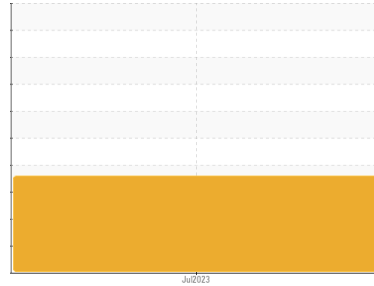


PROBLEM SUMMARY

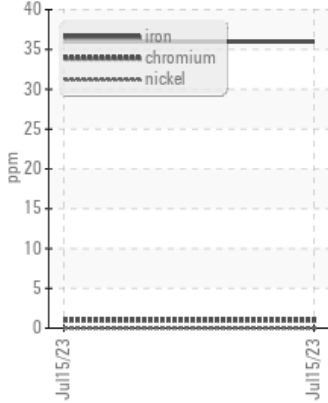
Area
ROCKVILLE
Machine Id
JOHN DEERE 350G M08-0875 1FF350GXCGF811198
Component
Hydraulic System
Fluid
HITACHI HYDRAULIC SUPER EX 46HN (--- GAL)

Sample Rating Trend

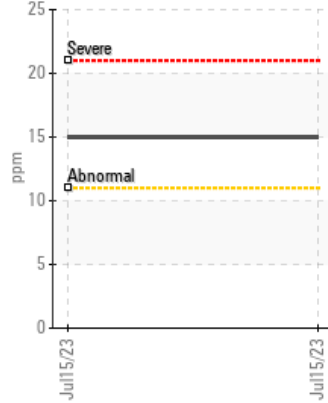


COMPONENT CONDITION SUMMARY

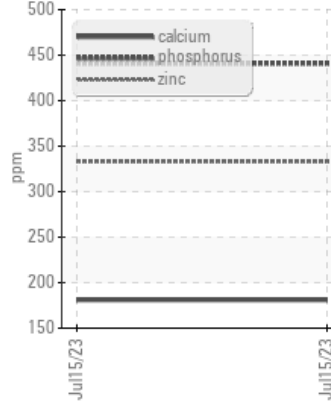
▲ Ferrous Alloys



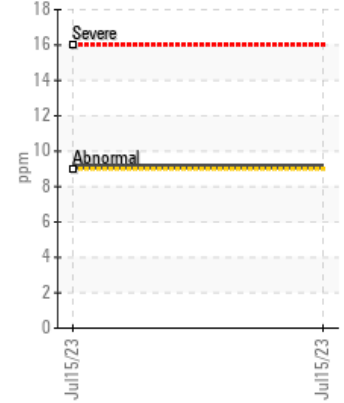
▲ Silicon (ppm)



▲ Additives



▲ Aluminum (ppm)



RECOMMENDATION

We advise that you check all areas where dirt can enter the system. Recommend drain oil if not already done. Reduce drain interval to 2000 hours or drain and flush and use recommended zinc free oil.

PROBLEMATIC TEST RESULTS

Sample Status				ABNORMAL	---	---
Iron	ppm	ASTM D5185m	>32	▲ 36	---	---
Aluminum	ppm	ASTM D5185m	>9	▲ 9	---	---
Zinc	ppm	ASTM D5185m	0	▲ 333	---	---
Silicon	ppm	ASTM D5185m	>11	▲ 15	---	---

Customer Id: LUCMIL
Sample No.: JR0165554
Lab Number: 05901198
Test Package: CONST



To manage this report scan the QR code

To discuss the diagnosis or test data:
Don Baldrige +1
don.b505@comcast.net

To change component or sample information:
Customer Service +1 1-800-237-1369
customerservice@wearcheck.com

RECOMMENDED ACTIONS

Action	Status	Date	Done By	Description
Change Fluid	---	---	?	Recommend drain oil if not already done. Reduce drain interval to 2000 hours or drain and flush and use recommended zinc free oil.
Flush System	---	---	?	Recommend drain oil if not already done. Reduce drain interval to 2000 hours or drain and flush and use recommended zinc free oil.
Check Dirt Access	---	---	?	We advise that you check all areas where dirt can enter the system.

HISTORICAL DIAGNOSIS

OIL ANALYSIS REPORT

Sample Rating Trend

DIRT

Area
ROCKVILLE
Machine Id
JOHN DEERE 350G M08-0875 1FF350GXCGF811198
Component
Hydraulic System
Fluid
HITACHI HYDRAULIC SUPER EX 46HN (--- GAL)


DIAGNOSIS
▲ Recommendation

We advise that you check all areas where dirt can enter the system. Recommend drain oil if not already done. Reduce drain interval to 2000 hours or drain and flush and use recommended zinc free oil.

▲ Wear

The iron level is abnormal.

▲ Contamination

Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress. The amount and size of particulates present in the system are acceptable.

▲ Fluid Condition

Zinc level above manufacturer's recommendations. The AN level is acceptable for this fluid.

SAMPLE INFORMATION	method	limit/base	current	history1	history2
Sample Number	Client Info		JR0165554	---	---
Sample Date	Client Info		15 Jul 2023	---	---
Machine Age	hrs	Client Info	6725	---	---
Oil Age	hrs	Client Info	0	---	---
Oil Changed	Client Info		Not Chngd	---	---
Sample Status			ABNORMAL	---	---

WEAR METALS	method	limit/base	current	history1	history2
PQ	ASTM D8184	>50	15	---	---
Iron	ppm	ASTM D5185m	>32	▲ 36	---
Chromium	ppm	ASTM D5185m	>9	1	---
Nickel	ppm	ASTM D5185m	>5	0	---
Titanium	ppm	ASTM D5185m		<1	---
Silver	ppm	ASTM D5185m		0	---
Aluminum	ppm	ASTM D5185m	>9	▲ 9	---
Lead	ppm	ASTM D5185m	>28	0	---
Copper	ppm	ASTM D5185m	>50	3	---
Tin	ppm	ASTM D5185m	>5	0	---
Vanadium	ppm	ASTM D5185m		<1	---
Cadmium	ppm	ASTM D5185m		0	---

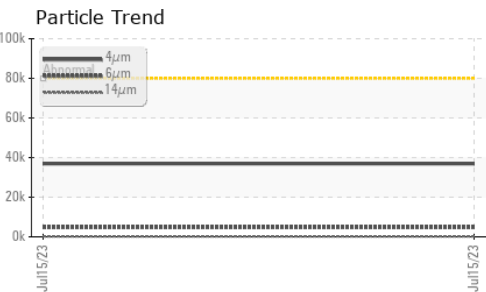
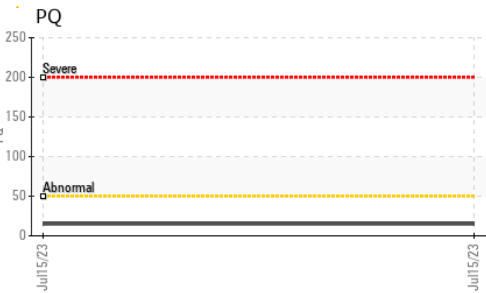
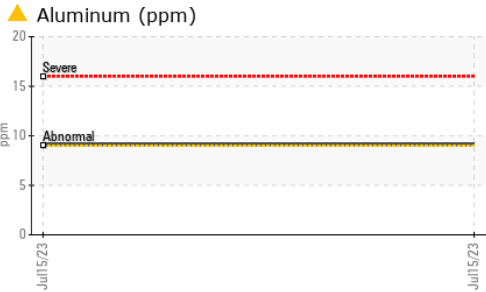
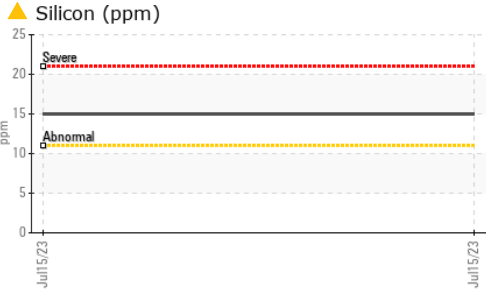
ADDITIVES	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		3	---
Barium	ppm	ASTM D5185m		0	---
Molybdenum	ppm	ASTM D5185m		6	---
Manganese	ppm	ASTM D5185m		<1	---
Magnesium	ppm	ASTM D5185m		32	---
Calcium	ppm	ASTM D5185m		181	---
Phosphorus	ppm	ASTM D5185m	827	441	---
Zinc	ppm	ASTM D5185m	0	▲ 333	---
Sulfur	ppm	ASTM D5185m	13	1108	---

CONTAMINANTS	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>11	▲ 15	---
Sodium	ppm	ASTM D5185m	>21	1	---
Potassium	ppm	ASTM D5185m	>20	2	---

FLUID CLEANLINESS	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>80000	36903	---	---
Particles >6µm	ASTM D7647	>20000	4786	---	---
Particles >14µm	ASTM D7647	>640	217	---	---
Particles >21µm	ASTM D7647	>160	46	---	---
Particles >38µm	ASTM D7647	>40	1	---	---
Particles >71µm	ASTM D7647	>10	0	---	---
Oil Cleanliness	ISO 4406 (c)	>23/21/16	22/19/15	---	---

FLUID DEGRADATION	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.06	0.47	---

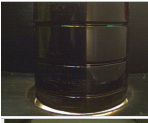

OIL ANALYSIS REPORT



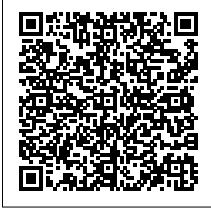
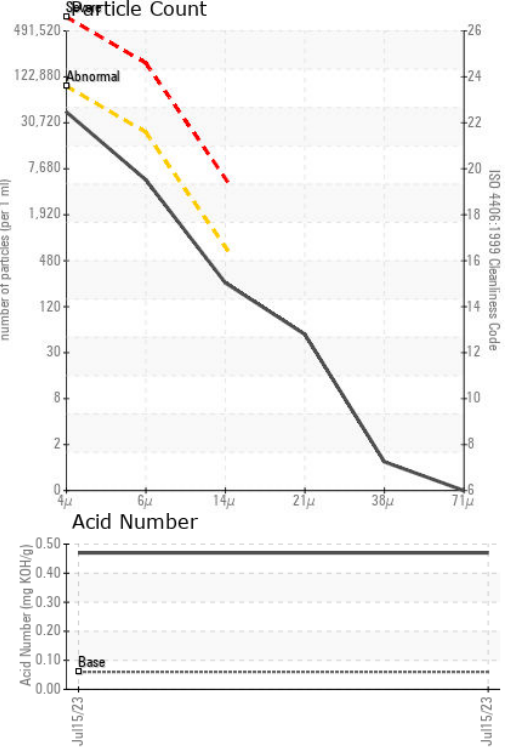
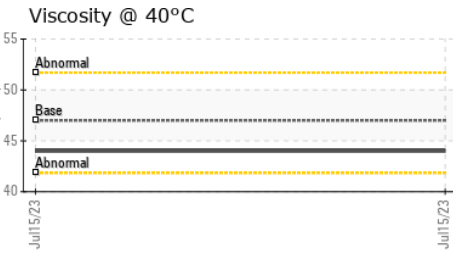
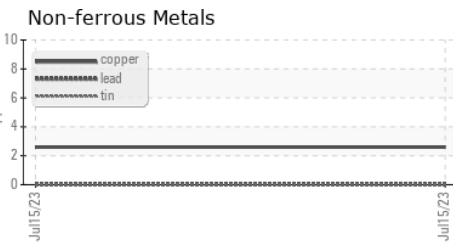
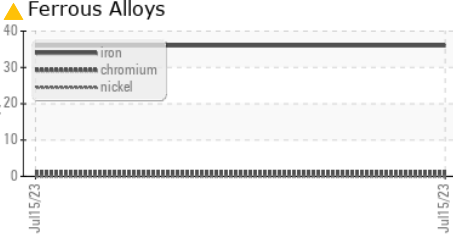
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	---
Precipitate	scalar	*Visual	NONE	NONE	---
Silt	scalar	*Visual	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---
Appearance	scalar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

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445 47	44.0	---	---

SAMPLE IMAGES	method	limit/base	current	history1	history2
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Color		no image	no image
Bottom		no image	no image

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : JR0165554 **Received** : 18 Jul 2023
Lab Number : 05901198 **Diagnosed** : 19 Jul 2023
Unique Number : 10562554 **Diagnostician** : Don Baldrige
Test Package : CONST (Additional Tests: PQ)

LUCK STONE
 19380 RICHMOND TURNPIKE
 MILFORD, VA
 US 22514
 Contact: BRYAN MORRIS
 bmorris@luckstone.com
 T: (804)400-3630
 F: x:

Certificate L2367
 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)