



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

Area  
**LES GRIMM**  
Machine Id  
**[LES GRIMM] 006 569145-6**  
Component  
**Starboard Reduction Gear**  
Fluid  
**CHEVRON URSA SUPER PLUS 40 (--- 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>MW0049599</b>	MW0059880	MW0059872
Sample Date		Client Info		<b>01 Feb 2024</b>	01 Jan 2024	01 Dec 2023
Machine Age	hrs	Client Info		<b>12093</b>	11390	10603
Oil Age	hrs	Client Info		<b>1947</b>	1172	435
Filter Age	hrs	Client Info		<b>753</b>	1172	435
Oil Changed		Client Info		<b>Changed</b>	Changed	Changed
Filter Changed		Client Info		<b>Changed</b>	Changed	Changed
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

**WEAR**

All component wear rates are normal.

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

**CONTAMINATION**

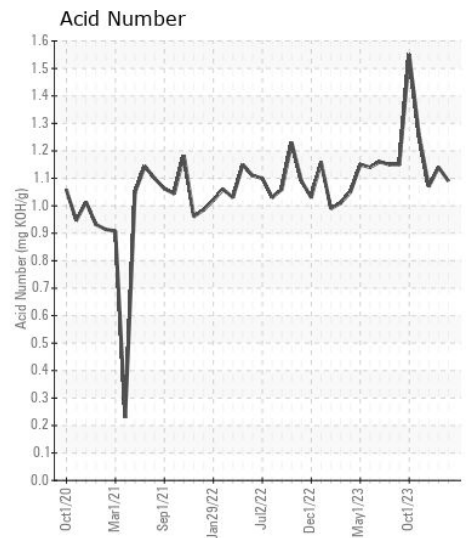
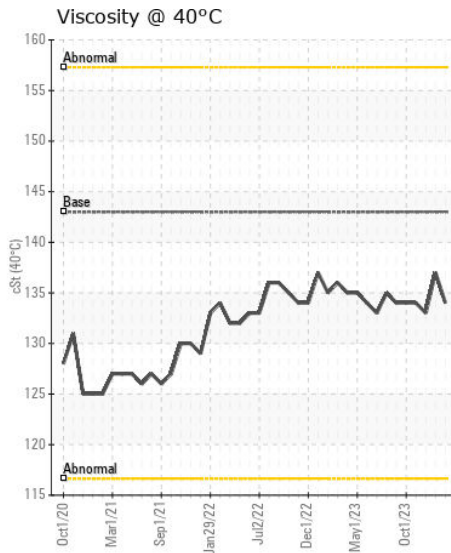
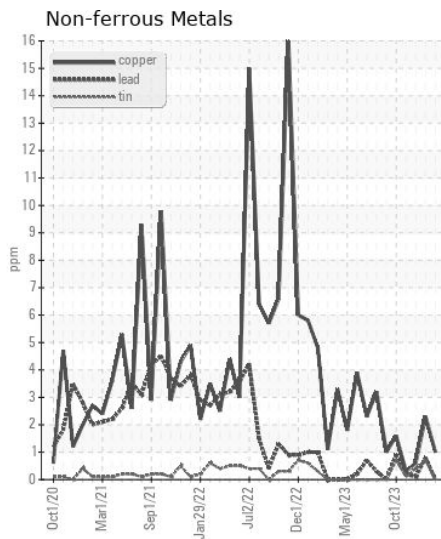
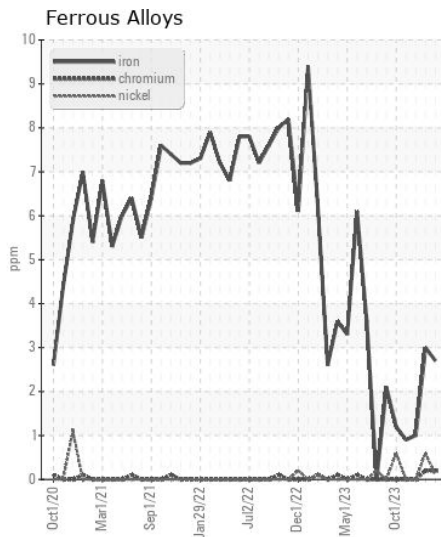
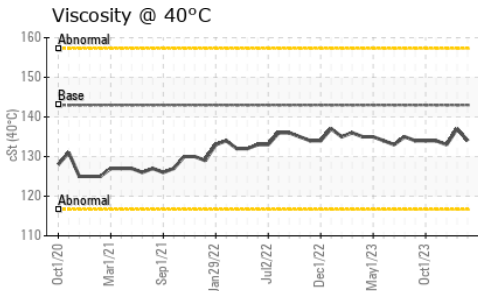
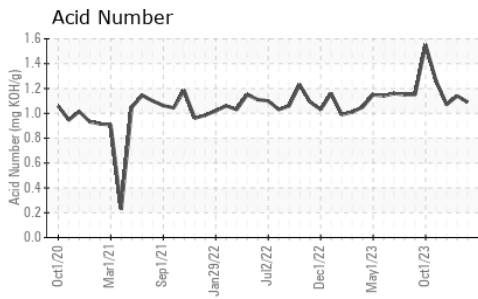
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>50	<b>5</b>	6	5
Potassium	ppm	ASTM D5185m	>20	<b>2</b>	2	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>NONE</b>	NONE	NONE
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>0</b>	0	2
Boron	ppm	ASTM D5185m		<b>252</b>	308	300
Barium	ppm	ASTM D5185m		<b>5</b>	0	0
Molybdenum	ppm	ASTM D5185m		<b>26</b>	31	30
Manganese	ppm	ASTM D5185m		<b>0</b>	<1	<1
Magnesium	ppm	ASTM D5185m		<b>11</b>	13	15
Calcium	ppm	ASTM D5185m		<b>1863</b>	2463	2284
Phosphorus	ppm	ASTM D5185m	1000	<b>591</b>	697	692
Zinc	ppm	ASTM D5185m	1090	<b>648</b>	790	765
Sulfur	ppm	ASTM D5185m		<b>2449</b>	3120	2809
Acid Number (AN)	mg KOH/g	ASTM D8045		<b>1.09</b>	1.14	1.07
Visc @ 40°C	cSt	ASTM D445	143	<b>134</b>	137	133



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : MW0049599 **Received** : 14 Feb 2024  
**Lab Number** : 06089607 **Tested** : 15 Feb 2024  
**Unique Number** : 10877052 **Diagnosed** : 15 Feb 2024 - Wes Davis  
**Test Package** : MAR 2

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

Contact: DALE MORIE  
 dale.morie@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)