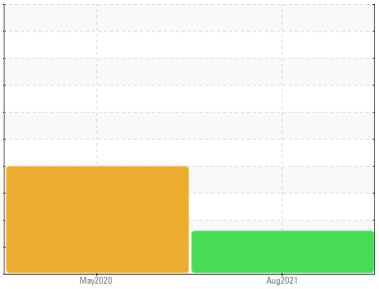
PROBLEM SUMMARY

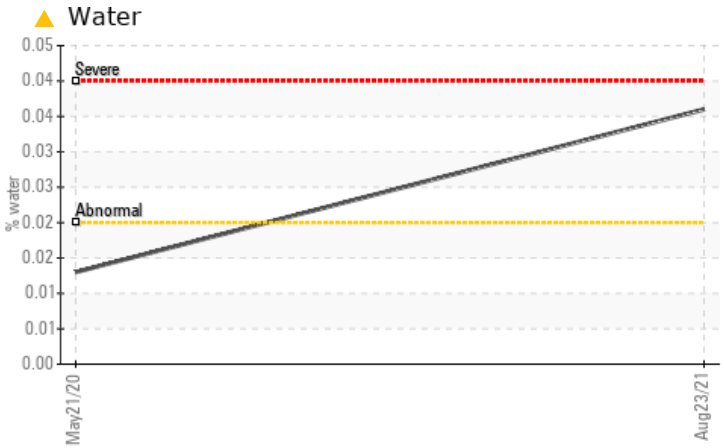
Sample Rating Trend



WATER

Machine Id
BDE UNIT 6 (S/N Bx00003-006)
Component
Transformer Oil
Fluid
ENVIROTEMP FR3 FLUID (1620 GAL)

COMPONENT CONDITION SUMMARY



RECOMMENDATION

We recommend an early resample to monitor this condition.

PROBLEMATIC TEST RESULTS

Sample Status				**ABNORMAL**	SEVERE	---
Water	%	ASTM D6304*	>0.02	▲ **0.036**	0.013	---
ppm Water	ppm	ASTM D6304*	>200	▲ **366.3**	0	---

Customer Id: NEWMIL
Sample No.: WC0502015
Lab Number: 02562003
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	---	---	?	We recommend that you drain the transformer oil from the component if this has not already been done.
Resample	---	---	?	We recommend an early resample to monitor this condition.
Check Breathers	---	---	?	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

21 May 2020 Diag: Bill Quesnel

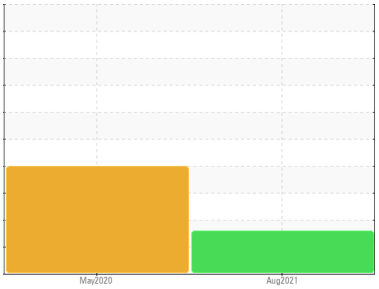
DEGRADATION

We recommend that you drain the transformer oil from the component if this has not already been done. We recommend an early resample to monitor this condition.All component wear rates are normal. The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The water content is negligible. The system and fluid cleanliness is acceptable. The AN level is acceptable for this fluid. The interfacial tension (IFT) for this fluid is very low. The transformer oil is no longer serviceable.

view report

OIL ANALYSIS REPORT

Sample Rating Trend



WATER

Machine Id
BDE UNIT 6 (S/N Bx00003-006)
Component
Transformer Oil
Fluid
ENVIROTEMP FR3 FLUID (1620 GAL)

DIAGNOSIS

Recommendation
We recommend an early resample to monitor this condition.

Wear
{not applicable}

Contamination
There is a moderate 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		**WC0502015**	WC0380025	---
Sample Date		Client Info		**23 Aug 2021**	21 May 2020	---
Machine Age	hrs	Client Info		**0**	0	---
Oil Age	hrs	Client Info		**0**	0	---
Oil Changed		Client Info		**N/A**	N/A	---
Sample Status				**ABNORMAL**	SEVERE	---

CONTAMINANTS		method	limit/base	current	history1	history2
Water	%	ASTM D6304*	>0.02	▲ **0.036**	0.013	---
ppm Water	ppm	ASTM D6304*	>200	▲ **366.3**	0	---

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>5000	**1988**	3019	---
Particles >6µm		ASTM D7647	>1300	**597**	1008	---
Particles >14µm		ASTM D7647	>160	**53**	122	---
Particles >21µm		ASTM D7647	>40	**14**	50	---
Particles >38µm		ASTM D7647	>10	**1**	3	---
Particles >71µm		ASTM D7647	>3	**1**	0	---
Oil Cleanliness		ISO 4406 (c)	>19/17/14	**18/16/13**	19/17/14	---

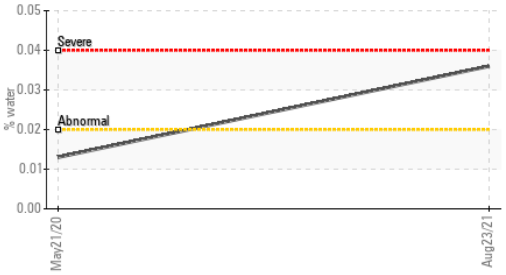
DISSOLVED GAS ANALYSIS (DGA)		method	limit/base	current	history1	history2
DGA - H2	ppm	ASTM D3612(e)*		**6**	---	---
DGA - O2	ppm	ASTM D3612(e)*		**247**	---	---
DGA - N2	ppm	ASTM D3612(e)*		**60797**	---	---
DGA - CO	ppm	ASTM D3612(e)*		**33**	---	---
DGA - CO2	ppm	ASTM D3612(e)*		**390**	---	---
DGA - Methane	ppm	ASTM D3612(e)*		**2**	---	---
DGA - Acetylene	ppm	ASTM D3612(e)*		**0**	---	---
DGA - Ethylene	ppm	ASTM D3612(e)*		**2**	---	---
DGA - Ethane	ppm	ASTM D3612(e)*		**193**	---	---
DGA - Total Gas Content	%	ASTM D3612(e)*		**61670**	---	---
DGA - Total Combustible Gas	ppm	ASTM D3612(e)*		**236**	---	---

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974*	0.22	**0.07**	0.05	---

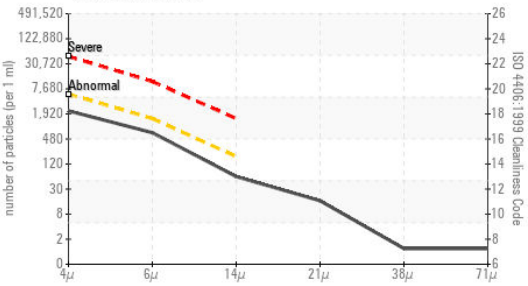
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	**NONE**	NONE	---
Yellow Metal	scalar	Visual*	NONE	**NONE**	NONE	---
Precipitate	scalar	Visual*	NONE	**NONE**	NONE	---
Silt	scalar	Visual*	NONE	**NONE**	NONE	---
Debris	scalar	Visual*	NONE	**NONE**	NONE	---
Sand/Dirt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

OIL ANALYSIS REPORT

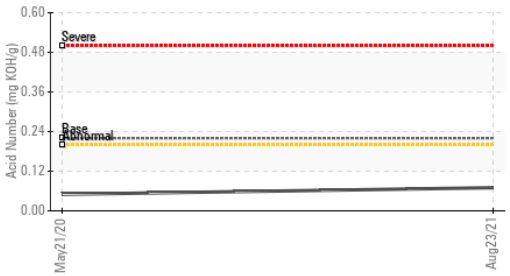
Water



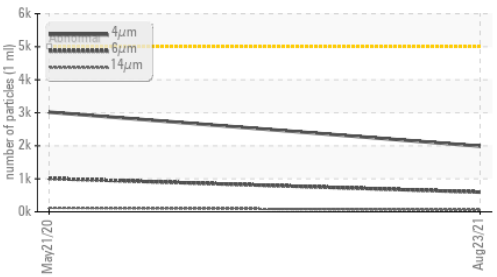
Particle Count



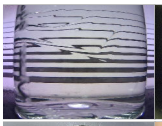
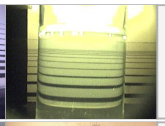
Acid Number



Particle Trend

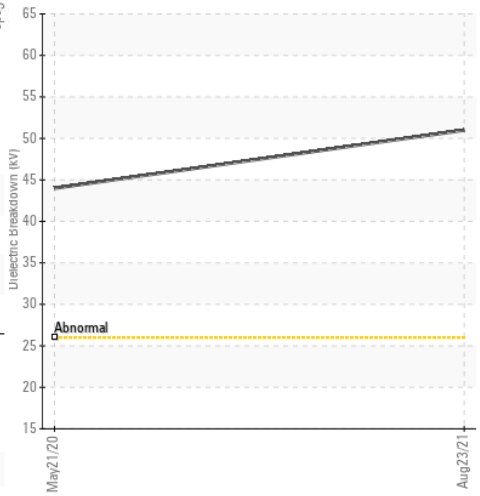


FLUID PROPERTIES		method	limit/base	current	history1	history2
Specific Gravity		ASTM D4052(e)	0.92	**0.921**	0.923	---
Dielectric Breakdown	kV	ASTM D3612(e)*		**51**	44	---
Interfacial Tension	mN/m	ASTM D971(e)*		**15.01**	14.83	---
ASTM Color	scalar	ASTM D1500(e)		**L0.5**	>0.5	---

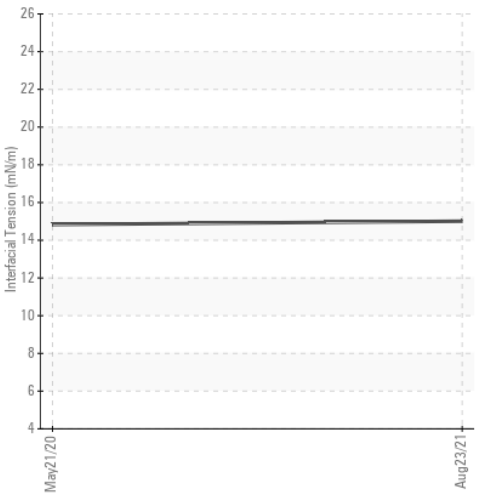
SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					*no image*
Bottom					*no image*

GRAPHS

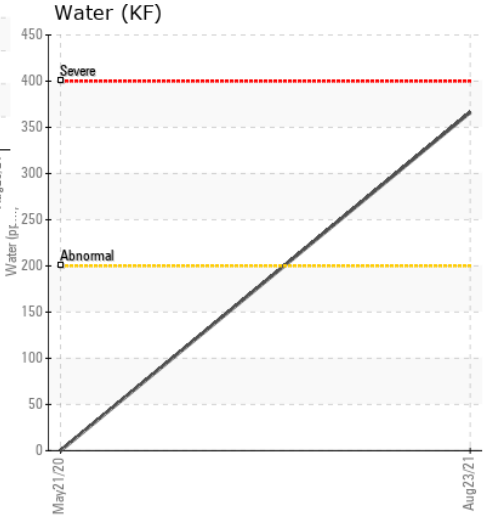
Dielectric BDV



Interfacial Tension



Water (KF)



ISO 17025:2017 Accredited Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0502015
Lab Number : 02562003
Unique Number : 5591044
Test Package : TRF 2 (Additional Tests: PrtCount)

Received : 05 Jun 2023
Diagnosed : 27 Jul 2023
Diagnostician : Bill Quesnel

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.

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