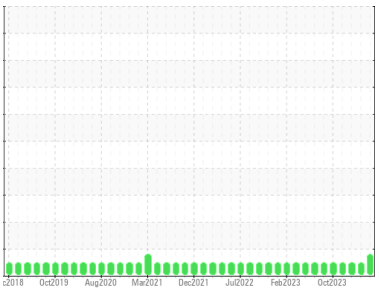
OIL ANALYSIS REPORT

Sample Rating Trend



WEAR

Area
BRIAN RAFFERTY
Machine Id
[BRIAN RAFFERTY] 006 566616-6
Component
Starboard Reduction Gear
Fluid
SCHAEFFER XL 150 (135 GAL)

DIAGNOSIS

Recommendation
No corrective action is recommended at this time. Resample at the next service interval to monitor.

Wear
An increase in the iron level is noted.

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		**MW0062797**	MW0062789	MW0055652
Sample Date		Client Info		**01 Apr 2024**	01 Feb 2024	01 Dec 2023
Machine Age	hrs	Client Info		**29954**	28490	27074
Oil Age	hrs	Client Info		**29954**	28490	27074
Oil Changed		Client Info		**Not Changd**	N/A	Not Changd
Sample Status				**ATTENTION**	NORMAL	NORMAL

CONTAMINATION		method	limit/base	current	history1	history2
Water		WC Method	>0.1	**NEG**	NEG	NEG

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>150	**110**	50	48
Chromium	ppm	ASTM D5185m	>10	**0**	0	0
Nickel	ppm	ASTM D5185m	>10	**0**	0	<1
Titanium	ppm	ASTM D5185m		**<1**	<1	<1
Silver	ppm	ASTM D5185m		**0**	0	0
Aluminum	ppm	ASTM D5185m	>25	**16**	14	16
Lead	ppm	ASTM D5185m	>100	**0**	0	<1
Copper	ppm	ASTM D5185m	>50	**40**	38	37
Tin	ppm	ASTM D5185m	>10	**<1**	0	<1
Vanadium	ppm	ASTM D5185m		**0**	0	0
Cadmium	ppm	ASTM D5185m		**0**	0	0

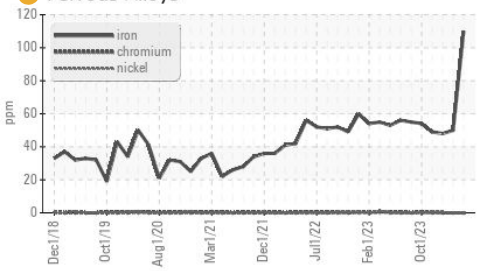
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		**14**	3	12
Barium	ppm	ASTM D5185m		**<1**	0	0
Molybdenum	ppm	ASTM D5185m		**247**	276	283
Manganese	ppm	ASTM D5185m		**1**	<1	<1
Magnesium	ppm	ASTM D5185m		**3**	0	4
Calcium	ppm	ASTM D5185m		**91**	65	62
Phosphorus	ppm	ASTM D5185m		**708**	686	688
Zinc	ppm	ASTM D5185m		**57**	46	37
Sulfur	ppm	ASTM D5185m		**21250**	18635	19307

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>50	**22**	17	18
Sodium	ppm	ASTM D5185m		**10**	7	7
Potassium	ppm	ASTM D5185m	>20	**<1**	0	2

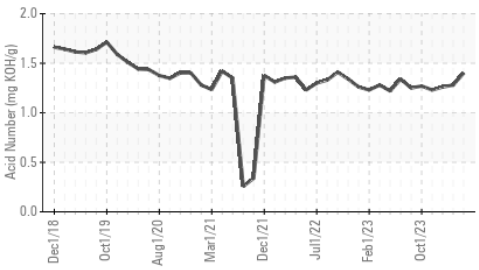
FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045		**1.40**	1.28	1.26

OIL ANALYSIS REPORT

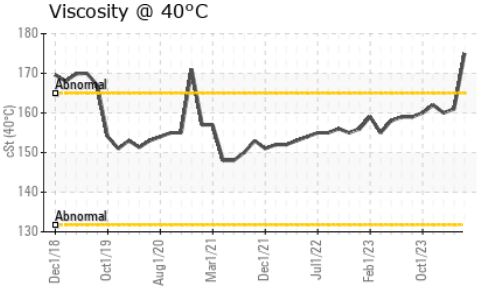
Ferrous Alloys



Acid Number



Viscosity @ 40°C



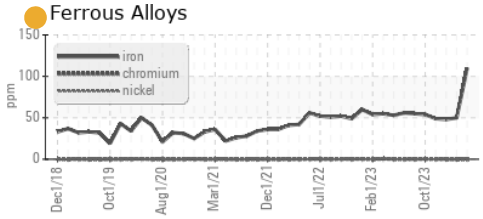
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Precipitate	scalar	*Visual	NONE	**NONE**	NONE	NONE
Silt	scalar	*Visual	NONE	**NONE**	NONE	NONE
Debris	scalar	*Visual	NONE	**NONE**	NONE	NONE
Sand/Dirt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

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445		**175**	161	160

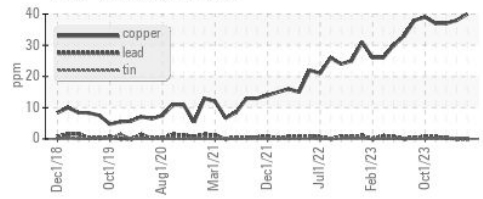
SAMPLE IMAGES	method	limit/base	current	history1	history2
Color			*no image*	*no image*	
Bottom			*no image*	*no image*	

GRAPHS

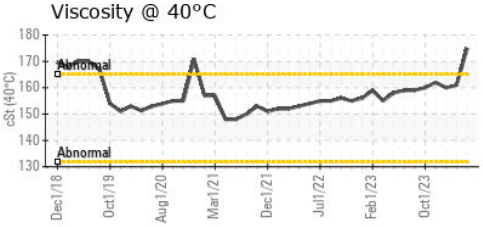
Ferrous Alloys



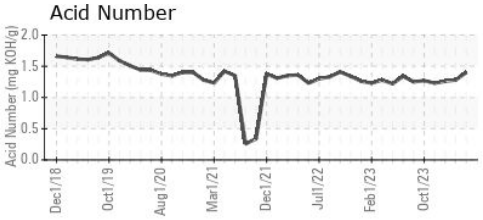
Non-ferrous Metals



Viscosity @ 40°C



Acid Number



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : MW0062797
Lab Number : 06142436
Unique Number : 10967244
Test Package : MAR 2

Received : 08 Apr 2024
Tested : 09 Apr 2024
Diagnosed : 11 Apr 2024 - Jonathan Hester

Certificate L2367

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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