



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

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		MW0067264	MW0049138	MW0061834
Sample Date		Client Info		23 Apr 2024	30 Mar 2024	03 Mar 2024
Machine Age	hrs	Client Info		0	37223	36734
Oil Age	hrs	Client Info		500	22450	21952
Filter Age	hrs	Client Info		500	0	113
Oil Changed		Client Info		Not Changd	Not Changd	Not Changd
Filter Changed		Client Info		Not Changd	None	Not Changd
Sample Status				NORMAL	ABNORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>150	57	83	57
Chromium	ppm	ASTM D5185m	>10	<1	<1	<1
Nickel	ppm	ASTM D5185m	>10	<1	<1	<1
Titanium	ppm	ASTM D5185m		1	1	1
Silver	ppm	ASTM D5185m		0	0	<1
Aluminum	ppm	ASTM D5185m	>25	23	▲ 36	23
Lead	ppm	ASTM D5185m	>100	<1	<1	2
Copper	ppm	ASTM D5185m	>50	7	9	6
Tin	ppm	ASTM D5185m	>10	<1	<1	2
Vanadium	ppm	ASTM D5185m		0	<1	<1
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

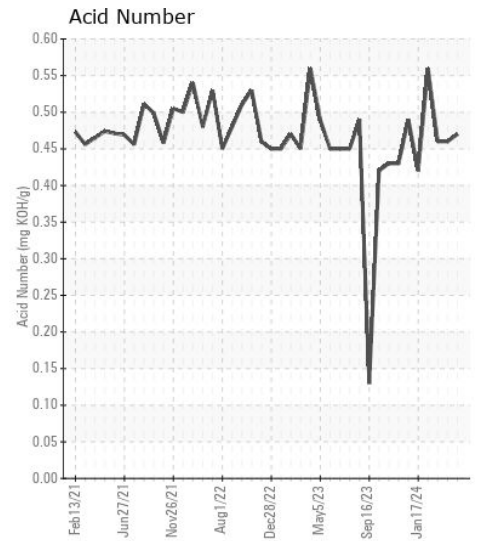
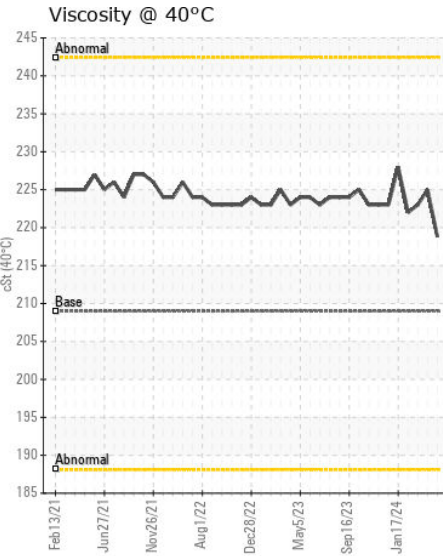
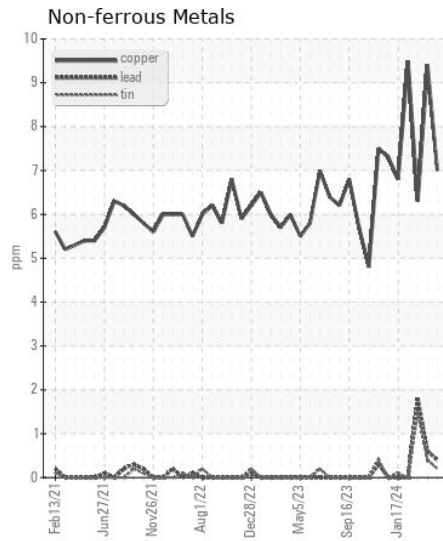
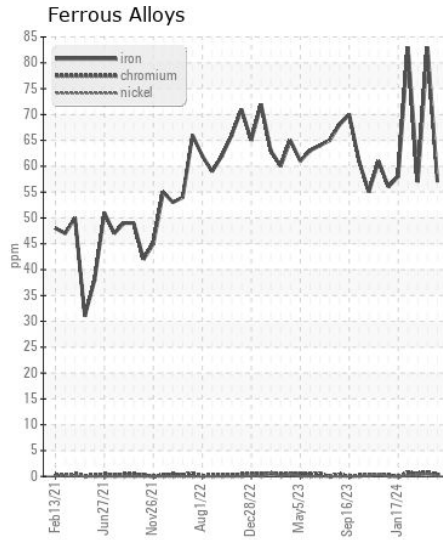
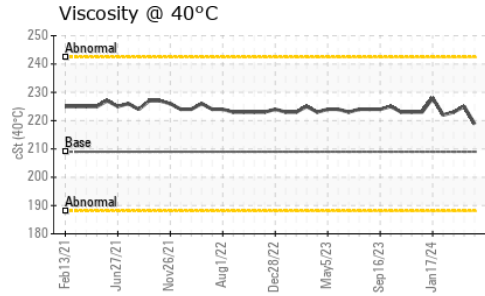
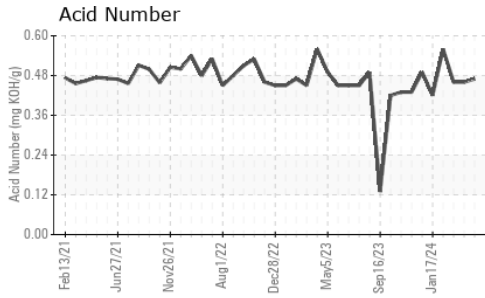
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>50	10	14	9
Potassium	ppm	ASTM D5185m	>20	1	2	2
Water		WC Method	>0.1	NEG	NEG	NEG
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	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		0	<1	3
Boron	ppm	ASTM D5185m		4	7	5
Barium	ppm	ASTM D5185m		<1	0	<1
Molybdenum	ppm	ASTM D5185m		2	3	2
Manganese	ppm	ASTM D5185m		<1	1	1
Magnesium	ppm	ASTM D5185m		8	11	4
Calcium	ppm	ASTM D5185m		63	99	63
Phosphorus	ppm	ASTM D5185m		227	315	224
Zinc	ppm	ASTM D5185m		8	12	9
Sulfur	ppm	ASTM D5185m		6787	9558	7556
Acid Number (AN)	mg KOH/g	ASTM D8045		0.47	0.46	0.46
Visc @ 40°C	cSt	ASTM D445	209	218.8	225	223



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : MW0067264
Lab Number : 06189754
Unique Number : 11046506
Test Package : MAR 2

Received : 23 May 2024
Tested : 31 May 2024
Diagnosed : 31 May 2024 - Sean Felton

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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