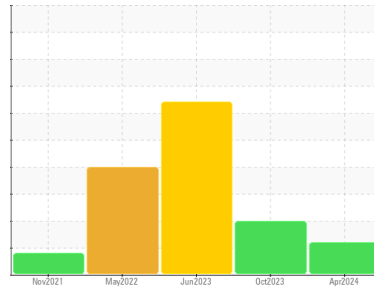




# OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Area

**HOLD-BAG**

Machine Id

**HOLDING KETTLE C**

Component

**Refrigeration Compressor**

Fluid

**PETRO CANADA PURITY FG EP GEAR OIL 220 (1 GAL)**

## DIAGNOSIS

### Recommendation

Resample at the next service interval to monitor.

### 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 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		<b>USP0006696</b>	USP0001370	USP244788
Sample Date	Client Info		<b>25 Apr 2024</b>	10 Oct 2023	12 Jun 2023
Machine Age	hrs	Client Info	<b>0</b>	0	0
Oil Age	hrs	Client Info	<b>0</b>	0	0
Oil Changed	Client Info		<b>N/A</b>	N/A	N/A
Sample Status			<b>ATTENTION</b>	ABNORMAL	ABNORMAL

## WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >8	<b>1</b>	▲ 83	▲ 93
Chromium	ppm	ASTM D5185m >2	<b>0</b>	<1	▲ 4
Nickel	ppm	ASTM D5185m	<b>0</b>	0	2
Titanium	ppm	ASTM D5185m	<b>0</b>	0	0
Silver	ppm	ASTM D5185m >2	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m >3	<b>0</b>	<1	0
Lead	ppm	ASTM D5185m >2	<b>0</b>	0	0
Copper	ppm	ASTM D5185m >8	<b>0</b>	0	<1
Tin	ppm	ASTM D5185m >4	<b>0</b>	0	<1
Vanadium	ppm	ASTM D5185m	<b>0</b>	0	0
Cadmium	ppm	ASTM D5185m	<b>0</b>	0	0

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	<b>0</b>	0	0
Barium	ppm	ASTM D5185m	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	<b>0</b>	0	<1
Manganese	ppm	ASTM D5185m	<b>0</b>	<1	1
Magnesium	ppm	ASTM D5185m	<b>0</b>	2	0
Calcium	ppm	ASTM D5185m	<b>0</b>	4	12
Phosphorus	ppm	ASTM D5185m	<b>503</b>	599	465
Zinc	ppm	ASTM D5185m	<b>0</b>	0	2
Sulfur	ppm	ASTM D5185m	<b>554</b>	553	699

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >15	<b>10</b>	9	10
Sodium	ppm	ASTM D5185m	<b>0</b>	<1	0
Potassium	ppm	ASTM D5185m >20	<b>0</b>	0	<1
Water	%	ASTM D6304 >0.01	<b>0.001</b>	0.003	▲ 0.339
ppm Water	ppm	ASTM D6304 >100	<b>13</b>	25.2	▲ 3390

## FLUID CLEANLINESS

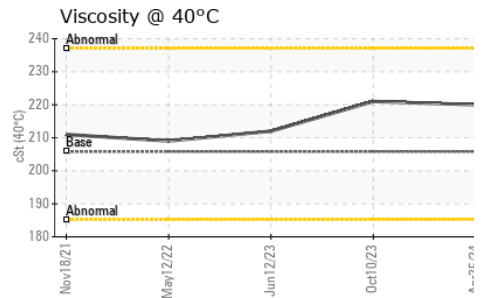
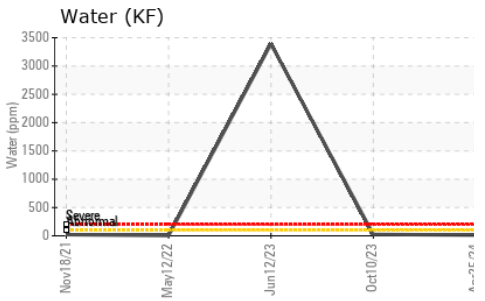
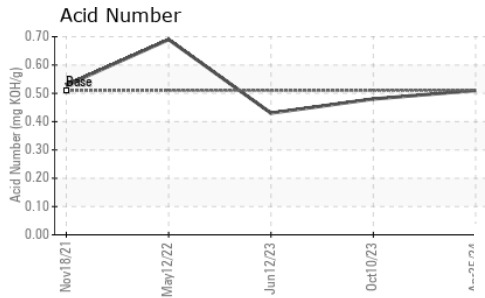
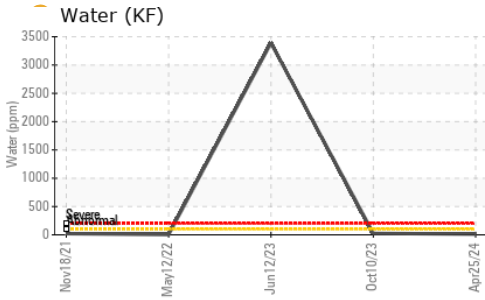
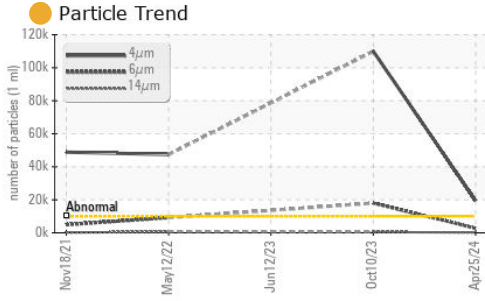
	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>10000	● <b>19448</b>	▲ 109922	---
Particles >6µm	ASTM D7647	>2500	● <b>2737</b>	▲ 17997	---
Particles >14µm	ASTM D7647	>640	<b>168</b>	450	---
Particles >21µm	ASTM D7647	>160	<b>40</b>	77	---
Particles >38µm	ASTM D7647	>40	<b>1</b>	3	---
Particles >71µm	ASTM D7647	>10	<b>0</b>	1	---
Oil Cleanliness	ISO 4406 (c)	>20/18/16	● <b>21/19/15</b>	▲ 24/21/16	---

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974 0.51	<b>0.51</b>	0.48	0.43



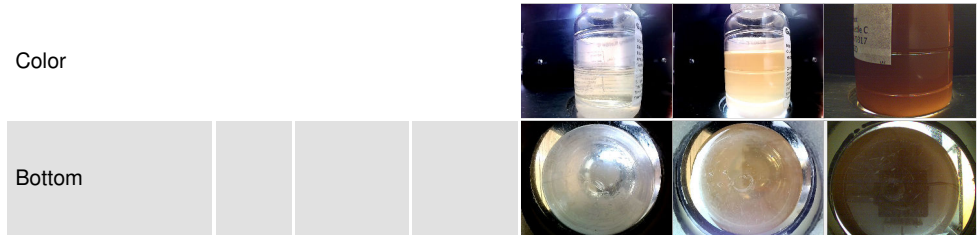
# OIL ANALYSIS REPORT



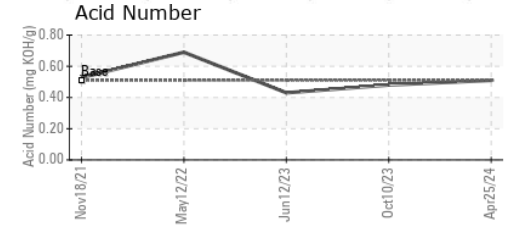
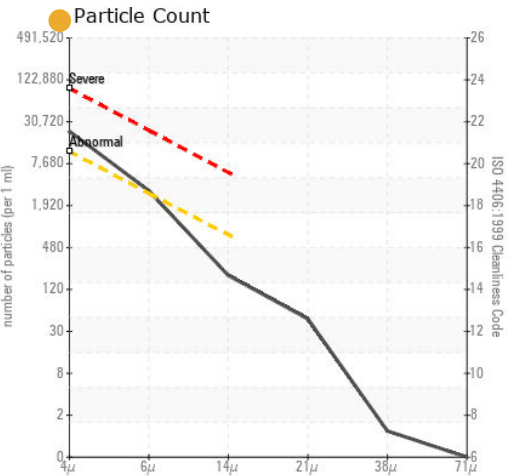
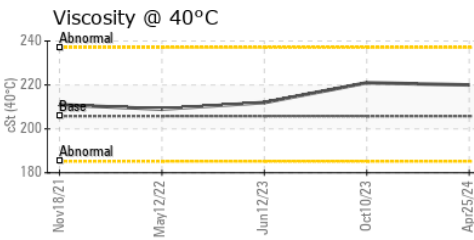
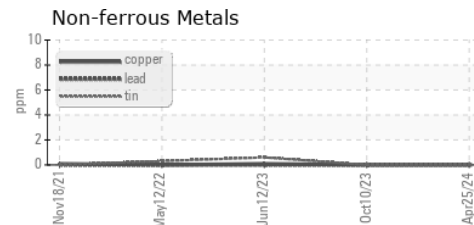
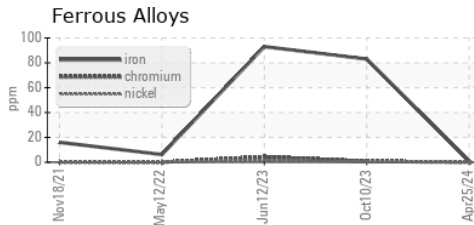
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	▲ MODER
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	● HAZY
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.01	NEG	▲ 0.2%
Free Water	scalar	*Visual		NEG	▲ 1.0

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	205.8	220	221

SAMPLE IMAGES	method	limit/base	current	history1	history2
---------------	--------	------------	---------	----------	----------



## GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
 Sample No. : USP006696  
 Lab Number : 06161478  
 Unique Number : 10996901  
 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)