WEAR CONTAMINATION FLUID CONDITION

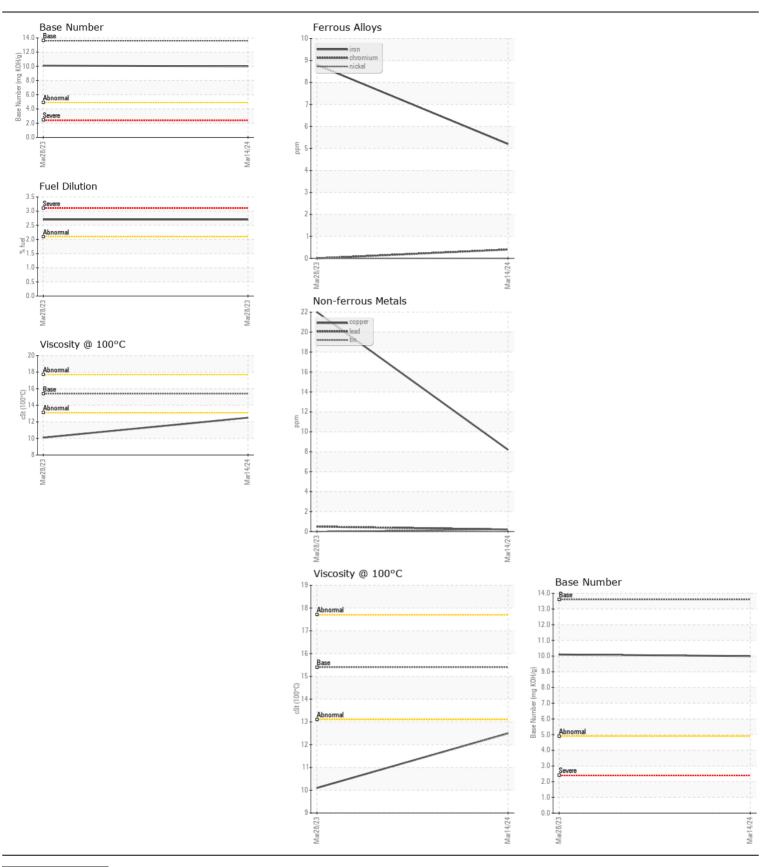
NORMAL NORMAL NORMAL

JOHN DEERE 3032E 1LV3032E1MN141473

Component Diesel Engine

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		JR0204222	JR0150786	
	Sample Date		Client Info		14 Mar 2024	28 Mar 2023	
	Machine Age	hrs	Client Info		76	49	
	Oil Age	hrs	Client Info		0	0	
	Filter Age	hrs	Client Info		0	0	
	Oil Changed		Client Info		N/A	Changed	
	Filter Changed		Client Info		N/A	Changed	
	Sample Status				NORMAL	ATTENTION	
WEAR	Iron	ppm	ASTM D5185m	>51	5	9	
All component wear rates are normal.	Chromium	ppm	ASTM D5185m	>11	<1	0	
	Nickel	ppm	ASTM D5185m	>5	0	0	
	Titanium	ppm	ASTM D5185m		<1	0	
	Silver	ppm	ASTM D5185m	>3	0	0	
	Aluminum	ppm	ASTM D5185m	>31	4	2	
	Lead	ppm	ASTM D5185m	>26	<1	<1	
	Copper	ppm	ASTM D5185m	>26	8	22	
	Tin	ppm	ASTM D5185m	>4	<1	0	
	Vanadium	ppm	ASTM D5185m		<1	0	
	White Metal	scalar	*Visual	NONE	NONE	NONE	
	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	
CONTAMINATION	Silicon	ppm	ASTM D5185m	>22	15	60	
OSITIAMINATION	Potassium	ppm	ASTM D5185m		3	0	
There is no indication of any contamination in the oil.	Fuel	%	ASTM D3524		<1.0	<u>^</u> 2.7	
	Water		WC Method		NEG	NEG	
	Glycol		WC Method		NEG	NEG	
	Soot %	%	*ASTM D7844	>3	0.1	0.1	
	Nitration	Abs/cm	*ASTM D7624	>20	6.2	6.6	
	Sulfation	Abs/.1mm	*ASTM D7415	>30	18.9	19.0	
	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	>0.21	NEG	NEG	
LUID CONDITION	Sodium	ppm	ASTM D5185m	>31	<1	13	
	Boron	ppm	ASTM D5185m	- 0 1	272	233	
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		3	5	
	Molybdenum	ppm	ASTM D5185m		251	220	
	Manganese	ppm	ASTM D5185m		<1	1	
	Magnesium	ppm	ASTM D5185m		760	620	
	Calcium	ppm	ASTM D5185m		1367	1724	
	Phosphorus	ppm	ASTM D5185m		861	886	
	Zinc	ppm	ASTM D5185m		1016	1034	
	Sulfur	ppm	ASTM D5185m		3195	3992	
	Oxidation	Abs/.1mm	*ASTM D7414	>25	14.2	14.4	
	Base Number (BN)				10.0	10.1	
	()	cSt	ASTM D445		12.5	10.1	





Laboratory Sample No.

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 : JR0204222 **Lab Number** : 06124755

Unique Number : 10938906

Received : 21 Mar 2024 **Tested**

Diagnosed Test Package : CONST (Additional Tests: FuelDilution, TBN)

: 22 Mar 2024 : 24 Mar 2024 - Don Baldridge

JRE - STATESVILLE 635 MOCKSVILLE HWY STATESVILLE, NC US 28625

Contact: MIKE CRANFILL MCRANFILL@JAMESRIVEREQUIPMENT.COM T: (704)872-6411

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)