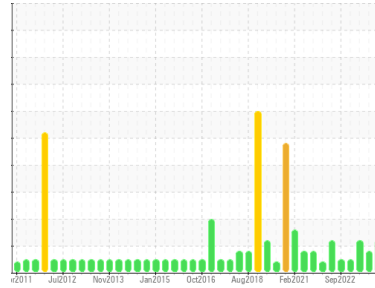




# OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Area  
**SAB1**  
Machine Id  
**SAB1 G6**  
Component  
**Turbine Bearing**  
Fluid  
**ESSO TERESSO ISO 46 (150 LTR)**

## DIAGNOSIS

### Recommendation

We recommend you service the filters on this component. We recommend an early resample to monitor this condition.

### Wear

All component wear rates are normal.

### Contamination

There is a moderate amount of silt (particulates < 14 microns in size) present in the oil. The system cleanliness is above the acceptable limit for the target ISO 4406 cleanliness code.

### Fluid Condition

The AN level is acceptable for this fluid. The oil is still serviceable provided that the contaminant(s) can be reduced to acceptable levels.

## SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		<b>WC0642846</b>	WC0828622	WC0642874
Sample Date	Client Info		<b>21 Dec 2023</b>	27 Aug 2023	27 Mar 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>ABNORMAL</b>	ATTENTION	ABNORMAL

## CONTAMINATION

	method	limit/base	current	history1	history2
Water	WC Method	>2	<b>NEG</b>	NEG	NEG

## WEAR METALS

	method	limit/base	current	history1	history2
PQ	ASTM D8184*		<b>0</b>	0	0
Iron	ppm	ASTM D5185(m) >7	<b>1</b>	1	2
Chromium	ppm	ASTM D5185(m) >2	<b>0</b>	0	0
Nickel	ppm	ASTM D5185(m) >2	<b>0</b>	<1	<1
Titanium	ppm	ASTM D5185(m)	<b>0</b>	0	0
Silver	ppm	ASTM D5185(m)	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185(m) >2	<b>&lt;1</b>	<1	0
Lead	ppm	ASTM D5185(m) >33	<b>2</b>	1	1
Copper	ppm	ASTM D5185(m) >3	<b>&lt;1</b>	<1	<1
Tin	ppm	ASTM D5185(m) >6	<b>0</b>	0	0
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

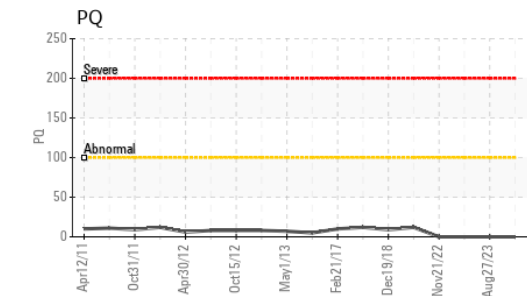
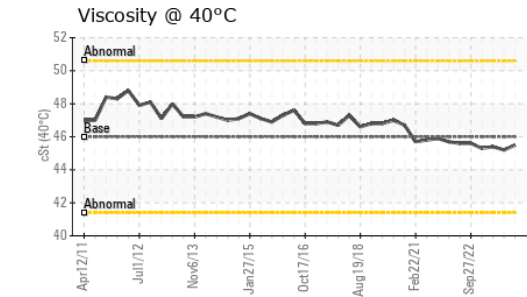
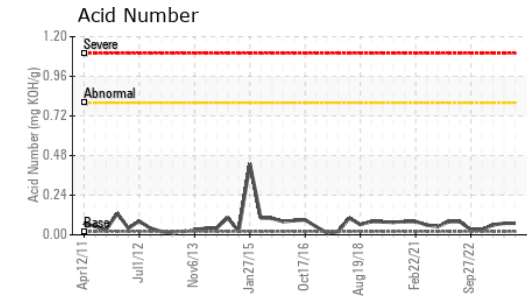
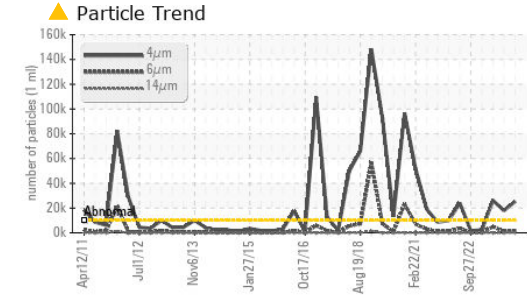
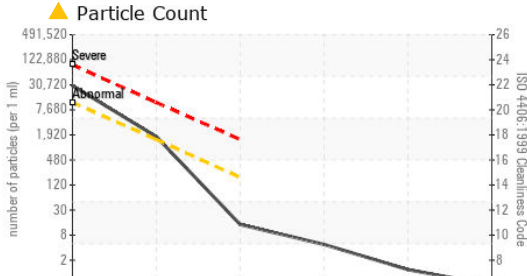
	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m) 0	<b>0</b>	0	<1
Barium	ppm	ASTM D5185(m)	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185(m) 0	<b>0</b>	0	0
Manganese	ppm	ASTM D5185(m)	<b>0</b>	0	0
Magnesium	ppm	ASTM D5185(m) 0	<b>0</b>	0	0
Calcium	ppm	ASTM D5185(m) 0	<b>&lt;1</b>	<1	0
Phosphorus	ppm	ASTM D5185(m) 2.4	<b>3</b>	4	2
Zinc	ppm	ASTM D5185(m) 0	<b>&lt;1</b>	2	<1
Sulfur	ppm	ASTM D5185(m)	<b>709</b>	678	662
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>5</b>	5	5
Sodium	ppm	ASTM D5185(m)	<b>0</b>	0	0
Potassium	ppm	ASTM D5185(m) >20	<b>&lt;1</b>	<1	0



# OIL ANALYSIS REPORT



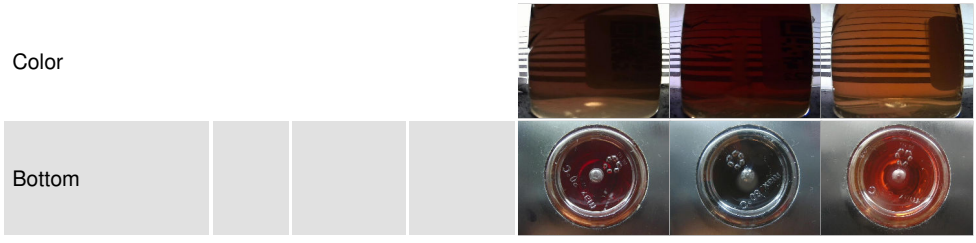
FLUID CLEANLINESS	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>10000	▲ 25335	▲ 17888	▲ 26121
Particles >6µm	ASTM D7647	>1300	▲ 1527	1172	▲ 4935
Particles >14µm	ASTM D7647	>160	12	8	93
Particles >21µm	ASTM D7647	>40	4	1	12
Particles >38µm	ASTM D7647	>10	1	0	1
Particles >71µm	ASTM D7647	>3	0	0	0
Oil Cleanliness	ISO 4406 (c)	>20/17/14	▲ 22/18/11	▲ 21/17/10	▲ 22/19/14

FLUID DEGRADATION	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g ASTM D974*	0.02	0.07	0.07	0.06

VISUAL	method	limit/base	current	history1	history2
White Metal	scalar Visual*	NONE	NONE	VLITE	NONE
Yellow Metal	scalar Visual*	NONE	NONE	NONE	NONE
Precipitate	scalar Visual*	NONE	NONE	NONE	NONE
Silt	scalar Visual*	NONE	NONE	NONE	NONE
Debris	scalar Visual*	NONE	NONE	NONE	NONE
Sand/Dirt	scalar Visual*	NONE	VLITE	NONE	NONE
Appearance	scalar Visual*	NORML	NORML	NORML	NORML
Odor	scalar Visual*	NORML	NORML	NORML	NORML
Emulsified Water	scalar Visual*	>2	NEG	NEG	NEG
Free Water	scalar Visual*		NEG	NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt ASTM D7279(m)	46	45.5	45.2	45.4

## SAMPLE IMAGES



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : WC0642846 **Received** : 22 Dec 2023  
**Lab Number** : 02604992 **Diagnosed** : 27 Dec 2023  
**Unique Number** : 5698077 **Diagnostician** : Kevin Marson  
**Test Package** : IND 2 ( Additional Tests: PQ, PrtCount, TAN Man )

**Ontario Power Generation**  
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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.