



WEAR	<b>NORMAL</b>
CONTAMINATION	<b>NORMAL</b>
FLUID CONDITION	<b>NORMAL</b>

Area  
**DALE A HELLER**  
Machine Id  
**[DALE A HELLER] 006 624201-6**  
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		<b>MW06186368</b>	MW0064832	MW0064788
Sample Date		Client Info		<b>01 May 2024</b>	01 Apr 2024	01 Mar 2024
Machine Age	hrs	Client Info		<b>74727</b>	73949	73249
Oil Age	hrs	Client Info		<b>74727</b>	6391	5691
Filter Age	hrs	Client Info		<b>0</b>	0	0
Oil Changed		Client Info		<b>N/A</b>	N/A	N/A
Filter Changed		Client Info		<b>N/A</b>	N/A	N/A
Sample Status				<b>NORMAL</b>	NORMAL	ABNORMAL

**WEAR**

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>150	<b>16</b>	7	7
Chromium	ppm	ASTM D5185m	>10	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185m	>10	<b>&lt;1</b>	<1	0
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	0
Silver	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
Aluminum	ppm	ASTM D5185m	>25	<b>3</b>	3	3
Lead	ppm	ASTM D5185m	>100	<b>&lt;1</b>	1	0
Copper	ppm	ASTM D5185m	>50	<b>3</b>	5	2
Tin	ppm	ASTM D5185m	>10	<b>1</b>	1	0
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

**CONTAMINATION**

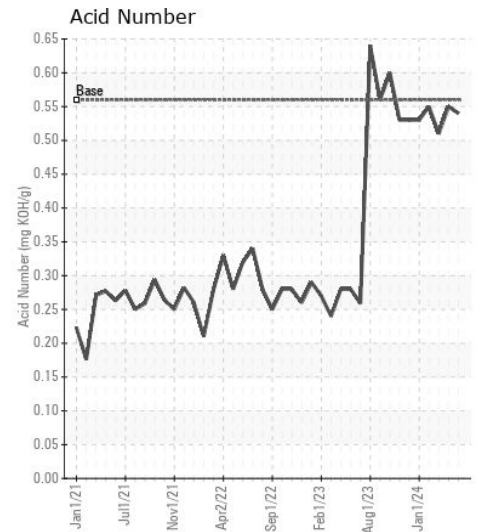
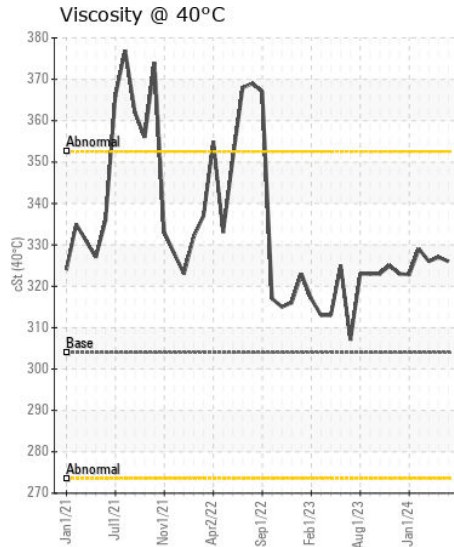
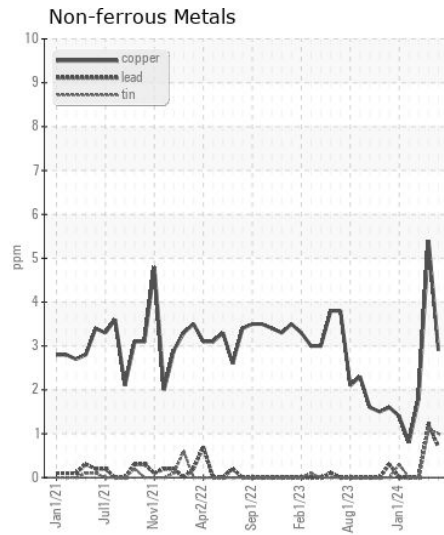
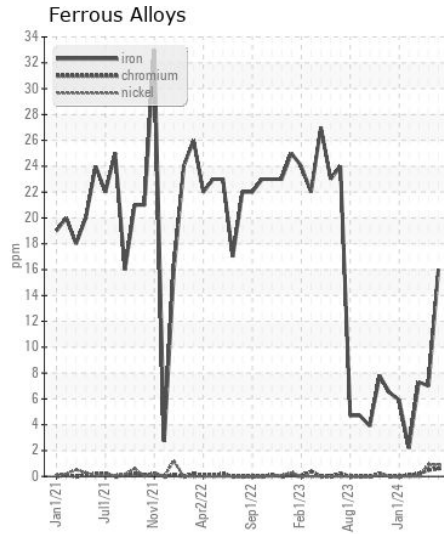
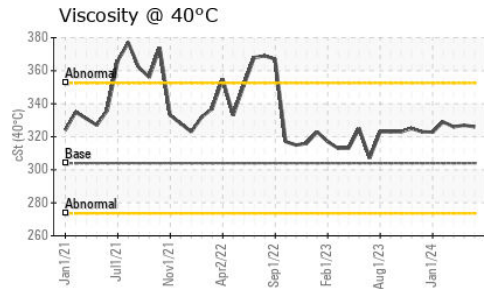
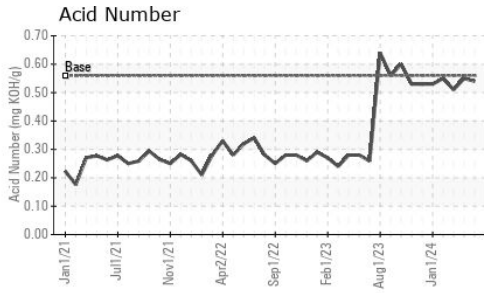
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>50	<b>3</b>	4	3
Potassium	ppm	ASTM D5185m	>20	<b>2</b>	1	2
Water		WC Method	>0.1	<b>NEG</b>	NEG	NEG
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	*Visual	NONE	<b>LIGHT</b>	LIGHT	▲ MODER
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Appearance	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Odor	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Emulsified Water	scalar	*Visual	>0.1	<b>NEG</b>	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		<b>3</b>	<1	2
Boron	ppm	ASTM D5185m	20	<b>3</b>	17	9
Barium	ppm	ASTM D5185m		<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	0	<b>2</b>	4	2
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	<1	0
Magnesium	ppm	ASTM D5185m		<b>1</b>	2	3
Calcium	ppm	ASTM D5185m	25	<b>18</b>	62	20
Phosphorus	ppm	ASTM D5185m	235	<b>145</b>	244	262
Zinc	ppm	ASTM D5185m		<b>0</b>	13	0
Sulfur	ppm	ASTM D5185m		<b>4303</b>	6438	6567
Acid Number (AN)	mg KOH/g	ASTM D8045	0.56	<b>0.54</b>	0.55	0.51
Visc @ 40°C	cSt	ASTM D445	304	<b>326</b>	327	326



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : MW06186368  
**Lab Number** : 06186368  
**Unique Number** : 11043120  
**Test Package** : MAR 2

**Received** : 21 May 2024  
**Tested** : 22 May 2024  
**Diagnosed** : 22 May 2024 - Wes Davis

**INGRAM BARGE**  
 900 S 3RD ST  
 PADUCAH, KY  
 US 42003

Contact: JUSTIN WHEELER  
 justin.wheeler@ingrambarge.com

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)

T:  
 F: (615)695-3697