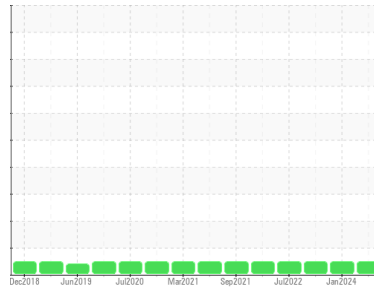




# OIL ANALYSIS REPORT

Area  
**BRUCE B/5/43210**  
 Machine Id  
**5-43210-P1-PM Up Brg**  
 Component  
**Upper Bearing**  
 Fluid  
**PETRO CANADA TURBOFLO XL68 (--- GAL)**

Sample Rating Trend



## 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>WC0900699</b>	WC0845453	WC0638206
Sample Date	Client Info	<b>02 Jul 2024</b>	10 Jan 2024	07 Nov 2022
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>	<1	<1
Chromium ppm ASTM D5185(m)	>5	<b>0</b>	0	0
Nickel ppm ASTM D5185(m)	>5	<b>&lt;1</b>	0	0
Titanium ppm ASTM D5185(m)	>5	<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>	1	<1
Lead ppm ASTM D5185(m)	>5	<b>0</b>	0	0
Copper ppm ASTM D5185(m)	>5	<b>&lt;1</b>	<1	0
Tin ppm ASTM D5185(m)	>5	<b>0</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)		<b>0</b>	0	0
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>	0	0
Calcium ppm ASTM D5185(m)		<b>0</b>	0	0
Phosphorus ppm ASTM D5185(m)		<b>1</b>	2	0
Zinc ppm ASTM D5185(m)	0	<b>1</b>	<1	1
Sulfur ppm ASTM D5185(m)		<b>2015</b>	2179	2158
Lithium ppm ASTM D5185(m)		<b>&lt;1</b>	<1	<1

## CONTAMINANTS

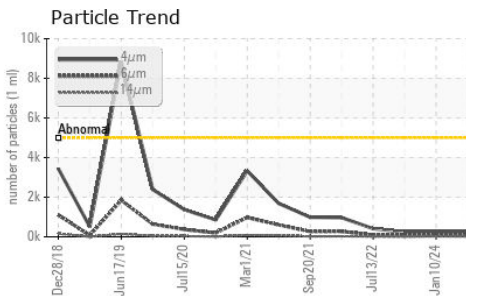
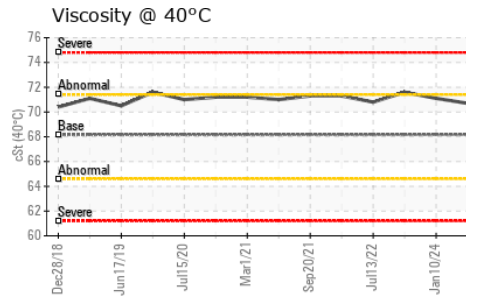
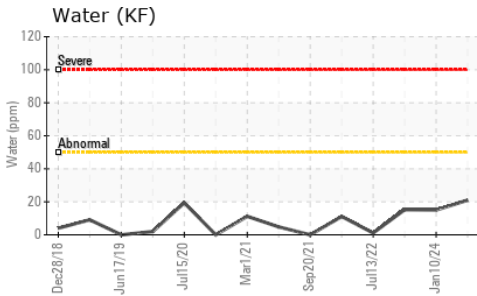
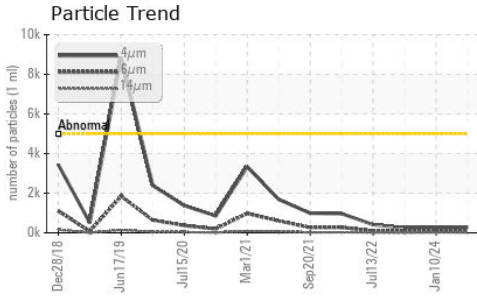
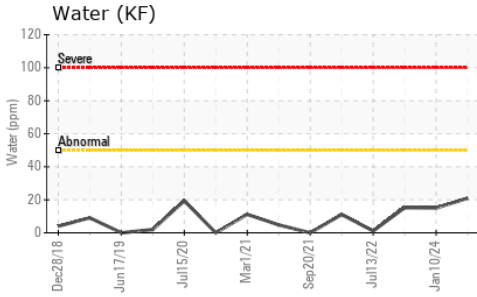
method	limit/base	current	history1	history2
Silicon ppm ASTM D5185(m)	>5	<b>&lt;1</b>	<1	<1
Sodium ppm ASTM D5185(m)	>5	<b>0</b>	0	0
Potassium ppm ASTM D5185(m)	>20	<b>0</b>	<1	0
Water % ASTM D6304*	>0.005	<b>0.002</b>	0.001	0.002
ppm Water ppm ASTM D6304*	>50	<b>21</b>	15	15.2

## FLUID CLEANLINESS

method	limit/base	current	history1	history2
Particles >4µm ASTM D7647	>5000	<b>291</b>	293	240
Particles >6µm ASTM D7647	>1300	<b>95</b>	116	73
Particles >14µm ASTM D7647	>320	<b>13</b>	22	4
Particles >21µm ASTM D7647	>80	<b>3</b>	7	2
Particles >38µm ASTM D7647	>20	<b>0</b>	1	0
Particles >71µm ASTM D7647	>4	<b>0</b>	0	0
Oil Cleanliness ISO 4406 (c)	>19/17/15	<b>15/14/11</b>	15/14/12	15/13/9



# OIL ANALYSIS REPORT

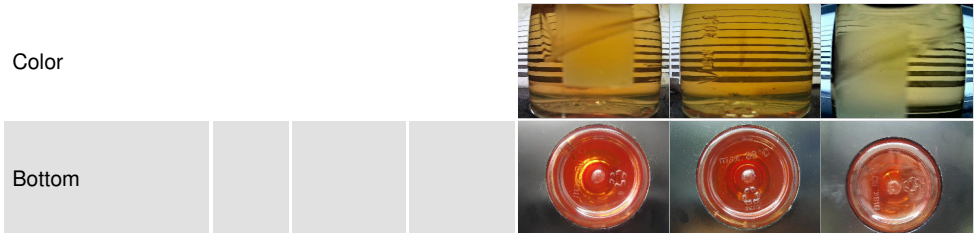


FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974*	0.04	<b>0.13</b>	0.15	0.11

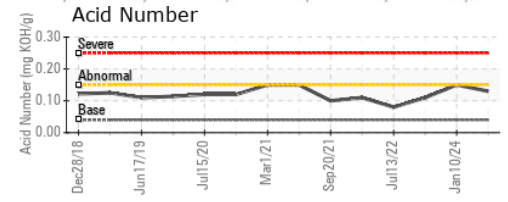
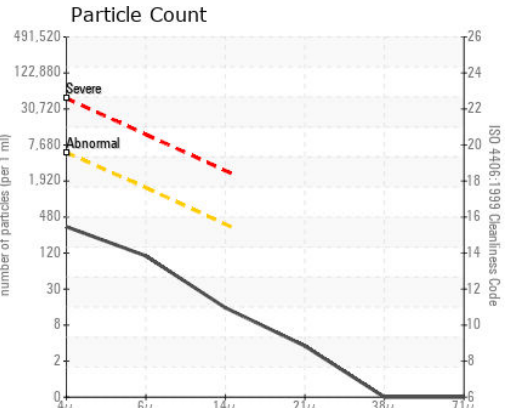
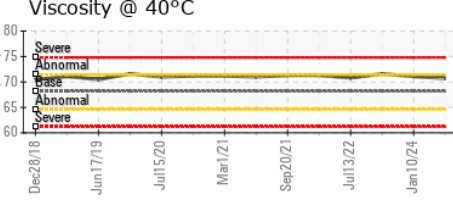
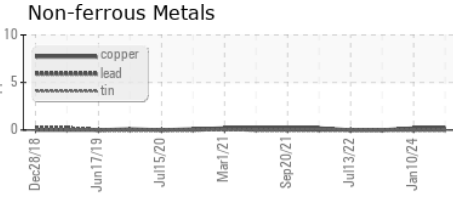
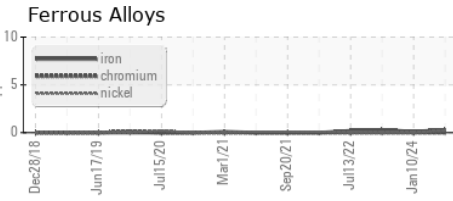
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE
Precipitate	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE
Silt	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	Visual*	NONE	<b>NONE</b>	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>70.7</b>	71.1	71.6

SAMPLE IMAGES		method	limit/base	current	history1	history2
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## GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : WC0900699  
**Lab Number** : 02645878  
**Unique Number** : 5811430  
**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

**Received** : 05 Jul 2024  
**Tested** : 08 Jul 2024  
**Diagnosed** : 08 Jul 2024 - Wes Davis

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.

Contact: Pierre Adouki  
 pierre.adouki@brucepower.com  
 T: (519)361-2673  
 F: