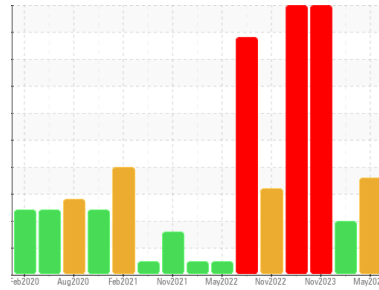


Area  
**MIX ROOM E [98982224]**  
Machine Id  
**KR-GR-001554-NORTH - 15000 MIXER (S/N MIX E - 11513084)**  
Component  
**Gearbox**  
Fluid  
**PETRO CANADA 220 (--- QTS)**

Sample Rating Trend



CONTAMINANT



## DIAGNOSIS

### Recommendation

We recommend you service the filters on this component if applicable. Resample at the next service interval to monitor.

### Wear

All component wear rates are normal.

### Contamination

Appearance is hazy. 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>PCA0114154</b>	PCA0116069	PCA0051933
Sample Date	Client Info	<b>24 May 2024</b>	14 Mar 2024	05 Nov 2023
Machine Age	hrs	<b>0</b>	0	0
Oil Age	hrs	<b>0</b>	0	0
Oil Changed	Client Info	<b>N/A</b>	N/A	N/A
Sample Status		<b>ABNORMAL</b>	ABNORMAL	SEVERE

## WEAR METALS

method	limit/base	current	history1	history2
Iron ppm	ASTM D5185m >200	<b>41</b>	33	▲ 731
Chromium ppm	ASTM D5185m >15	<b>&lt;1</b>	<1	▲ 8
Nickel ppm	ASTM D5185m >15	<b>0</b>	0	0
Titanium ppm	ASTM D5185m	<b>&lt;1</b>	<1	0
Silver ppm	ASTM D5185m	<b>0</b>	0	0
Aluminum ppm	ASTM D5185m >25	<b>2</b>	3	<1
Lead ppm	ASTM D5185m >100	<b>&lt;1</b>	<1	0
Copper ppm	ASTM D5185m >200	<b>&lt;1</b>	<1	<1
Tin ppm	ASTM D5185m >25	<b>&lt;1</b>	<1	2
Vanadium ppm	ASTM D5185m	<b>0</b>	<1	0
Cadmium ppm	ASTM D5185m	<b>0</b>	<1	<1

## ADDITIVES

method	limit/base	current	history1	history2
Boron ppm	ASTM D5185m	<b>8</b>	9	4
Barium ppm	ASTM D5185m	<b>&lt;1</b>	<1	0
Molybdenum ppm	ASTM D5185m	<b>8</b>	7	<1
Manganese ppm	ASTM D5185m	<b>&lt;1</b>	<1	7
Magnesium ppm	ASTM D5185m	<b>2</b>	1	2
Calcium ppm	ASTM D5185m	<b>10</b>	11	27
Phosphorus ppm	ASTM D5185m	<b>459</b>	472	364
Zinc ppm	ASTM D5185m	<b>18</b>	17	12
Sulfur ppm	ASTM D5185m	<b>1431</b>	1331	1166

## CONTAMINANTS

method	limit/base	current	history1	history2
Silicon ppm	ASTM D5185m >50	<b>7</b>	8	5
Sodium ppm	ASTM D5185m	<b>1</b>	<1	23
Potassium ppm	ASTM D5185m >20	<b>2</b>	2	20
Water %	ASTM D6304 >0.2	<b>0.115</b>	---	▲ 90.0
ppm Water	ASTM D6304 >2000	<b>1150</b>	---	▲ 900000

## FLUID CLEANLINESS

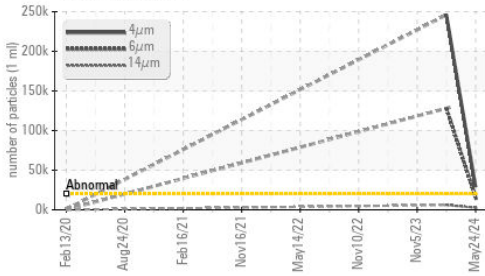
method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647 >20000	▲ <b>29005</b>	▲ 245950	---
Particles >6µm	ASTM D7647 >5000	▲ <b>15801</b>	▲ 128103	---
Particles >14µm	ASTM D7647 >640	▲ <b>2689</b>	▲ 6075	---
Particles >21µm	ASTM D7647 >160	▲ <b>906</b>	▲ 455	---
Particles >38µm	ASTM D7647 >40	▲ <b>140</b>	3	---
Particles >71µm	ASTM D7647 >10	▲ <b>14</b>	0	---
Oil Cleanliness	ISO 4406 (c) >21/19/16	▲ <b>22/21/19</b>	▲ 25/24/20	---

## FLUID DEGRADATION

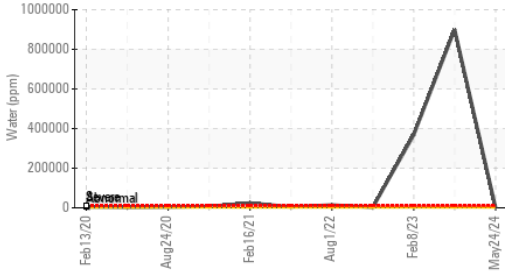
method	limit/base	current	history1	history2
Acid Number (AN) mg KOH/g	ASTM D8045	<b>0.59</b>	0.65	---

# OIL ANALYSIS REPORT

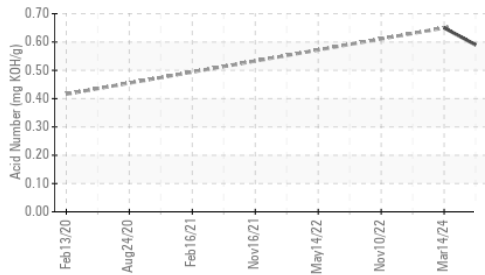
## ▲ Particle Trend



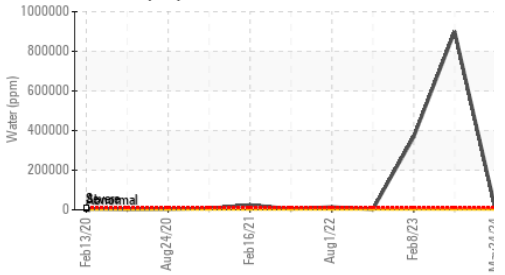
## Water (KF)



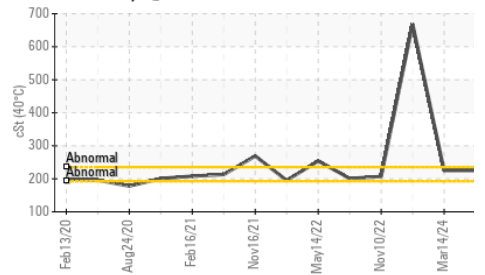
## Acid Number



## Water (KF)



## 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	0.2%	▲ 0.2%
Free Water	scalar	*Visual		NEG	▲ >10%

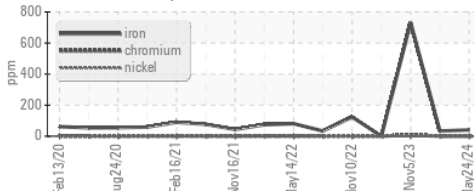
FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	225	225	---

## SAMPLE IMAGES

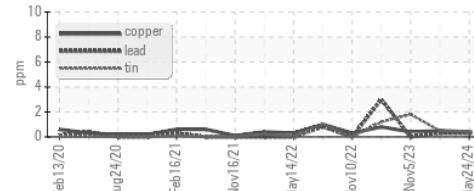
method	limit/base	current	history1	history2
Color				
Bottom				

## GRAPHS

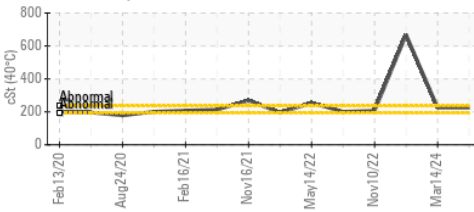
### Ferrous Alloys



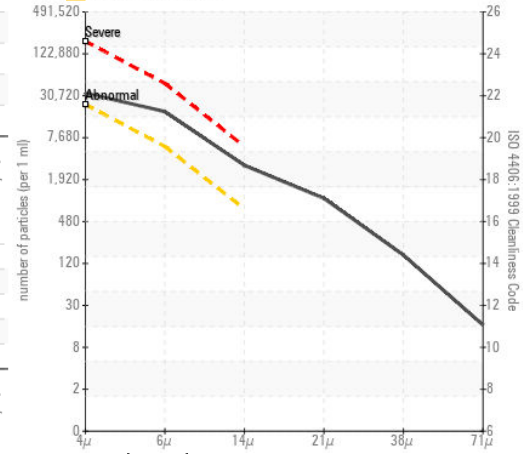
### Non-ferrous Metals



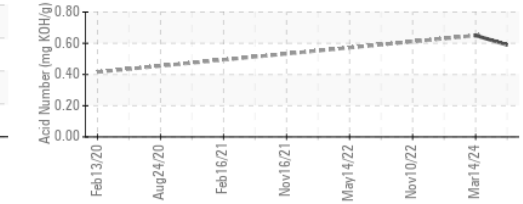
### Viscosity @ 40°C



### ▲ Particle Count



### Acid Number



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513

**Sample No.** : PCA0114154

**Lab Number** : 06195365

**Unique Number** : 11057488

**Test Package** : IND 2 ( Additional Tests: KF, PrtCount )

**Received** : 30 May 2024

**Tested** : 05 Jun 2024

**Diagnosed** : 05 Jun 2024 - Jonathan Hester

**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)