MAR II

WEAR CHECK Inland Marine Oil Analysis Program

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area
WILLIAM P MORELLI
Machine Id
[WILLIAM P MORELLI] 006 520785-6
Component
Starboard Reduction Gear
Fluid
CHEVRON MEROPA 320 (214 GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

WEAR

All component wear rates are normal.

CONTAMINATION

There is no indication of any contamination in the oil.

FLUID CONDITION

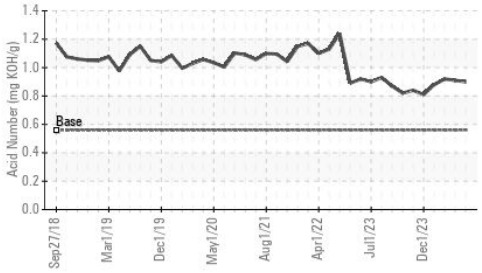
The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		MW0020438	MW0067925	MW0007687
Sample Date		Client Info		01 Apr 2024	01 Mar 2024	01 Feb 2024
Machine Age	hrs	Client Info		95322	8631	93883
Oil Age	hrs	Client Info		9375	0	7936
Filter Age	hrs	Client Info		9375	0	0
Oil Changed		Client Info		N/A	N/A	N/A
Filter Changed		Client Info		N/A	N/A	N/A
Sample Status				NORMAL	NORMAL	NORMAL
Iron	ppm	ASTM D5185m	>150	43	40	40
Chromium	ppm	ASTM D5185m	>10	0	<1	<1
Nickel	ppm	ASTM D5185m	>10	0	<1	<1
Titanium	ppm	ASTM D5185m		0	<1	<1
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>25	3	3	3
Lead	ppm	ASTM D5185m	>100	19	20	21
Copper	ppm	ASTM D5185m	>50	4	5	5
Tin	ppm	ASTM D5185m	>10	<1	<1	<1
Vanadium	ppm	ASTM D5185m		0	<1	<1
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Silicon	ppm	ASTM D5185m	>50	2	2	2
Potassium	ppm	ASTM D5185m	>20	<1	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
Sodium	ppm	ASTM D5185m		8	4	4
Boron	ppm	ASTM D5185m	20	9	8	9
Barium	ppm	ASTM D5185m		1	0	0
Molybdenum	ppm	ASTM D5185m	0	<1	2	2
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m		<1	2	2
Calcium	ppm	ASTM D5185m	25	26	23	25
Phosphorus	ppm	ASTM D5185m	235	346	308	306
Zinc	ppm	ASTM D5185m		7	2	6
Sulfur	ppm	ASTM D5185m		10069	9212	8722
Acid Number (AN)	mg KOH/g	ASTM D8045	0.56	0.90	0.91	0.92
Visc @ 40°C	cSt	ASTM D445	304	312	314	311

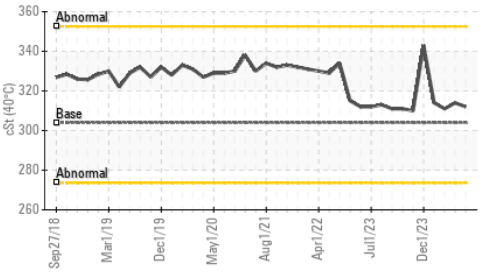
Report Id: INGPAD [WUSCAR] 06176167 (Generated: 05/13/2024 17:53:39) Rev: 1

Contact/Location: ANTHONY VAN CURA - INGPAD

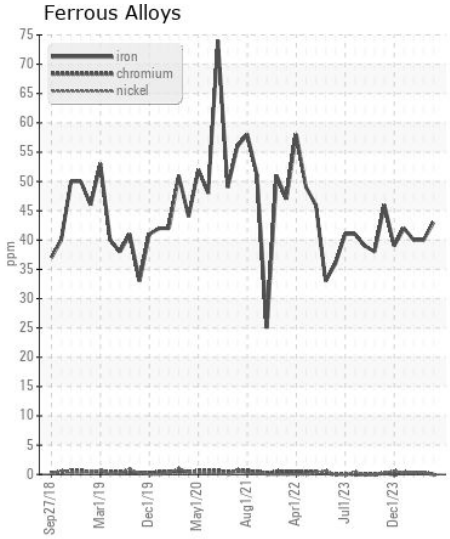
Acid Number



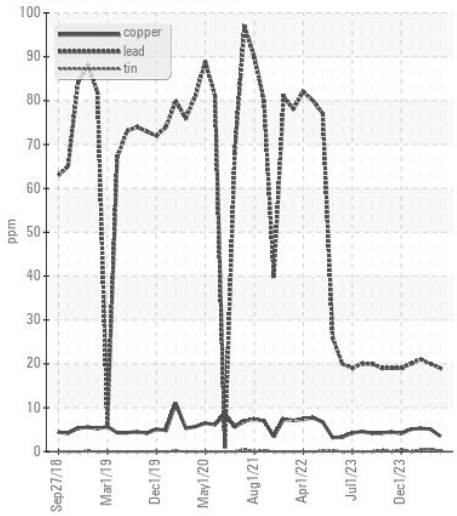
Viscosity @ 40°C



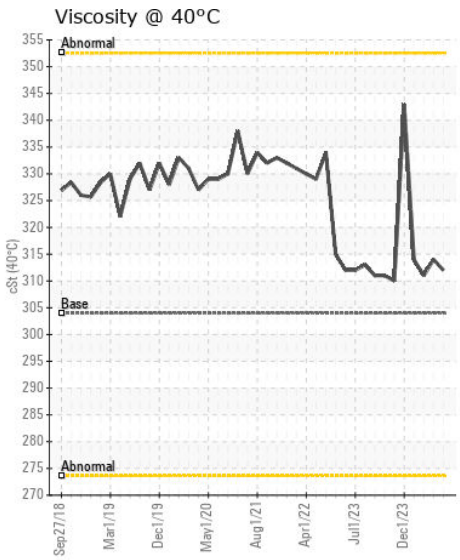
Ferrous Alloys



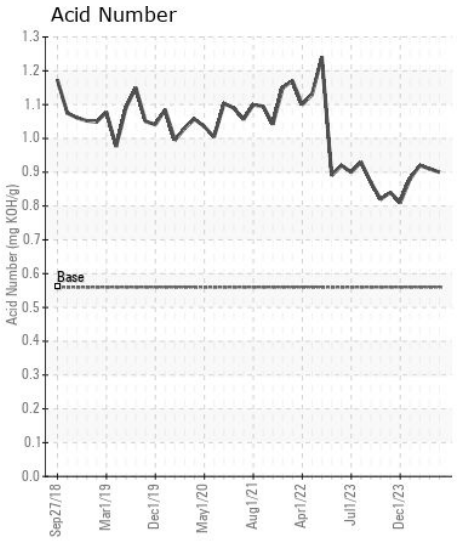
Non-ferrous Metals



Viscosity @ 40°C



Acid Number



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : MW0020438
Lab Number : 06176167
Unique Number : 11022220
Test Package : MAR 2

Received : 10 May 2024
Tested : 13 May 2024
Diagnosed : 13 May 2024 - Wes Davis

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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