



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.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		MW0059938	MW0020438	MW0067925
Sample Date		Client Info		01 May 2024	01 Apr 2024	01 Mar 2024
Machine Age	hrs	Client Info		96031	95322	8631
Oil Age	hrs	Client Info		0	9375	0
Filter Age	hrs	Client Info		0	9375	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

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>150	45	43	40
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	0
Aluminum	ppm	ASTM D5185m	>25	3	3	3
Lead	ppm	ASTM D5185m	>100	19	19	20
Copper	ppm	ASTM D5185m	>50	3	4	5
Tin	ppm	ASTM D5185m	>10	<1	<1	<1
Vanadium	ppm	ASTM D5185m		0	0	<1
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

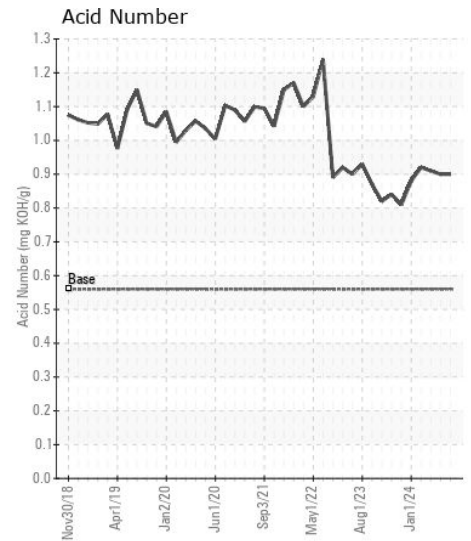
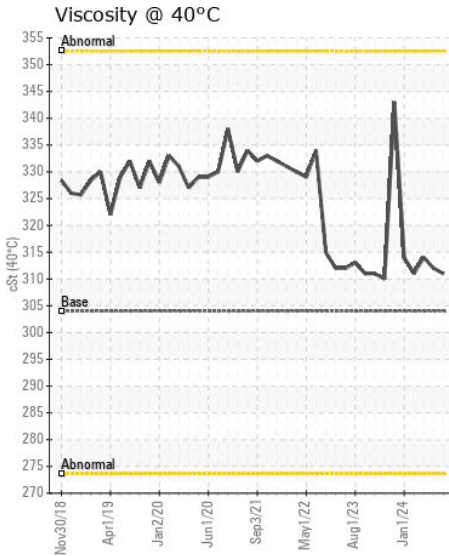
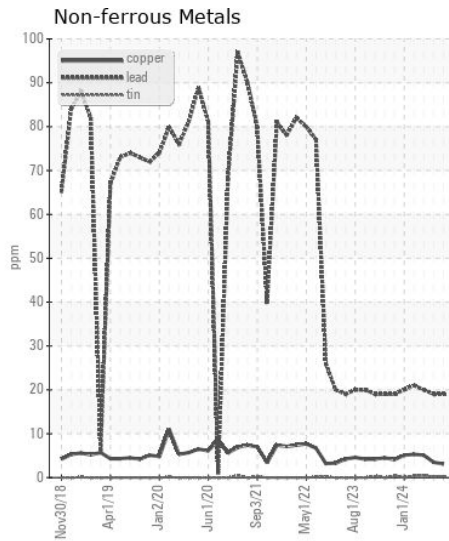
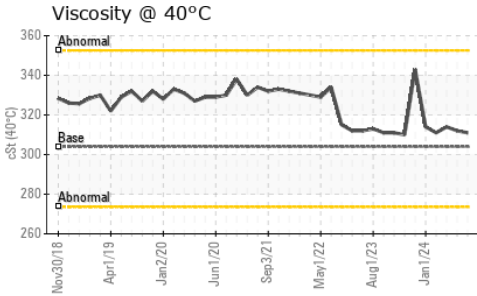
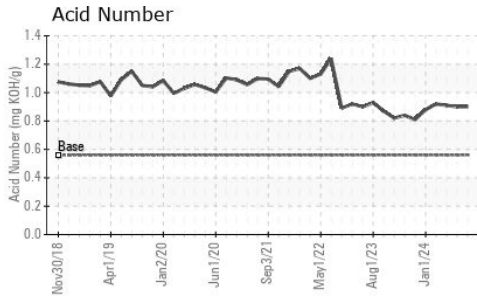
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>50	2	2	2
Potassium	ppm	ASTM D5185m	>20	0	<1	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		8	8	4
Boron	ppm	ASTM D5185m	20	8	9	8
Barium	ppm	ASTM D5185m		<1	1	0
Molybdenum	ppm	ASTM D5185m	0	<1	<1	2
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m		0	<1	2
Calcium	ppm	ASTM D5185m	25	27	26	23
Phosphorus	ppm	ASTM D5185m	235	339	346	308
Zinc	ppm	ASTM D5185m		6	7	2
Sulfur	ppm	ASTM D5185m		9920	10069	9212
Acid Number (AN)	mg KOH/g	ASTM D8045	0.56	0.90	0.90	0.91
Visc @ 40°C	cSt	ASTM D445	304	311	312	314



Certificate L2367

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

Sample No. : MW0059938

Lab Number : 06176172

Unique Number : 11022225

Test Package : MAR 2

Received : 10 May 2024

Tested : 13 May 2024

Diagnosed : 13 May 2024 - Wes Davis

INGRAM BARGE

900 S 3RD ST

PADUCAH, KY

US 42003

Contact: ANTHONY VAN CURA

anthony.vancura@ingrambarga.com

T: (270)415-4467

F: (615)695-3697

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)