



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

Machine Id  
**JOHN DEERE 8520 RW8520P031081**  
Component  
**Hydraulic System**  
Fluid  
**JOHN DEERE HY-GARD HYD/TRANS (25 GAL)**

**RECOMMENDATION**

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>JR0201597</b>	JR0039781	JRMC364959
Sample Date		Client Info		<b>29 Feb 2024</b>	30 Jul 2021	11 Feb 2013
Machine Age	hrs	Client Info		<b>0</b>	3182	1933
Oil Age	hrs	Client Info		<b>0</b>	0	1933
Filter Age	hrs	Client Info		<b>0</b>	0	544
Oil Changed		Client Info		<b>N/A</b>	Not Changd	Not Changd
Filter Changed		Client Info		<b>N/A</b>	Not Changd	Not Changd
Sample Status				<b>NORMAL</b>	NORMAL	MARGINAL

**WEAR**

All component wear rates are normal.

PQ	UOM	Method	Limit/Abn	Current	History1	History2
Iron	ppm	ASTM D5185m	>20	<b>7</b>	11	26
Chromium	ppm	ASTM D5185m	>10	<b>0</b>	<1	<1
Nickel	ppm	ASTM D5185m	>10	<b>0</b>	<1	<1
Titanium	ppm	ASTM D5185m		<b>0</b>	<1	<1
Silver	ppm	ASTM D5185m		<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>10	<b>&lt;1</b>	<1	1
Lead	ppm	ASTM D5185m	>10	<b>&lt;1</b>	7	2
Copper	ppm	ASTM D5185m	>75	<b>2</b>	5	10
Tin	ppm	ASTM D5185m	>10	<b>0</b>	0	0
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

**CONTAMINATION**

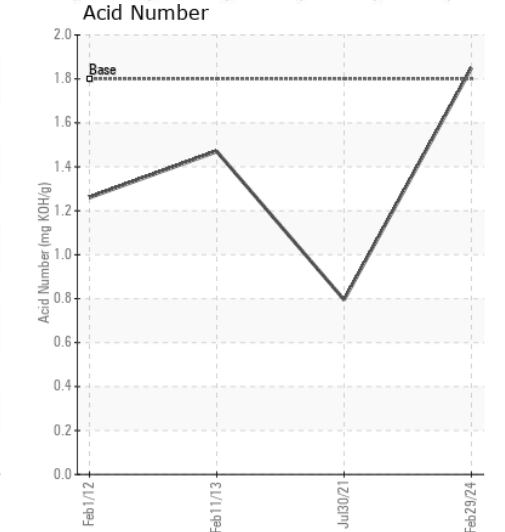
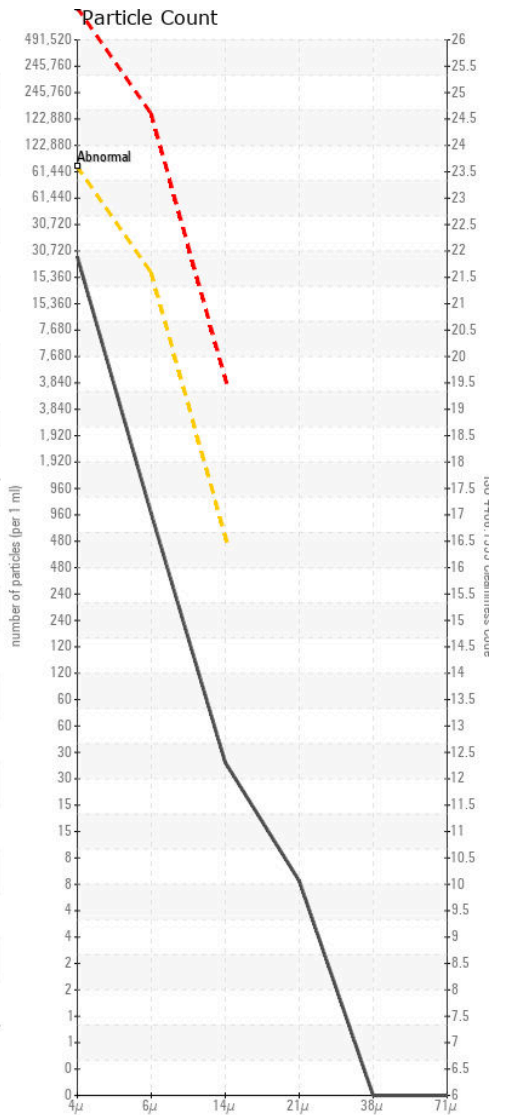
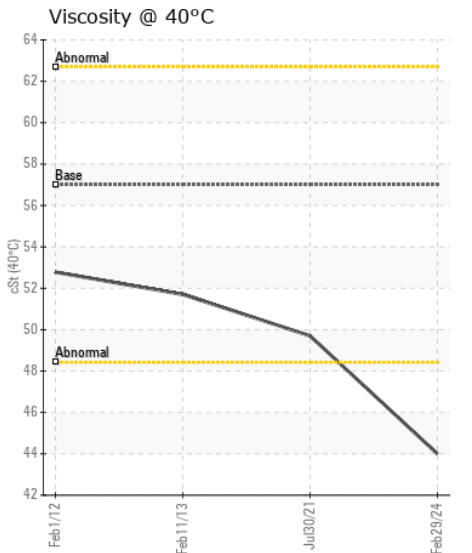
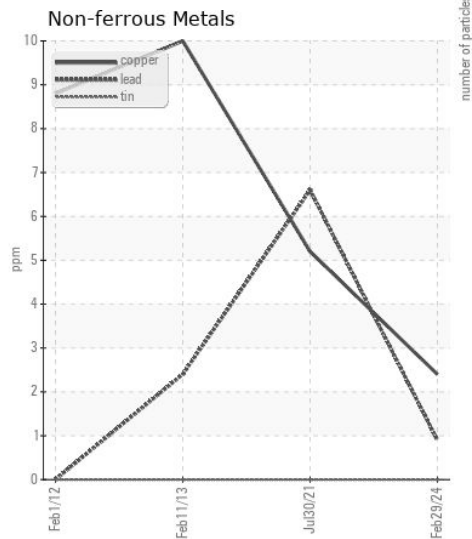
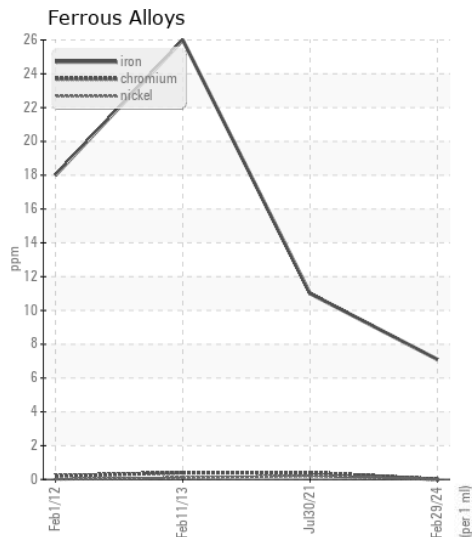
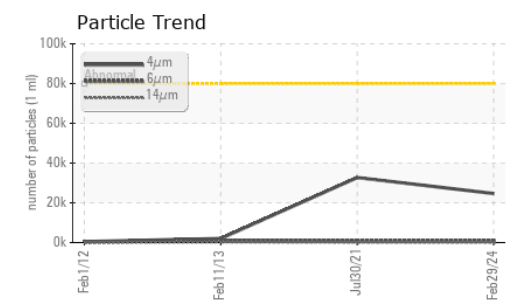
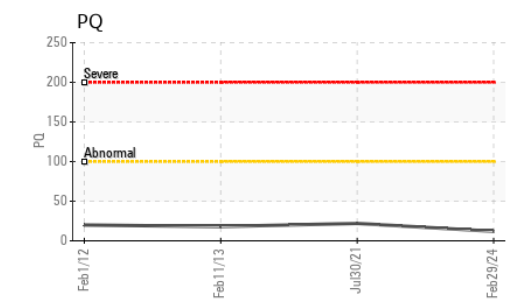
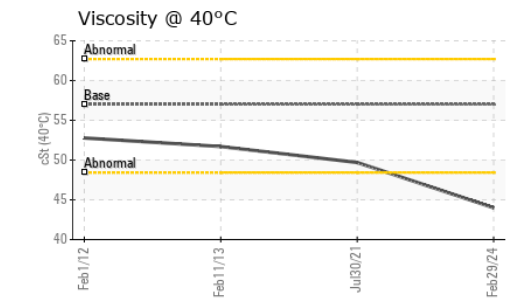
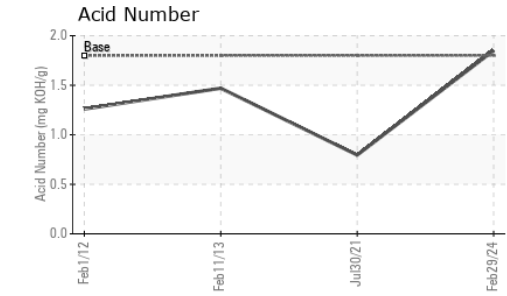
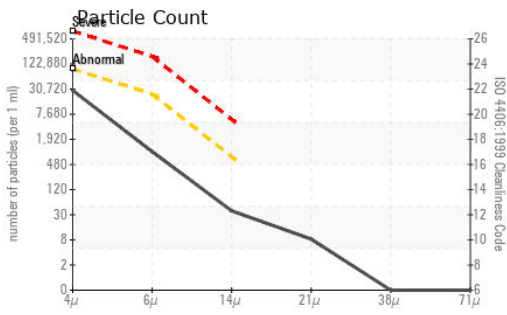
There is no indication of any contamination in the oil. The amount and size of particulates present in the system are acceptable.

Silicon	ppm	ASTM D5185m	>20	<b>4</b>	5	10
Potassium	ppm	ASTM D5185m	>20	<b>0</b>	<1	11
Water		WC Method	>0.1	<b>NEG</b>	NEG	NEG
Particles >4µm		ASTM D7647	>80000	<b>24677</b>	32710	2027
Particles >6µm		ASTM D7647	>20000	<b>855</b>	774	1104
Particles >14µm		ASTM D7647	>640	<b>33</b>	44	▲ 188
Particles >21µm		ASTM D7647	>160	<b>7</b>	18	▲ 63
Particles >38µm		ASTM D7647	>40	<b>0</b>	1	9
Particles >71µm		ASTM D7647	>10	<b>0</b>	0	1
Oil Cleanliness		ISO 4406 (c)	>23/21/16	<b>22/17/12</b>	22/17/13	▲ 18/17/15
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	>0.1	<b>NEG</b>	NEG	0.1%

**FLUID CONDITION**

The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		<b>&lt;1</b>	2	3
Boron	ppm	ASTM D5185m	6	<b>2</b>	7	9
Barium	ppm	ASTM D5185m	0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	0	<b>1</b>	4	5
Manganese	ppm	ASTM D5185m		<b>0</b>	<1	<1
Magnesium	ppm	ASTM D5185m	145	<b>29</b>	54	34
Calcium	ppm	ASTM D5185m	3570	<b>2624</b>	1875	1884
Phosphorus	ppm	ASTM D5185m	1290	<b>982</b>	626	686
Zinc	ppm	ASTM D5185m	1640	<b>1059</b>	757	776
Sulfur	ppm	ASTM D5185m		<b>3144</b>	2373	2955
Acid Number (AN)	mg KOH/g	ASTM D8045	1.8	<b>1.85</b>	0.795	1.47
Visc @ 40°C	cSt	ASTM D445	57.0	<b>44.0</b>	49.7	51.7



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : JR0201597 **Received** : 01 Mar 2024  
**Lab Number** : 06105972 **Tested** : 04 Mar 2024  
**Unique Number** : 10909469 **Diagnosed** : 05 Mar 2024 - 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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