



WEAR	ABNORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

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

RECOMMENDATION

No corrective action is recommended at this time. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		MW0049138	MW0061834	MW0061830
Sample Date		Client Info		30 Mar 2024	03 Mar 2024	11 Feb 2024
Machine Age	hrs	Client Info		37223	36734	36261
Oil Age	hrs	Client Info		22450	21952	21488
Filter Age	hrs	Client Info		0	113	0
Oil Changed		Client Info		Not Changd	Not Changd	Not Changd
Filter Changed		Client Info		None	Not Changd	None
Sample Status				ABNORMAL	NORMAL	ABNORMAL

WEAR

The aluminum level is abnormal. All other component wear rates are normal.

Iron	ppm	ASTM D5185m	>150	83	57	83
Chromium	ppm	ASTM D5185m	>10	<1	<1	<1
Nickel	ppm	ASTM D5185m	>10	<1	<1	<1
Titanium	ppm	ASTM D5185m		1	1	2
Silver	ppm	ASTM D5185m		0	<1	<1
Aluminum	ppm	ASTM D5185m	>25	▲ 36	23	▲ 30
Lead	ppm	ASTM D5185m	>100	<1	2	0
Copper	ppm	ASTM D5185m	>50	9	6	10
Tin	ppm	ASTM D5185m	>10	<1	2	0
Vanadium	ppm	ASTM D5185m		<1	<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.

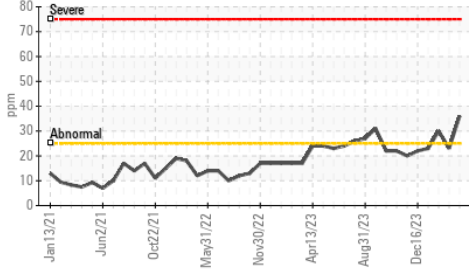
Silicon	ppm	ASTM D5185m	>50	14	9	14
Potassium	ppm	ASTM D5185m	>20	2	2	3
Water		WC Method	>0.1	NEG	NEG	NEG
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.1	NEG	NEG	NEG

FLUID CONDITION

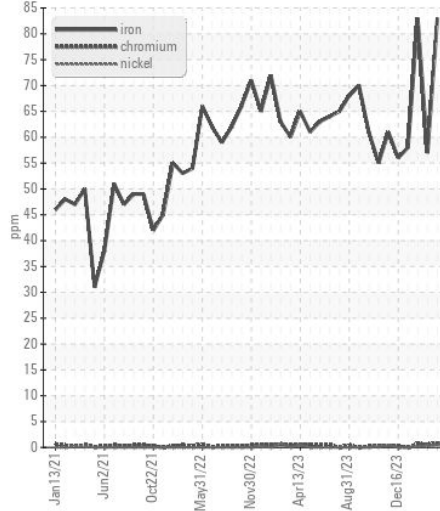
The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		<1	3	0
Boron	ppm	ASTM D5185m		7	5	8
Barium	ppm	ASTM D5185m		0	<1	<1
Molybdenum	ppm	ASTM D5185m		3	2	2
Manganese	ppm	ASTM D5185m		1	1	1
Magnesium	ppm	ASTM D5185m		11	4	10
Calcium	ppm	ASTM D5185m		99	63	86
Phosphorus	ppm	ASTM D5185m		315	224	323
Zinc	ppm	ASTM D5185m		12	9	0
Sulfur	ppm	ASTM D5185m		9558	7556	9571
Acid Number (AN)	mg KOH/g	ASTM D8045		0.46	0.46	0.56
Visc @ 40°C	cSt	ASTM D445	209	225	223	222

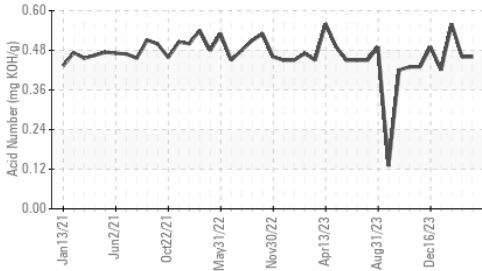
▲ Aluminum (ppm)



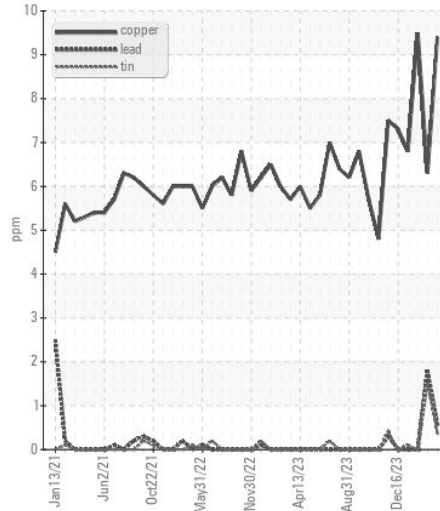
Ferrous Alloys



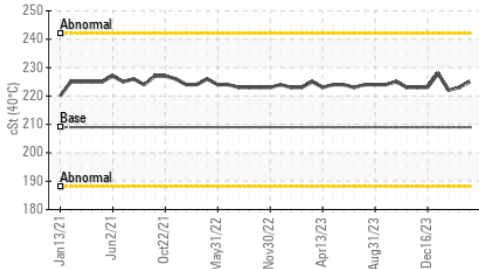
Acid Number



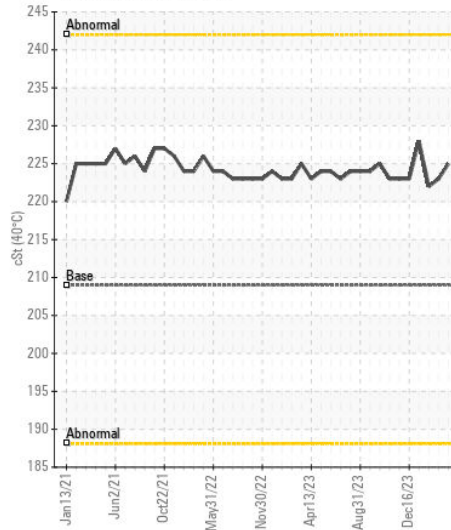
Non-ferrous Metals



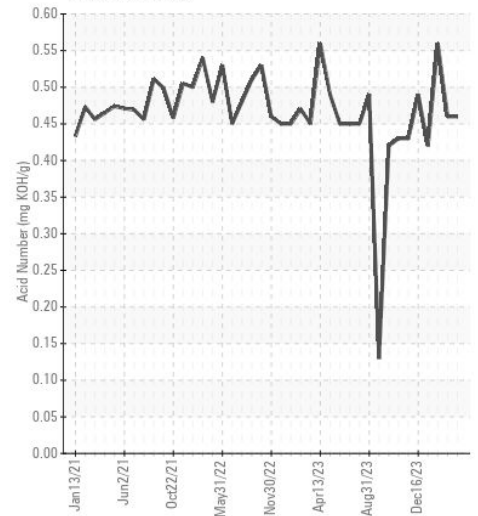
Viscosity @ 40°C



Viscosity @ 40°C



Acid Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513

Sample No. : MW0049138

Lab Number : 06148134

Unique Number : 10978212

Test Package : MAR 2

Received : 12 Apr 2024

Tested : 15 Apr 2024

Diagnosed : 17 Apr 2024 - Jonathan Hester

MAGNOLIA MARINE TRANSPORT

697 HAINING ROAD

VICKSBURG, MS

US 39183

Contact: MMT MAINTENANCE PLANNERS

mmtmaintenanceplanners@ergon.com

T: x:

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)

F: (601)638-8028