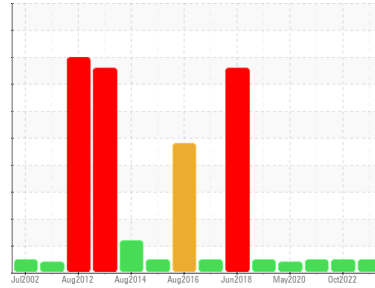




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



## Machine Id **A7 - Turbine (Lower) Guide Bearing**

Component  
**Lower Bearing**

Fluid  
**PETRO CANADA TURBOFLO R&O 46 (650 LTR)**

### DIAGNOSIS

#### Recommendation

Resample at the next service interval to monitor.

#### 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>WC0575644</b>	WC0575649	WC985261
Sample Date	Client Info		<b>14 Apr 2023</b>	08 Oct 2022	03 Oct 2021
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) >20	<b>&lt;1</b>	<1	<1
Chromium	ppm	ASTM D5185(m) >20	<b>0</b>	0	0
Nickel	ppm	ASTM D5185(m) >20	<b>&lt;1</b>	<1	<1
Titanium	ppm	ASTM D5185(m)	<b>0</b>	0	0
Silver	ppm	ASTM D5185(m)	<b>0</b>	0	<1
Aluminum	ppm	ASTM D5185(m) >20	<b>0</b>	<1	0
Lead	ppm	ASTM D5185(m) >20	<b>1</b>	2	3
Copper	ppm	ASTM D5185(m) >20	<b>&lt;1</b>	<1	<1
Tin	ppm	ASTM D5185(m) >20	<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>0</b>	<1	<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>&lt;1</b>	0	<1
Calcium	ppm	ASTM D5185(m) 0	<b>&lt;1</b>	0	<1
Phosphorus	ppm	ASTM D5185(m) 3	<b>3</b>	2	3
Zinc	ppm	ASTM D5185(m) 0	<b>3</b>	2	2
Sulfur	ppm	ASTM D5185(m)	<b>143</b>	136	118
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>0</b>	<1	<1
Sodium	ppm	ASTM D5185(m)	<b>&lt;1</b>	0	<1
Potassium	ppm	ASTM D5185(m) >20	<b>&lt;1</b>	0	<1

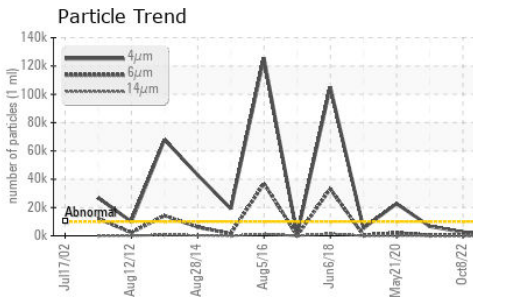
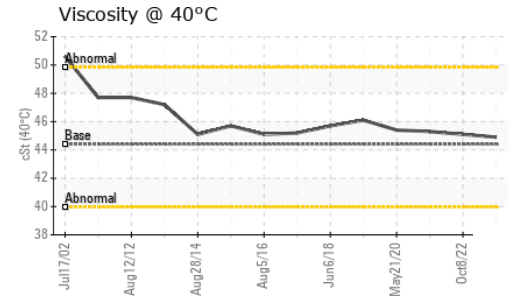
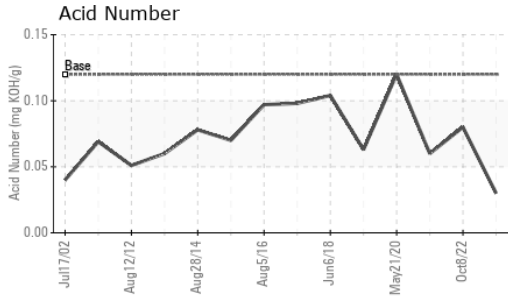
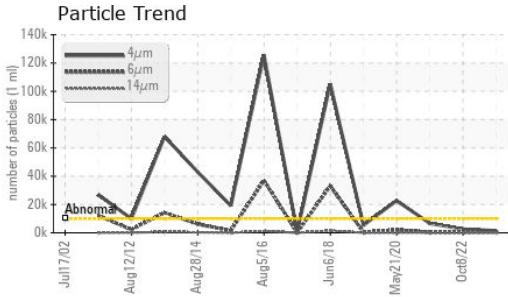
### FLUID CLEANLINESS

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>10000	<b>1481</b>	2626	6621
Particles >6µm	ASTM D7647	>2500	<b>486</b>	435	411
Particles >14µm	ASTM D7647	>160	<b>38</b>	23	2
Particles >21µm	ASTM D7647	>40	<b>13</b>	7	0
Particles >38µm	ASTM D7647	>10	<b>1</b>	1	0
Particles >71µm	ASTM D7647	>3	<b>0</b>	0	0
Oil Cleanliness	ISO 4406 (c)	>20/18/14	<b>18/16/12</b>	19/16/12	20/16/9

### FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974* 0.12	<b>0.03</b>	0.08	0.06

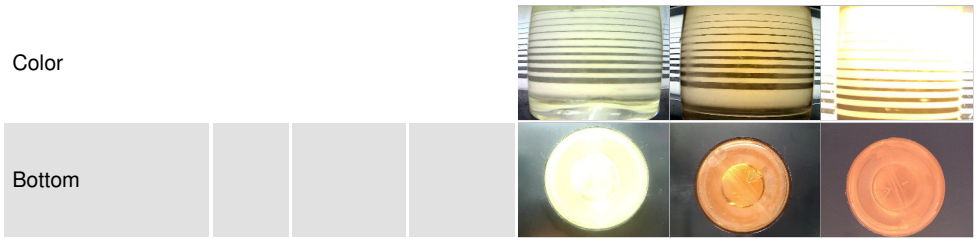
# OIL ANALYSIS REPORT



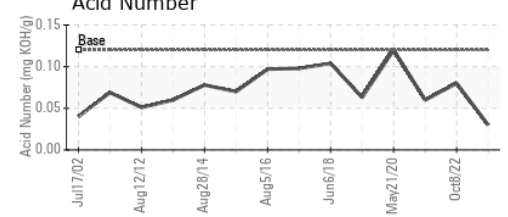
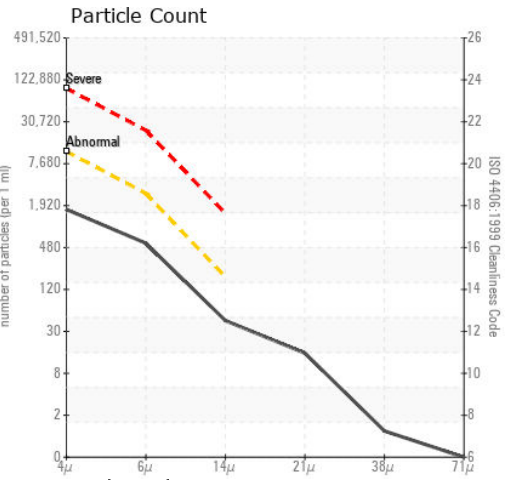
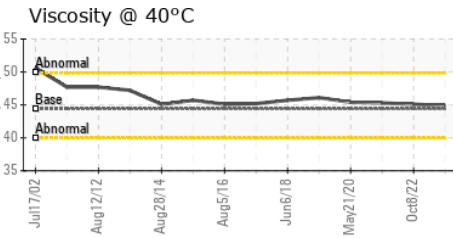
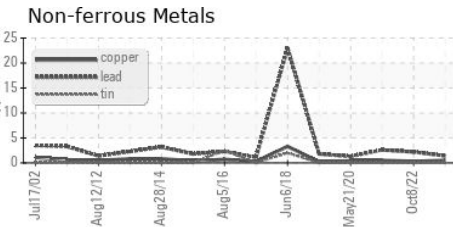
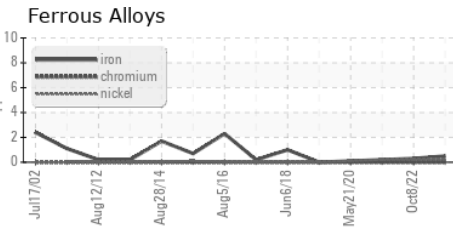
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	NONE	NONE
Yellow Metal	scalar	Visual*	NONE	NONE	NONE
Precipitate	scalar	Visual*	NONE	NONE	NONE
Silt	scalar	Visual*	NONE	NONE	NONE
Debris	scalar	Visual*	NONE	NONE	VLITE
Sand/Dirt	scalar	Visual*	NONE	NONE	NONE
Appearance	scalar	Visual*	NORML	NORML	NORML
Odor	scalar	Visual*	NORML	NORML	NORML
Emulsified Water	scalar	Visual*	>2	NEG	NEG
Free Water	scalar	Visual*		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2	
Visc @ 40°C	cSt	ASTM D7279(m)	44.4	<b>44.9</b>	45.1	45.3

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.** : WC0575644  
**Lab Number** : 02579991  
**Unique Number** : 5633051  
**Test Package** : IND 2 ( Additional Tests: TAN Man )  
**Received** : 01 Sep 2023  
**Diagnosed** : 01 Sep 2023  
**Diagnostician** : Kevin Marson

**Nalcor Energy - Churchill Falls**  
 PO Box 310  
 Churchill Falls, NL  
 CA A0R 1A0  
 Contact: Robert Noel  
 robertnoel@nlh.nl.ca  
 T: (709)925-8294  
 F: (709)925-8220

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.