WEAR CONTAMINATION **FLUID CONDITION**

NORMAL NORMAL NORMAL

Machine Id

Component

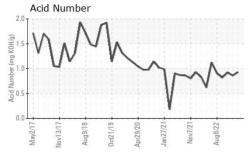
Port Reduction Gear							
{not provided} (GAL)							
RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
Little or no information is provided as to the component and lubricant being tested. Recommendations are therefore generic in nature and may not apply to the current application. 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	OOW	Client Info	LITTIU/AUTI	WC05745362	MW05718521	MW0567516
	Sample Date		Client Info		22 Jan 2023	14 Dec 2022	
	Machine Age	hrs	Client Info		64106	63364	62557
	Oil Age	hrs	Client Info		642	1607	801
	Filter Age	hrs	Client Info		0	0	0
	Oil Changed	1113	Client Info		N/A	N/A	N/A
	Filter Changed		Client Info		N/A	N/A	N/A
	Sample Status		Olletti IIIIO		NORMAL	NORMAL	NORMAL
						INOTTIVIAL	
WEAR	Iron	ppm	ASTM D5185m	>150	4	3	5
All component wear rates are normal.	Chromium	ppm	ASTM D5185m	>10	0	0	0
	Nickel	ppm	ASTM D5185m	>10	<1	0	0
	Titanium	ppm	ASTM D5185m		<1	<1	<1
	Silver	ppm	ASTM D5185m		0	0	0
	Aluminum	ppm	ASTM D5185m	>25	<1	<1	<1
	Lead	ppm	ASTM D5185m	>100	<1	<1	0
	Copper	ppm	ASTM D5185m	>50	<1	<1	<1
	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	5	4	4
There is no indication of any contamination in the oil.	Potassium	ppm	ASTM D5185m		<1	0	2
	Water	1-1-	WC Method		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	NORMI
	Odor	scalar	*Visual	NORML	NORML	NORML	NORML
	Emulsified Water	scalar	*Visual	>0.1	NEG	NEG	NEG
FLUID CONDITION	Sodium		ASTM D5185m				
	Boron	ppm	ASTM D5185m		3 317	3 300	<1 278
The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.		ppm					
	Barium Molybdenum	ppm	ASTM D5185m ASTM D5185m		0	0 35	0 32
	•	ppm			36		
	Manganese	ppm	ASTM D5185m		<1	<1	<1
	Magnesium	ppm	ASTM D5185m		64 2501	83	67 2371
	Calcium	ppm	ASTM D5185m		2591	2258	
	Phosphorus	ppm	ASTM D5185m		772	681	715
	Zinc	ppm	ASTM D5185m		894 2750	743	828
	Sulfur	ppm mg KOU/g	ASTM D5185m		3750	3015	3568 0.92
	Acid Number (AN)	mg KOH/g	ASTM D8045		0.93	0.86	0.92

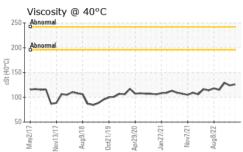
Visc @ 40°C cSt ASTM D445

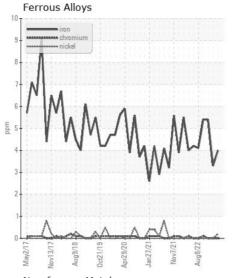
124

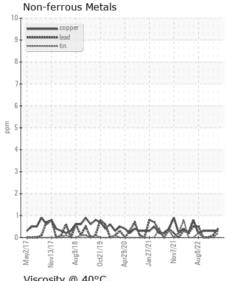
126

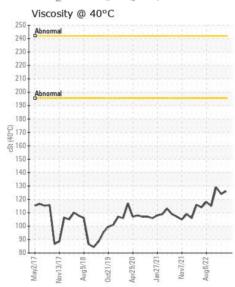
129

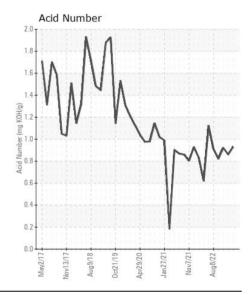
















Certificate L2367

Laboratory Sample No.

Lab Number : 05745362 Unique Number : 10299961

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 : WC05745362

Received **Tested** Diagnosed

: 20 Jan 2023 : 23 Jan 2023

: 23 Jan 2023 - Wes Davis

US 60439 Contact: RHETT DANIEL

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

ILLINOIS MARINE TOWING

Test Package : MAR 2 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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