WEAR CONTAMINATION FLUID CONDITION

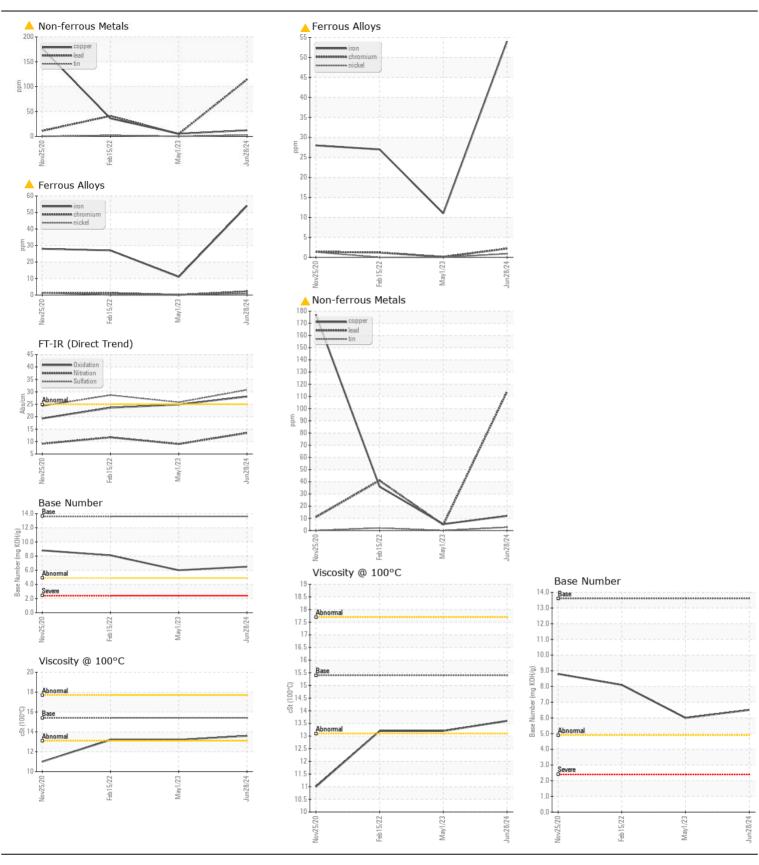
ABNORMAL NORMAL NORMAL

[05W47813]

JOHN DEERE 410L 1T0410LXLKF350838

Diesel Engine

RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
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		JR0225713	JR0173123	JR0106760
	Sample Date		Client Info		28 Jun 2024	01 May 2023	15 Feb 202
	Machine Age	hrs	Client Info		2167	1294	1008
	Oil Age	hrs	Client Info		1159	0	0
	Filter Age	hrs	Client Info		1159	0	0
	Oil Changed		Client Info		Changed	Not Changd	Changed
	Filter Changed		Client Info		Changed	Not Changd	Changed
	Sample Status				ABNORMAL	NORMAL	ABNORMA
VEAR	Iron	ppm	ASTM D5185m	>51	▲ 54	11	27
	Chromium	ppm	ASTM D5185m		2	<1	1
The iron level is abnormal. Bearing and/or bushing wear is indicated.	Nickel	ppm	ASTM D5185m		- <1	0	0
	Titanium	ppm	ASTM D5185m		<1	<1	<1
	Silver	ppm	ASTM D5185m	>3	0	0	0
	Aluminum	ppm	ASTM D5185m		7	4	9
	Lead	ppm	ASTM D5185m		114	5	<u>4</u> 1
	Copper	ppm	ASTM D5185m		12	5	△ 36
	Tin	ppm	ASTM D5185m		3	0	2
	Vanadium	ppm	ASTM D5185m		0	<1	<1
	White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
CONTAMINATION	Silicon	ppm	ASTM D5185m	\22	11	8	8
CONTAININATION	Potassium	ppm	ASTM D5185m		0	1	2
There is no indication of any contamination in the oil.	Fuel	ррпп	WC Method		<1.0	<1.0	<1.0
	Water		WC Method		NEG	NEG	NEG
	Glycol		WC Method	70.21	NEG	NEG	NEG
	Soot %	%	*ASTM D7844	>3	0.3	0.6	0.2
	Nitration	Abs/cm	*ASTM D7624	>20	13.5	9.0	11.7
	Sulfation	Abs/.1mm	*ASTM D7415		30.8	25.8	28.7
	Silt	scalar	*Visual	NONE	NONE	NONE	NONE
	Debris	scalar	*Visual	NONE	NONE	NONE	NONE
	Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
	Appearance	scalar	*Visual	NORML	NORML	NORML	NORM
	Odor	scalar	*Visual	NORML	NORML	NORML	NORM
	Emulsified Water	scalar	*Visual	>0.21	NEG	NEG	NEG
FLUID CONDITION	Sodium	ppm	ASTM D5185m	\31	4	1	3
LOID GONDITION	Boron	ppm	ASTM D5185m	701	35	233	96
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		<1	0	<1
	Molybdenum	ppm	ASTM D5185m		268	254	280
	Manganese	ppm	ASTM D5185m		3	1	2
	Magnesium	ppm	ASTM D5185m		1004	849	915
	Calcium	ppm	ASTM D5185m		1838	1514	1648
	Phosphorus	ppm	ASTM D5185m		958	878	898
	Zinc	ppm	ASTM D5185m		1253	1099	1085
	Sulfur	ppm	ASTM D5185m		4010	3408	2592
	Oxidation	Abs/.1mm	*ASTM D7414	>25	28.1	24.9	23.6
	Base Number (BN)				6.5	6.0	8.1
		99		15.4		13.2	







Certificate L2367

Laboratory

Sample No.

: JR0225713 Lab Number : 06224296 Unique Number : 11102493

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

Received **Tested** Diagnosed Test Package : CONST (Additional Tests: TBN)

: 01 Jul 2024 : 02 Jul 2024

: 02 Jul 2024 - Jonathan Hester

JRE - MANASSAS PARK 9107 OWENS DRIVE MANASSAS PARK, VA US 20111

Contact: DON VEST 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. Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

F: (703)631-4715

T: (703)631-8500