

Area

## NORMAL WEAR NORMAL CONTAMINATION FLUID CONDITION NORMAL



## [16W16226] **JOHN DEERE 210G 1FF210GXLNF530549**

Diesel Engine

## JOHN DEERE ENGINE OIL PLUS 50 II 15W40 (5 GAL)

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RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
Resample at the next service interval to monitor. ( Customer Sample Comment: 16W16226 )	Sample Number		Client Info		JR0207143	JR0196562	JR0173640
	Sample Date		Client Info		10 May 2024	12 Dec 2023	10 May 2023
	Machine Age	hrs	Client Info		1947	1294	672
	Oil Age	hrs	Client Info		653	622	672
	Filter Age	hrs	Client Info		653	622	672
	Oil Changed		Client Info		Changed	Changed	Changed
	Filter Changed		Client Info		Changed	Changed	Changed
	Sample Status				NORMAL	ABNORMAL	ABNORMAL
WEAR All component wear rates are normal.	Iron	ppm	ASTM D5185m	>51	22	31	44
	Chromium	ppm	ASTM D5185m	>11	<1	1	2
	Nickel	ppm	ASTM D5185m	>5	2	3	5
	Titanium	ppm	ASTM D5185m		<1	<1	<1
	Silver	ppm	ASTM D5185m	>3	0	0	<1
	Aluminum	ppm	ASTM D5185m		5	3	6
	Lead	ppm	ASTM D5185m		0	<1	2
	Copper	ppm	ASTM D5185m		11	<b>6</b> 1	▲ 372
	Tin	ppm	ASTM D5185m		<1	1	3
	Vanadium	ppm	ASTM D5185m		<1	<1	<1
	White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
CONTAMINATION	Silicon	ppm	ASTM D5185m		6	8	12
There is no indication of any contamination in the oil.	Potassium	ppm	ASTM D5185m		3	3	3
	Fuel		WC Method		<1.0	<1.0	0.6
	Water		WC Method	>0.21	NEG	NEG	NEG
	Glycol		WC Method		NEG	NEG	NEG
	Soot %	%	*ASTM D7844		0.5	0.7	0.4
	Nitration	Abs/cm	*ASTM D7624	>20	9.3	9.7	10.1
	Sulfation	Abs/.1mm	*ASTM D7415		23.6	24.2	25.1
	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	3	<1	6
	Boron	ppm	ASTM D5185m		145	100	142
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		<1	13	<1
	Molybdenum	ppm	ASTM D5185m		223	236	229
	Manganese	ppm	ASTM D5185m		<1	2	6
	Magnesium	ppm	ASTM D5185m		767	861	772
	Calcium	ppm	ASTM D5185m		1384	1486	1679
	Phosphorus	ppm	ASTM D5185m		918	889	976
	Zinc	ppm	ASTM D5185m		1119	1129	1217
	Sulfur	ppm	ASTM D5185m		3108	2833	3612
	Oxidation	Abs/.1mm	*ASTM D5165111 *ASTM D7414	>25	18.1	18.8	21.6
	Base Number (BN)				7.8	7.9	7.6
	Dase Nulliber (DN)	nig KOR/g	AGTINI DZ030	13.0	1.0	1.9	1.0

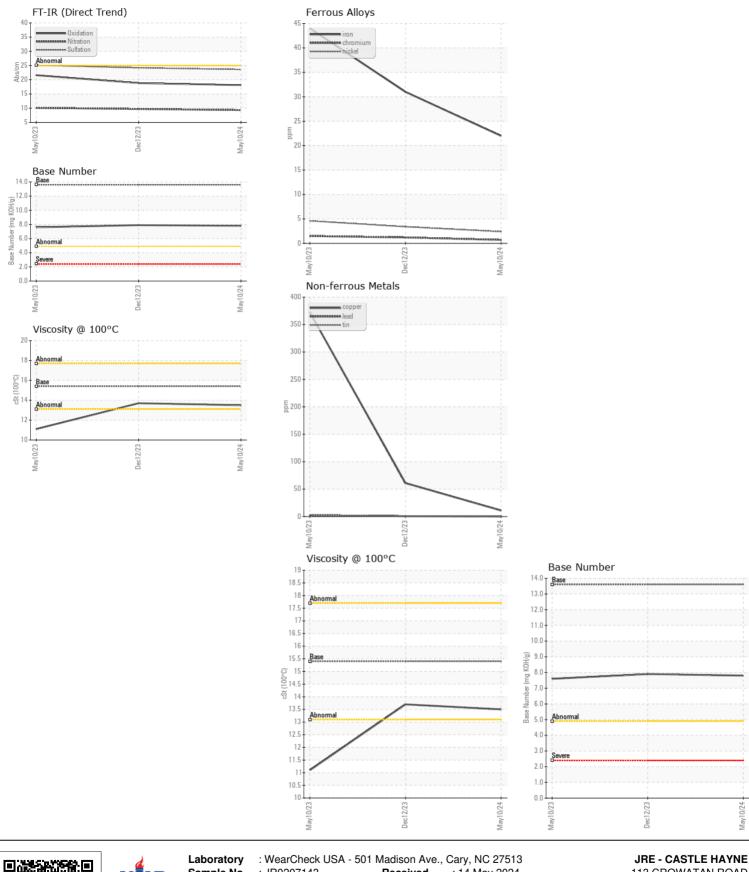
Visc @ 100°C cSt

ASTM D445 15.4

13.5

11.1

13.7



Sample No. : JR0207143 Received 113 CROWATAN ROAD : 14 May 2024 25 Lab Number : 06178514 Tested CASTLE HAYNE, NC : 15 May 2024 Unique Number : 11029840 Diagnosed : 16 May 2024 - Sean Felton US 28429-5819 Test Package : CONST (Additional Tests: TBN) Contact: WILMINGTON SHOP Certificate L2367 To discuss this sample report, contact Customer Service at 1-800-237-1369. todd.simmons@jamesriverequipment.com;canastasio@wearcheck.com;canastasio@we \* - Denotes test methods that are outside of the ISO 17025 scope of accreditation. T: (910)675-9211 Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012) F: