



OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL



Area
South Falls
 Machine Id
South Falls G3 (S/N U.S BRG)
 Component
New (Unused) Oil
 Fluid
ESSO TERESSO ISO 46 (10 LTR)

DIAGNOSIS

Recommendation

This is the baseline readout on this new (unused) oil. The fluid is suitable for service.

Wear

{not applicable}

Contamination

The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The water content is negligible. There is no indication of any contamination in the new (unused) oil.

Fluid Condition

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

SAMPLE INFORMATION

method	limit/base	current	history1	history2
Sample Number	Client Info	WC0823800	---	---
Sample Date	Client Info	13 Dec 2023	---	---
Machine Age	hrs Client Info	0	---	---
Oil Age	hrs Client Info	0	---	---
Oil Changed	Client Info	Not Chngd	---	---
Sample Status		NORMAL	---	---

WEAR METALS

method	limit/base	current	history1	history2
PQ	ASTM D8184*	0	---	---
Iron	ppm ASTM D5185(m) >5	<1	---	---
Chromium	ppm ASTM D5185(m) >5	0	---	---
Nickel	ppm ASTM D5185(m) >5	<1	---	---
Titanium	ppm ASTM D5185(m)	0	---	---
Silver	ppm ASTM D5185(m) >5	0	---	---
Aluminum	ppm ASTM D5185(m) >5	1	---	---
Lead	ppm ASTM D5185(m) >5	0	---	---
Copper	ppm ASTM D5185(m) >5	2	---	---
Tin	ppm ASTM D5185(m) >5	0	---	---
Antimony	ppm ASTM D5185(m)	0	---	---
Vanadium	ppm ASTM D5185(m)	0	---	---
Beryllium	ppm ASTM D5185(m)	0	---	---
Cadmium	ppm ASTM D5185(m)	0	---	---

ADDITIVES

method	limit/base	current	history1	history2
Boron	ppm ASTM D5185(m) 0	0	---	---
Barium	ppm ASTM D5185(m)	0	---	---
Molybdenum	ppm ASTM D5185(m) 0	<1	---	---
Manganese	ppm ASTM D5185(m)	0	---	---
Magnesium	ppm ASTM D5185(m) 0	9	---	---
Calcium	ppm ASTM D5185(m) 0	14	---	---
Phosphorus	ppm ASTM D5185(m) 2.4	12	---	---
Zinc	ppm ASTM D5185(m) 0	13	---	---
Sulfur	ppm ASTM D5185(m)	2074	---	---
Lithium	ppm ASTM D5185(m)	<1	---	---

CONTAMINANTS

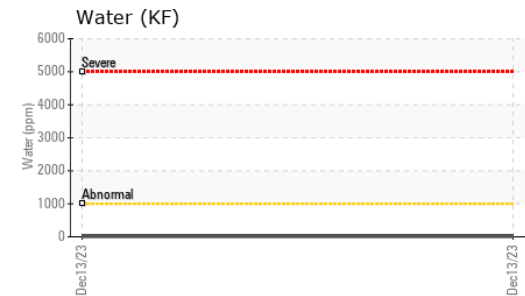
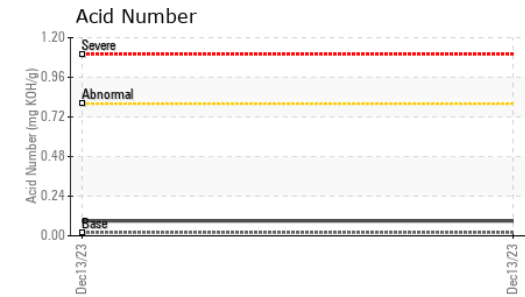
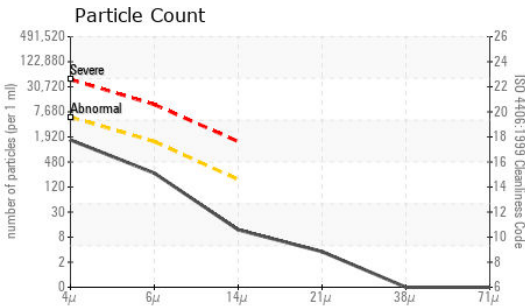
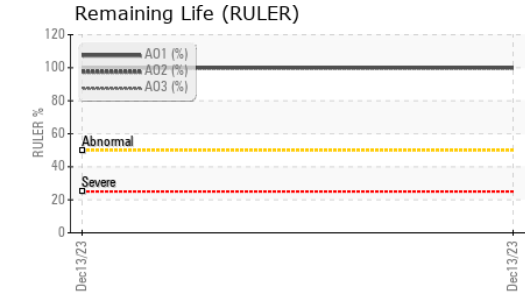
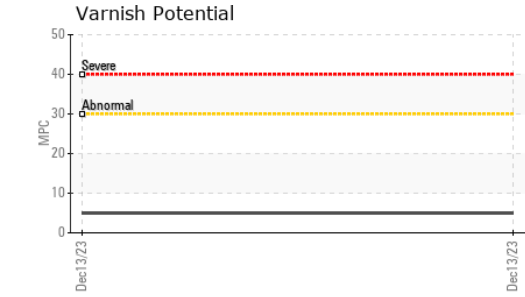
method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185(m) >15	<1	---	---
Sodium	ppm ASTM D5185(m)	<1	---	---
Potassium	ppm ASTM D5185(m) >20	0	---	---
Water	% ASTM D6304* >0.1	0.001	---	---
ppm Water	ppm ASTM D6304* >1000	13	---	---

INFRA-RED

method	limit/base	current	history1	history2
Soot %	% ASTM D7844*	0	---	---
Nitration	Abs/cm ASTM D7624*	2.5	---	---
Sulfation	Abs/.1mm ASTM D7415*	12.9	---	---



OIL ANALYSIS REPORT



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0823800
Lab Number : 02605294
Unique Number : 5698379
Test Package : IND 1 (Additional Tests: FT-IR, KF, KV100, MPC, PQ, PrtCount, RULER, TAN Man, VI)

Ontario Power Generation
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 GRAVENHURST, ON
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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	>5000	1420	---	---
Particles >6µm	ASTM D7647	>1300	228	---	---
Particles >14µm	ASTM D7647	>160	10	---	---
Particles >21µm	ASTM D7647	>40	3	---	---
Particles >38µm	ASTM D7647	>10	0	---	---
Particles >71µm	ASTM D7647	>3	0	---	---
Oil Cleanliness	ISO 4406 (c)	>19/17/14	18/15/10	---	---

FLUID DEGRADATION	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm ASTM D7414*		3.8	---	---
Acid Number (AN)	mg KOH/g ASTM D974*	0.02	0.09	---	---
Anti-Oxidant 1	% ASTM D6971*	<25	100	---	---
Anti-Oxidant 2	% ASTM D6971*	<25	100	---	---
MPC Varnish Potential	Scale ASTM D7843(m)*	>15	5	---	---

VISUAL	method	limit/base	current	history1	history2
White Metal	scalar Visual*	NONE	NONE	---	---
Yellow Metal	scalar Visual*	NONE	NONE	---	---
Precipitate	scalar Visual*	NONE	NONE	---	---
Silt	scalar Visual*	NONE	NONE	---	---
Debris	scalar Visual*	NONE	NONE	---	---
Sand/Dirt	scalar Visual*	NONE	NONE	---	---
Appearance	scalar Visual*	NORML	NORML	---	---
Odor	scalar Visual*	NORML	NORML	---	---
Emulsified Water	scalar Visual*	>0.1	NEG	---	---
Free Water	scalar Visual*		NEG	---	---

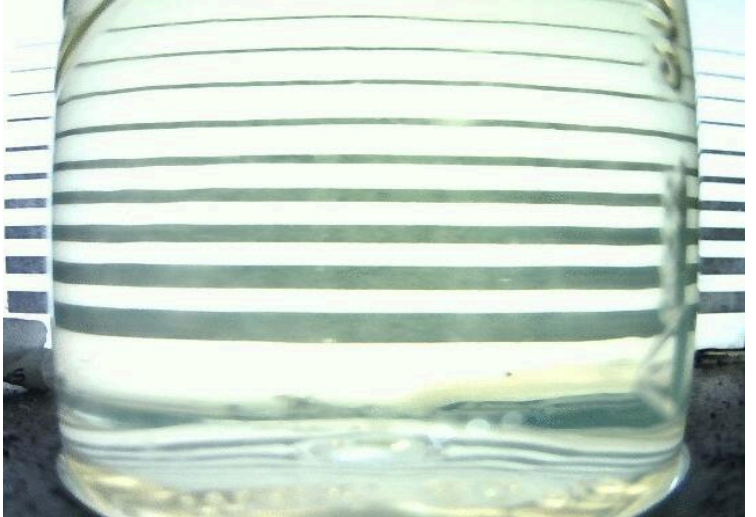
FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt ASTM D7279(m)	46	40.5	---	---
Visc @ 100°C	cSt ASTM D7279(m)	6.36	6.5	---	---
Viscosity Index (VI)	Scale ASTM D2270*	81	111	---	---

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

MPC (Varnish Test)



Sample Color & Clarity



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