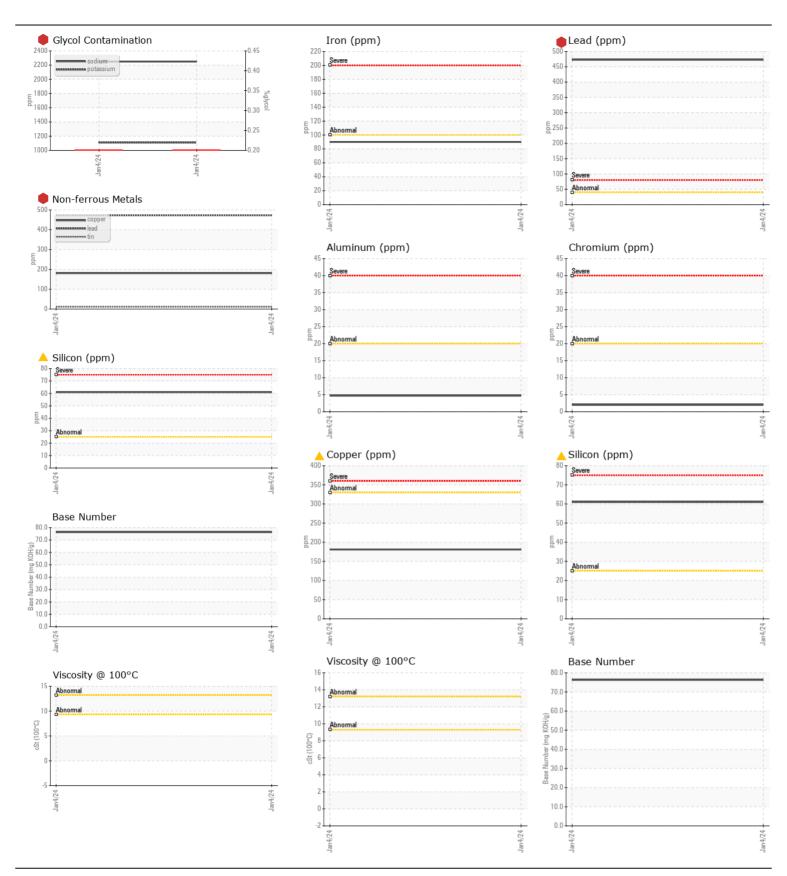
WEAR CONTAMINATION **FLUID CONDITION**

SEVERE SEVERE ABNORMAL

INTERNATIONAL GLEN HORST

Component Diesel Engine							
UNITECH SAE 30 (GAL)							
RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
We advise that you check for the source of the coolant leak. Check for low coolant level. Oil and filter change at the time of sampling has been noted. We advise that you inspect for the source(s) of wear. We recommend an early resample to monitor this condition.	Sample Number		Client Info		DC0030681		
	Sample Date		Client Info		04 Jan 2024		
	Machine Age	hrs	Client Info		1320		
	Oil Age	hrs	Client Info		114		
	Filter Age	hrs	Client Info		114		
	Oil Changed		Client Info		Changed		
	Filter Changed		Client Info		Changed		
	Sample Status				SEVERE		
WEAR	Iron	ppm	ASTM D5185m	>100	90		
WEAR	Chromium	ppm	ASTM D5185m		2		
Bearing and/or bushing wear is indicated.	Nickel	ppm	ASTM D5185m		1		
	Titanium	ppm	ASTM D5185m		<1		
	Silver	ppm	ASTM D5185m	>3	0		
	Aluminum	ppm	ASTM D5185m		5		
	Lead	ppm	ASTM D5185m	>40	473		
	Copper	ppm	ASTM D5185m	>330	<u> 181</u>		
	Tin	ppm	ASTM D5185m	>15	11		
	Vanadium	ppm	ASTM D5185m		<1		
	White Metal	scalar	*Visual	NONE	NONE		
	Yellow Metal	scalar	*Visual	NONE	NONE		
CONTAMINATION	0.11.		AOTH DE40E	05			
CONTAMINATION Sodium and/or potassium levels are high. There is a high concentration of glycol present in the oil. Elemental level of silicon (Si) above normal indicating ingress of seal material.	Silicon	ppm	ASTM D5185m		<u>▲</u> 61		
	Potassium	ppm	ASTM D5185m		<u> 1109</u>		
	Fuel		WC Method		<1.0		
	Water	0/	*ASTM D2982	>0.2	NEG		
	Glycol	%		. 0	0.20		
	Soot % Nitration	Abs/cm	*ASTM D7844 *ASTM D7624	>20	1.3 99.2		
	Sulfation	Abs/.1mm	*ASTM D7024	-	99.2 4.1		
	Silt	scalar	*Visual	NONE	NONE		
	Debris	scalar	*Visual	NONE	NONE		
	Sand/Dirt	scalar	*Visual	NONE	NONE		
	Appearance	scalar	*Visual	NORML	NORML		
	Odor	scalar		NORML	NORML		
	Emulsified Water		*Visual	>0.2	NEG		
FLUID CONDITION	Sodium	ppm	ASTM D5185m		<u> </u>		
The BN result indicates that there is suitable alkalinity remaining in the oil. The oil is no longer serviceable due to the presence of contaminants.	Boron	ppm	ASTM D5185m		217		
	Barium	ppm	ASTM D5185m		6		
	Molybdenum	ppm	ASTM D5185m		83		
	Manganese	ppm	ASTM D5185m		1		
	Magnesium	ppm	ASTM D5185m		168		
	Calcium	ppm	ASTM D5185m		530		
	Phosphorus	ppm	ASTM D5185m		1308		
	Zinc	ppm	ASTM D5185m		502 1771		
	Sulfur Oxidation	ppm Abs/.1mm	ASTM D5185m *ASTM D7414	>25	1771 84.5		
	Base Number (BN)		ASTM D7414 ASTM D2896	>20	76.3		
	Dase MUITIDEL (DIV)	ilig KOH/g	MO 1 IVI D2090		70.3		





Laboratory Sample No. Lab Number **Unique Number**

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

: 06058691 : 10830073

: DC0030681 Recieved : 11 Jan 2024 : 15 Jan 2024 Diagnosed Diagnostician : Jonathan Hester

Test Package : MOB 1 (Additional Tests: Glycol, TBN) 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) **DM REPAIR**

6018 MANHEIM RD WAYNESBORO, PA US 17268

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