



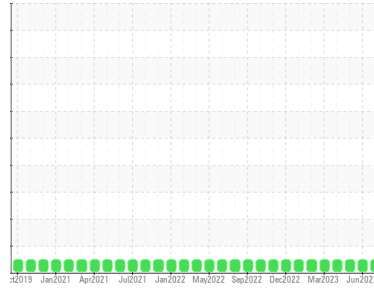
OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL



Area
Nashville
 Machine Id
[Nashville] Oil - Starboard Reduction Gear
 Component
Starboard Reduction Gear
 Fluid
GEAR OIL SAE 85W140 (35 GAL)



DIAGNOSIS

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

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		WC0769189	WC0683328	WC0683232
Sample Date	Client Info		10 Jul 2023	13 Jun 2023	16 May 2023
Machine Age	hrs	Client Info	54755	54352	53904
Oil Age	hrs	Client Info	8841	8567	8223
Oil Changed	Client Info		Filtered	Filtered	Filtered
Sample Status			NORMAL	NORMAL	NORMAL

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >150	4	5	5
Chromium	ppm	ASTM D5185m >10	0	0	<1
Nickel	ppm	ASTM D5185m >10	0	0	<1
Titanium	ppm	ASTM D5185m	0	0	<1
Silver	ppm	ASTM D5185m	0	0	<1
Aluminum	ppm	ASTM D5185m >25	<1	0	1
Lead	ppm	ASTM D5185m >100	0	0	<1
Copper	ppm	ASTM D5185m >50	<1	<1	1
Tin	ppm	ASTM D5185m >10	0	<1	<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 400	102	120	113
Barium	ppm	ASTM D5185m 200	0	0	0
Molybdenum	ppm	ASTM D5185m 12	2	2	2
Manganese	ppm	ASTM D5185m	<1	<1	<1
Magnesium	ppm	ASTM D5185m 12	18	11	16
Calcium	ppm	ASTM D5185m 150	72	69	63
Phosphorus	ppm	ASTM D5185m 1650	983	1005	962
Zinc	ppm	ASTM D5185m 125	31	5	24
Sulfur	ppm	ASTM D5185m 22500	13599	14297	13011

CONTAMINANTS

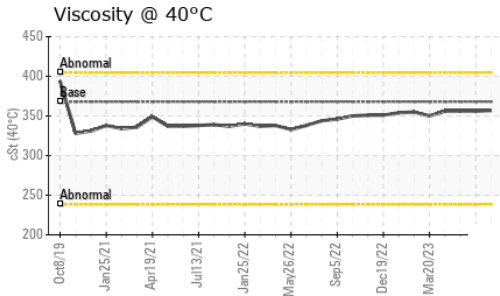
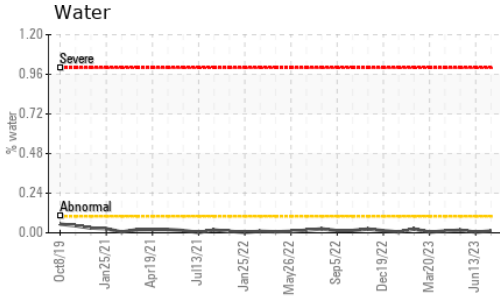
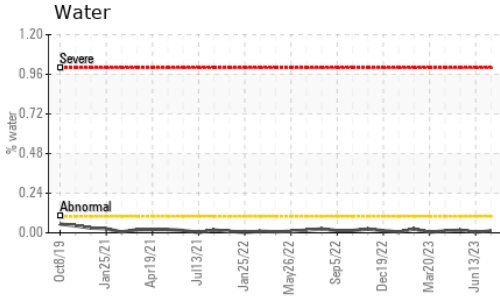
	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >50	<1	<1	1
Sodium	ppm	ASTM D5185m	<1	<1	2
Potassium	ppm	ASTM D5185m >20	<1	<1	<1
Water	%	ASTM D6304 >0.1	0.011	0.004	0.016
ppm Water	ppm	ASTM D6304 >1000	114.1	41.9	163.3

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045 2.00	1.19	1.15	1.20



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

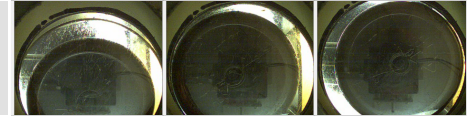
FLUID PROPERTIES	method	limit/base	current	history1	history2	
Visc @ 40°C	cSt	ASTM D445	368	357	356	356

SAMPLE IMAGES	method	limit/base	current	history1	history2
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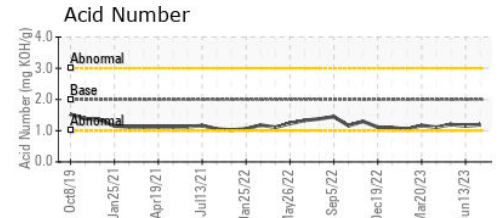
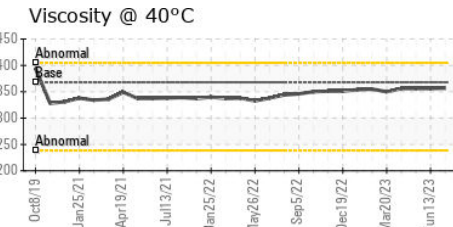
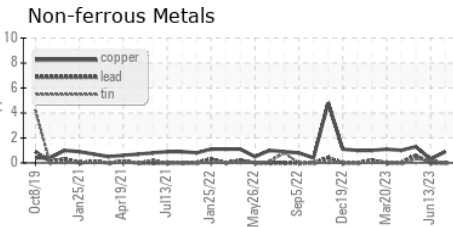
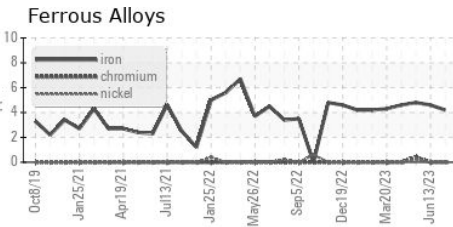
Color



Bottom



GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
 Sample No. : WC0769189 Received : 17 Jul 2023
 Lab Number : 05900022 Diagnosed : 18 Jul 2023
 Unique Number : 10561378 Diagnostician : Don Baldrige
 Test Package : IND 2 (Additional Tests: KF)

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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)