



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

Area

[W51966]

Machine Id

JOHN DEERE 844P 1DW844PAVPLX06127

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>JR0212114</b>	JR0199585	JR0199979
Sample Date		Client Info		<b>20 May 2024</b>	01 Apr 2024	12 Feb 2024
Machine Age	hrs	Client Info		<b>2482</b>	1976	1496
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>13</b>	11	14
Chromium	ppm	ASTM D5185m	>11	<b>&lt;1</b>	1	<1
Nickel	ppm	ASTM D5185m	>5	<b>&lt;1</b>	<1	0
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	<1
Silver	ppm	ASTM D5185m	>3	<b>1</b>	0	0
Aluminum	ppm	ASTM D5185m	>31	<b>6</b>	6	4
Lead	ppm	ASTM D5185m	>26	<b>6</b>	5	4
Copper	ppm	ASTM D5185m	>26	<b>23</b>	▲ 27	▲ 106
Tin	ppm	ASTM D5185m	>4	<b>4</b>	4	4
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	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.

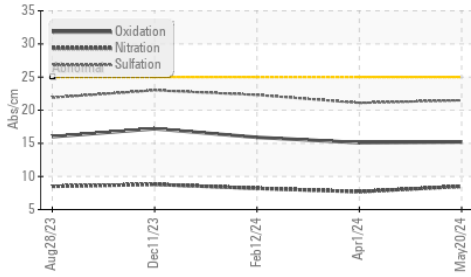
Silicon	ppm	ASTM D5185m	>22	<b>8</b>	8	6
Potassium	ppm	ASTM D5185m	>20	<b>3</b>	3	3
Fuel	%	ASTM D3524	>2.1	<b>&lt;1.0</b>	<1.0	<1.0
Water		WC Method	>0.21	<b>NEG</b>	NEG	NEG
Glycol		WC Method		<b>NEG</b>	NEG	NEG
Soot %	%	*ASTM D7844	>3	<b>0.4</b>	0.3	0.4
Nitration	Abs/cm	*ASTM D7624	>20	<b>8.5</b>	7.7	8.2
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>21.5</b>	21.1	22.3
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

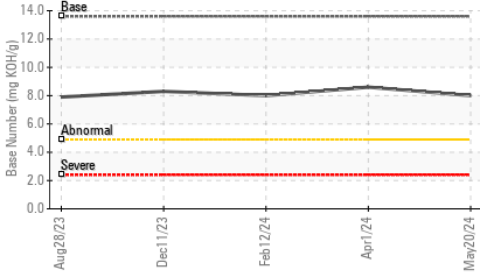
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m	>31	<b>4</b>	4	1
Boron	ppm	ASTM D5185m		<b>177</b>	230	220
Barium	ppm	ASTM D5185m		<b>2</b>	2	0
Molybdenum	ppm	ASTM D5185m		<b>230</b>	231	261
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	1	0
Magnesium	ppm	ASTM D5185m		<b>676</b>	806	775
Calcium	ppm	ASTM D5185m		<b>1440</b>	1373	1295
Phosphorus	ppm	ASTM D5185m		<b>809</b>	947	814
Zinc	ppm	ASTM D5185m		<b>999</b>	1086	1024
Sulfur	ppm	ASTM D5185m		<b>2951</b>	3443	2762
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>15.2</b>	15.1	15.9
Base Number (BN)	mg KOH/g	ASTM D2896	13.6	<b>8.0</b>	8.6	8.0
Visc @ 100°C	cSt	ASTM D445	15.4	<b>12.5</b>	12.9	12.7

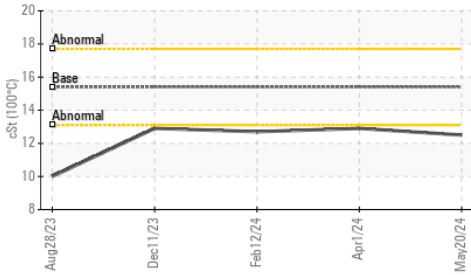
**FT-IR (Direct Trend)**



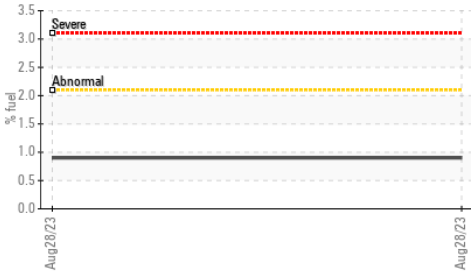
**Base Number**



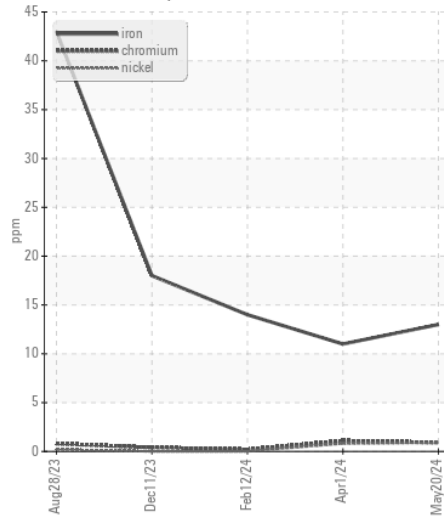
**Viscosity @ 100°C**



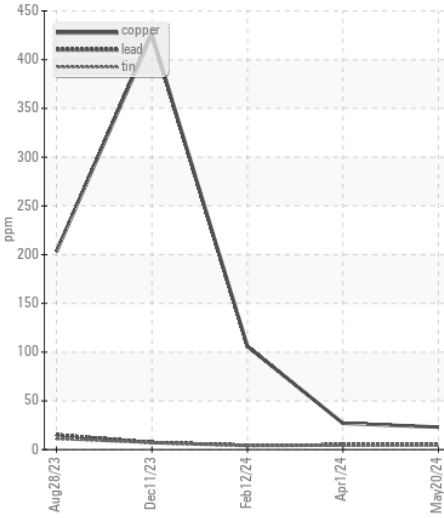
**Fuel Dilution**



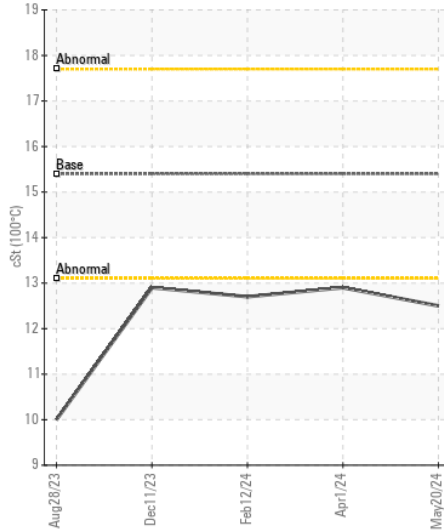
**Ferrous Alloys**



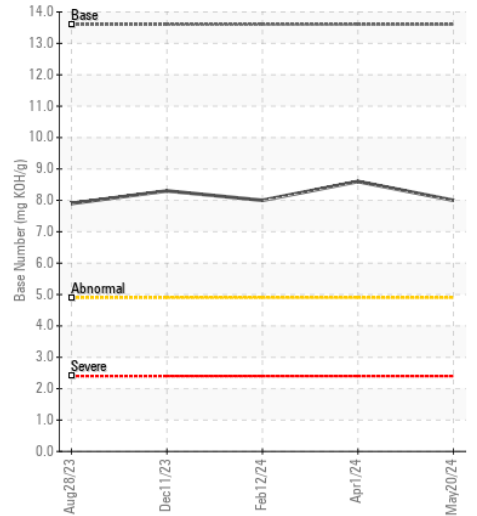
**Non-ferrous Metals**



**Viscosity @ 100°C**



**Base Number**



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : JR0212114 **Received** : 28 May 2024  
**Lab Number** : 06191974 **Tested** : 29 May 2024  
**Unique Number** : 11048726 **Diagnosed** : 30 May 2024 - Don Baldrige  
**Test Package** : CONST ( Additional Tests: FuelDilution, 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)