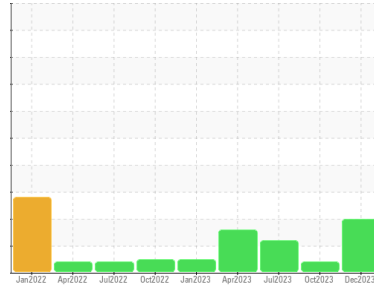


# OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Area  
**INJECT B ROOM [9866629]**  
 Machine Id  
**KR-GR-003248 - PUMP (S/N INJECT B - 11555702)**  
 Component  
**Gearbox**  
 Fluid  
**PETRO CANADA 220 (5 QTS)**

## DIAGNOSIS

### Recommendation

We recommend you service the filters on this component if applicable. Resample at the next service interval to monitor. ( Customer Sample Comment: 9866629 )

### Wear

All component wear rates are normal.

### Contamination

There is a high amount of particulates 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>PCA0114840</b>	PCA0091772	PCA0096610
Sample Date	Client Info			<b>26 Dec 2023</b>	15 Oct 2023	17 Jul 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>Not Chngd</b>	N/A	N/A
Sample Status				<b>ABNORMAL</b>	ATTENTION	ATTENTION

CONTAMINATION		method	limit/base	current	history1	history2
Water	WC Method		>0.2	<b>NEG</b>	NEG	NEG

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>200	<b>29</b>	55	87
Chromium	ppm	ASTM D5185m	>15	<b>0</b>	<1	<1
Nickel	ppm	ASTM D5185m	>15	<b>0</b>	0	0
Titanium	ppm	ASTM D5185m		<b>0</b>	0	0
Silver	ppm	ASTM D5185m		<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>25	<b>&lt;1</b>	1	5
Lead	ppm	ASTM D5185m	>100	<b>0</b>	0	0
Copper	ppm	ASTM D5185m	>200	<b>0</b>	<1	0
Tin	ppm	ASTM D5185m	>25	<b>0</b>	0	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>0</b>	0	0
Barium	ppm	ASTM D5185m		<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m		<b>0</b>	4	3
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m		<b>0</b>	0	2
Calcium	ppm	ASTM D5185m		<b>0</b>	0	9
Phosphorus	ppm	ASTM D5185m		<b>213</b>	488	561
Zinc	ppm	ASTM D5185m		<b>0</b>	0	▲ 85
Sulfur	ppm	ASTM D5185m		<b>433</b>	597	▲ 830

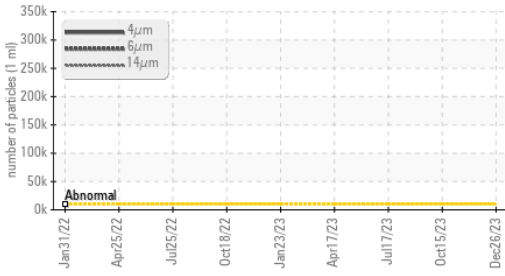
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>50	<b>5</b>	3	5
Sodium	ppm	ASTM D5185m		<b>3</b>	2	<1
Potassium	ppm	ASTM D5185m	>20	<b>2</b>	<1	1

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>10000	▲ <b>309609</b>	---	---
Particles >6µm		ASTM D7647	>2500	▲ <b>137211</b>	---	---
Particles >14µm		ASTM D7647	>640	▲ <b>3803</b>	---	---
Particles >21µm		ASTM D7647	>160	▲ <b>399</b>	---	---
Particles >38µm		ASTM D7647	>40	<b>2</b>	---	---
Particles >71µm		ASTM D7647	>10	<b>0</b>	---	---
Oil Cleanliness		ISO 4406 (c)	>20/18/16	▲ <b>25/24/19</b>	---	---

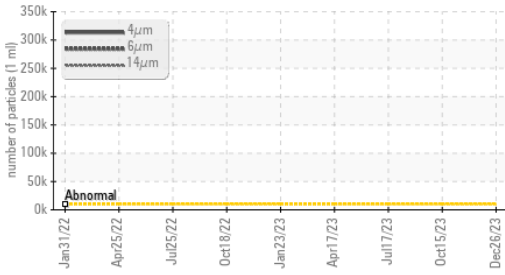
FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045		<b>0.48</b>	0.59	---

# OIL ANALYSIS REPORT

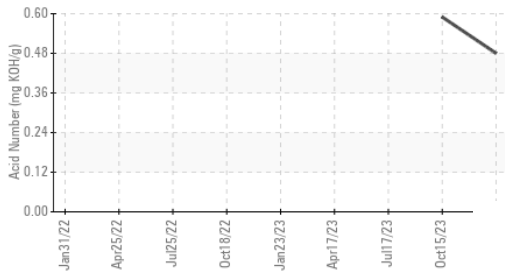
**▲ Particle Trend**



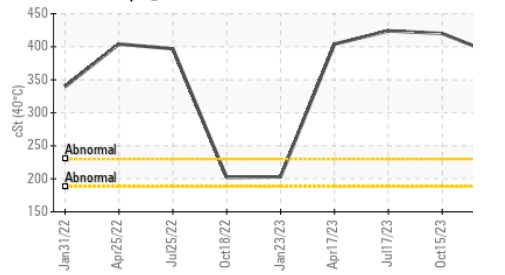
**▲ Particle Trend**



**Acid Number**



**Viscosity @ 40°C**



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	HAZY	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	NEG	0.2%
Free Water	scalar	*Visual		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	388	▲ 420	▲ 424

**SAMPLE IMAGES**

method	limit/base	current	history1	history2
Color				
Bottom				

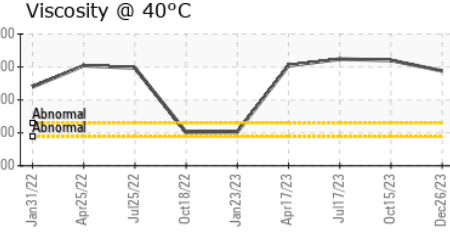
**GRAPHS**

**Ferrous Alloys**

**Non-ferrous Metals**

**▲ Particle Count**

**Acid Number**



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : PCA0114840 **Recieved** : 29 Dec 2023  
**Lab Number** : 06047762 **Diagnosed** : 02 Jan 2024  
**Unique Number** : 10808370 **Diagnostician** : Doug Bogart  
**Test Package** : IND 2 ( Additional Tests: PrtCount )

**KraftHeinz - Kirksville - Plant 8333 PCA**  
 2504 INDUSTRIAL DR  
 KIRKSVILLE, MO  
 US 63501  
 Contact: WALLACE WARD  
 wallace.ward@kraftheinzcompany.com  
 T: (660)627-1031  
 F: (660)627-5887

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)