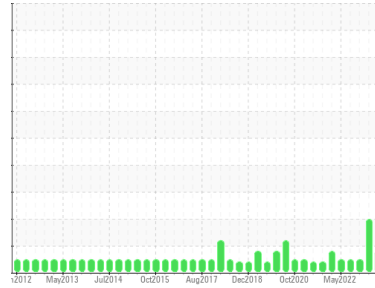




# PROBLEM SUMMARY

## Sample Rating Trend

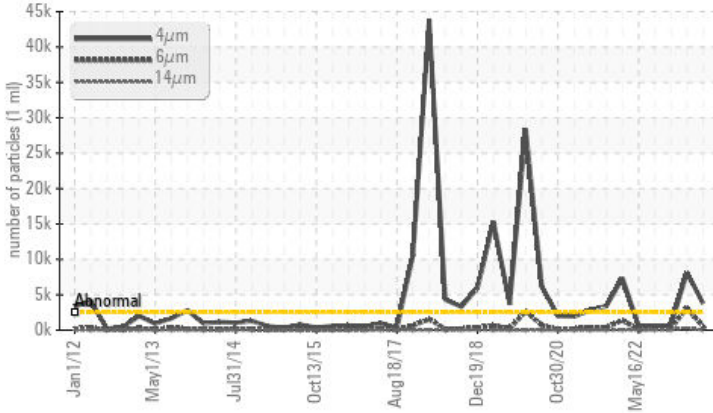
ISO



Area  
**SAB1**  
 Machine Id  
**SAB1 G8 Governor Sump**  
 Component  
**Hydraulic System**  
 Fluid  
**ESSO TERESSO ISO 46 (1600 LTR)**

## COMPONENT CONDITION SUMMARY

### ▲ Particle Trend



## RECOMMENDATION

We recommend you service the filters on this component. Resample at the next service interval to monitor.

## PROBLEMATIC TEST RESULTS

Sample Status			ATTENTION	ABNORMAL	NORMAL
Particles >4µm	ASTM D7647	>2500	▲ 3798	▲ 8109	627
Oil Cleanliness	ISO 4406 (c)	>18/16/13	▲ 19/16/11	▲ 20/19/15	16/14/10
PrtFilter				no image	no image

Customer Id: ONTQUE  
 Sample No.: WC0828630  
 Lab Number: 02578787  
 Test Package: IND 2



To manage this report scan the QR code

To discuss the diagnosis or test data:  
 Kevin Marson +1 (289)291-4644 x4644  
[Kevin.Marson@wearcheck.com](mailto:Kevin.Marson@wearcheck.com)

To change component or sample information:  
 Gloria Gonzalez +1 (289)291-4643 x4643  
[gloria.gonzalez@wearcheck.com](mailto:gloria.gonzalez@wearcheck.com)

RECOMMENDED ACTIONS

Action	Status	Date	Done By	Description
Change Filter	---	---	?	We recommend you service the filters on this component.

HISTORICAL DIAGNOSIS

27 Mar 2023 Diag: Kevin Marson



We advise that you perform a filter service, and use off-line filtration to improve the cleanliness of the system fluid. We recommend an early resample to monitor this condition. All component wear rates are normal. Oil Cleanliness are abnormally high. Particles >14µm are abnormally high. Particles >21µm are abnormally high. Particles >4µm are abnormally high. Particles >6µm are abnormally high. The system cleanliness is above the acceptable limit for the target ISO 4406 cleanliness code. The AN level is acceptable for this fluid. The oil is still serviceable provided that the contaminant(s) can be reduced to acceptable levels.



14 Nov 2022 Diag: Kevin Marson



Resample at the next service interval to monitor. All component wear rates are normal. The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.



27 Sep 2022 Diag: Kevin Marson



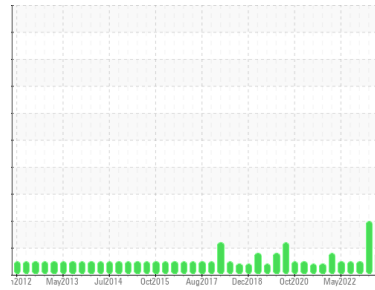
Resample at the next service interval to monitor. All component wear rates are normal. The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.





# OIL ANALYSIS REPORT

## Sample Rating Trend



ISO



Area  
**SAB1**  
Machine Id  
**SAB1 G8 Governor Sump**  
Component  
**Hydraulic System**  
Fluid  
**ESSO TERESSO ISO 46 (1600 LTR)**

### DIAGNOSIS

#### Recommendation

We recommend you service the filters on this component. Resample at the next service interval to monitor.

#### Wear

All component wear rates are normal.

#### Contamination

There is a light amount of silt (particulates < 14 microns in size) present in the oil.

#### 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>WC0828630</b>	WC0642882	WC0676690
Sample Date	Client Info		<b>27 Aug 2023</b>	27 Mar 2023	14 Nov 2022
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>ATTENTION</b>	ABNORMAL	NORMAL

### WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>20	<1	<1
Chromium	ppm	ASTM D5185(m)	>20	0	0
Nickel	ppm	ASTM D5185(m)	>20	0	0
Titanium	ppm	ASTM D5185(m)		0	0
Silver	ppm	ASTM D5185(m)		0	0
Aluminum	ppm	ASTM D5185(m)	>20	<1	0
Lead	ppm	ASTM D5185(m)	>20	<1	<1
Copper	ppm	ASTM D5185(m)	>20	<1	<1
Tin	ppm	ASTM D5185(m)	>20	0	0
Antimony	ppm	ASTM D5185(m)		0	<1
Vanadium	ppm	ASTM D5185(m)		0	0
Beryllium	ppm	ASTM D5185(m)		0	0
Cadmium	ppm	ASTM D5185(m)		0	0

### ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)	0	<1	<1
Barium	ppm	ASTM D5185(m)		0	0
Molybdenum	ppm	ASTM D5185(m)	0	0	0
Manganese	ppm	ASTM D5185(m)		0	0
Magnesium	ppm	ASTM D5185(m)	0	0	<1
Calcium	ppm	ASTM D5185(m)	0	<1	0
Phosphorus	ppm	ASTM D5185(m)	2.4	1	<1
Zinc	ppm	ASTM D5185(m)	0	2	<1
Sulfur	ppm	ASTM D5185(m)		835	875
Lithium	ppm	ASTM D5185(m)		<1	815

### CONTAMINANTS

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

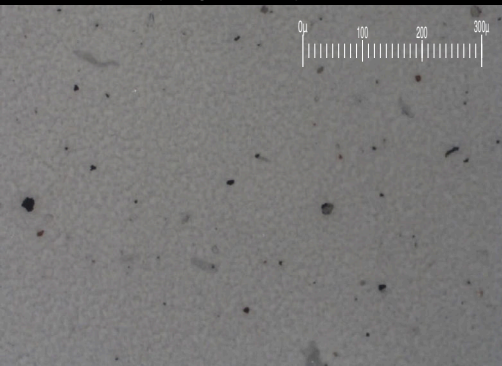
### FLUID CLEANLINESS

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>2500	▲ <b>3798</b>	▲ 8109	627
Particles >6µm	ASTM D7647	>640	▲ <b>542</b>	▲ 3114	158
Particles >14µm	ASTM D7647	>80	▲ <b>13</b>	▲ 292	10
Particles >21µm	ASTM D7647	>20	▲ <b>3</b>	▲ 66	2
Particles >38µm	ASTM D7647	>4	▲ <b>1</b>	1	0
Particles >71µm	ASTM D7647	>3	▲ <b>1</b>	0	0
Oil Cleanliness	ISO 4406 (c)	>18/16/13	▲ <b>19/16/11</b>	▲ 20/19/15	16/14/10

### FLUID DEGRADATION

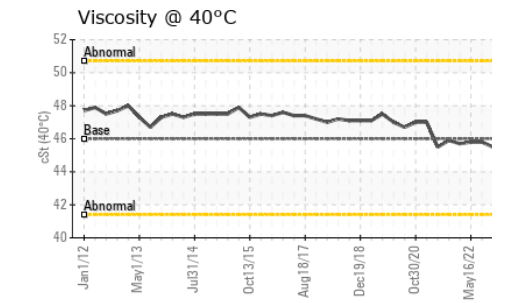
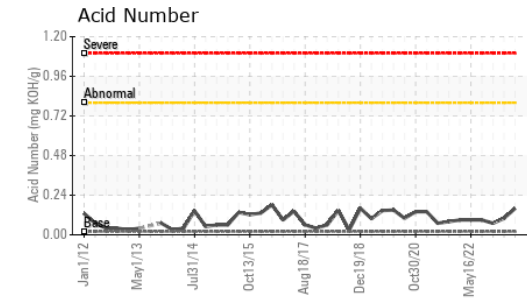
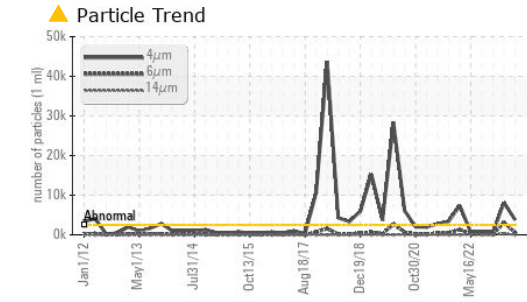
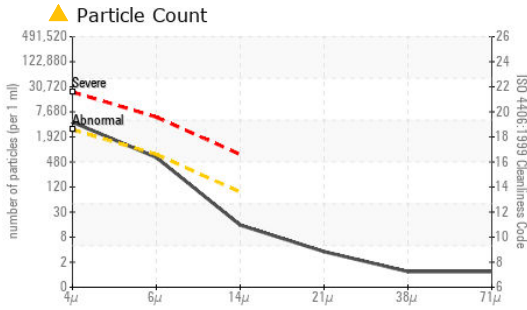
	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974*	0.02	0.16	0.10

Particle Filter (Magn: 100 x)





# OIL ANALYSIS REPORT



ISO 17025:2017  
Accredited  
Laboratory

**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : WC0828630 **Received** : 28 Aug 2023  
**Lab Number** : 02578787 **Diagnosed** : 30 Aug 2023  
**Unique Number** : 5631847 **Diagnostician** : Kevin Marson  
**Test Package** : IND 2 ( Additional Tests: Bottom, 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.

VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	VLITE	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*	>0.05	NEG	NEG
Free Water	scalar	Visual*		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	46	45.6	45.5

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



## GRAPHS

