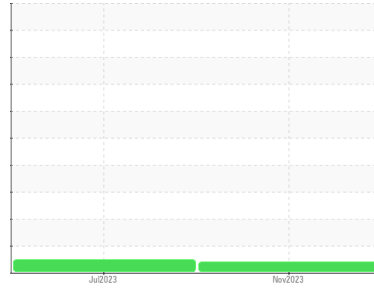




# PROBLEM SUMMARY

Sample Rating Trend



**VIS DEBRIS**



Machine Id  
**HEB\_MLU2**  
 Component  
**Inboard Pump**  
 Fluid  
**NOT GIVEN (--- GAL)**

## COMPONENT CONDITION SUMMARY

No relevant graphs to display

## RECOMMENDATION

We suspect abnormal contamination may be due to sampling method. No corrective action is recommended at this time. Resample at the next service interval to monitor.

## PROBLEMATIC TEST RESULTS

Sample Status		ABNORMAL	NORMAL	---
Debris	scalar *Visual	▲ MODER	NONE	---

**Customer Id:** ENEHEB  
**Sample No.:** RP0036150  
**Lab Number:** 06026574  
**Test Package:** IND 2



To manage this report scan the QR code

To discuss the diagnosis or test data:  
 Jonathan Hester +1 919-379-4092 x4092  
[jhester@wearcheckusa.com](mailto:jhester@wearcheckusa.com)

To change component or sample information:  
 Customer Service +1 1-800-237-1369  
[customerservice@wearcheck.com](mailto:customerservice@wearcheck.com)

## RECOMMENDED ACTIONS

*There are no recommended actions for this sample.*

## HISTORICAL DIAGNOSIS

**21 Jul 2023 Diag: Don Baldrige**

NORMAL



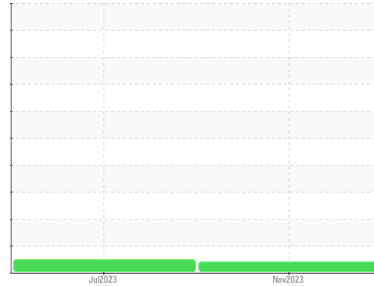
Resample at the next service interval to monitor. Please specify the brand, type, and viscosity of the oil on your next sample. All component wear rates are normal. There is no indication of any contamination in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report



# OIL ANALYSIS REPORT

Sample Rating Trend



VIS DEBRIS



Machine Id  
**HEB\_MLU2**  
Component  
**Inboard Pump**  
Fluid  
**NOT GIVEN (--- GAL)**

## DIAGNOSIS

### ▲ Recommendation

We suspect abnormal contamination may be due to sampling method. No corrective action is recommended at this time. Resample at the next service interval to monitor.

### Wear

All component wear rates are normal.

### ▲ Contamination

Moderate concentration of visible dirt/debris present in the oil. The water content is negligible.

### 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		<b>RP0036150</b>	RP0032966	---
Sample Date	Client Info		<b>16 Nov 2023</b>	21 Jul 2023	---
Machine Age	hrs	Client Info	<b>0</b>	0	---
Oil Age	hrs	Client Info	<b>0</b>	0	---
Oil Changed	Client Info		<b>N/A</b>	N/A	---
Sample Status			<b>ABNORMAL</b>	NORMAL	---

## WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >90	<b>0</b>	<1	---
Chromium	ppm	ASTM D5185m >5	<b>0</b>	0	---
Nickel	ppm	ASTM D5185m >5	<b>0</b>	0	---
Titanium	ppm	ASTM D5185m >3	<b>&lt;1</b>	0	---
Silver	ppm	ASTM D5185m >3	<b>0</b>	0	---
Aluminum	ppm	ASTM D5185m >7	<b>0</b>	0	---
Lead	ppm	ASTM D5185m >12	<b>4</b>	4	---
Copper	ppm	ASTM D5185m >30	<b>15</b>	13	---
Tin	ppm	ASTM D5185m >9	<b>2</b>	2	---
Vanadium	ppm	ASTM D5185m	<b>&lt;1</b>	0	---
Cadmium	ppm	ASTM D5185m	<b>&lt;1</b>	<1	---

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	<b>0</b>	0	---
Barium	ppm	ASTM D5185m	<b>0</b>	0	---
Molybdenum	ppm	ASTM D5185m	<b>0</b>	0	---
Manganese	ppm	ASTM D5185m	<b>0</b>	<1	---
Magnesium	ppm	ASTM D5185m	<b>59</b>	74	---
Calcium	ppm	ASTM D5185m	<b>0</b>	<1	---
Phosphorus	ppm	ASTM D5185m	<b>0</b>	4	---
Zinc	ppm	ASTM D5185m	<b>18</b>	24	---

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >60	<b>&lt;1</b>	<1	---
Sodium	ppm	ASTM D5185m	<b>2</b>	0	---
Potassium	ppm	ASTM D5185m >20	<b>0</b>	1	---
Water	%	ASTM D6304 >.1	<b>0.017</b>	0.019	---
ppm Water	ppm	ASTM D6304 >1000	<b>177</b>	199.5	---

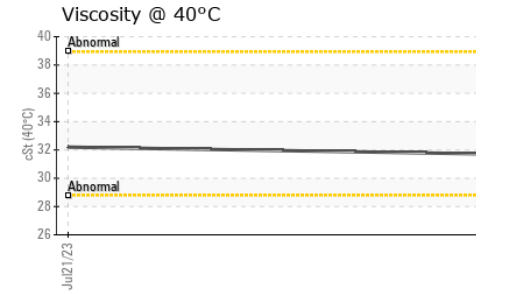
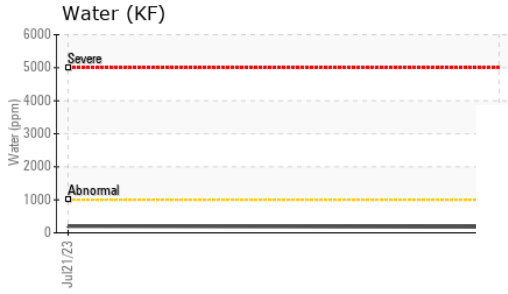
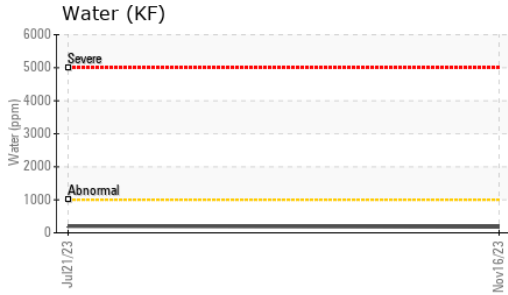
## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	<b>0.31</b>	0.33	---

## VISUAL

	method	limit/base	current	history1	history2
White Metal	scalar	*Visual NONE	<b>NONE</b>	NONE	---
Yellow Metal	scalar	*Visual NONE	<b>NONE</b>	NONE	---
Precipitate	scalar	*Visual NONE	<b>NONE</b>	NONE	---
Silt	scalar	*Visual NONE	<b>NONE</b>	NONE	---
Debris	scalar	*Visual NONE	<b>▲ MODER</b>	NONE	---
Sand/Dirt	scalar	*Visual NONE	<b>NONE</b>	NONE	---
Appearance	scalar	*Visual NORML	<b>NORML</b>	NORML	---
Odor	scalar	*Visual NORML	<b>NORML</b>	NORML	---
Emulsified Water	scalar	*Visual >.1	<b>NEG</b>	NEG	---
Free Water	scalar	*Visual	<b>NEG</b>	---	---

# OIL ANALYSIS REPORT



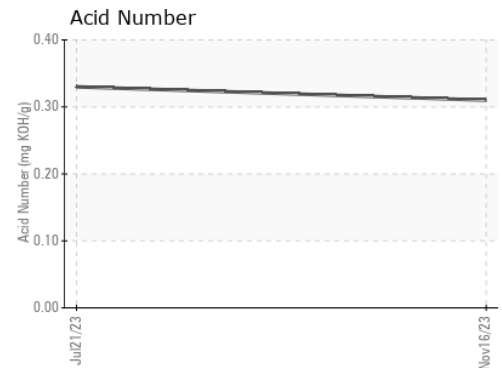
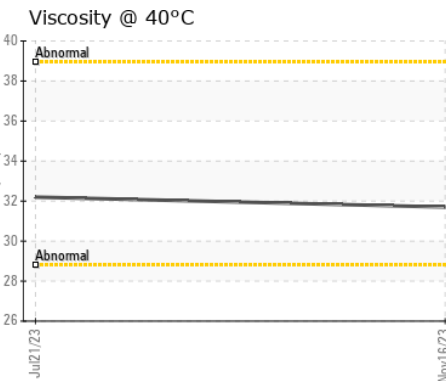
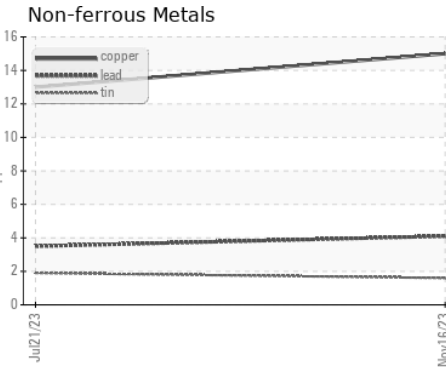
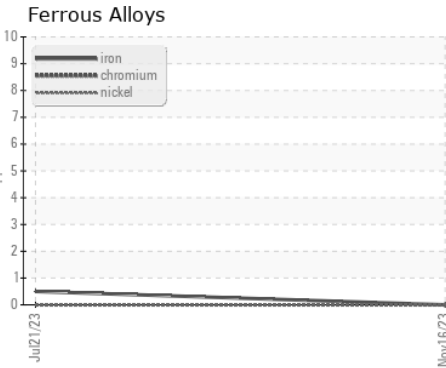
## FLUID PROPERTIES

method	limit/base	current	history1	history2	
Visc @ 40°C	cSt	ASTM D445	31.7	32.2	---

## SAMPLE IMAGES

method	limit/base	current	history1	history2
Color				no image
Bottom				no image

## GRAPHS



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : RP0036150 **Received** : 06 Dec 2023  
**Lab Number** : 06026574 **Diagnosed** : 08 Dec 2023  
**Unique Number** : 10776365 **Diagnostician** : Jonathan Hester  
**Test Package** : IND 2

**ENERGY TRANSFER - HEBRON**

HEBRON, KY  
 US 41048  
 Contact: Service Manager

To discuss this sample report, contact Customer Service at 1-800-237-1369.

\* - Denotes test methods that are outside of the ISO 17025 scope of accreditation.

Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

T:  
 F: