

Machine Id **RUBB MTS2410US 842T331** Component **Diesel Engine**

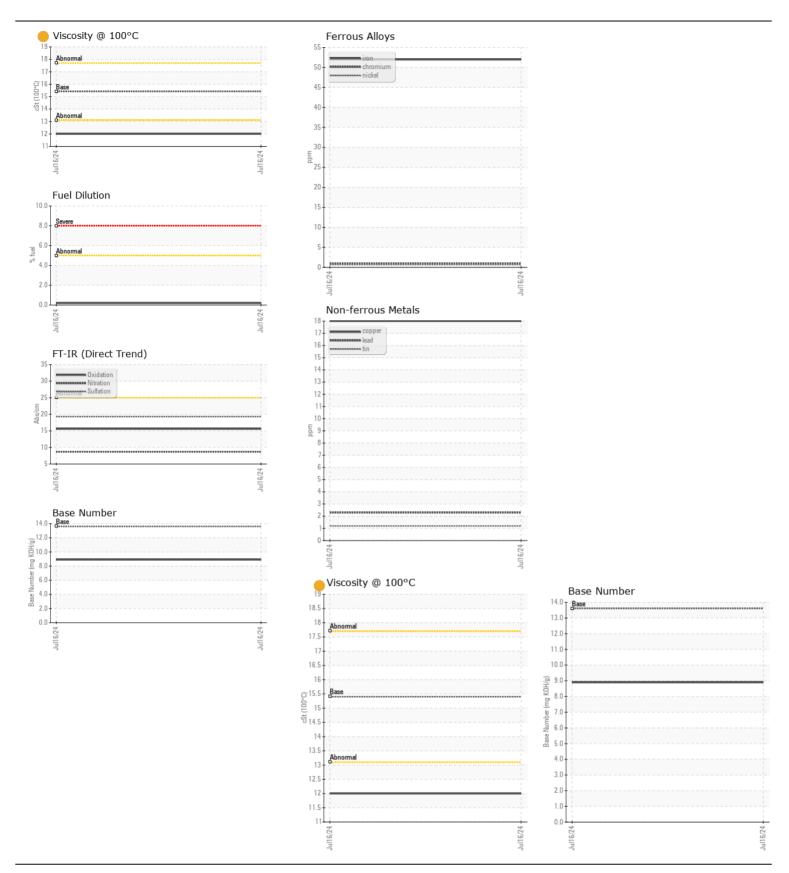
JOHN DEERE ENGINE OIL PLUS 50 II 15W40 (--- GAL)

RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
	Sample Number		Client Info		JR0226627		
Oil and filter change at the time of sampling has been noted. No corrective action is recommended at this time. Resample at the next service interval to monitor.	Sample Date		Client Info		16 Jul 2024		
	Machine Age	hrs	Client Info		463		
	Oil Age	hrs	Client Info		463		
	Filter Age	hrs	Client Info		463		
	Oil Changed		Client Info		Changed		
	Filter Changed		Client Info		Changed		
	Sample Status				ATTENTION		
NEAD	Iron		ASTM D5185m	. 100	50		
WEAR	Iron	ppm			52		
Metal levels are typical for a new component breaking in.	Chromium	ppm	ASTM D5185m		1		
	Nickel	ppm	ASTM D5185m	>4	<1		
	Titanium	ppm	ASTM D5185m		<1		
	Silver	ppm	ASTM D5185m		0		
	Aluminum	ppm	ASTM D5185m		3		
	Lead	ppm	ASTM D5185m	-	2		
	Copper	ppm	ASTM D5185m		18		
	Tin	ppm	ASTM D5185m	>15	1		
	Vanadium	ppm	ASTM D5185m		0		
	White Metal	scalar	*Visual	NONE	NONE		
	Yellow Metal	scalar	*Visual	NONE	NONE		
CONTAMINATION	Silicon	ppm	ASTM D5185m	>25	18		
	Potassium	ppm	ASTM D5185m		3		
Tests indicate that there is no fuel present in the oil. There is no indication of any contamination in the oil.	Fuel	%	ASTM D3103III		0.2		
	Water	70	WC Method		NEG		
	Glycol		WC Method	>0.2	NEG		
	Soot %	%	*ASTM D7844	. 2	0.5		
					8.7		
	Nitration	Abs/cm	*ASTM D7624	>20			
	Sulfation	Abs/.1mm	*ASTM D7415		19.3		
	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		5		
	Boron	ppm	ASTM D5185m		4		
The oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil. Confirm oil type.	Barium	ppm	ASTM D5185m		<1		
	Molybdenum	ppm	ASTM D5185m		67		
	Manganese	ppm	ASTM D5185m		3		
	Magnesium	ppm	ASTM D5185m		940		
	Calcium	ppm	ASTM D5185m		1091		
	Phosphorus	ppm	ASTM D5185m		1037		
	Zinc	ppm	ASTM D5185m		1226		
	Sulfur	ppm	ASTM D5185m		3190		
	Oxidation	Abs/.1mm	*ASTM D5185111 *ASTM D7414	>25	15.6		
	Base Number (BN)		ASTM D7414 ASTM D2896				
	Dase Nulliber (DN)	niy NOR/g	A01101D2030	10.0	8.9		

Visc @ 100°C cSt

ASTM D445 15.4

12.0



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513 **JRE - MANASSAS PARK** Sample No. : JR0226627 Received 9107 OWENS DRIVE : 17 Jul 2024 MANASSAS PARK, VA Lab Number : 06239013 Tested : 19 Jul 2024 Unique Number : 11127847 Diagnosed : 19 Jul 2024 - Sean Felton US 20111 Test Package : CONST (Additional Tests: FuelDilution, PercentFuel, TBN) Contact: DON VEST Certificate L2367 dvest@jamesriverequipment.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. T: (703)631-8500 Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012) F: (703)631-4715

Contact/Location: DON VEST - JAMMAN Page 2 of 2