WEAR CONTAMINATION FLUID CONDITION

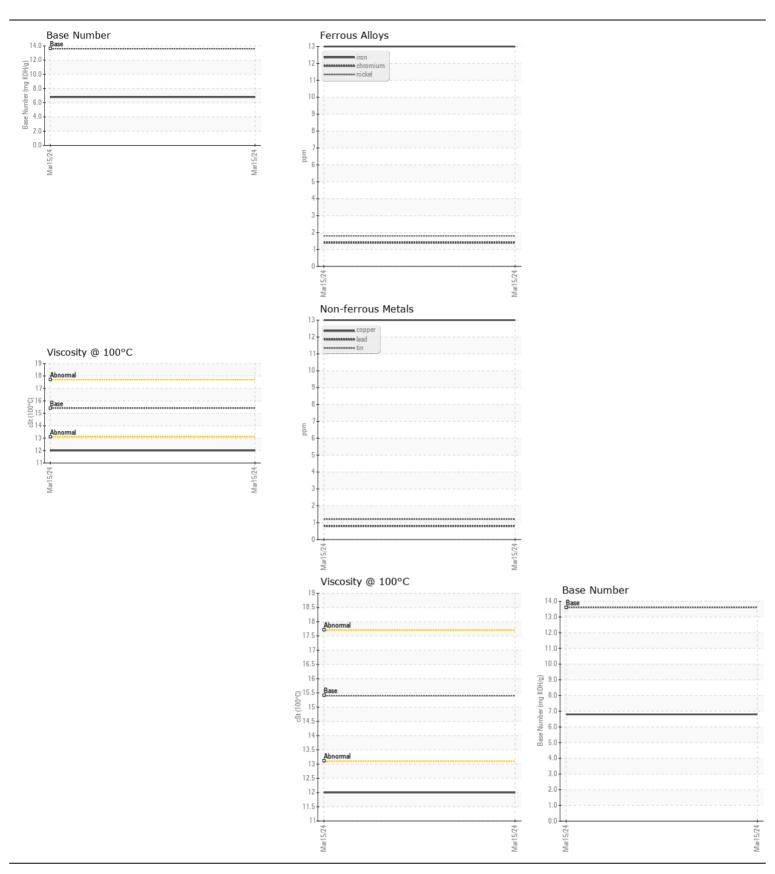
NORMAL NORMAL NORMAL

[GAINESVILLE RECYCLIN] **DOPPSTADT SM617 1849**

Component Diesel Engine

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

JOHN DEERE ENGINE OIL PLUS 30 II 13W40 (-							
RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.	Sample Number		Client Info		JR0203159		
	Sample Date		Client Info		15 Mar 2024		
	Machine Age	hrs	Client Info		488		
	Oil Age	hrs	Client Info		488		
	Filter Age	hrs	Client Info		488		
	Oil Changed		Client Info		Changed		
	Filter Changed		Client Info		Changed		
	Sample Status				NORMAL		
WEAR	Iron	ppm	ASTM D5185m	>100	13		
Metal levels are typical for a new component breaking in.	Chromium	ppm	ASTM D5185m	>20	1		
	Nickel	ppm	ASTM D5185m	>4	2		
	Titanium	ppm	ASTM D5185m		<1		
	Silver	ppm	ASTM D5185m	>3	0		
	Aluminum	ppm	ASTM D5185m	>20	4		
	Lead	ppm	ASTM D5185m	>40	<1		
	Copper	ppm	ASTM D5185m	>330	13		
	Tin	ppm	ASTM D5185m	>15	1		
	Vanadium	ppm	ASTM D5185m		<1		
	White Metal	scalar	*Visual	NONE	NONE		
	Yellow Metal	scalar	*Visual	NONE	NONE		
CONTAMINATION	Silicon	ppm	ASTM D5185m		12		
There is no indication of any contamination in the oil.	Potassium	ppm	ASTM D5185m	>20	2		
	Fuel	%	ASTM D3524	>5	<1.0		
	Water		WC Method	>0.2	NEG		
	Glycol		WC Method		NEG		
	Soot %	%	*ASTM D7844	>3	0.1		
	Nitration	Abs/cm	*ASTM D7624	>20	7.5		
	Sulfation	Abs/.1mm	*ASTM D7415	>30	17.6		
	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		5		
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.	Boron	ppm	ASTM D5185m		135		
	Barium	ppm	ASTM D5185m		0		
	Molybdenum	ppm	ASTM D5185m		88		
	Manganese	ppm	ASTM D5185m		2		
	Magnesium	ppm	ASTM D5185m		325		
	Calcium	ppm	ASTM D5185m		1960		
	Phosphorus	ppm	ASTM D5185m		464		
	Zinc	ppm	ASTM D5185m		857		
	Sulfur	ppm	ASTM D5185m		2779		
	Oxidation	Abs/.1mm	*ASTM D7414	>25	13.3		
	Dana Mussahasi (DM)	ma KOH/a	ASTM D2896	13.6	6.8		
	Base Number (BN)	my Normy	AOTIVI DE000	10.0	0.0		





Laboratory Sample No.

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Lab Number : 06123514

Unique Number : 10937665

: JR0203159

Received **Tested** Diagnosed

: 21 Mar 2024 : 25 Mar 2024 - Jonathan Hester

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

: 20 Mar 2024

Contact: DON VEST dvest@jamesriverequipment.com T: (703)631-8500

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) F: (703)631-4715

JRE - MANASSAS PARK

9107 OWENS DRIVE

MANASSAS PARK, VA

US 20111