



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

Machine Id  
**JOHN DEERE 460P 1DW460PALPFB06469**

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>JR0202800</b>	JR0186773	JR0175564
Sample Date		Client Info		<b>05 Feb 2024</b>	15 Oct 2023	06 Jul 2023
Machine Age	hrs	Client Info		<b>1512</b>	492	492
Oil Age	hrs	Client Info		<b>0</b>	492	492
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>12</b>	17	36
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>5</b>	4	4
Lead	ppm	ASTM D5185m	>26	<b>3</b>	10	12
Copper	ppm	ASTM D5185m	>26	<b>25</b>	▲ 100	▲ 526
Tin	ppm	ASTM D5185m	>4	<b>3</b>	4	10
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

### CONTAMINATION

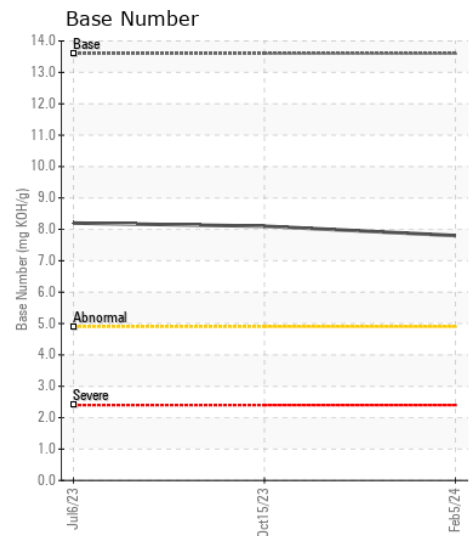
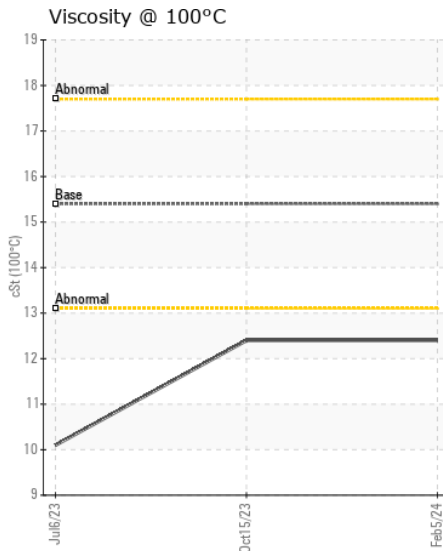
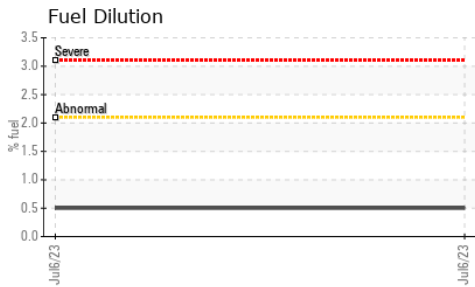
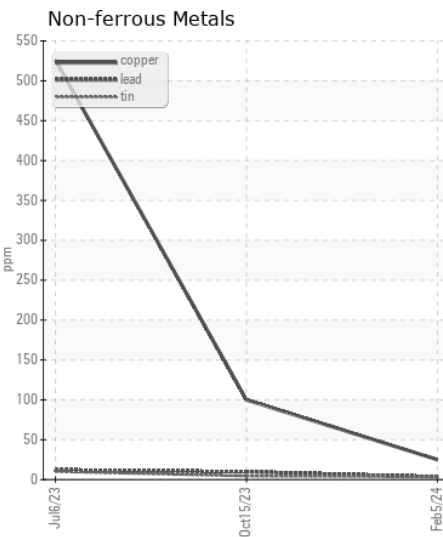
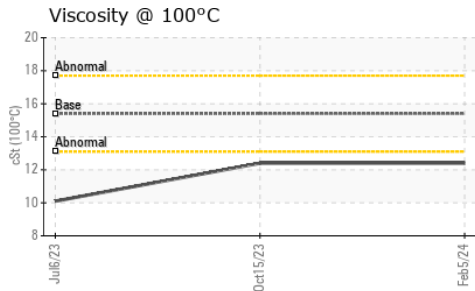
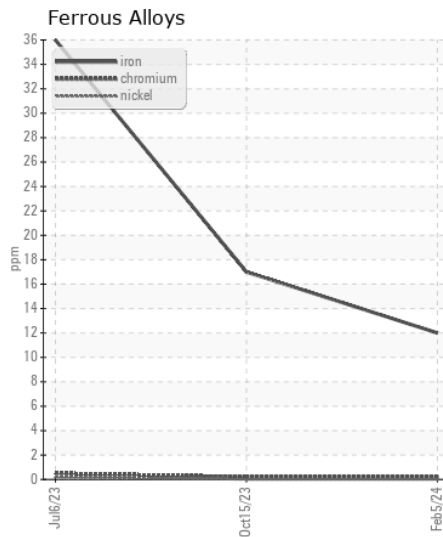
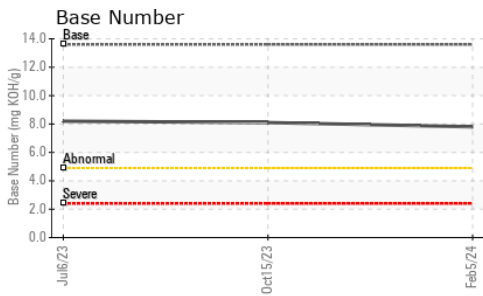
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>22	<b>4</b>	6	12
Potassium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	<1	5
Fuel	%	ASTM D3524	>2.1	<b>&lt;1.0</b>	<1.0	0.5
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	0.3
Nitration	Abs/cm	*ASTM D7624	>20	<b>8.7</b>	8.8	8.7
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>22.8</b>	21.9	22.2
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>3</b>	5	5
Boron	ppm	ASTM D5185m		<b>173</b>	172	158
Barium	ppm	ASTM D5185m		<b>1</b>	0	0
Molybdenum	ppm	ASTM D5185m		<b>260</b>	252	243
Manganese	ppm	ASTM D5185m		<b>1</b>	2	11
Magnesium	ppm	ASTM D5185m		<b>798</b>	792	743
Calcium	ppm	ASTM D5185m		<b>1319</b>	1426	1413
Phosphorus	ppm	ASTM D5185m		<b>860</b>	885	898
Zinc	ppm	ASTM D5185m		<b>1021</b>	1068	1078
Sulfur	ppm	ASTM D5185m		<b>2755</b>	2876	3201
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>16.5</b>	16.2	17.9
Base Number (BN)	mg KOH/g	ASTM D2896	13.6	<b>7.8</b>	8.1	8.2
Visc @ 100°C	cSt	ASTM D445	15.4	<b>12.4</b>	12.4	10.1



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : JR0202800 **Received** : 08 Feb 2024  
**Lab Number** : 06083433 **Tested** : 12 Feb 2024  
**Unique Number** : 10870878 **Diagnosed** : 12 Feb 2024 - Jonathan Hester  
**Test Package** : CONST ( Additional Tests: FuelDilution, TBN )

**JRE - GARNER**  
 4161 AUBURN CHURCH RD  
 GARNER, NC  
 US 27529

Contact: RALEIGH 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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