IND II WEAR CHECK

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	SEVERE
FLUID CONDITION	NORMAL

Machine Id
GFP3 - UNIT 8 TURBINE TAIL END BEARING (S/N 720328)
Component
Opposite End Turbine Bearing
Fluid
SHELL TURBO T ISO 100 (100 LTR)

RECOMMENDATION

We advise that you check all areas where contaminants can enter the system. We advise that you perform a filter service, and use off-line filtration to improve the cleanliness of the system fluid. The air breather requires service. If unrated, we recommend that you replace with a suitable micron rated and/or desiccant air breather. If rated, we recommend that you service/replace the breather. Resample in 30-45 days to monitor this situation. (Customer Sample Comment: Please ensure IND3 testing)

WEAR

All component wear rates are normal.

CONTAMINATION

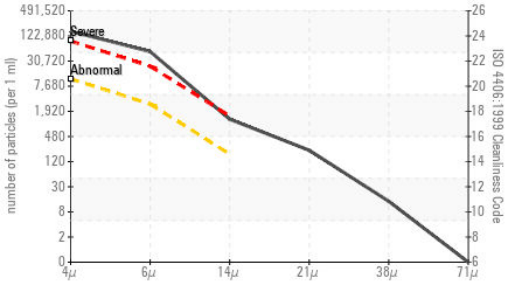
There is a high amount of particulates (2 to 100 microns in size) present in the oil.

FLUID CONDITION

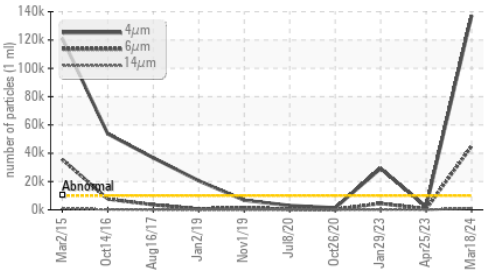
The AN level is acceptable for this fluid. The oil is still serviceable provided that the contaminant(s) can be reduced to acceptable levels.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		**WC0827920**	WC0701179	WC0630828
Sample Date		Client Info		**18 Mar 2024**	25 Apr 2023	29 Jan 2023
Machine Age	days	Client Info		**0**	0	0
Oil Age	days	Client Info		**0**	0	0
Filter Age	days	Client Info		**0**	0	0
Oil Changed		Client Info		**N/A**	N/A	Changed
Filter Changed		Client Info		**N/A**	N/A	Changed
Sample Status				**SEVERE**	NORMAL	ABNORMAL
Iron	ppm	ASTM D5185(m)	>20	**2**	<1	1
Chromium	ppm	ASTM D5185(m)	>20	**0**	0	0
Nickel	ppm	ASTM D5185(m)	>20	**0**	0	0
Titanium	ppm	ASTM D5185(m)		**0**	0	0
Silver	ppm	ASTM D5185(m)		**0**	0	0
Aluminum	ppm	ASTM D5185(m)	>20	**0**	0	0
Lead	ppm	ASTM D5185(m)	>20	**0**	5	4
Copper	ppm	ASTM D5185(m)	>20	**7**	1	1
Tin	ppm	ASTM D5185(m)	>20	**<1**	0	2
Vanadium	ppm	ASTM D5185(m)		**0**	0	0
White Metal	scalar	Visual*	NONE	**NONE**	NONE	NONE
Yellow Metal	scalar	Visual*	NONE	**NONE**	NONE	NONE
Silicon	ppm	ASTM D5185(m)	>15	**0**	0	0
Potassium	ppm	ASTM D5185(m)	>20	**0**	0	<1
Water		WC Method	>2	**NEG**	NEG	NEG
Particles >4µm		ASTM D7647	>10000	▲ **137286**	2201	▲ 29233
Particles >6µm		ASTM D7647	>2500	▲ **44915**	531	● 4518
Particles >14µm		ASTM D7647	>160	▲ **1091**	45	153
Particles >21µm		ASTM D7647	>40	▲ **198**	11	30
Particles >38µm		ASTM D7647	>10	**12**	1	2
Particles >71µm		ASTM D7647	>3	**0**	0	0
Oil Cleanliness		ISO 4406 (c)	>20/18/14	▲ **24/23/17**	18/16/13	▲ 22/19/14
Silt	scalar	Visual*	NONE	**NONE**	NONE	NONE
Debris	scalar	Visual*	NONE	**VLITE**	NONE	VLITE
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
Sodium	ppm	ASTM D5185(m)		**0**	0	<1
Boron	ppm	ASTM D5185(m)		**0**	0	<1
Barium	ppm	ASTM D5185(m)		**0**	0	0
Molybdenum	ppm	ASTM D5185(m)		**0**	0	0
Manganese	ppm	ASTM D5185(m)		**0**	0	0
Magnesium	ppm	ASTM D5185(m)		**<1**	0	0
Calcium	ppm	ASTM D5185(m)		**0**	0	0
Phosphorus	ppm	ASTM D5185(m)		**<1**	1	3
Zinc	ppm	ASTM D5185(m)		**6**	26	<1
Sulfur	ppm	ASTM D5185(m)		**80**	56	823
Acid Number (AN)	mg KOH/g	ASTM D974*	.05	**0.04**	0.06	0.12
Visc @ 40°C	cSt	ASTM D7279(m)	100	**101**	99.2	94.5

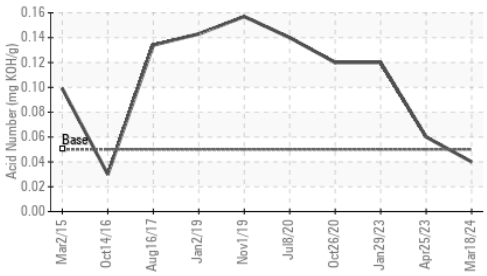
Particle Count



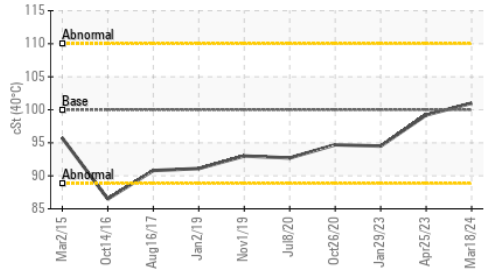
Particle Trend



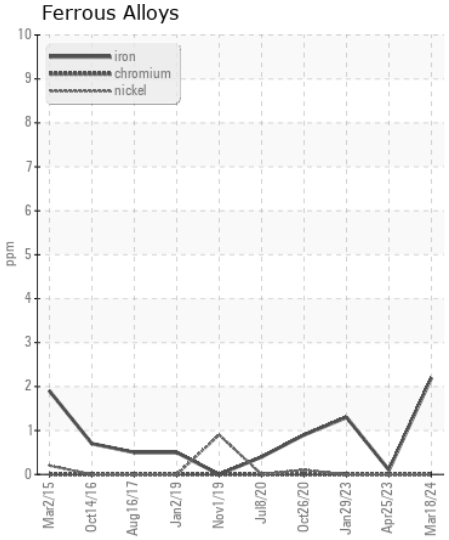
Acid Number



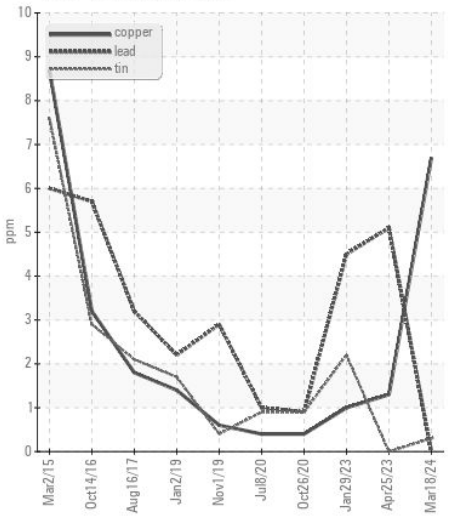
Viscosity @ 40°C



Ferrous Alloys



Non-ferrous Metals



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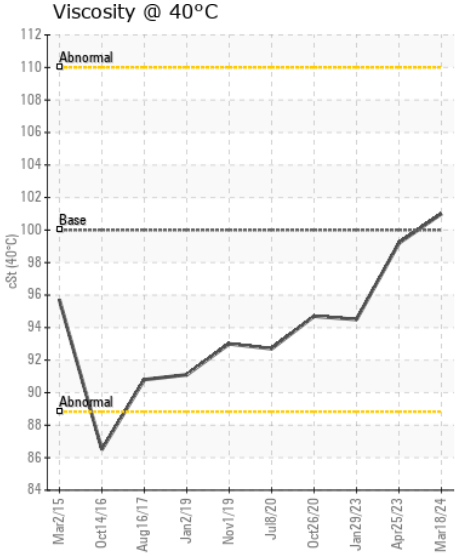
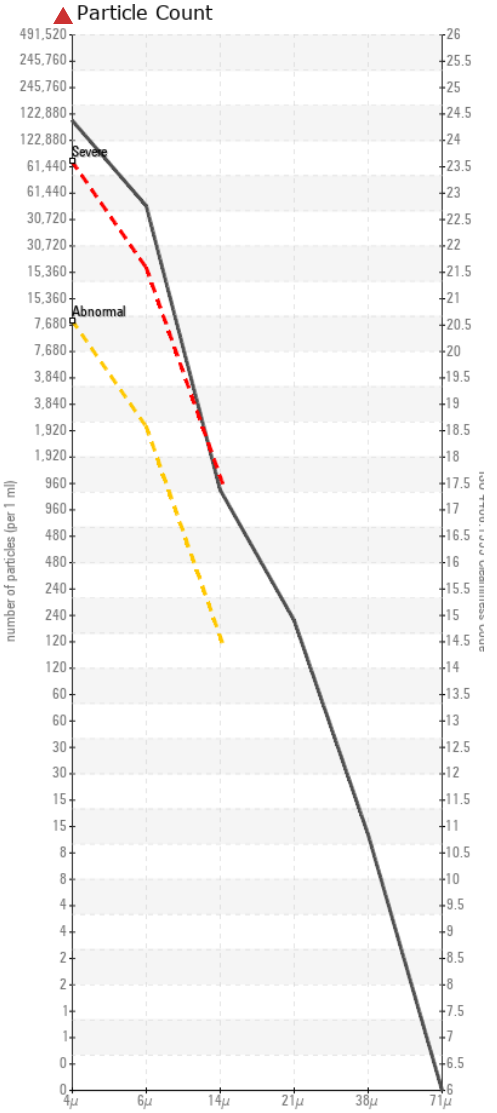
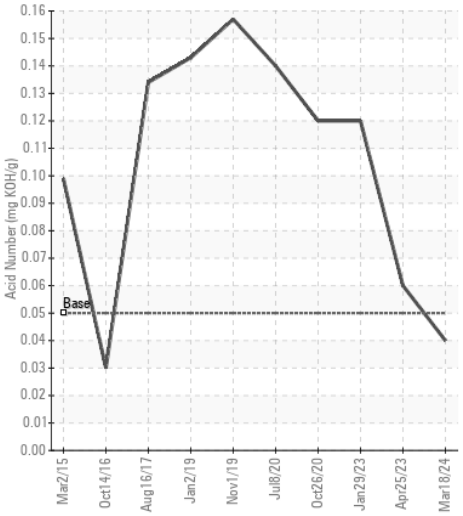


Particle Count



Acid Number



ISO 17025:2017 Accredited Laboratory

Laboratory	: WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9		
Sample No.	: WC0827920	**Received**	: 03 May 2024
Lab Number	: 02633142	**Tested**	: 07 May 2024
Unique Number	: 5774295	**Diagnosed**	: 10 May 2024 - Kevin Marson
Test Package	: IND 2 (Additional Tests: PrtCount, TAN Man)		

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.

Nalcor Energy - Grand Falls-Windsor
25 Hardy Avenue
Grand Falls-Windsor, NL
CA A2A 2P8
Contact: Phillip Winsor
philipwinsor@nlh.nl.ca
T: (709)486-8714
F: