



# OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	ATTENTION



Area  
**Store 3 - Norton**  
Machine Id  
**JOHN DEERE 540G 1DW540GXPDC656979**  
Component  
**Hydraulic System**  
Fluid  
**JOHN DEERE ENGINE OIL PLUS 50 II 10W30 (8 GAL)**

## RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>LEC0025580</b>	LEC0015026	LEC0002293
Sample Date		Client Info		<b>09 Nov 2021</b>	23 Sep 2020	24 May 2019
Machine Age	hrs	Client Info		<b>3544</b>	3003	2457
Oil Age	hrs	Client Info		<b>2621</b>	3003	1534
Filter Age	hrs	Client Info		<b>2621</b>	525	446
Oil Changed		Client Info		<b>Not Changd</b>	Not Changd	Not Changd
Filter Changed		Client Info		<b>Not Changd</b>	Not Changd	Not Changd
Sample Status				<b>ATTENTION</b>	NORMAL	NORMAL

## WEAR

All component wear rates are normal.

PQ		ASTM D8184	>50	<b>19</b>	25	23
Iron	ppm	ASTM D5185m	>71	<b>1</b>	23	22
Chromium	ppm	ASTM D5185m	>11	<b>&lt;1</b>	4	3
Nickel	ppm	ASTM D5185m	>6	<b>&lt;1</b>	0	<1
Titanium	ppm	ASTM D5185m		<b>0</b>	<1	0
Silver	ppm	ASTM D5185m		<b>&lt;1</b>	1	<1
Aluminum	ppm	ASTM D5185m	>11	<b>1</b>	8	12
Lead	ppm	ASTM D5185m	>13	<b>&lt;1</b>	<1	<1
Copper	ppm	ASTM D5185m	>21	<b>&lt;1</b>	26	19
Tin	ppm	ASTM D5185m	>5	<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

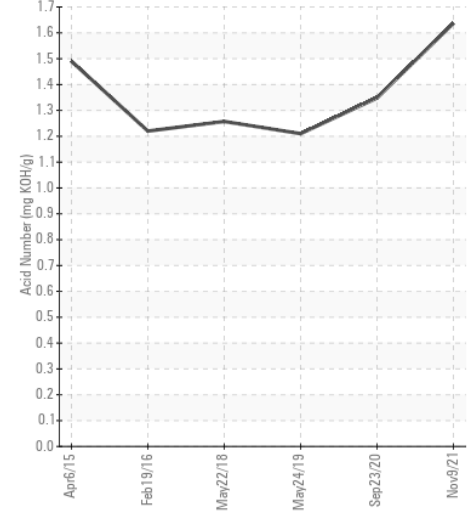
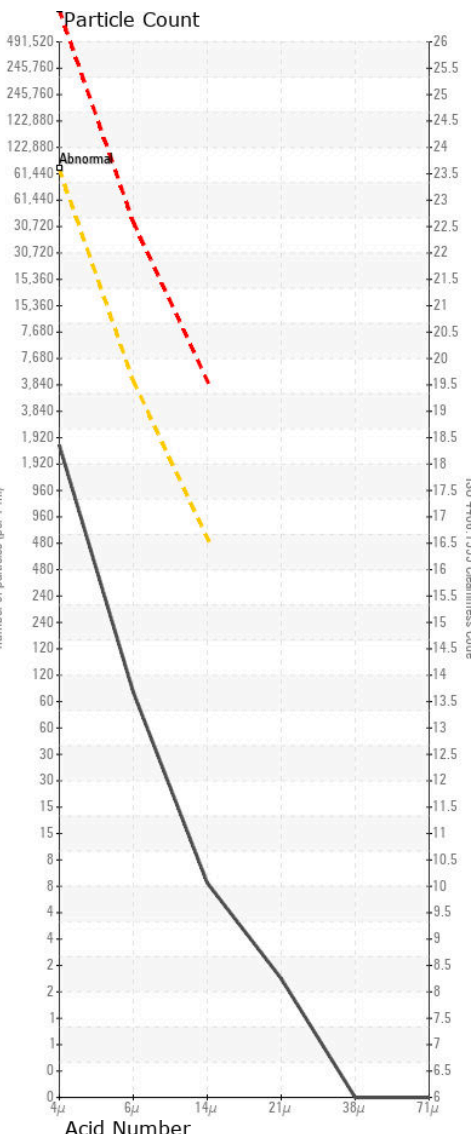
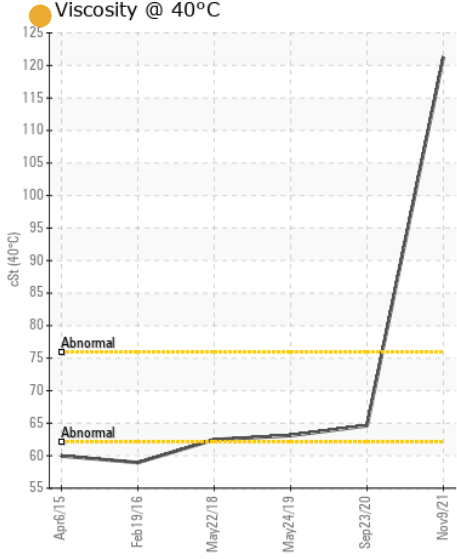
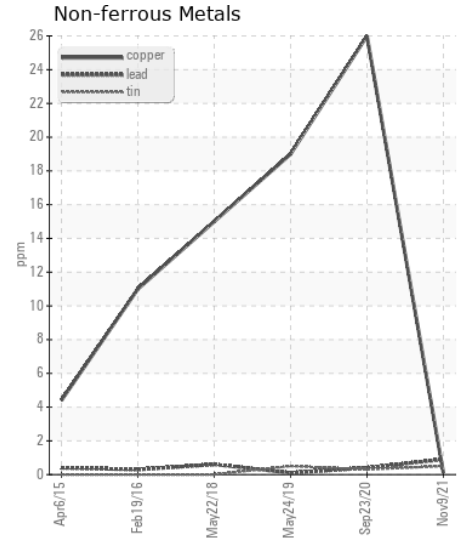
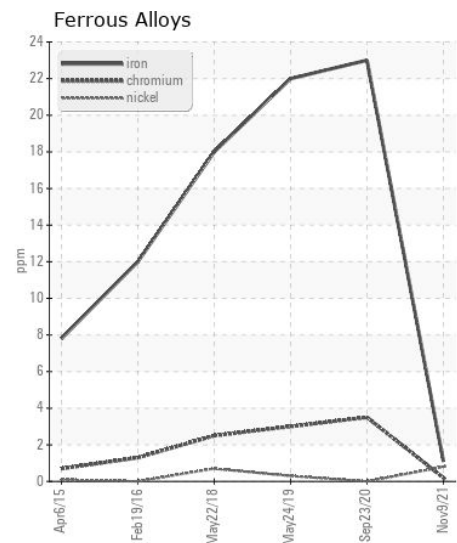
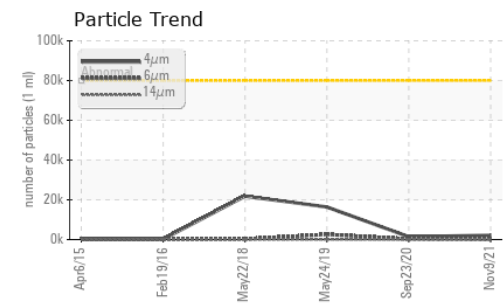
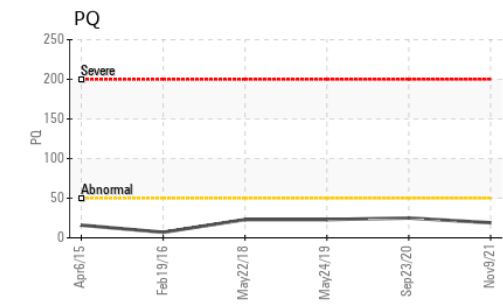
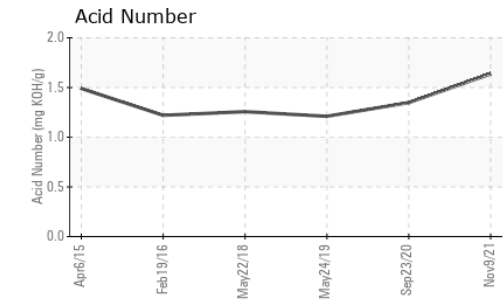
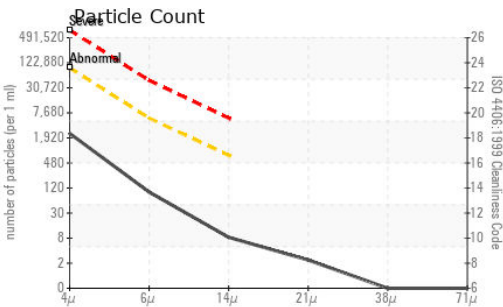
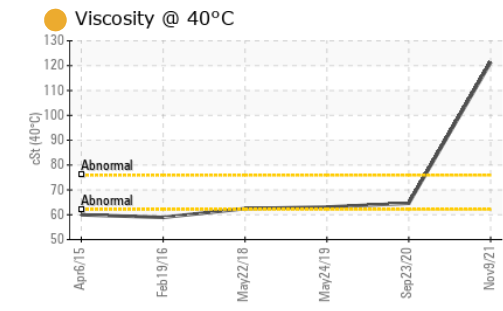
The amount and size of particulates present in the system are acceptable. There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>24	<b>6</b>	20	20
Potassium	ppm	ASTM D5185m	>20	<b>3</b>	4	4
Water		WC Method	>0.075	<b>NEG</b>	NEG	NEG
Particles >4µm		ASTM D7647	>80000	<b>2151</b>	1424	16388
Particles >6µm		ASTM D7647	>5000	<b>85</b>	276	2617
Particles >14µm		ASTM D7647	>640	<b>7</b>	17	83
Particles >21µm		ASTM D7647	>160	<b>2</b>	4	16
Particles >38µm		ASTM D7647	>40	<b>0</b>	1	0
Particles >71µm		ASTM D7647	>10	<b>0</b>	0	0
Oil Cleanliness		ISO 4406 (c)	>23/19/16	<b>18/14/10</b>	18/15/11	21/19/14
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	>0.075	<b>NEG</b>	NEG	NEG

## FLUID CONDITION

The oil viscosity is higher than normal. Confirm oil type. The AN level is acceptable for this fluid.

Sodium	ppm	ASTM D5185m	>21	<b>&lt;1</b>	4	5
Boron	ppm	ASTM D5185m		<b>244</b>	151	101
Barium	ppm	ASTM D5185m		<b>0</b>	<1	0
Molybdenum	ppm	ASTM D5185m		<b>210</b>	114	94
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m		<b>693</b>	478	467
Calcium	ppm	ASTM D5185m		<b>1397</b>	2022	2044
Phosphorus	ppm	ASTM D5185m		<b>820</b>	998	961
Zinc	ppm	ASTM D5185m		<b>956</b>	1165	1055
Sulfur	ppm	ASTM D5185m		<b>2647</b>	3117	3317
Acid Number (AN)	mg KOH/g	ASTM D8045		<b>1.637</b>	1.348	1.210
Visc @ 40°C	cSt	ASTM D445		<b>121.3</b>	64.6	63.1



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : LEC0025580 **Received** : 11 Nov 2021  
**Lab Number** : 05398391 **Tested** : 16 Nov 2021  
**Unique Number** : 9737541 **Diagnosed** : 16 Nov 2021 - Doug Bogart  
**Test Package** : MOBCE ( Additional Tests: PQ )

**RL LOGGING**  
 217 CLAYPOOL HOLLOW RD  
 BUCKHANNON, WV  
 US 26201  
 Contact: SERVICE MANAGER

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)