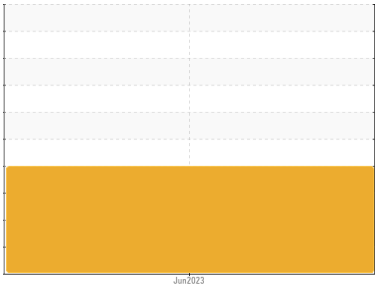
PROBLEM SUMMARY

Sample Rating Trend

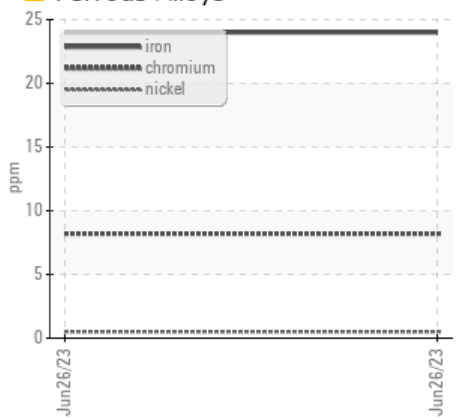


WEAR

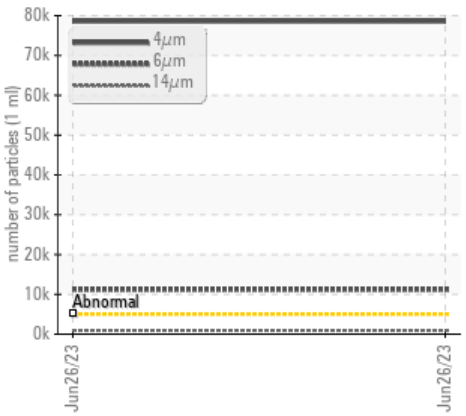
Machine Id
WL0098
Component
Hydraulic System
Fluid
PETRO CANADA HYDREX AW 32 (--- GAL)

COMPONENT CONDITION SUMMARY

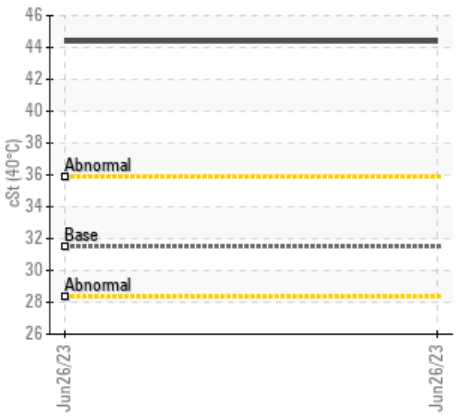
▲ Ferrous Alloys



▲ Particle Trend



▲ Viscosity @ 40°C



RECOMMENDATION

Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor. (Customer Sample Comment: Hydraulic filter and fluid change)

PROBLEMATIC TEST RESULTS

Sample Status				**ABNORMAL**	---	---
Iron	ppm	ASTM D5185m	>20	▲ **24**	---	---
Particles >4µm		ASTM D7647	>5000	▲ **78575**	---	---
Particles >6µm		ASTM D7647	>1300	▲ **11222**	---	---
Particles >14µm		ASTM D7647	>160	▲ **910**	---	---
Particles >21µm		ASTM D7647	>40	▲ **350**	---	---
Particles >38µm		ASTM D7647	>10	▲ **33**	---	---
Particles >71µm		ASTM D7647	>3	▲ **2**	---	---
Oil Cleanliness		ISO 4406 (c)	>19/17/14	▲ **23/21/17**	---	---
Visc @ 40°C	cSt	ASTM D445	31.5	▲ **44.39**	---	---

Customer Id: GFL625
Sample No.: GFL0077524
Lab Number: 05886132
Test Package: FLEET

To manage this report scan the QR code

To discuss the diagnosis or test data:
Jonathan Hester +1 919-379-4092 x4092
jhester@wearcheckusa.com

To change component or sample information:
Customer Service +1 1-800-237-1369
customerservice@wearcheck.com

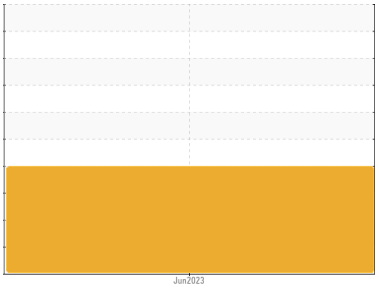
RECOMMENDED ACTIONS

Action	Status	Date	Done By	Description
Change Fluid	---	---	?	Oil and filter change at the time of sampling has been noted.
Change Filter	---	---	?	Oil and filter change at the time of sampling has been noted.

HISTORICAL DIAGNOSIS

OIL ANALYSIS REPORT

Sample Rating Trend



WEAR

Machine Id
WL0098
Component
Hydraulic System
Fluid
PETRO CANADA HYDREX AW 32 (--- GAL)

DIAGNOSIS

Recommendation
Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor. (Customer Sample Comment: Hydraulic filter and fluid change)

Wear
The iron level is abnormal.

Contamination
There is a high amount of particulates present in the oil.

Fluid Condition
Viscosity of sample indicates oil is within ISO 46 range, advise investigate. Confirm oil type. The AN level is acceptable for this fluid.

SAMPLE INFORMATION		method	limit/base	current	history 1	history 2
Sample Number		Client Info		**GFL0077524**	---	---
Sample Date		Client Info		**26 Jun 2023**	---	---
Machine Age	hrs	Client Info		**11950**	---	---
Oil Age	hrs	Client Info		**0**	---	---
Oil Changed		Client Info		**Changed**	---	---
Sample Status				**ABNORMAL**	---	---

WEAR METALS		method	limit/base	current	history 1	history 2
Iron	ppm	ASTM D5185m	>20	▲ **24**	---	---
Chromium	ppm	ASTM D5185m	>10	**8**	---	---
Nickel	ppm	ASTM D5185m	>10	**<1**	---	---
Titanium	ppm	ASTM D5185m		**1**	---	---
Silver	ppm	ASTM D5185m		**<1**	---	---
Aluminum	ppm	ASTM D5185m	>10	**1**	---	---
Lead	ppm	ASTM D5185m	>10	**2**	---	---
Copper	ppm	ASTM D5185m	>75	**2**	---	---
Tin	ppm	ASTM D5185m	>10	**<1**	---	---
Vanadium	ppm	ASTM D5185m		**<1**	---	---
Cadmium	ppm	ASTM D5185m		**<1**	---	---

ADDITIVES		method	limit/base	current	history 1	history 2
Boron	ppm	ASTM D5185m	0	**2**	---	---
Barium	ppm	ASTM D5185m	0	**0**	---	---
Molybdenum	ppm	ASTM D5185m	0	**4**	---	---
Manganese	ppm	ASTM D5185m	0	**1**	---	---
Magnesium	ppm	ASTM D5185m	0	**31**	---	---
Calcium	ppm	ASTM D5185m	50	**313**	---	---
Phosphorus	ppm	ASTM D5185m	330	**457**	---	---
Zinc	ppm	ASTM D5185m	430	**554**	---	---
Sulfur	ppm	ASTM D5185m	760	**1800**	---	---

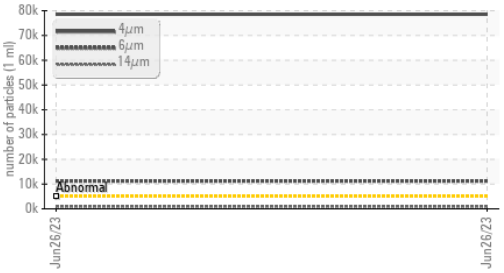
CONTAMINANTS		method	limit/base	current	history 1	history 2
Silicon	ppm	ASTM D5185m	>20	**4**	---	---
Sodium	ppm	ASTM D5185m		**2**	---	---
Potassium	ppm	ASTM D5185m	>20	**3**	---	---

FLUID CLEANLINESS		method	limit/base	current	history 1	history 2
Particles >4µm		ASTM D7647	>5000	▲ **78575**	---	---
Particles >6µm		ASTM D7647	>1300	▲ **11222**	---	---
Particles >14µm		ASTM D7647	>160	▲ **910**	---	---
Particles >21µm		ASTM D7647	>40	▲ **350**	---	---
Particles >38µm		ASTM D7647	>10	▲ **33**	---	---
Particles >71µm		ASTM D7647	>3	▲ **2**	---	---
Oil Cleanliness		ISO 4406 (c)	>19/17/14	▲ **23/21/17**	---	---

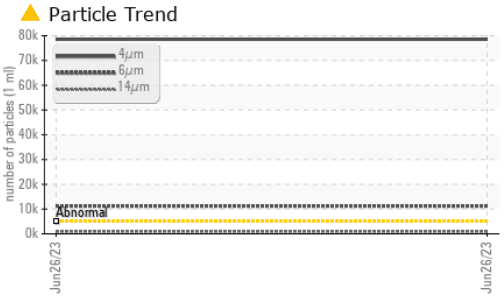
FLUID DEGRADATION		method	limit/base	current	history 1	history 2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.50	**0.36**	---	---

OIL ANALYSIS REPORT

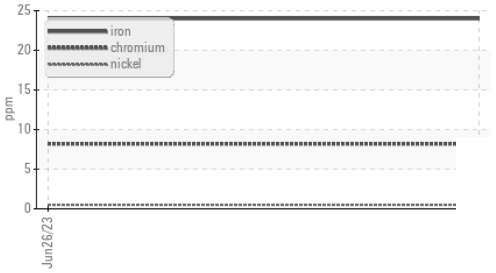
Particle Trend



Particle Trend

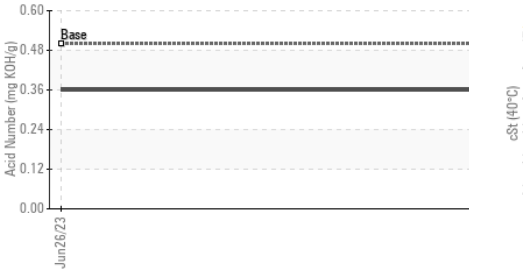


Ferrous Alloys



Viscosity @ 40°C

Acid Number



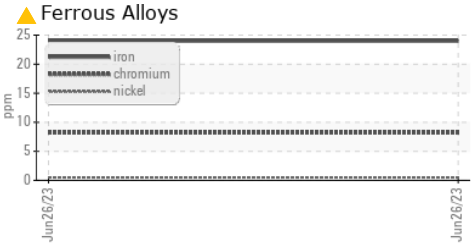
VISUAL		method	limit/base	current	history 1	history 2
White Metal	scalar	*Visual	NONE	**NONE**	---	---
Yellow Metal	scalar	*Visual	NONE	**NONE**	---	---
Precipitate	scalar	*Visual	NONE	**NONE**	---	---
Silt	scalar	*Visual	NONE	**NONE**	---	---
Debris	scalar	*Visual	NONE	**NONE**	---	---
Sand/Dirt	scalar	*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	history 1	history 2
Visc @ 40°C	cSt	ASTM D445	31.5	▲ **44.39**	---	---

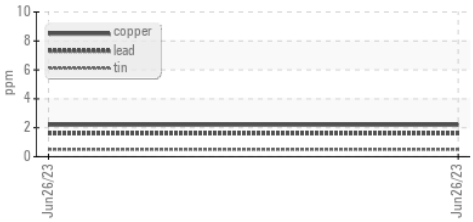
SAMPLE IMAGES	method	limit/base	current	history 1	history 2
Color				*no image*	*no image*
Bottom				*no image*	*no image*

GRAPHS

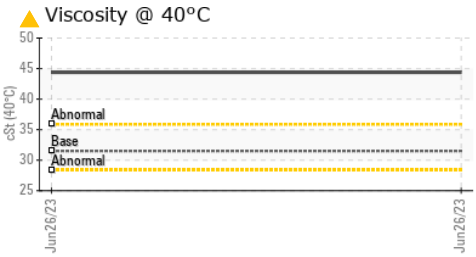
Ferrous Alloys



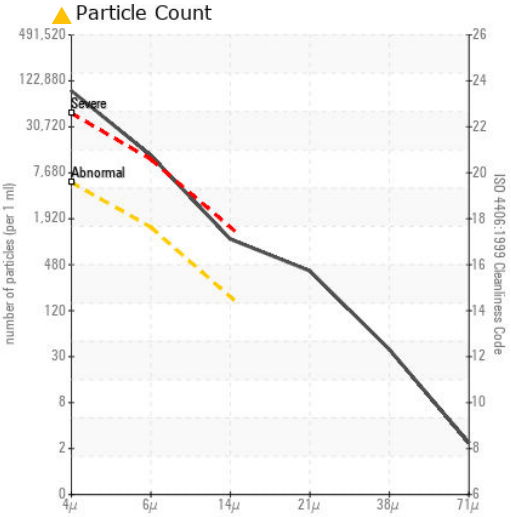
Non-ferrous Metals



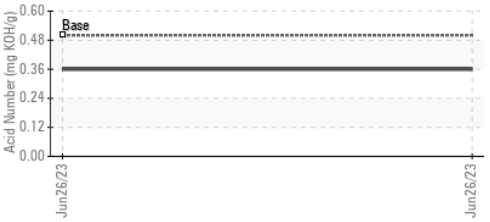
Viscosity @ 40°C



Particle Count



Acid Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0077524 **Received** : 28 Jun 2023
Lab Number : 05886132 **Diagnosed** : 06 Jul 2023
Unique Number : 10536615 **Diagnostician** : Jonathan Hester
Test Package : FLEET (Additional Tests: PrtCount)

To discuss this sample report, contact Customer Service at 1-800-237-1369.
** - Denotes test methods that are outside of the ISO 17025 scope of accreditation.*
Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

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US 48625
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