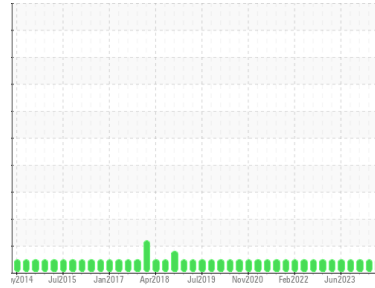




# OIL ANALYSIS REPORT

Sample Rating Trend

**NORMAL**



Area  
**SAB2**  
 Machine Id  
**SAB2 G11 Governor**  
 Component  
**Hydraulic System**  
 Fluid  
**ESSO TERESSO ISO 46 (6160 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

Component wear rates appear to be normal (unconfirmed).

### 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>WC0890824</b>	WC0801599	WC0858056
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	>0.05	<b>NEG</b>	NEG

## WEAR METALS

method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185(m)	>20	<b>&lt;1</b>	<1
Chromium	ppm	ASTM D5185(m)	>20	<b>0</b>	0
Nickel	ppm	ASTM D5185(m)	>20	<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)	>20	<b>0</b>	<1
Lead	ppm	ASTM D5185(m)	>20	<b>0</b>	<1
Copper	ppm	ASTM D5185(m)	>20	<b>0</b>	<1
Tin	ppm	ASTM D5185(m)	>20	<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>0</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>1</b>	<1
Zinc	ppm	ASTM D5185(m)	0	<b>&lt;1</b>	<1
Sulfur	ppm	ASTM D5185(m)		<b>1790</b>	1946
Lithium	ppm	ASTM D5185(m)		<b>&lt;1</b>	<1

## CONTAMINANTS

method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185(m)	>15	<b>0</b>	0
Sodium	ppm	ASTM D5185(m)		<b>0</b>	0
Potassium	ppm	ASTM D5185(m)	>20	<b>&lt;1</b>	<1

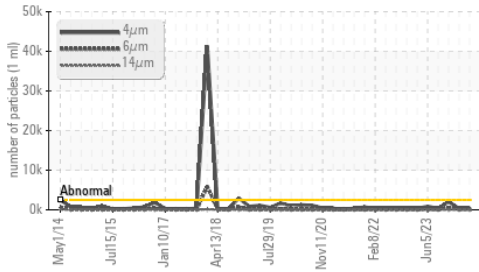
## FLUID CLEANLINESS

method	limit/base	current	history1	history2	
Particles >4µm	ASTM D7647	>2500	<b>368</b>	314	2025
Particles >6µm	ASTM D7647	>640	<b>144</b>	112	545
Particles >14µm	ASTM D7647	>80	<b>17</b>	14	32
Particles >21µm	ASTM D7647	>20	<b>3</b>	4	8
Particles >38µm	ASTM D7647	>4	<b>1</b>	1	1
Particles >71µm	ASTM D7647	>3	<b>0</b>	0	0
Oil Cleanliness	ISO 4406 (c)	>18/16/13	<b>16/14/11</b>	15/14/11	18/16/12

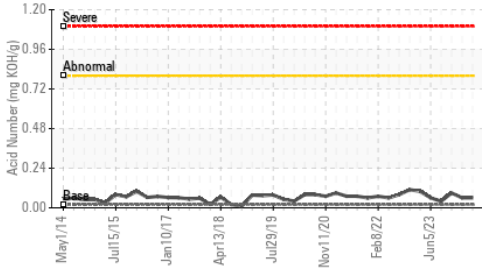


# OIL ANALYSIS REPORT

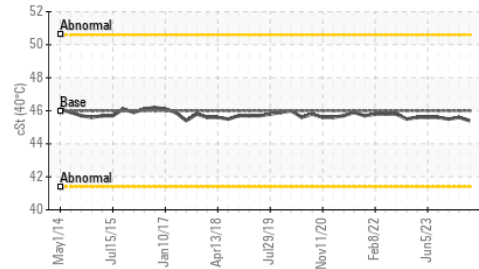
Particle Trend



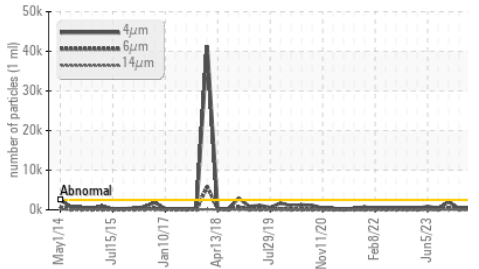
Acid Number



Viscosity @ 40°C



Particle Trend



**FLUID DEGRADATION**    method    limit/base    current    history1    history2

Acid Number (AN)    mg KOH/g    ASTM D974\*    0.02    **0.06**    0.06    0.09

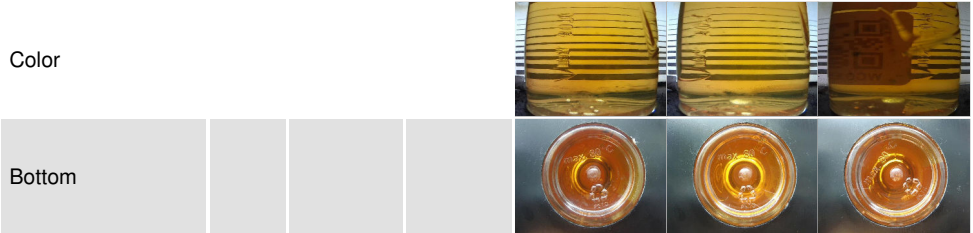
**VISUAL**    method    limit/base    current    history1    history2

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*	>0.05	<b>NEG</b>	NEG	NEG
Free Water	scalar	Visual*		<b>NEG</b>	NEG	NEG

**FLUID PROPERTIES**    method    limit/base    current    history1    history2

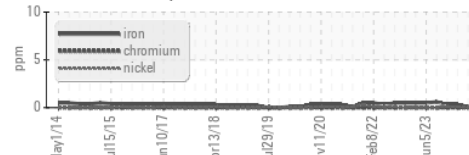
Visc @ 40°C    cSt    ASTM D7279(m)    46    **45.4**    45.6    45.5

**SAMPLE IMAGES**    method    limit/base    current    history1    history2

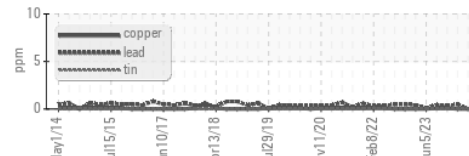


**GRAPHS**

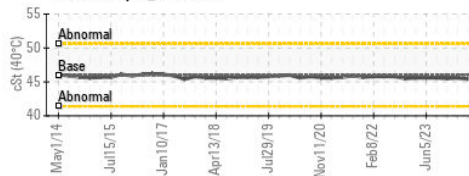
Ferrous Alloys



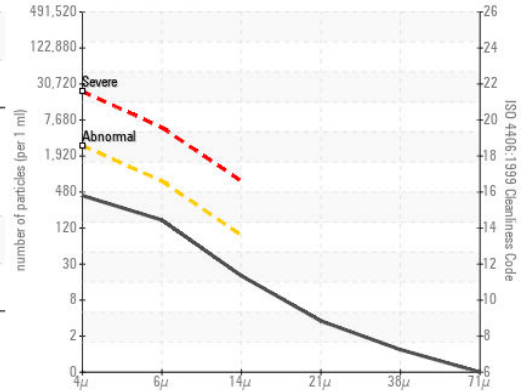
Non-ferrous Metals



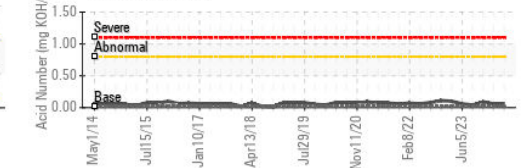
Viscosity @ 40°C



Particle Count



Acid Number



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : WC0890824    **Received** : 28 Mar 2024  
**Lab Number** : **02625206**    **Tested** : 01 Apr 2024  
**Unique Number** : 5750325    **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 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.