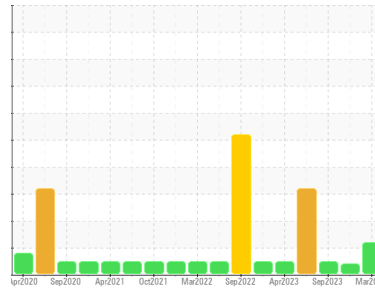


# OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Area  
**STUFF ROOM A [98872818]**  
 Machine Id  
**KR-GR-000295 - MARLEN (S/N STUFF A - 11513100)**  
 Component  
**Hydraulic System**  
 Fluid  
**PETRO CANADA PURITY FG HYDRAULIC AW 68 (60 GAL)**

## DIAGNOSIS

### Recommendation

No corrective action is recommended at this time. Resample at the next service interval to monitor. ( Customer Sample Comment: 98872818 )

### 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>PCA0120380</b>	PCA0112151	PCA0104789
Sample Date	Client Info	<b>20 Mar 2024</b>	20 Dec 2023	22 Sep 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>	Not Changd	N/A
Sample Status		<b>ABNORMAL</b>	ATTENTION	NORMAL

## WEAR METALS

method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185m >20	<b>&lt;1</b>	0	2
Chromium	ppm	ASTM D5185m >20	<b>&lt;1</b>	0	0
Nickel	ppm	ASTM D5185m >20	<b>0</b>	0	0
Titanium	ppm	ASTM D5185m	<b>&lt;1</b>	<1	<1
Silver	ppm	ASTM D5185m	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m >20	<b>3</b>	0	0
Lead	ppm	ASTM D5185m >20	<b>&lt;1</b>	0	0
Copper	ppm	ASTM D5185m >20	<b>1</b>	2	<1
Tin	ppm	ASTM D5185m >20	<b>&lt;1</b>	0	0
Vanadium	ppm	ASTM D5185m	<b>&lt;1</b>	0	0
Cadmium	ppm	ASTM D5185m	<b>&lt;1</b>	0	0

## ADDITIVES

method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185m	<b>0</b>	0	0
Barium	ppm	ASTM D5185m	<b>&lt;1</b>	0	0
Molybdenum	ppm	ASTM D5185m	<b>0</b>	0	0
Manganese	ppm	ASTM D5185m	<b>0</b>	0	<1
Magnesium	ppm	ASTM D5185m	<b>&lt;1</b>	0	0
Calcium	ppm	ASTM D5185m	<b>3</b>	0	<1
Phosphorus	ppm	ASTM D5185m	<b>455</b>	302	449
Zinc	ppm	ASTM D5185m	<b>5</b>	0	0
Sulfur	ppm	ASTM D5185m	<b>458</b>	858	474

## CONTAMINANTS

method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m >15	<b>2</b>	4	2
Sodium	ppm	ASTM D5185m	<b>0</b>	2	0
Potassium	ppm	ASTM D5185m >20	<b>&lt;1</b>	2	0
Water	%	ASTM D6304 >0.05	<b>0.000</b>	---	---
ppm Water	ppm	ASTM D6304 >500	<b>0</b>	---	---

## FLUID CLEANLINESS

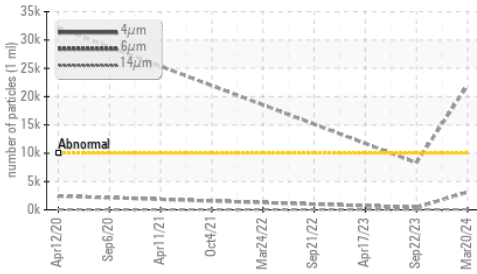
method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647 >10000	<b>▲ 22008</b>	---	8315
Particles >6µm	ASTM D7647 >2500	<b>● 3148</b>	---	420
Particles >14µm	ASTM D7647 >640	<b>59</b>	---	33
Particles >21µm	ASTM D7647 >160	<b>9</b>	---	9
Particles >38µm	ASTM D7647 >40	<b>1</b>	---	2
Particles >71µm	ASTM D7647 >10	<b>0</b>	---	1
Oil Cleanliness	ISO 4406 (c) >20/18/16	<b>▲ 22/19/13</b>	---	20/16/12

## FLUID DEGRADATION

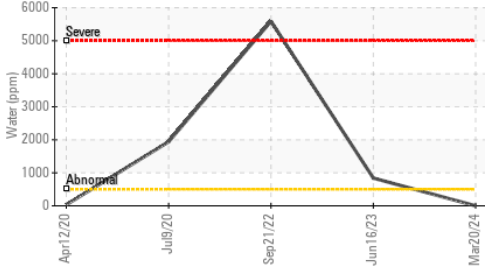
method	limit/base	current	history1	history2	
Acid Number (AN)	mg KOH/g	ASTM D8045 0.26	<b>0.26</b>	---	0.23

# OIL ANALYSIS REPORT

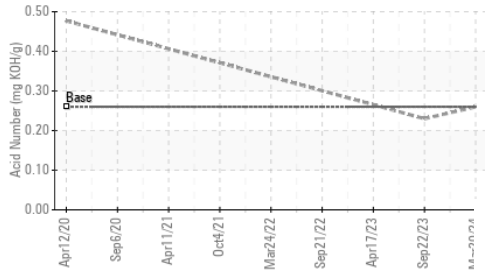
## ▲ Particle Trend



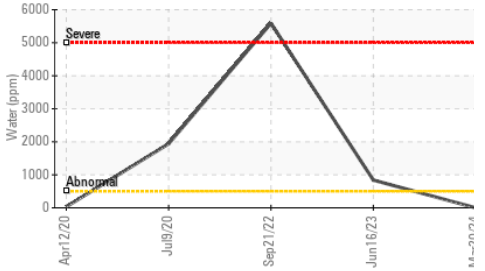
## Water (KF)



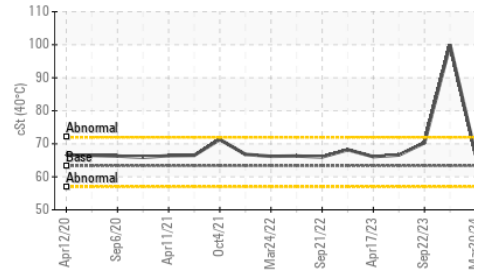
## Acid Number



## Water (KF)



## Viscosity @ 40°C



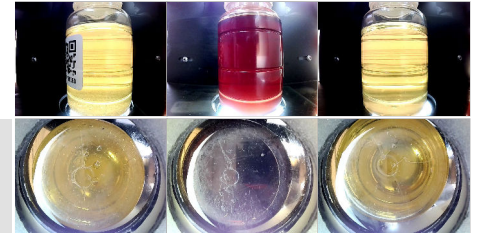
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE
Precipitate	scalar	*Visual	NONE	<b>NONE</b>	NONE
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE
Debris	scalar	*Visual	NONE	<b>NONE</b>	NONE
Sand/Dirt	scalar	*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	>0.05	<b>0.2%</b>	NEG
Free Water	scalar	*Visual		<b>NEG</b>	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	63.34	<b>66.7</b>	100

SAMPLE IMAGES	method	limit/base	current	history1	history2
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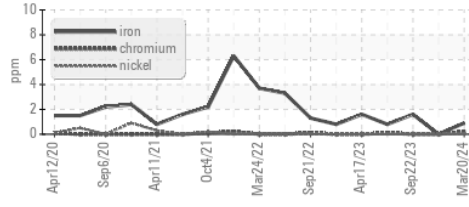
Color

Bottom

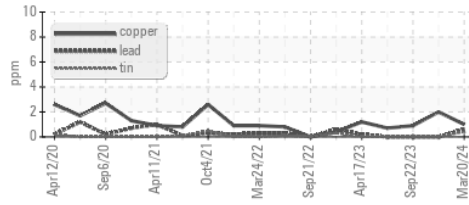


## GRAPHS

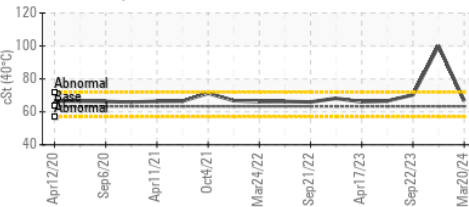
### Ferrous Alloys



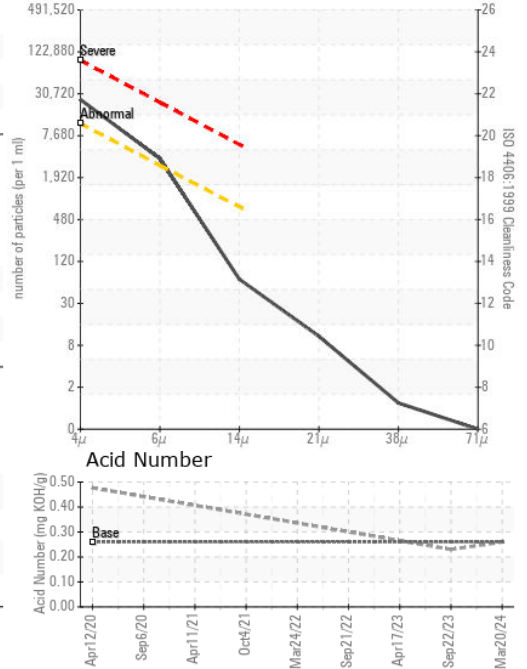
### Non-ferrous Metals



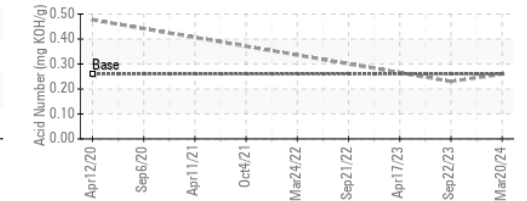
### Viscosity @ 40°C



### ▲ Particle Count



### Acid Number



Certificate L2367

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

**Sample No.** : PCA0120380

**Lab Number** : 06133234

**Unique Number** : 10952699

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

**Received** : 29 Mar 2024

**Tested** : 05 Apr 2024

**Diagnosed** : 05 Apr 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)