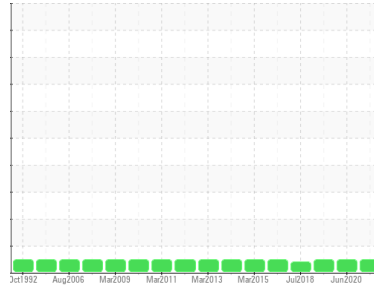




OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL



Area
WHITEDOG FALLS GS
 Machine Id
FP3G1
 Component
Governor System
 Fluid
ESSO TERESSO ISO 46 (--- 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	WC0560596	WC0475102	WC
Sample Date	Client Info	14 Apr 2021	17 Jun 2020	24 Jun 2019
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	NORMAL	NORMAL

CONTAMINATION

method	limit/base	current	history1	history2
Water	WC Method >0.1	NEG	NEG	NEG

WEAR METALS

method	limit/base	current	history1	history2
Iron	ppm ASTM D5185(m) >50	1	<1	2
Chromium	ppm ASTM D5185(m)	0	0	0
Nickel	ppm ASTM D5185(m)	<1	0	0
Titanium	ppm ASTM D5185(m)	0	0	0
Silver	ppm ASTM D5185(m)	<1	<1	0
Aluminum	ppm ASTM D5185(m) >3	<1	<1	0
Lead	ppm ASTM D5185(m) >75	<1	<1	<1
Copper	ppm ASTM D5185(m) >15	<1	<1	<1
Tin	ppm ASTM D5185(m) >55	0	0	0
Antimony	ppm ASTM D5185(m)	0	<1	0
Vanadium	ppm ASTM D5185(m)	0	0	0
Beryllium	ppm ASTM D5185(m)	0	0	0
Cadmium	ppm ASTM D5185(m)	0	0	<1

ADDITIVES

method	limit/base	current	history1	history2
Boron	ppm ASTM D5185(m) 0	<1	0	0
Barium	ppm ASTM D5185(m)	0	0	0
Molybdenum	ppm ASTM D5185(m) 0	0	0	0
Manganese	ppm ASTM D5185(m)	0	0	<1
Magnesium	ppm ASTM D5185(m) 0	<1	<1	<1
Calcium	ppm ASTM D5185(m) 0	<1	0	<1
Phosphorus	ppm ASTM D5185(m) 2.4	2	2	5
Zinc	ppm ASTM D5185(m) 0	<1	1	1
Sulfur	ppm ASTM D5185(m)	1972	1929	1785
Lithium	ppm ASTM D5185(m)	<1	<1	0

CONTAMINANTS

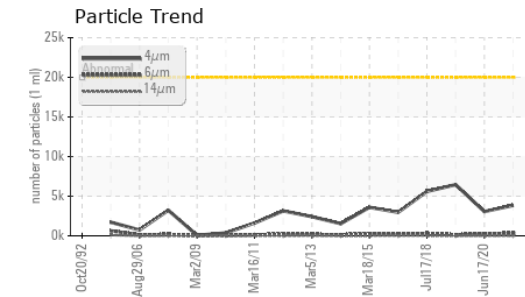
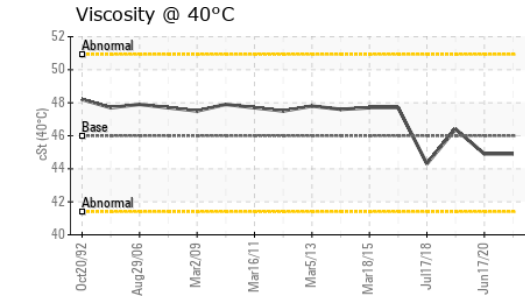
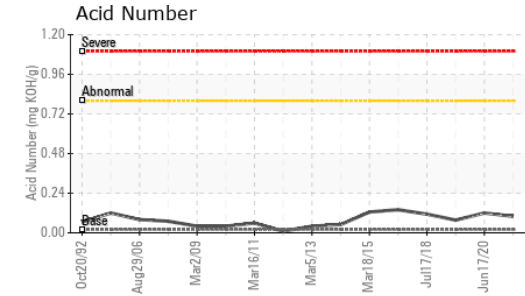
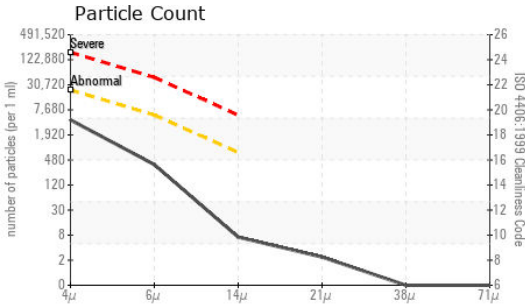
method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185(m) >8	1	<1	<1
Sodium	ppm ASTM D5185(m)	<1	0	0
Potassium	ppm ASTM D5185(m) >20	<1	0	0

FLUID CLEANLINESS

method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647 >20000	3843	3058	6456
Particles >6µm	ASTM D7647 >5000	327	236	123
Particles >14µm	ASTM D7647 >640	6	7	4
Particles >21µm	ASTM D7647 >160	2	3	2
Particles >38µm	ASTM D7647 >40	0	0	0
Particles >71µm	ASTM D7647 >10	0	0	0
Oil Cleanliness	ISO 4406 (c) >21/19/16	19/16/10	19/15/10	20/14/9



OIL ANALYSIS REPORT



FLUID DEGRADATION	method	limit/base	current	history1	history2
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Acid Number (AN)	mg KOH/g	ASTM D974*	0.02	0.10	0.12	0.077
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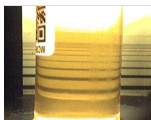

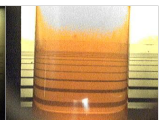



VISUAL	method	limit/base	current	history1	history2
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White Metal	scalar	Visual*	NONE	NONE	NONE	NONE
Yellow Metal	scalar	Visual*	NONE	NONE	NONE	NONE
Precipitate	scalar	Visual*	NONE	NONE	NONE	NONE
Silt	scalar	Visual*	NONE	NONE	NONE	NONE
Debris	scalar	Visual*	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*	>0.1	NEG	NEG	NEG
Free Water	scalar	Visual*		NEG	NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
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Visc @ 40°C	cSt	ASTM D7279(m)	46	44.9	44.9	46.4
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SAMPLE IMAGES	method	limit/base	current	history1	history2
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Color						
Bottom						
MPC				no image	no image	no image



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0560596 **Received** : 26 May 2021
Lab Number : **02423569** **Diagnosed** : 27 May 2021
Unique Number : 5227069 **Diagnostician** : Wes Davis
Test Package : IND 2 (Additional Tests: PrtCount, TAN Man)

Ontario Power Generation
 KENORA PRODUCTION CENTRE, 200-60 FOURTEENTH ST N.
 KENORA, ON
 CA P9N 4M9
 Contact: Josh Robinson
 josh.robinson@opg.com

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.