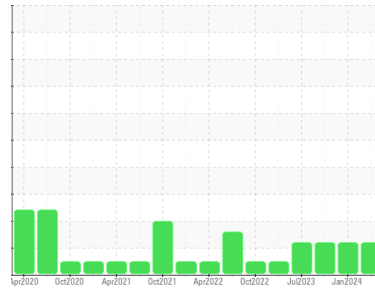


# OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Area

**MIX ROOM C [98957649]**

Machine Id

**KR-GR-001553-NORTH - 15000 MIXER (S/N MIX C - 11513064)**

Component

**Gearbox**

Fluid

**PETRO CANADA 220 (50 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: 98957649 )

### 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>PCA0120398</b>	PCA0108446	PCA0108241
Sample Date	Client Info	<b>17 Apr 2024</b>	22 Jan 2024	22 Oct 2023
Machine Age	hrs	<b>0</b>	0	0
Oil Age	hrs	<b>0</b>	0	0
Oil Changed	Client Info	<b>Not Changed</b>	N/A	N/A
Sample Status		<b>ABNORMAL</b>	ABNORMAL	ABNORMAL

## 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>70</b>	69	99
Chromium	ppm	ASTM D5185m >15	<b>&lt;1</b>	0	<1
Nickel	ppm	ASTM D5185m >15	<b>0</b>	0	0
Titanium	ppm	ASTM D5185m	<b>&lt;1</b>	0	<1
Silver	ppm	ASTM D5185m	<b>0</b>	0	<1
Aluminum	ppm	ASTM D5185m >25	<b>1</b>	1	4
Lead	ppm	ASTM D5185m >100	<b>0</b>	0	0
Copper	ppm	ASTM D5185m >200	<b>&lt;1</b>	<1	1
Tin	ppm	ASTM D5185m >25	<b>0</b>	0	1
Vanadium	ppm	ASTM D5185m	<b>&lt;1</b>	0	0
Cadmium	ppm	ASTM D5185m	<b>0</b>	0	0

## ADDITIVES

method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185m	<b>60</b>	69	92
Barium	ppm	ASTM D5185m	<b>&lt;1</b>	0	22
Molybdenum	ppm	ASTM D5185m	<b>330</b>	350	510
Manganese	ppm	ASTM D5185m	<b>3</b>	2	4
Magnesium	ppm	ASTM D5185m	<b>1</b>	0	0
Calcium	ppm	ASTM D5185m	<b>110</b>	107	139
Phosphorus	ppm	ASTM D5185m	<b>1010</b>	984	1485
Zinc	ppm	ASTM D5185m	<b>156</b>	152	218
Sulfur	ppm	ASTM D5185m	<b>23148</b>	18084	42157

## CONTAMINANTS

method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m >50	<b>12</b>	12	20
Sodium	ppm	ASTM D5185m	<b>13</b>	17	22
Potassium	ppm	ASTM D5185m >20	<b>2</b>	<1	2

## FLUID CLEANLINESS

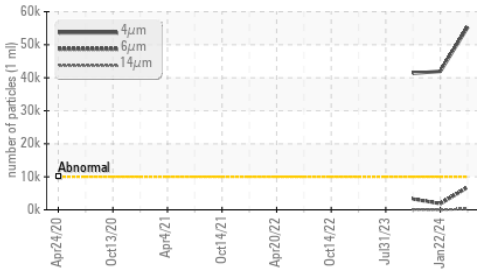
method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647 >10000	<b>▲ 55287</b>	▲ 41936	▲ 41360
Particles >6µm	ASTM D7647 >2500	<b>▲ 6854</b>	▲ 1888	▲ 3278
Particles >14µm	ASTM D7647 >640	<b>269</b>	39	88
Particles >21µm	ASTM D7647 >160	<b>57</b>	9	20
Particles >38µm	ASTM D7647 >40	<b>2</b>	1	1
Particles >71µm	ASTM D7647 >10	<b>0</b>	0	1
Oil Cleanliness	ISO 4406 (c) >20/18/16	<b>▲ 23/20/15</b>	▲ 23/18/12	▲ 23/19/14

## FLUID DEGRADATION

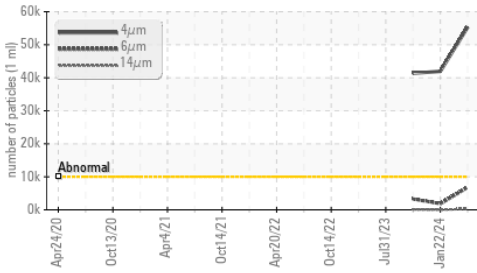
method	limit/base	current	history1	history2	
Acid Number (AN)	mg KOH/g	ASTM D8045	<b>2.15</b>	1.82	1.88

# OIL ANALYSIS REPORT

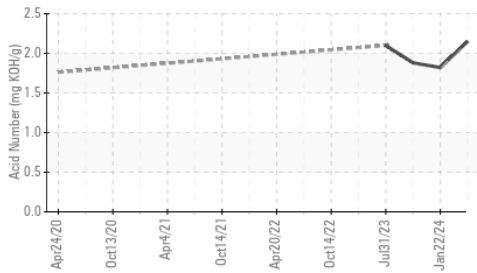
### ▲ Particle Trend



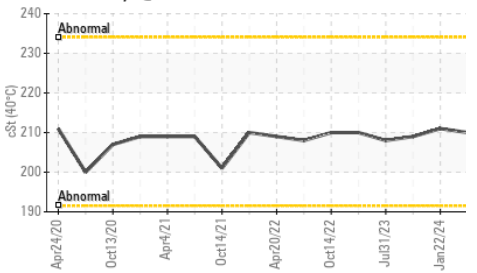
### ▲ Particle Trend



### Acid Number



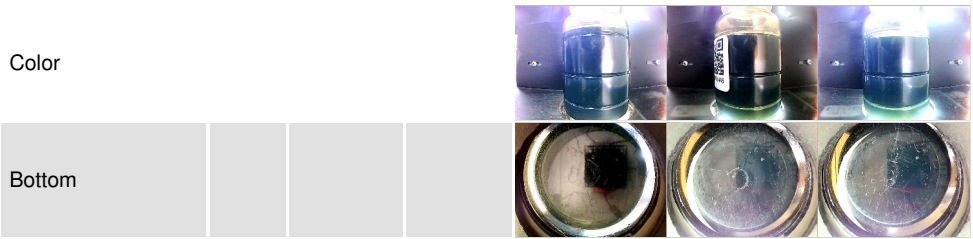
### Viscosity @ 40°C



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	LIGHT
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

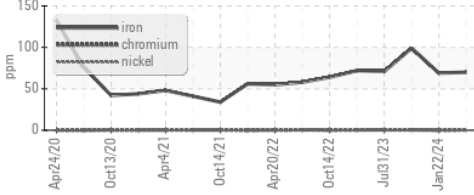
FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	210	211	209

### SAMPLE IMAGES

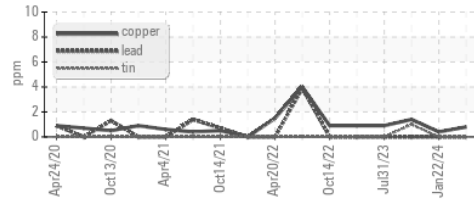


### GRAPHS

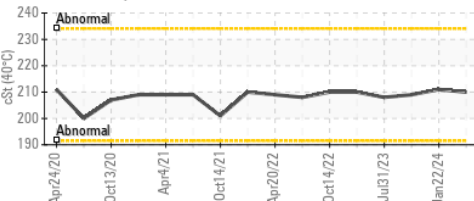
#### Ferrous Alloys



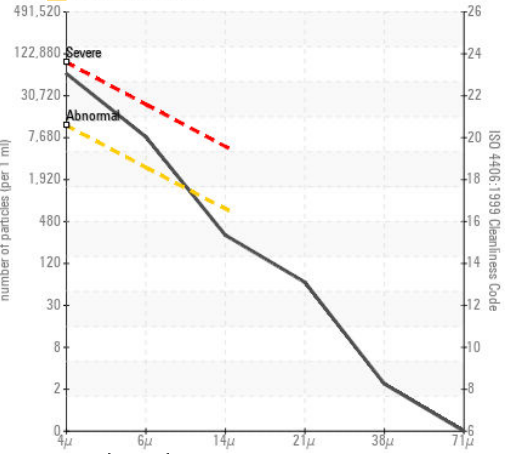
#### Non-ferrous Metals



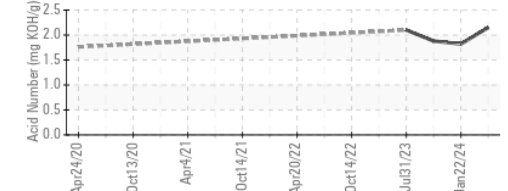
#### Viscosity @ 40°C



#### ▲ Particle Count



#### Acid Number



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : PCA0120398  
**Lab Number** : 06155879  
**Unique Number** : 10991302  
**Test Package** : IND 2 ( Additional Tests: PrtCount )

**Received** : 22 Apr 2024  
**Tested** : 23 Apr 2024  
**Diagnosed** : 24 Apr 2024 - Don Baldrige

**KraftHeinz - Kirksville - Plant 8333 PCA**  
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 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)