



# OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Area  
**Store 4 - Fairmont**  
Machine Id  
**JOHN DEERE 650J T0650JX133890**  
Component  
**Diesel Engine**  
Fluid  
**JOHN DEERE ENGINE OIL PLUS 50 II 15W40 (15 QTS)**

## RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>LECP184081</b>	LECP174926	LECP156453
Sample Date		Client Info		<b>22 Jan 2019</b>	19 Jun 2017	17 Apr 2015
Machine Age	hrs	Client Info		<b>3350</b>	2766	2462
Oil Age	hrs	Client Info		<b>584</b>	500	227
Filter Age	hrs	Client Info		<b>584</b>	500	227
Oil Changed		Client Info		<b>Changed</b>	Changed	Changed
Filter Changed		Client Info		<b>Changed</b>	Changed	Changed
Sample Status				<b>NORMAL</b>	NORMAL	ATTENTION

## WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>51	<b>45</b>	35	22
Chromium	ppm	ASTM D5185m	>11	<b>&lt;1</b>	<1	2
Nickel	ppm	ASTM D5185m	>5	<b>1</b>	1	<1
Titanium	ppm	ASTM D5185m		<b>0</b>	<1	3
Silver	ppm	ASTM D5185m		<b>0</b>	0	<1
Aluminum	ppm	ASTM D5185m	>31	<b>6</b>	5	5
Lead	ppm	ASTM D5185m	>26	<b>1</b>	<1	4
Copper	ppm	ASTM D5185m	>26	<b>2</b>	3	1
Tin	ppm	ASTM D5185m	>4	<b>0</b>	6	0
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	<1
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

## CONTAMINATION

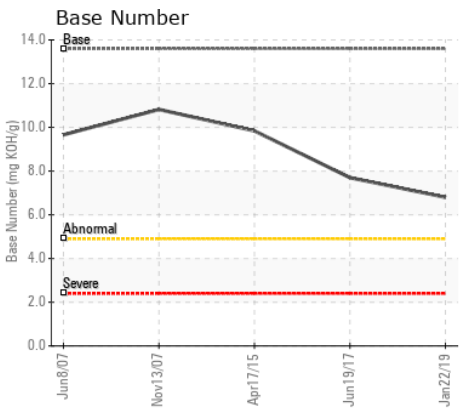
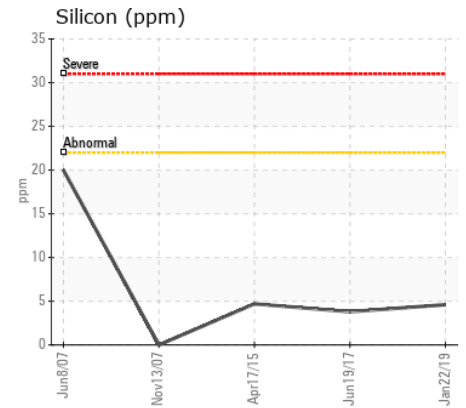
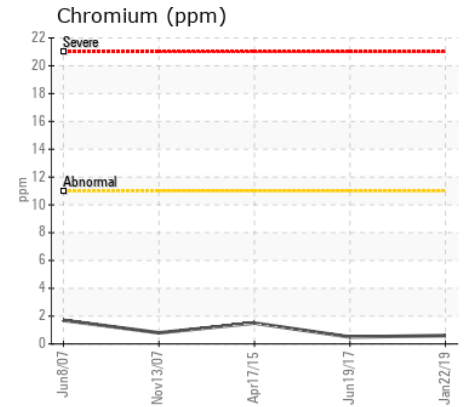
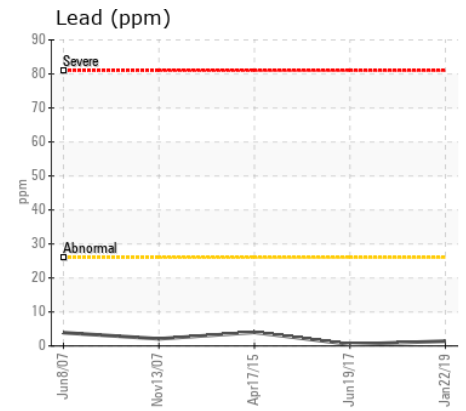
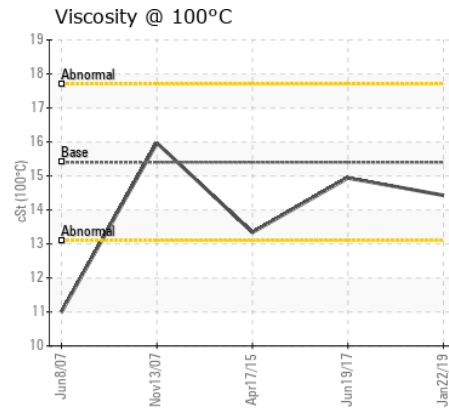
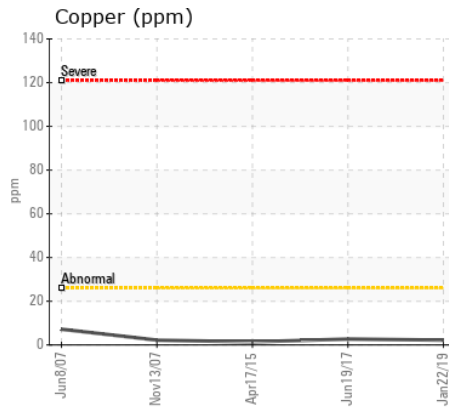
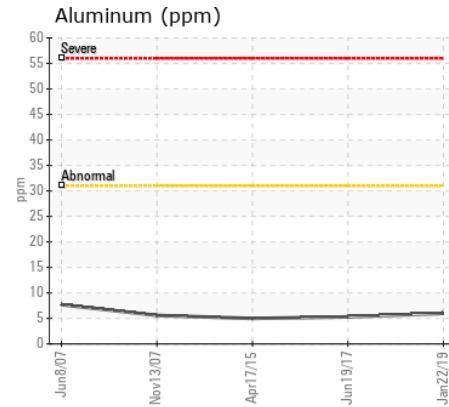
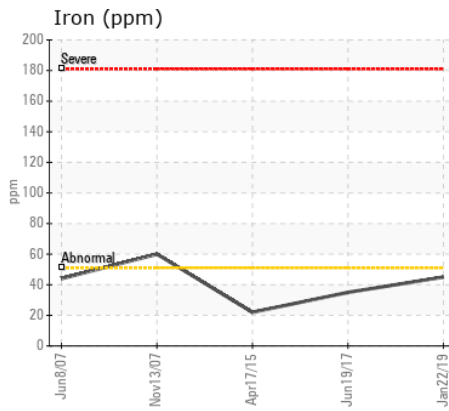
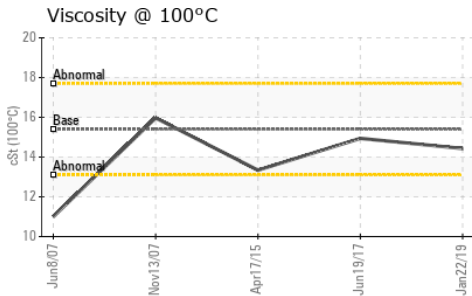
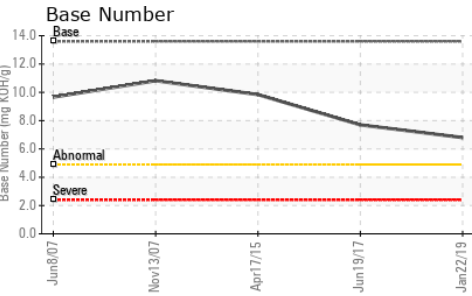
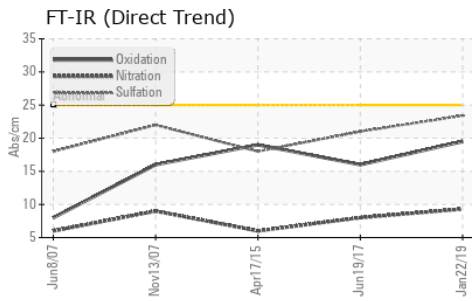
There is no indication of any contamination in the component.

Silicon	ppm	ASTM D5185m	>22	<b>5</b>	4	5
Potassium	ppm	ASTM D5185m	>20	<b>5</b>	3	<1
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>0.8</b>	0.4	0.3
Nitration	Abs/cm	*ASTM D7624	>20	<b>9.3</b>	8.	6.
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>23.4</b>	21.	18.
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>	10	53
Boron	ppm	ASTM D5185m		<b>365</b>	414	12
Barium	ppm	ASTM D5185m		<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m		<b>93</b>	85	10
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m		<b>390</b>	412	38
Calcium	ppm	ASTM D5185m		<b>1604</b>	1675	2137
Phosphorus	ppm	ASTM D5185m		<b>998</b>	1096	821
Zinc	ppm	ASTM D5185m		<b>1192</b>	1290	1069
Sulfur	ppm	ASTM D5185m		<b>2962</b>	3263	892
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>19.5</b>	16.	19.
Base Number (BN)	mg KOH/g	ASTM D2896	13.6	<b>6.8</b>	7.70	9.84
Visc @ 100°C	cSt	ASTM D445	15.4	<b>14.43</b>	14.94	13.34



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : LEC184081  
**Lab Number** : 04638125  
**Unique Number** : 8474560  
**Test Package** : MOB1+  
**Received** : 25 Jan 2019  
**Tested** : 28 Jan 2019  
**Diagnosed** : 28 Jan 2019 - Don Baldrige

**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)