**WEAR** CONTAMINATION **FLUID CONDITION**  **NORMAL NORMAL NORMAL** 

Machine Id

Component Port Reduction Gear

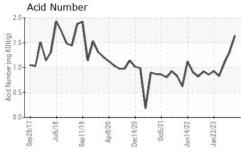
Fluid							
Reduction Gear Oil ( GAL)							
RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
Little or no information is provided as to the component and lubricant being tested. Recommendations are therefore generic in nature and may not apply to the current application. Please forward 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	OOW	Client Info	LITTIO TOTT	MW05981975	MW05863167	MW05824227
	Sample Date		Client Info		16 Oct 2023	01 Jun 2023	18 Apr 2023
	Machine Age	hrs	Client Info		22405	66976	66210
	Oil Age	hrs	Client Info		429	866	1470
	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		2	2	4
All component wear rates are normal.	Chromium	ppm	ASTM D5185m		0	0	<1
	Nickel	ppm	ASTM D5185m	>10	0	0	0
	Titanium	ppm	ASTM D5185m		<1	0	<1
	Silver	ppm	ASTM D5185m		0	0	0
	Aluminum	ppm	ASTM D5185m		1	0	1
	Lead	ppm	ASTM D5185m		<1	0	0
	Copper	ppm	ASTM D5185m		0	<1	<1
	Tin	ppm	ASTM D5185m	>10	0	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  There is no indication of any contamination in the oil.	Silicon	ppm	ASTM D5185m	>50	4	4	4
	Potassium	ppm	ASTM D5185m	>20	2	0	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	O - diam-		AOTA DEADE				
FEOID CONDITION	Sodium	ppm	ASTM D5185m		2	2	3
The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.	Boron	ppm	ASTM D5185m		382	407	372
	Barium Molybdenum	ppm	ASTM D5185m ASTM D5185m		3 45	0 41	0 46
	Manganese	ppm	ASTM D5185m		0	<1	<1
	Magnesium	ppm			74	50	94
	Calcium	ppm	ASTM D5185m ASTM D5185m		2608	3054	2750
	Phosphorus	ppm	ASTM D5185m		890	856	829
	Zinc	ppm	ASTM D5185m		1011	982	947
	Sulfur	ppm	ASTM D5185m		3299	3862	3785
	Acid Number (AN)	mg KOH/g	ASTM D3163111		1.64	1.32	1.09
	ACIO INUITIDEI (AIN)	my NOT/y	40 LINI D0043		1.04	1.02	1.00

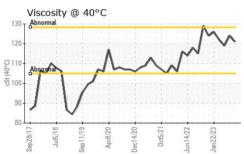
Visc @ 40°C cSt ASTM D445

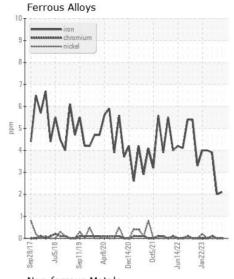
124

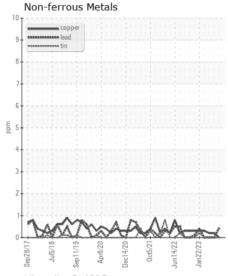
121

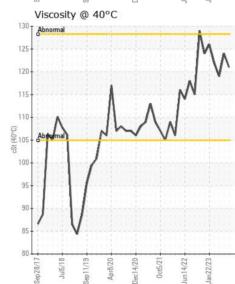
119

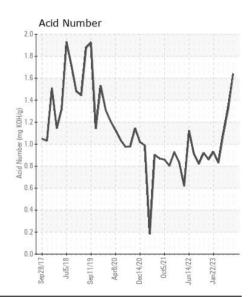














Certificate L2367

Laboratory Sample No.

Lab Number : 05981975 Unique Number : 10699270 Test Package : MAR 2

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 : MW05981975

Received **Tested** Diagnosed

: 18 Oct 2023

: 17 Oct 2023 : 18 Oct 2023 - Wes Davis

US 60439 Contact: RHETT DANIEL rdaniel@imtowing.com

**ILLINOIS MARINE TOWING** 

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