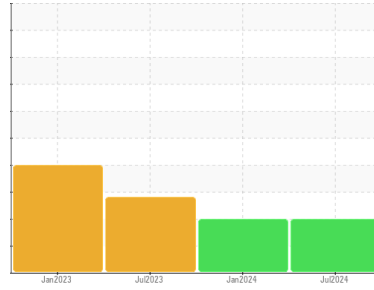


# OIL ANALYSIS REPORT

Area  
**PHASE 1 HTS**  
 Machine Id  
**HT 02**  
 Component  
**Agitator Gearbox**  
 Fluid  
**PETRO CANADA PURITY FG SYNTH EP GEAR 220 (--- LTR)**

Sample Rating Trend



## DIAGNOSIS

- Recommendation**  
We recommend you service the filters on this component if applicable. Resample at the next service interval to monitor.
- Wear**  
The copper level is abnormal. All other 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>PCA0124932</b>	PCA0111045	USP244677
Sample Date	Client Info	<b>08 Jul 2024</b>	08 Jan 2024	17 Jul 2023
Machine Age	hrs	<b>0</b>	0	0
Oil Age	hrs	<b>0</b>	0	0
Oil Changed	Client Info	<b>Not Chngd</b>	Not Chngd	N/A
Sample Status		<b>ABNORMAL</b>	ABNORMAL	ABNORMAL

## CONTAMINATION

method	limit/base	current	history1	history2
Water	WC Method >0.1	<b>NEG</b>	NEG	NEG

## WEAR METALS

method	limit/base	current	history1	history2
Iron	ppm ASTM D5185m >150	<b>4</b>	7	6
Chromium	ppm ASTM D5185m >10	<b>0</b>	<1	0
Nickel	ppm ASTM D5185m >10	<b>0</b>	0	0
Titanium	ppm ASTM D5185m	<b>&lt;1</b>	<1	0
Silver	ppm ASTM D5185m	<b>0</b>	0	<1
Aluminum	ppm ASTM D5185m >25	<b>0</b>	2	<1
Lead	ppm ASTM D5185m >100	<b>0</b>	<1	<1
Copper	ppm ASTM D5185m >50	<b>71</b>	89	68
Tin	ppm ASTM D5185m >10	<b>0</b>	<1	<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>21</b>	30	22
Barium	ppm ASTM D5185m	<b>0</b>	0	1
Molybdenum	ppm ASTM D5185m	<b>0</b>	<1	1
Manganese	ppm ASTM D5185m	<b>0</b>	<1	<1
Magnesium	ppm ASTM D5185m	<b>2</b>	<1	<1
Calcium	ppm ASTM D5185m	<b>&lt;1</b>	3	2
Phosphorus	ppm ASTM D5185m	<b>869</b>	909	751
Zinc	ppm ASTM D5185m	<b>30</b>	10	16
Sulfur	ppm ASTM D5185m	<b>12731</b>	14848	12646

## CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185m >50	<b>10</b>	8	11
Sodium	ppm ASTM D5185m	<b>&lt;1</b>	0	0
Potassium	ppm ASTM D5185m >20	<b>0</b>	1	<1

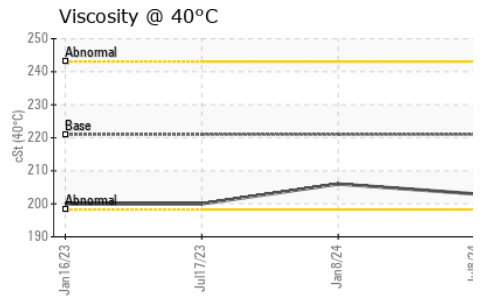
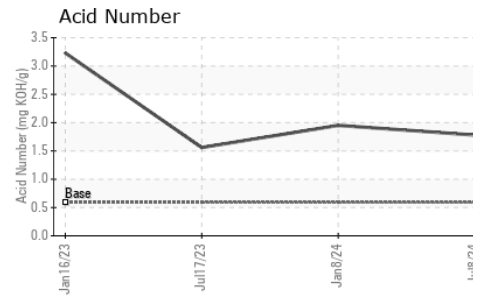
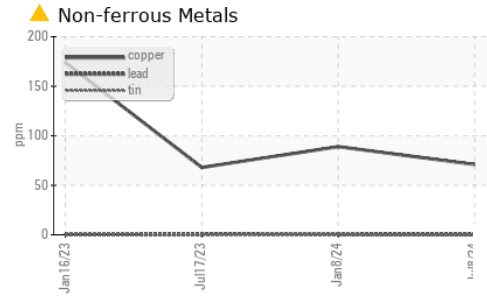
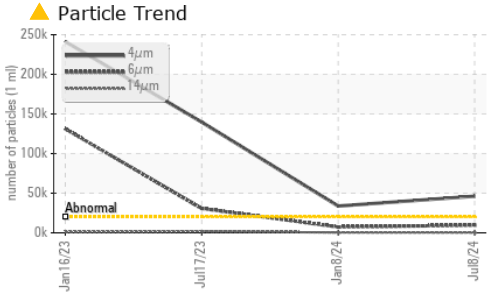
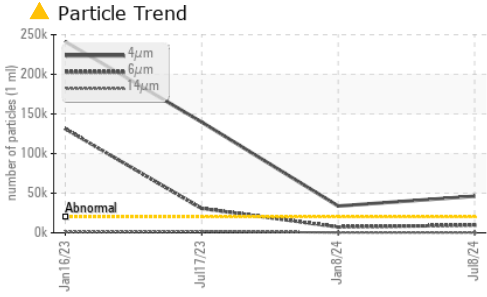
## FLUID CLEANLINESS

method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647 >20000	<b>46210</b>	33790	139669
Particles >6µm	ASTM D7647 >5000	<b>9636</b>	7297	30755
Particles >14µm	ASTM D7647 >640	<b>307</b>	394	1645
Particles >21µm	ASTM D7647 >160	<b>41</b>	92	427
Particles >38µm	ASTM D7647 >40	<b>2</b>	2	15
Particles >71µm	ASTM D7647 >10	<b>0</b>	0	1
Oil Cleanliness	ISO 4406 (c) >21/19/16	<b>23/20/15</b>	22/20/16	24/22/18

## FLUID DEGRADATION

method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g ASTM D8045 0.59	<b>1.78</b>	1.951	1.56

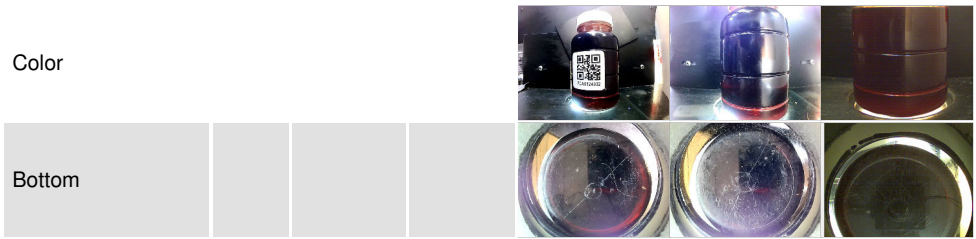
# OIL ANALYSIS REPORT



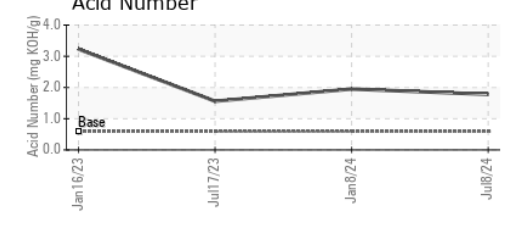
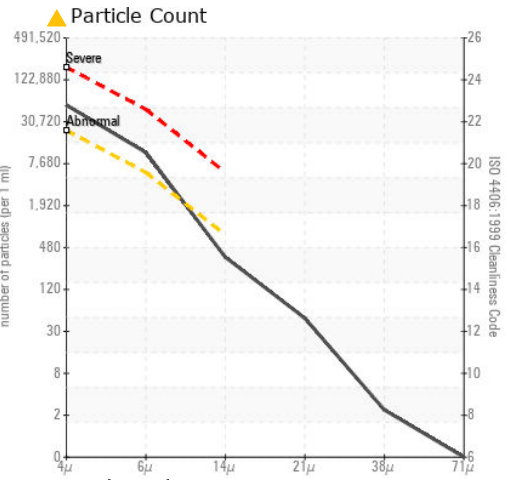
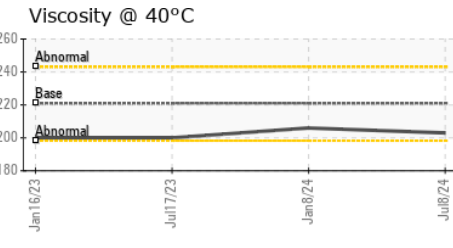
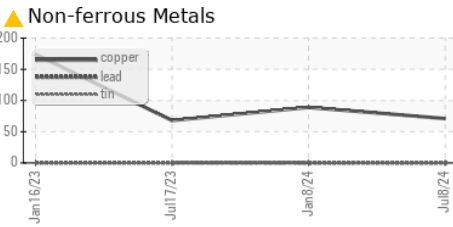
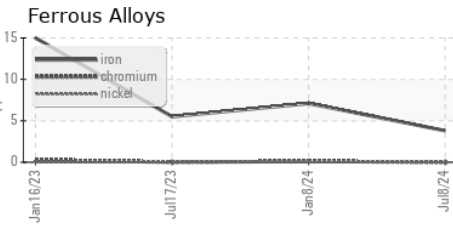
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	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 221	203	206	200

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



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : PCA0124932 **Received** : 11 Jul 2024  
**Lab Number** : 06233249 **Tested** : 12 Jul 2024  
**Unique Number** : 11116742 **Diagnosed** : 12 Jul 2024 - Don Baldrige  
**Test Package** : IND 2 ( Additional Tests: PrtCount )

**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)