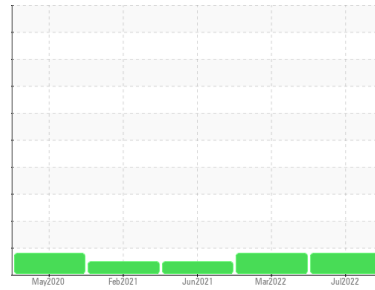


# OIL ANALYSIS REPORT

## Sample Rating Trend


**WEAR**


Area  
**[W48304]**  
 Machine Id  
**JOHN DEERE 650K 1T0650KKPJF344840**  
 Component  
**Diesel Engine**  
 Fluid  
**DIESEL ENGINE OIL SAE 40 (--- GAL)**

### DIAGNOSIS

#### ▲ 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.

#### ▲ Wear

The lead level has decreased, but is still abnormal. All other component wear rates are normal.

#### Contamination

There is no indication of any contamination in the oil.

#### 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.

### SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		<b>JR0134917</b>	JR0119389	JR0080074
Sample Date	Client Info		<b>10 Jul 2022</b>	13 Mar 2022	03 Jun 2021
Machine Age	hrs	Client Info	<b>2879</b>	2335	1468
Oil Age	hrs	Client Info	<b>500</b>	500	500
Oil Changed	Client Info		<b>Changed</b>	Changed	Changed
Sample Status			<b>ABNORMAL</b>	ABNORMAL	NORMAL

### CONTAMINATION

	method	limit/base	current	history1	history2
Fuel	WC Method	>2.1	<b>&lt;1.0</b>	<1.0	<1.0
Water	WC Method	>0.21	<b>NEG</b>	NEG	NEG
Glycol	WC Method		<b>NEG</b>	NEG	NEG

### WEAR METALS

	method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185m	>51	<b>26</b>	47	18
Chromium	ppm	ASTM D5185m	>11	<b>&lt;1</b>	2	<1
Nickel	ppm	ASTM D5185m	>5	<b>&lt;1</b>	0	0
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	<1
Silver	ppm	ASTM D5185m		<b>0</b>	0	<1
Aluminum	ppm	ASTM D5185m	>31	<b>5</b>	8	2
Lead	ppm	ASTM D5185m	>26	<b>▲ 44</b>	▲ 137	8
Copper	ppm	ASTM D5185m	>26	<b>4</b>	7	5
Tin	ppm	ASTM D5185m	>4	<b>2</b>	4	1
Antimony	ppm	ASTM D5185m		<b>---</b>	---	0
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	<1
Cadmium	ppm	ASTM D5185m		<b>0</b>	0	0

### ADDITIVES

	method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185m	250	<b>99</b>	48	204
Barium	ppm	ASTM D5185m	10	<b>0</b>	0	<1
Molybdenum	ppm	ASTM D5185m	100	<b>261</b>	266	254
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	2	<1
Magnesium	ppm	ASTM D5185m	450	<b>823</b>	897	808
Calcium	ppm	ASTM D5185m	3000	<b>1528</b>	1642	1515
Phosphorus	ppm	ASTM D5185m	1150	<b>844</b>	919	910
Zinc	ppm	ASTM D5185m	1350	<b>1063</b>	1125	1045
Sulfur	ppm	ASTM D5185m	4250	<b>3365</b>	2577	2438

### CONTAMINANTS

	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m	>22	<b>9</b>	12	6
Sodium	ppm	ASTM D5185m	>216	<b>2</b>	0	3
Potassium	ppm	ASTM D5185m	>20	<b>0</b>	0	2

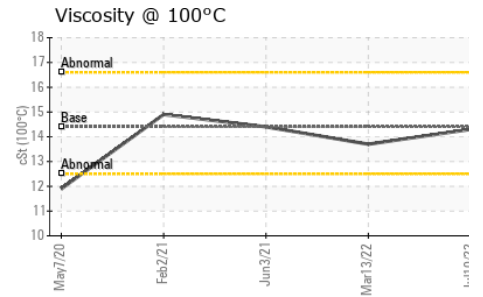
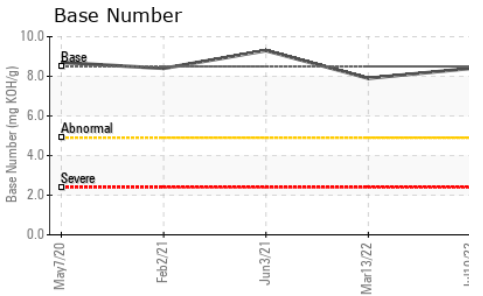
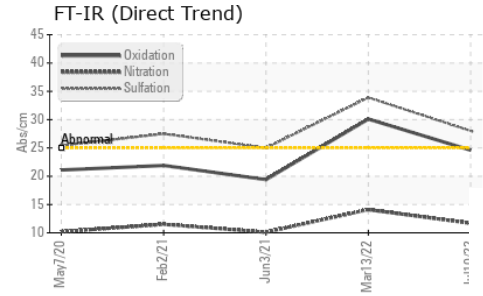
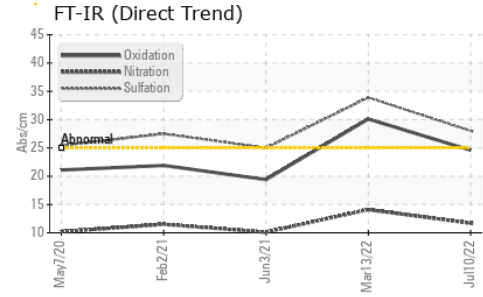
### INFRA-RED

	method	limit/base	current	history1	history2	
Soot %	%	*ASTM D7844	>3	<b>0.8</b>	1.2	0.5
Nitration	Abs/cm	*ASTM D7624	>20	<b>11.7</b>	14.1	10.1
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>28.0</b>	33.9	25

### FLUID DEGRADATION

	method	limit/base	current	history1	history2	
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>24.6</b>	30.1	19.4
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	<b>8.4</b>	7.9	9.3

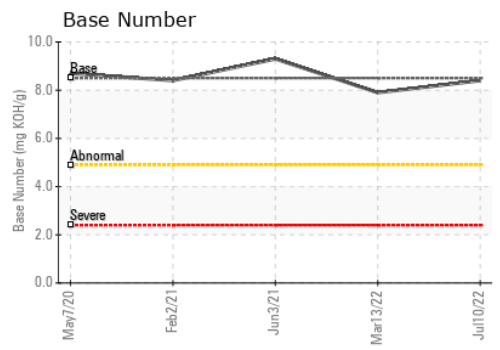
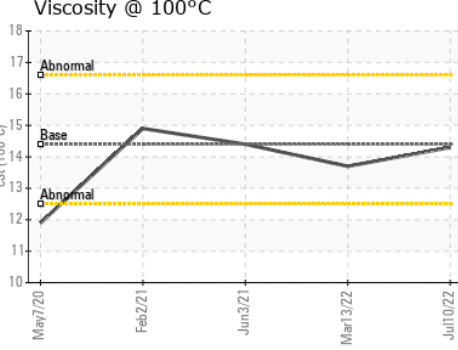
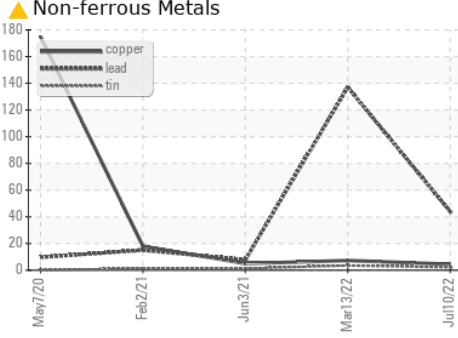
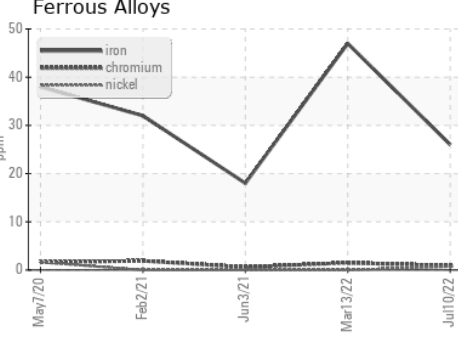
# OIL ANALYSIS REPORT



VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.21	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2	
Visc @ 100°C	cSt	ASTM D445	14.4	<b>14.3</b>	13.7	14.4

**GRAPHS**



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : JR0134917      **Received** : 11 Jul 2022  
**Lab Number** : 05587049      **Tested** : 12 Jul 2022  
**Unique Number** : 10046496      **Diagnosed** : 12 Jul 2022 - Don Baldrige  
**Test Package** : CONST ( Additional Tests: TBN )

**JRE - CHARLOTTE**  
 9550 STATESVILLE ROAD  
 CHARLOTTE, NC  
 US 28269  
 Contact: CHARLOTTE SHOP  
 myoung@jamesriverequipment.com  
 T: (704)597-0211  
 F: (704)596-6198

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)