



Machine Id  
**HALEY DENNIS ROSS**  
Component  
**Starboard Reduction Gear**  
Fluid  
**CHEVRON GEAR COMPOUND EP 220 (50 GAL)**

**RECOMMENDATION**

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>MW0067261</b>	MW0067264	MW0049138
Sample Date		Client Info		<b>21 May 2024</b>	23 Apr 2024	30 Mar 2024
Machine Age	hrs	Client Info		<b>38211</b>	0	37223
Oil Age	hrs	Client Info		<b>23438</b>	500	22450
Filter Age	hrs	Client Info		<b>0</b>	500	0
Oil Changed		Client Info		<b>Not Changd</b>	Not Changd	Not Changd
Filter Changed		Client Info		<b>None</b>	Not Changd	None
Sample Status				<b>NORMAL</b>	NORMAL	ABNORMAL

**WEAR**

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>150	<b>57</b>	57	83
Chromium	ppm	ASTM D5185m	>10	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185m	>10	<b>0</b>	<1	<1
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	1	1
Silver	ppm	ASTM D5185m		<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>25	<b>22</b>	23	▲ 36
Lead	ppm	ASTM D5185m	>100	<b>0</b>	<1	<1
Copper	ppm	ASTM D5185m	>50	<b>6</b>	7	9
Tin	ppm	ASTM D5185m	>10	<b>0</b>	<1	<1
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	0	<1
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

**CONTAMINATION**

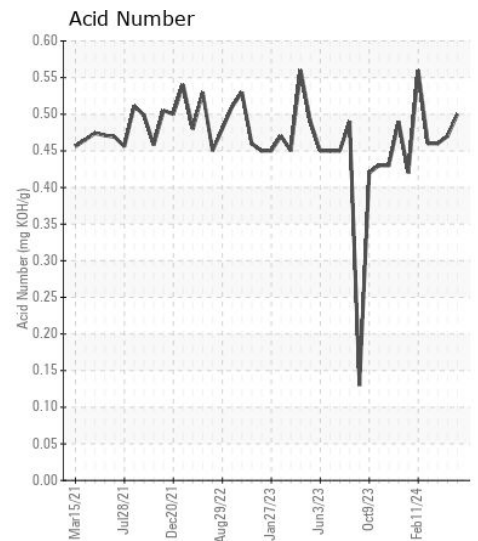
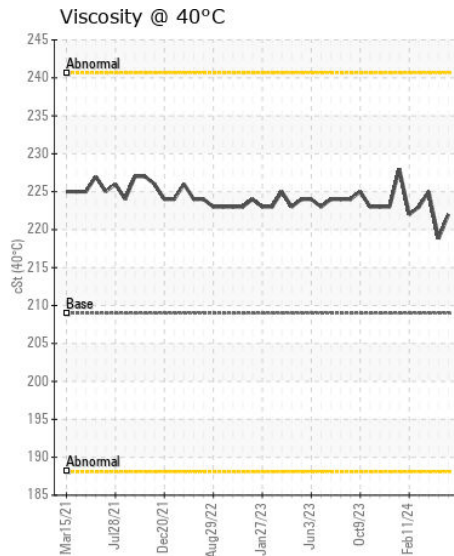
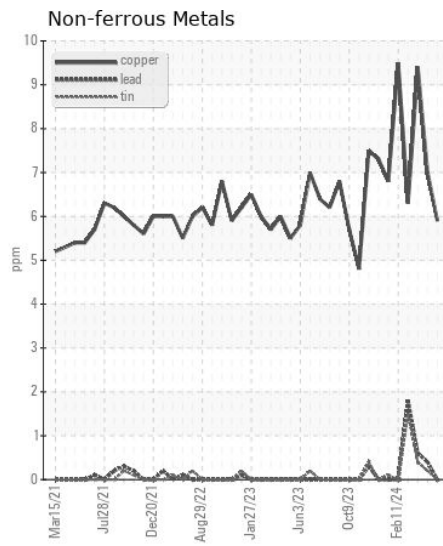
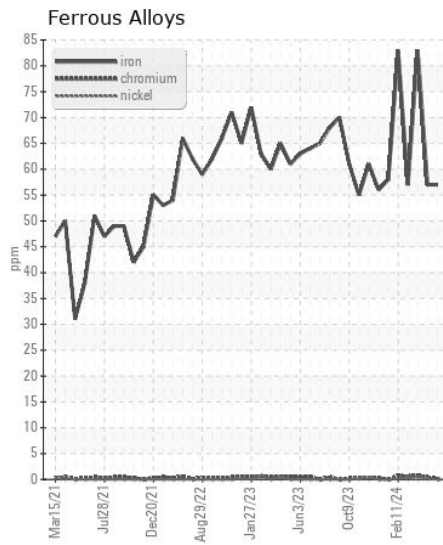
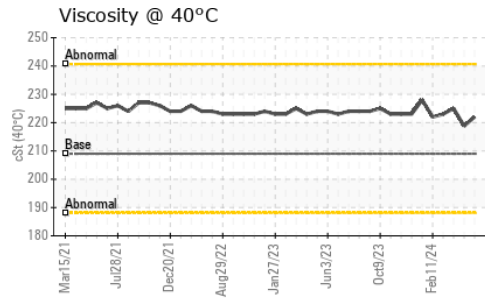
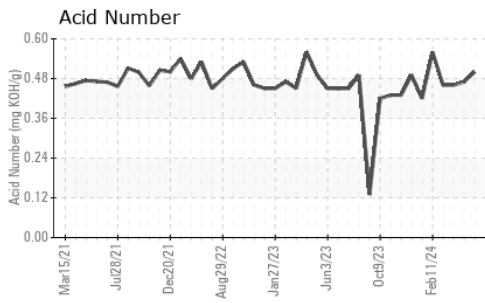
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>50	<b>8</b>	10	14
Potassium	ppm	ASTM D5185m	>20	<b>&lt;1</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>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>&lt;1</b>	0	<1
Boron	ppm	ASTM D5185m		<b>4</b>	4	7
Barium	ppm	ASTM D5185m		<b>0</b>	<1	0
Molybdenum	ppm	ASTM D5185m		<b>1</b>	2	3
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	<1	1
Magnesium	ppm	ASTM D5185m		<b>8</b>	8	11
Calcium	ppm	ASTM D5185m		<b>70</b>	63	99
Phosphorus	ppm	ASTM D5185m		<b>215</b>	227	315
Zinc	ppm	ASTM D5185m		<b>16</b>	8	12
Sulfur	ppm	ASTM D5185m		<b>7708</b>	6787	9558
Acid Number (AN)	mg KOH/g	ASTM D8045		<b>0.50</b>	0.47	0.46
Visc @ 40°C	cSt	ASTM D445	209	<b>222</b>	218.8	225



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : MW0067261  
**Lab Number** : 06195983  
**Unique Number** : 11058106  
**Test Package** : MAR 2

**Received** : 30 May 2024  
**Tested** : 02 Jun 2024  
**Diagnosed** : 02 Jun 2024 - Wes Davis

**MAGNOLIA MARINE TRANSPORT**  
 697 HAINING ROAD  
 VICKSBURG, MS  
 US 39183  
 Contact: MMT MAINTENANCE PLANNERS  
 mmtmaintenanceplanners@ergon.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)

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