WEAR CONTAMINATION FLUID CONDITION **NORMAL NORMAL NORMAL**

Machine Id **MRC**

Port Reduction Gear

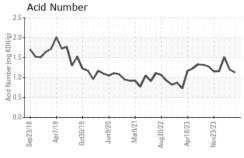
Reduction Gear Oil (GAL)							
RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
Little or no information is provided as to the component and lubricant being tested. Recommendations are therefore generic in nature and may not apply to the current application. Please forward information as to equipment type, reservoir capacity, lubricant type and any pertinent information to allow for a more accurate assessment. Resample at the next service interval to monitor. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample. Please specify the brand, type, and viscosity of the oil on your next sample.	Sample Number		Client Info		MW06152163	MW06108840	MW06071836
	Sample Date		Client Info		16 Apr 2024	04 Mar 2024	25 Jan 2024
	Machine Age	hrs	Client Info		11360	10633	9948
	Oil Age	hrs	Client Info		1412	681	1160
	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				NORMAL	NORMAL	NORMAL
WEAR	Iron	ppm	ASTM D5185m	>150	4	0	1
All component wear rates are normal.	Chromium	ppm	ASTM D5185m		0	<1	0
	Nickel	ppm	ASTM D5185m		0	0	0
	Titanium	ppm	ASTM D5185m		<1	0	0
	Silver	ppm	ASTM D5185m		0	0	0
	Aluminum	ppm	ASTM D5185m	>25	<1	2	<1
	Lead	ppm	ASTM D5185m	>100	0	0	0
	Copper	ppm	ASTM D5185m	>50	<1	<1	0
	Tin	ppm	ASTM D5185m	>10	<1	0	0
	Vanadium	ppm	ASTM D5185m		0	0	0
	White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
CONTAMINATION	Silicon	ppm	ASTM D5185m	>50	4	4	4
There is no indication of any contamination in the oil.	Potassium	ppm	ASTM D5185m		2	2	0
	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	Sodium	ppm	ASTM D5185m		2	<1	<1
The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.	Boron	ppm	ASTM D5185m		339	324	354
	Barium	ppm	ASTM D5185m		0	0	0
	Molybdenum	ppm	ASTM D5185m		35	36	35
	Manganese	ppm	ASTM D5185m		<1	0	<1
	Magnesium	ppm	ASTM D5185m		33	16	18
	Calcium	ppm	ASTM D5185m		2547	2654	2565
	Phosphorus	ppm	ASTM D5185m		831	774	813
	Zinc	ppm	ASTM D5185m		894	953	898
	Sulfur	ppm	ASTM D5185m		3674	3200	2977
	Acid Number (AN)	mg KOH/g	ASTM D8045		1.13	1.20	1.51

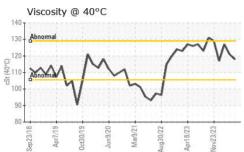
Visc @ 40°C cSt ASTM D445

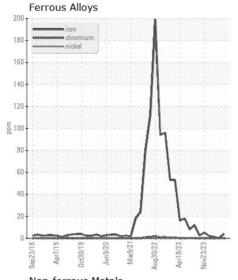
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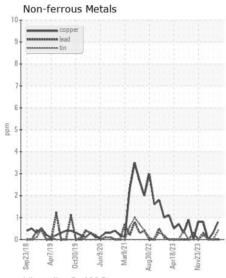
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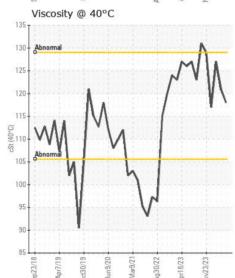
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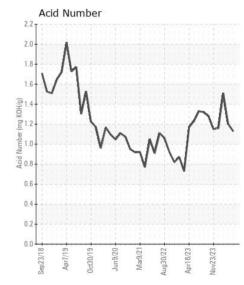
















Certificate L2367

Laboratory Sample No.

Lab Number : 06152163 Unique Number : 10982241

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 : MW06152163

Test Package : MAR 2

Received : 17 Apr 2024 **Tested** : 18 Apr 2024 Diagnosed

: 18 Apr 2024 - Wes Davis

US 60439 Contact: RHETT DANIEL

ILLINOIS MARINE TOWING

rdaniel@imtowing.com T: (630)280-4926

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: (630)739-2041

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