

Machine Id
OR343
Component
Hydraulic System
Fluid
PETRO CANADA HYDREX XV ALL SEASON HYDRAULIC OIL (87 LTR)

RECOMMENDATION

We advise that you check all areas where contaminants can enter the system. The oil change at the time of sampling has been noted. The air breather requires service. If unrated, we recommend that you replace with a suitable micron rated and/or desiccant air breather. If rated, we recommend that you service/replace the breather. Resample in 30-45 days to monitor this situation.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		GFL0113341	GFL0092256	---
Sample Date		Client Info		15 Apr 2024	21 Aug 2023	---
Machine Age	hrs	Client Info		16058	15462	---
Oil Age	hrs	Client Info		16058	500	---
Filter Age	hrs	Client Info		16058	500	---
Oil Changed		Client Info		Changed	Not Changed	---
Filter Changed		Client Info		Changed	Changed	---
Sample Status				SEVERE	SEVERE	---

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>20	8	11	---
Chromium	ppm	ASTM D5185(m)	>10	3	7	---
Nickel	ppm	ASTM D5185(m)	>10	<1	0	---
Titanium	ppm	ASTM D5185(m)		0	<1	---
Silver	ppm	ASTM D5185(m)		0	0	---
Aluminum	ppm	ASTM D5185(m)	>10	<1	2	---
Lead	ppm	ASTM D5185(m)	>10	0	0	---
Copper	ppm	ASTM D5185(m)	>75	15	1	---
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

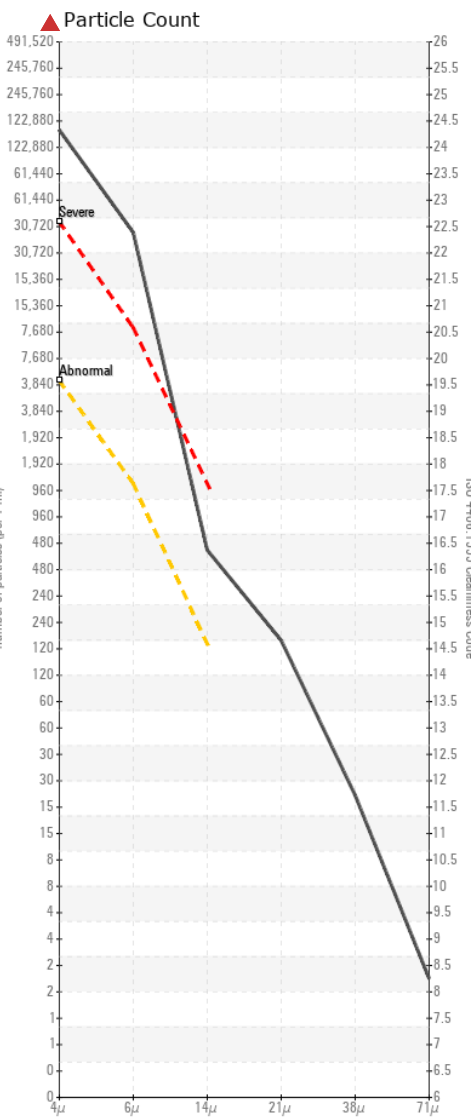
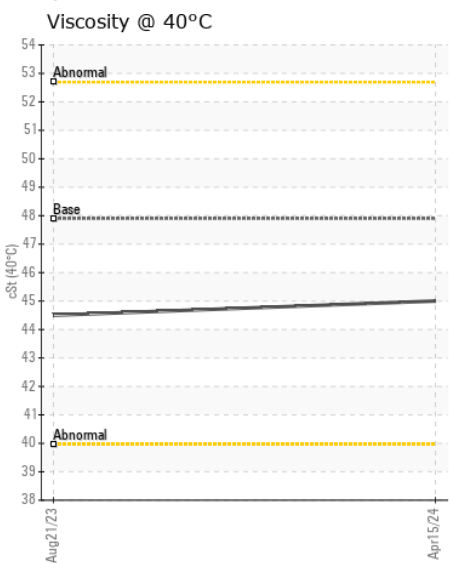
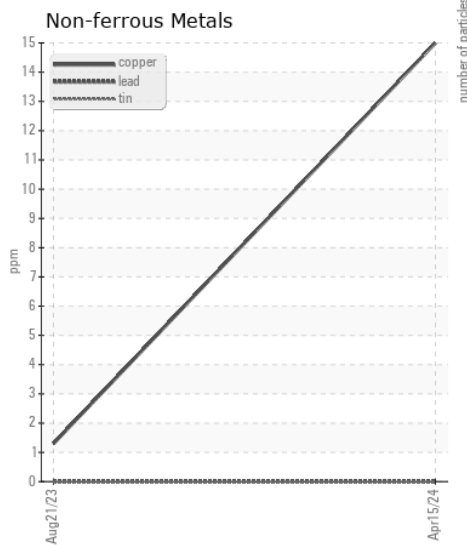
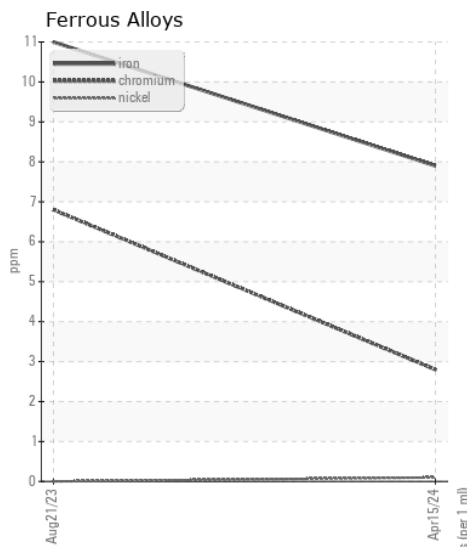
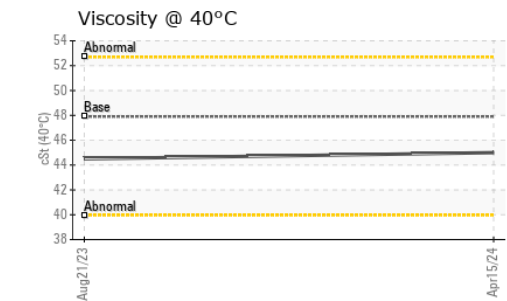
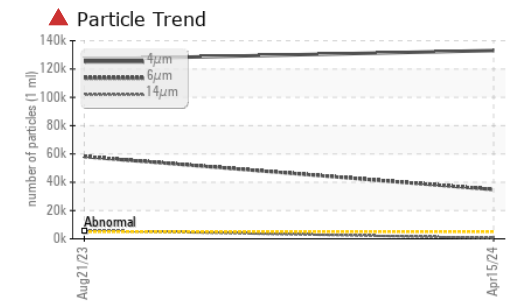
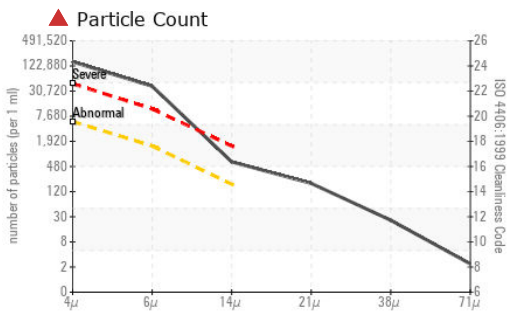
There is a high amount of particulates (2 to 100 microns in size) present in the oil.

Silicon	ppm	ASTM D5185(m)	>20	<1	4	---
Potassium	ppm	ASTM D5185(m)	>20	0	1	---
Water		WC Method	>0.1	NEG	NEG	---
Particles >4µm		ASTM D7647	>5000	▲ 133065	▲ 126854	---
Particles >6µm		ASTM D7647	>1300	▲ 34783	▲ 58064	---
Particles >14µm		ASTM D7647	>160	▲ 545	▲ 5899	---
Particles >21µm		ASTM D7647	>40	▲ 167	▲ 1326	---
Particles >38µm		ASTM D7647	>10	▲ 22	▲ 29	---
Particles >71µm		ASTM D7647	>3	2	3	---
Oil Cleanliness		ISO 4406 (c)	>19/17/14	▲ 24/22/16	▲ 24/23/20	---
Silt	scalar	Visual*	NONE	NONE	VLITE	---
Debris	scalar	Visual*	NONE	NONE	NONE	---
Sand/Dirt	scalar	Visual*	NONE	VLITE	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)		<1	3	---
Boron	ppm	ASTM D5185(m)	0	<1	<1	---
Barium	ppm	ASTM D5185(m)	0	0	0	---
Molybdenum	ppm	ASTM D5185(m)	0	0	0	---
Manganese	ppm	ASTM D5185(m)	1	<1	0	---
Magnesium	ppm	ASTM D5185(m)	0	5	3	---
Calcium	ppm	ASTM D5185(m)	100	108	112	---
Phosphorus	ppm	ASTM D5185(m)	670	601	664	---
Zinc	ppm	ASTM D5185(m)	850	786	791	---
Sulfur	ppm	ASTM D5185(m)	1600	1400	1450	---
Visc @ 40°C	cSt	ASTM D7279(m)	47.9	45.0	44.5	---



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : GFL0113341
Lab Number : 02630971
Unique Number : 5772124
Test Package : MOB 1 (Additional Tests: 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.