



Machine Id  
**CHA**  
Component  
**Port Reduction Gear**  
Fluid  
**Reduction Gear Oil (--- GAL)**

**RECOMMENDATION**

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

**WEAR**

All component wear rates are normal.

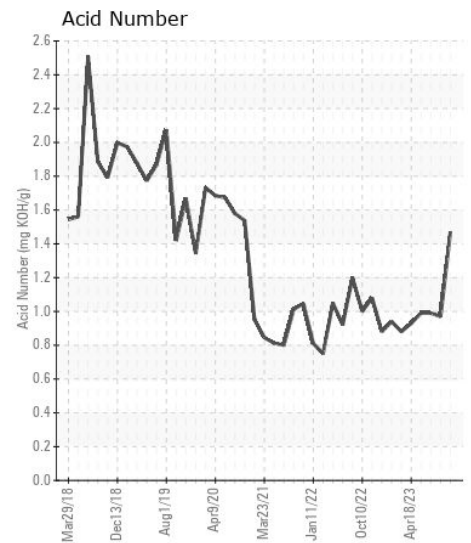
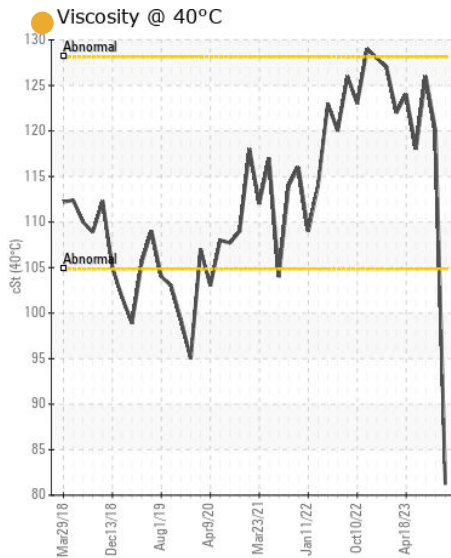
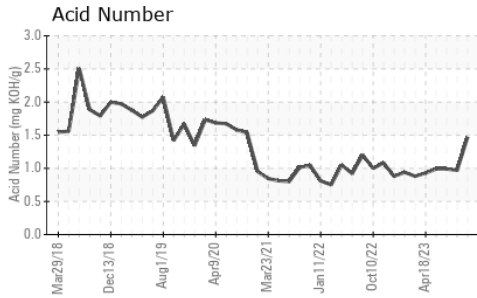
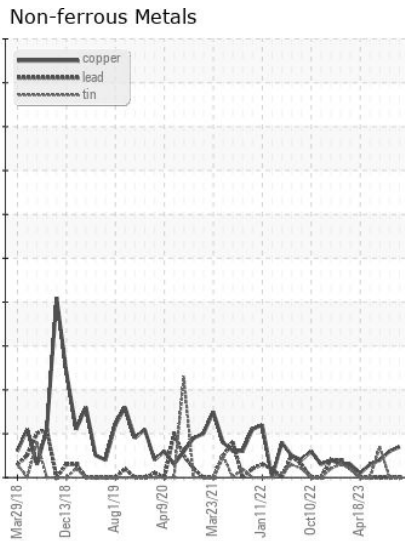
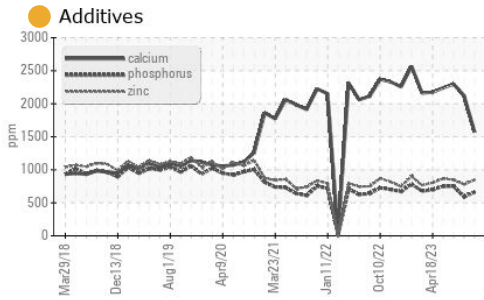
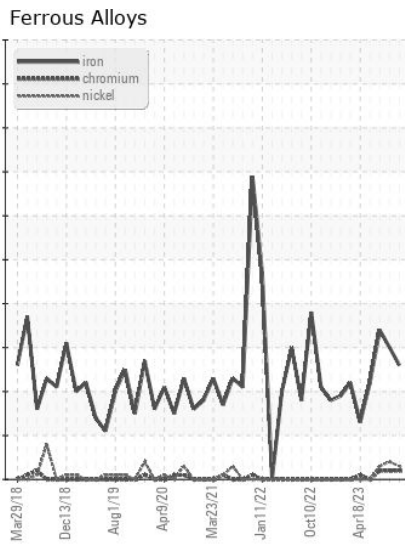
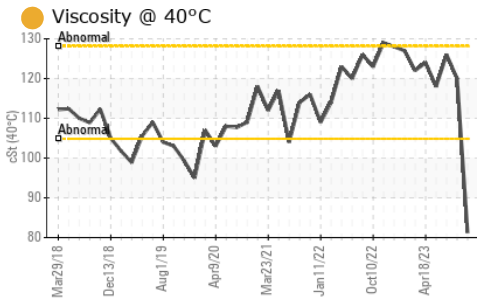
**CONTAMINATION**

There is no indication of any contamination in the oil.

**FLUID CONDITION**

The oil viscosity is lower than normal. Additive levels indicate the addition of a different brand, or type of oil. Confirm oil type. The AN level is acceptable for this fluid.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		MW06017509	MW06017498	MW05878235
Sample Date		Client Info		23 Nov 2023	23 Nov 2023	19 Jun 2023
Machine Age	hrs	Client Info		54428	53762	52221
Oil Age	hrs	Client Info		666	1537	868
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		N/A	N/A	N/A
Filter Changed		Client Info		N/A	N/A	N/A
Sample Status				ATTENTION	NORMAL	NORMAL
Iron	ppm	ASTM D5185m	>150	3	3	3
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	2	2	0
Lead	ppm	ASTM D5185m	>100	0	0	0
Copper	ppm	ASTM D5185m	>50	<1	<1	<1
Tin	ppm	ASTM D5185m	>10	0	0	<1
Vanadium	ppm	ASTM D5185m		0	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Silicon	ppm	ASTM D5185m	>50	6	4	4
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	LIGHT	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
Sodium	ppm	ASTM D5185m		0	0	2
Boron	ppm	ASTM D5185m		392	293	291
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		109	38	32
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m		500	91	79
Calcium	ppm	ASTM D5185m		1570	2122	2296
Phosphorus	ppm	ASTM D5185m		663	590	753
Zinc	ppm	ASTM D5185m		848	778	847
Sulfur	ppm	ASTM D5185m		3061	3070	3524
Acid Number (AN)	mg KOH/g	ASTM D8045		1.47	0.97	0.99
Visc @ 40°C	cSt	ASTM D445		81.2	120	126



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : MW06017509  
**Lab Number** : 06017509  
**Unique Number** : 10756653  
**Test Package** : MAR 2

**Received** : 24 Nov 2023  
**Tested** : 28 Nov 2023  
**Diagnosed** : 29 Nov 2023 - Jonathan Hester

**ILLINOIS MARINE TOWING**  
 PO BOX 391  
 LEMONT, IL  
 US 60439

Contact: RHETT DANIEL  
 rdaniel@imtowing.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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