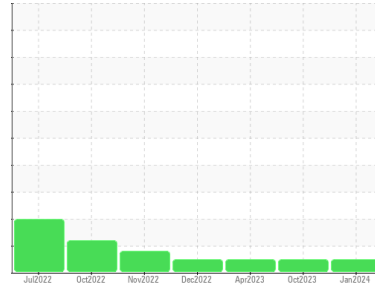




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Area  
**CPP Units**  
 Machine Id  
**CPP Port Unit**

Component  
**Middle Left Variable Pitch Prop**  
 Fluid  
**PETRO CANADA ENDURATEX EP 68 (--- GAL)**

## DIAGNOSIS

### Recommendation

Resample at the next service interval to monitor.  
 NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample.

### Wear

All component wear rates are normal.

### Contamination

The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable.

### 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>WC0877826</b>	WC0848604	WC0763471
Sample Date	Client Info			<b>10 Jan 2024</b>	27 Oct 2023	08 Apr 2023
Machine Age	hrs	Client Info		<b>15119</b>	15119	0
Oil Age	hrs	Client Info		<b>1</b>	0	0
Oil Changed	Client Info			<b>N/A</b>	N/A	N/A
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

CONTAMINATION		method	limit/base	current	history1	history2
Water	WC Method		>0.05	<b>NEG</b>	NEG	NEG

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>25	<b>8</b>	8	5
Chromium	ppm	ASTM D5185(m)	>10	<b>0</b>	0	0
Nickel	ppm	ASTM D5185(m)	>10	<b>&lt;1</b>	<1	<1
Titanium	ppm	ASTM D5185(m)		<b>0</b>	0	0
Silver	ppm	ASTM D5185(m)		<b>0</b>	<1	0
Aluminum	ppm	ASTM D5185(m)	>5	<b>&lt;1</b>	0	0
Lead	ppm	ASTM D5185(m)	>5	<b>&lt;1</b>	<1	<1
Copper	ppm	ASTM D5185(m)	>55	<b>1</b>	1	<1
Tin	ppm	ASTM D5185(m)	>5	<b>&lt;1</b>	0	0
Antimony	ppm	ASTM D5185(m)		<b>0</b>	0	<1
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	0	0
Beryllium	ppm	ASTM D5185(m)		<b>0</b>	0	0
Cadmium	ppm	ASTM D5185(m)		<b>0</b>	0	0

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)	69	<b>35</b>	39	44
Barium	ppm	ASTM D5185(m)	1	<b>0</b>	<1	0
Molybdenum	ppm	ASTM D5185(m)	1	<b>0</b>	0	0
Manganese	ppm	ASTM D5185(m)	1	<b>0</b>	0	<1
Magnesium	ppm	ASTM D5185(m)	1	<b>2</b>	1	1
Calcium	ppm	ASTM D5185(m)	1	<b>4</b>	4	3
Phosphorus	ppm	ASTM D5185(m)	246	<b>262</b>	255	285
Zinc	ppm	ASTM D5185(m)	1	<b>20</b>	19	20
Sulfur	ppm	ASTM D5185(m)	3670	<b>4381</b>	4189	4375
Lithium	ppm	ASTM D5185(m)		<b>&lt;1</b>	<1	<1

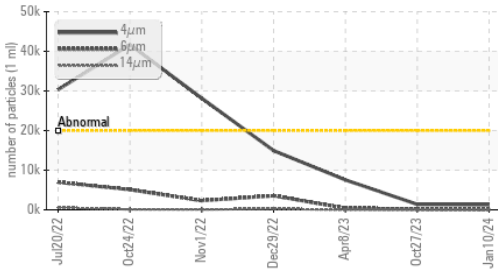
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>15	<b>&lt;1</b>	<1	<1
Sodium	ppm	ASTM D5185(m)		<b>3</b>	3	4
Potassium	ppm	ASTM D5185(m)	>20	<b>&lt;1</b>	0	<1

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>20000	<b>1273</b>	1376	7545
Particles >6µm		ASTM D7647	>5000	<b>59</b>	149	420
Particles >14µm		ASTM D7647	>320	<b>6</b>	13	4
Particles >21µm		ASTM D7647	>80	<b>3</b>	4	1
Particles >38µm		ASTM D7647	>20	<b>1</b>	1	0
Particles >71µm		ASTM D7647	>4	<b>1</b>	1	0
Oil Cleanliness		ISO 4406 (c)	>21/19/15	<b>17/13/10</b>	18/14/11	20/16/9

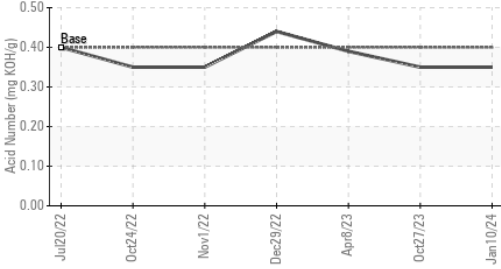


# OIL ANALYSIS REPORT

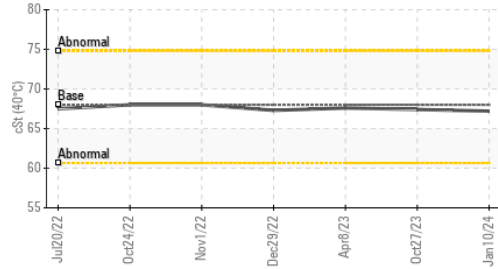
## Particle Trend



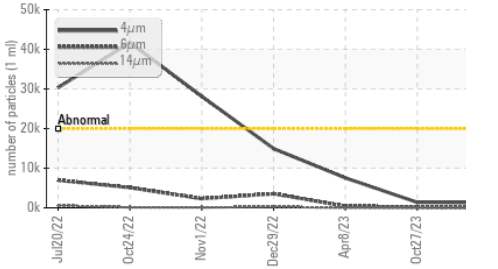
## Acid Number



## Viscosity @ 40°C



## Particle Trend



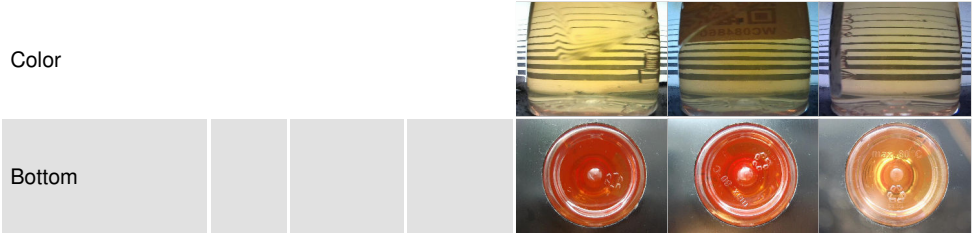
## FLUID DEGRADATION

method	limit/base	current	history1	history2
Acid Number (AN) mg KOH/g	ASTM D974* 0.4	<b>0.35</b>	0.35	0.39
White Metal	scalar Visual* NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar Visual* NONE	<b>NONE</b>	NONE	NONE
Precipitate	scalar Visual* NONE	<b>NONE</b>	NONE	NONE
Silt	scalar Visual* NONE	<b>NONE</b>	NONE	NONE
Debris	scalar Visual* NONE	<b>NONE</b>	NONE	NONE
Sand/Dirt	scalar Visual* NONE	<b>NONE</b>	NONE	NONE
Appearance	scalar Visual* NORML	<b>NORML</b>	NORML	NORML
Odor	scalar Visual* NORML	<b>NORML</b>	NORML	NORML
Emulsified Water	scalar Visual* >0.05	<b>NEG</b>	NEG	NEG
Free Water	scalar Visual*	<b>NEG</b>	NEG	NEG

## FLUID PROPERTIES

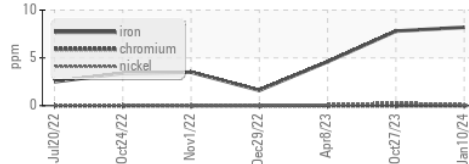
method	limit/base	current	history1	history2
Visc @ 40°C cSt	ASTM D7279(m) 68.0	<b>67.2</b>	67.4	67.6

## SAMPLE IMAGES

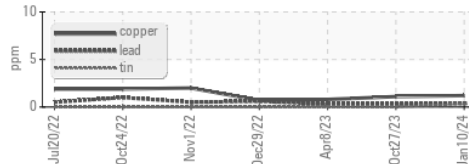


## GRAPHS

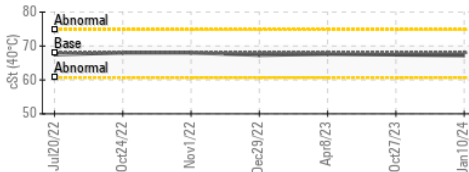
### Ferrous Alloys



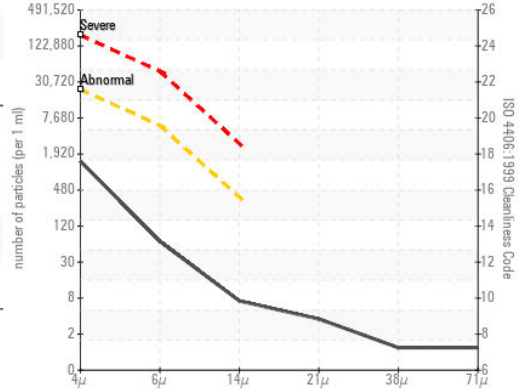
### Non-ferrous Metals



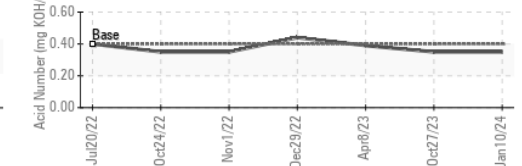
### Viscosity @ 40°C



### Particle Count



### Acid Number



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
 Sample No. : WC0877826  
 Lab Number : 02608724  
 Unique Number : 5709810  
 Test Package : MAR 2

Canadian Coast Guard  
 CCGS Vincent Massey, 101 Boul. Champlain  
 Quebec, QC  
 CA G1K 7Y7  
 Contact: Vincent Massey  
 vincentmasseyse@ccgs-ngcc.gc.ca

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.