



# OIL ANALYSIS REPORT

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



Machine Id  
**JOHN DEERE 350OF RDT TK 40351 (S/N DT200948)**  
Component  
**Diesel Engine**  
Fluid  
**DIESEL ENGINE OIL 10W40 (36 QTS)**

## RECOMMENDATION

The oil change at the time of sampling has been noted. Resample at the next service interval to monitor. No other corrective action is recommended at this time. Please specify the brand, type, and viscosity of the oil on your next sample.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>WC0905325</b>	WC0856949	WC0846509
Sample Date		Client Info		<b>22 Feb 2024</b>	24 Oct 2023	05 Sep 2023
Machine Age	hrs	Client Info		<b>17177</b>	16950	16703
Oil Age	hrs	Client Info		<b>250</b>	1750	1500
Filter Age	hrs	Client Info		<b>250</b>	1750	1500
Oil Changed		Client Info		<b>Changed</b>	Changed	Changed
Filter Changed		Client Info		<b>Changed</b>	Changed	Changed
Sample Status				<b>NORMAL</b>	ABNORMAL	SEVERE

## WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>45	<b>6</b>	5	6
Chromium	ppm	ASTM D5185m	>11	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185m	>5	<b>0</b>	0	0
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	<1
Silver	ppm	ASTM D5185m	>3	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>31	<b>2</b>	2	<1
Lead	ppm	ASTM D5185m	>26	<b>&lt;1</b>	0	<1
Copper	ppm	ASTM D5185m	>26	<b>&lt;1</b>	7	6
Tin	ppm	ASTM D5185m	>4	<b>0</b>	0	0
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	<1
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

## CONTAMINATION

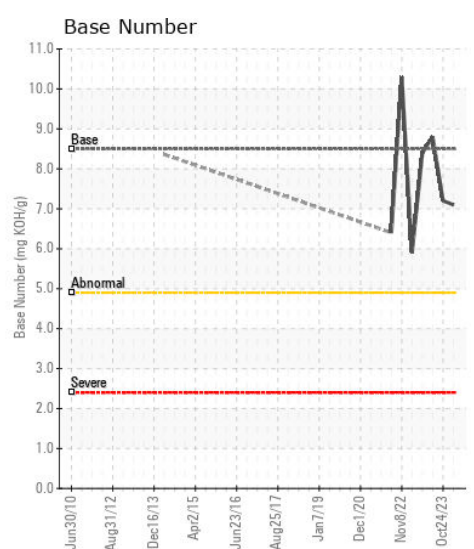
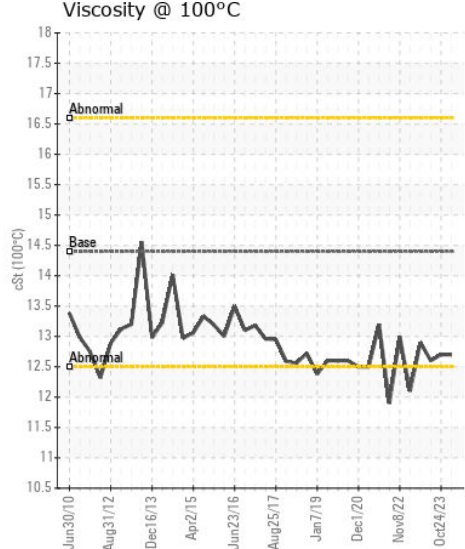
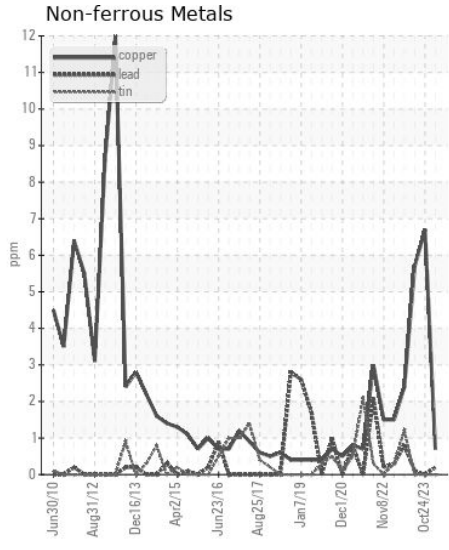
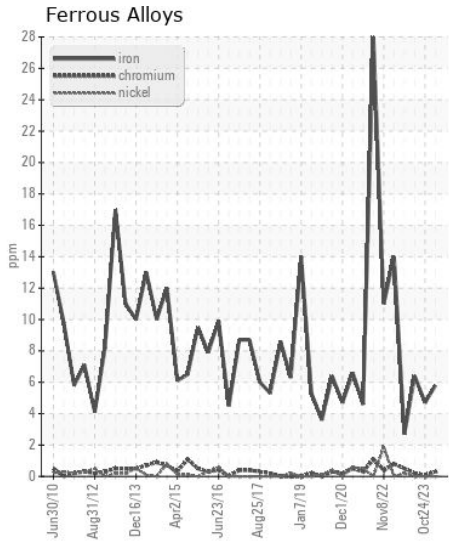
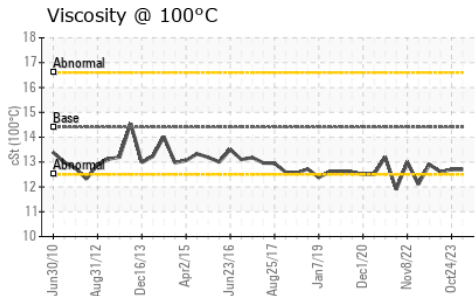
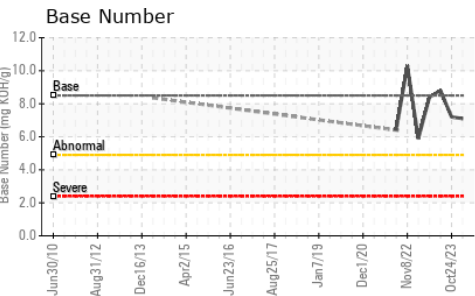
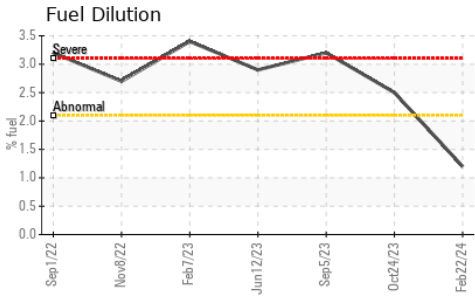
Light fuel dilution occurring. No other contaminants were detected in the oil.

Silicon	ppm	ASTM D5185m	>22	<b>5</b>	4	5
Potassium	ppm	ASTM D5185m	>20	<b>0</b>	3	2
Fuel	%	ASTM D3524	>2.1	<b>1.2</b>	▲ 2.5	◆ 3.2
Water		WC Method	>0.21	<b>NEG</b>	NEG	NEG
Glycol		WC Method		<b>NEG</b>	NEG	NEG
Soot %	%	*ASTM D7844	>3	<b>0.4</b>	0.5	0.5
Nitration	Abs/cm	*ASTM D7624	>20	<b>6.0</b>	6.0	7.6
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>19.6</b>	19.7	19.5
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>2</b>	2	1
Boron	ppm	ASTM D5185m	250	<b>388</b>	362	365
Barium	ppm	ASTM D5185m	10	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	100	<b>84</b>	86	110
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m	450	<b>372</b>	344	426
Calcium	ppm	ASTM D5185m	3000	<b>1281</b>	1376	1993
Phosphorus	ppm	ASTM D5185m	1150	<b>943</b>	1057	954
Zinc	ppm	ASTM D5185m	1350	<b>1104</b>	1155	1221
Sulfur	ppm	ASTM D5185m	4250	<b>2945</b>	3036	3625
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>13.4</b>	13.4	13.9
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	<b>7.1</b>	7.2	8.8
Visc @ 100°C	cSt	ASTM D445	14.4	<b>12.7</b>	12.7	12.6



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0905325 **Received** : 26 Feb 2024  
**Lab Number** : 06099772 **Tested** : 27 Feb 2024  
**Unique Number** : 10898002 **Diagnosed** : 27 Feb 2024 - Wes Davis  
**Test Package** : CONST ( Additional Tests: PercentFuel, TBN )

**SULLIVAN EASTERN INC**  
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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)