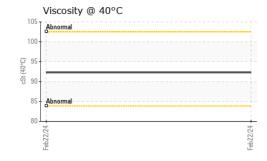
**WEAR** CONTAMINATION **FLUID CONDITION** 

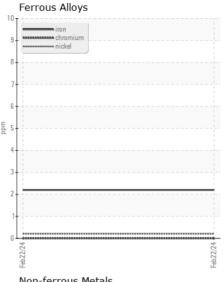
**NORMAL NORMAL NORMAL** 

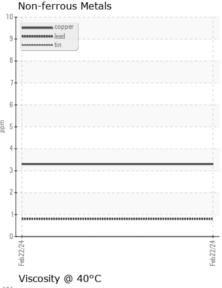
## **NO UNIT WC0787205**

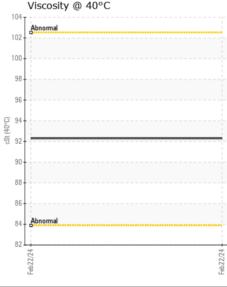
Component Unknown Component

Test	{not provided} (300 LTR)							
Listed. Recommendations are therefore generic in mature and manufacture apply in the current application. Peace service in growth or a companion of a low dischined Age. It is client Info. 0 0	RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Date   Client Info   22 Feb 2224	tested. Recommendations are therefore generic in nature and may not	Sample Number		Client Info		WC0787205		
typie, reservoir capacity, lubricant type and any pertinent information to allow from amore accurate assessment. Research assessment. R		Sample Date		Client Info		22 Feb 2024		
Filter Age   hrs   Client Info   700	117	Machine Age	hrs	Client Info		0		
Sample   Please provide more complete information on your negresariable for information reparting the proper sampling kits for your service. NOTE: We recommend using MAR1 2 test lists, this testiff includes AN to determine the suitability of the sample for continued use.    WEAR	for a more accurate assessment. Resample at the next service interval to	Oil Age	hrs	Client Info		700		
Please contact your representative for information reparding the proper sampling list for the sample for continued using MAR 2 test kits, this testelt includes AN to determine the suitability of the sample for continued using MAR 2 test kits, this testelt includes AN to determine the suitability of the sample for continued user.    VEAR	· · · · · · · · · · · · · · · · · · ·	Filter Age	hrs	Client Info		700		
Normal   N	Please contact your representative for information regarding the proper	Oil Changed		Client Info		Not Changd		
Iron	, ,	Filter Changed		Client Info		•		
All component wear rates are normal.	continued use.	Sample Status				NORMAL		
All component wear rates are normal.	WEAR	Iron	ppm	ASTM D5185(m)		2		
Nickel   ppm   ASTM D585(m)   0		Chromium		, ,				
Titanium   ppm   ASTM D5185m   0         Silver   ppm   ASTM D5185m   0         Aluminum   ppm   ASTM D5185m   0         Lead   ppm   ASTM D5185m   0         Copper   ppm   ASTM D5185m   3         Tin   ppm   ASTM D5185m   0   0       Vanadium   ppm   ASTM D5185m   0   0       Vanadium   ppm   ASTM D5185m   0   0       White Metal   scalar   Visual*   NONE   NONE   NONE   NONE     Vallow Metal   scalar   Visual*   NONE   NONE   NONE   NONE   NONE   NONE     Vanadium   ppm   ASTM D5185m   0   0       Vallow Metal   scalar   Visual*   NONE		Nickel		. ,		<1		
Aluminum   ppm   ASTM DS185(m)   <1           Copper   ppm   ASTM DS185(m)   <1           Tin   ppm   ASTM DS185(m)   0         Tin   ppm   ASTM DS185(m)   0         Vanadium   ppm   ASTM DS185(m)   0         Valual*   NONE   NONE         Valual*   NORML		Titanium		ASTM D5185(m)		0		
Lead		Silver	ppm	ASTM D5185(m)		0		
Copper		Aluminum	ppm	ASTM D5185(m)		<1		
Tin		Lead	ppm	ASTM D5185(m)		<1		
Vanadium   ppm   ASTM D5185(m)   0         White Metal   scalar   Visual*   NONE   NONE   NONE       Yellow Metal   scalar   Visual*   NONE   NONE   NONE       Yellow Metal   scalar   Visual*   NONE   NONE   NONE       There is no indication of any contamination in the component (unconfirmed).		Copper	ppm	ASTM D5185(m)		3		
White Metal   Scalar   Visual*   NONE   NONE   NONE   NONE   Visual*   NONE		Tin	ppm	ASTM D5185(m)		0		
Yellow Metal   scalar   Visual*   NONE   NONE		Vanadium	ppm	ASTM D5185(m)		0		
Silicon   ppm   ASTM D5185(m)   <1		White Metal	scalar	Visual*	NONE	NONE		
Potassium   ppm   ASTM DS185(m)   >20   <1           Water   WC Method   NEG           Silt   scalar   Visual*   NONE   NONE           Debris   scalar   Visual*   NONE   NONE   NONE           Debris   scalar   Visual*   NONE   NONE   NONE           Appearance   scalar   Visual*   NORML   NORM		Yellow Metal	scalar	Visual*	NONE	NONE		
Potassium   ppm   ASTM DS185(m)   >20   <1           Water   WC Method   NEG           Silt   scalar   Visual*   NONE   NONE           Debris   scalar   Visual*   NONE   NONE   NONE           Debris   scalar   Visual*   NONE   NONE   NONE           Appearance   scalar   Visual*   NORML   NORM	CONTAMINATION	Silicon	nnm	ΔSTM D5185(m)		_1		
Water   WC Method   NEG				, ,	>20			
Silt	·		ррпп	1 /	720			
Debris   Scalar   Visual*   NONE   NONE   Sand/Dirt   Scalar   Visual*   NONE   NONE   Sand/Dirt   Scalar   Visual*   NONE   NONE   Sand/Dirt   Scalar   Visual*   NORML   NORML   Sometiment   Someti			scalar		NONE			
Sand/Dirt   scalar   Visual*   NONE   NONE   NONE   NONE   NORML   N								
Codor   Scalar   Visual*   NORML   NORML   NORML   FEMULSIFIED   NEG           Emulsified Water   Scalar   Visual*   NEG           The condition of the sample is acceptable for the time in service (unconfirmed).   Sodium   ppm   ASTM D5185(m)   O           Boron   ppm   ASTM D5185(m)   O           Molybdenum   ppm   ASTM D5185(m)   O           Magnesee   ppm   ASTM D5185(m)   O           Calcium   ppm   ASTM D5185(m)   41           Phosphorus   ppm   ASTM D5185(m)   407           Zinc   ppm   ASTM D5185(m)   500           Sulfur   ppm   ASTM D5185(m)   6567		Sand/Dirt	scalar	Visual*	NONE	NONE		
Emulsified Water   scalar   Visual*   NEG		Appearance	scalar	Visual*	NORML	NORML		
Sodium   ppm   ASTM D5185(m)   Condition of the sample is acceptable for the time in service (unconfirmed).   Sodium   ppm   ASTM D5185(m)   Document   Condition of the sample is acceptable for the time in service (unconfirmed).   Barium   ppm   ASTM D5185(m)   Document   Condition of the sample is acceptable for the time in service (unconfirmed).   Barium   ppm   ASTM D5185(m)   Document   Condition   Condit		Odor	scalar	Visual*	NORML	NORML		
Boron   ppm   ASTM D5185(m)   0		Emulsified Water	scalar	Visual*		NEG		
Boron   ppm   ASTM D5185(m)   0	ELUID CONDITION	O - di		AOTM D5405()				
Barium   ppm   ASTM D5185(m)   0         Molybdenum   ppm   ASTM D5185(m)   0         Manganese   ppm   ASTM D5185(m)   0         Magnesium   ppm   ASTM D5185(m)   0         Calcium   ppm   ASTM D5185(m)   41         Phosphorus   ppm   ASTM D5185(m)   407         Zinc   ppm   ASTM D5185(m)   500         Sulfur   ppm   ASTM D5185(m)   6567	The condition of the sample is acceptable for the time in service			, ,				
Molybdenum         ppm         ASTM D5185(m)         0             Manganese         ppm         ASTM D5185(m)         0             Magnesium         ppm         ASTM D5185(m)         <1             Calcium         ppm         ASTM D5185(m)         41             Phosphorus         ppm         ASTM D5185(m)         407             Zinc         ppm         ASTM D5185(m)         500             Sulfur         ppm         ASTM D5185(m)         6567				, ,				
Manganese         ppm         ASTM D5185(m)         0             Magnesium         ppm         ASTM D5185(m)         <1				, ,				
Magnesium         ppm         ASTM D5185(m)         <1		•		, ,				
Calcium         ppm         ASTM D5185(m)         41             Phosphorus         ppm         ASTM D5185(m)         407             Zinc         ppm         ASTM D5185(m)         500             Sulfur         ppm         ASTM D5185(m)         6567				, ,				
Phosphorus         ppm         ASTM D5185(m)         407             Zinc         ppm         ASTM D5185(m)         500             Sulfur         ppm         ASTM D5185(m)         6567		J		\ /				
Zinc         ppm         ASTM D5185(m)         500             Sulfur         ppm         ASTM D5185(m)         6567				, ,				
Sulfur         ppm         ASTM D5185(m)         6567		•		, ,				
				. ,				











CALA ISO 17025:2017 Accredited Laboratory

Laboratory Sample No.

: WC0787205 Lab Number : 02620032

Unique Number : 5737142 Test Package : MAR 1

Received : 05 Mar 2024 **Tested** 

Diagnosed

: 05 Mar 2024 : 06 Mar 2024 - Kevin Marson

: WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 Horizon Maritime Services Ltd. - K.J. Gardner 101 Research Drive, Main Floor

Dartmouth, NS CA B2Y 4T6

Contact: Engine Room chiefeng.kjgardner@horizonmaritime.com

To discuss this sample report, contact Customer Service at 1-800-268-2131. Test denoted (\*) outside scope of accreditation, (m) method modified, (e) tested at external lab. Validity of results and interpretation are based on the sample and information as supplied.

T:

F: