



# OIL ANALYSIS REPORT

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

Area

[W8924]

Machine Id

**JOHN DEERE 904P 1DW904PAHPLX06066**

Component

**Diesel Engine**

Fluid

**JOHN DEERE ENGINE OIL PLUS 50 II 15W40 (42 QTS)**

## RECOMMENDATION

Oil and filter change at the time of sampling has been noted. No corrective action is recommended at this time. Resample at the next service interval to monitor. ( Customer Sample Comment: W8924 )

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>JR0196853</b>	JR0202642	---
Sample Date		Client Info		<b>21 May 2024</b>	24 Jan 2024	---
Machine Age	hrs	Client Info		<b>1465</b>	928	---
Oil Age	hrs	Client Info		<b>537</b>	928	---
Filter Age	hrs	Client Info		<b>537</b>	0	---
Oil Changed		Client Info		<b>Changed</b>	Changed	---
Filter Changed		Client Info		<b>Changed</b>	Changed	---
Sample Status				<b>ABNORMAL</b>	ABNORMAL	---

## WEAR

Cylinder, crank, or cam shaft wear is indicated. Bearing and/or bushing wear is indicated.

Iron	ppm	ASTM D5185m	>51	<b>▲ 104</b>	64	---
Chromium	ppm	ASTM D5185m	>11	<b>2</b>	1	---
Nickel	ppm	ASTM D5185m	>5	<b>&lt;1</b>	<1	---
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	---
Silver	ppm	ASTM D5185m	>3	<b>&lt;1</b>	0	---
Aluminum	ppm	ASTM D5185m	>31	<b>9</b>	3	---
Lead	ppm	ASTM D5185m	>26	<b>▲ 110</b>	45	---
Copper	ppm	ASTM D5185m	>26	<b>▲ 135</b>	▲ 166	---
Tin	ppm	ASTM D5185m	>4	<b>▲ 13</b>	10	---
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	0	---
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	---
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	---

## CONTAMINATION

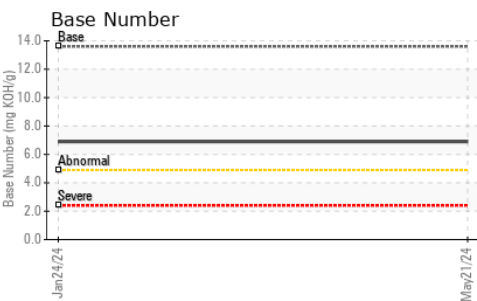
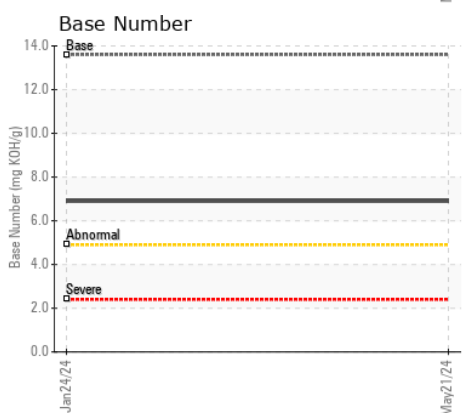
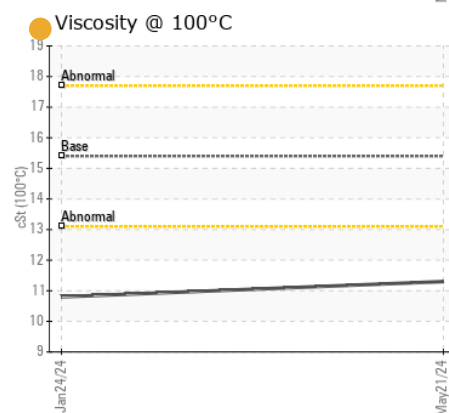
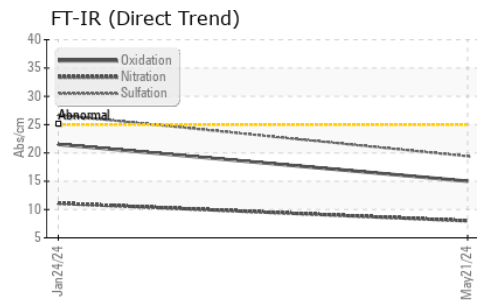
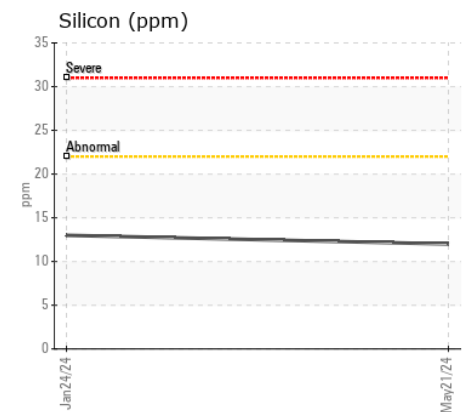
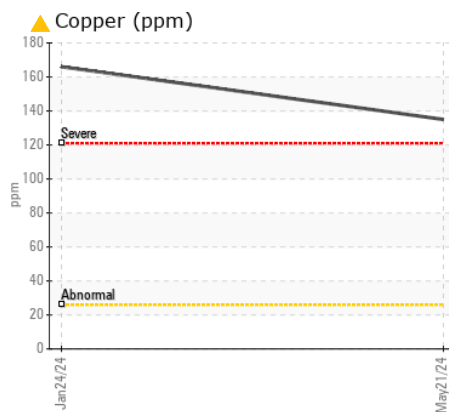
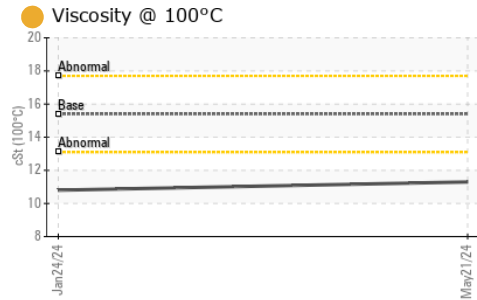
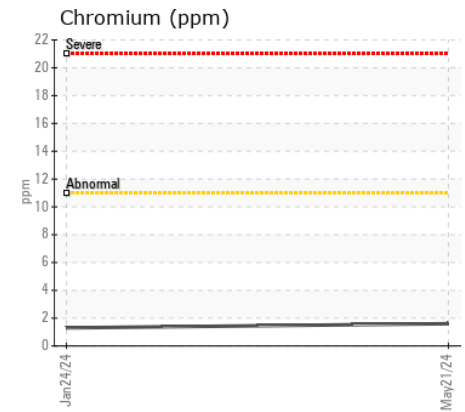
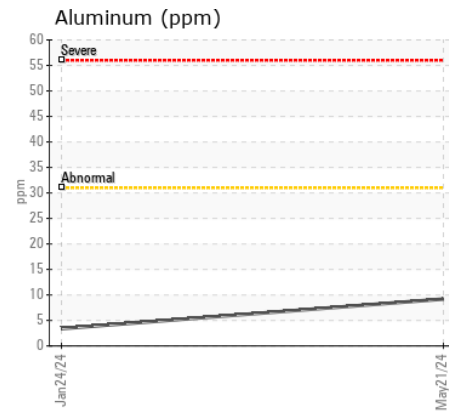
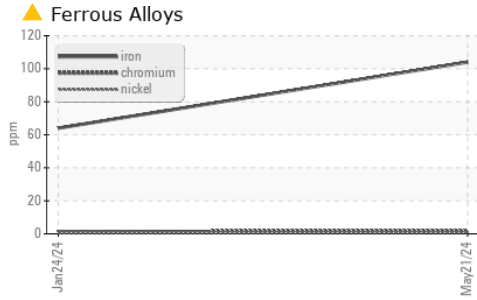
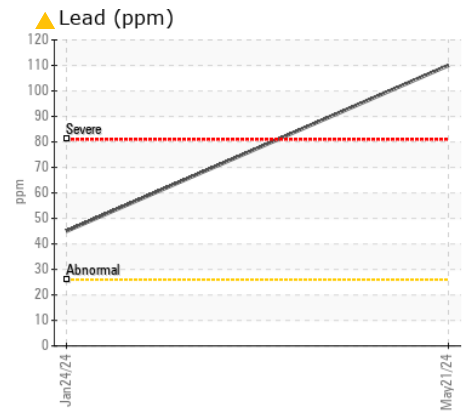
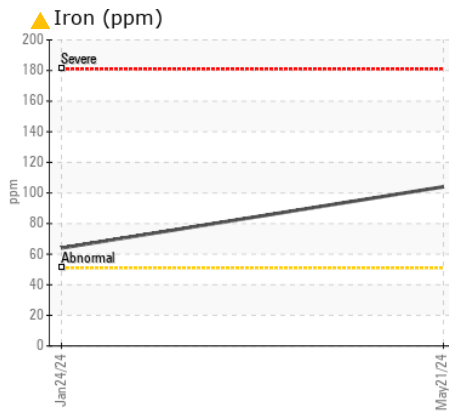
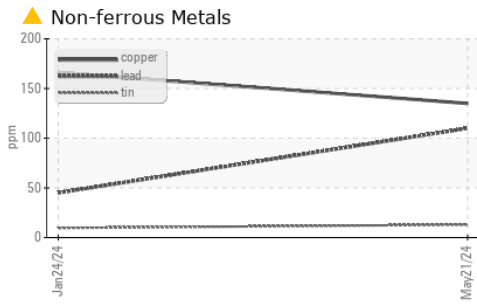
Fuel content negligible. There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>22	<b>12</b>	13	---
Potassium	ppm	ASTM D5185m	>20	<b>5</b>	7	---
Fuel	%	ASTM D3524	>2.1	<b>&lt;1.0</b>	0.7	---
Water		WC Method	>0.21	<b>NEG</b>	NEG	---
Glycol	%	*ASTM D2982		<b>NEG</b>	NEG	---
Soot %	%	*ASTM D7844	>3	<b>0.1</b>	0.9	---
Nitration	Abs/cm	*ASTM D7624	>20	<b>8.0</b>	11.1	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>19.4</b>	26.7	---
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	---
Debris	scalar	*Visual	NONE	<b>NONE</b>	NONE	---
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	NONE	---
Appearance	scalar	*Visual	NORML	<b>NORML</b>	NORML	---
Odor	scalar	*Visual	NORML	<b>NORML</b>	NORML	---
Emulsified Water	scalar	*Visual	>0.21	<b>NEG</b>	NEG	---

## FLUID CONDITION

The oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil. Confirm oil type.

Sodium	ppm	ASTM D5185m	>31	<b>14</b>	5	---
Boron	ppm	ASTM D5185m		<b>26</b>	41	---
Barium	ppm	ASTM D5185m		<b>0</b>	0	---
Molybdenum	ppm	ASTM D5185m		<b>226</b>	245	---
Manganese	ppm	ASTM D5185m		<b>13</b>	12	---
Magnesium	ppm	ASTM D5185m		<b>773</b>	749	---
Calcium	ppm	ASTM D5185m		<b>1691</b>	1488	---
Phosphorus	ppm	ASTM D5185m		<b>918</b>	812	---
Zinc	ppm	ASTM D5185m		<b>1166</b>	1101	---
Sulfur	ppm	ASTM D5185m		<b>3373</b>	2880	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>15.0</b>	21.5	---
Base Number (BN)	mg KOH/g	ASTM D2896	13.6	<b>6.9</b>	6.9	---
Visc @ 100°C	cSt	ASTM D445	15.4	<b>● 11.3</b>	10.8	---



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : JR0196853 **Received** : 23 May 2024  
**Lab Number** : 06188969 **Tested** : 28 May 2024  
**Unique Number** : 11045721 **Diagnosed** : 28 May 2024 - Don Baldrige  
**Test Package** : MOBCE ( Additional Tests: FuelDilution, Glycol, TBN )

**LUCK STONE - MANAKIN SABOT**  
 PO BOX 128  
 MANAKIN SABOT, VA  
 US 23103  
 Contact: SERVICE MANAGER

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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