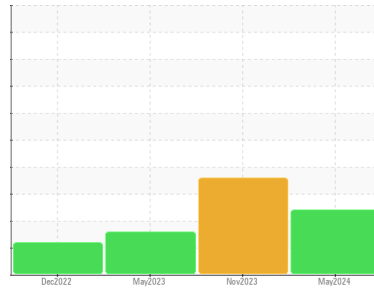


# OIL ANALYSIS REPORT

Area  
**MANTLE LINE 8**  
 Machine Id  
**HT 86**  
 Component  
**Agitator Gearbox**  
 Fluid  
**PETRO CANADA PURITY FG SYNTH EP GEAR 220 (--- LTR)**

Sample Rating Trend



## 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. Elemental level of silicon (Si) above normal.
- 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>PCA0117326</b>	PCA0111049	USP234435
Sample Date	Client Info	<b>31 May 2024</b>	27 Nov 2023	31 May 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>2</b>	5	2
Chromium	ppm ASTM D5185m >10	<b>0</b>	0	0
Nickel	ppm ASTM D5185m >10	<b>0</b>	1	<1
Titanium	ppm ASTM D5185m	<b>0</b>	0	0
Silver	ppm ASTM D5185m	<b>0</b>	0	0
Aluminum	ppm ASTM D5185m >25	<b>0</b>	1	0
Lead	ppm ASTM D5185m >100	<b>0</b>	0	0
Copper	ppm ASTM D5185m >50	<b>&lt;1</b>	13	<1
Tin	ppm ASTM D5185m >10	<b>&lt;1</b>	1	0
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>2</b>	0	0
Barium	ppm ASTM D5185m	<b>&lt;1</b>	0	0
Molybdenum	ppm ASTM D5185m	<b>0</b>	1	0
Manganese	ppm ASTM D5185m	<b>&lt;1</b>	0	0
Magnesium	ppm ASTM D5185m	<b>0</b>	<1	2
Calcium	ppm ASTM D5185m	<b>6</b>	5	3
Phosphorus	ppm ASTM D5185m	<b>507</b>	573	477
Zinc	ppm ASTM D5185m	<b>5</b>	0	0
Sulfur	ppm ASTM D5185m	<b>1277</b>	1449	1331

## CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185m >50	<b>▲ 894</b>	▲ 1062	▲ 576
Sodium	ppm ASTM D5185m	<b>0</b>	0	2
Potassium	ppm ASTM D5185m >20	<b>0</b>	1	4

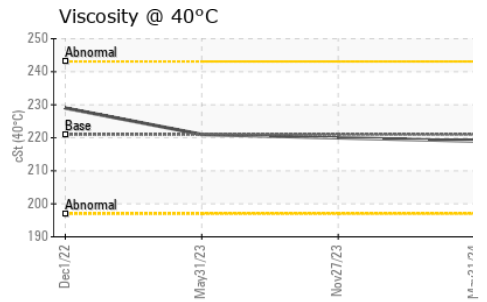
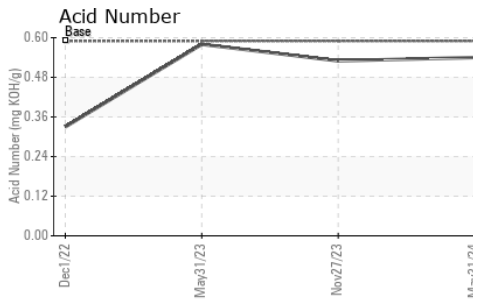
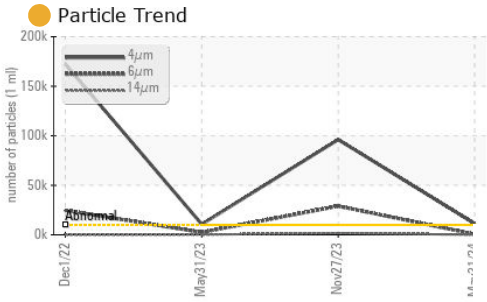
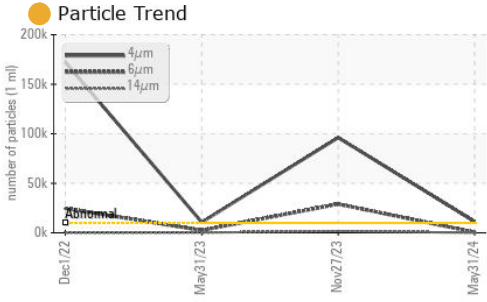
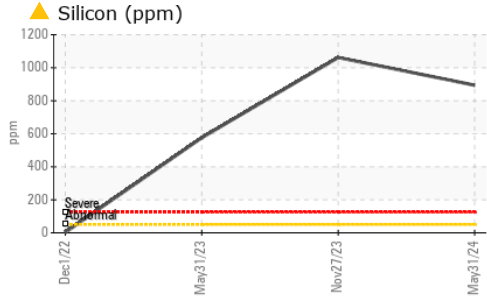
## FLUID CLEANLINESS

method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647 >10000	<b>● 11383</b>	▲ 96143	10675
Particles >6µm	ASTM D7647 >2500	<b>552</b>	▲ 29015	2453
Particles >14µm	ASTM D7647 >640	<b>22</b>	▲ 1726	156
Particles >21µm	ASTM D7647 >160	<b>7</b>	▲ 456	27
Particles >38µm	ASTM D7647 >40	<b>2</b>	22	2
Particles >71µm	ASTM D7647 >10	<b>1</b>	2	1
Oil Cleanliness	ISO 4406 (c) >20/18/16	<b>● 21/16/12</b>	▲ 24/22/18	21/18/14

## FLUID DEGRADATION

method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g ASTM D8045 0.59	<b>0.54</b>	0.53	0.58

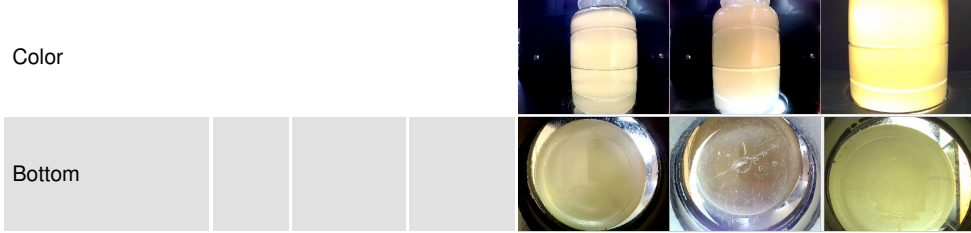
# OIL ANALYSIS REPORT



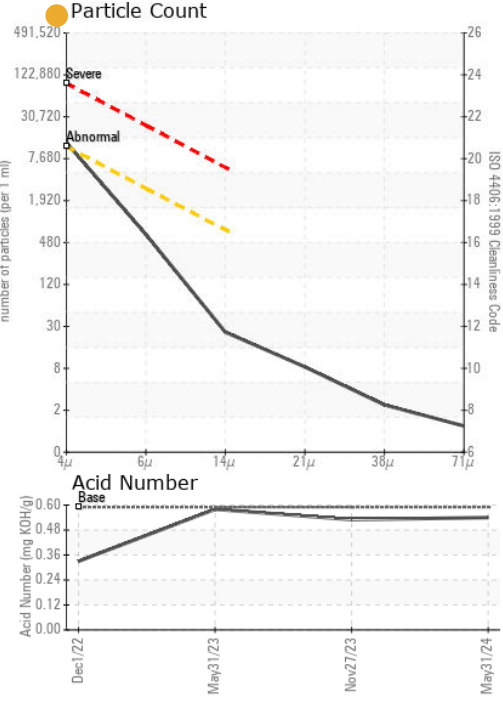
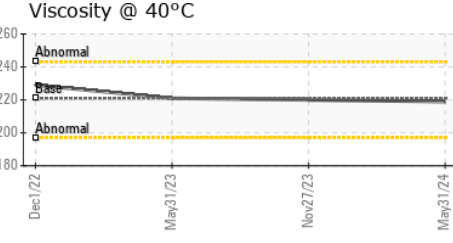
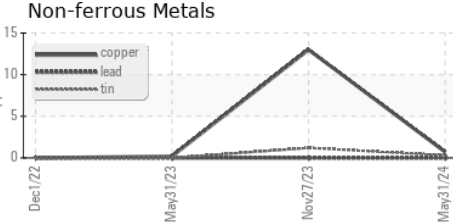
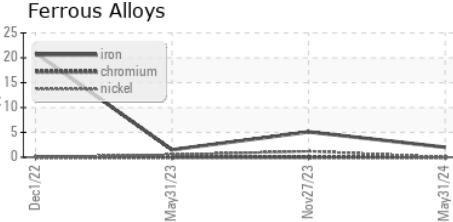
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE
Precipitate	scalar	*Visual	NONE	<b>NONE</b>	NONE
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE
Debris	scalar	*Visual	NONE	<b>NONE</b>	NONE
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	NONE
Appearance	scalar	*Visual	NORML	<b>NORML</b>	NORML
Odor	scalar	*Visual	NORML	<b>NORML</b>	NORML
Emulsified Water	scalar	*Visual	>0.1	<b>NEG</b>	NEG
Free Water	scalar	*Visual		<b>NEG</b>	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	221	<b>219</b>	220

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



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : PCA0117326  
**Lab Number** : 06200116  
**Unique Number** : 11062239  
**Test Package** : IND 2 ( Additional Tests: PrtCount )

**Received** : 05 Jun 2024  
**Tested** : 06 Jun 2024  
**Diagnosed** : 07 Jun 2024 - Don Baldrige

**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)