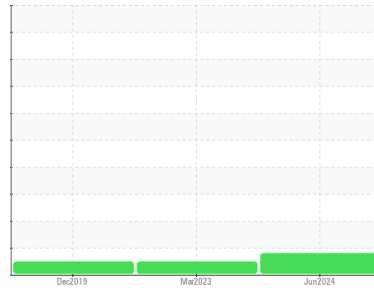




# OIL ANALYSIS REPORT

Sample Rating Trend



Machine Id  
**JOHN DEERE 350G 1FF350GXCGF811323**  
 Component  
**Hydraulic System**  
 Fluid  
**HITACHI HYDRAULIC SUPER EX 46HN (77 GAL)**

## DIAGNOSIS

**Recommendation**  
 No corrective action is recommended at this time. Resample at the next service interval to monitor. ( Customer Sample Comment: CHECKI FOR CROSS CONTAMINATION/ WRONG OIL TYPE )

**Wear**  
 The chromium level is abnormal. All other component wear rates are normal.

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

**Fluid Condition**  
 Additive levels do not indicate the addition of a different brand, or type of oil. The AN level is acceptable for this fluid. The condition of the oils additive package is suitable for further service.

## SAMPLE INFORMATION

method	limit/base	current	history1	history2
Sample Number	Client Info	<b>LEC0050857</b>	LEC0040001	LEC0008884
Sample Date	Client Info	<b>18 Jun 2024</b>	07 Mar 2023	26 Dec 2019
Machine Age	hrs	<b>8120</b>	4988	2828
Oil Age	hrs	<b>3132</b>	2160	6
Oil Changed	Client Info	<b>Not Chngd</b>	Changed	Changed
Sample Status		<b>ABNORMAL</b>	NORMAL	NORMAL

## WEAR METALS

method	limit/base	current	history1	history2		
PQ	ASTM D8184	>50	<b>21</b>	12	20	
Iron	ppm	ASTM D5185m	>32	<b>12</b>	1	3
Chromium	ppm	ASTM D5185m	>9	<b>▲ 16</b>	2	<1
Nickel	ppm	ASTM D5185m	>5	<b>&lt;1</b>	0	<1
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
Silver	ppm	ASTM D5185m		<b>0</b>	<1	<1
Aluminum	ppm	ASTM D5185m	>9	<b>2</b>	<1	<1
Lead	ppm	ASTM D5185m	>28	<b>&lt;1</b>	0	0
Copper	ppm	ASTM D5185m	>50	<b>2</b>	<1	<1
Tin	ppm	ASTM D5185m	>5	<b>&lt;1</b>	0	0
Antimony	ppm	ASTM D5185m		<b>---</b>	---	0
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	0
Cadmium	ppm	ASTM D5185m		<b>&lt;1</b>	0	0

## ADDITIVES

method	limit/base	current	history1	history2		
Boron	ppm	ASTM D5185m		<b>0</b>	0	<1
Barium	ppm	ASTM D5185m		<b>1</b>	0	0
Molybdenum	ppm	ASTM D5185m		<b>&lt;1</b>	0	<1
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	0	<1
Magnesium	ppm	ASTM D5185m		<b>3</b>	4	1
Calcium	ppm	ASTM D5185m		<b>96</b>	121	11
Phosphorus	ppm	ASTM D5185m	827	<b>650</b>	598	613
Zinc	ppm	ASTM D5185m	0	<b>53</b>	49	9
Sulfur	ppm	ASTM D5185m	13	<b>128</b>	164	39

## CONTAMINANTS

method	limit/base	current	history1	history2		
Silicon	ppm	ASTM D5185m	>11	<b>6</b>	1	2
Sodium	ppm	ASTM D5185m	>21	<b>&lt;1</b>	<1	0
Potassium	ppm	ASTM D5185m	>20	<b>1</b>	0	3
Water	%	ASTM D6304	>0.075	<b>NEG</b>	NEG	NEG

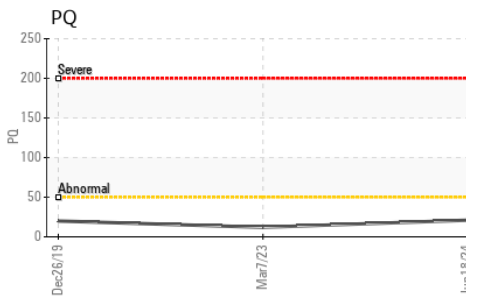
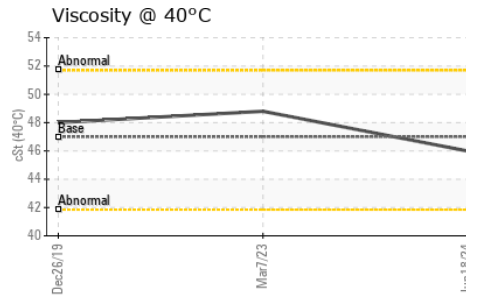
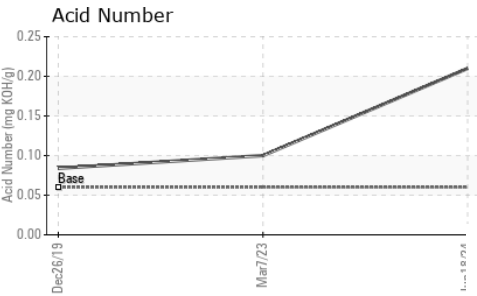
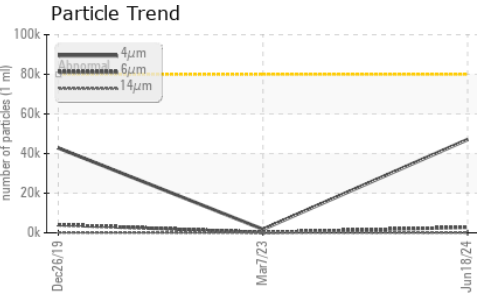
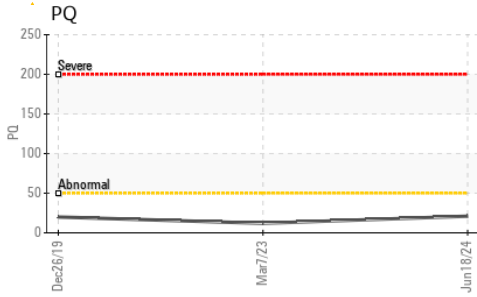
## FLUID CLEANLINESS

method	limit/base	current	history1	history2	
Particles >4µm	ASTM D7647	>80000	<b>47107</b>	1784	42817
Particles >6µm	ASTM D7647	>20000	<b>2790</b>	166	4050
Particles >14µm	ASTM D7647	>640	<b>9</b>	22	82
Particles >21µm	ASTM D7647	>160	<b>2</b>	8	11
Particles >38µm	ASTM D7647	>40	<b>0</b>	1	0
Particles >71µm	ASTM D7647	>10	<b>0</b>	0	0
Oil Cleanliness	ISO 4406 (c)	>23/21/16	<b>23/19/10</b>	18/15/12	23/19/14

## FLUID DEGRADATION

method	limit/base	current	history1	history2		
Acid Number (AN)	mg KOH/g	ASTM D8045	0.06	<b>0.21</b>	0.10	0.084

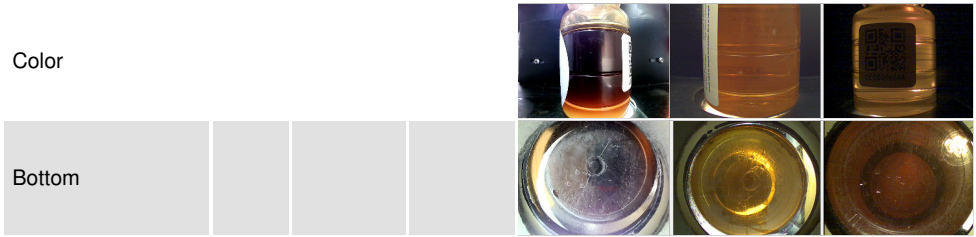
# OIL ANALYSIS REPORT



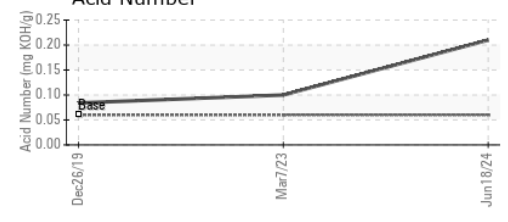
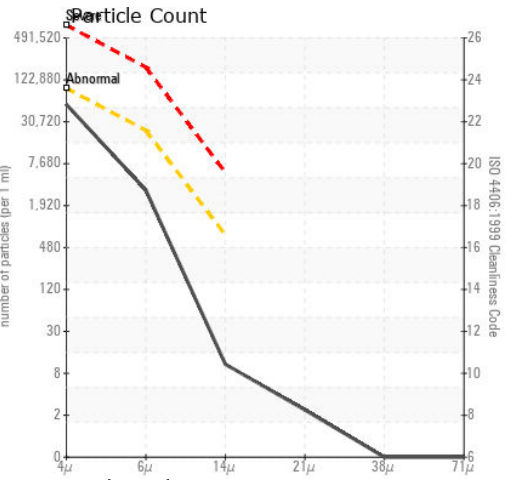
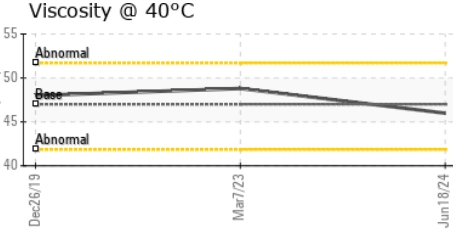
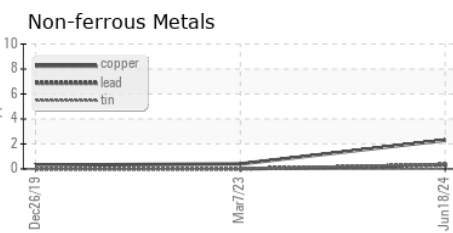
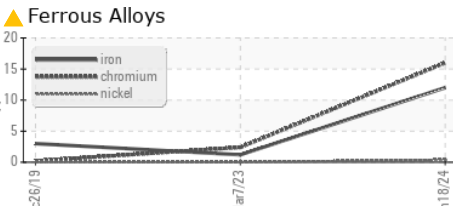
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.075	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445 47	45.99	48.8	48.0

SAMPLE IMAGES	method	limit/base	current	history1	history2
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## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : LEC0050857 **Received** : 20 Jun 2024  
**Lab Number** : 06216266 **Tested** : 20 Jun 2024  
**Unique Number** : 11089130 **Diagnosed** : 20 Jun 2024 - Doug Bogart  
**Test Package** : CONST ( Additional Tests: KF, PQ )

**SAFECO ENVIRONMENTAL**  
 3082 SOUTH HWY 88  
 DILLINER, PA  
 US 15327  
 Contact: B JORDAN  
 bjordan@safecoservices.com

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)

F: (724)725-1133