



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

Area

**[W51157]**

Machine Id

**JOHN DEERE 410P 1DW410PACPF06345**

Component

**Diesel Engine**

Fluid

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

### RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>JR0211492</b>	JR0179138	JR0165418
Sample Date		Client Info		<b>16 Apr 2024</b>	24 Oct 2023	13 Jun 2023
Machine Age	hrs	Client Info		<b>1667</b>	999	502
Oil Age	hrs	Client Info		<b>0</b>	0	0
Filter Age	hrs	Client Info		<b>0</b>	0	0
Oil Changed		Client Info		<b>Changed</b>	Changed	Changed
Filter Changed		Client Info		<b>Changed</b>	Changed	Changed
Sample Status				<b>NORMAL</b>	ABNORMAL	ABNORMAL

### WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>51	<b>19</b>	17	35
Chromium	ppm	ASTM D5185m	>11	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185m	>5	<b>0</b>	0	<1
Titanium	ppm	ASTM D5185m		<b>0</b>	0	<1
Silver	ppm	ASTM D5185m	>3	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>31	<b>4</b>	4	2
Lead	ppm	ASTM D5185m	>26	<b>5</b>	3	10
Copper	ppm	ASTM D5185m	>26	<b>21</b>	▲ 91	▲ 571
Tin	ppm	ASTM D5185m	>4	<b>3</b>	4	9
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

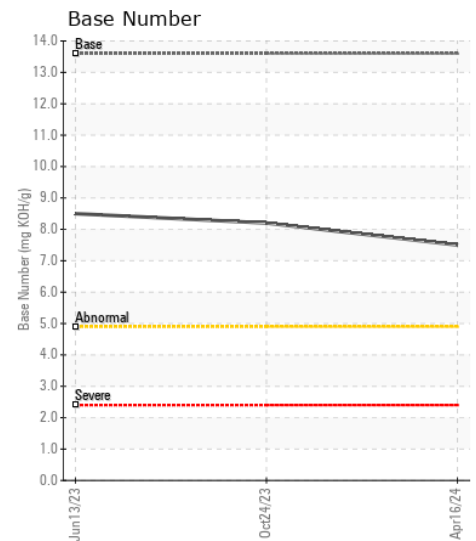
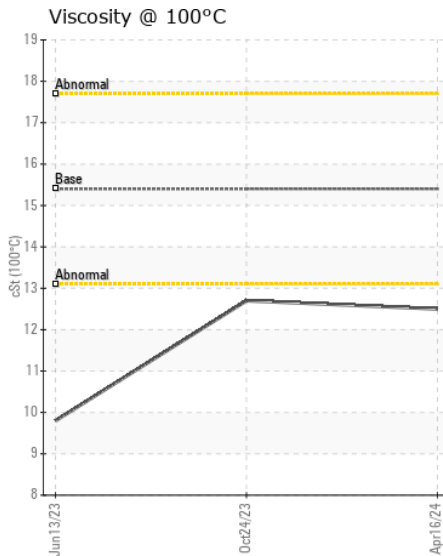
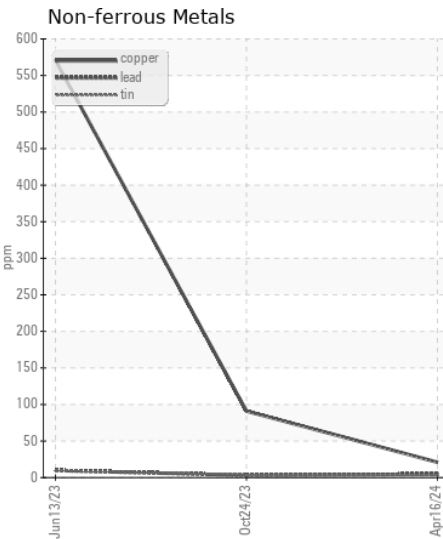
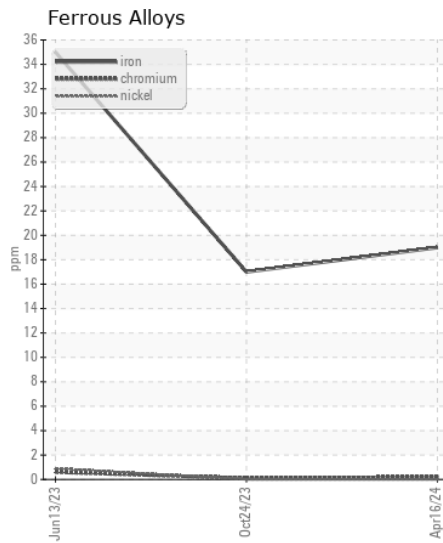
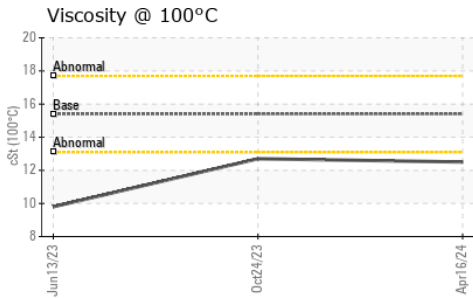
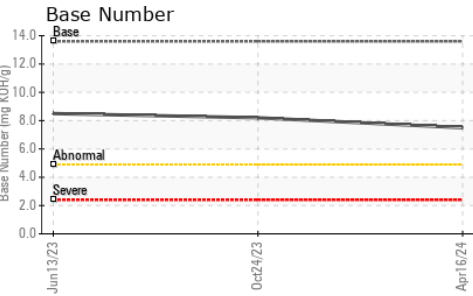
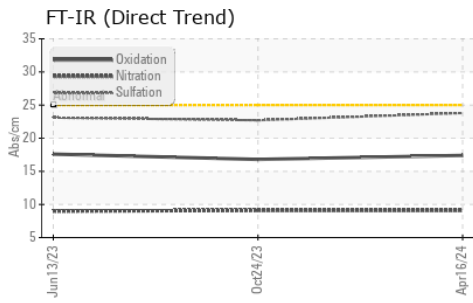
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>22	<b>6</b>	8	14
Potassium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	0	5
Fuel		WC Method	>2.1	<b>&lt;1.0</b>	<1.0	0.2
Water		WC Method	>0.21	<b>NEG</b>	NEG	NEG
Glycol		WC Method		<b>NEG</b>	NEG	NEG
Soot %	%	*ASTM D7844	>3	<b>0.3</b>	0.3	0.2
Nitration	Abs/cm	*ASTM D7624	>20	<b>9.1</b>	9.1	9.0
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>23.8</b>	22.7	23.1
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>4</b>	6	9
Boron	ppm	ASTM D5185m		<b>135</b>	162	182
Barium	ppm	ASTM D5185m		<b>&lt;1</b>	0	2
Molybdenum	ppm	ASTM D5185m		<b>251</b>	255	261
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	2	12
Magnesium	ppm	ASTM D5185m		<b>835</b>	850	812
Calcium	ppm	ASTM D5185m		<b>1477</b>	1388	1344
Phosphorus	ppm	ASTM D5185m		<b>844</b>	787	899
Zinc	ppm	ASTM D5185m		<b>1003</b>	1084	1072
Sulfur	ppm	ASTM D5185m		<b>3468</b>	2991	3219
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>17.4</b>	16.8	17.6
Base Number (BN)	mg KOH/g	ASTM D2896	13.6	<b>7.5</b>	8.2	8.5
Visc @ 100°C	cSt	ASTM D445	15.4	<b>12.5</b>	12.7	● 9.8



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : JR0211492 **Received** : 19 Apr 2024  
**Lab Number** : 06154158 **Tested** : 22 Apr 2024  
**Unique Number** : 10989581 **Diagnosed** : 22 Apr 2024 - Wes Davis  
**Test Package** : CONST ( Additional Tests: TBN )

**JRE - ASHLAND**  
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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)