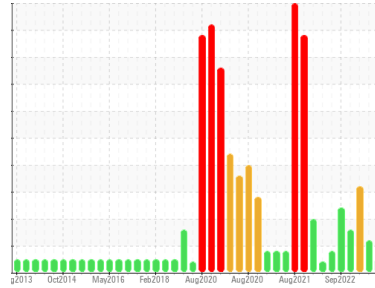




# OIL ANALYSIS REPORT

## Sample Rating Trend



**NORMAL**



Area  
**SAB1**  
Machine Id  
**SAB1 G3**

Component  
**Thrust Bearing**

Fluid  
**PETRO CANADA TURBOFLO XL46 (3000 LTR)**

### DIAGNOSIS

#### Recommendation

Resample at the next service interval to monitor. Please contact your representative for information regarding the proper sampling kits for your service. NOTE: We recommend using IND 3 test kits, this testkit includes Analytical Ferrography which provides a detailed morphological analysis of wear particles present in the fluid.

#### 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>WC0864654</b>	WC0828613	WC0642837
Sample Date	Client Info	<b>21 Dec 2023</b>	27 Aug 2023	27 Mar 2023
Machine Age	hrs	<b>0</b>	0	0
Oil Age	hrs	<b>0</b>	0	0
Oil Changed	Client Info	<b>N/A</b>	N/A	N/A
Sample Status		<b>NORMAL</b>	MARGINAL	ABNORMAL

### CONTAMINATION

method	limit/base	current	history1	history2
Water	WC Method >2	<b>NEG</b>	NEG	NEG

### WEAR METALS

method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185(m) >85	<b>1</b>	2	2
Chromium	ppm	ASTM D5185(m) >20	<b>0</b>	0	0
Nickel	ppm	ASTM D5185(m) >20	<b>0</b>	0	0
Titanium	ppm	ASTM D5185(m)	<b>0</b>	0	0
Silver	ppm	ASTM D5185(m)	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185(m) >40	<b>&lt;1</b>	<1	0
Lead	ppm	ASTM D5185(m) >60	<b>0</b>	0	<1
Copper	ppm	ASTM D5185(m) >7	<b>&lt;1</b>	<1	<1
Tin	ppm	ASTM D5185(m) >40	<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>	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>	0	<1
Calcium	ppm	ASTM D5185(m)	<b>&lt;1</b>	<1	0
Phosphorus	ppm	ASTM D5185(m)	<b>1</b>	2	1
Zinc	ppm	ASTM D5185(m) 0	<b>1</b>	2	1
Sulfur	ppm	ASTM D5185(m)	<b>713</b>	673	695
Lithium	ppm	ASTM D5185(m)	<b>&lt;1</b>	<1	<1

### CONTAMINANTS

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

### FLUID CLEANLINESS

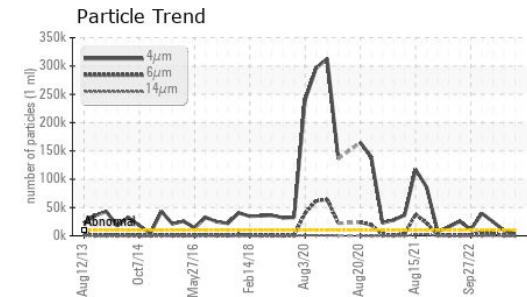
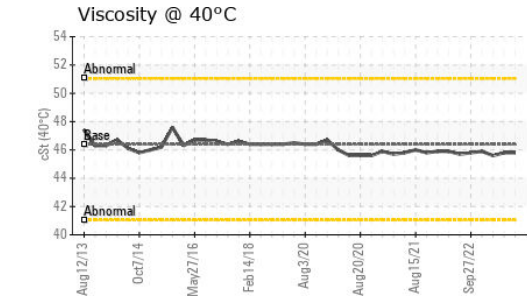
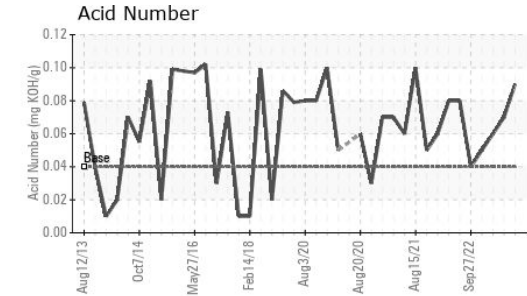
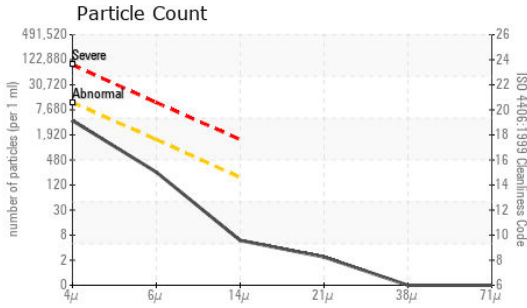
method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647 >10000	<b>3700</b>	9220	▲ 24934
Particles >6µm	ASTM D7647 >1300	<b>216</b>	426	▲ 4651
Particles >14µm	ASTM D7647 >160	<b>5</b>	8	▲ 374
Particles >21µm	ASTM D7647 >40	<b>2</b>	3	▲ 128
Particles >38µm	ASTM D7647 >10	<b>0</b>	0	8
Particles >71µm	ASTM D7647 >3	<b>0</b>	0	1
Oil Cleanliness	ISO 4406 (c) >20/17/14	<b>19/15/10</b>	20/16/10	▲ 22/19/16

Particle Filter (Magn: 200 x)





# OIL ANALYSIS REPORT

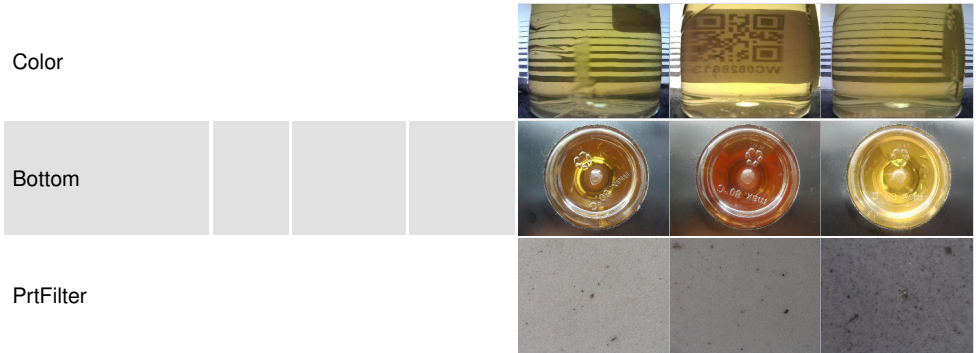


FLUID DEGRADATION	method	limit/base	current	history1	history2	
Acid Number (AN)	mg KOH/g	ASTM D974*	0.04	<b>0.09</b>	0.07	0.06

VISUAL	method	limit/base	current	history1	history2	
White Metal	scalar	Visual*	NONE	<b>NONE</b>	▲ VLITE	▲ VLITE
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*	>2	<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)	46.39	<b>45.8</b>	45.8	45.6

SAMPLE IMAGES	method	limit/base	current	history1	history2
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**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : WC0864654 **Received** : 22 Dec 2023  
**Lab Number** : **02604988** **Diagnosed** : 27 Dec 2023  
**Unique Number** : 5698073 **Diagnostician** : Kevin Marson  
**Test Package** : IND 2 ( Additional Tests: BottomAnalysis, FilterPatch, PrtFilter, TAN Man )

**Ontario Power Generation**  
 NIAGARA PLANT GROUP, 14000 NIAGARA PKWY  
 NIAGARA ON THE LAKE, ON  
 CA L0S 1J0  
 Contact: Michael Brochu  
 mike.brochu@opg.com  
 T: (905)357-0322  
 F: (905)374-5466

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.