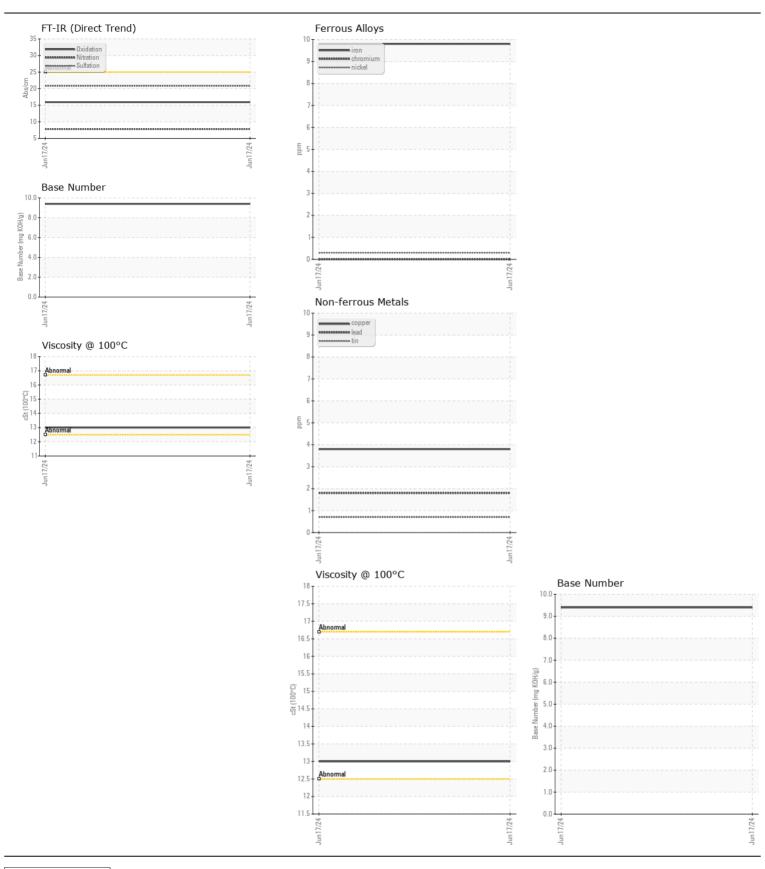
**WEAR** CONTAMINATION **FLUID CONDITION**  **NORMAL NORMAL NORMAL** 

Machine Id

## KLEEMANN MSS802iEVO K1020238

Component
Diesel Engine

{not provided} ( GAL)							
RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
Resample at the next service interval to monitor. Please specify the brand, type, and viscosity of the oil on your next sample.	Sample Number		Client Info		JR0221370		
	Sample Date		Client Info		17 Jun 2024		
	Machine Age	hrs	Client Info		1017		
	Oil Age	hrs	Client Info		0		
	Filter Age	hrs	Client Info		0		
	Oil Changed		Client Info		Changed		
	Filter Changed		Client Info		N/A		
	Sample Status				NORMAL		
WEAR	Iron	ppm	ASTM D5185m	>100	10		
	Chromium	ppm	ASTM D5185m		0		
All component wear rates are normal.	Nickel	ppm	ASTM D5185m		<1		
	Titanium	ppm	ASTM D5185m		0		
	Silver	ppm	ASTM D5185m	>3	0		
	Aluminum	ppm	ASTM D5185m		6		
	Lead	ppm	ASTM D5185m		2		
	Copper	ppm	ASTM D5185m	>330	4		
	Tin	ppm	ASTM D5185m	>15	<1		
	Vanadium	ppm	ASTM D5185m		<1		
	White Metal	scalar	*Visual	NONE	NONE		
	Yellow Metal	scalar	*Visual	NONE	NONE		
CONTAMINATION	Silicon	ppm	ASTM D5185m	>25	8		
There is no indication of any contamination in the oil.	Potassium	ppm	ASTM D5185m	>20	3		
	Fuel		WC Method	>5	<1.0		
	Water		WC Method	>0.2	NEG		
	Glycol		WC Method		NEG		
	Soot %	%	*ASTM D7844	>3	0.1		
	Nitration	Abs/cm	*ASTM D7624	>20	7.8		
	Sulfation	Abs/.1mm	*ASTM D7415	>30	20.8		
	Silt	scalar	*Visual	NONE	NONE		
	Debris	scalar	*Visual	NONE	NONE		
	Sand/Dirt	scalar	*Visual	NONE	NONE		
	Appearance	scalar	*Visual	NORML	NORML		
	Odor	scalar	*Visual	NORML	NORML		
	Emulsified Water	scalar	*Visual	>0.2	NEG		
FLUID CONDITION	Sodium	ppm	ASTM D5185m		2		
	Boron	ppm	ASTM D5185m		255		
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		260		
	Manganese	ppm	ASTM D5185m		1		
	Magnesium	ppm	ASTM D5185m		933		
	Calcium	ppm	ASTM D5185m		1520		
	Phosphorus	ppm	ASTM D5185m		936		
	Zinc	ppm	ASTM D5185m		1160		
	Sulfur	ppm	ASTM D5185m		3625		
	Oxidation	Abs/.1mm	*ASTM D7414	>25	15.9		
	Base Number (BN)	0 0	ASTM D2896		9.4		
	Visc @ 100°C	cSt	ASTM D445		13.0		





Certificate L2367

Laboratory Sample No.

Lab Number : 06216727

: JR0221370 Unique Number : 11089591

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

**Tested** Diagnosed

: 21 Jun 2024 : 24 Jun 2024

: 24 Jun 2024 - Wes Davis

JRE - STEPHENSON 245 YARDMASTER COURT STEPHENSON, VA US 22656-1761

Contact: PHIL DAUGHERTY

Test Package : CONST (Additional Tests: TBN) To discuss this sample report, contact Customer Service at 1-800-237-1369. pdaugherty@jamesriverequipment.com \* - 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)

F: (540)693-2588

T: x: