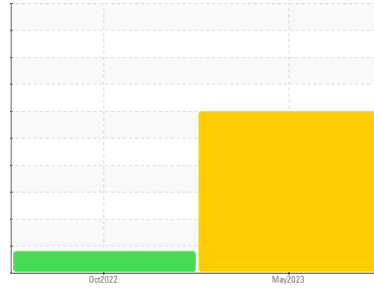




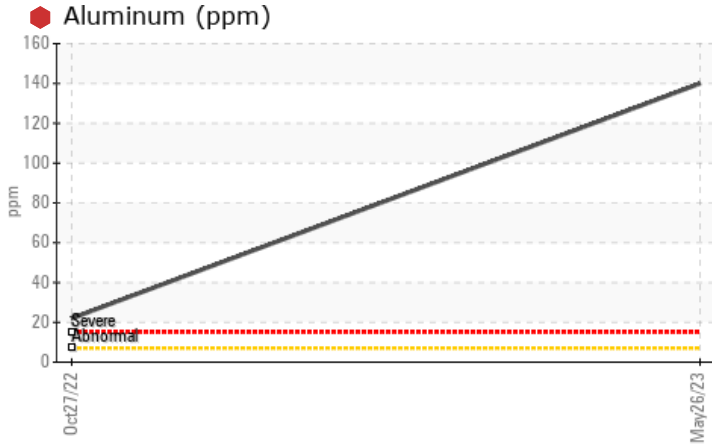
PROBLEM SUMMARY

Area
BAE SYSTEM
 Machine Id
B2012 HYDROENGINEERING STEAMER
 Component
Pump
 Fluid
CASTROL NON-DETERGENT SAE 30 (--- GAL)

Sample Rating Trend



COMPONENT CONDITION SUMMARY



RECOMMENDATION

We recommend an early resample to monitor this condition.

PROBLEMATIC TEST RESULTS

Sample Status				SEVERE	ABNORMAL	---
Aluminum	ppm	ASTM D5185m	>7	140	22	---

Customer Id: MOTYOR
 Sample No.: WC0802170
 Lab Number: 05863648
 Test Package: IND 2



To manage this report scan the QR code

To discuss the diagnosis or test data:
 Don Baldrige +1
don.b505@comcast.net

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

RECOMMENDED ACTIONS

Action	Status	Date	Done By	Description
Resample	---	---	?	We recommend an early resample to monitor this condition.

HISTORICAL DIAGNOSIS

27 Oct 2022 Diag: Doug Bogart

WEAR



No corrective action is recommended at this time. Resample at the next service interval to monitor. The aluminum level is abnormal. All other 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.

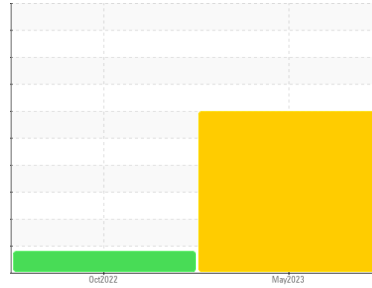
view report





OIL ANALYSIS REPORT

Sample Rating Trend



WEAR



Area
BAE SYSTEM
 Machine Id
B2012 HYDROENGINEERING STEAMER

Component
Pump
 Fluid
CASTROL NON-DETERGENT SAE 30 (--- GAL)

DIAGNOSIS

Recommendation

We recommend an early resample to monitor this condition.

Wear

The aluminum level is severe.

Contamination

There is no indication of any contamination in the oil.

Fluid Condition

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

SAMPLE INFORMATION

	method	limit/base	current	history 1	history 2
Sample Number	Client Info		WC0802170	WC0749757	---
Sample Date	Client Info		26 May 2023	27 Oct 2022	---
Machine Age	hrs	Client Info	0	0	---
Oil Age	hrs	Client Info	0	0	---
Oil Changed	Client Info		Not Changed	N/A	---
Sample Status			SEVERE	ABNORMAL	---

WEAR METALS

	method	limit/base	current	history 1	history 2
Iron	ppm	ASTM D5185m >90	30	13	---
Chromium	ppm	ASTM D5185m >5	<1	0	---
Nickel	ppm	ASTM D5185m >5	0	0	---
Titanium	ppm	ASTM D5185m >3	0	<1	---
Silver	ppm	ASTM D5185m >3	0	<1	---
Aluminum	ppm	ASTM D5185m >7	140	22	---
Lead	ppm	ASTM D5185m >12	0	0	---
Copper	ppm	ASTM D5185m >30	9	2	---
Tin	ppm	ASTM D5185m >9	0	0	---
Vanadium	ppm	ASTM D5185m	0	<1	---
Cadmium	ppm	ASTM D5185m	0	0	---

ADDITIVES

	method	limit/base	current	history 1	history 2
Boron	ppm	ASTM D5185m	0	0	---
Barium	ppm	ASTM D5185m	0	0	---
Molybdenum	ppm	ASTM D5185m	<1	1	---
Manganese	ppm	ASTM D5185m	<1	1	---
Magnesium	ppm	ASTM D5185m	0	3	---
Calcium	ppm	ASTM D5185m	42	30	---
Phosphorus	ppm	ASTM D5185m	317	339	---
Zinc	ppm	ASTM D5185m	350	423	---
Sulfur	ppm	ASTM D5185m	1588	1597	---

CONTAMINANTS

	method	limit/base	current	history 1	history 2
Silicon	ppm	ASTM D5185m >60	20	3	---
Sodium	ppm	ASTM D5185m	2	0	---
Potassium	ppm	ASTM D5185m >20	0	0	---

FLUID DEGRADATION

	method	limit/base	current	history 1	history 2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.40	0.43	---

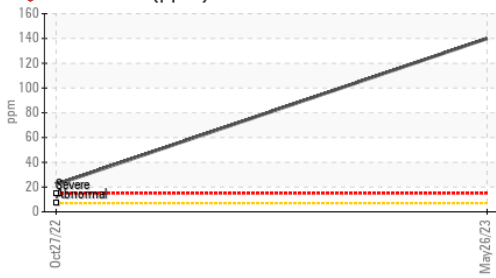
VISUAL

	method	limit/base	current	history 1	history 2
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	---
Emulsified Water	scalar	*Visual	NEG	NEG	---
Free Water	scalar	*Visual	NEG	NEG	---



OIL ANALYSIS REPORT

Aluminum (ppm)



FLUID PROPERTIES

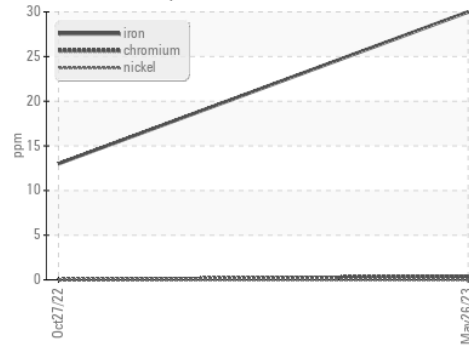
method	limit/base	current	history 1	history 2		
Visc @ 40°C	cSt	ASTM D445	105.7	104	100.6	---

SAMPLE IMAGES

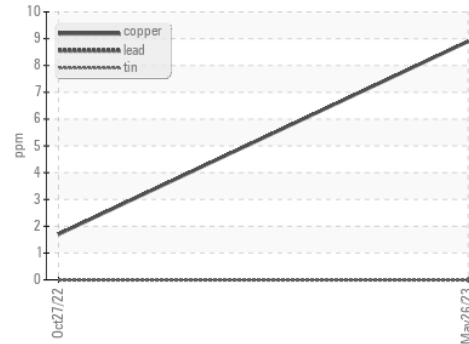
method	limit/base	current	history 1	history 2	
Color					no image
Bottom					no image

GRAPHS

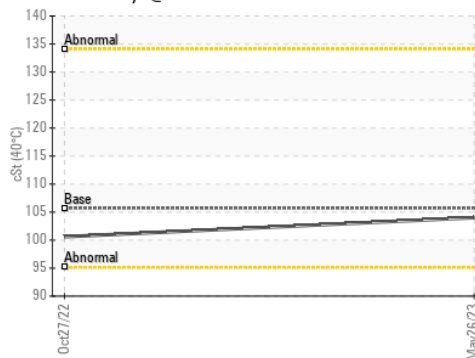
Ferrous Alloys



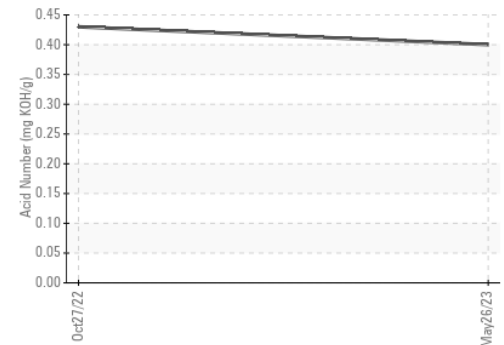
Non-ferrous Metals



Viscosity @ 40°C



Acid Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0802170 **Received** : 02 Jun 2023
Lab Number : **05863648** **Diagnosed** : 06 Jun 2023
Unique Number : 10498113 **Diagnostician** : Don Baldridge
Test Package : IND 2

MOTOR TECHNOLOGY INC
 515 WILLOW SPRINGS LN
 YORK, PA
 US 17406

Contact: Bill Trimmer
 btrimmer@motortechologyinc.com

T: (717)266-4045

F:

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)