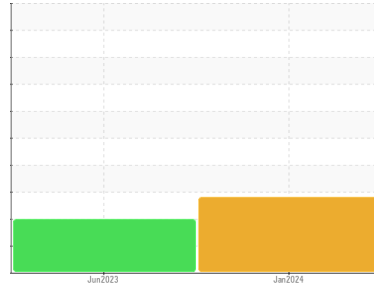




OIL ANALYSIS REPORT

Sample Rating Trend



WEAR



Machine Id
EX0357

Component
Rear Hydraulic System

Fluid
PETRO CANADA HYDREX AW 46 (220 LTR)

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. 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.

SAMPLE INFORMATION

method	limit/base	current	history1	history2
Sample Number	Client Info	GFL0092293	GFL0087350	---
Sample Date	Client Info	19 Jan 2024	27 Jun 2023	---
Machine Age	hrs	20413	19957	---
Oil Age	hrs	19957	2000	---
Oil Changed	Client Info	Not Chngd	Not Chngd	---
Sample Status		SEVERE	ABNORMAL	---

CONTAMINATION

method	limit/base	current	history1	history2
Water	WC Method >0.1	NEG	NEG	---

WEAR METALS

method	limit/base	current	history1	history2
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	---
Antimony	ppm ASTM D5185(m)	0	<1	---
Vanadium	ppm ASTM D5185(m)	0	0	---
Beryllium	ppm ASTM D5185(m)	0	0	---
Cadmium	ppm ASTM D5185(m)	0	0	---

ADDITIVES

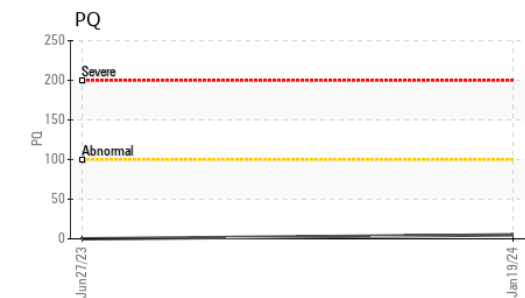
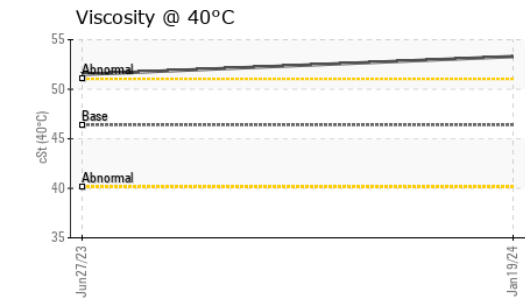
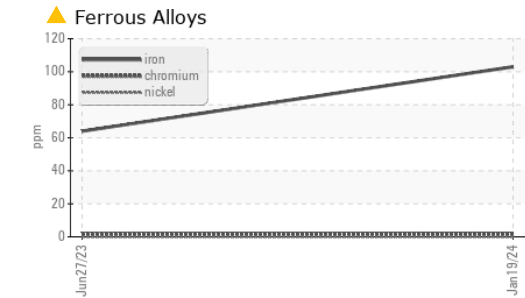
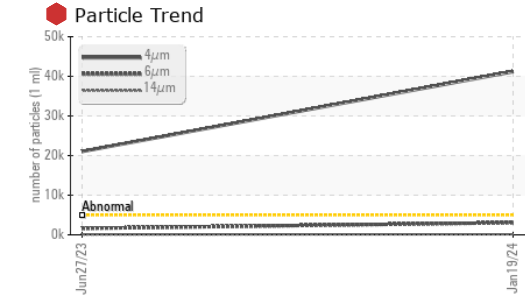
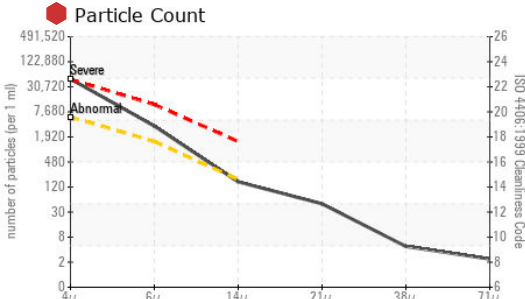
method	limit/base	current	history1	history2
Boron	ppm ASTM D5185(m) 0	20	16	---
Barium	ppm ASTM D5185(m) 0	0	0	---
Molybdenum	ppm ASTM D5185(m) 0	0	<1	---
Manganese	ppm ASTM D5185(m) 0	1	<1	---
Magnesium	ppm ASTM D5185(m) 0	9	8	---
Calcium	ppm ASTM D5185(m) 50	2334	2006	---
Phosphorus	ppm ASTM D5185(m) 330	415	460	---
Zinc	ppm ASTM D5185(m) 430	145	233	---
Sulfur	ppm ASTM D5185(m) 760	2603	2154	---
Lithium	ppm ASTM D5185(m)	<1	<1	---

CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185(m) >20	4	4	---
Sodium	ppm ASTM D5185(m)	2	3	---
Potassium	ppm ASTM D5185(m) >20	3	3	---



OIL ANALYSIS REPORT



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.

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

FLUID CLEANLINESS		method	limit/base	current	history1	history2
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	---	

VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	NONE	NONE	---
Yellow Metal	scalar	Visual*	NONE	NONE	NONE	---
Precipitate	scalar	Visual*	NONE	NONE	NONE	---
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	---
Free Water	scalar	Visual*		NEG	NEG	---

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	46.4	53.3	51.5	---

SAMPLE IMAGES		method	limit/base	current	history1	history2
Color						no image
Bottom						no image