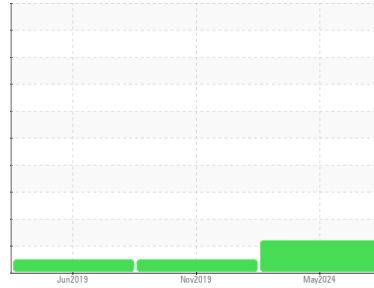




OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Area
(546HPY)
Machine Id
1034A
Component
Hydraulic System
Fluid
PETRO CANADA HYDREX AW 46 (50 GAL)

DIAGNOSIS

Recommendation

No corrective action is recommended at this time. The filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

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 AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

SAMPLE INFORMATION

method	limit/base	current	history1	history2
Sample Number	Client Info	GFL0118778	GFL0001876	GFLI-601810
Sample Date	Client Info	07 May 2024	24 Nov 2019	05 Jun 2019
Machine Age	hrs	17676	8273	6773
Oil Age	hrs	17556	0	1500
Oil Changed	Client Info	Not Chngd	Not Chngd	Not Chngd
Sample Status		ABNORMAL	NORMAL	NORMAL

CONTAMINATION

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

WEAR METALS

method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185m >30	15	3	2
Chromium	ppm	ASTM D5185m >2	<1	<1	0
Nickel	ppm	ASTM D5185m >2	0	0	0
Titanium	ppm	ASTM D5185m	<1	0	0
Silver	ppm	ASTM D5185m	0	0	0
Aluminum	ppm	ASTM D5185m >2	2	<1	0
Lead	ppm	ASTM D5185m >10	0	0	0
Copper	ppm	ASTM D5185m >25	1	<1	0
Tin	ppm	ASTM D5185m >20	<1	0	0
Antimony	ppm	ASTM D5185m	---	0	0
Vanadium	ppm	ASTM D5185m	<1	0	0
Cadmium	ppm	ASTM D5185m	<1	0	0

ADDITIVES

method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185m 0	4	1	0
Barium	ppm	ASTM D5185m 0	0	0	0
Molybdenum	ppm	ASTM D5185m 0	4	1	0
Manganese	ppm	ASTM D5185m 0	<1	<1	0
Magnesium	ppm	ASTM D5185m 0	28	8	6
Calcium	ppm	ASTM D5185m 50	136	67	59
Phosphorus	ppm	ASTM D5185m 330	378	326	296
Zinc	ppm	ASTM D5185m 430	464	429	384
Sulfur	ppm	ASTM D5185m 760	1010	759	---
Lithium	ppm	ASTM D5185m	---	---	0

CONTAMINANTS

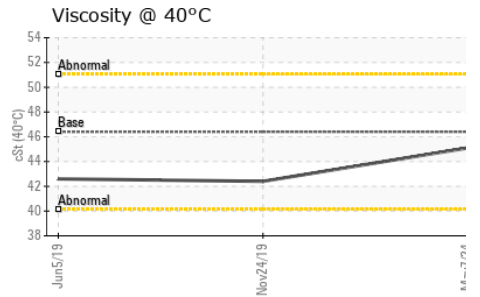
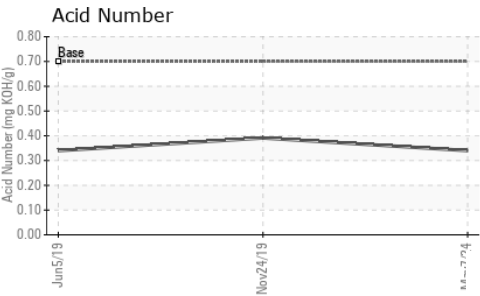
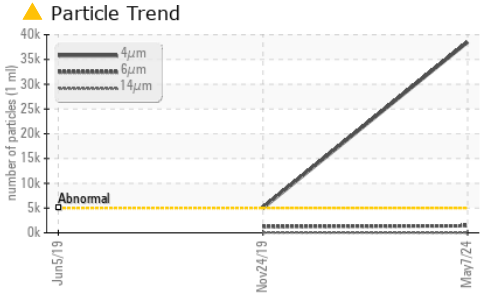
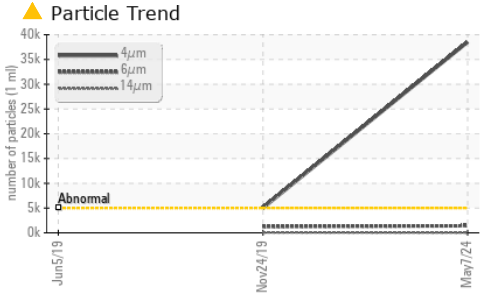
method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m >25	2	<1	1
Sodium	ppm	ASTM D5185m	1	<1	1
Potassium	ppm	ASTM D5185m >20	2	<1	0

FLUID CLEANLINESS

method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647 >5000	▲ 38505	4996	---
Particles >6µm	ASTM D7647 >1300	● 1419	1230	---
Particles >14µm	ASTM D7647 >160	26	63	---
Particles >21µm	ASTM D7647 >40	6	17	---
Particles >38µm	ASTM D7647 >10	0	4	---
Particles >71µm	ASTM D7647 >3	0	0	---
Oil Cleanliness	ISO 4406 (c) >19/17/14	▲ 22/18/12	19/17/13	---



OIL ANALYSIS REPORT

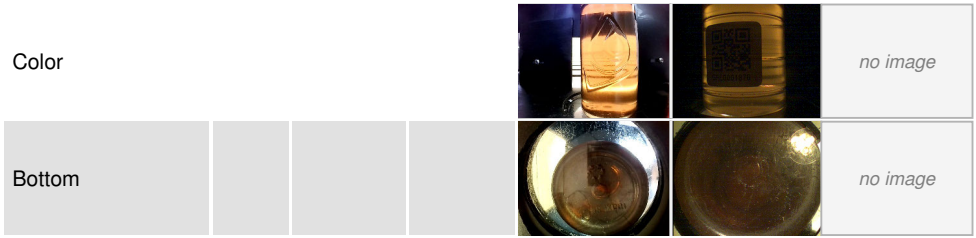


FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.70	0.34	0.391	0.34

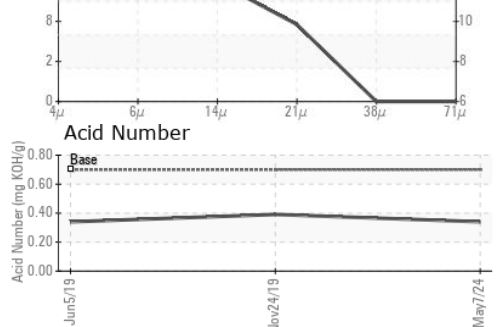
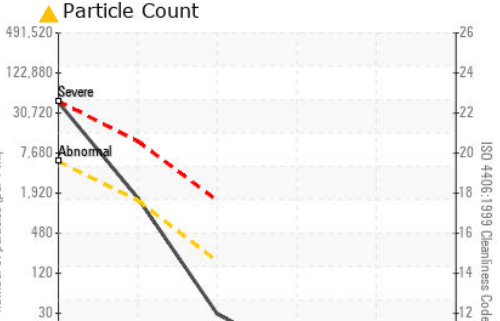
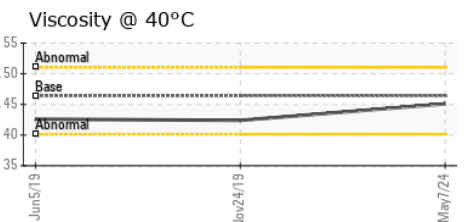
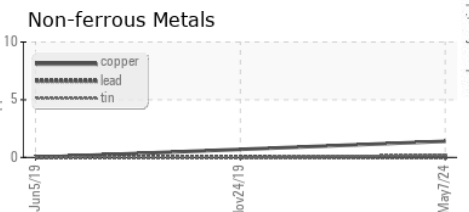
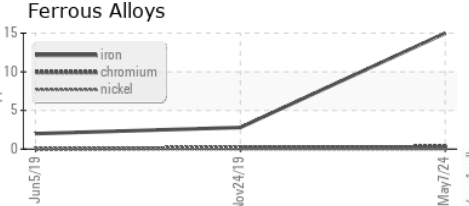
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	---
Precipitate	scalar	*Visual	NONE	NONE	NONE	---
Silt	scalar	*Visual	NONE	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE	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 D445	46.4	45.1	42.4	42.6

SAMPLE IMAGES



GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0118778 **Received** : 10 May 2024
Lab Number : **06175392** **Tested** : 13 May 2024
Unique Number : 11021445 **Diagnosed** : 14 May 2024 - Don Baldrige
Test Package : FLEET (Additional Tests : PrtCount)

GFL Environmental - 837 - Harrison TS
 28220 S State Route 291
 Harrisonville, MO
 US 64701
 Contact: SARA PATRICK
 spatrack@gflenv.com

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)