



Machine Id
EX0357
Component
Rear Hydraulic System
Fluid
PETRO CANADA HYDREX AW 46 (220 LTR)

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. The filter change at the time of sampling has been noted. Confirm the source of the lubricant being utilized for top-up/fill. Resample in 30-45 days to monitor this situation. Please specify the component make and model with your next sample.

WEAR

Iron ppm levels are abnormal. The low ferrous density (PQ) index indicates the wear metal levels are due to corrosion.

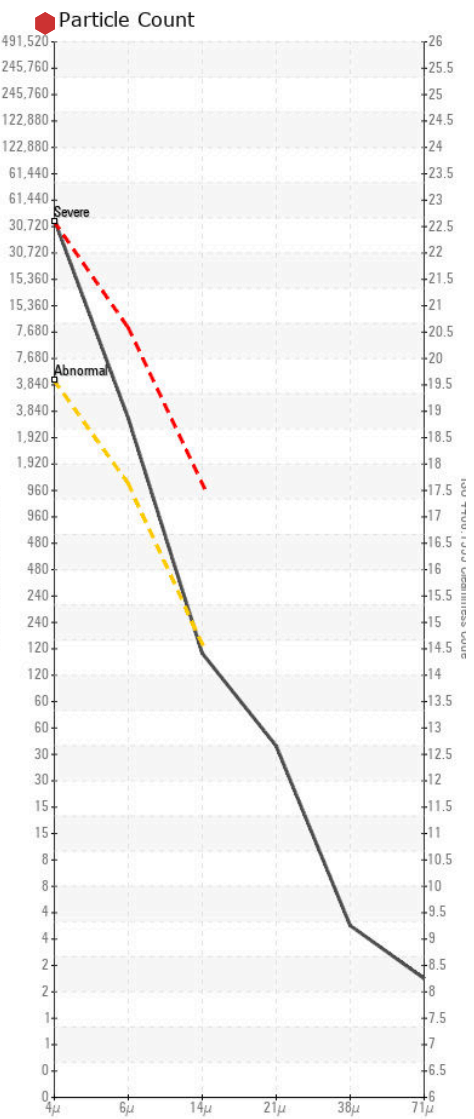
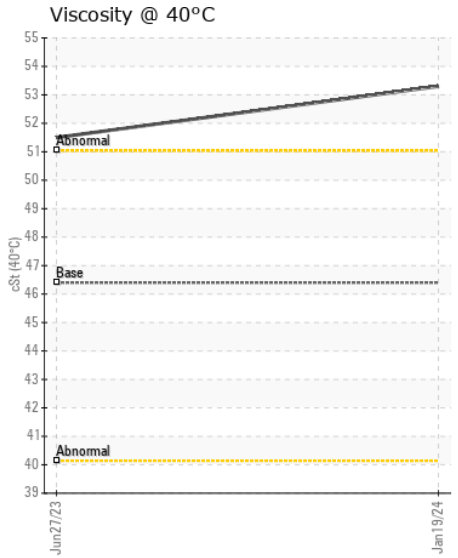
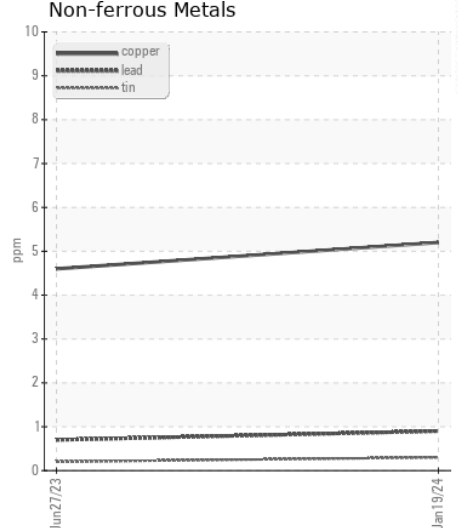
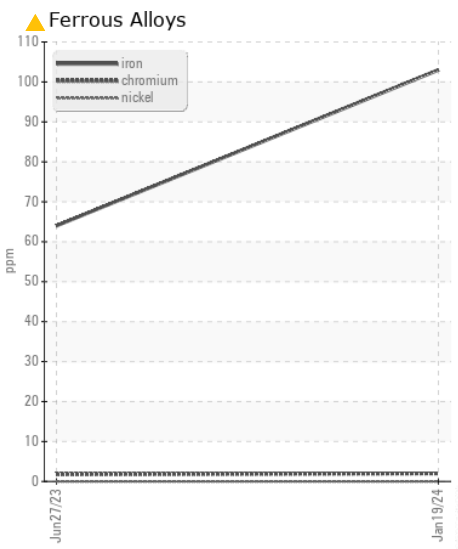
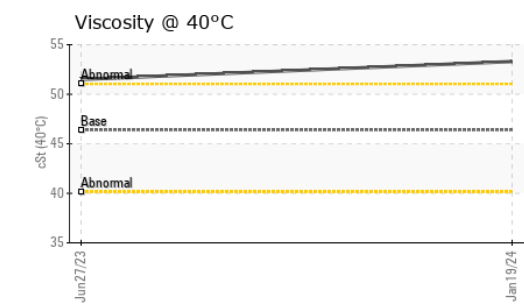
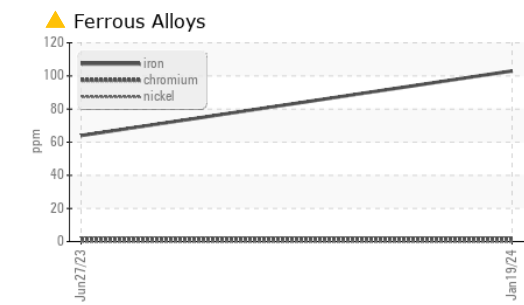
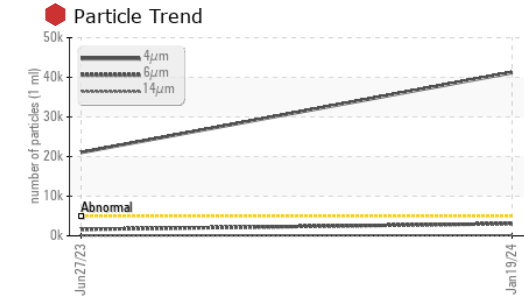
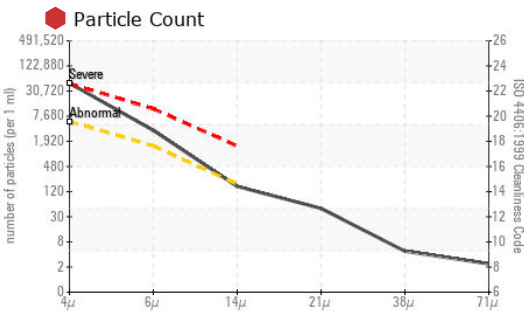
CONTAMINATION

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

FLUID CONDITION

Additive levels indicate the addition of a different brand, or type of oil. Viscosity of sample indicates oil is within SAE 20 range, advise investigate. The oil is still serviceable provided that the contaminant(s) can be reduced to acceptable levels.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		GFL0092293	GFL0087350	---
Sample Date		Client Info		19 Jan 2024	27 Jun 2023	---
Machine Age	hrs	Client Info		20413	19957	---
Oil Age	hrs	Client Info		19957	2000	---
Filter Age	hrs	Client Info		1000	2000	---
Oil Changed		Client Info		Not Changed	Not Changed	---
Filter Changed		Client Info		Changed	Not Changed	---
Sample Status				SEVERE	ABNORMAL	---
PQ		ASTM D8184*		5	0	---
Iron	ppm	ASTM D5185(m)	>20	▲ 103	▲ 64	---
Chromium	ppm	ASTM D5185(m)	>10	2	2	---
Nickel	ppm	ASTM D5185(m)	>10	0	0	---
Titanium	ppm	ASTM D5185(m)		0	0	---
Silver	ppm	ASTM D5185(m)		0	0	---
Aluminum	ppm	ASTM D5185(m)	>10	1	<1	---
Lead	ppm	ASTM D5185(m)	>10	<1	<1	---
Copper	ppm	ASTM D5185(m)	>75	5	5	---
Tin	ppm	ASTM D5185(m)	>10	<1	<1	---
Vanadium	ppm	ASTM D5185(m)		0	0	---
White Metal	scalar	Visual*	NONE	NONE	NONE	---
Yellow Metal	scalar	Visual*	NONE	NONE	NONE	---
Silicon	ppm	ASTM D5185(m)	>20	4	4	---
Potassium	ppm	ASTM D5185(m)	>20	3	3	---
Water		WC Method	>0.1	NEG	NEG	---
Particles >4µm		ASTM D7647	>5000	◆ 41182	▲ 21040	---
Particles >6µm		ASTM D7647	>1300	▲ 3064	▲ 1624	---
Particles >14µm		ASTM D7647	>160	141	90	---
Particles >21µm		ASTM D7647	>40	42	28	---
Particles >38µm		ASTM D7647	>10	4	1	---
Particles >71µm		ASTM D7647	>3	2	0	---
Oil Cleanliness		ISO 4406 (c)	>19/17/14	◆ 23/19/14	▲ 22/18/14	---
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	---
Sodium	ppm	ASTM D5185(m)		2	3	---
Boron	ppm	ASTM D5185(m)	0	20	16	---
Barium	ppm	ASTM D5185(m)	0	0	0	---
Molybdenum	ppm	ASTM D5185(m)	0	0	<1	---
Manganese	ppm	ASTM D5185(m)	0	1	<1	---
Magnesium	ppm	ASTM D5185(m)	0	9	8	---
Calcium	ppm	ASTM D5185(m)	50	2334	2006	---
Phosphorus	ppm	ASTM D5185(m)	330	415	460	---
Zinc	ppm	ASTM D5185(m)	430	145	233	---
Sulfur	ppm	ASTM D5185(m)	760	2603	2154	---
Visc @ 40°C	cSt	ASTM D7279(m)	46.4	53.3	51.5	---



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 GFL Environmental - 720 - Lafleche - Landfill
Sample No. : GFL0092293 **Received** : 24 Jan 2024
Lab Number : 02610886 **Diagnosed** : 25 Jan 2024
Unique Number : 5719981 **Diagnostician** : Kevin Marson
Test Package : MOB 1 (Additional Tests: PQ, 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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