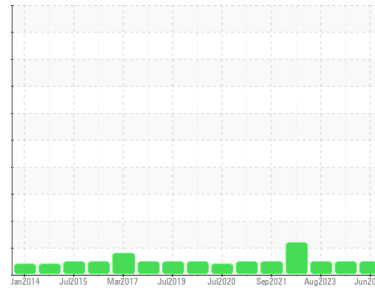




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Area

**BRUCE A/2/71310**

Machine Id

**2-71310-P3-PM Up Brg Filler**

Component

**Upper Bearing**

Fluid

**PETRO CANADA TURBOFLO XL68 (--- 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 water content is negligible. 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>WC</b>	WC0871740	WC0815753
Sample Date	Client Info		<b>02 Jun 2024</b>	12 Jan 2024	20 Aug 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>NORMAL</b>	NORMAL	NORMAL

## WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m) >10	<b>&lt;1</b>	0	<1
Chromium	ppm	ASTM D5185(m) >5	<b>0</b>	0	0
Nickel	ppm	ASTM D5185(m) >5	<b>&lt;1</b>	0	<1
Titanium	ppm	ASTM D5185(m) >5	<b>0</b>	0	0
Silver	ppm	ASTM D5185(m)	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185(m) >5	<b>&lt;1</b>	<1	<1
Lead	ppm	ASTM D5185(m) >5	<b>0</b>	<1	0
Copper	ppm	ASTM D5185(m) >5	<b>&lt;1</b>	0	<1
Tin	ppm	ASTM D5185(m) >5	<b>0</b>	0	0
Antimony	ppm	ASTM D5185(m)	<b>0</b>	0	0
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)	<b>&lt;1</b>	0	<1
Barium	ppm	ASTM D5185(m)	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185(m)	<b>0</b>	0	0
Manganese	ppm	ASTM D5185(m)	<b>0</b>	0	0
Magnesium	ppm	ASTM D5185(m)	<b>0</b>	<1	<1
Calcium	ppm	ASTM D5185(m)	<b>&lt;1</b>	<1	<1
Phosphorus	ppm	ASTM D5185(m)	<b>3</b>	3	3
Zinc	ppm	ASTM D5185(m) 0	<b>3</b>	3	4
Sulfur	ppm	ASTM D5185(m)	<b>2017</b>	2184	2050
Lithium	ppm	ASTM D5185(m)	<b>&lt;1</b>	<1	<1

## CONTAMINANTS

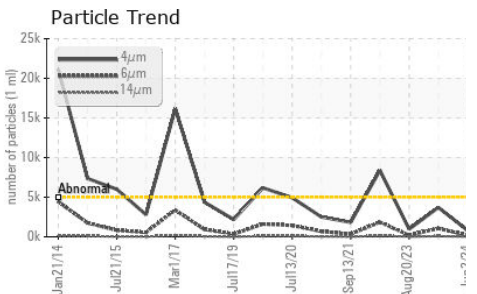
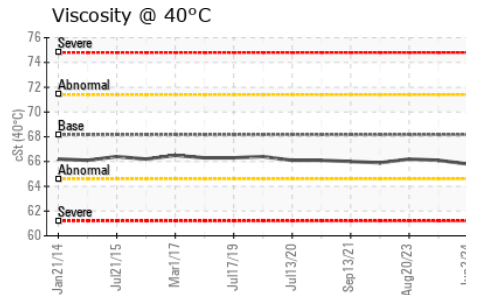
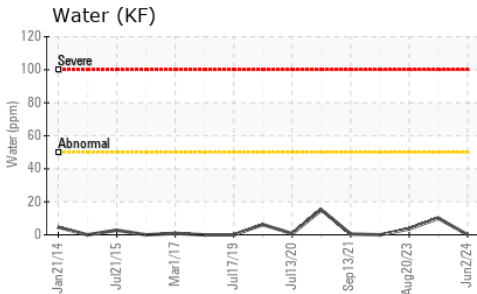
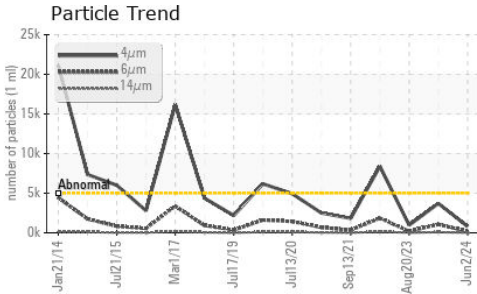
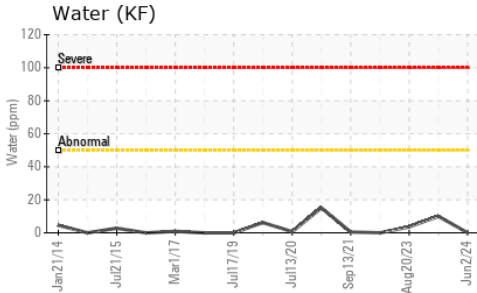
	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m) >5	<b>8</b>	8	9
Sodium	ppm	ASTM D5185(m) >5	<b>&lt;1</b>	<1	<1
Potassium	ppm	ASTM D5185(m) >20	<b>&lt;1</b>	<1	<1
Water	%	ASTM D6304* >0.005	<b>0.000</b>	0.001	0.001
ppm Water	ppm	ASTM D6304* >50	<b>0</b>	10	3.6

## FLUID CLEANLINESS

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>5000	<b>804</b>	3705	964
Particles >6µm	ASTM D7647	>1300	<b>180</b>	1072	190
Particles >14µm	ASTM D7647	>320	<b>8</b>	86	18
Particles >21µm	ASTM D7647	>80	<b>3</b>	20	5
Particles >38µm	ASTM D7647	>20	<b>1</b>	2	0
Particles >71µm	ASTM D7647	>4	<b>0</b>	1	0
Oil Cleanliness	ISO 4406 (c)	>19/17/15	<b>17/15/10</b>	19/17/14	17/15/11



# OIL ANALYSIS REPORT



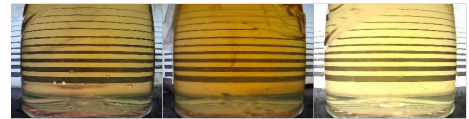
FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974*	0.04	<b>0.11</b>	0.14	0.14

VISUAL		method	limit/base	current	history1	history2
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*	>0.005	<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)	68.17	<b>65.8</b>	66.1	66.2

SAMPLE IMAGES		method	limit/base	current	history1	history2
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Color

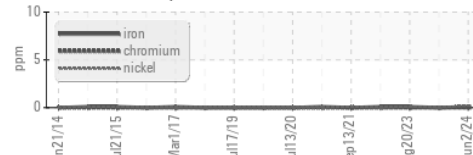


Bottom

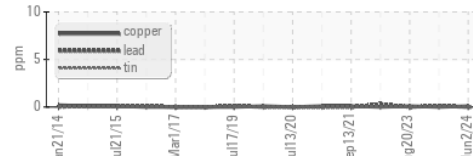


## GRAPHS

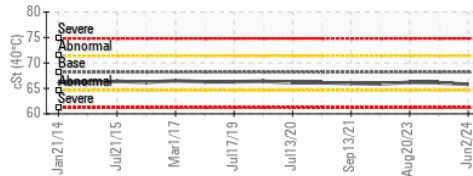
### Ferrous Alloys



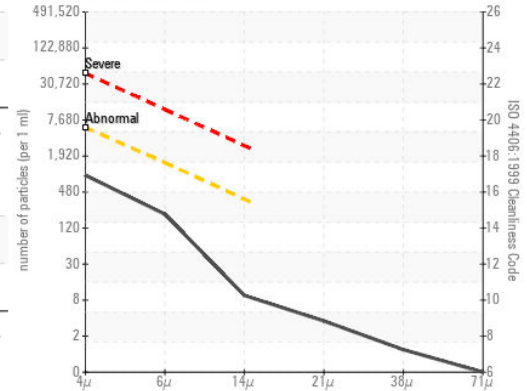
### Non-ferrous Metals



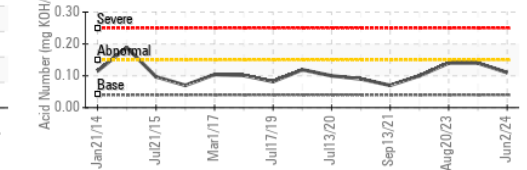
### Viscosity @ 40°C



### Particle Count



### Acid Number



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : WC  
**Lab Number** : 02645507  
**Unique Number** : 5803046  
**Test Package** : IND 2 ( Additional Tests: TAN Man )

**Bruce Power - Bruce A PdM**  
 P.O.Box 1540, 177 Tie Road., RM-222 U2 Column 2N11 615'  
 Tiverton, ON  
 CA N0G 2T0  
 Contact: Pierre Adouki  
 pierre.adouki@brucepower.com  
 T: (519)361-2673  
 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.