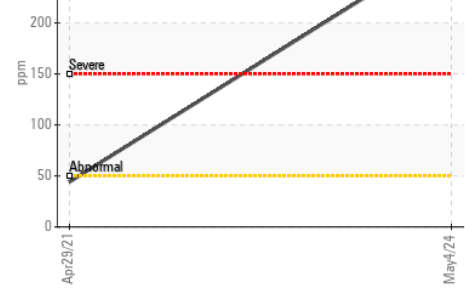
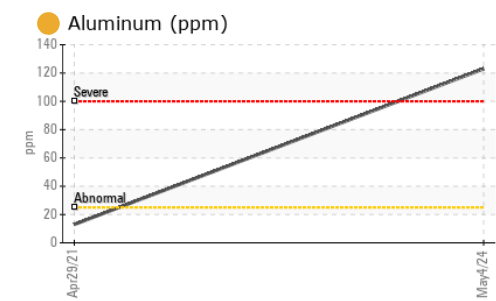
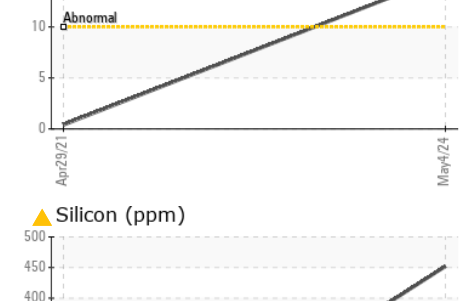
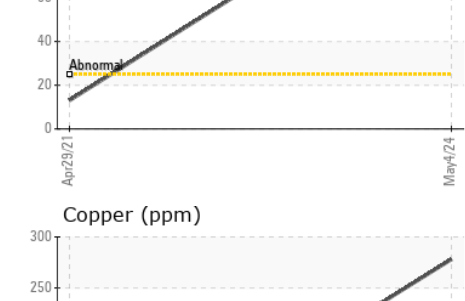
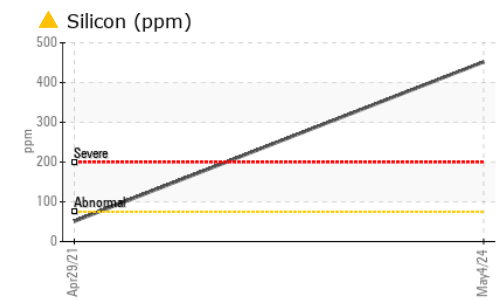
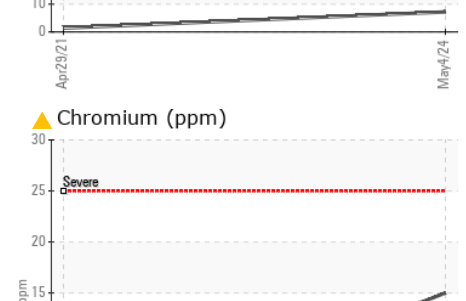
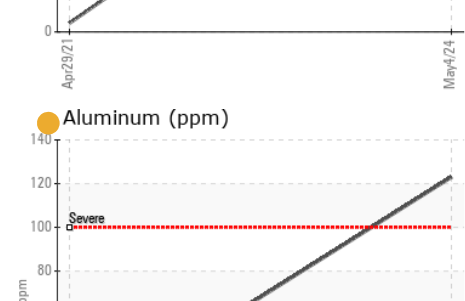
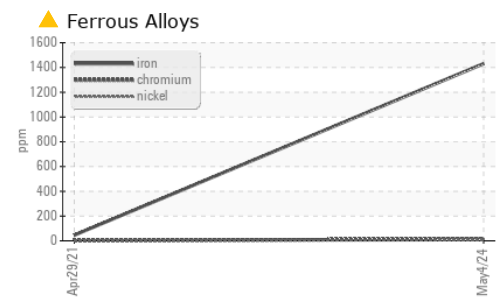
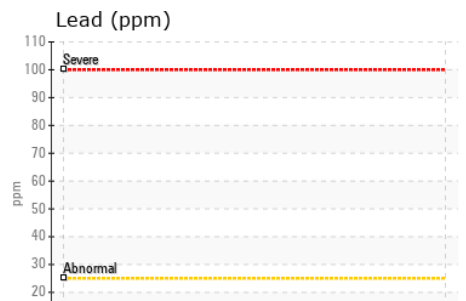
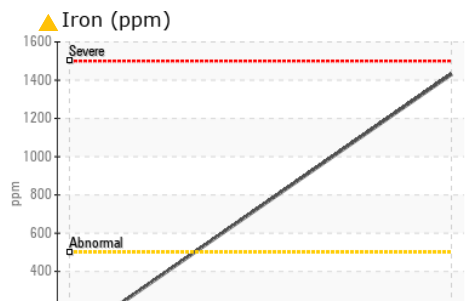
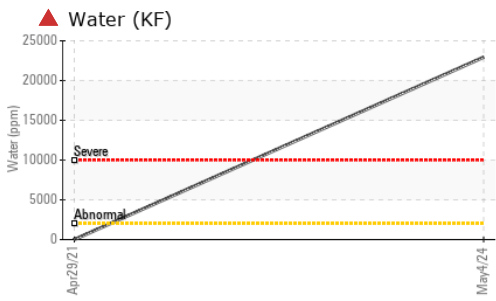
There is a high concentration of water present in the oil. Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress. High amount of ingressed dirt has caused abrasive wear to the component.

Silicon	ppm	ASTM D5185(m)	>75	<b>▲ 452</b>	51	---
Potassium	ppm	ASTM D5185(m)	>20	<b>48</b>	8	---
Water	%	ASTM D6304*	>0.2	<b>▲ 2.294</b>	---	---
ppm Water	ppm	ASTM D6304*	>2000	<b>▲ 22941</b>	---	---
Silt	scalar	Visual*	NONE	<b>LIGHT</b>	LTMOD	---
Debris	scalar	Visual*	NONE	<b>VLITE</b>	NONE	---
Sand/Dirt	scalar	Visual*	NONE	<b>NONE</b>	NONE	---
Appearance	scalar	Visual*	NORML	<b>▲ HAZY</b>	NORML	---
Odor	scalar	Visual*	NORML	<b>NORML</b>	NORML	---
Emulsified Water	scalar	Visual*	>0.2	<b>▲ .2%</b>	NEG	---

**FLUID CONDITION**

The oil is no longer serviceable as a result of the abnormal and/or severe wear.

Sodium	ppm	ASTM D5185(m)		<b>56</b>	8	---
Boron	ppm	ASTM D5185(m)	243	<b>155</b>	29	---
Barium	ppm	ASTM D5185(m)	1	<b>4</b>	<1	---
Molybdenum	ppm	ASTM D5185(m)		<b>0</b>	<1	---
Manganese	ppm	ASTM D5185(m)		<b>18</b>	1	---
Magnesium	ppm	ASTM D5185(m)	2	<b>64</b>	9	---
Calcium	ppm	ASTM D5185(m)	6	<b>769</b>	32	---
Phosphorus	ppm	ASTM D5185(m)	987	<b>1018</b>	536	---
Zinc	ppm	ASTM D5185(m)	1	<b>341</b>	10	---
Sulfur	ppm	ASTM D5185(m)	21530	<b>15304</b>	22196	---
Visc @ 40°C	cSt	ASTM D7279(m)	141.0	<b>120</b>	131	---
Visc @ 100°C	cSt	ASTM D7279(m)	15.06	<b>8.4</b>	13.7	---
Viscosity Index (VI)	Scale	ASTM D2270*	108	<b>---</b>	100	---



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : PC0048506 **Received** : 29 May 2024  
**Lab Number** : 02638665 **Tested** : 31 May 2024  
**Unique Number** : 5787827 **Diagnosed** : 31 May 2024 - Kevin Marson  
**Test Package** : MOB 1 ( Additional Tests: KF, KV100, PQ, 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.