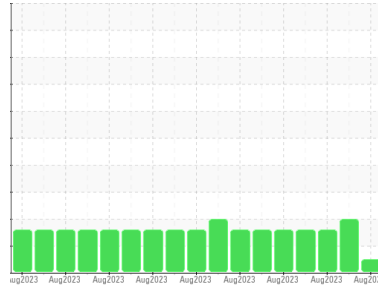




# OIL ANALYSIS REPORT

Sample Rating Trend

UNKNOWN



Area  
**WCLSNC**  
 Machine Id  
**QC230801HY**  
 Component  
**Hydraulic System**  
 Fluid  
**JOHN DEERE HY-GARD HYD/TRANS (--- GAL)**

## DIAGNOSIS

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number	Client Info			<b>WC0844501</b>	WC0844500	WC0844498
Sample Date	Client Info			<b>24 Aug 2023</b>	23 Aug 2023	21 Aug 2023
Machine Age	hrs	Client Info		<b>0</b>	0	0
Oil Age	hrs	Client Info		<b>0</b>	0	0
Oil Changed	Client Info			<b>N/A</b>	N/A	N/A
Sample Status				<b>---</b>	ABNORMAL	ABNORMAL

WEAR METALS		method	limit/base	current	history1	history2
PQ		ASTM D8184		<b>20</b>	30	34
Iron	ppm	ASTM D5185m		<b>59</b>	55	56
Chromium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185m		<b>0</b>	1	1
Titanium	ppm	ASTM D5185m		<b>0</b>	0	<1
Silver	ppm	ASTM D5185m		<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m		<b>0</b>	2	2
Lead	ppm	ASTM D5185m		<b>9</b>	9	9
Copper	ppm	ASTM D5185m		<b>80</b>	70	71
Tin	ppm	ASTM D5185m		<b>2</b>	2	2
Vanadium	ppm	ASTM D5185m		<b>0</b>	<1	<1
Cadmium	ppm	ASTM D5185m		<b>0</b>	<1	0

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		<b>108</b>	100	113
Barium	ppm	ASTM D5185m		<b>3</b>	0	0
Molybdenum	ppm	ASTM D5185m		<b>0</b>	0	0
Manganese	ppm	ASTM D5185m		<b>16</b>	15	15
Magnesium	ppm	ASTM D5185m		<b>21</b>	23	24
Calcium	ppm	ASTM D5185m		<b>3598</b>	3371	3533
Phosphorus	ppm	ASTM D5185m		<b>1209</b>	1053	1120
Zinc	ppm	ASTM D5185m		<b>1428</b>	1350	1408
Sulfur	ppm	ASTM D5185m		<b>3594</b>	3609	3839

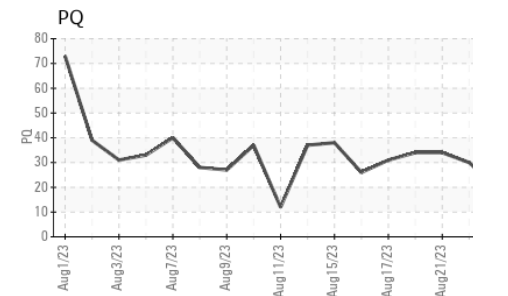
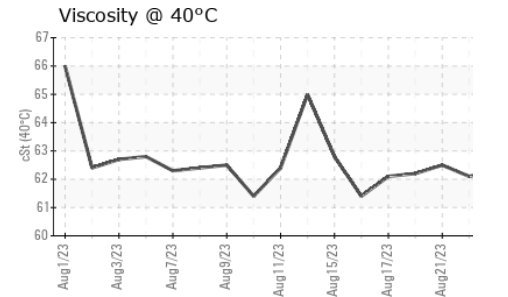
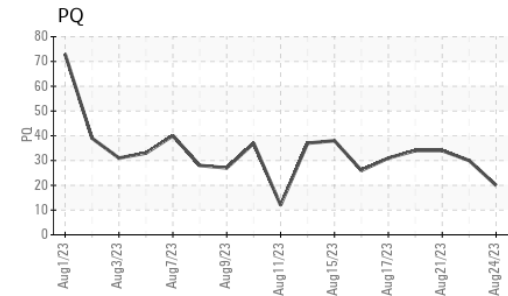
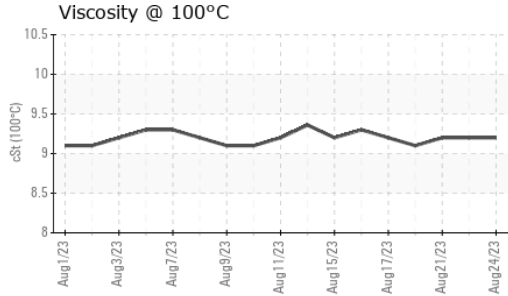
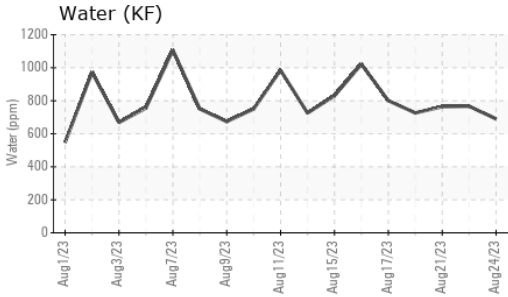
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m		<b>8</b>	8	8
Sodium	ppm	ASTM D5185m		<b>14</b>	16	17
Potassium	ppm	ASTM D5185m		<b>2</b>	0	0
Water	%	ASTM D6304		<b>0.068</b>	0.076	0.076
ppm Water	ppm	ASTM D6304		<b>689.7</b>	766.8	764.0

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647		<b>300571</b>	372512	312429
Particles >6µm		ASTM D7647		<b>146375</b>	282737	138204
Particles >14µm		ASTM D7647		<b>976</b>	21429	816
Particles >21µm		ASTM D7647		<b>27</b>	800	15
Particles >38µm		ASTM D7647		<b>0</b>	2	0
Particles >71µm		ASTM D7647		<b>0</b>	1	0
Oil Cleanliness		ISO 4406 (c)		<b>25/24/17</b>	26/25/22	25/24/17

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045		<b>0.90</b>	1.03	1.00



# OIL ANALYSIS REPORT



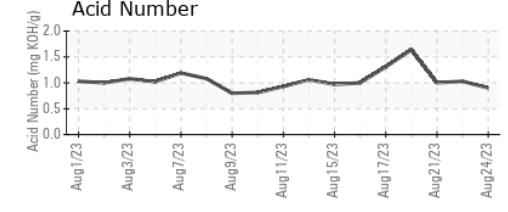
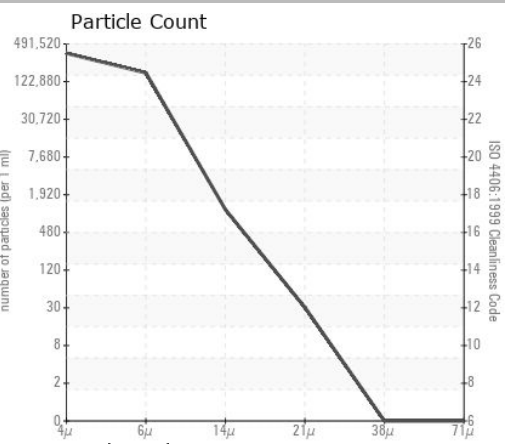
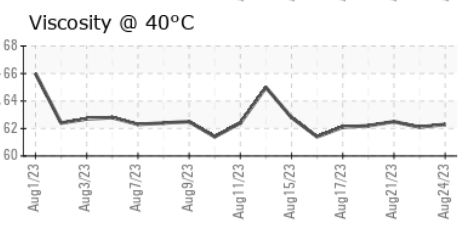
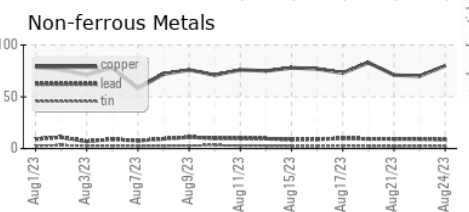
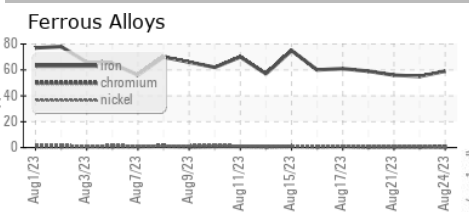
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	▲ MODER	MODER	MODER
Debris	scalar	*Visual	▲ MODER	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance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

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	62.3	62.1	62.5
Visc @ 100°C	cSt	ASTM D445	9.2	9.2	9.2
Viscosity Index (VI)	Scale	ASTM D2270	125	126	125

SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					



## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0844501 **Received** : 24 Aug 2023  
**Lab Number** : 05933494 **Diagnosed** : 24 Oct 2023  
**Unique Number** : 10618765 **Diagnostician** : System  
**Test Package** : IND 2 ( Additional Tests: KF, KV100, PQ, VI )

**WEARCHECK LUBRICATION SERVICES QA ACCOUNT**  
 501 Madison Ave  
 Cary, NC  
 US 27513  
 Contact: WCLS CARY NC

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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