**WEAR CONTAMINATION FLUID CONDITION** 

**NORMAL NORMAL** NORMAL

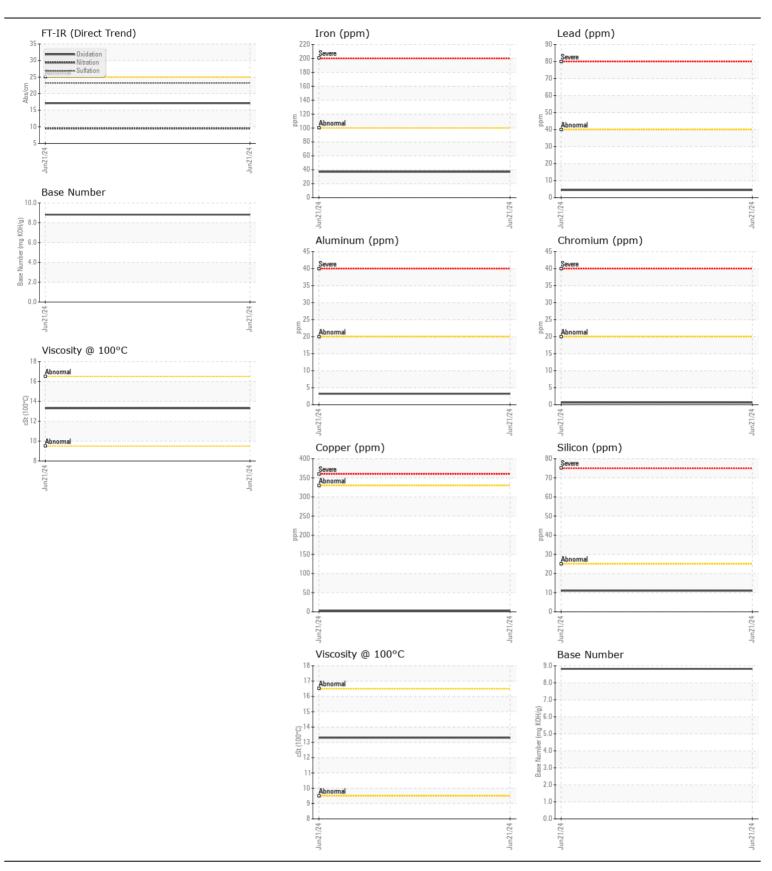
## {UNASSIGNED}

JD 9570 Component

**Diesel Engine** 

DIESEL FUGINE OIL (--- GAL)

Test	DIESEL ENGINE OIL ( GAL)							
Sample Number   Client Info	RECOMMENDATION	Test	HOM	Method	Limit/Ahn	Current	History1	History2
Resample at the next service interval to monitor. The fluid was not specified, however, a fluid match indicates that this fluid is SAE 40   Machine Age   hirs   Client Info   500	Resample at the next service interval to monitor. The fluid was not specified, however, a fluid match indicates that this fluid is SAE 40 Diesel Engine Oil. Please confirm the oil type and grade, and specify the brand of the oil on your next sample. Please specify the component		00111		Littleyton			
Machine Age   brs   Client Info     4581		•						
Disable Englane Unit makes commitmed in the oil on your next sample. Please specify the component make and model with your next sample. Please specify the component make and model with your next sample.   Please specify the component make and model with your next sample.   Please specify the component make and model with your next sample.   Please specify the component make and model with your next sample.   Please specify the component sample status   Please status   P			hrs					
### Piler Age   Mag		•						
Oil Changed   Client Info   Changed   Client Info   Changed   Client Info   Changed   Changed								
Filter Changed Sample Status		•	1113					
NORMAL   N								
Iron		•		Olletti IIIIO		_		
All component wear rates are normal.    Chromium   ppm   ASTM D5185m   >40   0         Titanium   ppm   ASTM D5185m   >40   0         Titanium   ppm   ASTM D5185m   >3   0         All uminum   ppm   ASTM D5185m   >3   0         All uminum   ppm   ASTM D5185m   >3   0         All uminum   ppm   ASTM D5185m   >40   4         All uminum   ppm   ASTM D5185m   >40   4         Copper   ppm   ASTM D5185m   >40   4         Copper   ppm   ASTM D5185m   >40   4         Tin   ppm   ASTM D5185m   >40   4         Tin   ppm   ASTM D5185m   >40   4         Vanadium   ppm   ASTM D5185m   >40   0         Vanadium   ppm   ASTM D5185m   >40   0         Vanadium   ppm   ASTM D5185m   >0         Vellow Metal   scalar   Visual   NONE   NONE       Vellow Metal   scalar   Visual   NONE   NONE       Potassium   ppm   ASTM D5185m   >20   2       Fuel   WC Method   >5   -1.0       Glycol   WC Method   >5   -1.0       Glycol   WC Method   >5   -1.0       Glycol   WC Method   >5   -1.0       Soot   %   NSI m0784   >3   0.8       Silit   scalar   Visual   NONE   NONE       Soot   %   NSI m0784   >3   0.8       Silit   scalar   Visual   NONE   NONE       Sand/Dirt   scalar   Visual   NONE   NONE       Sand/Dirt   scalar   Visual   NONE   NONE       Soot   Scalar   Visual   NONE   NORE       Soot   Scalar   Visual   NORE       Soot   Scalar   Visual   NORE	<u></u>					INONWAL		
All component wear rates are normal.    Chromium   ppm   ASTM D5185m   >40   0         Titanium   ppm   ASTM D5185m   >40   0         Titanium   ppm   ASTM D5185m   >3   0         All uminum   ppm   ASTM D5185m   >3   0         All uminum   ppm   ASTM D5185m   >3   0         All uminum   ppm   ASTM D5185m   >40   4         All uminum   ppm   ASTM D5185m   >40   4         Copper   ppm   ASTM D5185m   >40   4         Copper   ppm   ASTM D5185m   >40   4         Tin   ppm   ASTM D5185m   >40   4         Tin   ppm   ASTM D5185m   >40   4         Vanadium   ppm   ASTM D5185m   >40   0         Vanadium   ppm   ASTM D5185m   >40   0         Vanadium   ppm   ASTM D5185m   >0         Vellow Metal   scalar   Visual   NONE   NONE       Vellow Metal   scalar   Visual   NONE   NONE       Potassium   ppm   ASTM D5185m   >20   2       Fuel   WC Method   >5   -1.0       Glycol   WC Method   >5   -1.0       Glycol   WC Method   >5   -1.0       Glycol   WC Method   >5   -1.0       Soot   %   NSI m0784   >3   0.8       Silit   scalar   Visual   NONE   NONE       Soot   %   NSI m0784   >3   0.8       Silit   scalar   Visual   NONE   NONE       Sand/Dirt   scalar   Visual   NONE   NONE       Sand/Dirt   scalar   Visual   NONE   NONE       Soot   Scalar   Visual   NONE   NORE       Soot   Scalar   Visual   NORE       Soot   Scalar   Visual   NORE	WFAR	Iron	ppm	ASTM D5185m	>100	37		
Nickel   ppm   ASTM D5185m   44   0   0   0   0   0   0   0   0		Chromium		ASTM D5185m	>20	<1		
Titanium   ppm   ASTM D5185m   30 0	All component wear rates are normal.	Nickel				0		
Silver		Titanium		ASTM D5185m		0		
Aluminum   ppm   ASTM D5185m   >20   3		Silver			>3			
Lead   ppm   ASTM D5185m   34   34   34   34   34   34   34   3								
Copper								
Tin								
Vanadium   Vanadium								
White Metal   Yellow Metal   Scalar   *Visual   NONE   N								
Yellow Metal   Scalar   *Visual   NONE   NONE           CONTAMINATION       There is no indication of any contamination in the oil.       Potassium   ppm   ASTM D5185m   >20   2           Potassium   ppm   ASTM D5185m   >20   2           Water   WC Method   >5   <1.0           Glycol   WC Method   >0.2   NEG           Glycol   WC Method   NEG           Soot %   %   *ASTM D7644   >3   0.8           Sulfation   Abs/cm   *ASTM D5185m   NONE   NONE           Sulfation   Abs/cm   *ASTM D5185m   NONE   NONE           Sulfation   Abs/cm   *Visual   NONE   NONE           Sulfation   *Visual   NONE   NONE           Sulfation   *Vi					NONE	-		
Silicon   ppm   ASTM D5185m   >25   11         Potassium   ppm   ASTM D5185m   >20   2         Fuel   WC Method   >5   <1.0       Water   WC Method   >0.2   NEG         Glycol   WC Method   >0.2   NEG         Soot % % 'ASTM D7844   >3   0.8         Sulfation   Abs/mm 'ASTM D7845   >30   9.5         Sulfation   Abs/mm 'ASTM D7845   >30   23.2         Silt   scalar 'Visual   NONE   NONE   NONE     Debris   scalar 'Visual   NONE   NONE   NONE         Appearance   scalar 'Visual   NONE   NORML		Yellow Metal						
Potassium								
Potassium	CONTAMINATION	Silicon	ppm	ASTM D5185m	>25	11		
Water   WC Method   >0.2   NEG           Glycol   WC Method   >0.2   NEG           Glycol   WC Method   NEG           Soot %		Potassium	ppm	ASTM D5185m	>20	2		
Glycol	There is no indication of any contamination in the oil.	Fuel		WC Method	>5	<1.0		
Soot %		Water		WC Method	>0.2	NEG		
Nitration   Abs/cm   *ASTM D7624   >20   9.5         Sulfation   Abs/cm   *ASTM D7615   >30   23.2         Silt   scalar   *Visual   NONE   NONE   NONE         Debris   scalar   *Visual   NONE   NONE   NONE         Debris   scalar   *Visual   NONE   NONE   NONE   NONE         Sand/Dirt   scalar   *Visual   NONE   NORML   N		Glycol		WC Method		NEG		
Sulfation   Abs/.tmm   *ASTM.D7415   >30   23.2		Soot %	%	*ASTM D7844	>3	0.8		
Silt   scalar *Visual   NONE   NONE   NONE   NONE   Sand/Dirts   scalar *Visual   NONE   NORML		Nitration	Abs/cm	*ASTM D7624	>20	9.5		
Debris   Scalar   *Visual   NONE   NONE   NONE   Sand/Dirt   Scalar   *Visual   NONE   NONE		Sulfation	Abs/.1mm	*ASTM D7415	>30	23.2		
Sand/Dirt   scalar   *Visual   NONE   NONE             Appearance   scalar   *Visual   NORML   NORML   NORML           Odor   scalar   *Visual   NORML   N		Silt	scalar	*Visual	NONE	NONE		
Appearance   scalar   *Visual   NORML   NORM		Debris	scalar	*Visual	NONE	NONE		
Codor   Scalar *Visual   NORML   NORML   Full   Scalar *Visual   Scalar *Visual *Scalar		Sand/Dirt	scalar	*Visual	NONE	NONE		
Emulsified Water   scalar   *Visual   >0.2   NEG		Appearance	scalar	*Visual	NORML	NORML		
FLUID CONDITION  The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.  Sodium ppm ASTM D5185m >75 0  Barium ppm ASTM D5185m 0  Molybdenum ppm ASTM D5185m 95  Manganese ppm ASTM D5185m 0  Magnesium ppm ASTM D5185m 0  Calcium ppm ASTM D5185m 1236		Odor	scalar	*Visual	NORML	NORML		
Boron   ppm   ASTM D5185m   66           Barium   ppm   ASTM D5185m   0           Molybdenum   ppm   ASTM D5185m   95           Manganese   ppm   ASTM D5185m   0           Manganese   ppm   ASTM D5185m   0           Manganese   ppm   ASTM D5185m   891           Calcium   ppm   ASTM D5185m   1236		<b>Emulsified Water</b>	scalar	*Visual	>0.2	NEG		
Boron   ppm   ASTM D5185m   66           Barium   ppm   ASTM D5185m   0           Molybdenum   ppm   ASTM D5185m   95           Manganese   ppm   ASTM D5185m   0           Manganese   ppm   ASTM D5185m   0           Manganese   ppm   ASTM D5185m   891           Calcium   ppm   ASTM D5185m   1236								
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.  Barium ppm ASTM D5185m 0 Molybdenum ppm ASTM D5185m 0 Magnesium ppm ASTM D5185m 0 Calcium ppm ASTM D5185m 1236	FLUID CONDITION				>75			
oil. The condition of the oil is suitable for further service.    Molybdenum   ppm   ASTM D5185m   95         Manganese   ppm   ASTM D5185m   0         Magnesium   ppm   ASTM D5185m   891         Calcium   ppm   ASTM D5185m   1236	The BN result indicates that there is suitable alkalinity remaining in the							
Molybdenum         ppm         ASTM D5185m         95             Manganese         ppm         ASTM D5185m         0             Magnesium         ppm         ASTM D5185m         891             Calcium         ppm         ASTM D5185m         1236	,							
Magnesium         ppm         ASTM D5185m         891             Calcium         ppm         ASTM D5185m         1236		-	ppm					
Calcium         ppm         ASTM D5185m         1236								
		•						
Phosphorus ppm ASTM D5185m 925								
			ppm					
Zinc ppm ASTM D5185m 1331								
Sulfur         ppm         ASTM D5185m         2817								
Oxidation		Oxidation			>25			
Base Number (BN)         mg KOH/g         ASTM D2896         8.82								
Visc @ 100°C cSt ASTM D445 ( 13.3 )		, ,						





Certificate L2367

Laboratory Sample No.

Lab Number : 06221430 Unique Number : 11099627

: KFS0006058 Test Package : MOB 2

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Received : 26 Jun 2024 **Tested** : 27 Jun 2024

Diagnosed : 27 Jun 2024 - Wes Davis

HARNESS LLC 855 N JAMES CAMPBELL BLVD COLUMBIA, TN US 38401

Contact: BEN HARNESS ben@slectharness.com

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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