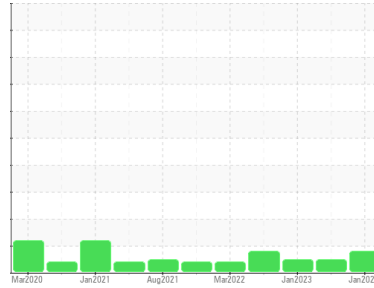




OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Machine Id
OR962
Component
Tank Hydraulic System
Fluid
PETRO CANADA HYDREX AW 46 (188 LTR)

DIAGNOSIS

Recommendation

The filter change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

Wear

All component wear rates are normal.

Contamination

There is a moderate 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		GFL0092254	GFL0056454	GFL0064908
Sample Date	Client Info		19 Jan 2024	25 Apr 2023	10 Jan 2023
Machine Age	hrs	Client Info	13733	11728	10932
Oil Age	hrs	Client Info	1348	3100	2400
Oil Changed	Client Info		N/A	Changed	Not Changed
Sample Status			ABNORMAL	NORMAL	NORMAL

CONTAMINATION

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

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m) >20	8	11	13
Chromium	ppm	ASTM D5185(m) >10	0	0	0
Nickel	ppm	ASTM D5185(m) >10	<1	0	0
Titanium	ppm	ASTM D5185(m)	0	0	0
Silver	ppm	ASTM D5185(m)	0	0	0
Aluminum	ppm	ASTM D5185(m) >10	1	1	2
Lead	ppm	ASTM D5185(m) >10	<1	<1	<1
Copper	ppm	ASTM D5185(m) >75	1	2	2
Tin	ppm	ASTM D5185(m) >10	0	0	0
Antimony	ppm	ASTM D5185(m)	0	<1	<1
Vanadium	ppm	ASTM D5185(m)	0	0	0
Beryllium	ppm	ASTM D5185(m)	0	0	0
Cadmium	ppm	ASTM D5185(m)	0	0	0

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m) 0	<1	1	2
Barium	ppm	ASTM D5185(m) 0	<1	<1	<1
Molybdenum	ppm	ASTM D5185(m) 0	<1	<1	<1
Manganese	ppm	ASTM D5185(m) 0	0	<1	<1
Magnesium	ppm	ASTM D5185(m) 0	16	9	5
Calcium	ppm	ASTM D5185(m) 50	174	195	211
Phosphorus	ppm	ASTM D5185(m) 330	569	615	670
Zinc	ppm	ASTM D5185(m) 430	714	705	769
Sulfur	ppm	ASTM D5185(m) 760	1421	1467	1494
Lithium	ppm	ASTM D5185(m)	<1	<1	<1

CONTAMINANTS

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

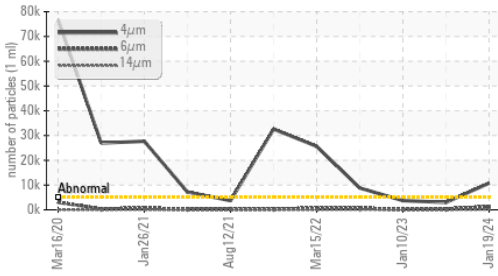
FLUID CLEANLINESS

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>5000	▲ 10760	2994	3715
Particles >6µm	ASTM D7647	>1300	1294	270	105
Particles >14µm	ASTM D7647	>160	91	37	6
Particles >21µm	ASTM D7647	>40	23	13	1
Particles >38µm	ASTM D7647	>10	2	1	0
Particles >71µm	ASTM D7647	>3	1	0	0
Oil Cleanliness	ISO 4406 (c)	>19/17/14	▲ 21/17/14	19/15/12	19/14/10

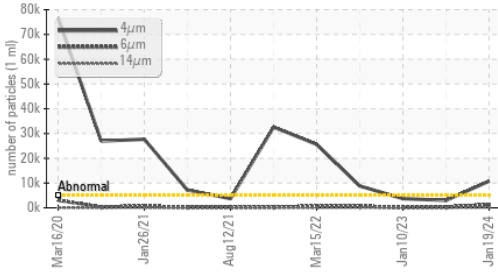


OIL ANALYSIS REPORT

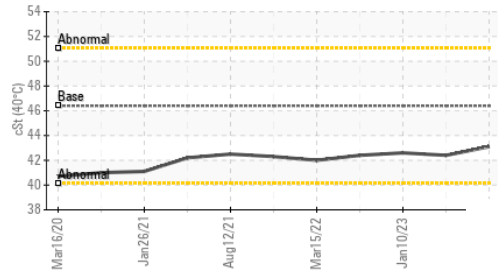
▲ Particle Trend



▲ Particle Trend



Viscosity @ 40°C



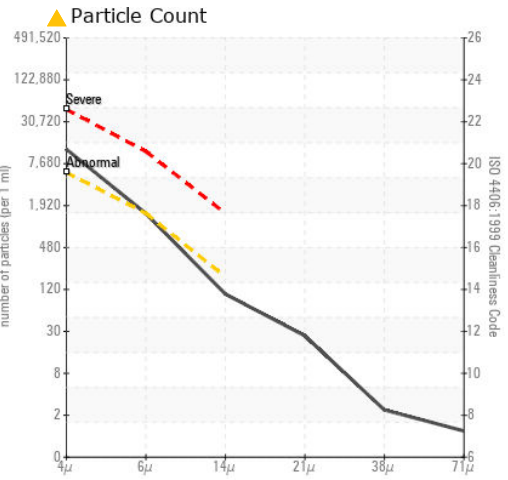
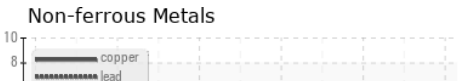
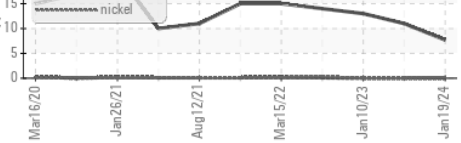
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	NONE	NONE
Yellow Metal	scalar	Visual*	NONE	NONE	NONE
Precipitate	scalar	Visual*	NONE	NONE	NONE
Silt	scalar	Visual*	NONE	NONE	NONE
Debris	scalar	Visual*	NONE	NONE	NONE
Sand/Dirt	scalar	Visual*	NONE	NONE	NONE
Appearance	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	43.1	42.4

SAMPLE IMAGES



GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 GFL Environmental - 720 - Lafleche - Landfill
Sample No. : GFL0092254 **Received** : 24 Jan 2024
Lab Number : 02610887 **Diagnosed** : 25 Jan 2024
Unique Number : 5719982 **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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