



WEAR	ABNORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	NORMAL

Machine Id

EX0354

Component

Rear Right Final Drive

Fluid

PETRO CANADA TRAXON E SYNTHETIC 80W-140 (5 LTR)

RECOMMENDATION

We advise that you check all areas where dirt can enter the system. The oil change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		GFL0113439	GFL0113408	---
Sample Date		Client Info		20 Jun 2024	08 Apr 2024	---
Machine Age	hrs	Client Info		25281	24807	---
Oil Age	hrs	Client Info		474	1000	---
Filter Age	hrs	Client Info		474	1000	---
Oil Changed		Client Info		Changed	Not Changd	---
Filter Changed		Client Info		N/A	N/A	---
Sample Status				ABNORMAL	NORMAL	---

WEAR

Chromium ppm levels are abnormal. Aluminum ppm levels are noted. A sharp increase in the chromium level is noted.

Iron	ppm	ASTM D5185(m)	>500	391	202	---
Chromium	ppm	ASTM D5185(m)	>10	▲ 15	7	---
Nickel	ppm	ASTM D5185(m)	>10	<1	<1	---
Titanium	ppm	ASTM D5185(m)		5	3	---
Silver	ppm	ASTM D5185(m)		<1	0	---
Aluminum	ppm	ASTM D5185(m)	>25	● 94	62	---
Lead	ppm	ASTM D5185(m)	>25	0	0	---
Copper	ppm	ASTM D5185(m)	>50	1	<1	---
Tin	ppm	ASTM D5185(m)	>10	0	0	---
Vanadium	ppm	ASTM D5185(m)		<1	0	---
White Metal	scalar	Visual*	NONE	NONE	NONE	---
Yellow Metal	scalar	Visual*	NONE	VLITE	NONE	---

CONTAMINATION

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.

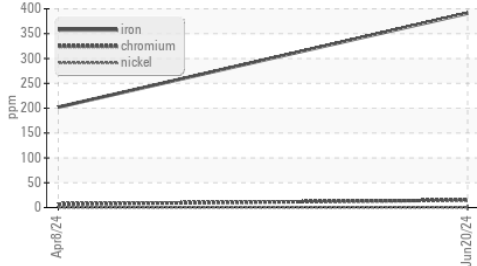
Silicon	ppm	ASTM D5185(m)	>75	▲ 318	197	---
Potassium	ppm	ASTM D5185(m)	>20	32	20	---
Water		WC Method	>0.2	NEG	NEG	---
Silt	scalar	Visual*	NONE	NONE	VLITE	---
Debris	scalar	Visual*	NONE	NONE	NONE	---
Sand/Dirt	scalar	Visual*	NONE	NONE	NONE	---
Appearance	scalar	Visual*	NORML	NORML	NORML	---
Odor	scalar	Visual*	NORML	NORML	NORML	---
Emulsified Water	scalar	Visual*	>0.2	NEG	NEG	---

FLUID CONDITION

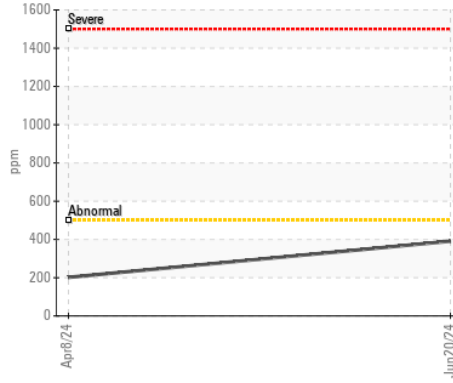
The oil is no longer serviceable as a result of the abnormal and/or severe wear.

Sodium	ppm	ASTM D5185(m)		23	14	---
Boron	ppm	ASTM D5185(m)	202	156	104	---
Barium	ppm	ASTM D5185(m)	<1	<1	<1	---
Molybdenum	ppm	ASTM D5185(m)		1	0	---
Manganese	ppm	ASTM D5185(m)		4	2	---
Magnesium	ppm	ASTM D5185(m)	<1	29	20	---
Calcium	ppm	ASTM D5185(m)		551	371	---
Phosphorus	ppm	ASTM D5185(m)	1209	862	856	---
Zinc	ppm	ASTM D5185(m)	1	20	12	---
Sulfur	ppm	ASTM D5185(m)	20439	15194	16064	---
Visc @ 40°C	cSt	ASTM D7279(m)	230	212	215	---

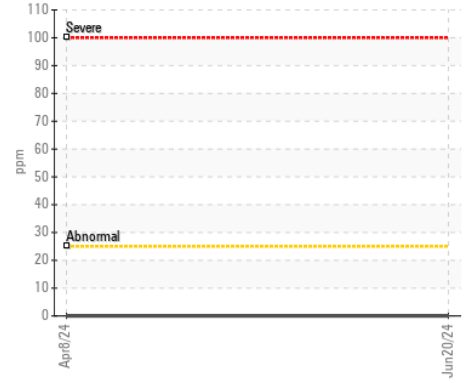
▲ Ferrous Alloys



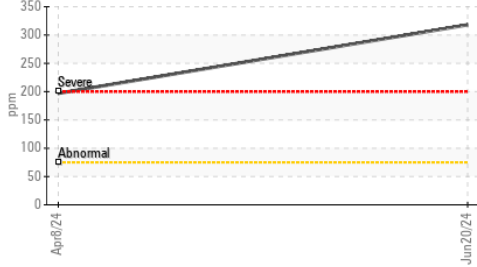
Iron (ppm)



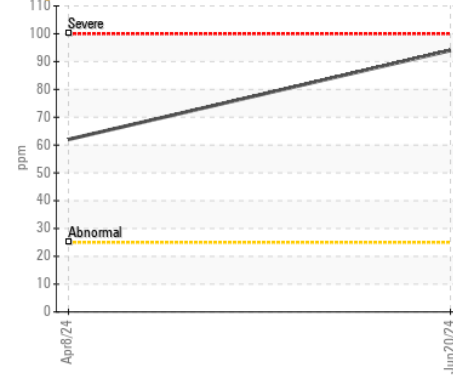
Lead (ppm)



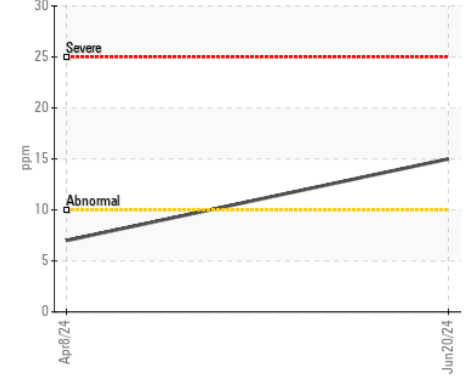
▲ Silicon (ppm)



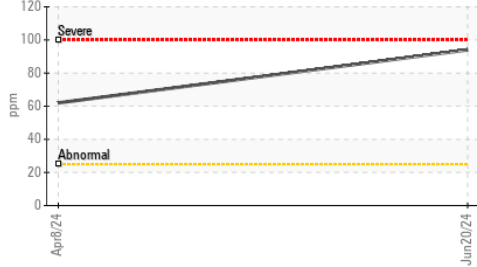
● Aluminum (ppm)



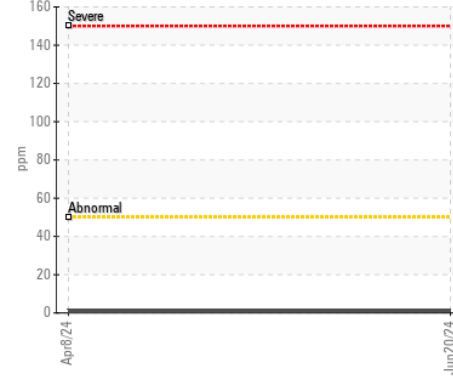
▲ Chromium (ppm)



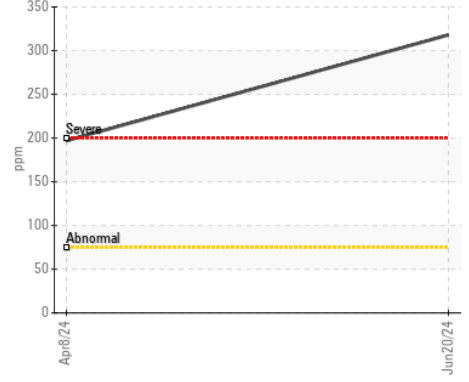
● Aluminum (ppm)



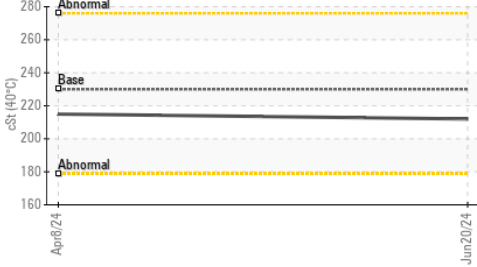
Copper (ppm)



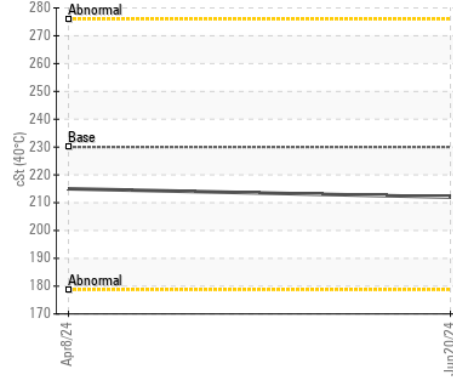
▲ Silicon (ppm)



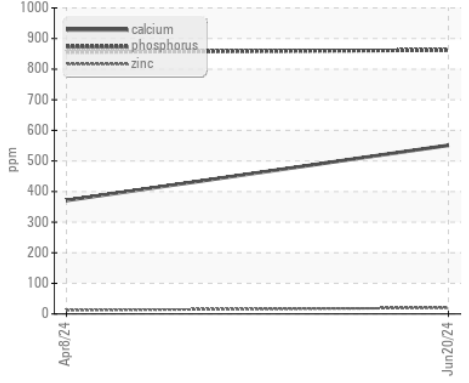
Viscosity @ 40°C



Viscosity @ 40°C



Additives



ISO 17025:2017
Accredited
Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : GFL0113439
Lab Number : 02644066
Unique Number : 5801605
Test Package : MOB 1

Received : 25 Jun 2024
Tested : 25 Jun 2024
Diagnosed : 25 Jun 2024 - Kevin Marson

GFL Environmental - 720 - Lafleche - Landfill
 17125 Lafleche Road,
 Moose Creek, ON
 CA K0C 1W0
 Contact: Charles Bergeron
 cbergeron@gflenv.com
 T: (613)538-4853
 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.