



# OIL ANALYSIS REPORT

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



Machine Id  
**JOHN DEERE 250-D OFF RDTK 40202 (S/N 606178)**  
Component  
**Center Differential**  
Fluid  
**GEAR OIL SAE 80W90 (20 QTS)**

## RECOMMENDATION

We advise that you check for the source of water entry. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>WC0950643</b>	WC0846414	WC0756304
Sample Date		Client Info		<b>16 Jul 2024</b>	26 Oct 2023	21 Dec 2022
Machine Age	hrs	Client Info		<b>14306</b>	13887	13396
Oil Age	hrs	Client Info		<b>500</b>	2000	0
Filter Age	hrs	Client Info		<b>500</b>	2000	0
Oil Changed		Client Info		<b>Not Changed</b>	Changed	Not Changed
Filter Changed		Client Info		<b>Not Changed</b>	Changed	Not Changed
Sample Status				<b>ABNORMAL</b>	ABNORMAL	ABNORMAL

## WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>500	<b>151</b>	450	306
Chromium	ppm	ASTM D5185m	>10	<b>1</b>	4	3
Nickel	ppm	ASTM D5185m	>10	<b>&lt;1</b>	2	2
Titanium	ppm	ASTM D5185m		<b>0</b>	<1	<1
Silver	ppm	ASTM D5185m		<b>0</b>	<1	0
Aluminum	ppm	ASTM D5185m	>25	<b>2</b>	5	6
Lead	ppm	ASTM D5185m	>25	<b>1</b>	1	2
Copper	ppm	ASTM D5185m	>100	<b>38</b>	59	40
Tin	ppm	ASTM D5185m	>10	<b>0</b>	<1	<1
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	LIGHT
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

## CONTAMINATION

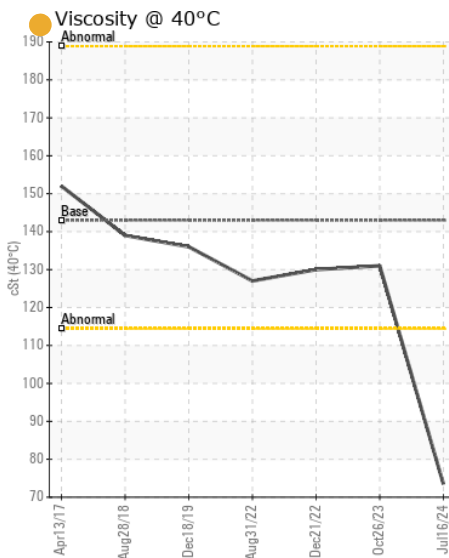
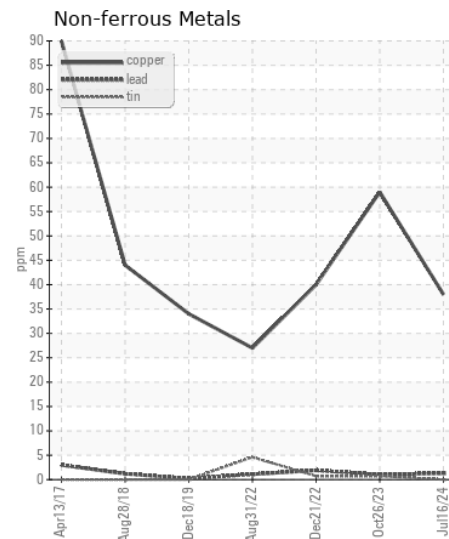
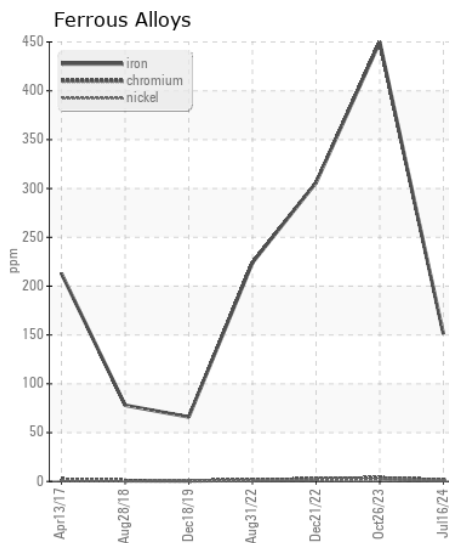
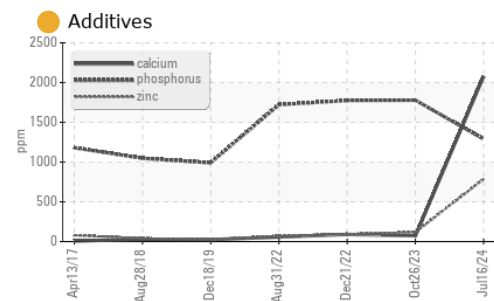
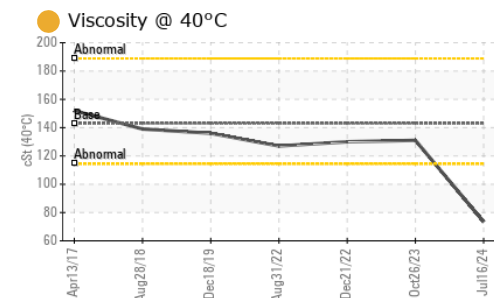
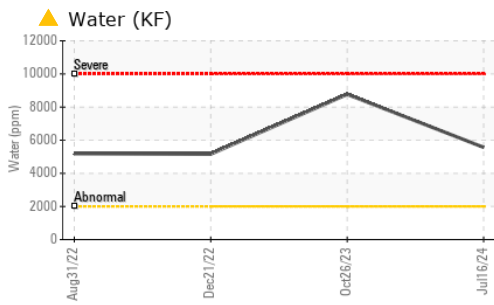
Appearance is milky. There is a moderate concentration of water present in the oil.

Silicon	ppm	ASTM D5185m	>75	<b>6</b>	10	8
Potassium	ppm	ASTM D5185m	>20	<b>1</b>	2	0
Water	%	ASTM D6304	>.2	<b>▲ 0.557</b>	▲ 0.877	▲ 0.516
ppm Water	ppm	ASTM D6304	>2000	<b>▲ 5570</b>	▲ 8770	▲ 5160
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	*Visual	NONE	<b>NONE</b>	NONE	LIGHT
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Appearance	scalar	*Visual	NORML	<b>● MILKY</b>	NORML	● HAZY
Odor	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Emulsified Water	scalar	*Visual	>.2	<b>▲ 0.2%</b>	▲ 0.2%	0.2%

## FLUID CONDITION

The oil viscosity is lower than normal. This plus the additive levels indicates the addition of a different brand, or type of oil. Confirm oil type.

Sodium	ppm	ASTM D5185m	>170	<b>0</b>	4	3
Boron	ppm	ASTM D5185m	400	<b>72</b>	91	58
Barium	ppm	ASTM D5185m	200	<b>0</b>	<1	0
Molybdenum	ppm	ASTM D5185m	12	<b>20</b>	64	30
Manganese	ppm	ASTM D5185m		<b>2</b>	6	4
Magnesium	ppm	ASTM D5185m	12	<b>62</b>	28	16
Calcium	ppm	ASTM D5185m	150	<b>● 2078</b>	72	90
Phosphorus	ppm	ASTM D5185m	1650	<b>1290</b>	1778	1774
Zinc	ppm	ASTM D5185m	125	<b>● 784</b>	117	92
Sulfur	ppm	ASTM D5185m	22500	<b>● 8771</b>	18950	21028
Visc @ 40°C	cSt	ASTM D445	143	<b>● 73.5</b>	131	130



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0950643  
**Lab Number** : 06240719  
**Unique Number** : 11129553  
**Test Package** : CONST ( Additional Tests: KF )

**Received** : 18 Jul 2024  
**Tested** : 19 Jul 2024  
**Diagnosed** : 20 Jul 2024 - Don Baldrige

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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