



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area

JRE-CHARLOTTE

Machine Id

JOHN DEERE 310 P 1DW310PAEPFB06548

Component

Diesel Engine

Fluid

NOT GIVEN (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor. Please specify the brand, type, and viscosity of the oil on your next sample.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		JR0189200	JR0178633	---
Sample Date		Client Info		16 Dec 2023	21 Aug 2023	---
Machine Age	hrs	Client Info		1253	558	---
Oil Age	hrs	Client Info		695	558	---
Filter Age	hrs	Client Info		0	0	---
Oil Changed		Client Info		Changed	Changed	---
Filter Changed		Client Info		Changed	Changed	---
Sample Status				NORMAL	NORMAL	---

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>51	21	36	---
Chromium	ppm	ASTM D5185m	>11	<1	<1	---
Nickel	ppm	ASTM D5185m	>5	5	6	---
Titanium	ppm	ASTM D5185m		0	<1	---
Silver	ppm	ASTM D5185m	>3	<1	0	---
Aluminum	ppm	ASTM D5185m	>31	6	3	---
Lead	ppm	ASTM D5185m	>26	1	2	---
Copper	ppm	ASTM D5185m	>26	14	19	---
Tin	ppm	ASTM D5185m	>4	<1	2	---
Vanadium	ppm	ASTM D5185m		<1	0	---
White Metal	scalar	*Visual	NONE	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	---

CONTAMINATION

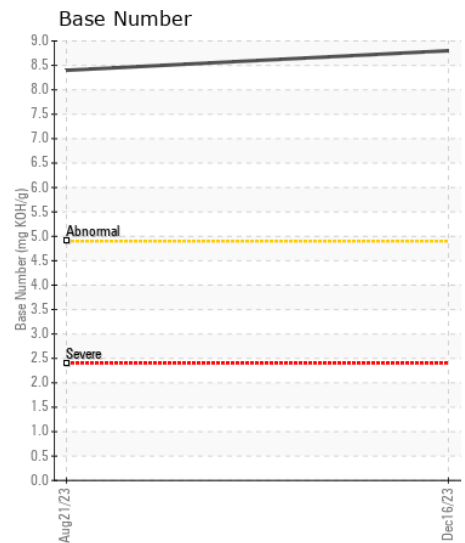
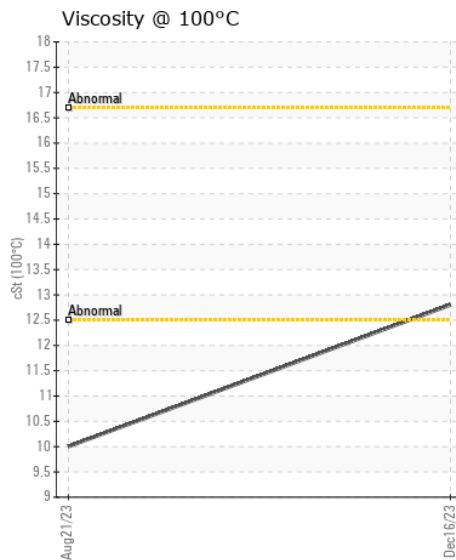
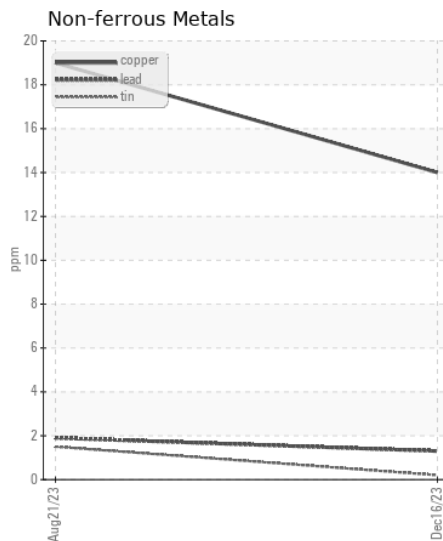
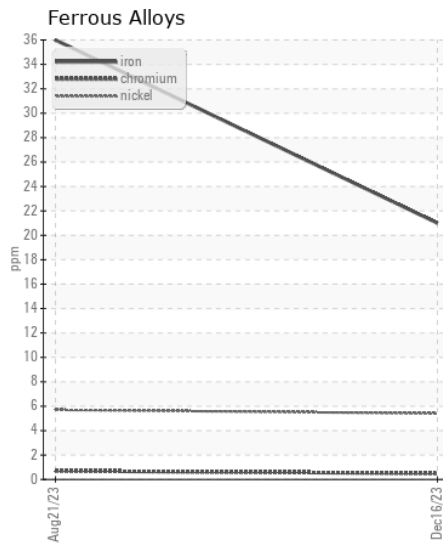
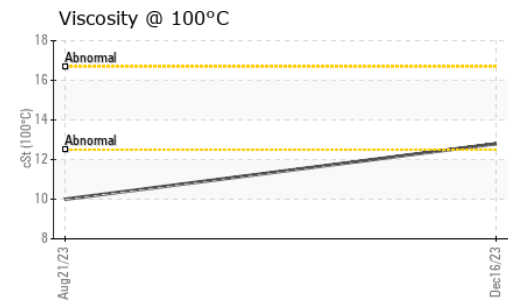
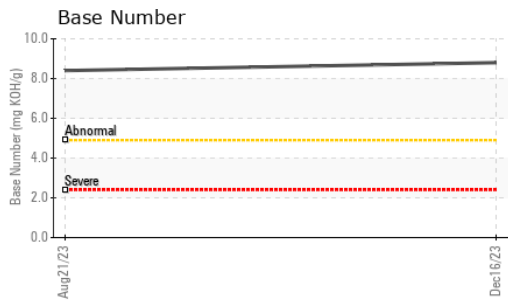
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>22	6	10	---
Potassium	ppm	ASTM D5185m	>20	1	8	---
Fuel		WC Method	>2.1	<1.0	0.2	---
Water		WC Method	>0.21	NEG	NEG	---
Glycol		WC Method		NEG	NEG	---
Soot %	%	*ASTM D7844	>3	0.3	0.3	---
Nitration	Abs/cm	*ASTM D7624	>20	8.3	7.6	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	21.5	21.2	---
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	---

FLUID CONDITION

The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m	>31	<1	3	---
Boron	ppm	ASTM D5185m		205	262	---
Barium	ppm	ASTM D5185m		0	0	---
Molybdenum	ppm	ASTM D5185m		245	280	---
Manganese	ppm	ASTM D5185m		1	2	---
Magnesium	ppm	ASTM D5185m		890	827	---
Calcium	ppm	ASTM D5185m		1360	1448	---
Phosphorus	ppm	ASTM D5185m		909	937	---
Zinc	ppm	ASTM D5185m		1162	1133	---
Sulfur	ppm	ASTM D5185m		3139	3021	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	15.9	16.2	---
Base Number (BN)	mg KOH/g	ASTM D2896		8.8	8.4	---
Visc @ 100°C	cSt	ASTM D445		12.8	10.0	---



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : JR0189200 **Received** : 12 Jan 2024
Lab Number : 06059116 **Diagnosed** : 12 Jan 2024
Unique Number : 10830498 **Diagnostician** : Wes Davis
Test Package : CONST (Additional Tests: TBN)

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)

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