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

Machine Id

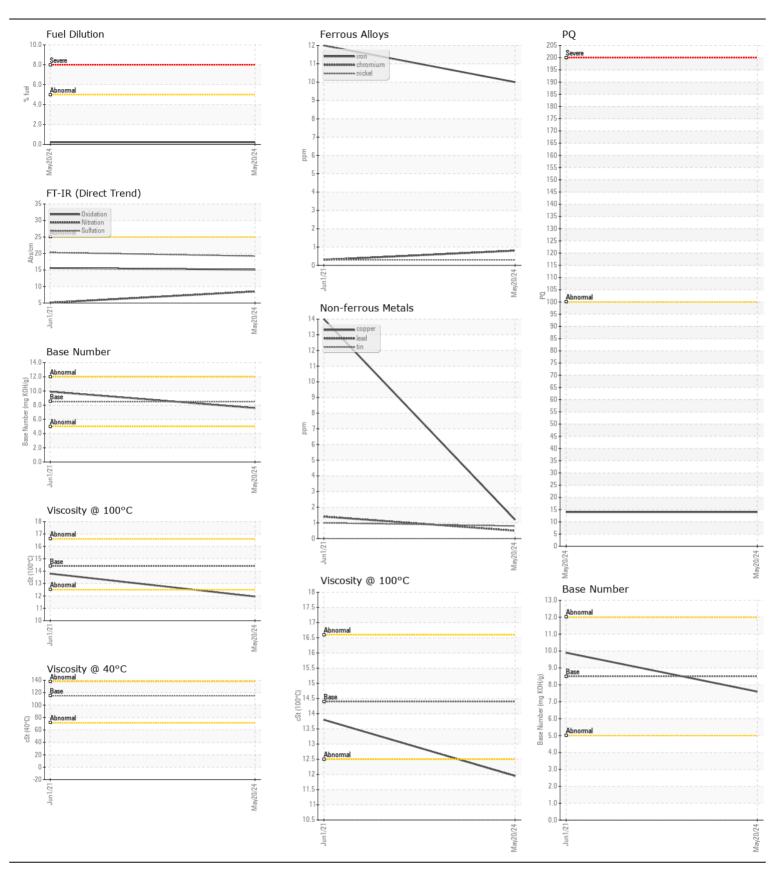
2120-0232

Diesel Engine

DIESEL ENGINE OIL SAF 15W40 (--- GAL)

DIESEL ENGINE OIL SAE 15W40 (GAL)							
RECOMMENDATION	Test Sample Number	UOM	Method Client Info	Limit/Abn	Current JR0211393	History1 JR0088341	History2
No corrective action is recommended at this time. 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 Date		Client Info		20 May 2024	01 Jun 2021	
	Machine Age	hrs	Client Info		2959	80	
	Oil Age	hrs	Client Info		0	80	
	Filter Age	hrs	Client Info		0	80	
	Oil Changed		Client Info		Changed	Changed	
	Filter Changed		Client Info		Changed	Changed	
	Sample Status				NORMAL	NORMAL	
WEAR All component wear rates are normal.	PQ		ASTM D8184		14		
	Iron	ppm	ASTM D5185m	>100	10	12	
	Chromium	ppm	ASTM D5185m		<1	<1	
	Nickel	ppm	ASTM D5185m		<1	<1	
	Titanium	ppm	ASTM D5185m	- 1	<1	<1	
	Silver	ppm	ASTM D5185m	>3	0	<1	
	Aluminum	ppm	ASTM D5185m		2	2	
	Lead	ppm	ASTM D5185m		- <1	1	
	Copper	ppm	ASTM D5185m		1	14	
	Tin	ppm	ASTM D5185m		<1	1	
	Vanadium	ppm	ASTM D5185m		<1	<1	
	White Metal	scalar	*Visual	NONE	NONE	NONE	
	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	
CONTAMINATION	Silicon	ppm	ASTM D5185m	\25	7	30	
	Potassium	ppm	ASTM D5185m		3	8	
Fuel content negligible. There is no indication of any contamination in the oil.	Fuel	%		>5	0.2	<1.0	
	Water	70	WC Method		NEG	NEG	
	Glycol		WC Method	7 O.L	NEG	NEG	
	Soot %	%	*ASTM D7844	>3	0.2	0.1	
	Nitration	Abs/cm	*ASTM D7624	>20	8.5	5.1	
	Sulfation	Abs/.1mm	*ASTM D7415		19.2	20.3	
	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	scalar	*Visual	>0.2	NEG	NEG	
FLUID CONDITION	Sodium	ppm	ASTM D5185m	>158	1	3	
TEGIE GONDITION	Boron	ppm	ASTM D5185m		29	117	
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		1	0	
	Molybdenum	ppm	ASTM D5185m		40	58	
	Manganese	ppm	ASTM D5185m		<1	4	
	Magnesium	ppm	ASTM D5185m	450	523	416	
	Calcium	ppm	ASTM D5185m	3000	1494	1679	
	Phosphorus	ppm	ASTM D5185m		849	1012	
	Zinc	ppm	ASTM D5185m		953	1202	
	Sulfur	ppm	ASTM D5185m		2834	3530	
	Oxidation	Abs/.1mm	*ASTM D7414		15.1	15.6	
	Base Number (BN)	mg KOH/g	ASTM D2896	8.5	7.6	9.9	
	Visc @ 100°C	cSt	ASTM D445	14.4	11.95	13.8	

Contact/Location: DAVID ZIEG - JAMASH





Report Id: JAMASH [WUSCAR] 06194708 (Generated: 06/06/2024 06:07:32) Rev: 1

Laboratory Sample No. Lab Number Unique Number : 11056831

: JR0211393 : 06194708

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

Received **Tested** Diagnosed

: 29 May 2024 : 05 Jun 2024

: 05 Jun 2024 - Wes Davis

JRE - ASHLAND 11047 LEADBETTER RD ASHLAND, VA US 23005

Test Package : CONST (Additional Tests: FuelDilution, KV40, PercentFuel, PQ, TBN, VI) 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)

Contact: DAVID ZIEG dzieg@jamesriverequipment.com T: (804)798-6001

Contact/Location: DAVID ZIEG - JAMASH

F: (804)798-0292