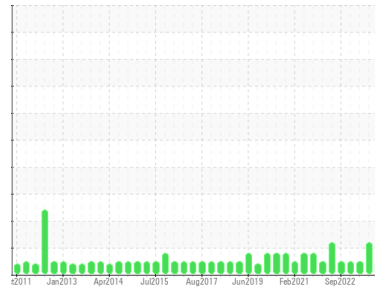




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Area
SAB1
 Machine Id
SAB1 G4
 Component
Turbine Bearing
 Fluid
ESSO TERESSO ISO 46 (150 LTR)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

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	WC0864637	WC0828616	WC0642868
Sample Date	Client Info	21 Dec 2023	27 Aug 2023	27 Mar 2023
Machine Age	hrs	Client Info	0	0
Oil Age	hrs	Client Info	0	0
Oil Changed	Client Info	N/A	N/A	N/A
Sample Status		NORMAL	ABNORMAL	NORMAL

CONTAMINATION

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

WEAR METALS

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

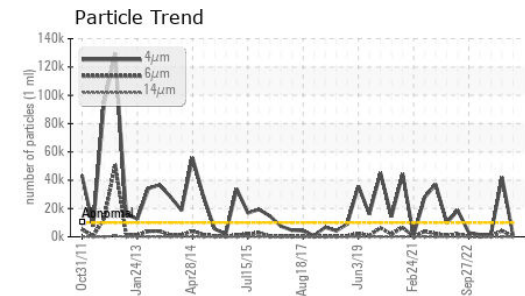
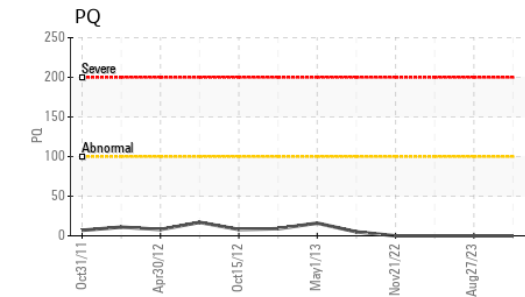
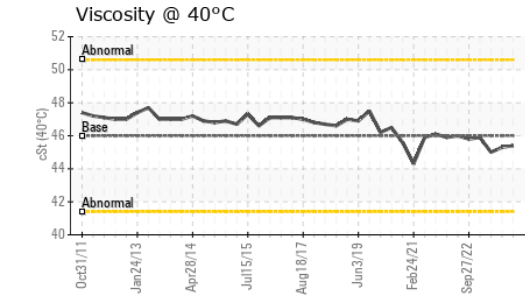
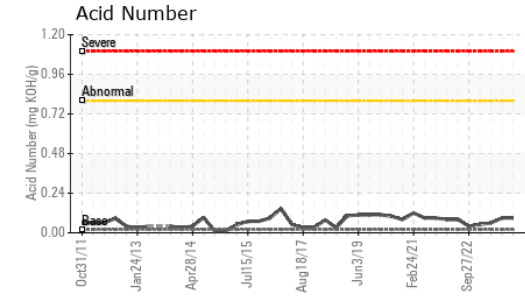
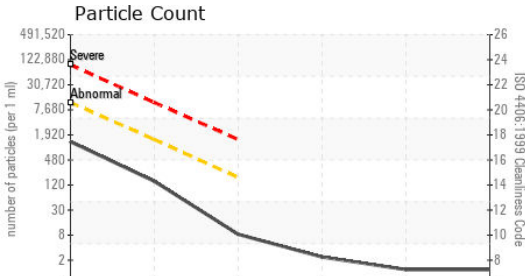
method	limit/base	current	history1	history2
Boron	ppm ASTM D5185(m) 0	0	<1	<1
Barium	ppm ASTM D5185(m)	0	0	0
Molybdenum	ppm ASTM D5185(m) 0	0	0	0
Manganese	ppm ASTM D5185(m)	0	0	0
Magnesium	ppm ASTM D5185(m) 0	0	<1	<1
Calcium	ppm ASTM D5185(m) 0	<1	<1	0
Phosphorus	ppm ASTM D5185(m) 2.4	1	2	<1
Zinc	ppm ASTM D5185(m) 0	2	2	<1
Sulfur	ppm ASTM D5185(m)	644	627	667
Lithium	ppm ASTM D5185(m)	<1	<1	<1

CONTAMINANTS

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



OIL ANALYSIS REPORT



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0864637 **Received** : 22 Dec 2023
Lab Number : 02604989 **Diagnosed** : 27 Dec 2023
Unique Number : 5698074 **Diagnostician** : Kevin Marson
Test Package : IND 2 (Additional Tests: PQ, PrtCount, 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.

FLUID CLEANLINESS	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>10000	1158	▲ 42139	1659
Particles >6µm	ASTM D7647	>1300	130	▲ 4254	543
Particles >14µm	ASTM D7647	>160	7	24	39
Particles >21µm	ASTM D7647	>40	2	3	9
Particles >38µm	ASTM D7647	>10	1	1	0
Particles >71µm	ASTM D7647	>3	1	0	0
Oil Cleanliness	ISO 4406 (c)	>20/17/14	17/14/10	▲ 23/19/12	18/16/12

FLUID DEGRADATION	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g ASTM D974*	0.02	0.09	0.09	0.06

VISUAL	method	limit/base	current	history1	history2
White Metal	scalar Visual*	NONE	NONE	NONE	NONE
Yellow Metal	scalar Visual*	NONE	NONE	NONE	NONE
Precipitate	scalar Visual*	NONE	NONE	NONE	NONE
Silt	scalar Visual*	NONE	NONE	VLITE	NONE
Debris	scalar Visual*	NONE	NONE	NONE	NONE
Sand/Dirt	scalar Visual*	NONE	NONE	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	45.4	45.3	45.0

SAMPLE IMAGES	method	limit/base	current	history1	history2
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