



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area
JOHN M RIVERS
Machine Id
[JOHN M RIVERS] 006 633894-6
Component
Starboard Reduction Gear
Fluid
CHEVRON MEROPA 320 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		MW0058714	MW0058709	MW0065756
Sample Date		Client Info		01 Jul 2024	01 May 2024	01 Apr 2024
Machine Age	hrs	Client Info		75667	74285	73637
Oil Age	hrs	Client Info		5288	3905	73637
Filter Age	hrs	Client Info		0	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	SEVERE	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>150	16	▲ 570	16
Chromium	ppm	ASTM D5185m	>10	0	9	<1
Nickel	ppm	ASTM D5185m	>10	<1	2	0
Titanium	ppm	ASTM D5185m		<1	<1	<1
Silver	ppm	ASTM D5185m		0	<1	<1
Aluminum	ppm	ASTM D5185m	>25	1	2	1
Lead	ppm	ASTM D5185m	>100	48	12	25
Copper	ppm	ASTM D5185m	>50	7	▲ 174	2
Tin	ppm	ASTM D5185m	>10	0	▲ 20	<1
Vanadium	ppm	ASTM D5185m		0	<1	<1
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

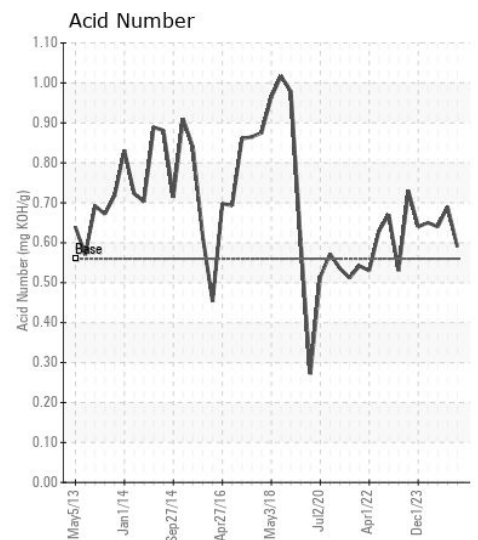
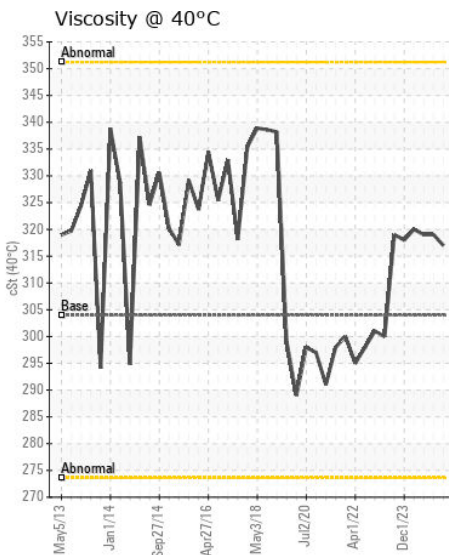
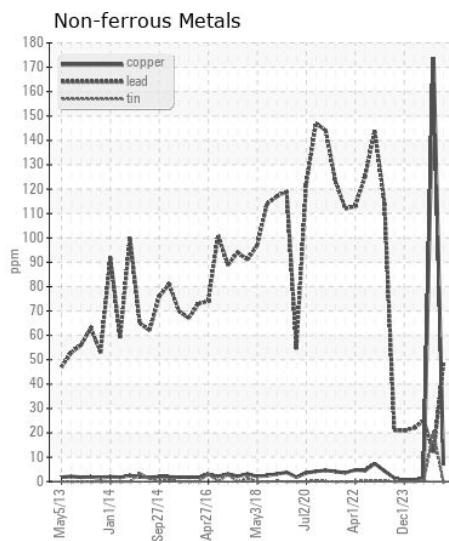
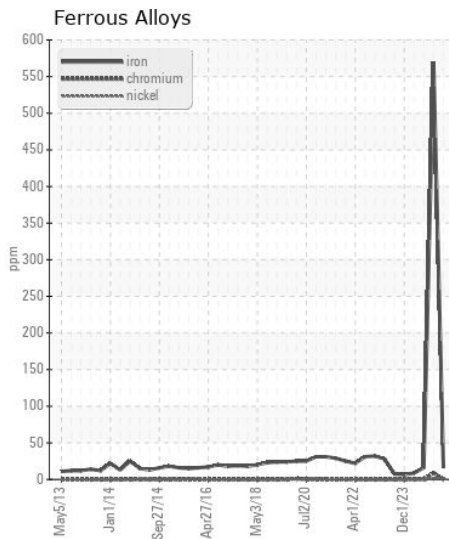
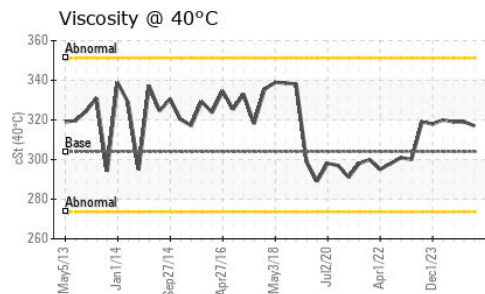
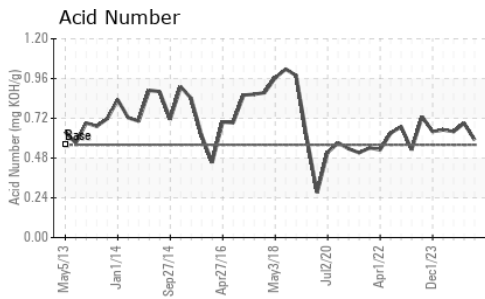
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>50	2	8	2
Potassium	ppm	ASTM D5185m	>20	3	2	2
Water		WC Method	>0.1	NEG	NEG	NEG
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	LIGHT	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	4	2
Boron	ppm	ASTM D5185m	20	13	14	11
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m	0	<1	1	<1
Manganese	ppm	ASTM D5185m		2	6	0
Magnesium	ppm	ASTM D5185m		11	1	2
Calcium	ppm	ASTM D5185m	25	56	28	47
Phosphorus	ppm	ASTM D5185m	235	273	198	305
Zinc	ppm	ASTM D5185m		10	29	3
Sulfur	ppm	ASTM D5185m		7263	4561	6925
Acid Number (AN)	mg KOH/g	ASTM D8045	0.56	0.59	0.69	0.64
Visc @ 40°C	cSt	ASTM D445	304	317	319	319



Certificate L2367

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

Sample No. : MW0058714

Lab Number : 06238523

Unique Number : 11127357

Test Package : MAR 2

Received : 16 Jul 2024

Tested : 17 Jul 2024

Diagnosed : 17 Jul 2024 - Wes Davis

INGRAM BARGE

900 S 3RD ST

PADUCAH, KY

US 42003

Contact: JEFF BISHOP

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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)