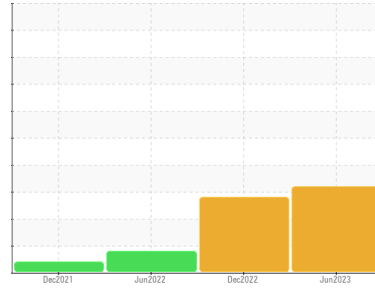




PROBLEM SUMMARY

Sample Rating Trend



SEDIMENT

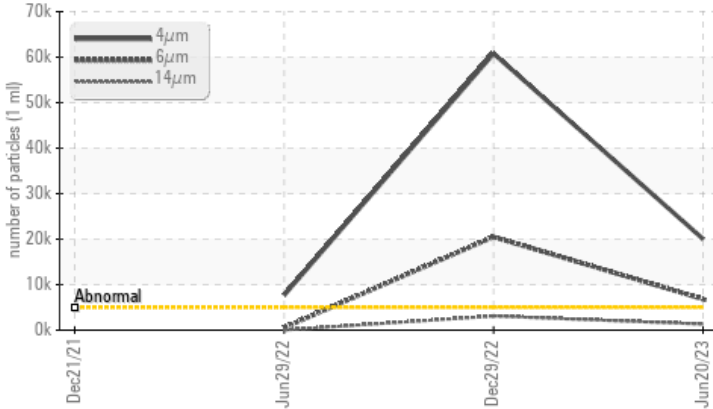


Area
LITTLESTOWN FOUNDRY
 Machine Id
2 HYDR MH PUMP

Component
Hydraulic System
 Fluid
HOUGHTON WOCO AW 46 (--- Oz)

COMPONENT CONDITION SUMMARY

▲ Particle Trend



RECOMMENDATION

We recommend you service the filters on this component. Resample at the next service interval to monitor.

PROBLEMATIC TEST RESULTS

Sample Status			ABNORMAL	ABNORMAL	ATTENTION
Particles >4µm	ASTM D7647	>5000	▲ 20043	▲ 60783	▲ 7701
Particles >6µm	ASTM D7647	>1300	▲ 6826	▲ 20492	536
Particles >14µm	ASTM D7647	>160	▲ 1325	▲ 3096	39
Particles >21µm	ASTM D7647	>40	▲ 518	▲ 928	10
Particles >38µm	ASTM D7647	>10	▲ 28	▲ 83	0
Oil Cleanliness	ISO 4406 (c)	>19/17/14	▲ 22/20/18	▲ 23/22/19	▲ 20/16/12
Silt	scalar	*Visual	▲ MODER	NONE	NONE

Customer Id: MOTYOR
 Sample No.: WC0816721
 Lab Number: 05880764
 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
Change Filter	---	---	?	We recommend you service the filters on this component.

HISTORICAL DIAGNOSIS

29 Dec 2022 Diag: Jonathan Hester

ISO



We recommend you service the filters on this component. Resample at the next service interval to monitor. All component wear rates are normal. There is a high amount of particulates present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report



29 Jun 2022 Diag: Don Baldrige

ISO



No corrective action is recommended at this time. Resample at the next service interval to monitor. All component wear rates are normal. There is a moderate amount of silt (particulates < 14 microns in size) present in the oil. The AN level is acceptable for this fluid. The condition of the oil is acceptable for the time in service.

view report



21 Dec 2021 Diag: Doug Bogart

VIS DEBRIS



We recommend you service the filters on this component. Resample at the next service interval to monitor. We were unable to perform a particle count due to a high concentration of particles present in this sample. Please note that this is a corrected copy for laboratory data updates. All component wear rates are normal. Moderate concentration of visible dirt/debris present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

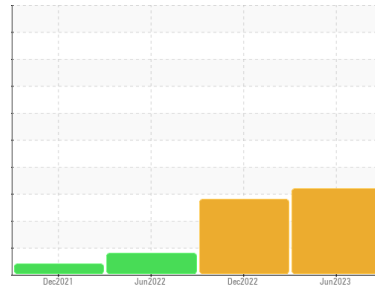
view report





OIL ANALYSIS REPORT

Sample Rating Trend



SEDIMENT



Area
LITTLESTOWN FOUNDRY
 Machine Id
2 HYDR MH PUMP
 Component
Hydraulic System
 Fluid
HOUGHTON WOCO AW 46 (--- Oz)

DIAGNOSIS

▲ Recommendation

We recommend you service the filters on this component. Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

▲ Contamination

There is a high amount of particulates present in the oil. There is a moderate amount of visible silt present in the sample.

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			WC0816721	WC0762151	WC0675935
Sample Date	Client Info			20 Jun 2023	29 Dec 2022	29 Jun 2022
Machine Age	hrs	Client Info		0	0	0
Oil Age	hrs	Client Info		0	0	0
Oil Changed	Client Info			Not Chngd	Not Chngd	Not Chngd
Sample Status				ABNORMAL	ABNORMAL	ATTENTION

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>20	4	4	3
Chromium	ppm	ASTM D5185m	>20	1	1	1
Nickel	ppm	ASTM D5185m	>20	0	0	0
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>20	0	<1	<1
Lead	ppm	ASTM D5185m	>20	0	0	0
Copper	ppm	ASTM D5185m	>20	2	2	2
Tin	ppm	ASTM D5185m	>20	0	0	0
Antimony	ppm	ASTM D5185m		---	---	---
Vanadium	ppm	ASTM D5185m		0	0	0
Cadmium	ppm	ASTM D5185m		0	0	0

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		0	0	0
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		0	<1	<1
Manganese	ppm	ASTM D5185m		0	0	0
Magnesium	ppm	ASTM D5185m		0	0	0
Calcium	ppm	ASTM D5185m		61	67	69
Phosphorus	ppm	ASTM D5185m		274	275	286
Zinc	ppm	ASTM D5185m		333	328	344
Sulfur	ppm	ASTM D5185m		1164	1179	1257

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>15	2	2	1
Sodium	ppm	ASTM D5185m		<1	<1	<1
Potassium	ppm	ASTM D5185m	>20	0	0	0

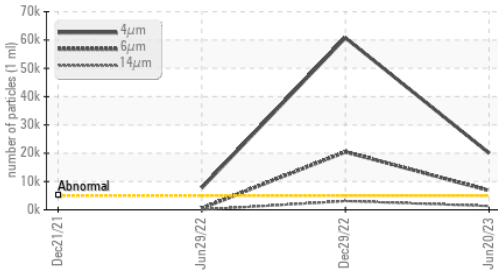
FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>5000	▲ 20043	▲ 60783	▲ 7701
Particles >6µm		ASTM D7647	>1300	▲ 6826	▲ 20492	536
Particles >14µm		ASTM D7647	>160	▲ 1325	▲ 3096	39
Particles >21µm		ASTM D7647	>40	▲ 518	▲ 928	10
Particles >38µm		ASTM D7647	>10	▲ 28	▲ 83	0
Particles >71µm		ASTM D7647	>3	1	▲ 3	0
Oil Cleanliness		ISO 4406 (c)	>19/17/14	▲ 22/20/18	▲ 23/22/19	▲ 20/16/12

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045		0.22	0.25	0.22

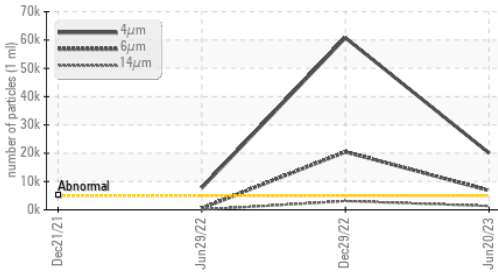


OIL ANALYSIS REPORT

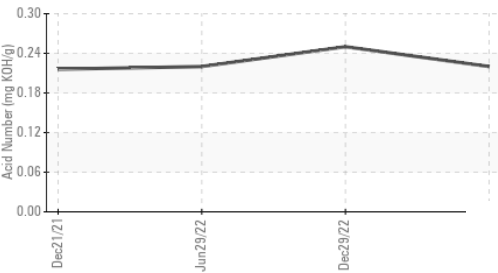
▲ Particle Trend



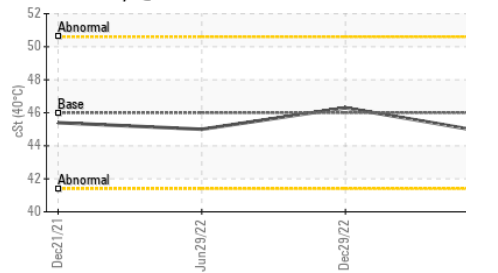
▲ Particle Trend



Acid Number



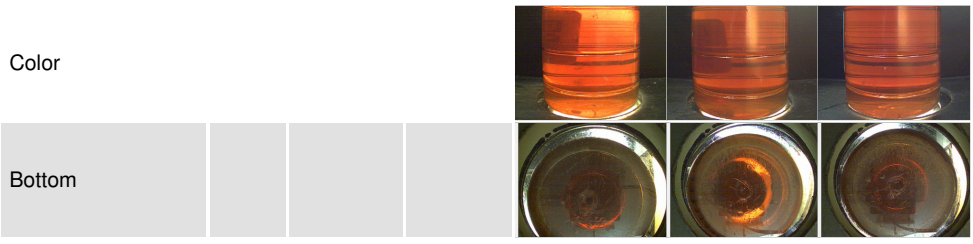
Viscosity @ 40°C



VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	LIGHT
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	▲ MODER	NONE
Debris	scalar	*Visual	NONE	NONE	LIGHT
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.05	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

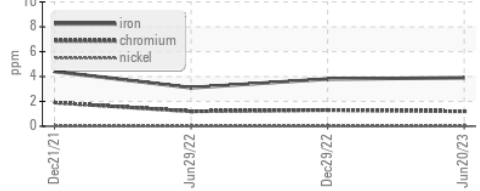
FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445 46	44.8	46.3	45.0

SAMPLE IMAGES	method	limit/base	current	history1	history2
---------------	--------	------------	---------	----------	----------

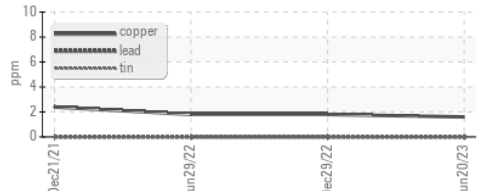


GRAPHS

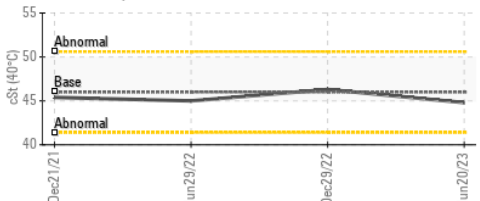
Ferrous Alloys



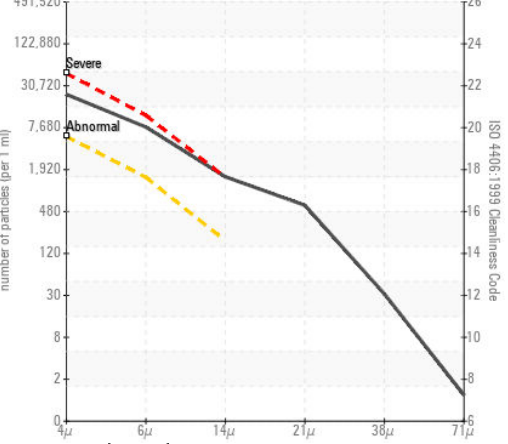
Non-ferrous Metals



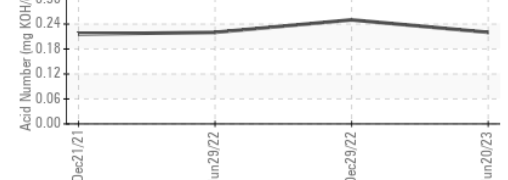
Viscosity @ 40°C



▲ Particle Count



Acid Number



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0816721 **Received** : 22 Jun 2023
Lab Number : 05880764 **Diagnosed** : 25 Jun 2023
Unique Number : 10525867 **Diagnostician** : Don Baldrige
Test Package : IND 2

MOTOR TECHNOLOGY INC
 515 WILLOW SPRINGS LN
 YORK, PA
 US 17406
 Contact: Bill Trimmer
 btrimmer@motortechinc.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)