



WEAR	<b>NORMAL</b>
CONTAMINATION	<b>NORMAL</b>
FLUID CONDITION	<b>NORMAL</b>



Area  
**[W8497]**  
 Machine Id  
**JOHN DEERE 210G C9013621 (S/N 1FF210GXCEE522436)**  
 Component  
**Diesel Engine**  
 Fluid  
**JOHN DEERE ENGINE OIL PLUS 50 II 15W40 (22 QTS)**

### RECOMMENDATION

Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor. ( Customer Sample Comment: W8497 )

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>JR0197151</b>	JR0013769	JR0008818
Sample Date		Client Info		<b>08 Feb 2024</b>	02 Jun 2020	29 May 2019
Machine Age	hrs	Client Info		<b>1701</b>	1601	844
Oil Age	hrs	Client Info		<b>944</b>	500	344
Filter Age	hrs	Client Info		<b>944</b>	500	344
Oil Changed		Client Info		<b>Changed</b>	Not Changd	Changed
Filter Changed		Client Info		<b>Changed</b>	Not Changed	Changed
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

### WEAR

All component wear rates are normal for time on oil.

Iron	ppm	ASTM D5185m	>51	<b>65</b>	17	28
Chromium	ppm	ASTM D5185m	>11	<b>1</b>	<1	<1
Nickel	ppm	ASTM D5185m	>5	<b>5</b>	<1	<1
Titanium	ppm	ASTM D5185m		<b>6</b>	4	10
Silver	ppm	ASTM D5185m	>3	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>31	<b>11</b>	7	5
Lead	ppm	ASTM D5185m	>26	<b>&lt;1</b>	<1	0
Copper	ppm	ASTM D5185m	>26	<b>8</b>	8	39
Tin	ppm	ASTM D5185m	>4	<b>&lt;1</b>	<1	0
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

### CONTAMINATION

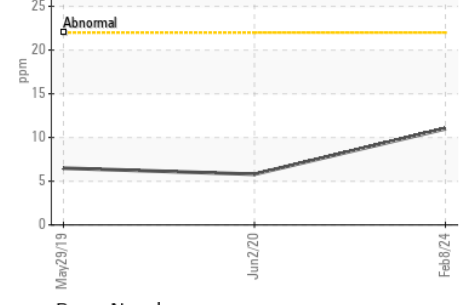
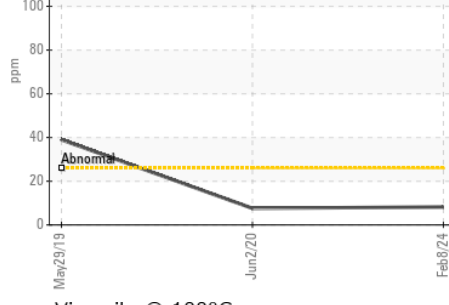
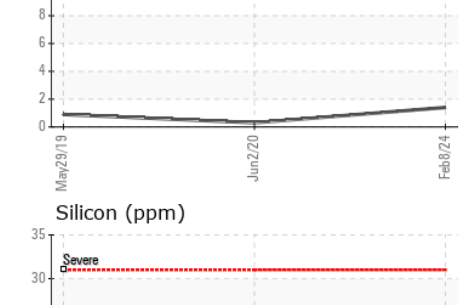
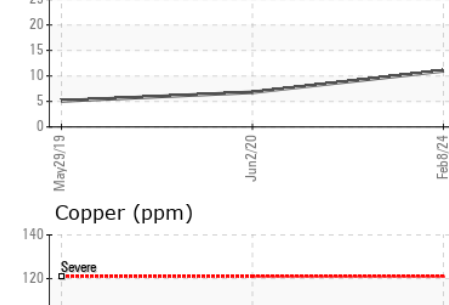
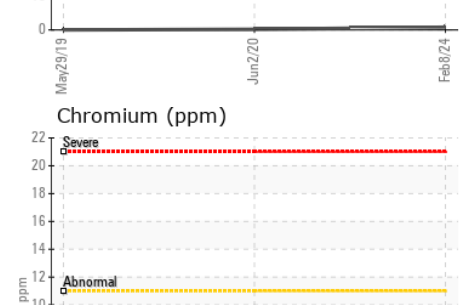
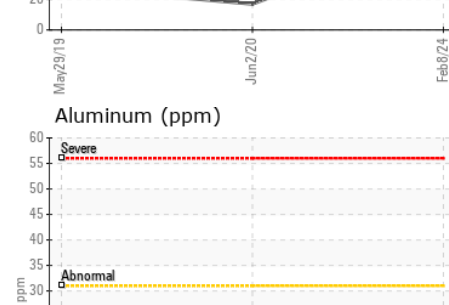
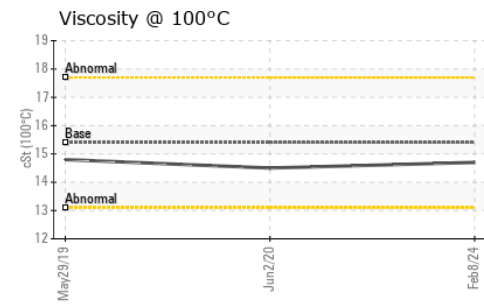
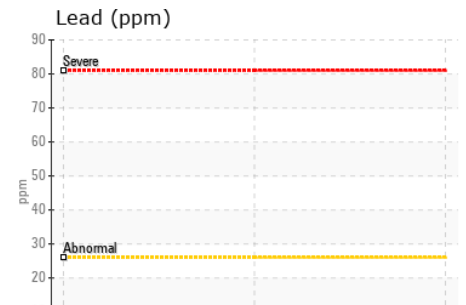
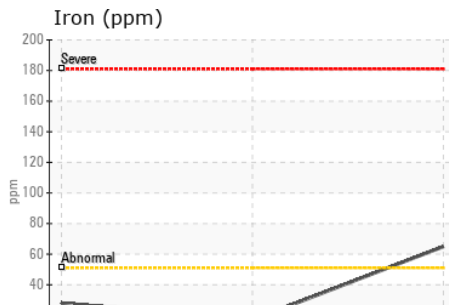
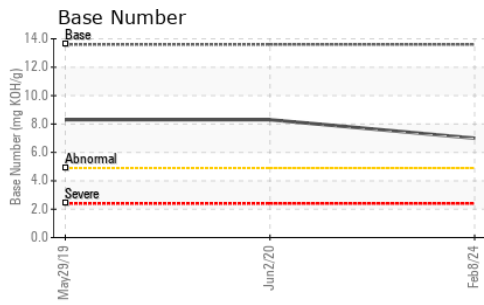
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>22	<b>11</b>	6	6
Potassium	ppm	ASTM D5185m	>20	<b>17</b>	6	15
Fuel		WC Method	>2.1	<b>&lt;1.0</b>	<1.0	<1.0
Water		WC Method	>0.21	<b>NEG</b>	NEG	NEG
Glycol		WC Method		<b>NEG</b>	NEG	NEG
Soot %	%	*ASTM D7844	>3	<b>1.1</b>	0.2	0.4
Nitration	Abs/cm	*ASTM D7624	>20	<b>10.5</b>	9.8	9.1
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>28.5</b>	23.2	22.5
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Appearance	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Odor	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Emulsified Water	scalar	*Visual	>0.21	<b>NEG</b>	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	<b>2</b>	4	5
Boron	ppm	ASTM D5185m		<b>31</b>	140	88
Barium	ppm	ASTM D5185m		<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m		<b>263</b>	216	199
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m		<b>968</b>	831	1048
Calcium	ppm	ASTM D5185m		<b>1438</b>	1316	1544
Phosphorus	ppm	ASTM D5185m		<b>898</b>	854	954
Zinc	ppm	ASTM D5185m		<b>1223</b>	984	1167
Sulfur	ppm	ASTM D5185m		<b>2800</b>	2418	2691
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>21.3</b>	17.9	17.2
Base Number (BN)	mg KOH/g	ASTM D2896	13.6	<b>7.0</b>	8.3	8.3
Visc @ 100°C	cSt	ASTM D445	15.4	<b>14.7</b>	14.5	14.8



Certificate L2367

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

Sample No. : JR0197151

Lab Number : 06087096

Unique Number : 10874541

Test Package : MOBCE ( Additional Tests: TBN )

Received : 13 Feb 2024

Tested : 14 Feb 2024

Diagnosed : 14 Feb 2024 - Don Baldrige

JRE - HOPE MILLS/FAYETTEVILLE

5039 HWY 301 SOUTH

HOPE MILLS, NC

US 28348

Contact: FAYETTEVILLE SHOP

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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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F: