



WEAR	SEVERE
CONTAMINATION	ABNORMAL
FLUID CONDITION	NORMAL

Machine Id
JOHN DEERE 1023E 1LV1023EHEH412906

Component
Hydraulic System

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

RECOMMENDATION

We recommend you service the filters on this component. We recommend an early resample to monitor this condition.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		JR0183665	---	---
Sample Date		Client Info		01 Mar 2024	---	---
Machine Age	hrs	Client Info		464	---	---
Oil Age	hrs	Client Info		0	---	---
Filter Age	hrs	Client Info		0	---	---
Oil Changed		Client Info		Not Changd	---	---
Filter Changed		Client Info		Not Changd	---	---
Sample Status				SEVERE	---	---

WEAR

The iron level is abnormal. The copper level is severe. Copper level high for break in.

PQ	UOM	Method	Limit/Abn	Current	History1	History2
Iron	ppm	ASTM D5185m	>20	▲ 50	---	---
Chromium	ppm	ASTM D5185m	>10	<1	---	---
Nickel	ppm	ASTM D5185m	>10	0	---	---
Titanium	ppm	ASTM D5185m		<1	---	---
Silver	ppm	ASTM D5185m		<1	---	---
Aluminum	ppm	ASTM D5185m	>10	11	---	---
Lead	ppm	ASTM D5185m	>10	8	---	---
Copper	ppm	ASTM D5185m	>75	▲ 639	---	---
Tin	ppm	ASTM D5185m	>10	2	---	---
Vanadium	ppm	ASTM D5185m		0	---	---
White Metal	scalar	*Visual	NONE	NONE	---	---
Yellow Metal	scalar	*Visual	NONE	NONE	---	---

CONTAMINATION

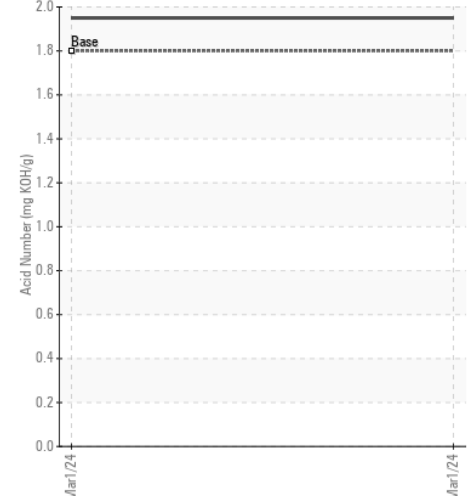
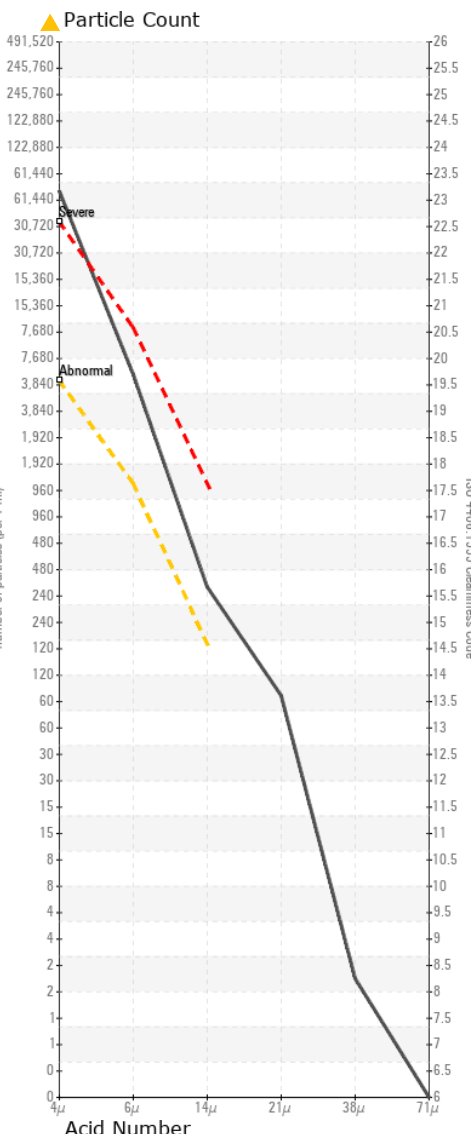
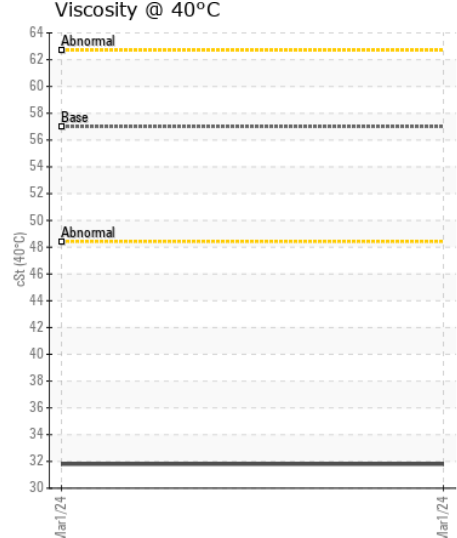
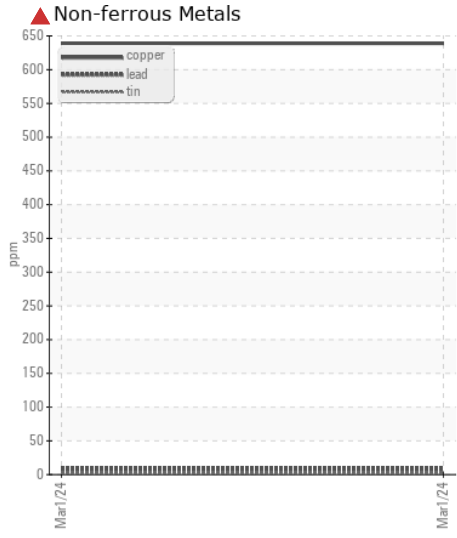
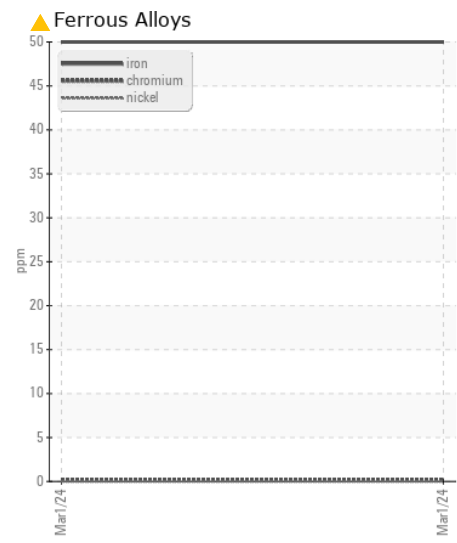
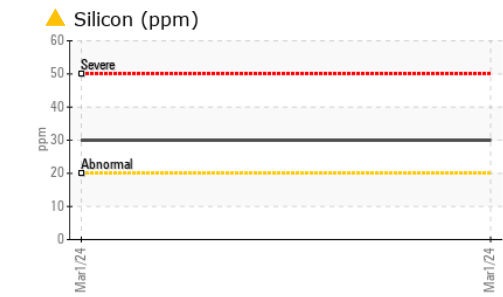
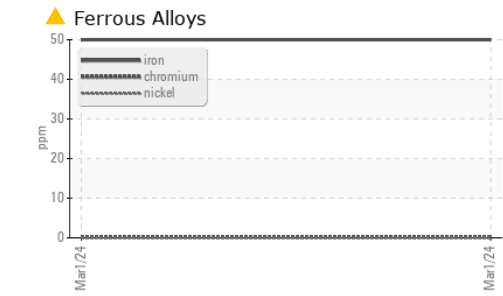
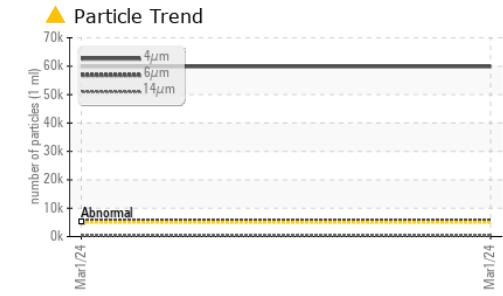
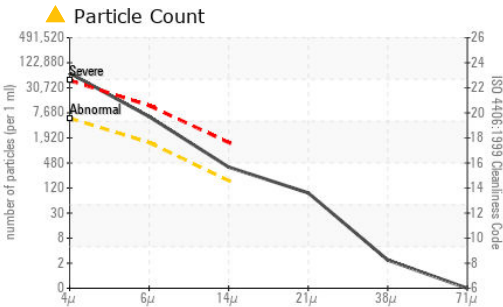
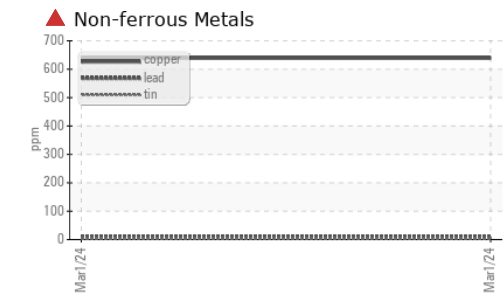
There is a high amount of particulates present in the oil. Elemental level of silicon (Si) above normal indicating ingress of seal material.

Silicon	ppm	ASTM D5185m	>20	▲ 30	---	---
Potassium	ppm	ASTM D5185m	>20	6	---	---
Water		WC Method	>0.1	NEG	---	---
Particles >4µm		ASTM D7647	>5000	▲ 59874	---	---
Particles >6µm		ASTM D7647	>1300	▲ 5427	---	---
Particles >14µm		ASTM D7647	>160	▲ 336	---	---
Particles >21µm		ASTM D7647	>40	▲ 81	---	---
Particles >38µm		ASTM D7647	>10	2	---	---
Particles >71µm		ASTM D7647	>3	0	---	---
Oil Cleanliness		ISO 4406 (c)	>19/17/14	▲ 23/20/16	---	---
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	>0.1	NEG	---	---

FLUID CONDITION

The BN result indicates that there is suitable alkalinity remaining in the oil.

Sodium	ppm	ASTM D5185m		5	---	---
Boron	ppm	ASTM D5185m	6	<1	---	---
Barium	ppm	ASTM D5185m	0	2	---	---
Molybdenum	ppm	ASTM D5185m	0	<1	---	---
Manganese	ppm	ASTM D5185m		2	---	---
Magnesium	ppm	ASTM D5185m	145	109	---	---
Calcium	ppm	ASTM D5185m	3570	3567	---	---
Phosphorus	ppm	ASTM D5185m	1290	1067	---	---
Zinc	ppm	ASTM D5185m	1640	1318	---	---
Sulfur	ppm	ASTM D5185m		4305	---	---
Acid Number (AN)	mg KOH/g	ASTM D8045	1.8	1.95	---	---
Visc @ 40°C	cSt	ASTM D445	57.0	31.8	---	---



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : JR0183665 **Received** : 11 Apr 2024
Lab Number : 06145745 **Tested** : 12 Apr 2024
Unique Number : 10970553 **Diagnosed** : 14 Apr 2024 - Don Baldrige
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)