



# OIL ANALYSIS REPORT

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



Area  
**Store 1 - Cowen [146992]**  
Machine Id  
**JOHN DEERE 544K 1DW544KZCDE654148**  
Component  
**Hydraulic System**  
Fluid  
**JOHN DEERE ENGINE OIL PLUS 50 II 15W40 (39 GAL)**

## RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>LEC0045888</b>	LEC0009565	LEC0005304
Sample Date		Client Info		<b>12 Jan 2024</b>	24 Jan 2020	24 Oct 2019
Machine Age	hrs	Client Info		<b>23079</b>	14647	14069
Oil Age	hrs	Client Info		<b>0</b>	14647	14069
Filter Age	hrs	Client Info		<b>0</b>	14647	14069
Oil Changed		Client Info		<b>Not Chngd</b>	Not Chngd	Not Chngd
Filter Changed		Client Info		<b>Not Chngd</b>	Not Chngd	Not Chngd
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

## WEAR

All component wear rates are normal.

PQ		ASTM D8184	>50	<b>16</b>	23	17
Iron	ppm	ASTM D5185m	>71	<b>2</b>	6	7
Chromium	ppm	ASTM D5185m	>11	<b>0</b>	<1	<1
Nickel	ppm	ASTM D5185m	>6	<b>0</b>	0	0
Titanium	ppm	ASTM D5185m		<b>0</b>	<1	<1
Silver	ppm	ASTM D5185m		<b>&lt;1</b>	<1	0
Aluminum	ppm	ASTM D5185m	>11	<b>2</b>	3	4
Lead	ppm	ASTM D5185m	>13	<b>&lt;1</b>	<1	0
Copper	ppm	ASTM D5185m	>21	<b>&lt;1</b>	3	4
Tin	ppm	ASTM D5185m	>5	<b>&lt;1</b>	<1	<1
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	0
White Metal	scalar	*Visual	NONE	<b>LIGHT</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

## CONTAMINATION

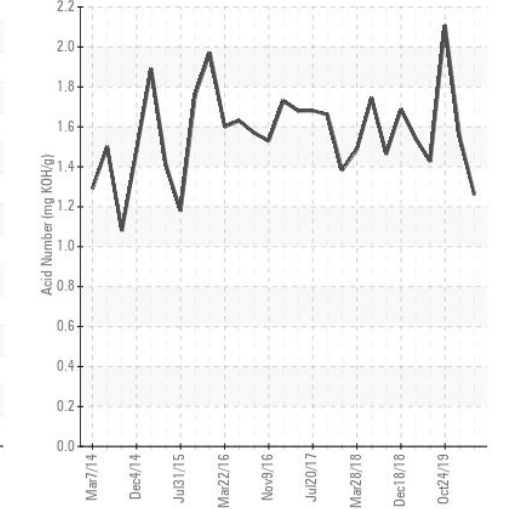
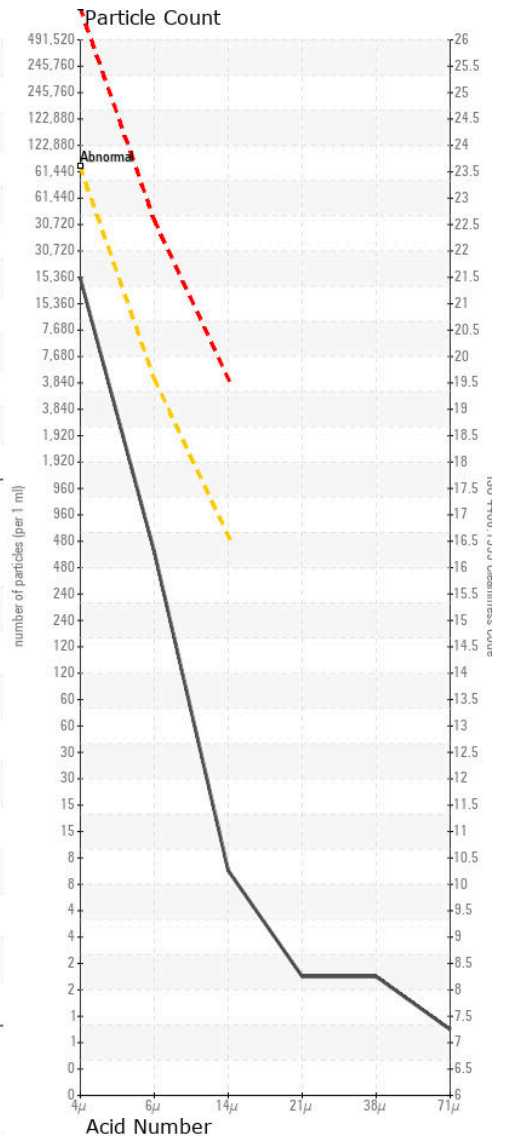
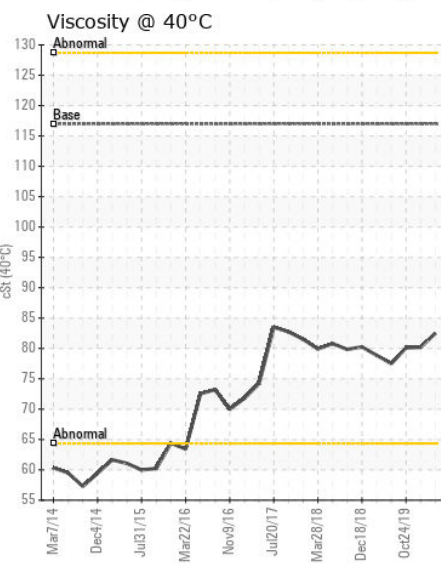
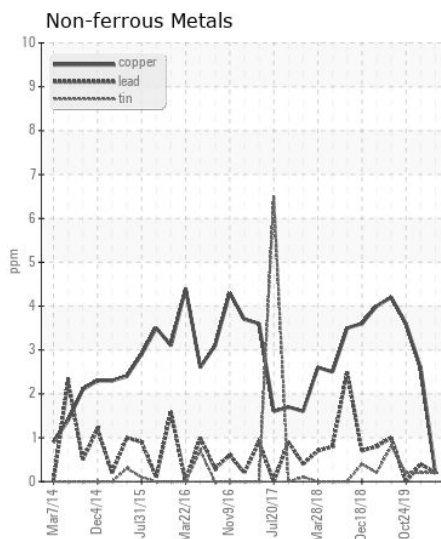
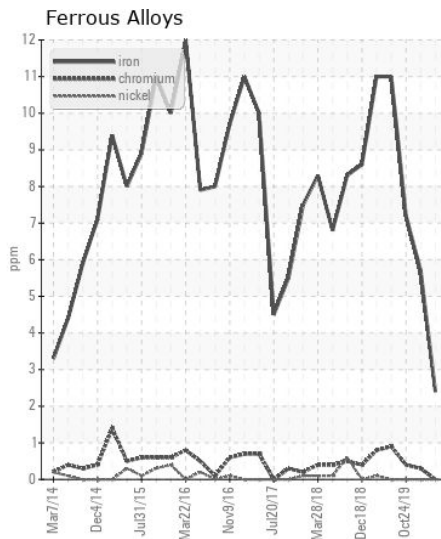
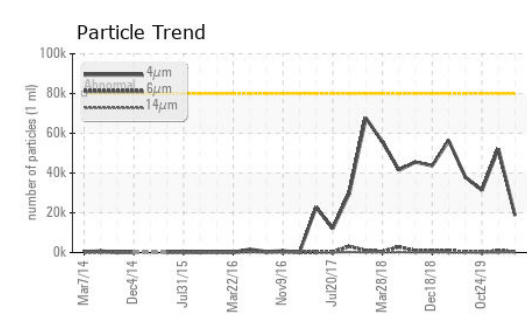
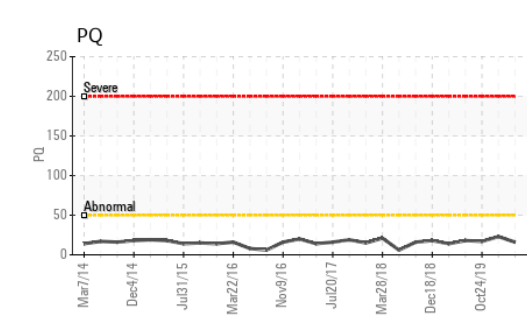
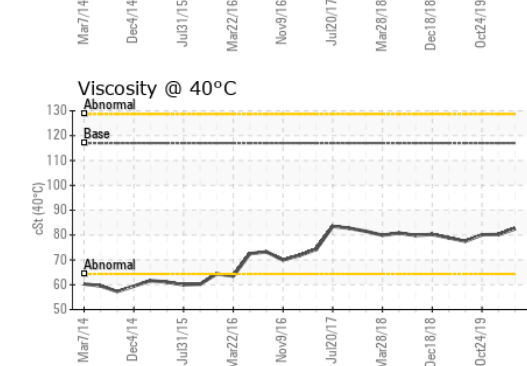
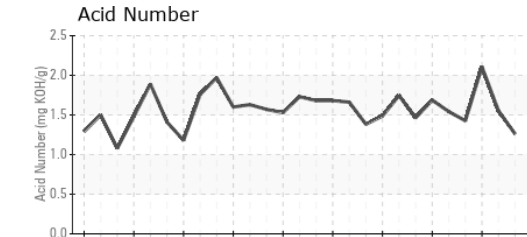
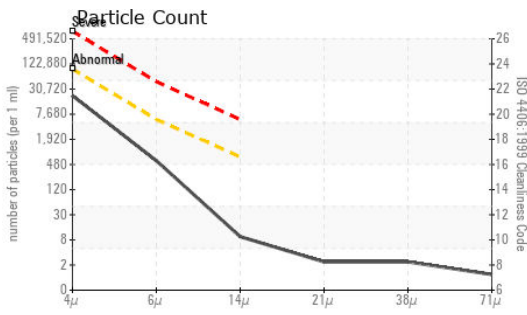
There is no indication of any contamination in the oil. The amount and size of particulates present in the system are acceptable.

Silicon	ppm	ASTM D5185m	>24	<b>4</b>	7	9
Potassium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	1	2
Water		WC Method	>0.075	<b>NEG</b>	NEG	NEG
Particles >4µm		ASTM D7647	>80000	<b>18602</b>	52154	31356
Particles >6µm		ASTM D7647	>5000	<b>520</b>	734	397
Particles >14µm		ASTM D7647	>640	<b>8</b>	16	9
Particles >21µm		ASTM D7647	>160	<b>2</b>	9	3
Particles >38µm		ASTM D7647	>40	<b>2</b>	7	2
Particles >71µm		ASTM D7647	>10	<b>1</b>	3	2
Oil Cleanliness		ISO 4406 (c)	>23/19/16	<b>21/16/10</b>	23/17/11	22/16/10
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 AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m	>21	<b>&lt;1</b>	<1	3
Boron	ppm	ASTM D5185m		<b>26</b>	10	15
Barium	ppm	ASTM D5185m		<b>0</b>	<1	0
Molybdenum	ppm	ASTM D5185m		<b>59</b>	56	50
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m		<b>399</b>	415	428
Calcium	ppm	ASTM D5185m		<b>1605</b>	1652	1561
Phosphorus	ppm	ASTM D5185m		<b>1095</b>	1009	934
Zinc	ppm	ASTM D5185m		<b>1228</b>	1153	1044
Sulfur	ppm	ASTM D5185m		<b>3433</b>	2901	1630
Acid Number (AN)	mg KOH/g	ASTM D8045		<b>1.26</b>	1.552	2.108
Visc @ 40°C	cSt	ASTM D445	117	<b>82.5</b>	80.2	80.1



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : LEC0045888 **Received** : 18 Jan 2024  
**Lab Number** : 06064224 **Diagnosed** : 20 Jan 2024  
**Unique Number** : 10835606 **Diagnostician** : Don Baldrige  
**Test Package** : CONST ( Additional Tests: PQ )

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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