



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



Machine Id  
**JOHN DEERE 772G 1DW772GPTEF666356**

Component  
**Hydraulic System**

Fluid  
**JOHN DEERE ENGINE OIL PLUS 50 II 15W40 (16 QTS)**

### RECOMMENDATION

Oil and filter change at the time of sampling has been noted. No corrective action is recommended at this time. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>JR0209239</b>	JR0164765	JR0106293
Sample Date		Client Info		<b>08 Apr 2024</b>	25 May 2023	30 Nov 2021
Machine Age	hrs	Client Info		<b>4823</b>	4380	3497
Oil Age	hrs	Client Info		<b>0</b>	433	0
Filter Age	hrs	Client Info		<b>0</b>	433	0
Oil Changed		Client Info		<b>Changed</b>	Not Changd	Changed
Filter Changed		Client Info		<b>Changed</b>	Not Changd	Changed
Sample Status				<b>ABNORMAL</b>	ABNORMAL	ABNORMAL

### WEAR

The copper level is abnormal. All other component wear rates are normal.

PQ		ASTM D8184	>50	<b>19</b>	16	18
Iron	ppm	ASTM D5185m	>71	<b>17</b>	18	24
Chromium	ppm	ASTM D5185m	>11	<b>1</b>	1	1
Nickel	ppm	ASTM D5185m	>6	<b>0</b>	0	0
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	<1
Silver	ppm	ASTM D5185m		<b>3</b>	3	4
Aluminum	ppm	ASTM D5185m	>11	<b>5</b>	6	6
Lead	ppm	ASTM D5185m	>13	<b>2</b>	<1	3
Copper	ppm	ASTM D5185m	>21	<b>▲ 28</b>	23	<b>▲ 27</b>
Tin	ppm	ASTM D5185m	>5	<b>0</b>	<1	<1
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	<b>▲ MODER</b>	LIGHT
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

### CONTAMINATION

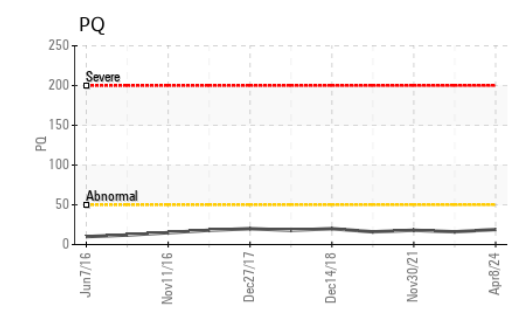
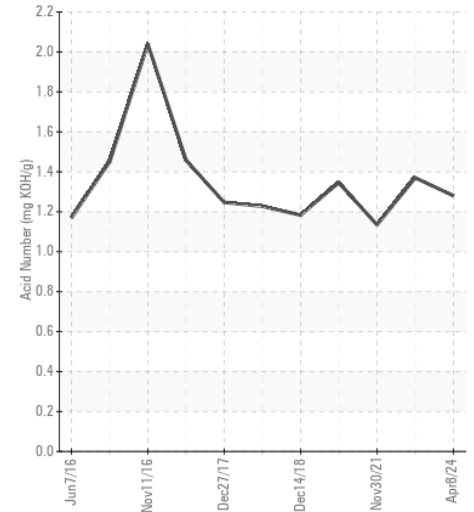
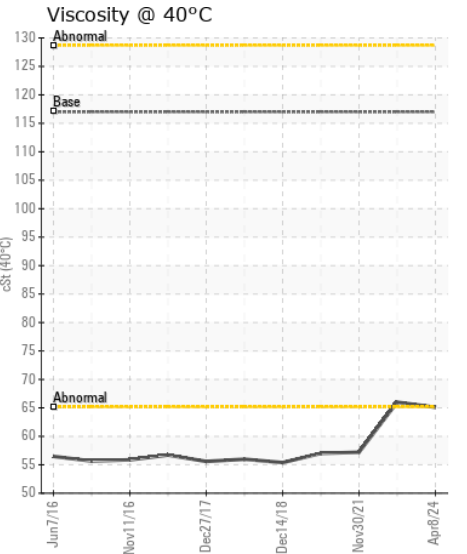
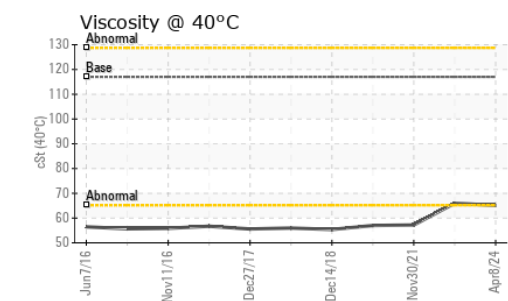
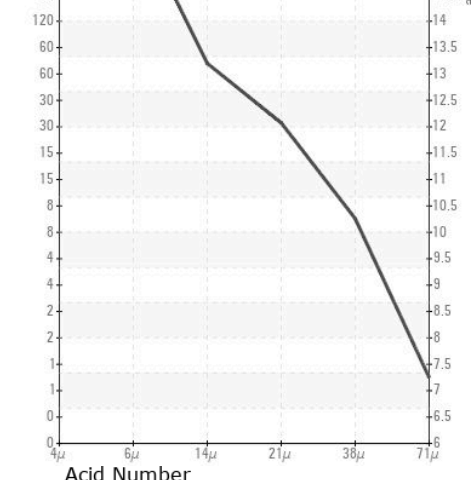
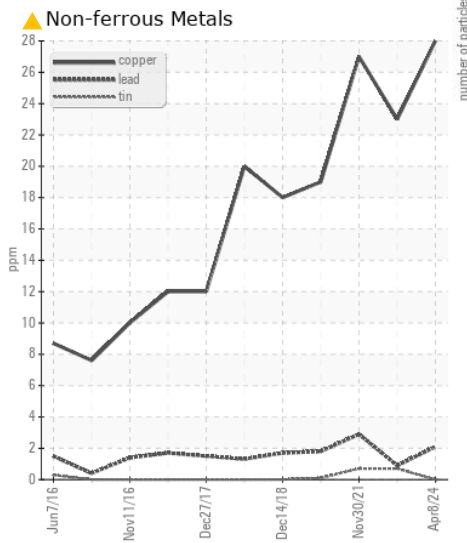
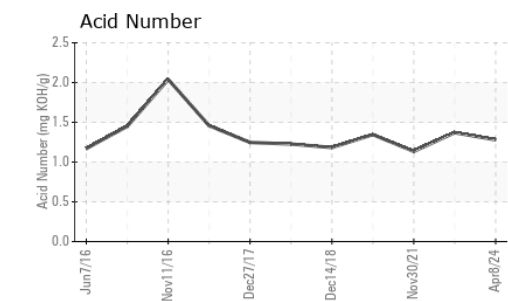
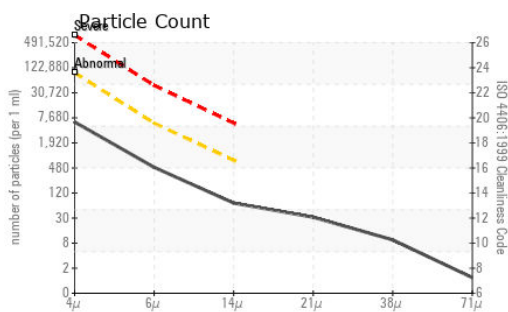
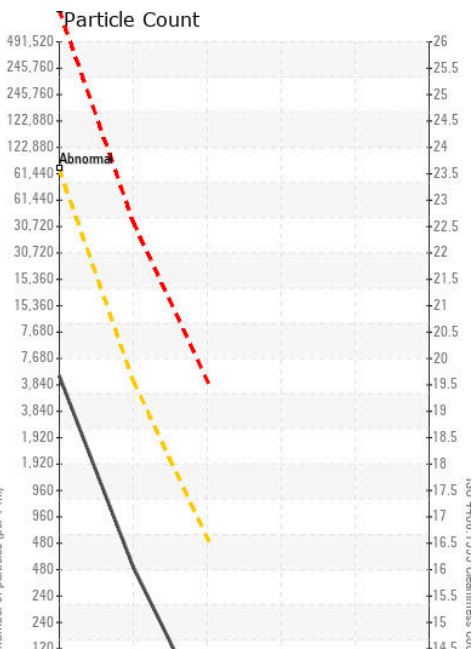
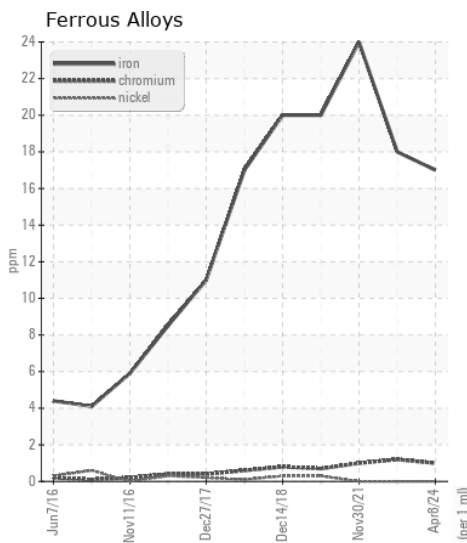
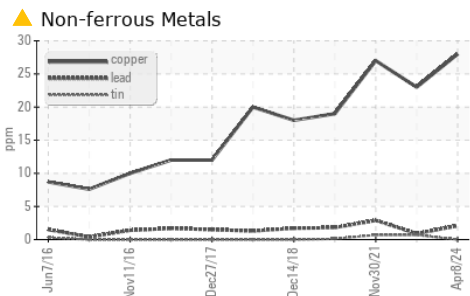
There is no indication of any contamination in the oil. The amount and size of particulates present in the system are acceptable.

Silicon	ppm	ASTM D5185m	>24	<b>11</b>	13	15
Potassium	ppm	ASTM D5185m	>20	<b>9</b>	3	2
Water		WC Method	>0.075	<b>NEG</b>	NEG	NEG
Particles >4µm		ASTM D7647	>80000	<b>5323</b>	---	45269
Particles >6µm		ASTM D7647	>5000	<b>437</b>	---	857
Particles >14µm		ASTM D7647	>640	<b>61</b>	---	80
Particles >21µm		ASTM D7647	>160	<b>28</b>	---	43
Particles >38µm		ASTM D7647	>40	<b>8</b>	---	8
Particles >71µm		ASTM D7647	>10	<b>1</b>	---	0
Oil Cleanliness		ISO 4406 (c)	>23/19/16	<b>20/16/13</b>	---	23/17/13
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	*Visual	NONE	<b>LIGHT</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	>0.075	<b>NEG</b>	NEG	NEG

### FLUID CONDITION

The AN level is acceptable for this fluid. The condition of the oils additive package is suitable for further service.

Sodium	ppm	ASTM D5185m	>21	<b>5</b>	3	2
Boron	ppm	ASTM D5185m		<b>114</b>	134	34
Barium	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
Molybdenum	ppm	ASTM D5185m		<b>93</b>	104	27
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m		<b>395</b>	492	291
Calcium	ppm	ASTM D5185m		<b>1690</b>	1907	2114
Phosphorus	ppm	ASTM D5185m		<b>820</b>	952	1011
Zinc	ppm	ASTM D5185m		<b>943</b>	1186	1185
Sulfur	ppm	ASTM D5185m		<b>3167</b>	3977	2935
Acid Number (AN)	mg KOH/g	ASTM D8045		<b>1.28</b>	1.37	1.134
Visc @ 40°C	cSt	ASTM D445	117	<b>65.1</b>	66.0	57.2



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : JR0209239 **Received** : 17 Apr 2024  
**Lab Number** : 06151886 **Tested** : 18 Apr 2024  
**Unique Number** : 10981964 **Diagnosed** : 19 Apr 2024 - Don Baldrige  
**Test Package** : CONST ( Additional Tests: PQ )

**NATIONAL QUARRY SERVICE**  
 4189 NC 87 SOUTH  
 MONCURE, NC  
 US 27012  
 Contact: MATT JUSTICE

Certificate L2367  
 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)

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