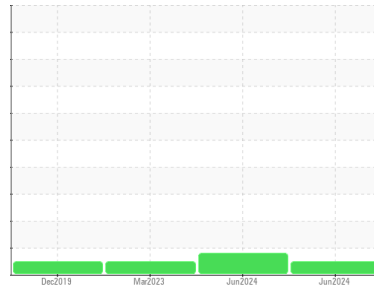




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



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. NOTE: one of two samples received with same ID and sampling date. (Customer Sample Comment: CHECK FOR CROSS CONTAMINATION/ WRONG OIL TYPE)

Wear

All 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. 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		LEC0050859	LEC0050857	LEC0040001
Sample Date	Client Info		18 Jun 2024	18 Jun 2024	07 Mar 2023
Machine Age	hrs	Client Info	5780	8120	4988
Oil Age	hrs	Client Info	792	3132	2160
Oil Changed	Client Info		Not Chngd	Not Chngd	Changed
Sample Status			NORMAL	ABNORMAL	NORMAL

WEAR METALS

	method	limit/base	current	history1	history2	
PQ	ASTM D8184	>50	22	21	12	
Iron	ppm	ASTM D5185m	>32	1	12	1
Chromium	ppm	ASTM D5185m	>9	1	▲ 16	2
Nickel	ppm	ASTM D5185m	>5	<1	<1	0
Titanium	ppm	ASTM D5185m		<1	<1	0
Silver	ppm	ASTM D5185m		0	0	<1
Aluminum	ppm	ASTM D5185m	>9	2	2	<1
Lead	ppm	ASTM D5185m	>28	<1	<1	0
Copper	ppm	ASTM D5185m	>50	<1	2	<1
Tin	ppm	ASTM D5185m	>5	<1	<1	0
Antimony	ppm	ASTM D5185m		---	---	---
Vanadium	ppm	ASTM D5185m		0	0	0
Cadmium	ppm	ASTM D5185m		<1	<1	0

ADDITIVES

	method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185m		0	0	0
Barium	ppm	ASTM D5185m		<1	1	0
Molybdenum	ppm	ASTM D5185m		<1	<1	0
Manganese	ppm	ASTM D5185m		0	<1	0
Magnesium	ppm	ASTM D5185m		<1	3	4
Calcium	ppm	ASTM D5185m		21	96	121
Phosphorus	ppm	ASTM D5185m	827	613	650	598
Zinc	ppm	ASTM D5185m	0	21	53	49
Sulfur	ppm	ASTM D5185m	13	0	128	164

CONTAMINANTS

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

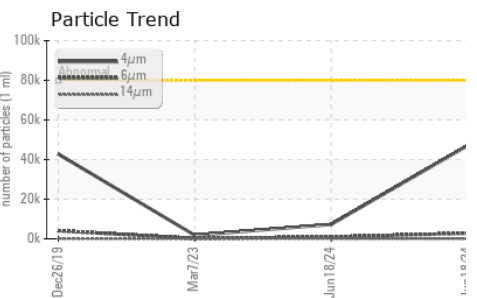
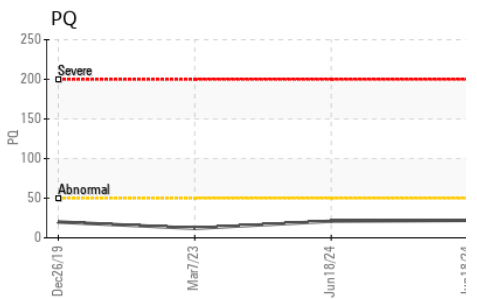
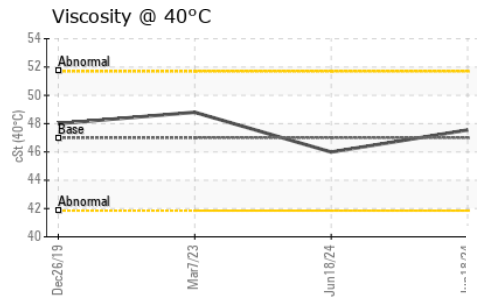
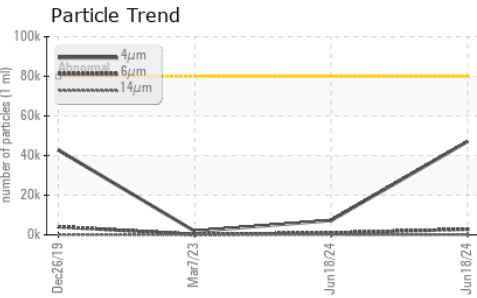
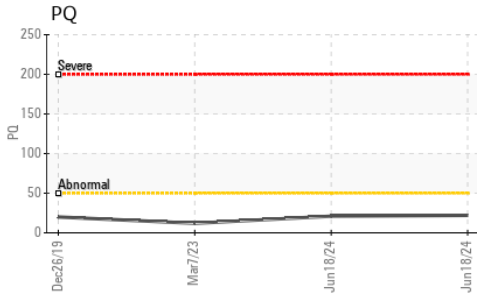
FLUID CLEANLINESS

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>80000	7265	47107	1784
Particles >6µm	ASTM D7647	>20000	890	2790	166
Particles >14µm	ASTM D7647	>640	17	9	22
Particles >21µm	ASTM D7647	>160	2	2	8
Particles >38µm	ASTM D7647	>40	0	0	1
Particles >71µm	ASTM D7647	>10	0	0	0
Oil Cleanliness	ISO 4406 (c)	>23/21/16	20/17/11	23/19/10	18/15/12

FLUID DEGRADATION

	method	limit/base	current	history1	history2	
Acid Number (AN)	mg KOH/g	ASTM D8045	0.06	0.13	0.21	0.10

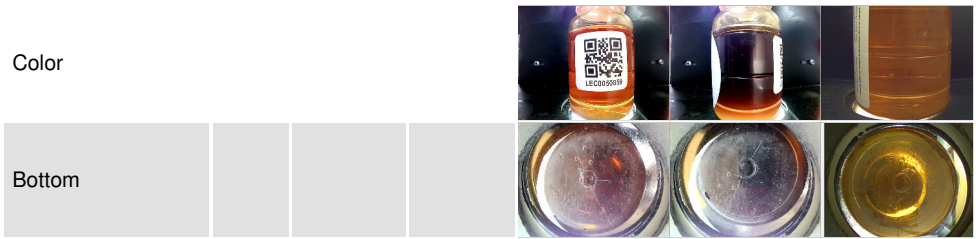
OIL ANALYSIS REPORT



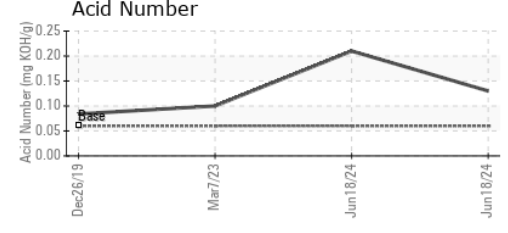
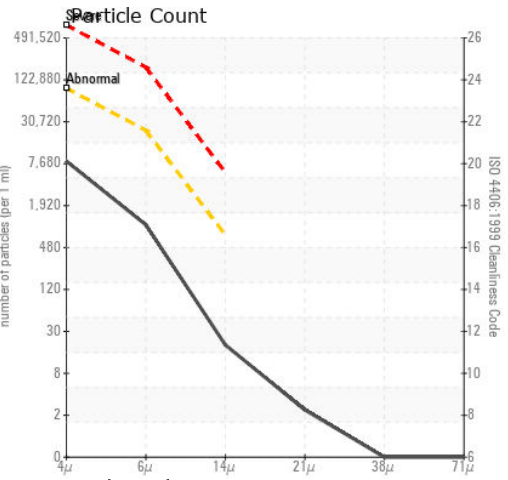
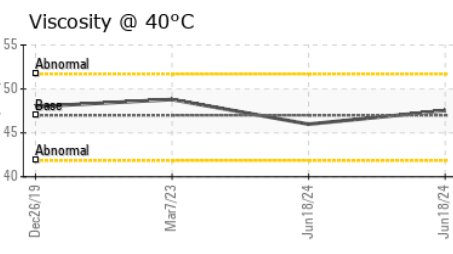
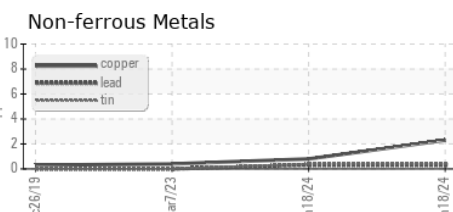
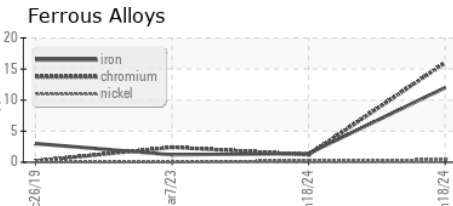
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	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	47.55	45.99	48.8

SAMPLE IMAGES	method	limit/base	current	history1	history2
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GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : LEC0050859 **Received** : 20 Jun 2024
Lab Number : 06216268 **Tested** : 20 Jun 2024
Unique Number : 11089132 **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)