WEAR CONTAMINATION FLUID CONDITION

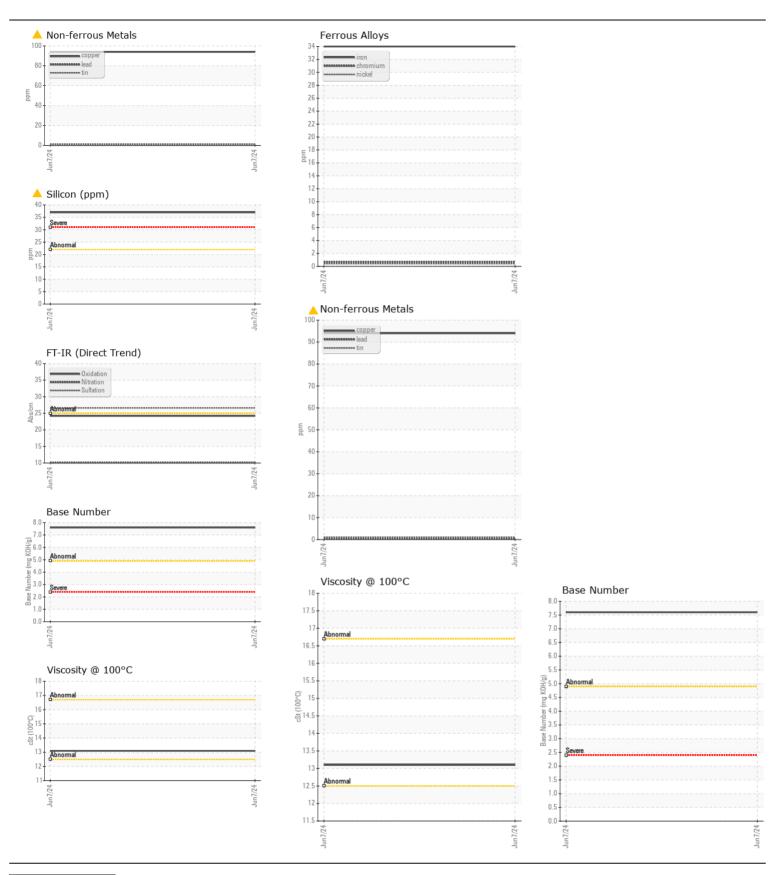
ABNORMAL ABNORMAL NORMAL

[WNC HARDSCAPE]

JOHN DEERE 325G 1T0325GKAPJ445830

Diesel Engine

RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
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 Number		Client Info		JR0207992		
	Sample Date		Client Info		07 Jun 2024		
	Machine Age	hrs	Client Info		537		
	Oil Age	hrs	Client Info		537		
	Filter Age	hrs	Client Info		0		
	Oil Changed		Client Info		Changed		
	Filter Changed		Client Info		Changed		
	Sample Status				ABNORMAL		
WEAR	Iron	ppm	ASTM D5185m	>51	34		
The copper level is abnormal. All other metal levels are typical for a new component breaking in.	Chromium	ppm	ASTM D5185m		<1		
	Nickel	ppm	ASTM D5185m		<1		
	Titanium	ppm	ASTM D5185m		<1		
	Silver	ppm	ASTM D5185m	>3	0		
	Aluminum	ppm	ASTM D5185m		6		
	Lead	ppm	ASTM D5185m		<1		
	Copper	ppm	ASTM D5185m		<u> </u>		
	Tin	ppm	ASTM D5185m		<1		
	Vanadium	ppm	ASTM D5185m		0		
	White Metal	scalar	*Visual	NONE	NONE		
	Yellow Metal	scalar	*Visual	NONE	NONE		
CONTAMINATION	Silicon	ppm	ASTM D5185m	>22	4 37		
Elemental level of silicon (Si) above normal indicating ingress of seal material.	Potassium	ppm	ASTM D5185m	>20	2		
	Fuel		WC Method	>2.1	<1.0		
	Water		WC Method	>0.21	NEG		
	Glycol		WC Method		NEG		
	Soot %	%	*ASTM D7844	>3	0.7		
	Nitration	Abs/cm	*ASTM D7624	>20	10.1		
	Sulfation	Abs/.1mm	*ASTM D7415	>30	26.6		
	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	>0.21	NEG		
FLUID CONDITION	Sodium	ppm	ASTM D5185m	>31	7		
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		175		
	Barium	ppm	ASTM D5185m		0		
	Molybdenum	ppm	ASTM D5185m		234		
	Manganese	ppm	ASTM D5185m		<1		
	Magnesium	ppm	ASTM D5185m		679		
	Calcium	ppm	ASTM D5185m		1668		
	Phosphorus	ppm	ASTM D5185m		811		
	Zinc	ppm	ASTM D5185m		1109		
	Sulfur	ppm	ASTM D5185m		3248		
	Oxidation	Abs/.1mm	*ASTM D7414	>25	24.2		
	Base Number (BN)	mg KOH/g	ASTM D2896		7.6		
	Visc @ 100°C	cSt	ASTM D445		13.1		







Laboratory Sample No.

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 : JR0207992 Lab Number : 06209918

Unique Number : 11082782

Received **Tested** Diagnosed

: 14 Jun 2024 : 17 Jun 2024

: 17 Jun 2024 - Don Baldridge

JRE - ASHEVILLE 101 BRUCE DRIVE ASHEVILLE, NC US 28806 Contact: Randy Warren

Test Package : CONST (Additional Tests: KV40, TBN) Certificate L2367 To discuss this sample report, contact Customer Service at 1-800-237-1369.

randy.warren@jamesriverequipment.com T: (528)667-0176

Contact/Location: Randy Warren - VANASH

* - 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)

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