

Machine Id **PE4045U138707** Component **Diesel Engine** Fluid **JOHN DEERE ENGINE OIL PLUS 50 II 15W40 (20 QTS)**

RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
We advise that you check the fuel injection system. Oil and filter change at the time of sampling has been noted. We recommend an early resample to monitor this condition.	Sample Number		Client Info		JR0212750		
	Sample Date		Client Info		28 May 2024		
	Machine Age	hrs	Client Info		324		
	Oil Age	hrs	Client Info		324		
	Filter Age	hrs	Client Info		324		
	Oil Changed		Client Info		Changed		
	Filter Changed		Client Info		Changed		
	Sample Status				SEVERE		
NEAR	Iron	ppm	ASTM D5185m	>100	26		
	Chromium	ppm	ASTM D5185m	>20	<1		
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		9		
	Lead	ppm	ASTM D5185m		1		
	Copper	ppm	ASTM D5185m	>330	16		
	Tin	ppm	ASTM D5185m	>15	2		
	Vanadium	ppm	ASTM D5185m		<1		
	White Metal	scalar	*Visual	NONE	NONE		
	Yellow Metal	scalar	*Visual	NONE	NONE		
CONTAMINATION	Silicon	ppm	ASTM D5185m		8		
There is a high amount of fuel present in the oil.	Potassium	ppm	ASTM D5185m		2		
	Fuel	%	ASTM D3524		A 33.3		
	Water		WC Method	>0.2	NEG		
	Glycol		WC Method		NEG		
	Soot %	%	*ASTM D7844		0.2		
	Nitration	Abs/cm	*ASTM D7624	>20	8.2		
	Sulfation	Abs/.1mm	*ASTM D7415		20.6		
	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		4		
Fuel is present in the oil and is lowering the viscosity. The BN result indicates that there is suitable alkalinity remaining in the oil. The oil is no longer serviceable due to the presence of contaminants.	Boron	ppm	ASTM D5185m		231		
	Barium	ppm	ASTM D5185m		4		
	Molybdenum	ppm	ASTM D5185m		232		
	Manganese	ppm	ASTM D5185m		3		
	Magnesium	ppm	ASTM D5185m		759		
	Calcium	ppm	ASTM D5185m		1477		
	Phosphorus	ppm	ASTM D5185m		899		
	Zinc	ppm	ASTM D5185m		1032		
		0000	ASTM D5185m		3319		
	Sulfur	ppm	ASTIVI DJIOJIII		2219		
	Sulfur Oxidation	Abs/.1mm	*ASTM D5105111	>25	15.8		

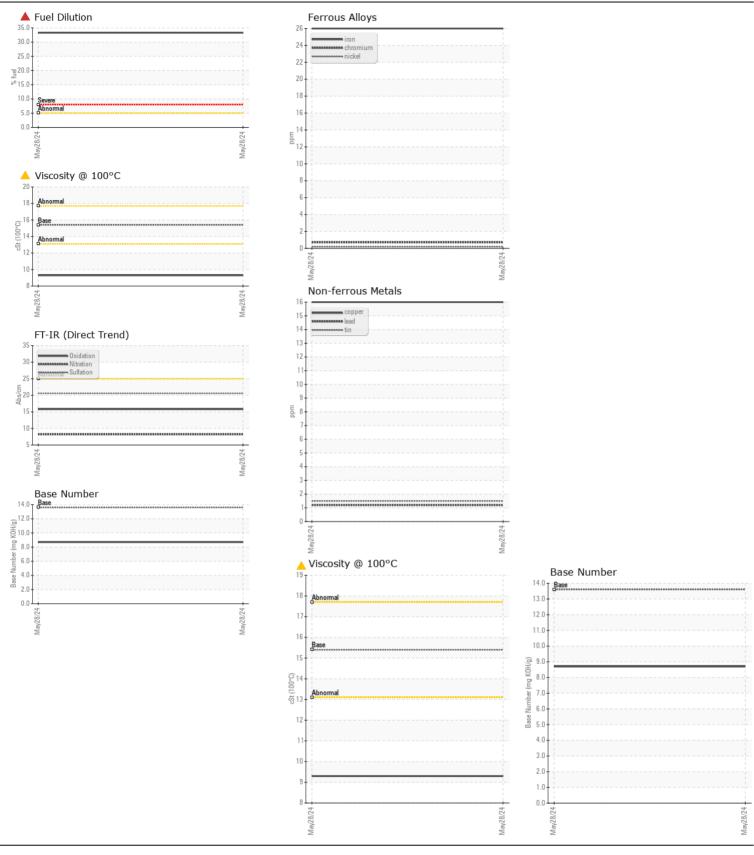
Base Number (BN) mg KOH/g ASTM D2896 13.6

Visc @ 100°C cSt

ASTM D445 15.4

8.7

9.3



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513 **JRE - GARNER** Sample No. Received 4161 AUBURN CHURCH RD : JR0212750 : 30 May 2024 Lab Number : 06195269 Tested : 05 Jun 2024 GARNER, NC : 05 Jun 2024 - Jonathan Hester US 27529 Unique Number : 11057392 Diagnosed Test Package : CONST (Additional Tests: FuelDilution, PercentFuel, TBN) Contact: RALEIGH SHOP Certificate L2367 To discuss this sample report, contact Customer Service at 1-800-237-1369. sean.betts@jamesriverequipment.com;catherine.anastasio@wearcheck.com * - Denotes test methods that are outside of the ISO 17025 scope of accreditation. T: (919)614-2260 Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012) F: (919)779-5432

Submitted By: RALEIGH SHOP Page 2 of 2