



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

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>MW0061799</b>	MW0056364	MW0056359
Sample Date		Client Info		<b>16 Dec 2023</b>	22 Nov 2023	30 Oct 2023
Machine Age	hrs	Client Info		<b>35262</b>	34777	34281
Oil Age	hrs	Client Info		<b>20489</b>	20004	19498
Filter Age	hrs	Client Info		<b>93</b>	0	465
Oil Changed		Client Info		<b>Not Changed</b>	Not Changed	Not Changed
Filter Changed		Client Info		<b>Not Changed</b>	None	N/A
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

**WEAR**

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>150	<b>56</b>	61	55
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	<1
Aluminum	ppm	ASTM D5185m	>25	<b>22</b>	20	22
Lead	ppm	ASTM D5185m	>100	<b>0</b>	<1	0
Copper	ppm	ASTM D5185m	>50	<b>7</b>	8	5
Tin	ppm	ASTM D5185m	>10	<b>0</b>	<1	0
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**

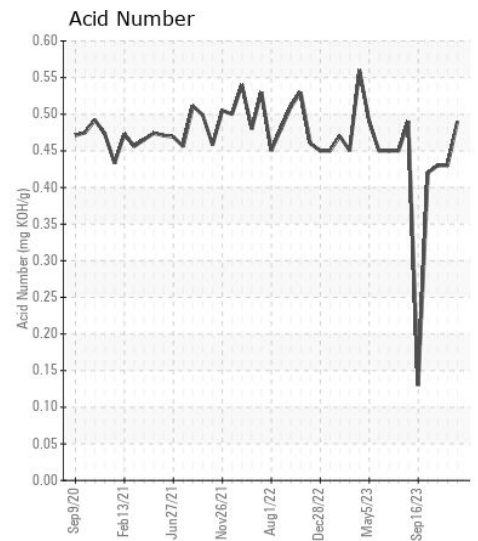
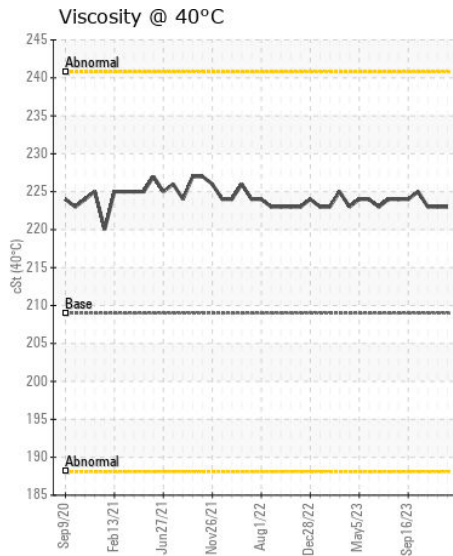
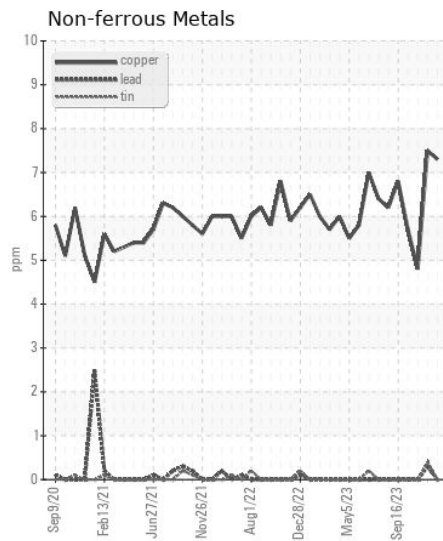
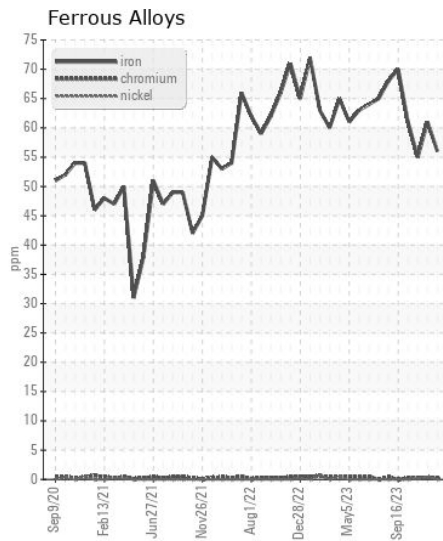
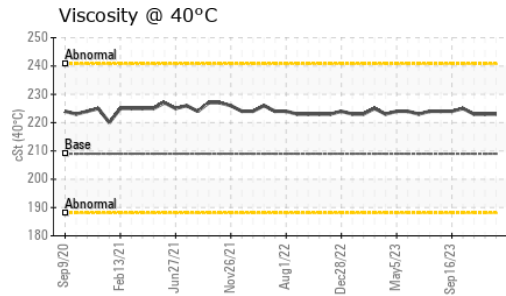
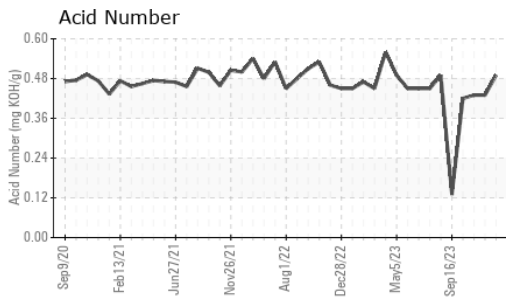
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>50	<b>9</b>	11	9
Potassium	ppm	ASTM D5185m	>20	<b>0</b>	3	0
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	0
Boron	ppm	ASTM D5185m		<b>0</b>	4	3
Barium	ppm	ASTM D5185m		<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m		<b>&lt;1</b>	2	0
Manganese	ppm	ASTM D5185m		<b>1</b>	1	<1
Magnesium	ppm	ASTM D5185m		<b>7</b>	6	6
Calcium	ppm	ASTM D5185m		<b>55</b>	57	57
Phosphorus	ppm	ASTM D5185m		<b>208</b>	172	208
Zinc	ppm	ASTM D5185m		<b>10</b>	0	<1
Sulfur	ppm	ASTM D5185m		<b>5823</b>	6603	6201
Acid Number (AN)	mg KOH/g	ASTM D8045		<b>0.49</b>	0.43	0.43
Visc @ 40°C	cSt	ASTM D445	209	<b>223</b>	223	223



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : MW0061799 **Received** : 16 Jan 2024  
**Lab Number** : 06062122 **Diagnosed** : 18 Jan 2024  
**Unique Number** : 10833504 **Diagnostician** : Wes Davis  
**Test Package** : MAR 2

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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