



Machine Id
OR1975
Component
Rear Hydraulic System

Fluid
PETRO CANADA HYDREX XV ALL SEASON HYDRAULIC OIL (84 LTR)

RECOMMENDATION

The filter 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		GFL0113411	GFL0087347	---
Sample Date		Client Info		29 Apr 2024	19 Jul 2023	---
Machine Age	hrs	Client Info		8207	6950	---
Oil Age	hrs	Client Info		1500	1000	---
Filter Age	hrs	Client Info		500	600	---
Oil Changed		Client Info		Not Changed	Not Changed	---
Filter Changed		Client Info		Changed	Changed	---
Sample Status				ABNORMAL	NORMAL	---

WEAR

Iron ppm levels are noted. The low ferrous density (PQ) index indicates the wear metal levels are due to corrosion. All other component wear rates are normal.

Test	UOM	Method	Limit/Abn	Current	History1	History2
PQ		ASTM D8184*		2	---	---
Iron	ppm	ASTM D5185(m)	>20	30	19	---
Chromium	ppm	ASTM D5185(m)	>10	<1	<1	---
Nickel	ppm	ASTM D5185(m)	>10	0	0	---
Titanium	ppm	ASTM D5185(m)		<1	<1	---
Silver	ppm	ASTM D5185(m)		0	0	---
Aluminum	ppm	ASTM D5185(m)	>10	4	2	---
Lead	ppm	ASTM D5185(m)	>10	0	<1	---
Copper	ppm	ASTM D5185(m)	>75	5	4	---
Tin	ppm	ASTM D5185(m)	>10	0	0	---
Vanadium	ppm	ASTM D5185(m)		0	0	---
White Metal	scalar	Visual*	NONE	NONE	NONE	---
Yellow Metal	scalar	Visual*	NONE	NONE	NONE	---

CONTAMINATION

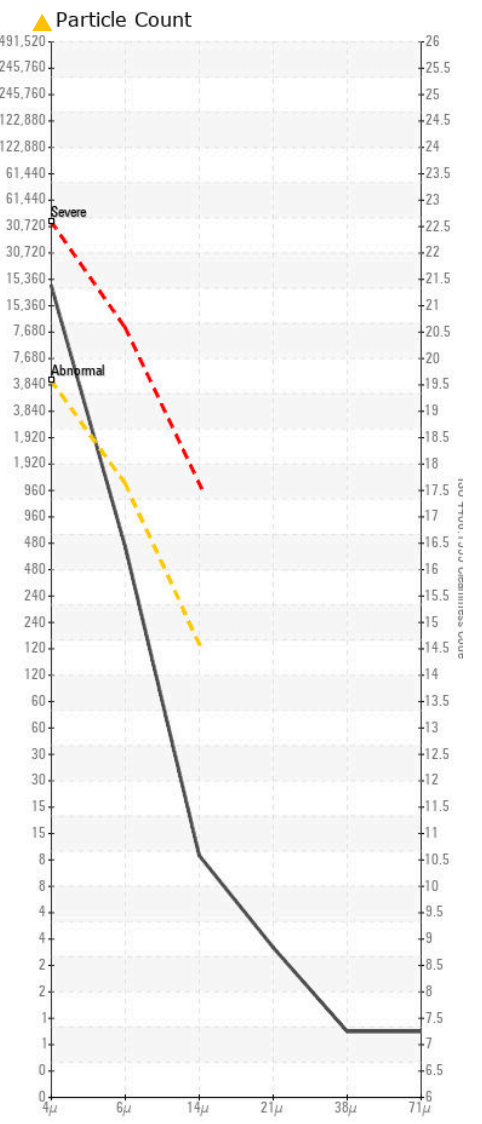
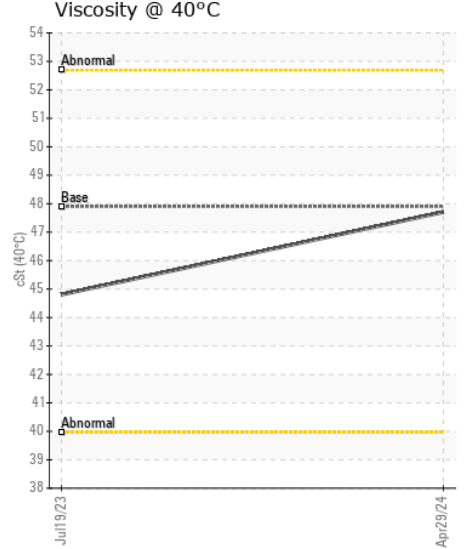
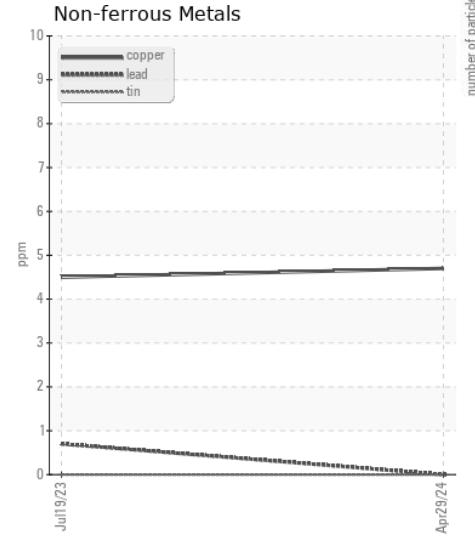
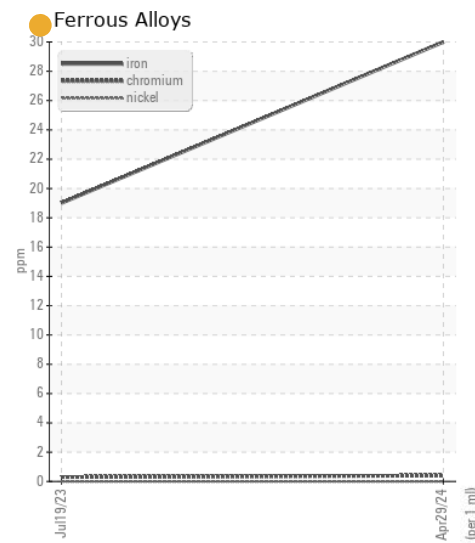
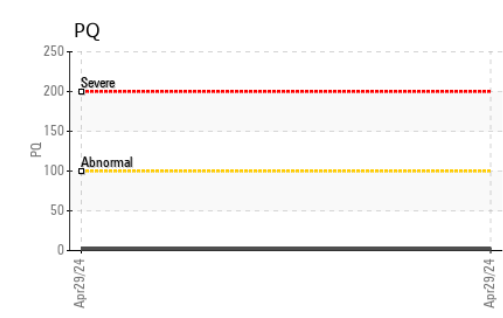
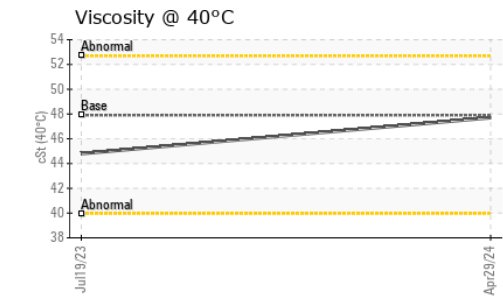
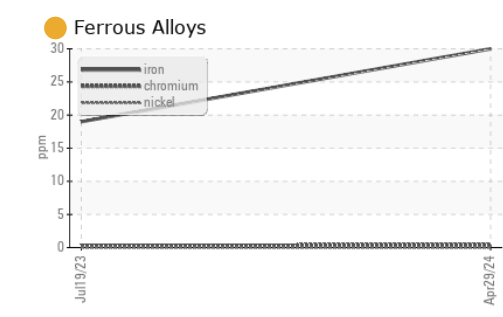
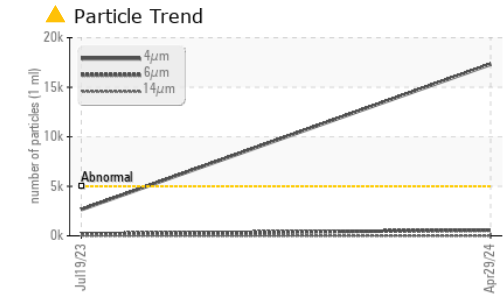
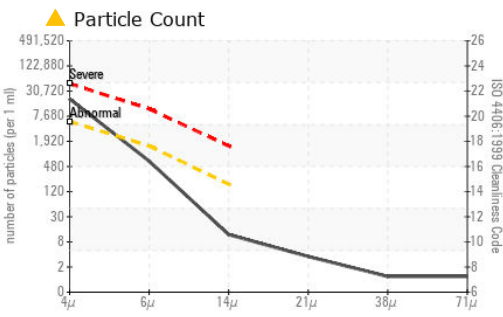
There is a moderate amount of silt (particulates < 14 microns in size) present in the oil.

Silicon	ppm	ASTM D5185(m)	>20	13	8	---
Potassium	ppm	ASTM D5185(m)	>20	3	2	---
Water		WC Method	>0.1	NEG	NEG	---
Particles >4µm		ASTM D7647	>5000	17316	2645	---
Particles >6µm		ASTM D7647	>1300	568	197	---
Particles >14µm		ASTM D7647	>160	10	11	---
Particles >21µm		ASTM D7647	>40	3	3	---
Particles >38µm		ASTM D7647	>10	1	0	---
Particles >71µm		ASTM D7647	>3	1	0	---
Oil Cleanliness		ISO 4406 (c)	>19/17/14	21/16/10	19/15/11	---
Silt	scalar	Visual*	NONE	NONE	NONE	---
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*	>0.1	NEG	NEG	---

FLUID CONDITION

The oil is still serviceable provided that the contaminant(s) can be reduced to acceptable levels.

Sodium	ppm	ASTM D5185(m)		2	1	---
Boron	ppm	ASTM D5185(m)	0	2	1	---
Barium	ppm	ASTM D5185(m)	0	0	0	---
Molybdenum	ppm	ASTM D5185(m)	0	0	<1	---
Manganese	ppm	ASTM D5185(m)	1	<1	<1	---
Magnesium	ppm	ASTM D5185(m)	0	9	6	---
Calcium	ppm	ASTM D5185(m)	100	633	357	---
Phosphorus	ppm	ASTM D5185(m)	670	780	784	---
Zinc	ppm	ASTM D5185(m)	850	950	928	---
Sulfur	ppm	ASTM D5185(m)	1600	2278	1984	---
Visc @ 40°C	cSt	ASTM D7279(m)	47.9	47.7	44.8	---



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : GFL0113411 **Received** : 09 May 2024
Lab Number : 02634364 **Tested** : 10 May 2024
Unique Number : 5775517 **Diagnosed** : 10 May 2024 - Kevin Marson
Test Package : MOB 1 (Additional Tests: PQ, PrtCount)

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.