WEAR CONTAMINATION FLUID CONDITION

NORMAL NORMAL

Machine Id

Component **Port Reduction Gear**

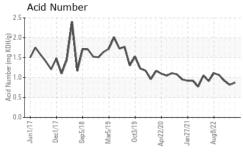
Port Reduction Gear							
{not provided} (GAL)							
RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
	Sample Number	00	Client Info	2.111071011	WC05745352	MW05718512	
Little or no information is provided as to the component and lubricant being tested. Recommendations are therefore 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 Date		Client Info		22 Jan 2023	14 Dec 2022	24 Oct 2022
	Machine Age	hrs	Client Info		5046	4299	3875
	Oil Age	hrs	Client Info		747	1194	769
	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
WEAD	la a		AOTA DE405	450			0.4
WEAR	Iron	ppm	ASTM D5185m		53	96	94
All component wear rates are normal.	Chromium	ppm	ASTM D5185m		<1	1	<1
	Nickel Titanium	ppm	ASTM D5185m ASTM D5185m	>10	0 <1	0	0 <1
	Silver	ppm	ASTM D5185m		0	<1 0	0
	Aluminum	ppm	ASTM D5185m	>25	1	1	1
	Lead	ppm	ASTM D5185m		<1	<1	0
	Copper	ppm	ASTM D5185m		1	2	2
	Tin	ppm	ASTM D5185m		<1	<1	0
	Vanadium	ppm	ASTM D5185m	7.0	0	0	0
	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		6	4	4
	Potassium	ppm	ASTM D5185m		<1	0	2
	Water		WC Method		NEG	NEG	NEG
	Silt	scalar	*Visual	NONE	NONE	NONE	NONE
	Debris	scalar	*Visual	NONE	NONE	NONE	NONE
	Sand/Dirt	scalar	*Visual	NONE NORML	NONE	NONE NORML	NONE
	Appearance Odor	scalar	*Visual	NORML	NORML NORML	NORML	NORML
	Emulsified Water		*Visual	>0.1	NEG	NEG	NEG
			·····				
FLUID CONDITION	Sodium	ppm	ASTM D5185m		3	1	0
The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.	Boron	ppm	ASTM D5185m		310	310	293
	Barium	ppm	ASTM D5185m		0	0	0
	Molybdenum	ppm	ASTM D5185m		36	41	41
	Manganese	ppm	ASTM D5185m		<1	1	1
	Magnesium	ppm	ASTM D5185m		42	90	87
	Calcium	ppm	ASTM D5185m		2483	2206	2224
	Phosphorus	ppm	ASTM D5185m		730	669	693
	Zinc	ppm	ASTM D5185m		846	745	801
	Sulfur	ppm	ASTM D5185m		3578	3008	3396
	Acid Number (AN)	mg KOH/g	ASTM D8045		0.87	0.82	0.92

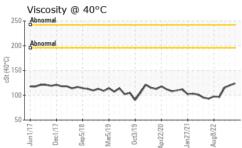
Visc @ 40°C cSt ASTM D445

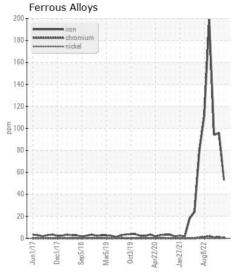
120

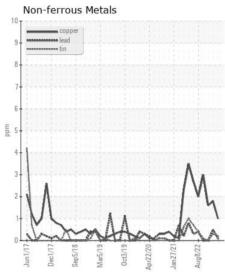
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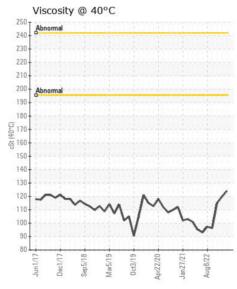
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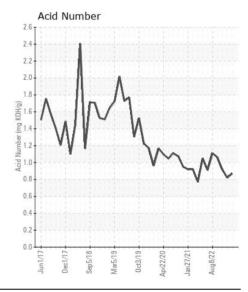
















Certificate L2367

Laboratory Sample No.

Lab Number : 05745352 Unique Number : 10299951 Test Package : MAR 2

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Received : 20 Jan 2023 : WC05745352 **Tested** : 23 Jan 2023

Diagnosed

: 23 Jan 2023 - Wes Davis

US 60439 Contact: RHETT DANIEL

ILLINOIS MARINE TOWING

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

F: (630)739-2041

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)

PO BOX 391

LEMONT, IL