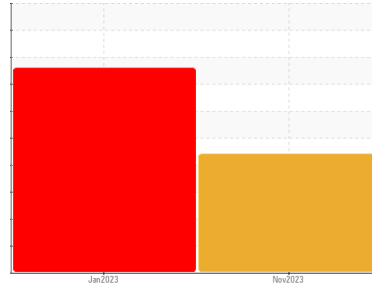


Area
Tractors
Machine Id
UTL003
Component
Front Right Wheel Hub
Fluid
PETRO CANADA TRAXON 80W90 (--- LTR)



DIAGNOSIS

Recommendation

We advise that you check for the source of water entry. 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. The fluid was specified as PETRO CANADA TRAXON 80W90, however, a fluid match indicates that this fluid is SAE 90 Gear Oil. Please confirm the oil type and grade on your next sample.

Wear

All component wear rates are normal.

Contamination

There is a high concentration of water present in the oil.

Fluid Condition

Viscosity of sample indicates oil is within SAE 90 range, advise investigate. This plus the additive levels indicates that this is not the same brand, or type of oil as reported. The oil is no longer serviceable due to the presence of contaminants.

SAMPLE INFORMATION

method	limit/base	current	history1	history2
Sample Number	Client Info	PC0075076	PC0066958	---
Sample Date	Client Info	14 Nov 2023	25 Jan 2023	---
Machine Age	hrs	Client Info	0	---
Oil Age	hrs	Client Info	0	---
Oil Changed	Client Info	N/A	N/A	---
Sample Status		SEVERE	ABNORMAL	---

WEAR METALS

method	limit/base	current	history1	history2		
Iron	ppm	ASTM D5185(m)	>500	385	▲ 631	---
Chromium	ppm	ASTM D5185(m)	>8	2	4	---
Nickel	ppm	ASTM D5185(m)	>5	5	▲ 10	---
Titanium	ppm	ASTM D5185(m)		<1	4	---
Silver	ppm	ASTM D5185(m)		<1	0	---
Aluminum	ppm	ASTM D5185(m)	>5	17	▲ 35	---
Lead	ppm	ASTM D5185(m)	>5	3	4	---
Copper	ppm	ASTM D5185(m)	>50	35	31	---
Tin	ppm	ASTM D5185(m)		2	3	---
Antimony	ppm	ASTM D5185(m)	>5	<1	1	---
Vanadium	ppm	ASTM D5185(m)		0	<1	---
Beryllium	ppm	ASTM D5185(m)		0	0	---
Cadmium	ppm	ASTM D5185(m)		0	0	---

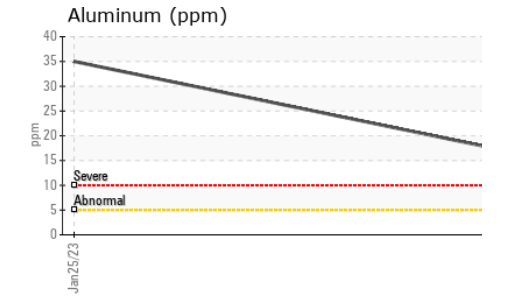
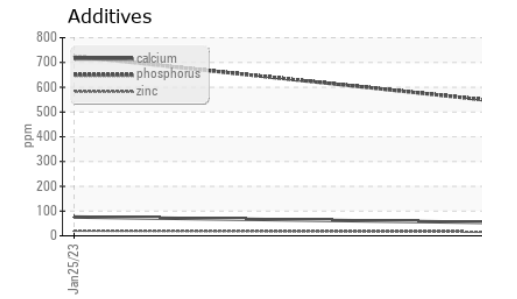
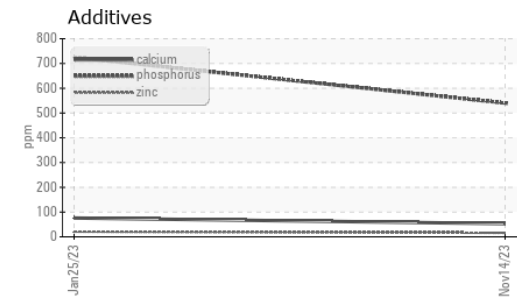
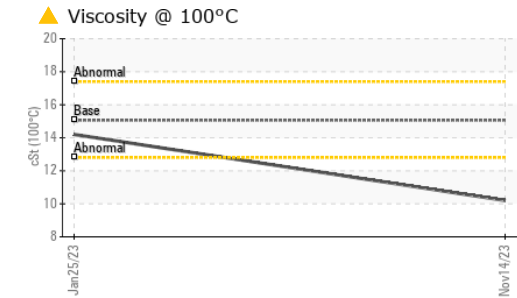
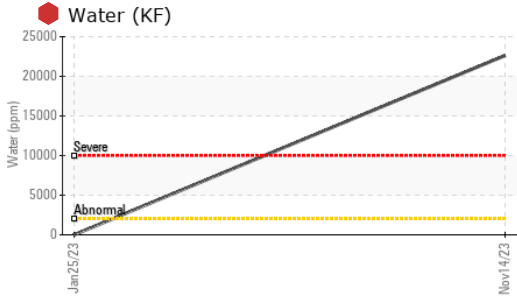
ADDITIVES

method	limit/base	current	history1	history2		
Boron	ppm	ASTM D5185(m)	243	13	32	---
Barium	ppm	ASTM D5185(m)	1	<1	0	---
Molybdenum	ppm	ASTM D5185(m)		0	1	---
Manganese	ppm	ASTM D5185(m)		3	5	---
Magnesium	ppm	ASTM D5185(m)	2	8	17	---
Calcium	ppm	ASTM D5185(m)	6	53	76	---
Phosphorus	ppm	ASTM D5185(m)	987	540	725	---
Zinc	ppm	ASTM D5185(m)	1	16	21	---
Sulfur	ppm	ASTM D5185(m)	21530	22900	21923	---
Lithium	ppm	ASTM D5185(m)		<1	12	---

CONTAMINANTS

method	limit/base	current	history1	history2		
Silicon	ppm	ASTM D5185(m)	>25	59	▲ 127	---
Sodium	ppm	ASTM D5185(m)		10	15	---
Potassium	ppm	ASTM D5185(m)	>20	4	11	---
Water	%	ASTM D6304*	>0.2	● 2.263	NEG	---
ppm Water	ppm	ASTM D6304*	>2000	● 22632	---	---

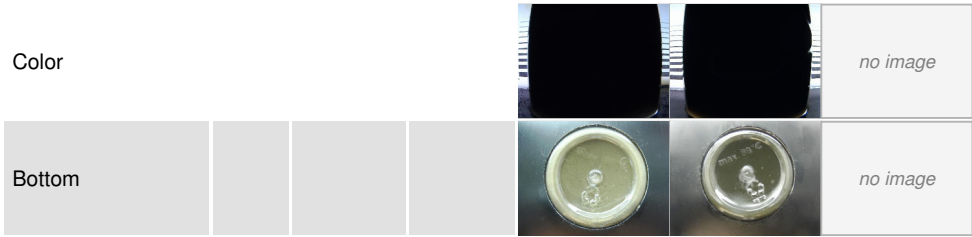
OIL ANALYSIS REPORT



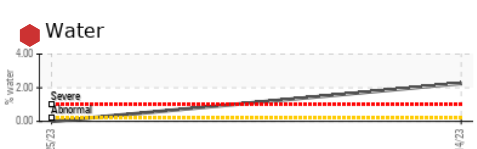
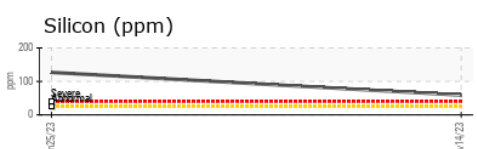
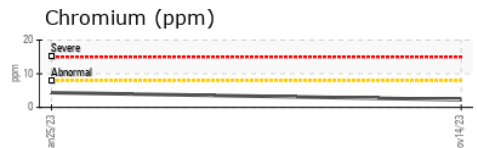
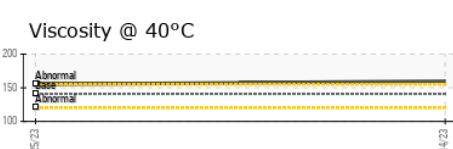
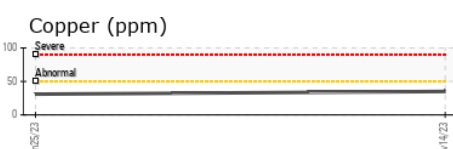
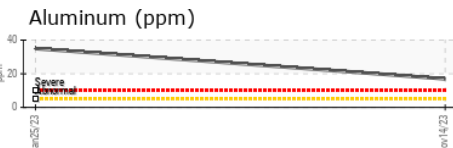
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	NONE	---
Yellow Metal	scalar	Visual*	NONE	NONE	---
Precipitate	scalar	Visual*	NONE	NONE	---
Silt	scalar	Visual*	NONE	NONE	---
Debris	scalar	Visual*	NONE	NONE	---
Sand/Dirt	scalar	Visual*	NONE	NONE	---
Appearance	scalar	Visual*	NORML	▲ MILKY	NORML
Odor	scalar	Visual*	NORML	NORML	---
Emulsified Water	scalar	Visual*	>0.2	▲ .5%	.2%
Free Water	scalar	Visual*		NEG	▲ 1%

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	141.0	160	155
Visc @ 100°C	cSt	ASTM D7279(m)	15.06	▲ 10.2	14.2
Viscosity Index (VI)	Scale	ASTM D2270*	108	---	87

SAMPLE IMAGES



GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : PC0075076 **Received** : 21 Nov 2023
Lab Number : 02597946 **Diagnosed** : 23 Nov 2023
Unique Number : 5683026 **Diagnostician** : Kevin Marson
Test Package : MOB 1 (Additional Tests: KF, KV100, VI)

Lakeshore Gold Timmins West
 Timmins, ON
 CA
 Contact: Adam Koscielak
 adam.koscielak@HFSinclair.com
 T:
 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.