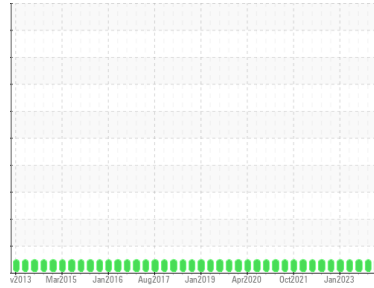




# OIL ANALYSIS REPORT

Sample Rating Trend

**NORMAL**



Area  
**SAB2**  
 Machine Id  
**SAB2 G21**  
 Component  
**Turbine Bearing**  
 Fluid  
**ESSO TERESSO ISO 46 (273 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>WC0801612</b>	WC0858093	WC0830393
Sample Date	Client Info		<b>07 Jan 2024</b>	25 Oct 2023	31 Jul 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

## 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) >7	<b>&lt;1</b>	<1	<1
Chromium	ppm	ASTM D5185(m) >2	<b>0</b>	0	0
Nickel	ppm	ASTM D5185(m) >2	<b>&lt;1</b>	<1	0
Titanium	ppm	ASTM D5185(m)	<b>0</b>	0	0
Silver	ppm	ASTM D5185(m)	<b>0</b>	<1	0
Aluminum	ppm	ASTM D5185(m) >2	<b>&lt;1</b>	0	0
Lead	ppm	ASTM D5185(m) >33	<b>2</b>	2	2
Copper	ppm	ASTM D5185(m) >3	<b>&lt;1</b>	<1	<1
Tin	ppm	ASTM D5185(m) >6	<b>0</b>	0	<1
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) 0	<b>&lt;1</b>	<1	<1
Barium	ppm	ASTM D5185(m)	<b>0</b>	<1	0
Molybdenum	ppm	ASTM D5185(m) 0	<b>0</b>	0	0
Manganese	ppm	ASTM D5185(m)	<b>0</b>	0	0
Magnesium	ppm	ASTM D5185(m) 0	<b>0</b>	0	<1
Calcium	ppm	ASTM D5185(m) 0	<b>&lt;1</b>	<1	<1
Phosphorus	ppm	ASTM D5185(m) 2.4	<b>&lt;1</b>	1	2
Zinc	ppm	ASTM D5185(m) 0	<b>2</b>	2	3
Sulfur	ppm	ASTM D5185(m)	<b>1404</b>	1330	1649
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>9</b>	10	14
Sodium	ppm	ASTM D5185(m)	<b>0</b>	0	0
Potassium	ppm	ASTM D5185(m) >20	<b>1</b>	<1	<1

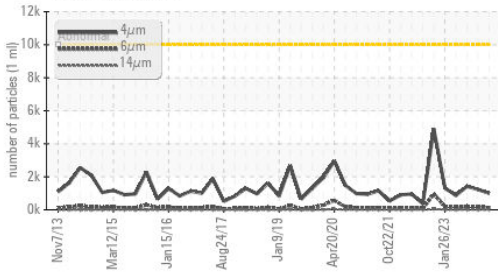
## FLUID CLEANLINESS

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>10000	<b>1000</b>	1231	1418
Particles >6µm	ASTM D7647	>1300	<b>136</b>	163	217
Particles >14µm	ASTM D7647	>160	<b>7</b>	6	14
Particles >21µm	ASTM D7647	>40	<b>5</b>	2	5
Particles >38µm	ASTM D7647	>10	<b>2</b>	1	0
Particles >71µm	ASTM D7647	>3	<b>1</b>	1	0
Oil Cleanliness	ISO 4406 (c)	>20/17/14	<b>17/14/10</b>	17/15/10	18/15/11

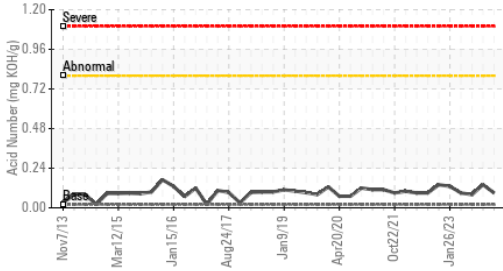


# OIL ANALYSIS REPORT

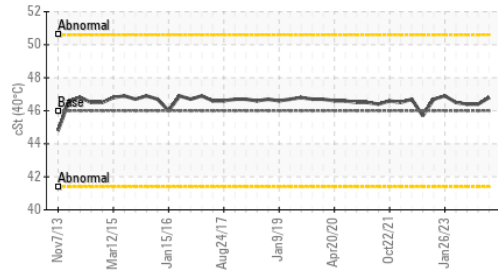
Particle Trend



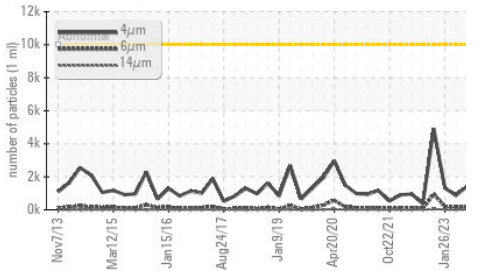
Acid Number



Viscosity @ 40°C



Particle Trend



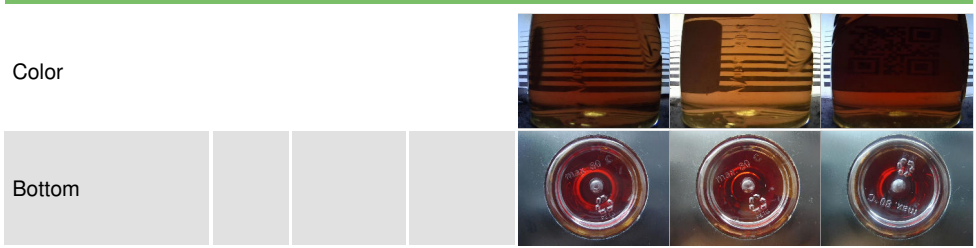
### FLUID DEGRADATION

method	limit/base	current	history1	history2
Acid Number (AN) mg KOH/g	ASTM D974* 0.02	<b>0.09</b>	0.14	0.08
VISUAL				
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	NONE
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

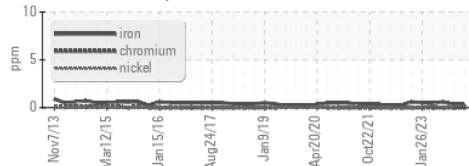
method	limit/base	current	history1	history2
Visc @ 40°C cSt	ASTM D7279(m) 46	<b>46.8</b>	46.4	46.4

### SAMPLE IMAGES

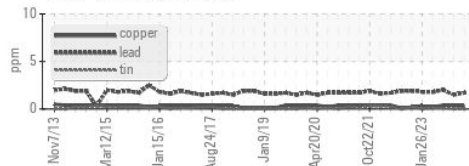


### GRAPHS

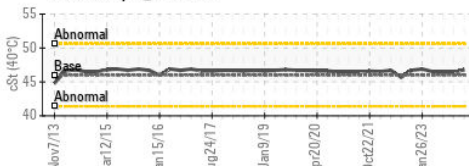
Ferrous Alloys



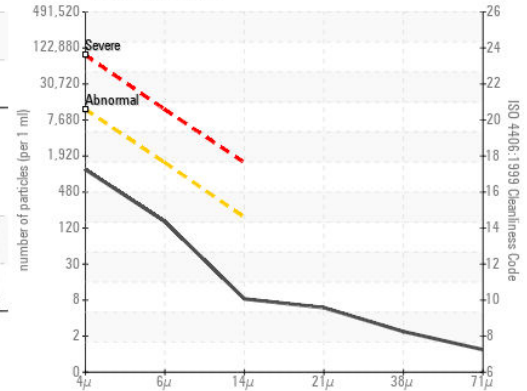
Non-ferrous Metals



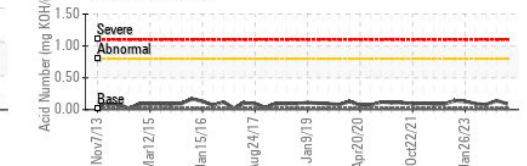
Viscosity @ 40°C



Particle Count



Acid Number



ISO 17025:2017 Accredited Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
 Sample No. : WC0801612      Received : 08 Jan 2024  
 Lab Number : **02607011**      Diagnosed : 09 Jan 2024  
 Unique Number : 5708097      Diagnostician : Kevin Marson  
 Test Package : IND 2 ( Additional Tests: TAN Man )

**Ontario Power Generation**  
 NIAGARA PLANT GROUP, 14000 NIAGARA PKWY  
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 Contact: Alex Courtemanche  
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 T: (905)357-0322  
 F: (905)357-6558

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.