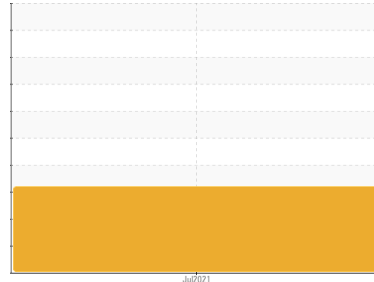




PROBLEM SUMMARY

Sample Rating Trend

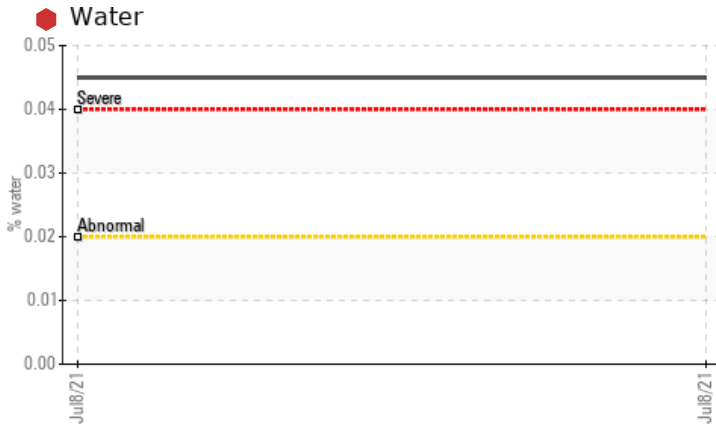


WATER



Machine Id
BDE PH #2 UNIT #7 (S/N BX00004-001)
 Component
Transformer Oil
 Fluid
ENVIROTEMP FR3 FLUID (2445 LTR)

COMPONENT CONDITION SUMMARY



RECOMMENDATION

We recommend an early resample to monitor this condition.

PROBLEMATIC TEST RESULTS

Sample Status				SEVERE	---	---
Water	%	ASTM D6304*	>0.02	0.045	---	---
ppm Water	ppm	ASTM D6304*	>200	454.5	---	---

Customer Id: NEWMIL
 Sample No.: WC0475722
 Lab Number: 02562004
 Test Package: TRF 2



To manage this report scan the QR code

To discuss the diagnosis or test data:
 Bill Quesnel CLS, OMA II, MLA-III, LLA-I +1
 (289)291-4641 x4641
Bill.Quesnel@wearcheck.com

To change component or sample information:
 Gloria Gonzalez +1 (289)291-4643 x4643
gloria.gonzalez@wearcheck.com

RECOMMENDED ACTIONS

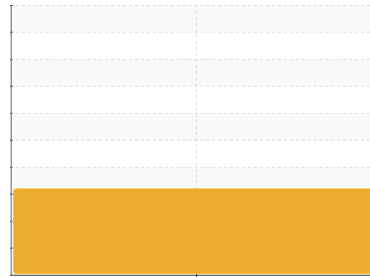
Action	Status	Date	Done By	Description
Change Fluid	MISSED	Jul 13 2023	?	We recommend that you drain the transformer oil from the component if this has not already been done.
Change Filter	MISSED	Jul 13 2023	?	We recommend you service the filters on this component.
Resample	MISSED	Jul 13 2023	?	We recommend an early resample to monitor this condition.
Check Breathers	MISSED	Jul 13 2023	?	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.

HISTORICAL DIAGNOSIS



OIL ANALYSIS REPORT

Sample Rating Trend



WATER



Machine Id
BDE PH #2 UNIT #7 (S/N BX00004-001)

Component
Transformer Oil
Fluid
ENVIROTEMP FR3 FLUID (2445 LTR)

DIAGNOSIS

Recommendation

We recommend an early resample to monitor this condition.

Wear

{not applicable}

Contamination

There is a high concentration of water present in the transformer oil. The system cleanliness is acceptable for your target ISO 4406 cleanliness code.

Fluid Condition

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

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		WC0475722	---	---
Sample Date	Client Info		08 Jul 2021	---	---
Machine Age	hrs	Client Info	0	---	---
Oil Age	hrs	Client Info	0	---	---
Oil Changed	Client Info		N/A	---	---
Sample Status			SEVERE	---	---

CONTAMINANTS

	method	limit/base	current	history1	history2
Water	%	ASTM D6304*	>0.02	0.045	---
ppm Water	ppm	ASTM D6304*	>200	454.5	---

FLUID CLEANLINESS

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>5000	6276	---	---
Particles >6µm	ASTM D7647	>1300	2134	---	---
Particles >14µm	ASTM D7647	>160	210	---	---
Particles >21µm	ASTM D7647	>40	70	---	---
Particles >38µm	ASTM D7647	>10	4	---	---
Particles >71µm	ASTM D7647	>3	1	---	---
Oil Cleanliness	ISO 4406 (c)	>19/17/14	20/18/15	---	---

DISSOLVED GAS ANALYSIS (DGA)

	method	limit/base	current	history1	history2
DGA - H2	ppm	ASTM D3612(e)*	6	---	---
DGA - O2	ppm	ASTM D3612(e)*	255	---	---
DGA - N2	ppm	ASTM D3612(e)*	53853	---	---
DGA - CO	ppm	ASTM D3612(e)*	43	---	---
DGA - CO2	ppm	ASTM D3612(e)*	998	---	---
DGA - Methane	ppm	ASTM D3612(e)*	2	---	---
DGA - Acetylene	ppm	ASTM D3612(e)*	0	---	---
DGA - Ethylene	ppm	ASTM D3612(e)*	4	---	---
DGA - Ethane	ppm	ASTM D3612(e)*	157	---	---
DGA - Total Gas Content	%	ASTM D3612(e)*	55318	---	---
DGA - Total Combustible Gas	ppm	ASTM D3612(e)*	212	---	---

FLUID DEGRADATION

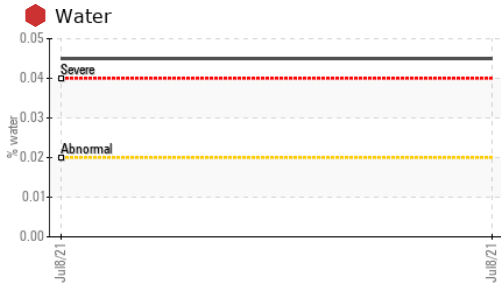
	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974*	0.22	0.09	---

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	---

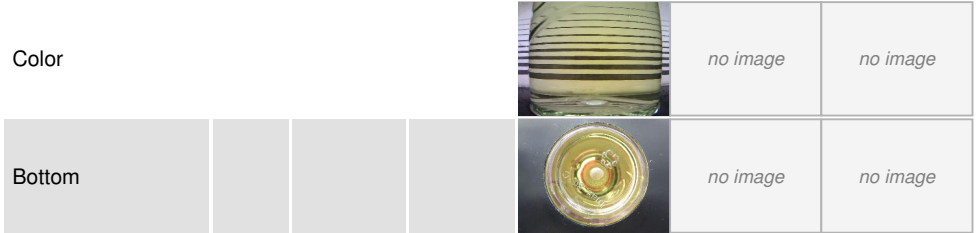


OIL ANALYSIS REPORT

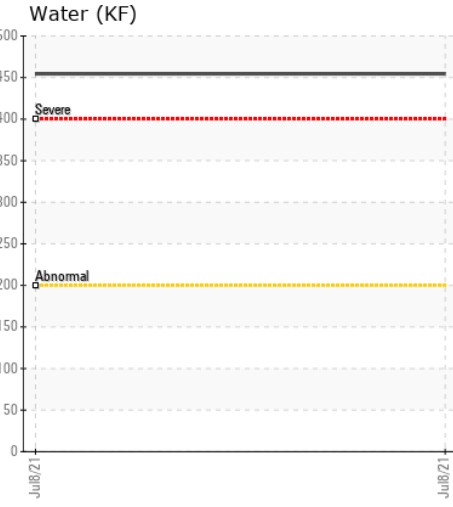
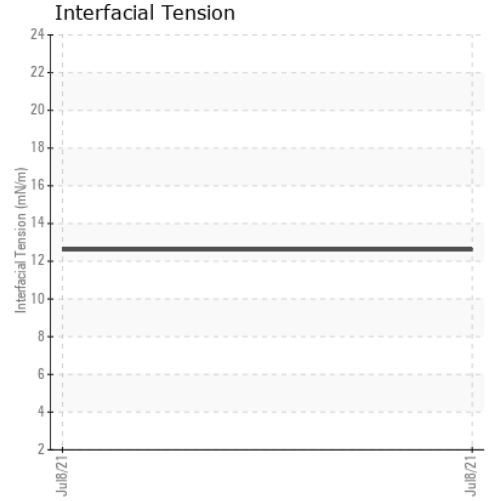
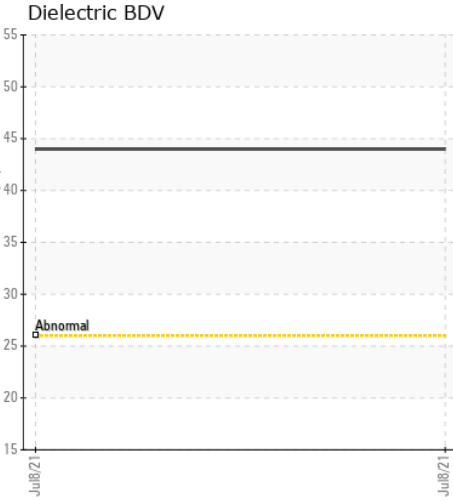
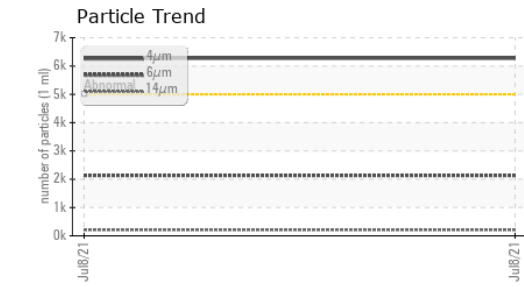
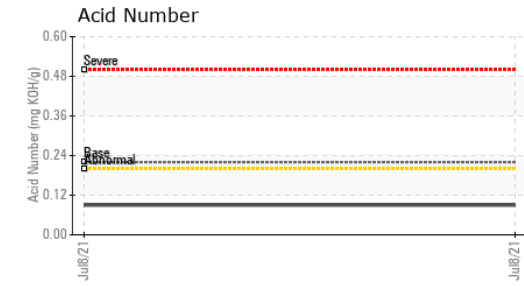
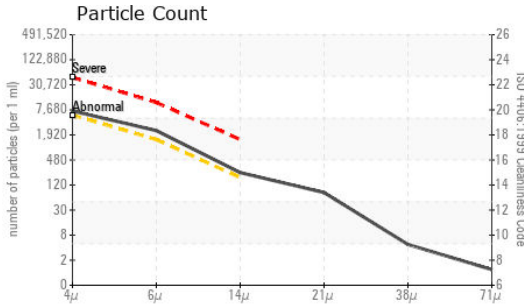


FLUID PROPERTIES	method	limit/base	current	history1	history2
Specific Gravity	ASTM D4052(e)	0.92	0.921	---	---
Dielectric Breakdown	kV ASTM D3612(e)*		44	---	---
Interfacial Tension	mN/m ASTM D971(e)*		12.61	---	---
ASTM Color	scalar ASTM D1500(e)		L1.0	---	---

SAMPLE IMAGES	method	limit/base	current	history1	history2
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GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 NEWFOUNDLAND & LABRADOR HYDRO
Sample No. : WC0475722 **Received** : 05 Jun 2023 BAY D'ESPOIR WHSE., 1 CAMP BOGGY RD., PO BOX 100
Lab Number : 02562004 **Diagnosed** : 27 Jul 2023 MILLTOWN, BAY D'ESPOIR, NL
Unique Number : 5591045 **Diagnostician** : Bill Quesnel CA A0H 1W0
Test Package : TRF 2 (Additional Tests: PrtCount)

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.

Contact: Matthew Lambert
 matthewlambert@nlh.nl.ca
 T: (709)882-3126
 F: (709)882-3161