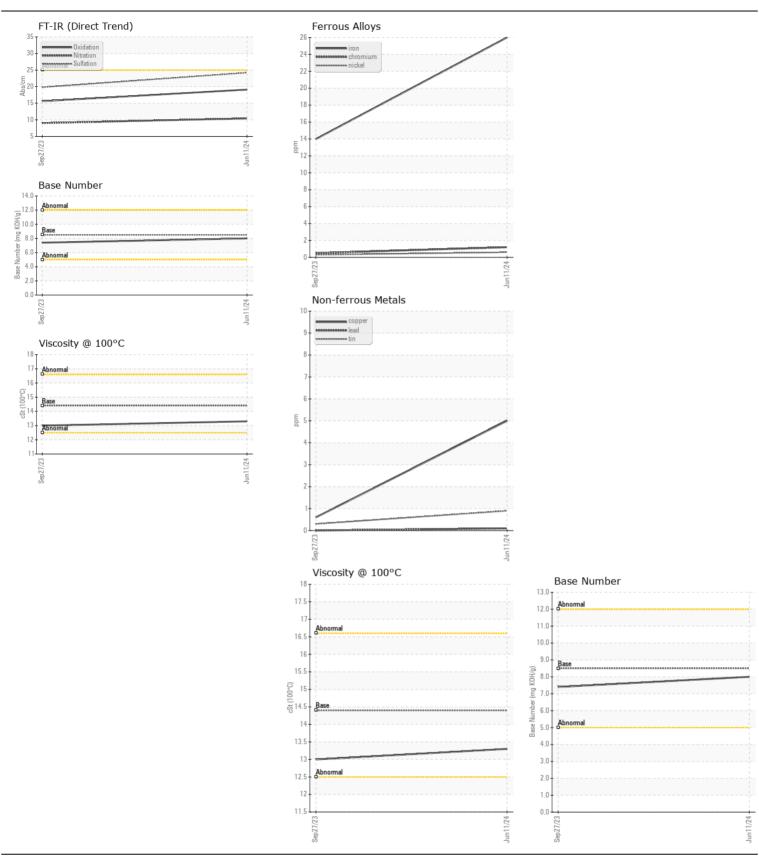
WEAR CONTAMINATION **FLUID CONDITION** **NORMAL NORMAL NORMAL**

Machine Id

H1860918

Component Diesel Engine

RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History
Resample at the next service interval to monitor. Please specify the component make and model with your next sample. Please specify the brand, type, and viscosity of the oil on your next sample.	Sample Number		Client Info		JR0212042	JR0179209	
	Sample Date		Client Info		11 Jun 2024	27 Sep 2023	
	Machine Age	hrs	Client Info		1992	1510	
	Oil Age	hrs	Client Info		0	0	
	Filter Age	hrs	Client Info		0	0	
	Oil Changed		Client Info		Changed	Changed	
	Filter Changed		Client Info		Changed	Changed	
	Sample Status				NORMAL	NORMAL	
/EAR	Iron	ppm	ASTM D5185m	>100	26	14	
	Chromium	ppm	ASTM D5185m		1	<1	
All component wear rates are normal.	Nickel	ppm	ASTM D5185m		- <1	<1	
	Titanium	ppm	ASTM D5185m	7 7	<1	<1	
	Silver	ppm	ASTM D5185m	>3	<1	0	
	Aluminum	ppm	ASTM D5185m		6	2	
	Lead	ppm		>40	<1	0	
	Copper	ppm	ASTM D5185m		5	<1	
	Tin	ppm	ASTM D5185m		<1	<1	
	Vanadium	ppm	ASTM D5185m	7.0	<1	0	
	White Metal	scalar	*Visual	NONE	NONE	NONE	
	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	
ONTAMINATION	Silicon	nnm	ASTM D5185m	. 25	19	10	
ONTAMINATION	Potassium	ppm	ASTM D5185m		6	5	
There is no indication of any contamination in the oil.	Fuel	ppm	WC Method		<1.0	<1.0	
	Water		WC Method		<1.0 NEG	NEG	
	Glycol		WC Method	>0.2	NEG	NEG	
	Soot %	%	*ASTM D7844	~3	0.3	0.2	
	Nitration	Abs/cm	*ASTM D7624	>20	10.4	9.0	
	Sulfation	Abs/.1mm	*ASTM D7415		24.2	19.8	
	Silt	scalar	*Visual	NONE	NONE	NONE	
	Debris	scalar	*Visual	NONE	NONE	NONE	
	Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	
	Appearance	scalar	*Visual	NORML	NORML	NORML	
	Odor	scalar	*Visual	NORML	NORML	NORML	
	Emulsified Water		*Visual	>0.2	NEG	NEG	
			Vioudi				
LUID CONDITION	Sodium	ppm	ASTM D5185m	>158	2	2	
The BN result indicates that there is suitable alkalinity remaining in the	Boron	ppm	ASTM D5185m	250	123	27	
oil. The condition of the oil is suitable for further service.	Barium	ppm	ASTM D5185m		1	0	
	Molybdenum	ppm	ASTM D5185m	100	233	47	
	Manganese	ppm	ASTM D5185m		1	<1	
	Magnesium	ppm	ASTM D5185m		725	303	
	Calcium	ppm	ASTM D5185m		1763	1961	
	Phosphorus	ppm	ASTM D5185m	1150	949	1009	
	Zinc	ppm		1350	1200	1253	
	Sulfur	ppm	ASTM D5185m		3503	3498	
	Oxidation	Abs/.1mm	*ASTM D7414		19.1	15.6	
	Base Number (BN)	mg KOH/g	ASTM D2896	8.5	8.0	7.4	
	Visc @ 100°C	cSt	ASTM D445	14.4	13.3	13.0	





Laboratory Sample No.

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

Lab Number : 06213086 Unique Number : 11085950

: JR0212042

Received **Tested** Diagnosed

: 18 Jun 2024 : 19 Jun 2024

: 19 Jun 2024 - Wes Davis

JRE - ASHLAND 11047 LEADBETTER RD ASHLAND, VA US 23005

Contact: DAVID ZIEG dzieg@jamesriverequipment.com

T: (804)798-6001 F: (804)798-0292

Contact/Location: DAVID ZIEG - JAMASH

Test Package : CONST (Additional Tests: TBN) Certificate L2367 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)