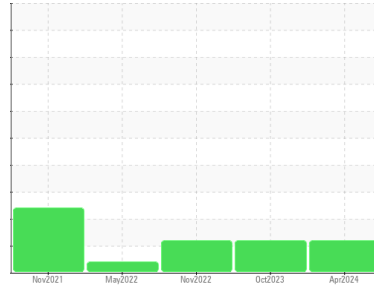




# OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Area

**HOLD-BAG**

Machine Id

**HOLDING KETTLE B - 11531788**

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 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	<b>USP0006683</b>	USP0001356	USP239431
Sample Date	Client Info	<b>25 Apr 2024</b>	10 Oct 2023	14 Nov 2022
Machine Age	hrs	Client Info	0	0
Oil Age	hrs	Client Info	0	0
Oil Changed	Client Info	<b>N/A</b>	N/A	N/A
Sample Status		<b>ABNORMAL</b>	ABNORMAL	ABNORMAL

## WEAR METALS

method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185m >8	<b>6</b>	15	16
Chromium	ppm	ASTM D5185m >2	<b>0</b>	0	<1
Nickel	ppm	ASTM D5185m	<b>0</b>	0	0
Titanium	ppm	ASTM D5185m	<b>0</b>	0	0
Silver	ppm	ASTM D5185m >2	<b>0</b>	0	2
Aluminum	ppm	ASTM D5185m >3	<b>0</b>	<1	<1
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>	<1	0
Vanadium	ppm	ASTM D5185m	<b>0</b>	0	0
Cadmium	ppm	ASTM D5185m	<b>0</b>	0	<1

## ADDITIVES

method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185m	<b>0</b>	0	1
Barium	ppm	ASTM D5185m	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	<b>0</b>	0	0
Manganese	ppm	ASTM D5185m	<b>0</b>	<1	<1
Magnesium	ppm	ASTM D5185m	<b>0</b>	2	<1
Calcium	ppm	ASTM D5185m	<b>0</b>	4	4
Phosphorus	ppm	ASTM D5185m	<b>495</b>	524	536
Zinc	ppm	ASTM D5185m	<b>0</b>	0	8
Sulfur	ppm	ASTM D5185m	<b>575</b>	623	996

## CONTAMINANTS

method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m >15	<b>4</b>	7	9
Sodium	ppm	ASTM D5185m	<b>0</b>	1	0
Potassium	ppm	ASTM D5185m >20	<b>0</b>	0	2
Water	%	ASTM D6304 >0.01	<b>0.002</b>	0.009	0.036
ppm Water	ppm	ASTM D6304 >100	<b>16</b>	92.7	360

## FLUID CLEANLINESS

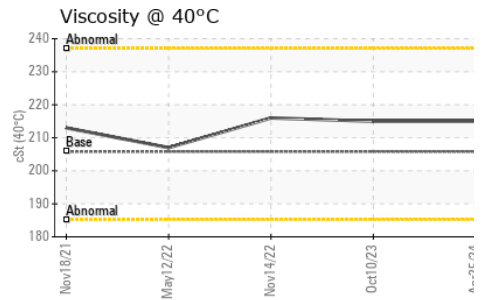
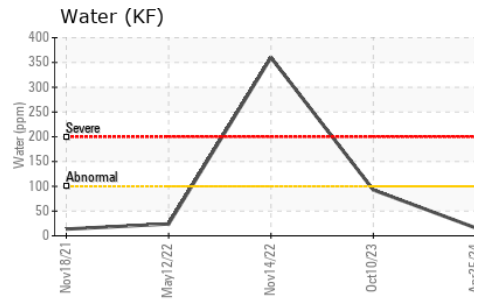
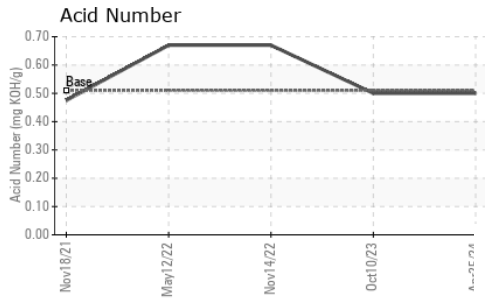
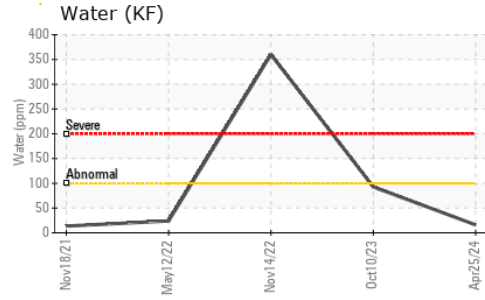
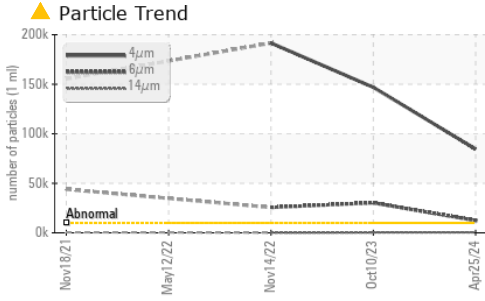
method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647 >10000	<b>▲ 84498</b>	▲ 146922	▲ 191647
Particles >6µm	ASTM D7647 >2500	<b>▲ 12412</b>	▲ 30312	▲ 25610
Particles >14µm	ASTM D7647 >640	<b>450</b>	356	170
Particles >21µm	ASTM D7647 >160	<b>102</b>	42	9
Particles >38µm	ASTM D7647 >40	<b>2</b>	5	1
Particles >71µm	ASTM D7647 >10	<b>0</b>	1	0
Oil Cleanliness	ISO 4406 (c) >20/18/16	<b>▲ 24/21/16</b>	▲ 24/22/16	▲ 25/22/15

## FLUID DEGRADATION

method	limit/base	current	history1	history2	
Acid Number (AN)	mg KOH/g	ASTM D974 0.51	<b>0.50</b>	0.50	0.67



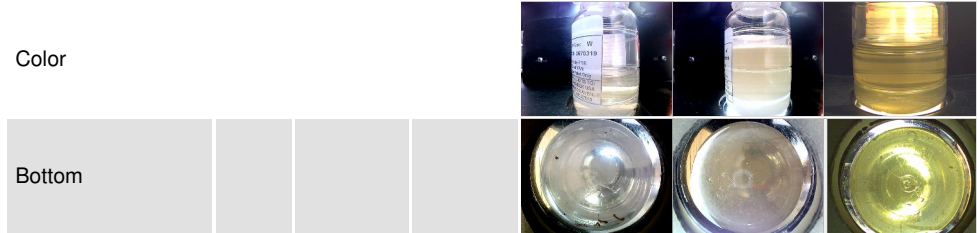
# OIL ANALYSIS REPORT



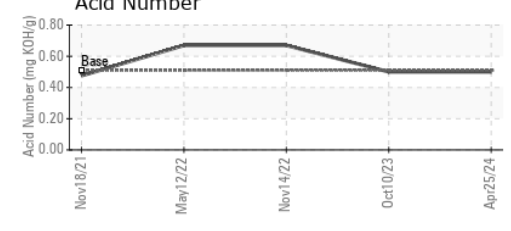
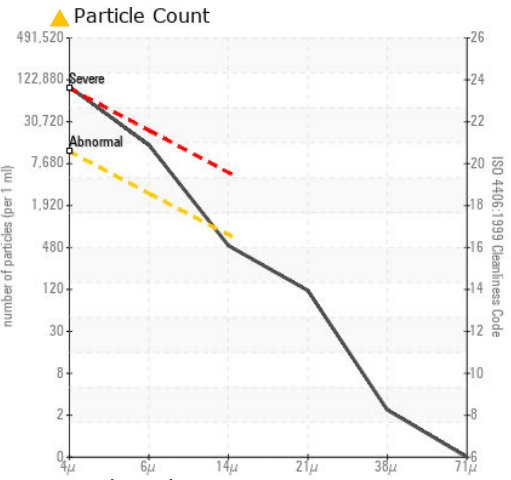
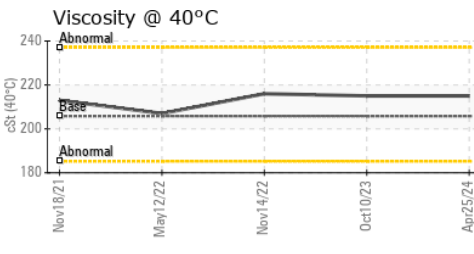
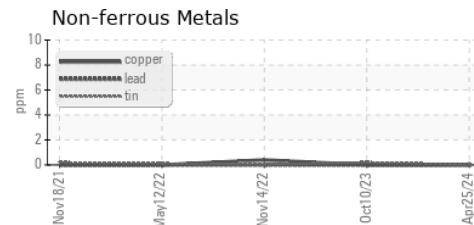
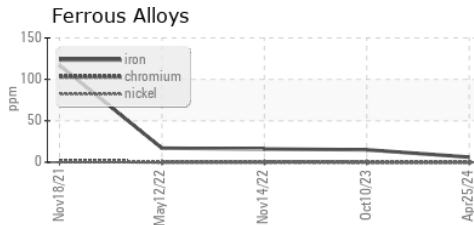
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	VLITE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance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

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	205.8	215	216

SAMPLE IMAGES	method	limit/base	current	history1	history2
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## GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
 Sample No. : USP006683  
 Lab Number : 06161481  
 Unique Number : 10996904  
 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: