



WEAR	ABNORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	NORMAL

Area
[W21491-READ]

Machine Id
JOHN DEERE 5055E 1PY5055ELHH401695

Component
Hydraulic System

Fluid
JOHN DEERE HY-GARD HYD/TRANS (--- GAL)

RECOMMENDATION

We recommend you service the filters on this component. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		JR0210833	JR0041660	---
Sample Date		Client Info		18 Apr 2024	31 Jan 2020	---
Machine Age	hrs	Client Info		376	180	---
Oil Age	hrs	Client Info		376	180	---
Filter Age	hrs	Client Info		376	180	---
Oil Changed		Client Info		Not Changd	Not Changd	---
Filter Changed		Client Info		Not Changd	Not Changd	---
Sample Status				ABNORMAL	ABNORMAL	---

WEAR

The iron level is abnormal. The copper level is abnormal. All other metal levels are typical for a new component breaking in.

PQ	UOM	Method	Limit/Abn	Current	History1	History2
Iron	ppm	ASTM D5185m	>20	▲ 47	▲ 30	---
Chromium	ppm	ASTM D5185m	>10	<1	<1	---
Nickel	ppm	ASTM D5185m	>10	<1	0	---
Titanium	ppm	ASTM D5185m		<1	<1	---
Silver	ppm	ASTM D5185m		<1	<1	---
Aluminum	ppm	ASTM D5185m	>10	3	2	---
Lead	ppm	ASTM D5185m	>10	3	2	---
Copper	ppm	ASTM D5185m	>75	▲ 136	▲ 77	---
Tin	ppm	ASTM D5185m	>10	3	2	---
Vanadium	ppm	ASTM D5185m		<1	0	---
White Metal	scalar	*Visual	NONE	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	---

CONTAMINATION

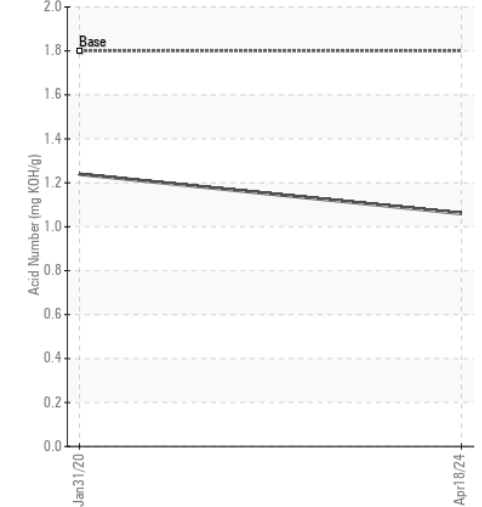
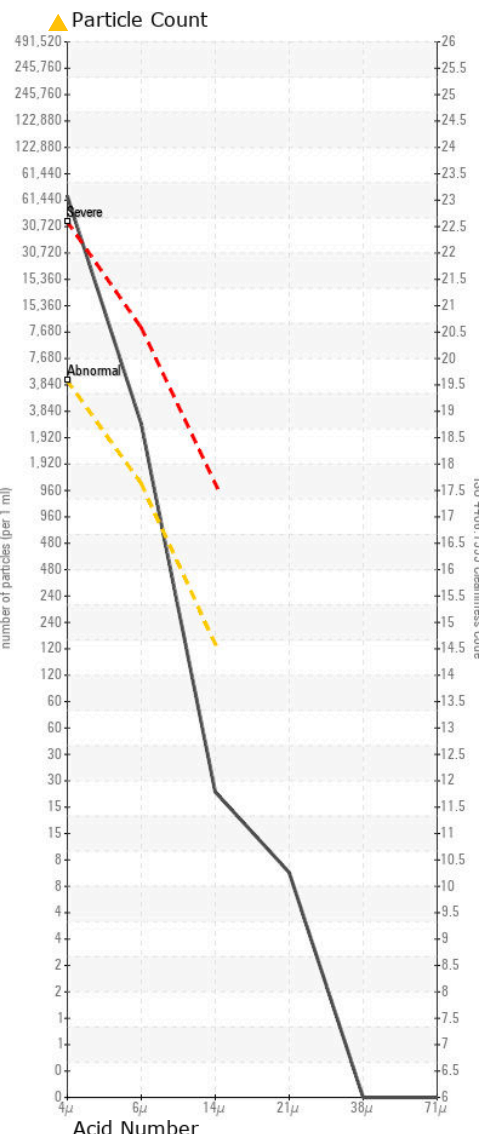
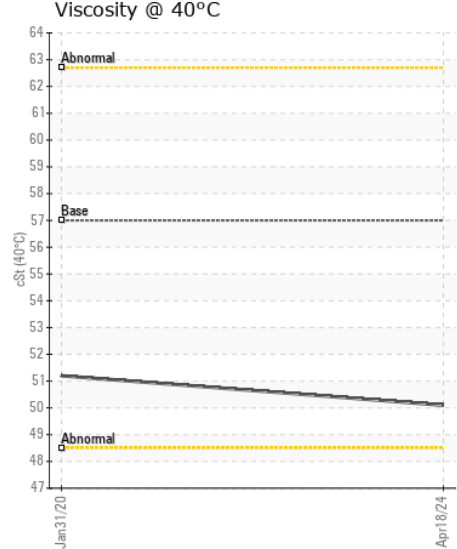
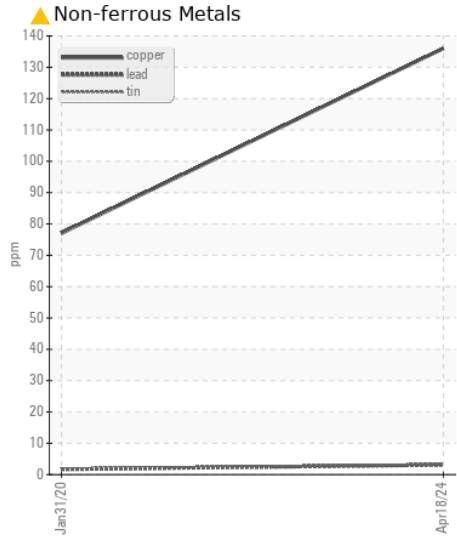
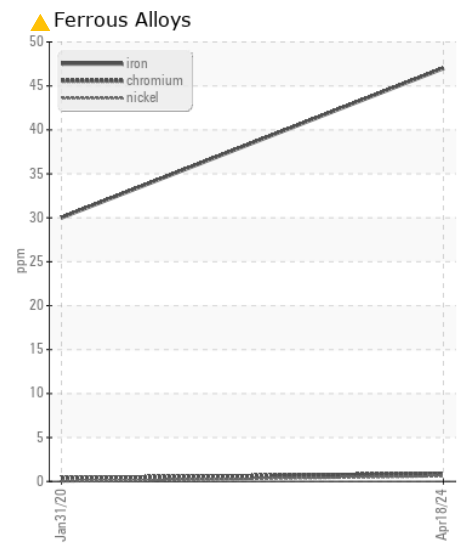
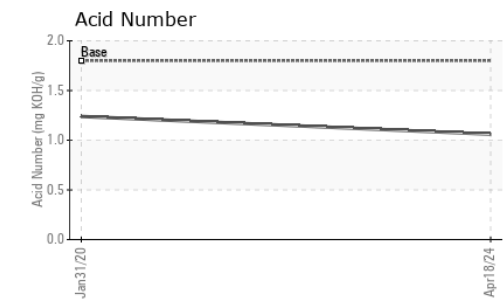
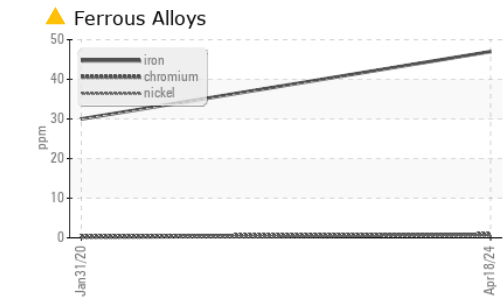
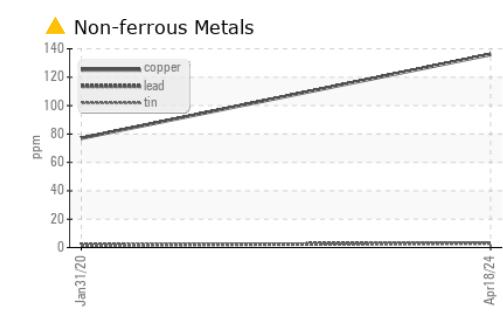
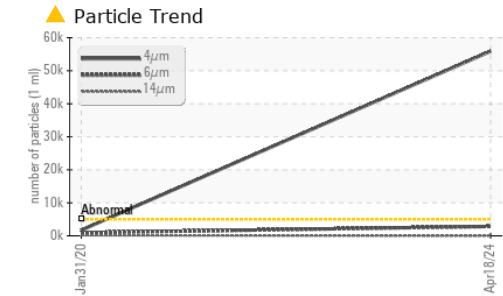
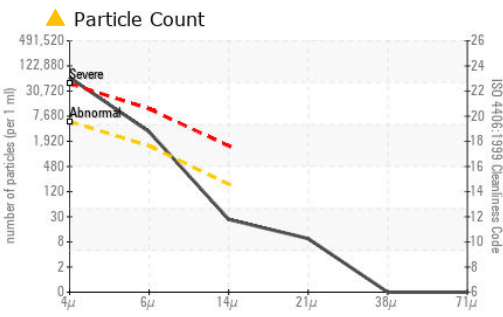
There is a high amount of silt (particulates < 14 microns in size) present in the oil.

Silicon	ppm	ASTM D5185m	>20	7	6	---
Potassium	ppm	ASTM D5185m	>20	4	2	---
Water		WC Method	>0.1	NEG	NEG	---
Particles >4µm		ASTM D7647	>5000	▲ 55911	1730	---
Particles >6µm		ASTM D7647	>1300	▲ 2840	942	---
Particles >14µm		ASTM D7647	>160	23	160	---
Particles >21µm		ASTM D7647	>40	8	54	---
Particles >38µm		ASTM D7647	>10	0	8	---
Particles >71µm		ASTM D7647	>3	0	0	---
Oil Cleanliness		ISO 4406 (c)	>19/17/14	▲ 23/19/12	18/17/14	---
Silt	scalar	*Visual	NONE	NONE	NONE	---
Debris	scalar	*Visual	NONE	LIGHT	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	---
Appearance	scalar	*Visual	NORML	NORML	NORML	---
Odor	scalar	*Visual	NORML	NORML	NORML	---
Emulsified Water	scalar	*Visual	>0.1	NEG	0.2%	---

FLUID CONDITION

The AN level is acceptable for this fluid.

Sodium	ppm	ASTM D5185m		5	4	---
Boron	ppm	ASTM D5185m	6	4	6	---
Barium	ppm	ASTM D5185m	0	<1	<1	---
Molybdenum	ppm	ASTM D5185m	0	<1	<1	---
Manganese	ppm	ASTM D5185m		3	2	---
Magnesium	ppm	ASTM D5185m	145	85	92	---
Calcium	ppm	ASTM D5185m	3570	3244	3507	---
Phosphorus	ppm	ASTM D5185m	1290	1021	1008	---
Zinc	ppm	ASTM D5185m	1640	1183	1209	---
Sulfur	ppm	ASTM D5185m		4081	3196	---
Acid Number (AN)	mg KOH/g	ASTM D8045	1.8	1.06	1.239	---
Visc @ 40°C	cSt	ASTM D445	57.0	50.1	51.2	---



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : JR0210833 **Received** : 22 Apr 2024
Lab Number : 06156860 **Tested** : 23 Apr 2024
Unique Number : 10992283 **Diagnosed** : 24 Apr 2024 - Angela Borella
Test Package : CONST (Additional Tests: PQ)

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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)