

JOHN DEERE 544 P 1DW544PAPNLZ14440

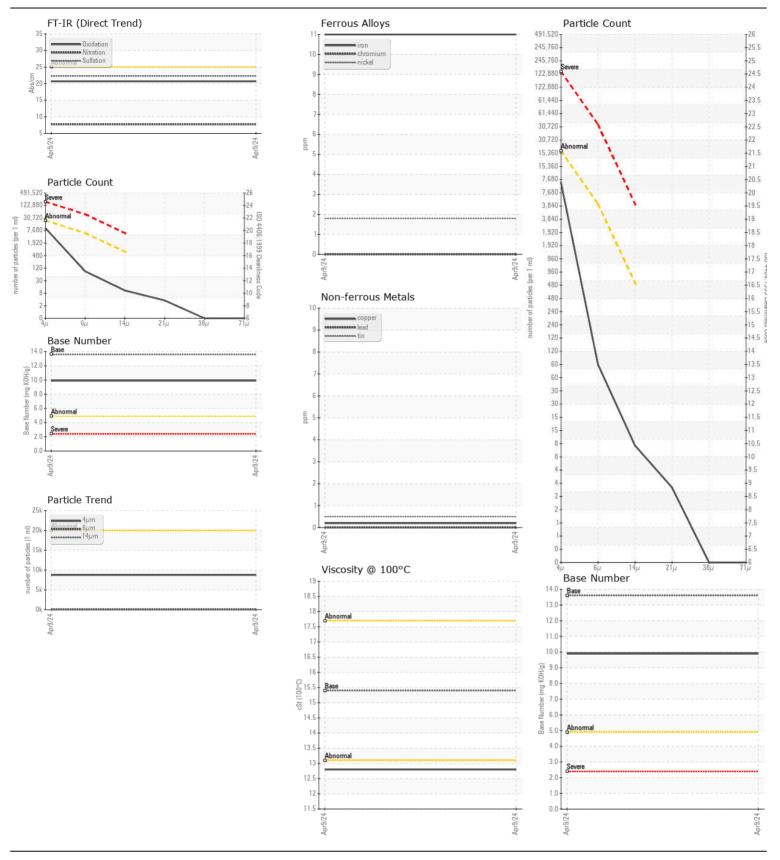
Diesel Engine

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

RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
Resample at the next service interval to monitor.	Sample Number		Client Info		JR0211038		
	Sample Date Machine Age	hrs	Client Info Client Info		09 Apr 2024 2113		
	Oil Age	hrs	Client Info		500		
	Filter Age	hrs	Client Info		500		
	Oil Changed	1110	Client Info		Changed		
	Filter Changed		Client Info		Changed		
	Sample Status				NORMAL		
VEAR	Iron	ppm	ASTM D5185m		11		
All component wear rates are normal.	Chromium Nickel	ppm ppm	ASTM D5185m ASTM D5185m		0 2		
	Titanium	ppm	ASTM D5185m	>5	0		
	Silver	ppm	ASTM D5185m	>3	0		
	Aluminum	ppm	ASTM D5185m		2		
	Lead	ppm	ASTM D5185m	>26	0		
	Copper	ppm	ASTM D5185m		<1		
	Tin	ppm	ASTM D5185m	>4	<1		
	Vanadium	ppm	ASTM D5185m	NONE	0		
	White Metal	scalar	*Visual	NONE	NONE		
	Yellow Metal	scalar	*Visual	NONE	NONE		
CONTAMINATION	Silicon	ppm	ASTM D5185m	>22	5		
	Potassium	ppm	ASTM D5185m		2		
There is no indication of any contamination in the oil.	Fuel	%	ASTM D3524	>2.1	<1.0		
	Water		WC Method	>0.21	NEG		
	Glycol		WC Method		NEG		
	Soot %	%	*ASTM D7844		0.3		
	Nitration	Abs/cm	*ASTM D7624	>20	7.7		
	Sulfation Particles >4µm	Abs/.1mm	*ASTM D7415 ASTM D7647	>30 >20000	22.3 8760		
	Particles >6µm		ASTM D7647 ASTM D7647		75		
	Particles >14µm		ASTM D7647		9		
	Particles >21µm		ASTM D7647		3		
	Particles >38µm		ASTM D7647		0		
	Particles >71µm		ASTM D7647	>10	0		
	Oil Cleanliness		ISO 4406 (c)	>21/19/16	20/13/10		
	Silt	scalar	*Visual	NONE	NONE		
	Debris	scalar	*Visual	NONE	NONE		
	Sand/Dirt	scalar	*Visual	NONE	NONE		
	Appearance Odor	scalar scalar	*Visual *Visual	NORML NORML	NORML NORML		
	Emulsified Water	scalar	*Visual	>0.21	NEG		
LUID CONDITION	Sodium	ppm	ASTM D5185m	>31	3		
	Boron	ppm	ASTM D5185m		57		
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is acceptable for the time in service.	Barium	ppm	ASTM D5185m		0		
	Molybdenum	ppm	ASTM D5185m		42		
	Manganese	ppm	ASTM D5185m		<1		
	Magnesium	ppm	ASTM D5185m		513 1729		
	Calcium Phosphorus	ppm	ASTM D5185m ASTM D5185m		968		
	Zinc	ppm ppm	ASTM D5185m		968 1135		
	Sulfur	ppm	ASTM D5185m		3489		
	Oxidation	Abs/.1mm	*ASTM D7414	>25	20.7		
	Base Number (BN)		ASTM D2896		9.9		
		cSt	ASTM D445		12.8		



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513 **JRE - MANASSAS PARK** . Sample No. : JR0211038 9107 OWENS DRIVE Received : 10 Apr 2024 Lab Number : 06145206 MANASSAS PARK, VA Tested : 11 Apr 2024 : 13 Apr 2024 - Don Baldridge US 20111 Unique Number : 10970014 Diagnosed Test Package : CONST (Additional Tests: FuelDilution, PrtCount, 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