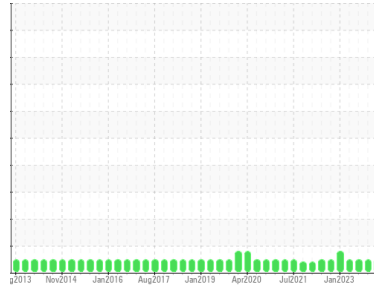




# OIL ANALYSIS REPORT

Sample Rating Trend

**NORMAL**



Area  
**SAB2**  
 Machine Id  
**SAB2 G14**  
 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>WC0890836</b>	WC0801575	WC0858068
Sample Date	Client Info	<b>27 Mar 2024</b>	07 Jan 2024	25 Oct 2023
Machine Age	hrs	Client Info	<b>0</b>	0
Oil Age	hrs	Client Info	<b>0</b>	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	<b>&gt;2</b>	<b>NEG</b>	NEG

## WEAR METALS

method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185(m)	>7	<b>&lt;1</b>	<1
Chromium	ppm	ASTM D5185(m)	>2	<b>0</b>	0
Nickel	ppm	ASTM D5185(m)	>2	<b>0</b>	<1
Titanium	ppm	ASTM D5185(m)		<b>0</b>	0
Silver	ppm	ASTM D5185(m)		<b>0</b>	<1
Aluminum	ppm	ASTM D5185(m)	>2	<b>0</b>	<1
Lead	ppm	ASTM D5185(m)	>33	<b>&lt;1</b>	1
Copper	ppm	ASTM D5185(m)	>3	<b>&lt;1</b>	<1
Tin	ppm	ASTM D5185(m)	>6	<b>0</b>	0
Antimony	ppm	ASTM D5185(m)		<b>0</b>	0
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	0
Beryllium	ppm	ASTM D5185(m)		<b>0</b>	0
Cadmium	ppm	ASTM D5185(m)		<b>0</b>	0

## ADDITIVES

method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185(m)	0	<b>&lt;1</b>	0
Barium	ppm	ASTM D5185(m)		<b>0</b>	<1
Molybdenum	ppm	ASTM D5185(m)	0	<b>0</b>	0
Manganese	ppm	ASTM D5185(m)		<b>0</b>	0
Magnesium	ppm	ASTM D5185(m)	0	<b>0</b>	0
Calcium	ppm	ASTM D5185(m)	0	<b>0</b>	<1
Phosphorus	ppm	ASTM D5185(m)	2.4	<b>&lt;1</b>	<1
Zinc	ppm	ASTM D5185(m)	0	<b>2</b>	2
Sulfur	ppm	ASTM D5185(m)		<b>1800</b>	783
Lithium	ppm	ASTM D5185(m)		<b>&lt;1</b>	<1

## CONTAMINANTS

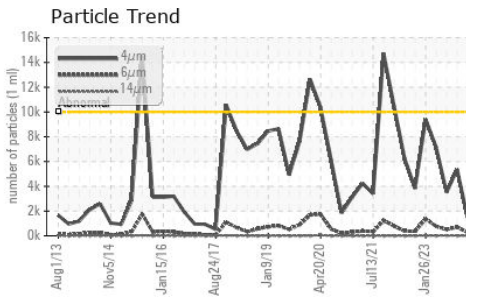
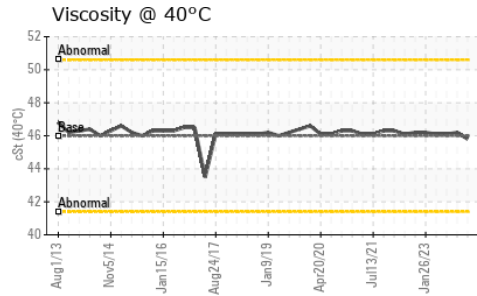
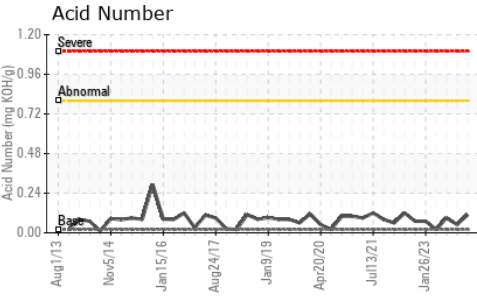
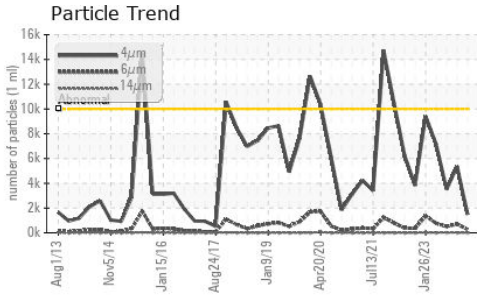
method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185(m)	>20	<b>16</b>	<1
Sodium	ppm	ASTM D5185(m)		<b>0</b>	0
Potassium	ppm	ASTM D5185(m)	>20	<b>&lt;1</b>	<1

## FLUID CLEANLINESS

method	limit/base	current	history1	history2	
Particles >4µm	ASTM D7647	>10000	<b>1491</b>	5353	3513
Particles >6µm	ASTM D7647	>1300	<b>268</b>	712	519
Particles >14µm	ASTM D7647	>160	<b>11</b>	20	25
Particles >21µm	ASTM D7647	>40	<b>3</b>	7	6
Particles >38µm	ASTM D7647	>10	<b>1</b>	1	1
Particles >71µm	ASTM D7647	>3	<b>0</b>	0	0
Oil Cleanliness	ISO 4406 (c)	>20/17/14	<b>18/15/11</b>	20/17/11	19/16/12



# OIL ANALYSIS REPORT

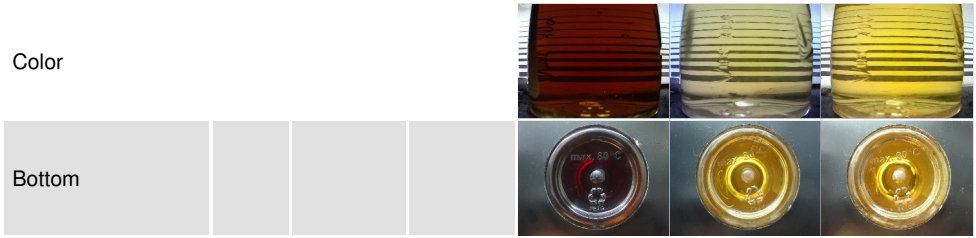


FLUID DEGRADATION	method	limit/base	current	history1	history2	
Acid Number (AN)	mg KOH/g	ASTM D974*	0.02	<b>0.11</b>	0.05	0.09

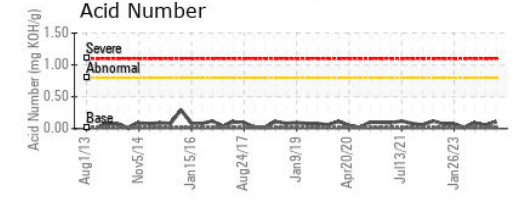
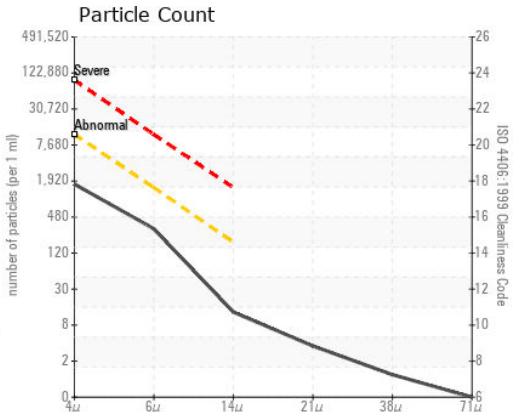
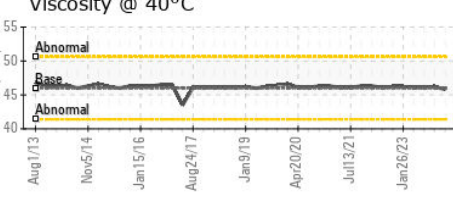
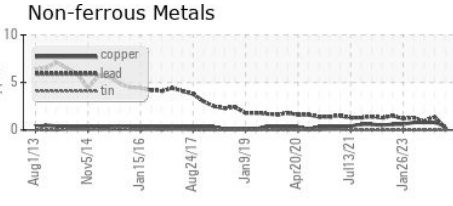
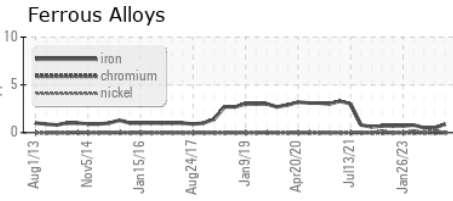
VISUAL	method	limit/base	current	history1	history2	
White Metal	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE
Precipitate	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE
Silt	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	Visual*	NONE	<b>NONE</b>	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*	>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	<b>45.8</b>	46.2	46.1

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. : WC0890836 Received : 28 Mar 2024  
 Lab Number : 02625254 Tested : 01 Apr 2024  
 Unique Number : 5750373 Diagnosed : 01 Apr 2024 - Kevin Marson  
 Test Package : IND 2 ( Additional Tests: TAN Man )

**Ontario Power Generation**  
 NIAGARA PLANT GROUP, 14000 NIAGARA PKWY  
 NIAGARA ON THE LAKE, ON  
 CA LOS 1J0  
 Contact: Alex Courtemanche  
 alex.courtemanche@opg.com  
 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.