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

**NORMAL NORMAL NORMAL** 

## **BILL RODGERS**

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		Client Info		WC05745348	MW05718516	MW05527159
	Sample Date		Client Info		22 Jan 2023	14 Dec 2022	21 Apr 2022
	Machine Age	hrs	Client Info		9472	8679	8154
	Oil Age	hrs	Client Info		1350	525	1006
	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  All component wear rates are normal.	Iron	nnm	ASTM D5185m	×150	4	4	6
	Chromium	ppm	ASTM D5185m		4 <1	<1	0
	Nickel	ppm	ASTM D5185m		0	0	0
	Titanium	ppm	ASTM D5165m	>10	<1	1	3
	Silver	ppm	ASTM D5185m		<1	0	<1
	Aluminum	ppm	ASTM D5185m	>25	1	1	1
	Lead	ppm	ASTM D5185m		1	<1	1
	Copper	ppm	ASTM D5185m		<1	1	2
	Tin	ppm	ASTM D5185m		<1	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
CONTAMINATION	Silicon	ppm	ASTM D5185m		7	4	3
There is no indication of any contamination in the oil.	Potassium	ppm	ASTM D5185m		<1	0	0
	Water			>0.1	NEG	NEG	NEG
	Silt	scalar	*Visual	NONE	NONE	NONE	NONE
	Debris Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
	Appearance	scalar scalar	*Visual	NONE	NONE NORML	NONE NORML	NONE
	Odor	scalar	*Visual	NORML	NORML	NORML	NORML
	Emulsified Water		*Visual	>0.1	NEG	NEG	NEG
FLUID CONDITION	Sodium	ppm	ASTM D5185m		1	<1	1
The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.	Boron	ppm	ASTM D5185m		322	298	253
	Barium	ppm	ASTM D5185m		0	0	0
	Molybdenum	ppm	ASTM D5185m		43	39	42
	Manganese	ppm	ASTM D5185m		<1	<1	<1
	Magnesium	ppm	ASTM D5185m		105	119	212
	Calcium	ppm	ASTM D5185m		2370	2216	2262
	Phosphorus	ppm	ASTM D5185m		764	680	730
	Zinc	ppm	ASTM D5185m		881	753	807
	Sulfur	ppm	ASTM D5185m		3739	3137	2713
	Acid Number (AN)	mg KOH/g	ASTM D8045		0.90	0.72	0.79

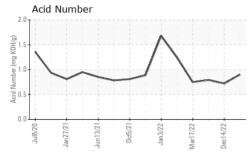
Visc @ 40°C cSt

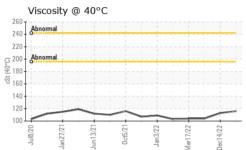
ASTM D445

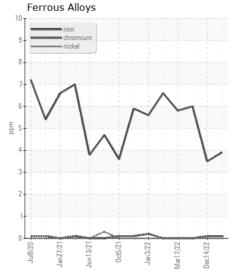
113

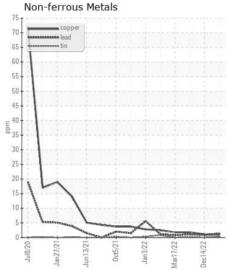
116

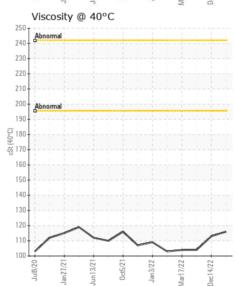
104

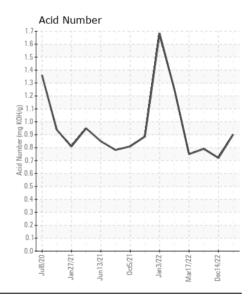














Certificate L2367

Laboratory Sample No.

Lab Number : 05745348 Unique Number: 10299947 Test Package : MAR 2

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 : WC05745348

**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** 

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)

Received

PO BOX 391

LEMONT, IL