



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

Area  
**[W52922 US SILICA]**

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>JR0224486</b>	JR0212114	JR0199585
Sample Date		Client Info		<b>15 Jul 2024</b>	20 May 2024	01 Apr 2024
Machine Age	hrs	Client Info		<b>3057</b>	2482	1976
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>	NORMAL	ABNORMAL

### WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>51	<b>13</b>	13	11
Chromium	ppm	ASTM D5185m	>11	<b>&lt;1</b>	<1	1
Nickel	ppm	ASTM D5185m	>5	<b>0</b>	<1	<1
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	<1
Silver	ppm	ASTM D5185m	>3	<b>0</b>	1	0
Aluminum	ppm	ASTM D5185m	>31	<b>5</b>	6	6
Lead	ppm	ASTM D5185m	>26	<b>4</b>	6	5
Copper	ppm	ASTM D5185m	>26	<b>21</b>	23	▲ 27
Tin	ppm	ASTM D5185m	>4	<b>2</b>	4	4
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.

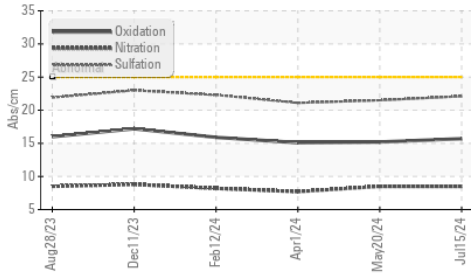
Silicon	ppm	ASTM D5185m	>22	<b>6</b>	8	8
Potassium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	3	3
Fuel		WC Method	>2.1	<b>&lt;1.0</b>	<1.0	<1.0
Water		WC Method	>0.21	<b>NEG</b>	NEG	NEG
Glycol		WC Method		<b>NEG</b>	NEG	NEG
Soot %	%	*ASTM D7844	>3	<b>0.4</b>	0.4	0.3
Nitration	Abs/cm	*ASTM D7624	>20	<b>8.5</b>	8.5	7.7
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>22.1</b>	21.5	21.1
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

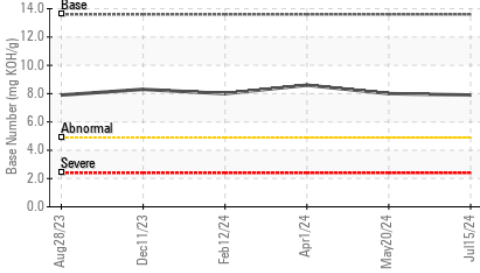
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m	>31	<b>4</b>	4	4
Boron	ppm	ASTM D5185m		<b>147</b>	177	230
Barium	ppm	ASTM D5185m		<b>&lt;1</b>	2	2
Molybdenum	ppm	ASTM D5185m		<b>217</b>	230	231
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	<1	1
Magnesium	ppm	ASTM D5185m		<b>717</b>	676	806
Calcium	ppm	ASTM D5185m		<b>1564</b>	1440	1373
Phosphorus	ppm	ASTM D5185m		<b>852</b>	809	947
Zinc	ppm	ASTM D5185m		<b>995</b>	999	1086
Sulfur	ppm	ASTM D5185m		<b>3459</b>	2951	3443
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>15.7</b>	15.2	15.1
Base Number (BN)	mg KOH/g	ASTM D2896	13.6	<b>7.9</b>	8.0	8.6
Visc @ 100°C	cSt	ASTM D445	15.4	<b>12.4</b>	12.5	12.9

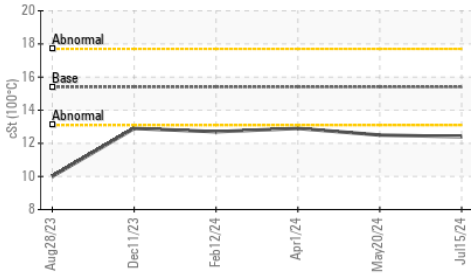
**FT-IR (Direct Trend)**



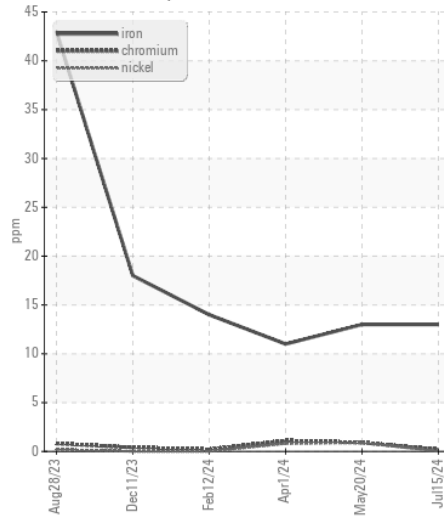
**Base Number**



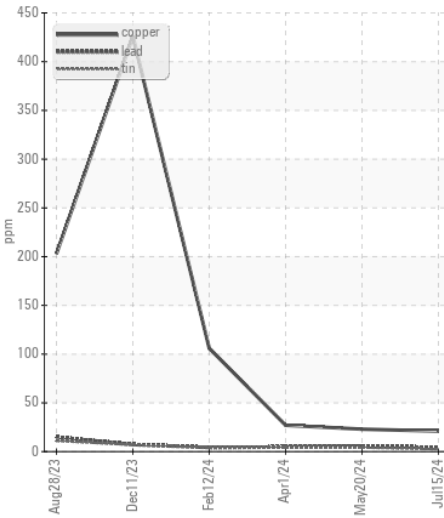
**Viscosity @ 100°C**



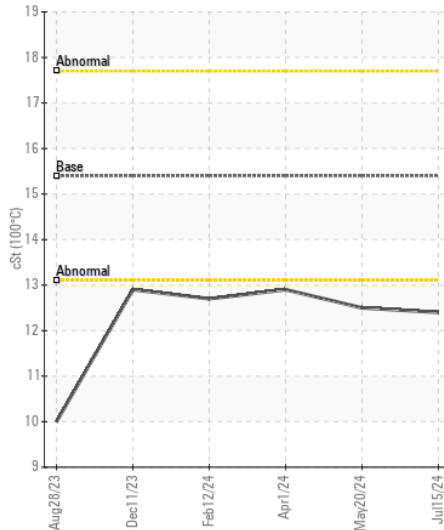
**Ferrous Alloys**



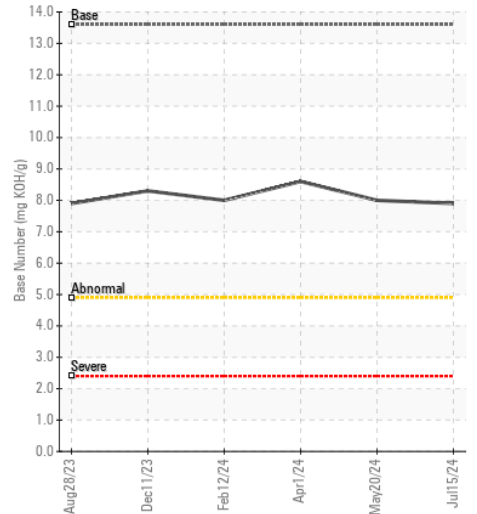
**Non-ferrous Metals**



**Viscosity @ 100°C**



**Base Number**



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : JR0224486 **Received** : 17 Jul 2024  
**Lab Number** : 06238938 **Tested** : 18 Jul 2024  
**Unique Number** : 11127772 **Diagnosed** : 18 Jul 2024 - Wes Davis  
**Test Package** : CONST ( Additional Tests: TBN )

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)

**JRE - ASHLAND**  
 11047 LEADBETTER RD  
 ASHLAND, VA  
 US 23005  
 Contact: DAVID ZIEG  
 dzieg@jamesriverequipment.com  
 T: (804)798-6001  
 F: (804)798-0292