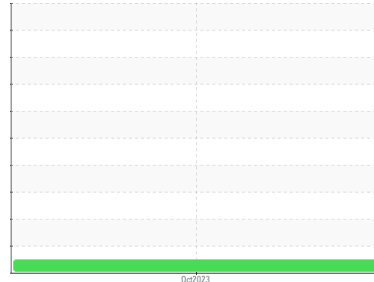




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Machine Id  
**SOLAR TURBIN**

Component  
**Turbine**

Fluid  
**SHELL TURBO S4 GX 32 (--- GAL)**

## DIAGNOSIS

### Recommendation

Resample at the next service interval to monitor.  
NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample.

### 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>PP0000594</b>	---	---
Sample Date	Client Info			<b>03 Oct 2023</b>	---	---
Machine Age	hrs	Client Info		<b>0</b>	---	---
Oil Age	hrs	Client Info		<b>0</b>	---	---
Oil Changed	Client Info			<b>N/A</b>	---	---
Sample Status				<b>NORMAL</b>	---	---

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>15	<b>&lt;1</b>	---	---
Chromium	ppm	ASTM D5185(m)	>4	<b>0</b>	---	---
Nickel	ppm	ASTM D5185(m)	>2	<b>0</b>	---	---
Titanium	ppm	ASTM D5185(m)		<b>0</b>	---	---
Silver	ppm	ASTM D5185(m)		<b>&lt;1</b>	---	---
Aluminum	ppm	ASTM D5185(m)	>10	<b>0</b>	---	---
Lead	ppm	ASTM D5185(m)		<b>6</b>	---	---
Copper	ppm	ASTM D5185(m)	>5	<b>&lt;1</b>	---	---
Tin	ppm	ASTM D5185(m)	>5	<b>0</b>	---	---
Antimony	ppm	ASTM D5185(m)		<b>0</b>	---	---
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	---	---
Beryllium	ppm	ASTM D5185(m)		<b>0</b>	---	---
Cadmium	ppm	ASTM D5185(m)		<b>0</b>	---	---

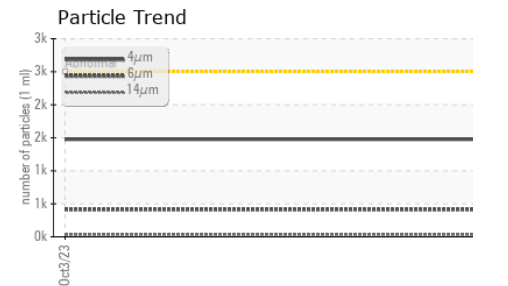
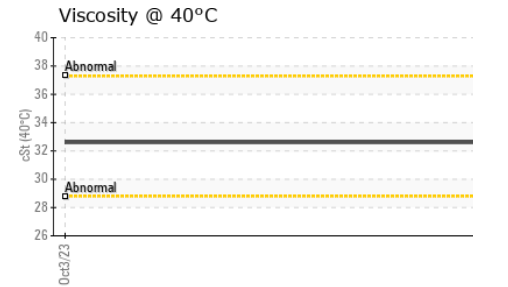
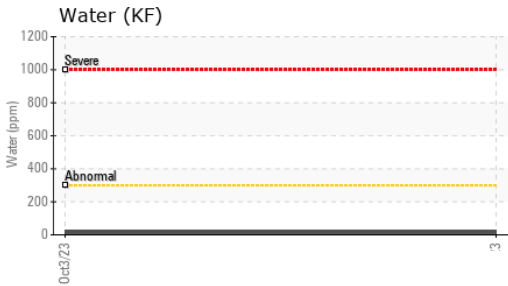
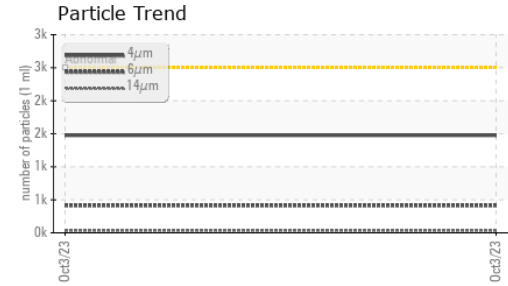
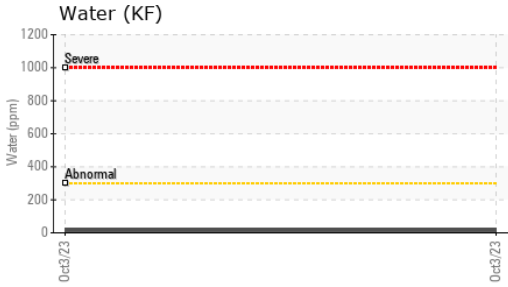
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)		<b>&lt;1</b>	---	---
Barium	ppm	ASTM D5185(m)		<b>5</b>	---	---
Molybdenum	ppm	ASTM D5185(m)		<b>0</b>	---	---
Manganese	ppm	ASTM D5185(m)		<b>0</b>	---	---
Magnesium	ppm	ASTM D5185(m)		<b>0</b>	---	---
Calcium	ppm	ASTM D5185(m)		<b>15</b>	---	---
Phosphorus	ppm	ASTM D5185(m)		<b>91</b>	---	---
Zinc	ppm	ASTM D5185(m)		<b>17</b>	---	---
Sulfur	ppm	ASTM D5185(m)		<b>141</b>	---	---
Lithium	ppm	ASTM D5185(m)		<b>&lt;1</b>	---	---

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>15	<b>&lt;1</b>	---	---
Sodium	ppm	ASTM D5185(m)		<b>19</b>	---	---
Potassium	ppm	ASTM D5185(m)	>20	<b>0</b>	---	---
Water	%	ASTM D6304*	>0.03	<b>0.001</b>	---	---
ppm Water	ppm	ASTM D6304*	>300	<b>14.6</b>	---	---

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>2500	<b>1476</b>	---	---
Particles >6µm		ASTM D7647	>640	<b>414</b>	---	---
Particles >14µm		ASTM D7647	>80	<b>34</b>	---	---
Particles >21µm		ASTM D7647	>20	<b>8</b>	---	---
Particles >38µm		ASTM D7647	>4	<b>0</b>	---	---
Particles >71µm		ASTM D7647	>3	<b>0</b>	---	---
Oil Cleanliness		ISO 4406 (c)	>18/16/13	<b>18/16/12</b>	---	---





# OIL ANALYSIS REPORT

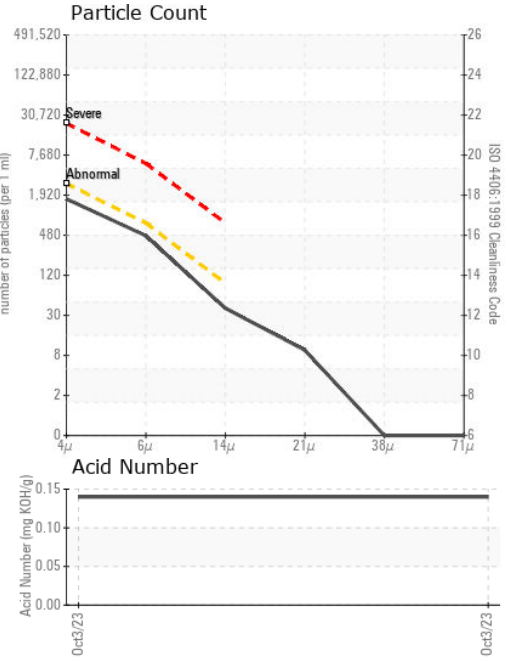
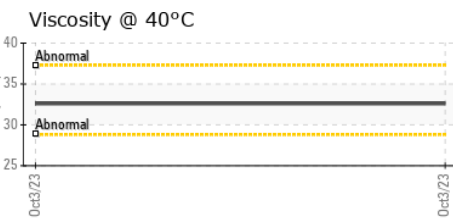
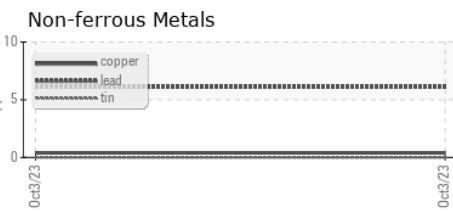
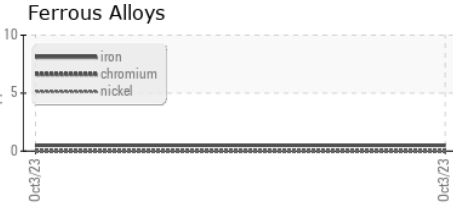


FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974*		<b>0.14</b>	---	---
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	<b>NONE</b>	---	---
Yellow Metal	scalar	Visual*	NONE	<b>NONE</b>	---	---
Precipitate	scalar	Visual*	NONE	<b>NONE</b>	---	---
Silt	scalar	Visual*	NONE	<b>NONE</b>	---	---
Debris	scalar	Visual*	NONE	<b>NONE</b>	---	---
Sand/Dirt	scalar	Visual*	NONE	<b>NONE</b>	---	---
Appearance	scalar	Visual*	NORML	<b>NORML</b>	---	---
Odor	scalar	Visual*	NORML	<b>NORML</b>	---	---
Emulsified Water	scalar	Visual*	>0.03	<b>NEG</b>	---	---
Free Water	scalar	Visual*		<b>NEG</b>	---	---

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)		<b>32.6</b>	---	---

SAMPLE IMAGES		method	limit/base	current	history1	history2
Color					no image	no image
Bottom					no image	no image

## GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : PP0000594  
**Lab Number** : **02586780**  
**Unique Number** : 5655846  
**Test Package** : IND 2

**CANADIAN CHEMICAL CLEANING**  
 1099 HWY #6, R.R. #2  
 HAMILTON, ON  
 CA L8N 2Z7  
 Contact: Darren MacDonald  
 Darren@chemcleaning.com  
 T: (905)320-6670  
 F: (905)689-2998

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.