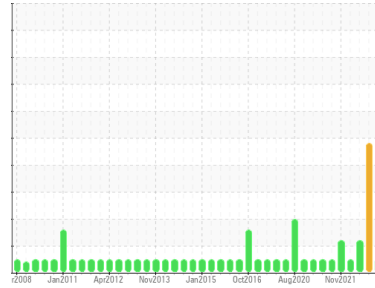




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Area
SAB1
 Machine Id
SAB1 G9
 Component
Thrust Bearing
 Fluid
ESSO TERESSO ISO 46 (4250 LTR)

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.

Wear

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 INFORMATION

	method	limit/base	current	history 1	history 2
Sample Number	Client Info		WC0676692	WC0587310	WC
Sample Date	Client Info		11 Nov 2022	27 Sep 2022	05 Jun 2022
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	ABNORMAL	ABNORMAL

WEAR METALS

	method	limit/base	current	history 1	history 2
Iron	ppm	ASTM D5185(m)	>85	<1	<1
Chromium	ppm	ASTM D5185(m)	>20	0	0
Nickel	ppm	ASTM D5185(m)	>20	0	<1
Titanium	ppm	ASTM D5185(m)		0	0
Silver	ppm	ASTM D5185(m)		0	0
Aluminum	ppm	ASTM D5185(m)	>40	0	0
Lead	ppm	ASTM D5185(m)	>60	<1	<1
Copper	ppm	ASTM D5185(m)	>7	<1	▲ 10
Tin	ppm	ASTM D5185(m)	>40	0	▲ 8
Antimony	ppm	ASTM D5185(m)		<1	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	history 1	history 2
Boron	ppm	ASTM D5185(m)	0	<1	0
Barium	ppm	ASTM D5185(m)		0	0
Molybdenum	ppm	ASTM D5185(m)	0	0	0
Manganese	ppm	ASTM D5185(m)		0	0
Magnesium	ppm	ASTM D5185(m)	0	0	<1
Calcium	ppm	ASTM D5185(m)	0	0	<1
Phosphorus	ppm	ASTM D5185(m)	2.4	3	<1
Zinc	ppm	ASTM D5185(m)	0	1	1
Sulfur	ppm	ASTM D5185(m)		767	655
Lithium	ppm	ASTM D5185(m)		<1	<1

CONTAMINANTS

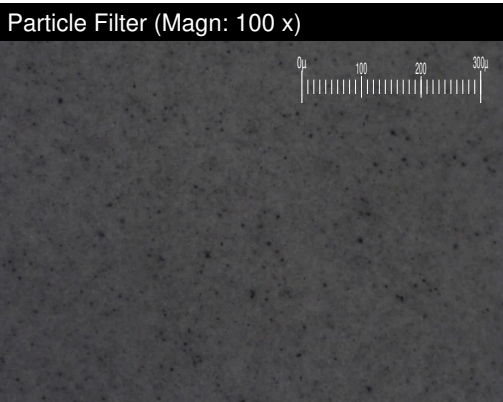
	method	limit/base	current	history 1	history 2
Silicon	ppm	ASTM D5185(m)	>20	2	1
Sodium	ppm	ASTM D5185(m)		0	0
Potassium	ppm	ASTM D5185(m)	>20	0	0

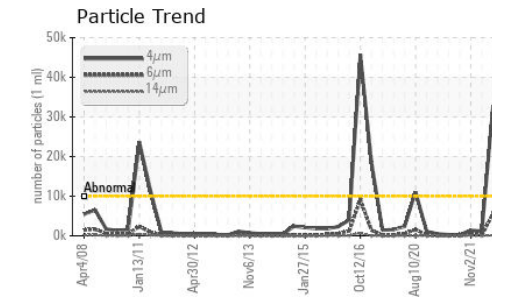
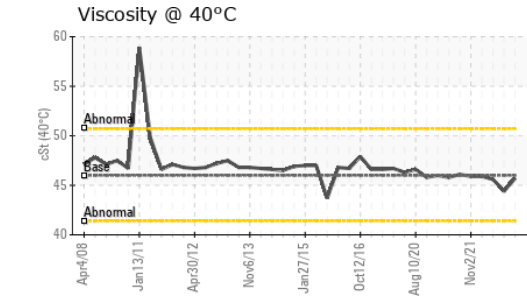
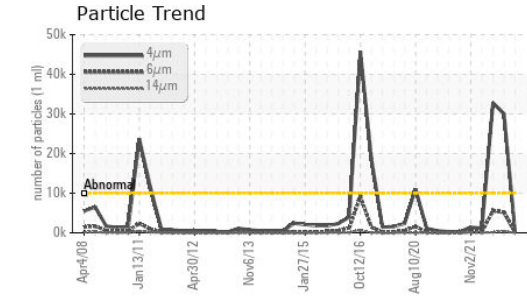
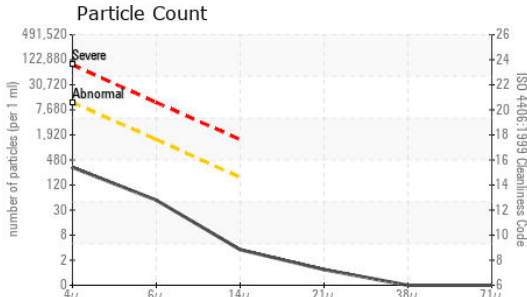
FLUID CLEANLINESS

	method	limit/base	current	history 1	history 2
Particles >4µm	ASTM D7647	>10000	280	▲ 30081	▲ 32774
Particles >6µm	ASTM D7647	>1300	46	▲ 5192	▲ 5531
Particles >14µm	ASTM D7647	>160	3	▲ 342	138
Particles >21µm	ASTM D7647	>40	1	▲ 94	16
Particles >38µm	ASTM D7647	>10	0	2	0
Particles >71µm	ASTM D7647	>3	0	0	0
Oil Cleanliness	ISO 4406 (c)	>20/17/14	15/13/9	▲ 22/20/16	▲ 22/20/14

FLUID DEGRADATION

	method	limit/base	current	history 1	history 2
Acid Number (AN)	mg KOH/g	ASTM D974*	0.02	0.04	0.07

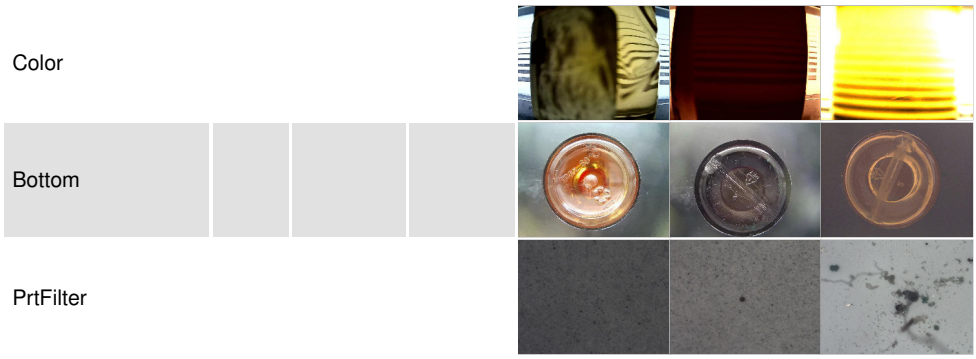




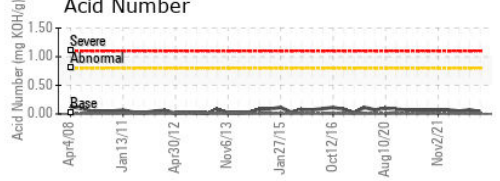
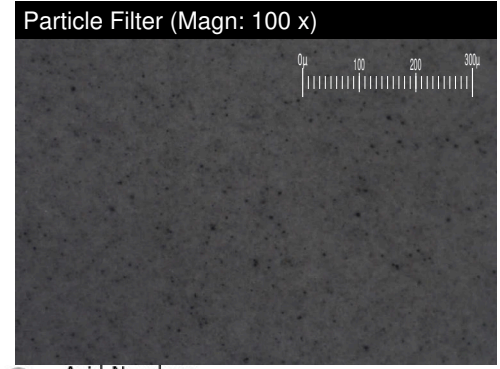
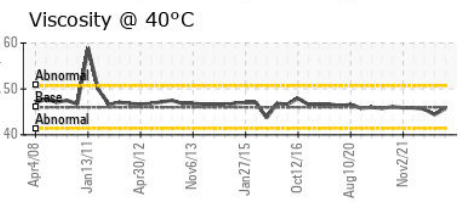
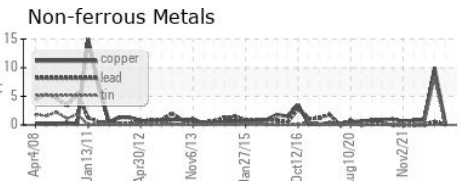
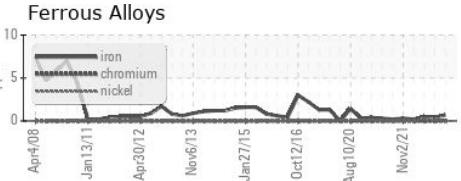
VISUAL	method	limit/base	current	history 1	history 2	
White Metal	scalar	Visual*	NONE	NONE	▲ VLITE	NONE
Yellow Metal	scalar	Visual*	NONE	NONE	NONE	NONE
Precipitate	scalar	Visual*	NONE	NONE	NONE	NONE
Silt	scalar	Visual*	NONE	NONE	NONE	NONE
Debris	scalar	Visual*	NONE	NONE	VLITE	NONE
Sand/Dirt	scalar	Visual*	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	history 1	history 2	
Visc @ 40°C	cSt	ASTM D7279(m)	46	45.7	44.4	45.6

SAMPLE IMAGES	method	limit/base	current	history 1	history 2
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GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0676692
Lab Number : 02525189
Unique Number : 5490170
Test Package : IND 2 (Additional Tests: BottomAnalysis, FilterPatch, 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.