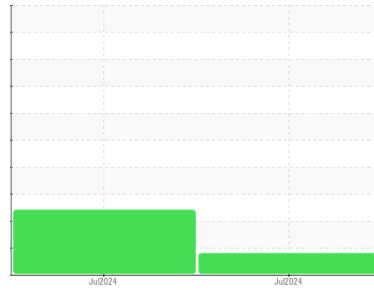




OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Machine Id
U4
 Component
Main Turbine
 Fluid
{not provided} (--- GAL)

DIAGNOSIS

Recommendation

Little or no information is provided as to the component and lubricant being tested. Recommendations are therefore generic in nature and may not apply to the current application. Please forward information as to equipment type, reservoir capacity, lubricant type and any pertinent information to allow for a more accurate assessment. We recommend you service the filters on this component. Resample at the next service interval to monitor. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample. Please specify the brand, type, and viscosity of the oil on your next sample.

Wear

All component wear rates are normal.

Contamination

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

Fluid Condition

The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

Particle Filter (Magn: 200 x)



SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		WC	WC	---
Sample Date	Client Info		03 Jul 2024	03 Jul 2024	---
Machine Age	hrs	Client Info	0	0	---
Oil Age	hrs	Client Info	0	0	---
Oil Changed	Client Info		N/A	N/A	---
Sample Status			ATTENTION	---	---

WEAR METALS

	method	limit/base	current	history1	history2
PQ	ASTM D8184*		0	0	---
Iron	ppm	ASTM D5185(m) >15	<1	<1	---
Chromium	ppm	ASTM D5185(m) >4	0	0	---
Nickel	ppm	ASTM D5185(m) >2	<1	0	---
Titanium	ppm	ASTM D5185(m)	0	0	---
Silver	ppm	ASTM D5185(m)	0	0	---
Aluminum	ppm	ASTM D5185(m) >10	0	<1	---
Lead	ppm	ASTM D5185(m)	0	0	---
Copper	ppm	ASTM D5185(m) >5	<1	<1	---
Tin	ppm	ASTM D5185(m) >5	0	0	---
Antimony	ppm	ASTM D5185(m)	0	0	---
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)	<1	<1	---
Barium	ppm	ASTM D5185(m)	0	0	---
Molybdenum	ppm	ASTM D5185(m)	0	0	---
Manganese	ppm	ASTM D5185(m)	0	0	---
Magnesium	ppm	ASTM D5185(m)	0	0	---
Calcium	ppm	ASTM D5185(m)	<1	0	---
Phosphorus	ppm	ASTM D5185(m)	4	4	---
Zinc	ppm	ASTM D5185(m)	<1	<1	---
Sulfur	ppm	ASTM D5185(m)	1068	1064	---
Lithium	ppm	ASTM D5185(m)	<1	<1	---

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m) >15	0	0	---
Sodium	ppm	ASTM D5185(m)	0	0	---
Potassium	ppm	ASTM D5185(m) >20	<1	<1	---
Water	%	ASTM D6304* >0.03	0.003	0.003	---
ppm Water	ppm	ASTM D6304* >300	33	32	---

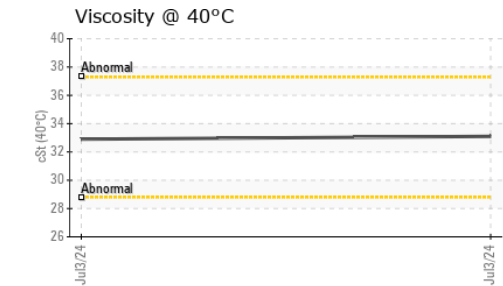
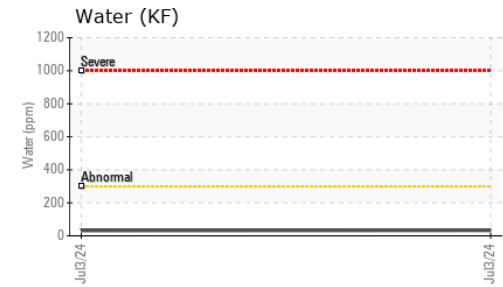
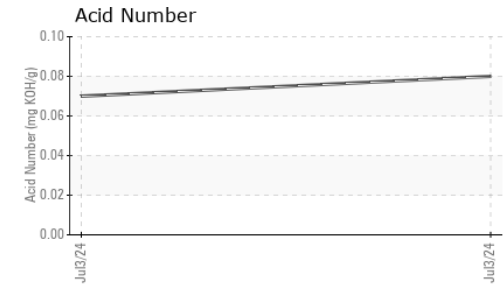
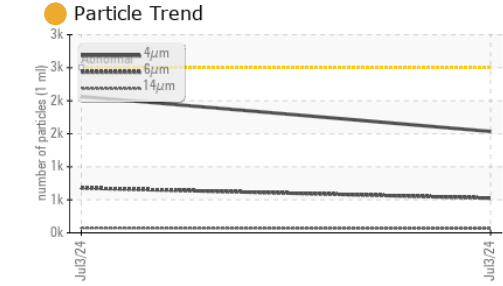
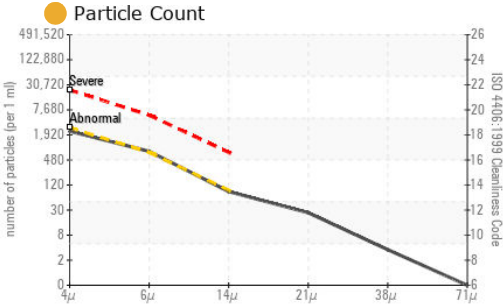
FLUID CLEANLINESS

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>2500	2064	1535	---
Particles >6µm	ASTM D7647	>640	679	525	---
Particles >14µm	ASTM D7647	>80	74	64	---
Particles >21µm	ASTM D7647	>20	23	20	---
Particles >38µm	ASTM D7647	>4	3	3	---
Particles >71µm	ASTM D7647	>3	0	1	---

Oil Cleanliness ISO 4406 (c) >18/16/13 **18/17/13** 18/16/13
 Contact/Location: Abbas Eskandari - OPGBAT



OIL ANALYSIS REPORT



FLUID DEGRADATION	method	limit/base	current	history1	history2
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Acid Number (AN)	mg KOH/g	ASTM D974*	0.08	0.07	---
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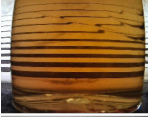



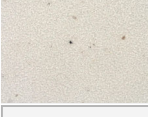

VISUAL	method	limit/base	current	history1	history2
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White Metal	scalar	Visual*	NONE	VLITE	NONE	---
Yellow Metal	scalar	Visual*	NONE	NONE	NONE	---
Precipitate	scalar	Visual*	NONE	NONE	NONE	---
Silt	scalar	Visual*	NONE	NONE	NONE	---
Debris	scalar	Visual*	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*	>0.03	.2%	NEG	---
Free Water	scalar	Visual*		NEG	NEG	---

FLUID PROPERTIES	method	limit/base	current	history1	history2
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Visc @ 40°C	cSt	ASTM D7279(m)	33.1	32.9	---
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SAMPLE IMAGES	method	limit/base	current	history1	history2
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Color						no image
Bottom						no image
PrtFilter						no image
MPC						no image



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC
Lab Number : 02645437
Unique Number : 5802976
Test Package : IND 2 (Additional Tests: Bottom, BottomAnalysis, FilterPatch, PQ, PrtFilter, TALS, Autac)

Ontario Power Generation
 7263 Hwy #33 , P.O.Box 1000
 BATH, ON
 CA K0H 1G0

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.

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