



OIL ANALYSIS REPORT

Sample Rating Trend

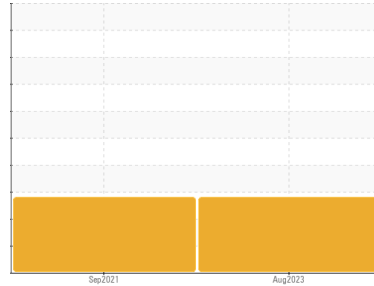
ISO



Machine Id
OR1022

Component
Hydraulic System

Fluid
PETRO CANADA HYDREX XV ALL SEASON HYDRAULIC OIL (--- GAL)



DIAGNOSIS

Recommendation

Check seals and/or filters for points of contaminant entry. 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. We recommend you service the filters on this component. Resample in 30-45 days to monitor this situation. Please specify the component make and model with your next sample.

Wear

All component wear rates are normal.

Contamination

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

Fluid Condition

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

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		GFL0087367	GFL0030487	---
Sample Date	Client Info		02 Aug 2023	22 Sep 2021	---
Machine Age	hrs	Client Info	14483	12975	---
Oil Age	hrs	Client Info	2000	2000	---
Oil Changed	Client Info		Not Changed	Changed	---
Sample Status			SEVERE	SEVERE	---

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m) >20	7	17	---
Chromium	ppm	ASTM D5185(m) >10	<1	1	---
Nickel	ppm	ASTM D5185(m) >10	<1	<1	---
Titanium	ppm	ASTM D5185(m)	<1	<1	---
Silver	ppm	ASTM D5185(m)	0	0	---
Aluminum	ppm	ASTM D5185(m) >10	2	10	---
Lead	ppm	ASTM D5185(m) >10	2	<1	---
Copper	ppm	ASTM D5185(m) >75	2	4	---
Tin	ppm	ASTM D5185(m) >10	0	<1	---
Antimony	ppm	ASTM D5185(m)	0	0	---
Vanadium	ppm	ASTM D5185(m)	0	0	---
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) 0	<1	2	---
Barium	ppm	ASTM D5185(m) 0	0	0	---
Molybdenum	ppm	ASTM D5185(m) 0	0	<1	---
Manganese	ppm	ASTM D5185(m) 1	0	<1	---
Magnesium	ppm	ASTM D5185(m) 0	2	23	---
Calcium	ppm	ASTM D5185(m) 100	138	660	---
Phosphorus	ppm	ASTM D5185(m) 670	670	619	---
Zinc	ppm	ASTM D5185(m) 850	830	737	---
Sulfur	ppm	ASTM D5185(m) 1600	1432	1747	---
Lithium	ppm	ASTM D5185(m)	<1	<1	---

CONTAMINANTS

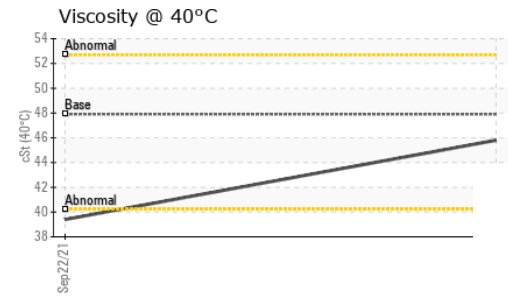
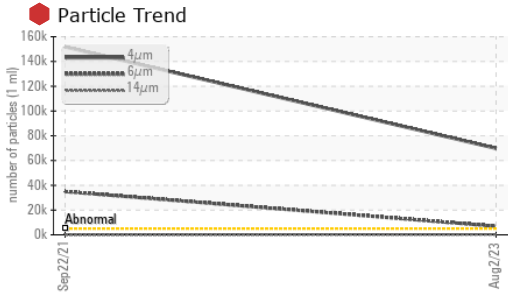
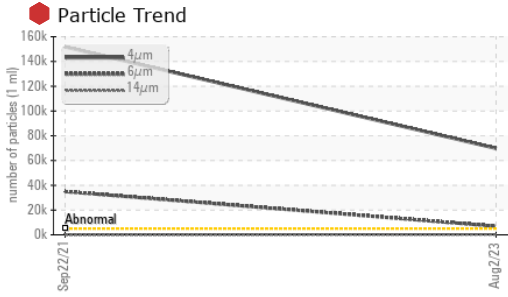
	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m) >20	6	21	---
Sodium	ppm	ASTM D5185(m)	<1	12	---
Potassium	ppm	ASTM D5185(m) >20	<1	4	---

FLUID CLEANLINESS

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>5000	69819	151826	---
Particles >6µm	ASTM D7647	>1300	6909	34926	---
Particles >14µm	ASTM D7647	>160	228	21	---
Particles >21µm	ASTM D7647	>40	67	1	---
Particles >38µm	ASTM D7647	>10	2	0	---
Particles >71µm	ASTM D7647	>3	0	0	---
Oil Cleanliness	ISO 4406 (c)	>19/17/14	23/20/15	24/22/12	---



OIL ANALYSIS REPORT



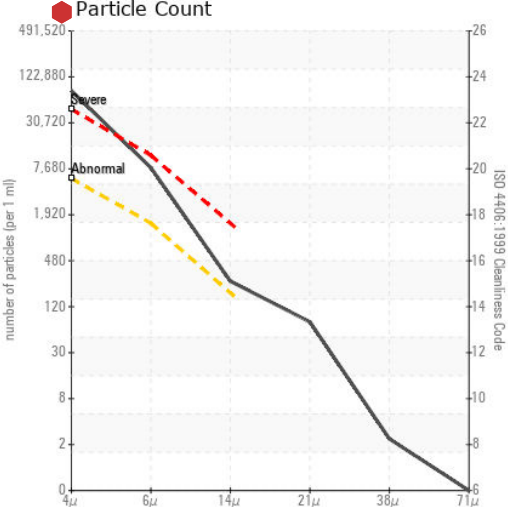
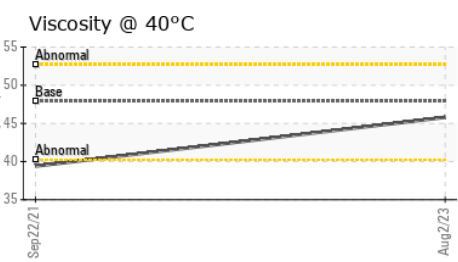
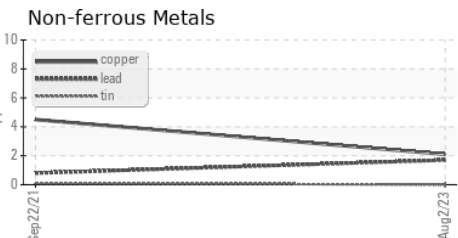
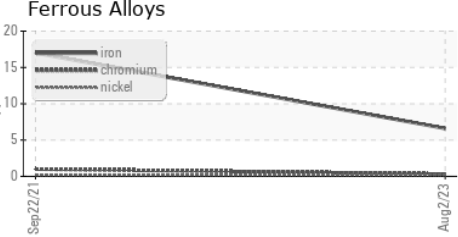
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	NONE	---
Yellow Metal	scalar	Visual*	NONE	NONE	---
Precipitate	scalar	Visual*	NONE	NONE	---
Silt	scalar	Visual*	NONE	NONE	---
Debris	scalar	Visual*	NONE	NONE	VLITE
Sand/Dirt	scalar	Visual*	NONE	NONE	---
Appearance	scalar	Visual*	NORML	NORML	---
Odor	scalar	Visual*	NORML	NORML	---
Emulsified Water	scalar	Visual*	>0.1	NEG	---
Free Water	scalar	Visual*		NEG	---

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	47.9	45.8	39.4

SAMPLE IMAGES	method	limit/base	current	history1	history2
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GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 GFL Environmental - 720 - Lafleche - Landfill
Sample No. : GFL0087367 **Received** : 11 Aug 2023
Lab Number : 02575402 **Diagnosed** : 14 Aug 2023
Unique Number : 5620453 **Diagnostician** : Wes Davis
Test Package : MOB 1 (Additional Tests: PrtCount)

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.

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