



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
MARK STAAB (S/N 2657)

Component
Starboard Reduction Gear

Fluid
SCHAEFFER 209 MOLY UNIVERSAL GEARLUBE ISO 220 (150 GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		MW0062247	MW0062270	MW0047528
Sample Date		Client Info		15 Jun 2024	15 Apr 2024	15 Feb 2024
Machine Age	hrs	Client Info		82444	87085	79678
Oil Age	hrs	Client Info		22333	20974	19896
Filter Age	hrs	Client Info		10448	9103	7788
Oil Changed		Client Info		Not Changd	Not Changd	Not Changd
Filter Changed		Client Info		Not Changd	Not Changd	None
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>150	45	49	54
Chromium	ppm	ASTM D5185m	>10	0	<1	<1
Nickel	ppm	ASTM D5185m	>10	0	0	0
Titanium	ppm	ASTM D5185m		<1	<1	<1
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>25	5	6	6
Lead	ppm	ASTM D5185m	>100	0	0	1
Copper	ppm	ASTM D5185m	>50	8	8	11
Tin	ppm	ASTM D5185m	>10	<1	0	<1
Vanadium	ppm	ASTM D5185m		0	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

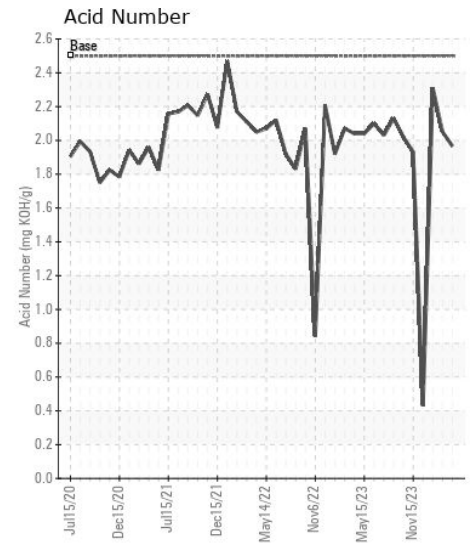
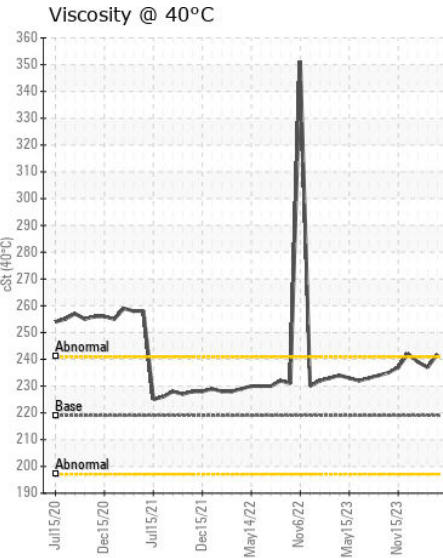
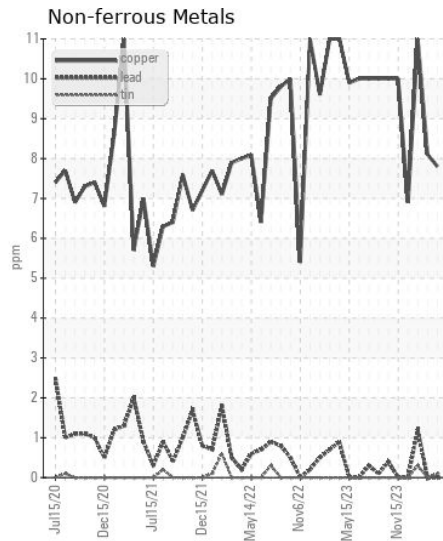
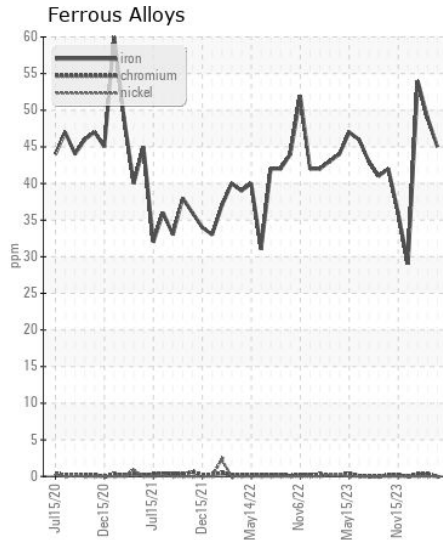
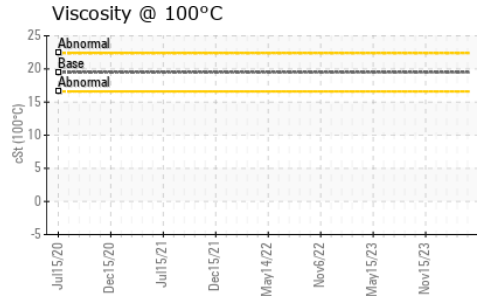
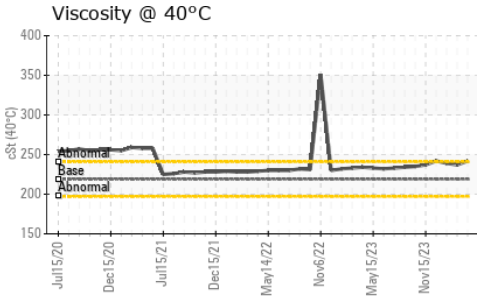
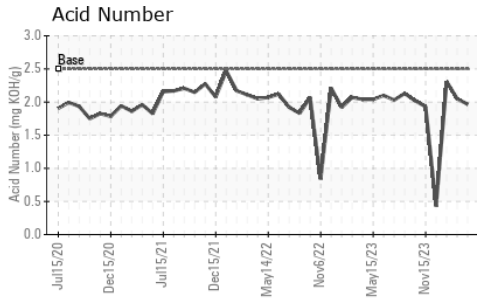
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>50	9	9	11
Potassium	ppm	ASTM D5185m	>20	4	2	2
Water		WC Method	>0.1	NEG	NEG	NEG
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

FLUID CONDITION

The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		6	6	7
Boron	ppm	ASTM D5185m	65	42	54	63
Barium	ppm	ASTM D5185m		<1	1	<1
Molybdenum	ppm	ASTM D5185m	325	378	389	472
Manganese	ppm	ASTM D5185m		1	1	<1
Magnesium	ppm	ASTM D5185m		19	4	4
Calcium	ppm	ASTM D5185m		97	77	82
Phosphorus	ppm	ASTM D5185m	875	918	893	988
Zinc	ppm	ASTM D5185m		66	35	36
Sulfur	ppm	ASTM D5185m	16000	21973	21522	24044
Acid Number (AN)	mg KOH/g	ASTM D8045	2.5	1.966	2.05	2.31
Visc @ 40°C	cSt	ASTM D445	219	241.9	237	239



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513

Sample No. : MW0062247

Lab Number : 06216653

Unique Number : 11089517

Test Package : MAR 2 (Additional Tests: KV100)

Received : 21 Jun 2024

Tested : 26 Jun 2024

Diagnosed : 26 Jun 2024 - Jonathan Hester

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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