



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

Area

**[16W15207]**

Machine Id

**JOHN DEERE 544 P 1DW544PAJNLZ15235**

Component

**Diesel Engine**

Fluid

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

### RECOMMENDATION

Resample at the next service interval to monitor. ( Customer Sample Comment: 16W15207 )

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>JR0196210</b>	JR0185291	JR0173274
Sample Date		Client Info		<b>22 Dec 2023</b>	28 Sep 2023	20 Jun 2023
Machine Age	hrs	Client Info		<b>2500</b>	2055	1537
Oil Age	hrs	Client Info		<b>445</b>	518	0
Filter Age	hrs	Client Info		<b>445</b>	518	0
Oil Changed		Client Info		<b>Changed</b>	Changed	Changed
Filter Changed		Client Info		<b>Changed</b>	Changed	Changed
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

### WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>51	<b>9</b>	8	10
Chromium	ppm	ASTM D5185m	>11	<b>&lt;1</b>	<1	0
Nickel	ppm	ASTM D5185m	>5	<b>&lt;1</b>	<1	<1
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
Silver	ppm	ASTM D5185m	>3	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>31	<b>4</b>	4	3
Lead	ppm	ASTM D5185m	>26	<b>0</b>	0	0
Copper	ppm	ASTM D5185m	>26	<b>1</b>	2	6
Tin	ppm	ASTM D5185m	>4	<b>&lt;1</b>	<1	<1
Vanadium	ppm	ASTM D5185m		<b>0</b>	<1	<1
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

### CONTAMINATION

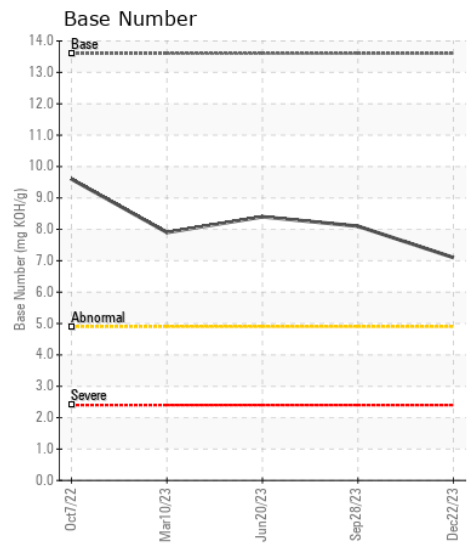
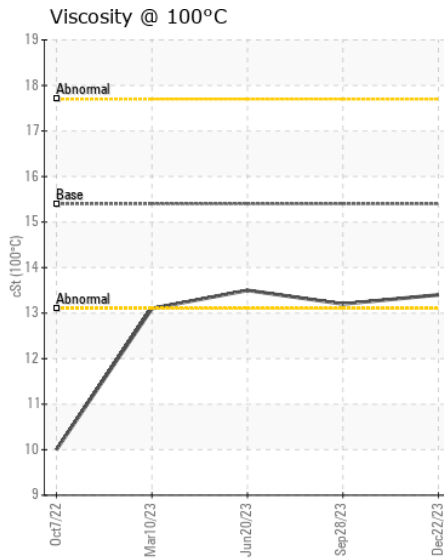
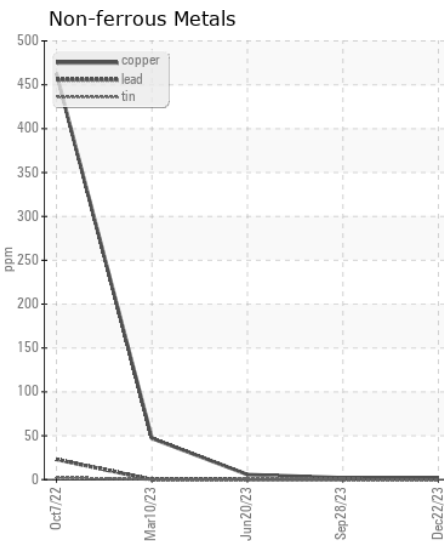
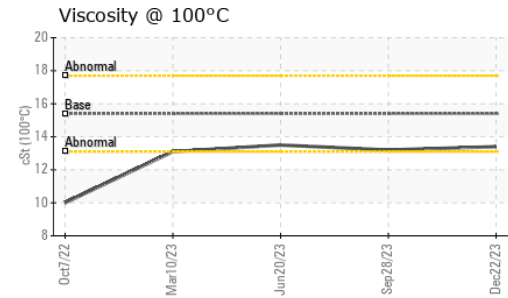
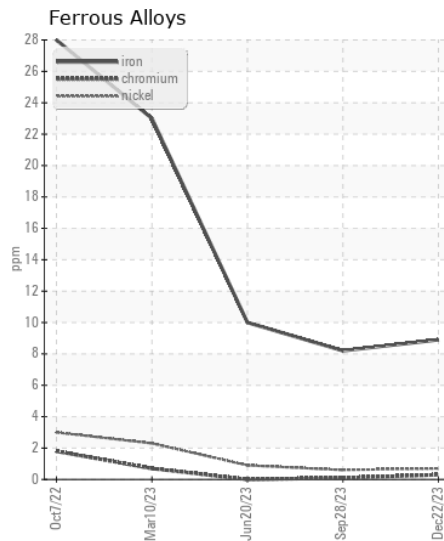
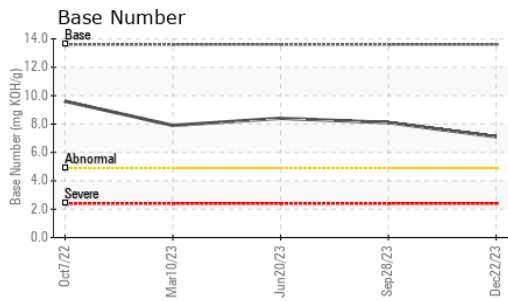
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>22	<b>7</b>	6	6
Potassium	ppm	ASTM D5185m	>20	<b>3</b>	2	2
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>0.2</b>	0.2	0.3
Nitration	Abs/cm	*ASTM D7624	>20	<b>8.2</b>	8.0	8.4
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>20.3</b>	20.4	22.0
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>0</b>	1	4
Boron	ppm	ASTM D5185m		<b>364</b>	249	199
Barium	ppm	ASTM D5185m		<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m		<b>246</b>	264	221
Manganese	ppm	ASTM D5185m		<b>0</b>	<1	<1
Magnesium	ppm	ASTM D5185m		<b>859</b>	772	756
Calcium	ppm	ASTM D5185m		<b>1470</b>	1353	1455
Phosphorus	ppm	ASTM D5185m		<b>1306</b>	881	843
Zinc	ppm	ASTM D5185m		<b>1130</b>	1058	1037
Sulfur	ppm	ASTM D5185m		<b>6642</b>	3256	3398
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>15.2</b>	15.2	17.6
Base Number (BN)	mg KOH/g	ASTM D2896	13.6	<b>7.1</b>	8.1	8.4
Visc @ 100°C	cSt	ASTM D445	15.4	<b>13.4</b>	13.2	13.5



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : JR0196210 **Received** : 09 Jan 2024  
**Lab Number** : 06055717 **Diagnosed** : 10 Jan 2024  
**Unique Number** : 10821666 **Diagnostician** : Jonathan Hester  
**Test Package** : CONST ( Additional Tests: TBN )

**JRE - GARNER**  
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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)