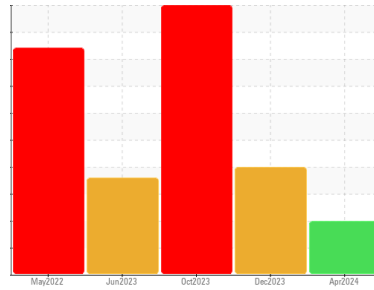




OIL ANALYSIS REPORT

Sample Rating Trend



Area
BAGLINE
 Machine Id
KETTLE 2 - BAG

Component
Top Refrigeration Compressor
 Fluid
PETRO CANADA PURITY FG SYNTH EP GEAR 220 (--- GAL)

DIAGNOSIS

- Recommendation**
We recommend an early resample to monitor this condition.
- Wear**
The iron level is abnormal.
- 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.

SAMPLE INFORMATION

method	limit/base	current	history1	history2
Sample Number	Client Info	USP0006498	USP0004475	USP0001363
Sample Date	Client Info	21 Apr 2024	17 Dec 2023	10 Oct 2023
Machine Age	hrs	0	0	0
Oil Age	hrs	0	0	0
Oil Changed	Client Info	N/A	N/A	N/A
Sample Status		ABNORMAL	ABNORMAL	SEVERE

WEAR METALS

method	limit/base	current	history1	history2
Iron ppm	ASTM D5185m >8	▲ 79	▲ 329	▲ 607
Chromium ppm	ASTM D5185m >2	<1	1	3
Nickel ppm	ASTM D5185m	<1	0	0
Titanium ppm	ASTM D5185m	<1	0	<1
Silver ppm	ASTM D5185m >2	0	0	0
Aluminum ppm	ASTM D5185m >3	2	0	<1
Lead ppm	ASTM D5185m >2	0	0	0
Copper ppm	ASTM D5185m >8	<1	<1	<1
Tin ppm	ASTM D5185m >4	<1	0	<1
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	0	0
Barium ppm	ASTM D5185m	<1	0	1
Molybdenum ppm	ASTM D5185m	<1	0	0
Manganese ppm	ASTM D5185m	<1	2	3
Magnesium ppm	ASTM D5185m	1	0	2
Calcium ppm	ASTM D5185m	8	0	6
Phosphorus ppm	ASTM D5185m	583	416	469
Zinc ppm	ASTM D5185m	4	1	13
Sulfur ppm	ASTM D5185m	386	349	400

CONTAMINANTS

method	limit/base	current	history1	history2
Silicon ppm	ASTM D5185m >15	13	25	13
Sodium ppm	ASTM D5185m	2	8	15
Potassium ppm	ASTM D5185m >20	1	2	5
Water %	ASTM D6304 >0.01	0.00	▲ 0.121	▲ 0.378
ppm Water	ASTM D6304 >100	0	▲ 1210	▲ 3780

FLUID CLEANLINESS

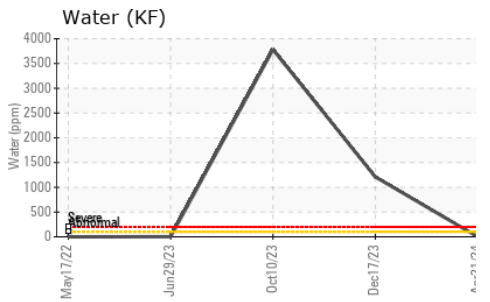
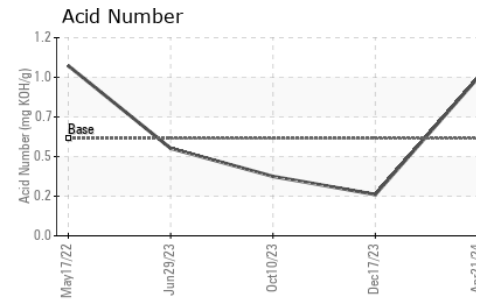
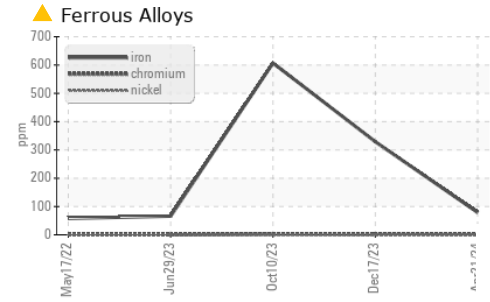
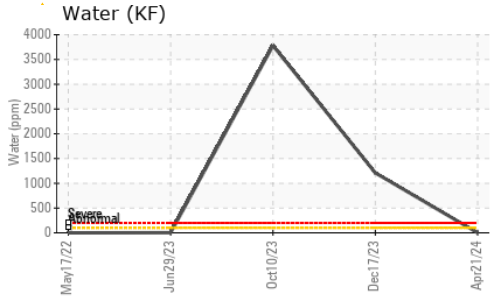
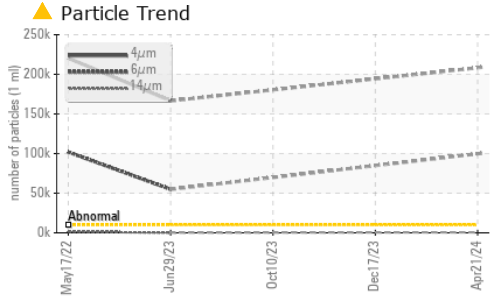
method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647 >10000	▲ 208297	---	---
Particles >6µm	ASTM D7647 >2500	▲ 99782	---	---
Particles >14µm	ASTM D7647 >640	572	---	---
Particles >21µm	ASTM D7647 >160	50	---	---
Particles >38µm	ASTM D7647 >40	0	---	---
Particles >71µm	ASTM D7647 >10	0	---	---
Oil Cleanliness	ISO 4406 (c) >20/18/16	▲ 25/24/16	---	---

FLUID DEGRADATION

method	limit/base	current	history1	history2
Acid Number (AN) mg KOH/g	ASTM D974 0.59	0.955	0.25	0.36



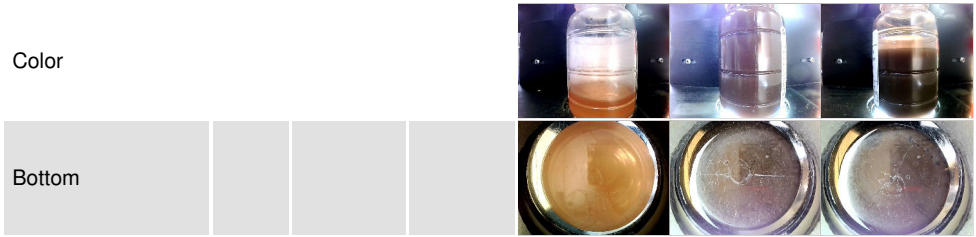
OIL ANALYSIS REPORT



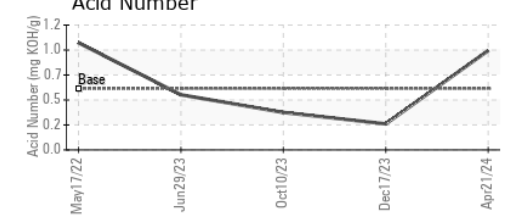
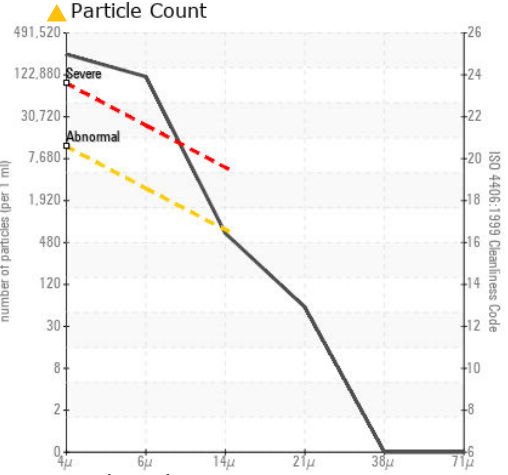
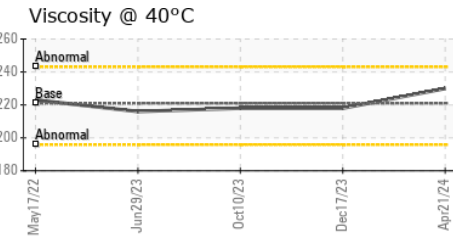
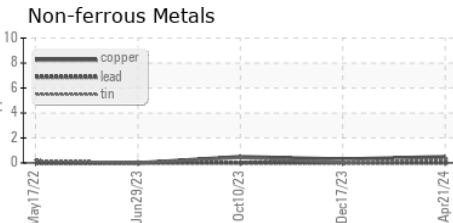
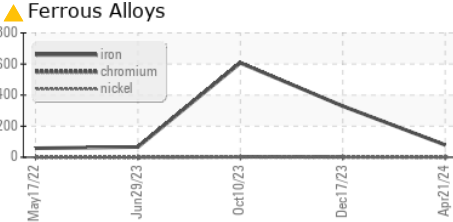
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	▲ HEAVY	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	● HAZY	● MILKY
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.01	▲ 0.2%	▲ 0.2%
Free Water	scalar	*Visual		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445 221	230	218	218

SAMPLE IMAGES	method	limit/base	current	history1	history2
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GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : USP006498 **Received** : 22 Apr 2024
Lab Number : 06156013 **Tested** : 23 Apr 2024
Unique Number : 10991436 **Diagnosed** : 24 Apr 2024 - Jonathan Hester
Test Package : IND 2

KraftHeinz - Cedar Rapids - Plant 8370
 4601 C ST SW
 CEDAR RAPIDS, IA
 US 52404
 Contact: Service Manager

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)

T:
F: