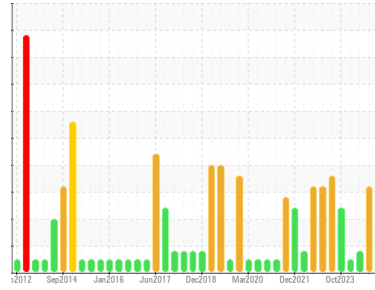




# OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Area  
 2 Phoenix/007 Hydrobon/Plat/C Compressor/1B Recycle/Makeup  
 Machine Id  
**N/A 07GC1B**  
 Component  
**Gearbox**  
 Fluid  
**PETRO CANADA TURBOFLO 68 (400 LTR)**

## DIAGNOSIS

### Recommendation

We recommend you service the filters on this component. We recommend an early resample to monitor this condition.

### Wear

All component wear rates are normal.

### Contamination

There is a moderate amount of silt (particulates < 14 microns in size) present in the oil. The system cleanliness is above the acceptable limit for the target ISO 4406 cleanliness code.

### Fluid Condition

The AN level is acceptable for this fluid. 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>WC0957454</b>	WC0912440	WC0883386
Sample Date	Client Info		<b>02 Jul 2024</b>	12 Mar 2024	15 Dec 2023
Machine Age	hrs	Client Info	<b>0</b>	0	0
Oil Age	hrs	Client Info	<b>0</b>	0	0
Oil Changed	Client Info		<b>N/A</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 D5185(m)	>200	<b>2</b>	2
Chromium	ppm	ASTM D5185(m)	>15	<b>0</b>	0
Nickel	ppm	ASTM D5185(m)	>15	<b>&lt;1</b>	<1
Titanium	ppm	ASTM D5185(m)		<b>0</b>	0
Silver	ppm	ASTM D5185(m)		<b>0</b>	<1
Aluminum	ppm	ASTM D5185(m)	>25	<b>0</b>	<1
Lead	ppm	ASTM D5185(m)	>100	<b>0</b>	0
Copper	ppm	ASTM D5185(m)	>200	<b>&lt;1</b>	<1
Tin	ppm	ASTM D5185(m)	>25	<b>0</b>	0
Antimony	ppm	ASTM D5185(m)	>5	<b>0</b>	0
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	0
Beryllium	ppm	ASTM D5185(m)		<b>0</b>	0
Cadmium	ppm	ASTM D5185(m)		<b>0</b>	0

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)	0	<b>&lt;1</b>	<1
Barium	ppm	ASTM D5185(m)	0	<b>0</b>	<1
Molybdenum	ppm	ASTM D5185(m)	0	<b>0</b>	0
Manganese	ppm	ASTM D5185(m)	0	<b>0</b>	0
Magnesium	ppm	ASTM D5185(m)	0	<b>2</b>	<1
Calcium	ppm	ASTM D5185(m)	0	<b>2</b>	<1
Phosphorus	ppm	ASTM D5185(m)	120	<b>4</b>	<1
Zinc	ppm	ASTM D5185(m)	0.0	<b>3</b>	<1
Sulfur	ppm	ASTM D5185(m)	50	<b>633</b>	833
Lithium	ppm	ASTM D5185(m)		<b>&lt;1</b>	<1

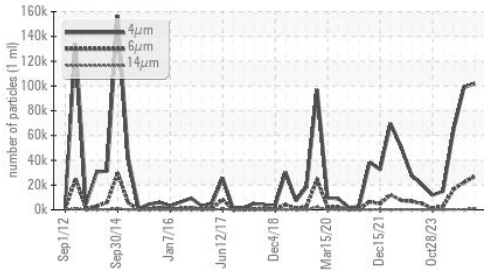
## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>50	<b>0</b>	0
Sodium	ppm	ASTM D5185(m)		<b>0</b>	0
Potassium	ppm	ASTM D5185(m)	>20	<b>0</b>	<1

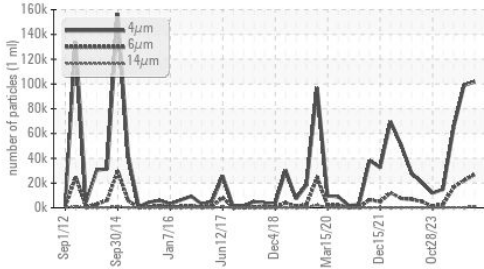
## FLUID CLEANLINESS

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647		<b>101739</b>	98940	64705
Particles >6µm	ASTM D7647	>5000	<b>▲ 26876</b>	▲ 22181	▲ 16433
Particles >14µm	ASTM D7647	>640	<b>● 881</b>	249	360
Particles >21µm	ASTM D7647	>160	<b>200</b>	33	40
Particles >38µm	ASTM D7647	>40	<b>17</b>	2	1
Particles >71µm	ASTM D7647	>10	<b>2</b>	0	1
Oil Cleanliness	ISO 4406 (c)	>--/19/16	<b>▲ 24/22/17</b>	▲ 24/22/15	▲ 23/21/16

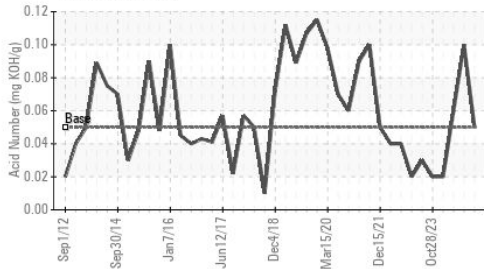
### ▲ Particle Trend



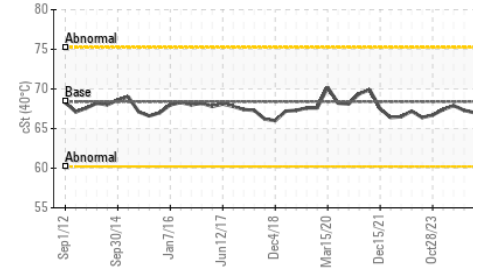
### ▲ Particle Trend



### Acid Number



### Viscosity @ 40°C



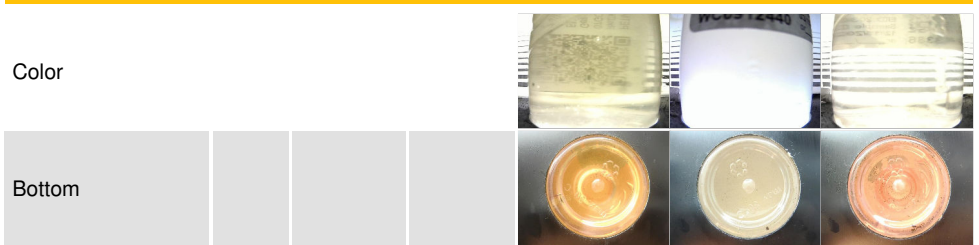
### FLUID DEGRADATION

	method	limit/base	current	history1	history2	
Acid Number (AN)	mg KOH/g	ASTM D974*	0.05	<b>0.05</b>	0.10	0.06
<b>VISUAL</b>						
White Metal	scalar	Visual*	NONE	<b>VLITE</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>VLITE</b>	NONE	VLITE
Sand/Dirt	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE
Appearance	scalar	Visual*	NORML	<b>NORML</b>	▲ WGOIL	NORML
Odor	scalar	Visual*	NORML	<b>NORML</b>	NORML	NORML
Emulsified Water	scalar	Visual*	>0.2	<b>NEG</b>	.5%	NEG
Free Water	scalar	Visual*		<b>NEG</b>	▲ 1%	NEG

### FLUID PROPERTIES

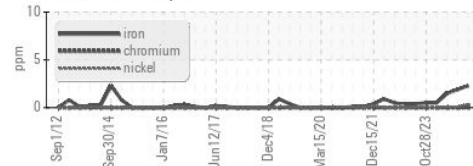
	method	limit/base	current	history1	history2	
Visc @ 40°C	cSt	ASTM D7279(m)	68.4	<b>67.0</b>	67.3	67.9

### SAMPLE IMAGES

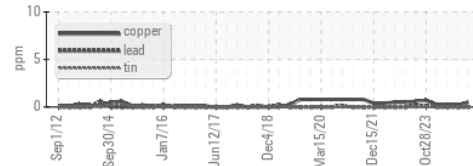


### GRAPHS

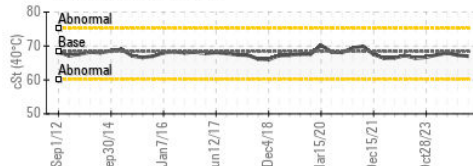
#### Ferrous Alloys



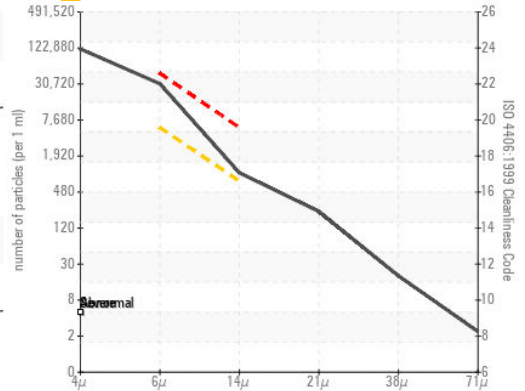
#### Non-ferrous Metals



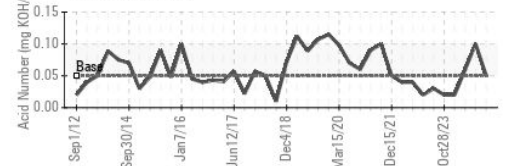
#### Viscosity @ 40°C



#### ▲ Particle Count



#### Acid Number



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : WC0957454 **Received** : 09 Jul 2024  
**Lab Number** : **02646804** **Tested** : 10 Jul 2024  
**Unique Number** : 5812356 **Diagnosed** : 10 Jul 2024 - Wes Davis  
**Test Package** : IND 2 ( Additional Tests: TAN Man )

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.

**Petro Canada Lubricants Inc.**  
 385 Southdown Road  
 Mississauga, ON  
 CA L5J 2Y3  
 Contact: Martin Wagenaar  
 martin.wagenaar@HFSinclair.com  
 T: (905)403-5682  
 F: (905)822-6025