



OIL ANALYSIS REPORT

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

Area  
**Store 2 - Beaver [RO#148600]**  
Machine Id  
**JOHN DEERE 460P 1DW460PACPF06217**  
Component  
**Diesel Engine**  
Fluid  
**JOHN DEERE ENGINE OIL PLUS 50 II 10W30 (11 GAL)**

**RECOMMENDATION**

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>LEC0048858</b>	LEC0047312	LEC0040562
Sample Date		Client Info		<b>15 Apr 2024</b>	04 Jan 2024	30 May 2023
Machine Age	hrs	Client Info		<b>1653</b>	1036	495
Oil Age	hrs	Client Info		<b>617</b>	541	495
Filter Age	hrs	Client Info		<b>617</b>	541	495
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**

Metal levels are typical for a new component breaking in.

Iron	ppm	ASTM D5185m	>51	<b>21</b>	6	40
Chromium	ppm	ASTM D5185m	>11	<b>1</b>	<1	<1
Nickel	ppm	ASTM D5185m	>5	<b>2</b>	<1	<1
Titanium	ppm	ASTM D5185m		<b>3</b>	3	<1
Silver	ppm	ASTM D5185m	>3	<b>&lt;1</b>	0	0
Aluminum	ppm	ASTM D5185m	>31	<b>4</b>	2	1
Lead	ppm	ASTM D5185m	>26	<b>7</b>	2	11
Copper	ppm	ASTM D5185m	>26	<b>64</b>	30	▲ 596
Tin	ppm	ASTM D5185m	>4	<b>7</b>	2	16
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**

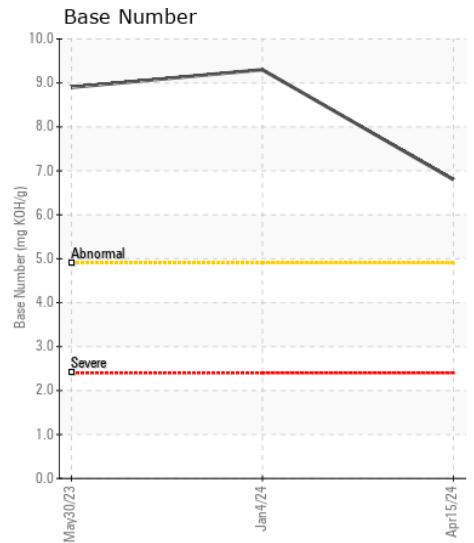
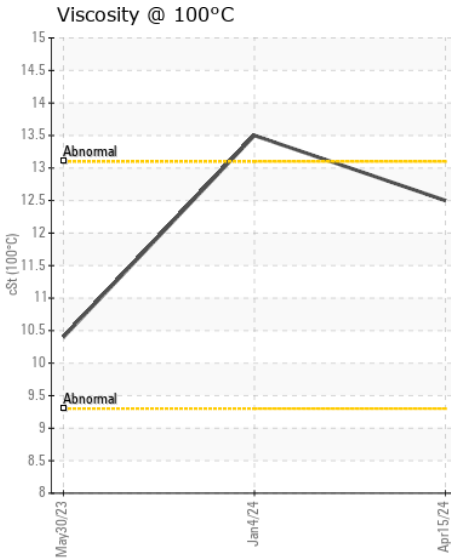
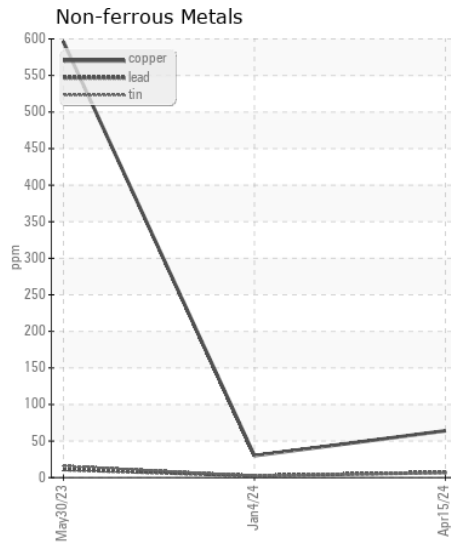
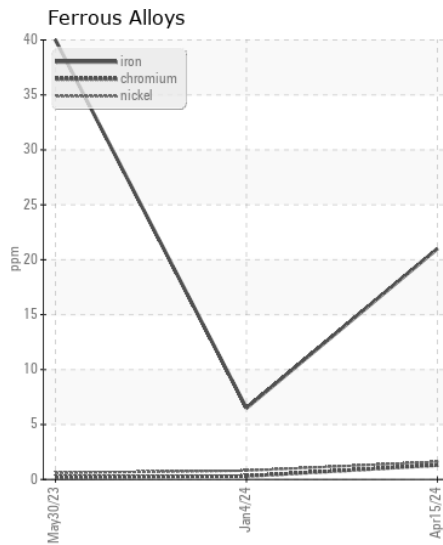
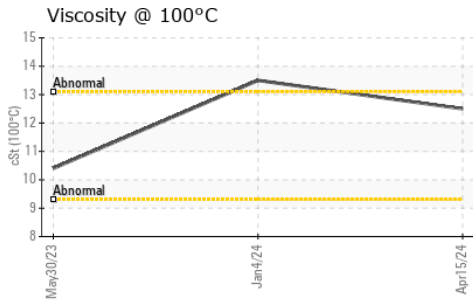
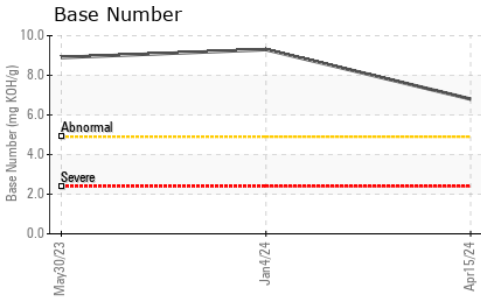
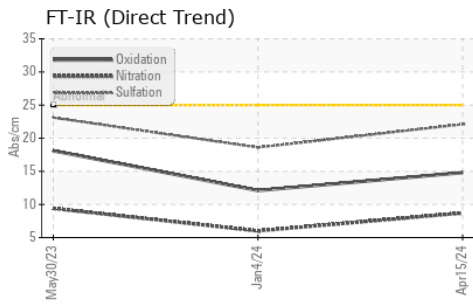
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>120	<b>6</b>	5	13
Potassium	ppm	ASTM D5185m	>20	<b>4</b>	4	5
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>0.3</b>	0.1	0.3
Nitration	Abs/cm	*ASTM D7624	>20	<b>8.7</b>	6.0	9.4
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>22.1</b>	18.6	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>	0	<1
Boron	ppm	ASTM D5185m		<b>43</b>	100	193
Barium	ppm	ASTM D5185m		<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m		<b>27</b>	21	279
Manganese	ppm	ASTM D5185m		<b>2</b>	<1	5
Magnesium	ppm	ASTM D5185m		<b>681</b>	669	787
Calcium	ppm	ASTM D5185m		<b>1305</b>	1246	1472
Phosphorus	ppm	ASTM D5185m		<b>1062</b>	888	892
Zinc	ppm	ASTM D5185m		<b>1148</b>	1125	1066
Sulfur	ppm	ASTM D5185m		<b>3767</b>	3780	3004
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>14.8</b>	12.1	18.1
Base Number (BN)	mg KOH/g	ASTM D2896		<b>6.8</b>	9.3	8.9
Visc @ 100°C	cSt	ASTM D445		<b>12.5</b>	13.5	10.4



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : LEC0048858 **Received** : 18 Apr 2024  
**Lab Number** : 06152866 **Tested** : 19 Apr 2024  
**Unique Number** : 10982944 **Diagnosed** : 19 Apr 2024 - Wes Davis  
**Test Package** : CONST ( Additional Tests: TBN )

**LESLIE EQUIPMENT COMPANY**  
 105 TENNIS CENTER DR.  
 MARIETTA, OH  
 US 45750-9765  
 Contact: LEANNE KENDALL  
 KendalLeanne@lec1.com  
 T:  
 F: (740)373-5570

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)