

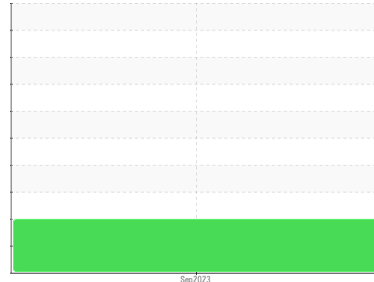


# OIL ANALYSIS REPORT

Sample Rating Trend

ISO

Area  
**{UNASSIGNED}**  
Machine Id  
**OR1985**  
Component  
**Hydraulic System**  
Fluid  
**PETRO CANADA DURATRAN (100 LTR)**



## DIAGNOSIS

### Recommendation

Check seals and/or filters for points of contaminant entry. The air breather requires service. If unrated, we recommend that you replace with a suitable micron rated and/or desiccant air breather. If rated, we recommend that you service/replace the breather. The filter change at the time of sampling has been noted. Confirm the source of the lubricant being utilized for top-up/fill. Resample in 30-45 days to monitor this situation. ( Customer Sample Comment: Oil sampled is HYtran ultra from CASE )

### 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

Additive levels indicate the addition of a different brand, or type of oil. The oil is still serviceable provided that the contaminant(s) can be reduced to acceptable levels.

## SAMPLE INFORMATION

method	limit/base	current	history1	history2
Sample Number	Client Info	<b>GFL0092205</b>	---	---
Sample Date	Client Info	<b>20 Sep 2023</b>	---	---
Machine Age	hrs Client Info	<b>9100</b>	---	---
Oil Age	hrs Client Info	<b>1000</b>	---	---
Oil Changed	Client Info	<b>Changed</b>	---	---
Sample Status		<b>SEVERE</b>	---	---

## WEAR METALS

method	limit/base	current	history1	history2
Iron ppm ASTM D5185(m)	>65	<b>22</b>	---	---
Chromium ppm ASTM D5185(m)	>6	<b>0</b>	---	---
Nickel ppm ASTM D5185(m)	>10	<b>&lt;1</b>	---	---
Titanium ppm ASTM D5185(m)		<b>0</b>	---	---
Silver ppm ASTM D5185(m)		<b>&lt;1</b>	---	---
Aluminum ppm ASTM D5185(m)	>5	<b>3</b>	---	---
Lead ppm ASTM D5185(m)	>45	<b>&lt;1</b>	---	---
Copper ppm ASTM D5185(m)	>120	<b>5</b>	---	---
Tin ppm ASTM D5185(m)	>4	<b>0</b>	---	---
Antimony ppm ASTM D5185(m)		<b>0</b>	---	---
Vanadium ppm ASTM D5185(m)		<b>0</b>	---	---
Beryllium ppm ASTM D5185(m)		<b>0</b>	---	---
Cadmium ppm ASTM D5185(m)		<b>0</b>	---	---

## ADDITIVES

method	limit/base	current	history1	history2
Boron ppm ASTM D5185(m)	110	<b>117</b>	---	---
Barium ppm ASTM D5185(m)	0.0	<b>&lt;1</b>	---	---
Molybdenum ppm ASTM D5185(m)	0.0	<b>0</b>	---	---
Manganese ppm ASTM D5185(m)	1	<b>0</b>	---	---
Magnesium ppm ASTM D5185(m)	13	<b>13</b>	---	---
Calcium ppm ASTM D5185(m)	3610	<b>3479</b>	---	---
Phosphorus ppm ASTM D5185(m)	1192	<b>794</b>	---	---
Zinc ppm ASTM D5185(m)	1455	<b>60</b>	---	---
Sulfur ppm ASTM D5185(m)	2641	<b>2976</b>	---	---
Lithium ppm ASTM D5185(m)		<b>&lt;1</b>	---	---

## CONTAMINANTS

method	limit/base	current	history1	history2
Silicon ppm ASTM D5185(m)	>25	<b>10</b>	---	---
Sodium ppm ASTM D5185(m)		<b>3</b>	---	---
Potassium ppm ASTM D5185(m)	>20	<b>1</b>	---	---

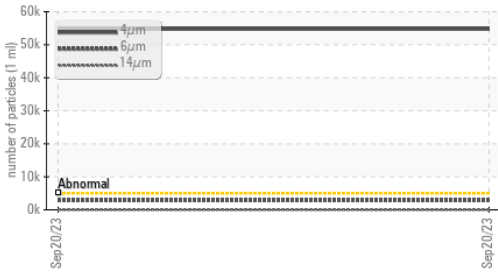
## FLUID CLEANLINESS

method	limit/base	current	history1	history2
Particles >4µm ASTM D7647	>5000	<b>54736</b>	---	---
Particles >6µm ASTM D7647	>1300	<b>2849</b>	---	---
Particles >14µm ASTM D7647	>160	<b>37</b>	---	---
Particles >21µm ASTM D7647	>40	<b>9</b>	---	---
Particles >38µm ASTM D7647	>10	<b>0</b>	---	---
Particles >71µm ASTM D7647	>3	<b>0</b>	---	---
Oil Cleanliness ISO 4406 (c)	>19/17/14	<b>23/19/12</b>	---	---

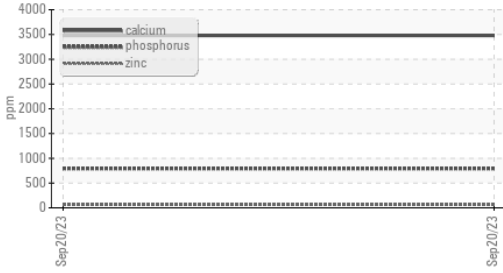


# OIL ANALYSIS REPORT

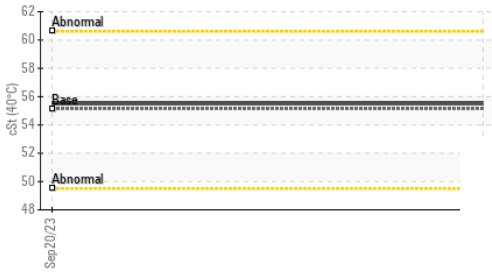
### Particle Trend



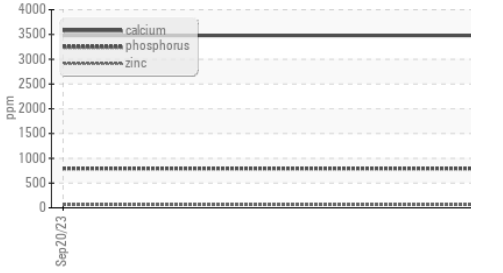
### Additives



### Viscosity @ 40°C



### Additives



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

FLUID PROPERTIES	method	limit/base	current	history1	history2	
Visc @ 40°C	cSt	ASTM D7279(m)	55.14	55.5	---	---

### SAMPLE IMAGES

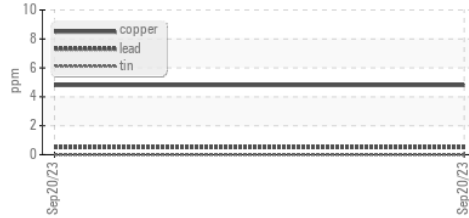
method	limit/base	current	history1	history2
Color				
Bottom				

### GRAPHS

#### Ferrous Alloys



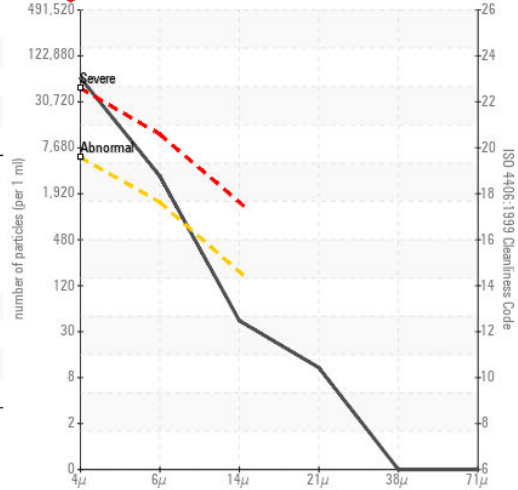
#### Non-ferrous Metals



#### Viscosity @ 40°C



#### Particle Count



ISO 17025:2017  
Accredited  
Laboratory

**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 GFL Environmental - 720 - Lafleche - Landfill  
**Sample No.** : GFL0092205 **Received** : 28 Sep 2023 17125 Lafleche Road,  
**Lab Number** : 02585893 **Diagnosed** : 02 Oct 2023 Moose Creek, ON  
**Unique Number** : 5654959 **Diagnostician** : Kevin Marson CA K0C 1W0  
**Test Package** : MOB 1 ( Additional Tests: PrtCount )  
 Contact: Charles Bergeron  
 cbergeron@gflenv.com  
 T: (613)538-4853  
 F:

To discuss this sample report, contact Customer Service at 1-800-268-2131.  
 Test denoted (\*) outside scope of accreditation, (m) method modified, (e) tested at external lab.  
 Validity of results and interpretation are based on the sample and information as supplied.