



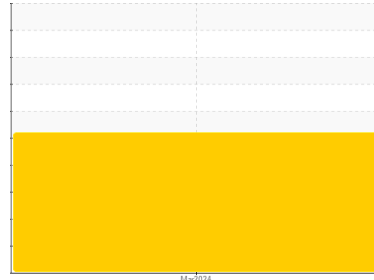
OIL ANALYSIS REPORT

Sample Rating Trend

ISO



Machine Id
OR340
Component
Hydraulic System
Fluid
PETRO CANADA HYDREX MV 32 (60 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.

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 viscosity is higher than normal. This plus the additive levels indicates that this is not the same brand, or type of oil as reported. 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		GFL0113364	---	---
Sample Date	Client Info		18 Mar 2024	---	---
Machine Age	hrs	Client Info	6366	---	---
Oil Age	hrs	Client Info	6366	---	---
Oil Changed	Client Info		Not Chngd	---	---
Sample Status			SEVERE	---	---

CONTAMINATION

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

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m) >20	3	---	---
Chromium	ppm	ASTM D5185(m) >10	0	---	---
Nickel	ppm	ASTM D5185(m) >10	0	---	---
Titanium	ppm	ASTM D5185(m)	0	---	---
Silver	ppm	ASTM D5185(m)	0	---	---
Aluminum	ppm	ASTM D5185(m) >10	<1	---	---
Lead	ppm	ASTM D5185(m) >10	0	---	---
Copper	ppm	ASTM D5185(m) >75	14	---	---
Tin	ppm	ASTM D5185(m) >10	0	---	---
Antimony	ppm	ASTM D5185(m)	0	---	---
Vanadium	ppm	ASTM D5185(m)	0	---	---
Beryllium	ppm	ASTM D5185(m)	0	---	---
Cadmium	ppm	ASTM D5185(m)	0	---	---

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m) 0	113	---	---
Barium	ppm	ASTM D5185(m) 0	0	---	---
Molybdenum	ppm	ASTM D5185(m) 0	0	---	---
Manganese	ppm	ASTM D5185(m) 1	0	---	---
Magnesium	ppm	ASTM D5185(m) 0	4	---	---
Calcium	ppm	ASTM D5185(m) 50	1030	---	---
Phosphorus	ppm	ASTM D5185(m) 330	627	---	---
Zinc	ppm	ASTM D5185(m) 430	429	---	---
Sulfur	ppm	ASTM D5185(m) 760	2226	---	---
Lithium	ppm	ASTM D5185(m)	<1	---	---

CONTAMINANTS

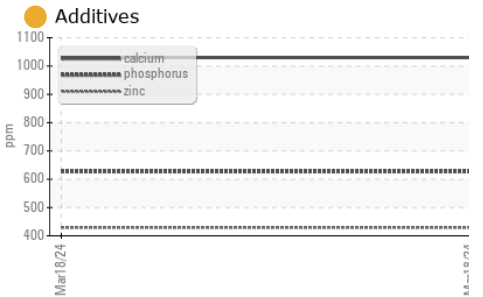
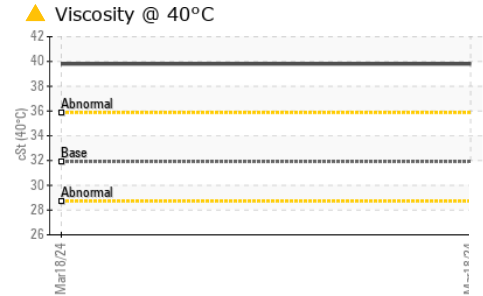
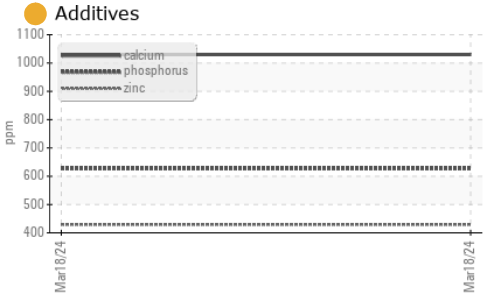
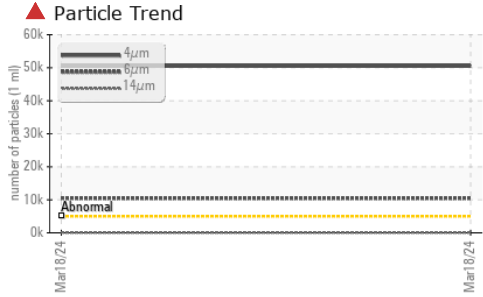
	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m) >20	2	---	---
Sodium	ppm	ASTM D5185(m)	4	---	---
Potassium	ppm	ASTM D5185(m) >20	<1	---	---

FLUID CLEANLINESS

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>5000	▲ 50481	---	---
Particles >6µm	ASTM D7647	>1300	▲ 10473	---	---
Particles >14µm	ASTM D7647	>160	71	---	---
Particles >21µm	ASTM D7647	>40	5	---	---
Particles >38µm	ASTM D7647	>10	1	---	---
Particles >71µm	ASTM D7647	>3	1	---	---
Oil Cleanliness	ISO 4406 (c)	>19/17/14	▲ 23/21/13	---	---



OIL ANALYSIS REPORT



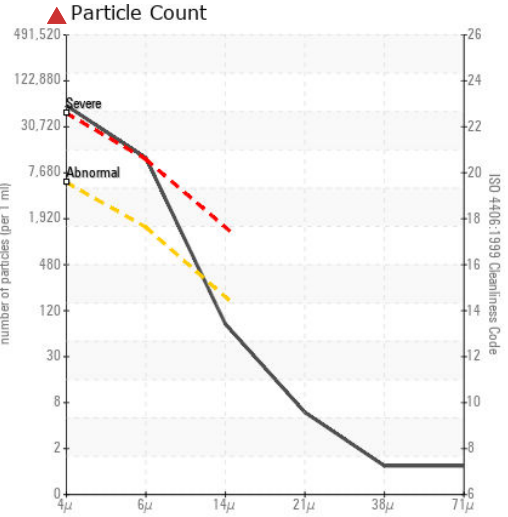
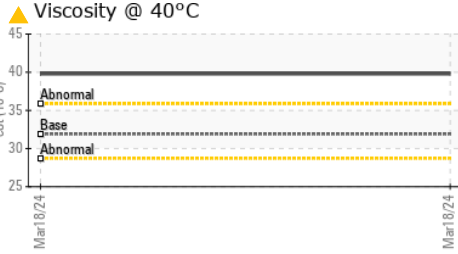
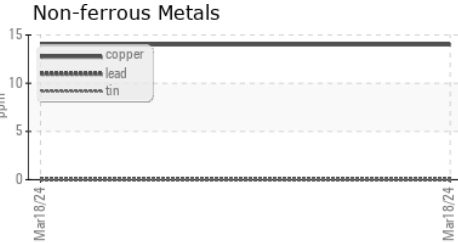
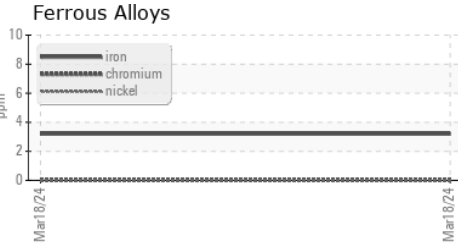
VISUAL	method	limit/base	current	history1	history2	
White Metal	scalar	Visual*	NONE	NONE	---	---
Yellow Metal	scalar	Visual*	NONE	NONE	---	---
Precipitate	scalar	Visual*	NONE	NONE	---	---
Silt	scalar	Visual*	NONE	NONE	---	---
Debris	scalar	Visual*	NONE	NONE	---	---
Sand/Dirt	scalar	Visual*	NONE	NONE	---	---
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)	31.9 ▲ 39.8	---	---

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

GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : GFL0113364 **Received** : 21 Mar 2024
Lab Number : 02623754 **Tested** : 22 Mar 2024
Unique Number : 5748873 **Diagnosed** : 22 Mar 2024 - Kevin Marson
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.