



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

Area

**[16W16457]**

Machine Id

**JOHN DEERE 748L 1DW748LBAKF697049**

Component

**Diesel Engine**

Fluid

**JOHN DEERE ENGINE OIL PLUS 50 II 15W40 (30 QTS)**

### RECOMMENDATION

Resample at the next service interval to monitor. ( Customer Sample Comment: 16W16457 )

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>JR0217234</b>	JR0177180	JR0028967
Sample Date		Client Info		<b>17 Jun 2024</b>	24 Apr 2024	11 Nov 2019
Machine Age	hrs	Client Info		<b>6084</b>	5926	0
Oil Age	hrs	Client Info		<b>700</b>	0	0
Filter Age	hrs	Client Info		<b>700</b>	0	0
Oil Changed		Client Info		<b>Changed</b>	Not Changd	Changed
Filter Changed		Client Info		<b>Changed</b>	Not Changd	N/A
Sample Status				<b>NORMAL</b>	NORMAL	ABNORMAL

### WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>51	<b>25</b>	25	34
Chromium	ppm	ASTM D5185m	>11	<b>1</b>	<1	<1
Nickel	ppm	ASTM D5185m	>5	<b>2</b>	2	2
Titanium	ppm	ASTM D5185m		<b>0</b>	0	0
Silver	ppm	ASTM D5185m	>3	<b>&lt;1</b>	0	0
Aluminum	ppm	ASTM D5185m	>31	<b>6</b>	6	6
Lead	ppm	ASTM D5185m	>26	<b>0</b>	0	0
Copper	ppm	ASTM D5185m	>26	<b>5</b>	3	▲ 620
Tin	ppm	ASTM D5185m	>4	<b>&lt;1</b>	<1	<1
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

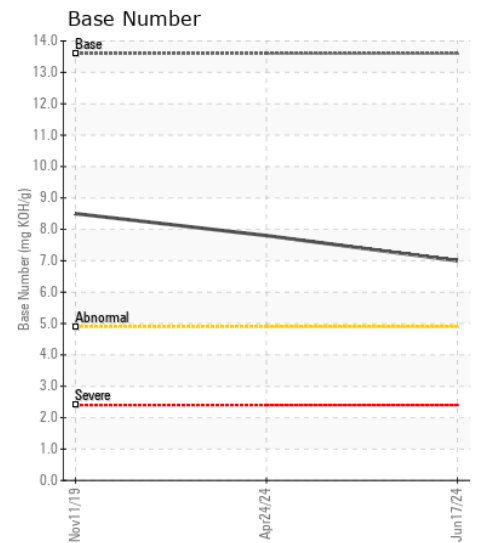
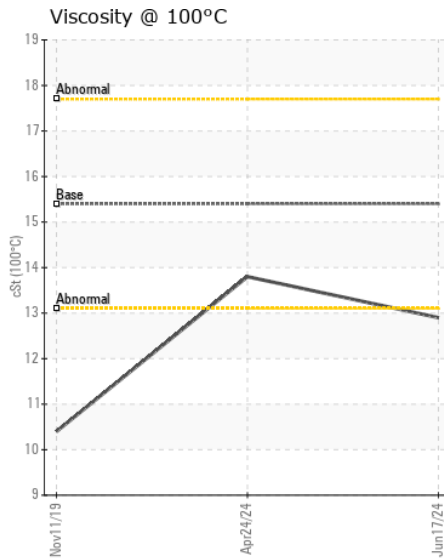
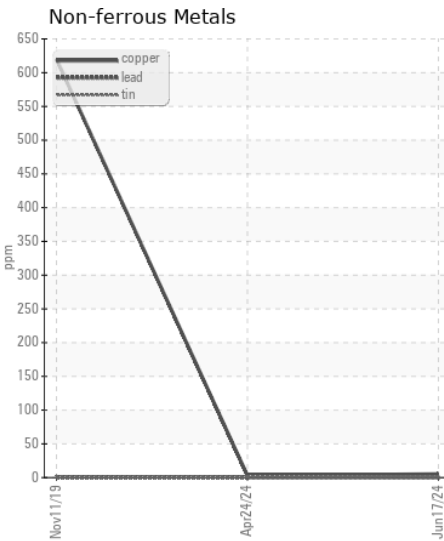
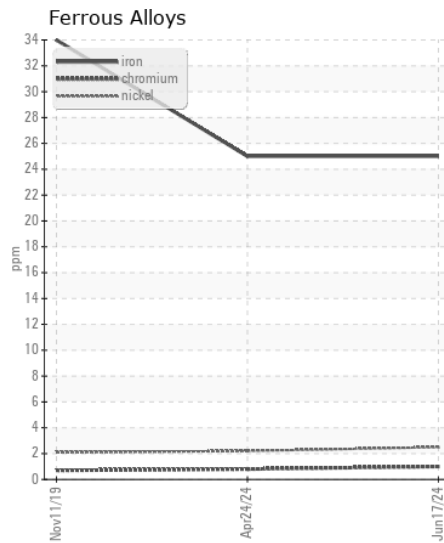
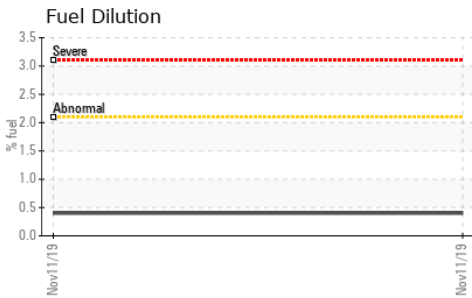
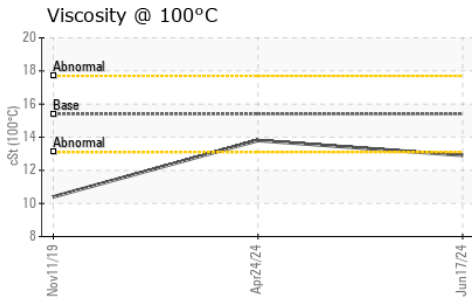
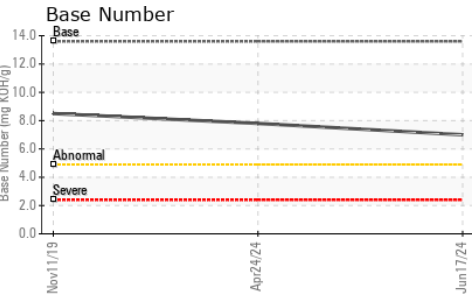
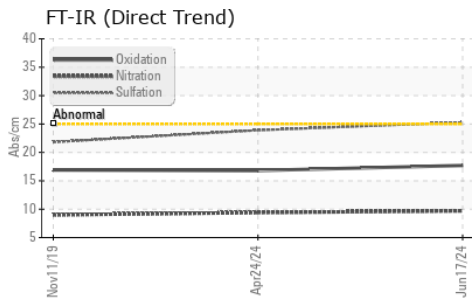
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>22	<b>9</b>	9	12
Potassium	ppm	ASTM D5185m	>20	<b>4</b>	2	12
Fuel	%	ASTM D3524	>2.1	<b>&lt;1.0</b>	<1.0	0.4
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>	0.7	0.4
Nitration	Abs/cm	*ASTM D7624	>20	<b>9.7</b>	9.4	9
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>25.3</b>	23.9	21.8
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>	2	8
Boron	ppm	ASTM D5185m		<b>41</b>	96	135
Barium	ppm	ASTM D5185m		<b>0</b>	<1	0
Molybdenum	ppm	ASTM D5185m		<b>247</b>	266	239
Manganese	ppm	ASTM D5185m		<b>1</b>	<1	7
Magnesium	ppm	ASTM D5185m		<b>837</b>	838	924
Calcium	ppm	ASTM D5185m		<b>1372</b>	1468	1668
Phosphorus	ppm	ASTM D5185m		<b>890</b>	933	1007
Zinc	ppm	ASTM D5185m		<b>1085</b>	1109	1084
Sulfur	ppm	ASTM D5185m		<b>3306</b>	3219	2775
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>17.7</b>	16.8	16.9
Base Number (BN)	mg KOH/g	ASTM D2896	13.6	<b>7.0</b>	7.8	8.5
Visc @ 100°C	cSt	ASTM D445	15.4	<b>12.9</b>	13.8	10.4



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : JR0217234 **Received** : 19 Jun 2024  
**Lab Number** : 06214370 **Tested** : 20 Jun 2024  
**Unique Number** : 11087234 **Diagnosed** : 21 Jun 2024 - Don Baldrige  
**Test Package** : CONST ( Additional Tests: FuelDilution, 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 - CASTLE HAYNE**  
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