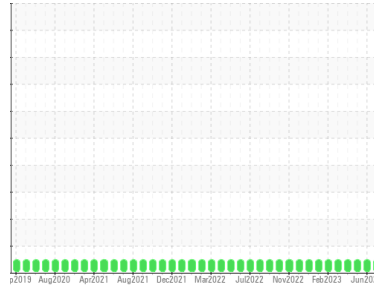




OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL



Area
Findlay
 Machine Id
[Findlay] Oil - Starboard Reduction Gear
 Component
Starboard Reduction Gear
 Fluid
MARATHON SAE 40 (35 GAL)

DIAGNOSIS

Recommendation
 Resample at the next service interval to monitor. (Customer Sample Comment: C.Kemper)

Wear
 All component wear rates are normal.

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 suitable for further service.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		WC0769495	WC0769536	WC0769527
Sample Date	Client Info		15 Jul 2023	15 Jun 2023	23 May 2023
Machine Age	hrs	Client Info	21647	21390	20844
Oil Age	hrs	Client Info	19427	18785	18248
Oil Changed	Client Info		Not Chngd	Filtered	Not Chngd
Sample Status			NORMAL	NORMAL	NORMAL

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >150	17	19	16
Chromium	ppm	ASTM D5185m >10	0	<1	<1
Nickel	ppm	ASTM D5185m >10	0	<1	<1
Titanium	ppm	ASTM D5185m	<1	0	<1
Silver	ppm	ASTM D5185m	0	0	<1
Aluminum	ppm	ASTM D5185m >25	0	<1	2
Lead	ppm	ASTM D5185m >100	0	<1	<1
Copper	ppm	ASTM D5185m >50	2	2	2
Tin	ppm	ASTM D5185m >10	<1	0	<1
Vanadium	ppm	ASTM D5185m	<1	0	<1
Cadmium	ppm	ASTM D5185m	0	0	<1

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	21	20	20
Barium	ppm	ASTM D5185m	0	0	0
Molybdenum	ppm	ASTM D5185m	53	46	47
Manganese	ppm	ASTM D5185m	<1	<1	<1
Magnesium	ppm	ASTM D5185m	822	716	704
Calcium	ppm	ASTM D5185m	943	856	829
Phosphorus	ppm	ASTM D5185m	881	825	754
Zinc	ppm	ASTM D5185m	1033	987	881
Sulfur	ppm	ASTM D5185m	3221	3176	2502

CONTAMINANTS

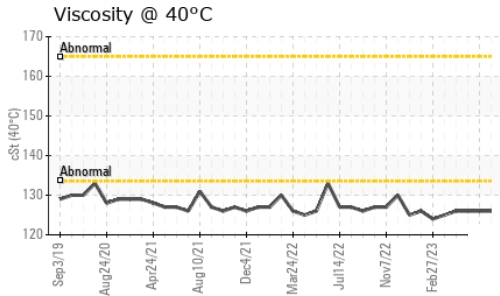
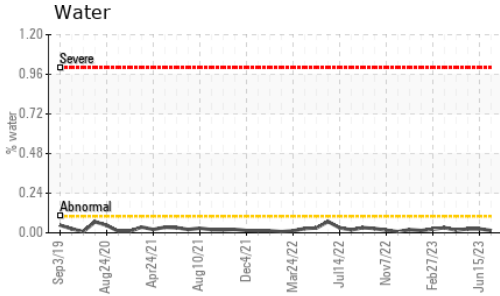
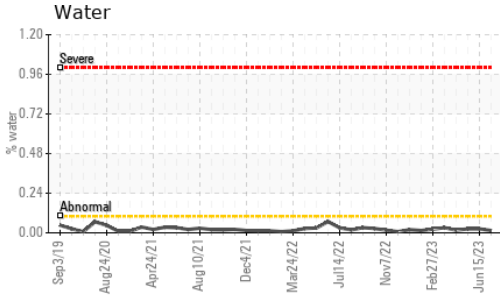
	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >50	3	5	3
Sodium	ppm	ASTM D5185m	4	3	4
Potassium	ppm	ASTM D5185m >20	2	3	0
Water	%	ASTM D6304 >0.1	0.014	0.024	0.024
ppm Water	ppm	ASTM D6304 >1000	140.6	242.5	247.6

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.844	0.74	0.66



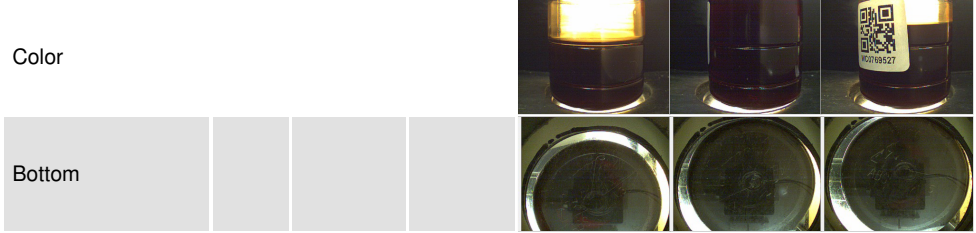
OIL ANALYSIS REPORT



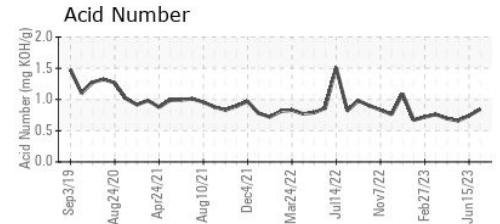
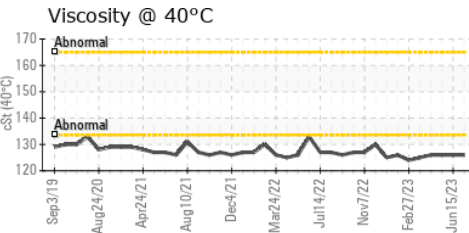
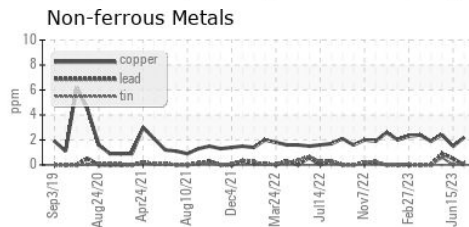
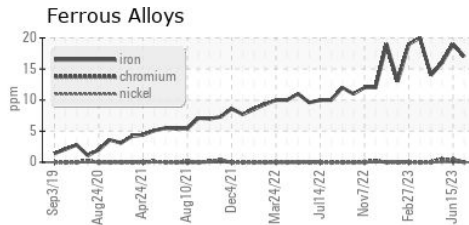
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.1	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	126	126	126

SAMPLE IMAGES	method	limit/base	current	history1	history2
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GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
 Sample No. : WC0769495 Received : 20 Jul 2023
 Lab Number : 05903357 Diagnosed : 24 Jul 2023
 Unique Number : 10564713 Diagnostician : Don Baldrige
 Test Package : IND 2 (Additional Tests: KF)

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)

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