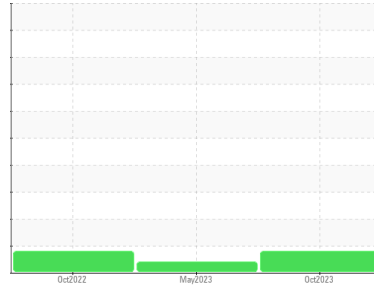




# PROBLEM SUMMARY

## Sample Rating Trend



ISO



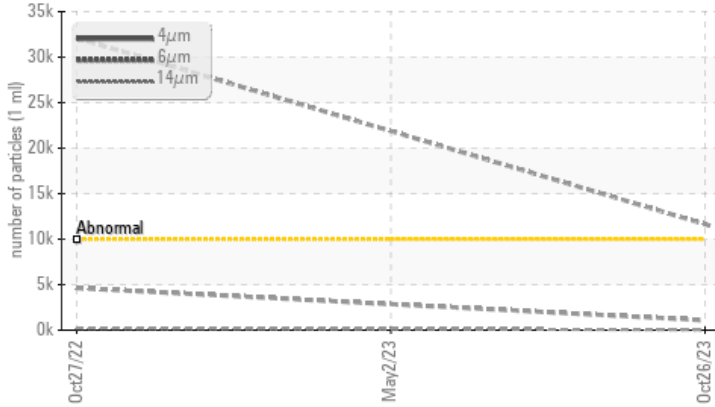
Machine Id  
**HT 84**

Component  
**Agitator Gearbox**

Fluid  
**PETRO CANADA PURITY FG EP GEAR OIL 220 (--- LTR)**

## COMPONENT CONDITION SUMMARY

### ▲ Particle Trend



## RECOMMENDATION

Resample at the next service interval to monitor.

## PROBLEMATIC TEST RESULTS

Sample Status		ATTENTION	ABNORMAL	ATTENTION
Particles >4µm	ASTM D7647 >10000	▲ 11642	---	▲ 32105
Oil Cleanliness	ISO 4406 (c) >20/18/16	▲ 21/17/12	---	▲ 22/19/15

Customer Id: KRAMASIOW  
 Sample No.: USP0002927  
 Lab Number: 05994413  
 Test Package: IND 2



To manage this report scan the QR code

To discuss the diagnosis or test data:  
 Doug Bogart +1 (800)237-1369 x4016  
[dougb@wearcheckusa.com](mailto:dougb@wearcheckusa.com)

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

## RECOMMENDED ACTIONS

*There are no recommended actions for this sample.*

## HISTORICAL DIAGNOSIS

### 02 May 2023 Diag: Doug Bogart

#### VIS DEBRIS



We recommend you service the filters on this component if applicable. Resample at the next service interval to monitor. We were unable to perform a particle count due to a high concentration of particles present in this sample. All component wear rates are normal. Moderate concentration of visible dirt/debris present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report



### 27 Oct 2022 Diag: Doug Bogart

#### ISO



Resample at the next service interval to monitor. All component wear rates are normal. There is a moderate amount of silt (particulates < 6 microns in size) present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

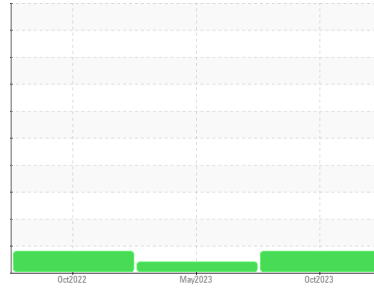
view report





# OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Machine Id  
**HT 84**

Component  
**Agitator Gearbox**

Fluid  
**PETRO CANADA PURITY FG EP GEAR OIL 220 (--- LTR)**

## 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 < 6 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>USP0002927</b>	USP248902	USP234451
Sample Date	Client Info		<b>26 Oct 2023</b>	02 May 2023	27 Oct 2022
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	ATTENTION

## WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >150	<b>6</b>	14	16
Chromium	ppm	ASTM D5185m >10	<b>&lt;1</b>	0	0
Nickel	ppm	ASTM D5185m >10	<b>0</b>	0	0
Titanium	ppm	ASTM D5185m	<b>0</b>	0	0
Silver	ppm	ASTM D5185m	<b>0</b>	0	<1
Aluminum	ppm	ASTM D5185m >25	<b>&lt;1</b>	0	<1
Lead	ppm	ASTM D5185m >100	<b>0</b>	0	0
Copper	ppm	ASTM D5185m >50	<b>&lt;1</b>	<1	<1
Tin	ppm	ASTM D5185m >10	<b>&lt;1</b>	0	<1
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>125</b>	123	163
Barium	ppm	ASTM D5185m	<b>20</b>	0	0
Molybdenum	ppm	ASTM D5185m	<b>&lt;1</b>	1	2
Manganese	ppm	ASTM D5185m	<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m	<b>0</b>	0	1
Calcium	ppm	ASTM D5185m	<b>2</b>	4	6
Phosphorus	ppm	ASTM D5185m	<b>554</b>	1043	1042
Zinc	ppm	ASTM D5185m	<b>33</b>	25	40
Sulfur	ppm	ASTM D5185m	<b>27406</b>	22243	23046

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >50	<b>9</b>	16	19
Sodium	ppm	ASTM D5185m	<b>6</b>	29	7
Potassium	ppm	ASTM D5185m >20	<b>0</b>	24	6
Water	%	ASTM D6304 >0.1	<b>0.007</b>	0.030	0.019
ppm Water	ppm	ASTM D6304 >1000	<b>79.5</b>	302.5	191.7

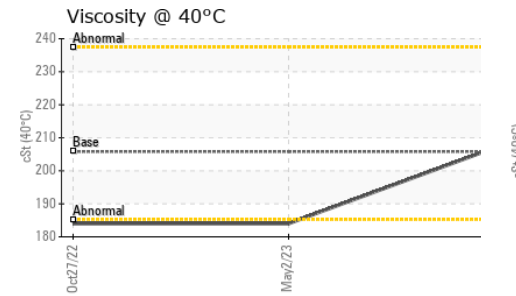
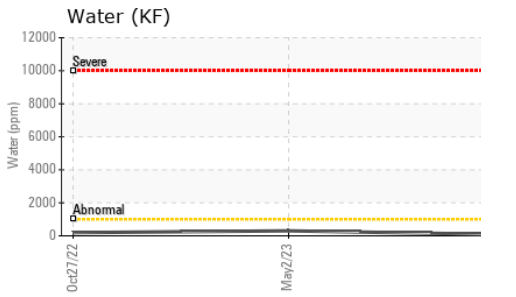
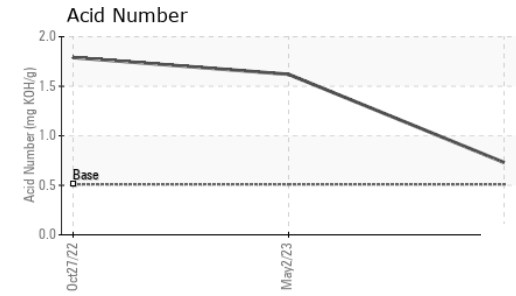
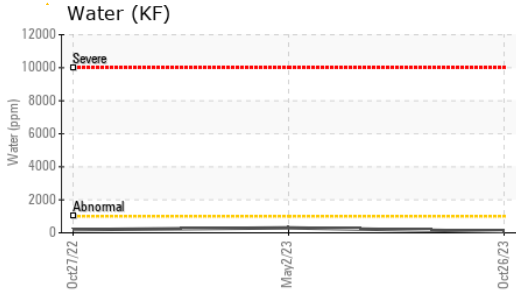
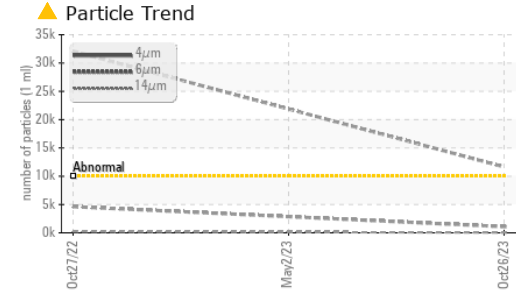
## FLUID CLEANLINESS

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>10000	<b>▲ 11642</b>	---	▲ 32105
Particles >6µm	ASTM D7647	>2500	<b>1082</b>	---	4629
Particles >14µm	ASTM D7647	>640	<b>38</b>	---	220
Particles >21µm	ASTM D7647	>160	<b>9</b>	---	48
Particles >38µm	ASTM D7647	>40	<b>1</b>	---	1
Particles >71µm	ASTM D7647	>10	<b>0</b>	---	0
Oil Cleanliness	ISO 4406 (c)	>20/18/16	<b>▲ 21/17/12</b>	---	▲ 22/19/15

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045 0.51	<b>0.73</b>	1.62	1.79

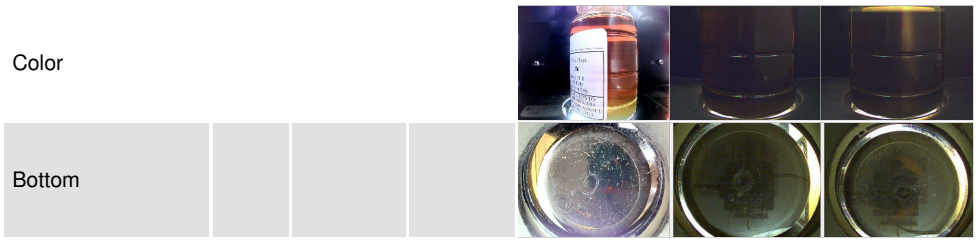
# OIL ANALYSIS REPORT



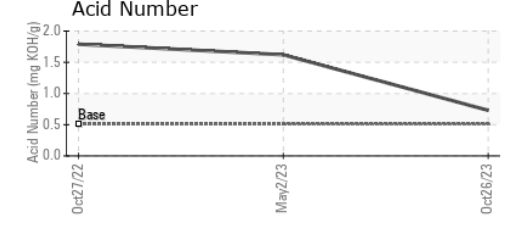
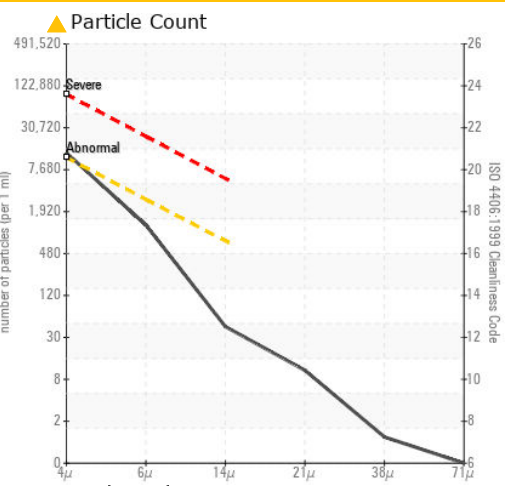
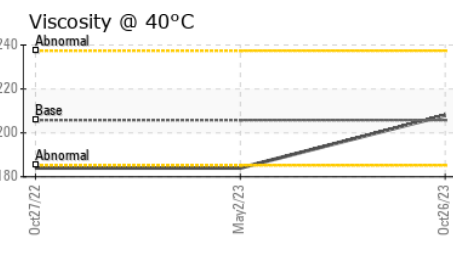
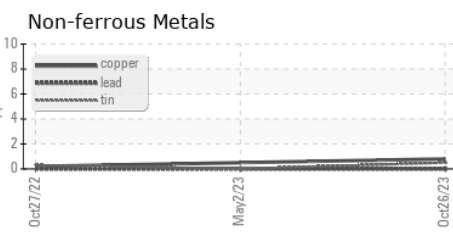
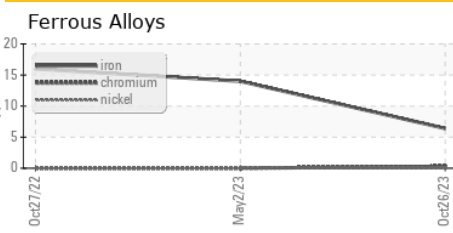
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	▲ MODER
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	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	205.8	184	184

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



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : USP0002927 **Received** : 31 Oct 2023  
**Lab Number** : 05994413 **Diagnosed** : 01 Nov 2023  
**Unique Number** : 10722773 **Diagnostician** : Doug Bogart  
**Test Package** : IND 2

**KraftHeinz - Mason City - Plant 8360**  
 1022 12TH ST  
 MASON CITY, IA  
 US 50401  
 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: (641)421-2936