

# **OIL ANALYSIS REPORT**

# SAB1 SAB1 G8 Governor Sump

**Hydraulic System** 

ESSO TERESSO ISO 46 (1600 LTR)

Sample Rating Trend



## 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.

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 INFORM	IATION	method	limit/base	current	history1	history2
Sample Number		Client Info		WC0864641	WC0828630	WC0642882
Sample Date		Client Info		21 Dec 2023	27 Aug 2023	27 Mar 2023
Machine Age	hrs	Client Info		0	0	0
Oil Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		N/A	N/A	N/A
Sample Status				NORMAL	ATTENTION	ABNORMAL
CONTAMINATION	N	method	limit/base	current	history1	history2
Water		WC Method	>0.05	NEG	NEG	NEG
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>20	<1	<1	<1
Chromium	ppm	ASTM D5185(m)	>20	0	0	0
Nickel	ppm	ASTM D5185(m)	>20	0	0	<1
Titanium	ppm	ASTM D5185(m)		0	0	0
Silver	ppm	ASTM D5185(m)		0	0	0
Aluminum	ppm	ASTM D5185(m)	>20	<1	<1	0
Lead	ppm	ASTM D5185(m)	>20	<1	<1	<1
Copper	ppm	ASTM D5185(m)	>20	<1	<1	<1
Tin	ppm	ASTM D5185(m)	>20	0	0	0
Antimony	ppm	ASTM D5185(m)		0	0	<1
Vanadium	ppm	ASTM D5185(m)		0	0	0
Beryllium	ppm	ASTM D5185(m)		0	0	0
Cadmium	ppm	ASTM D5185(m)		0	0	0
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)	0	0	<1	<1
Barium	ppm	ASTM D5185(m)		0	0	0
Molybdenum	ppm	ASTM D5185(m)	0	0	0	0
Manganese	ppm	ASTM D5185(m)		0	0	0
Magnesium						
	ppm	ASTM D5185(m)	0	<1	0	<1
Calcium	ppm ppm			<1 <1		
		ASTM D5185(m)			0	<1
Calcium	ppm	ASTM D5185(m) ASTM D5185(m)	0 2.4	<1	0 <1	<1
Calcium Phosphorus	ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	0 2.4	<1 <1	0 <1	<1 0 <1
Calcium Phosphorus Zinc	ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	0 2.4	<1 <1 <1	0 <1 1 2	<1 0 <1 <1
Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	0 2.4	<1 <1 <1 871	0 <1 1 2 835	<1 0 <1 <1 875
Calcium Phosphorus Zinc Sulfur Lithium	ppm ppm ppm ppm	ASTM D5185(m)	0 2.4 0	<1 <1 <1 871 <1	0 <1 1 2 835 <1	<1 0 <1 <1 875
Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS	ppm ppm ppm ppm ppm	ASTM D5185(m)  method	0 2.4 0	<1 <1 <1 871 <1 current	0 <1 1 2 835 <1 history1	<1 0 <1 <1 875 <1 history2
Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon	ppm ppm ppm ppm ppm	ASTM D5185(m)  method  ASTM D5185(m)	0 2.4 0	<1 <1 <1 871 <1 current	0 <1 1 2 835 <1 history1 <1	<1 0 <1 <1 875 <1 history2 <1
Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium	ppm ppm ppm ppm ppm	ASTM D5185(m)  Method  ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	0 2.4 0 limit/base >15	<1 <1 <1 871 <1 current 0 0	0 <1 1 2 835 <1 history1 <1 <1	<1 0 <1 <1 875 <1 history2 <1 0
Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN	ppm ppm ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)  method  ASTM D5185(m) ASTM D5185(m)  ASTM D5185(m) ASTM D5185(m)	0 2.4 0 limit/base >15 >20	<1 <1 <1 871 <1 current 0 0 <1	0	<1 0 <1 875 <1 history2 <1 0 <1
Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm	ppm ppm ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)  METHOD  ASTM D5185(m)	0 2.4 0 limit/base >15 >20 limit/base >2500	<1 <1 <1 <1 871 <1 current 0 0 <1 current 2168	0 <1 1 1 2 835 <1 history1 <1 <1 <1 history1	<1 0 <1 <1 875 <1 history2 <1 0 <1 history2
Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >6µm	ppm ppm ppm ppm ppm	ASTM D5185(m)  Method  ASTM D5185(m) ASTM D5185(m)  ASTM D5185(m)  ASTM D5185(m)  ASTM D5185(m)  ASTM D5185(m)  ASTM D5185(m)  ASTM D7647	0 2.4 0 limit/base >15 >20 limit/base >2500 >640	<1 <1 <1 <1 871 <1 current 0 0 <1 current 2168 316	0	<1 0 <1 875 <1 history2 <1 0 <1 history2  41 0 <1 history2  3114
Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >6µm Particles >14µm	ppm ppm ppm ppm ppm	ASTM D5185(m)  METHOD  ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)  METHOD  ASTM D5185(m) ASTM D5185(m)  ASTM D7647 ASTM D7647 ASTM D7647	0 2.4 0 limit/base >15 >20 limit/base >2500 >640 >80	<1 <1 <1 <1 871 <1 current 0 0 <1 current 2168 316 8	0	<1 0 <1 875 <1 history2 <1 0 <1 history2  ▲ 8109 ▲ 3114 ▲ 292
Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >14µm Particles >21µm	ppm ppm ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)  METHOD  METHOD  ASTM D5185(m)  ASTM D7647  ASTM D7647  ASTM D7647  ASTM D7647	0 2.4 0 limit/base >15 >20 limit/base >2500 >640 >80 >20	<1 <1 <1 <1 871 <1 current 0 0 <1 current 2168 316 8 3	0	<1 0 <1 875 <1 history2 <1 0 <1 history2  41 0 <1 history2  41 292 666
Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >6µm Particles >14µm	ppm ppm ppm ppm ppm	ASTM D5185(m)  METHOD  ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)  METHOD  ASTM D5185(m) ASTM D5185(m)  ASTM D7647 ASTM D7647 ASTM D7647	0 2.4 0 limit/base >15 >20 limit/base >2500 >640 >80 >20 >4	<1 <1 <1 <1 871 <1 current 0 0 <1 current 2168 316 8	0	<1 0 <1 875 <1 history2 <1 0 <1 history2  ▲ 8109 ▲ 3114 ▲ 292

ISO 4406 (c) >18/16/13

18/15/10

**1**9/16/11

Oil Cleanliness

**2**0/19/15



# OIL ANALYSIS REPORT





CALA ISO 17025:2017 Accredited Laboratory

Laboratory Sample No. Lab Number

Unique Number

: WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 : WC0864641 : 02604963 : 5698048

Recieved Diagnosed

: 27 Dec 2023 : Kevin Marson Diagnostician Test Package : IND 2 (Additional Tests: TAN Man)

: 22 Dec 2023

**Ontario Power Generation** NIAGARA PLANT GROUP,, 14000 NIAGARA PKWY NIAGARA ON THE LAKE, ON CA LOS 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.