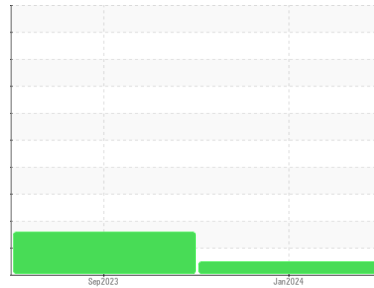




OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL



Area
[A34461]
 Machine Id
JOHN DEERE 450K 1T0450KXPMF390627
 Component
Hydraulic System
 Fluid
JOHN DEERE HYDRAU (--- GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable.

Fluid Condition

The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

SAMPLE INFORMATION

method	limit/base	current	history1	history2
Sample Number	Client Info	WE0006583	WE0005612	---
Sample Date	Client Info	12 Jan 2024	20 Sep 2023	---
Machine Age	hrs	Client Info	1062	1012
Oil Age	hrs	Client Info	50	1012
Oil Changed	Client Info	Not Chngd	Not Chngd	---
Sample Status		NORMAL	ABNORMAL	---

CONTAMINATION

method	limit/base	current	history1	history2
Water	WC Method >0.1	NEG	NEG	---

WEAR METALS

method	limit/base	current	history1	history2
PQ	ASTM D8184	16	14	---
Iron	ppm	ASTM D5185m >20	0	0
Chromium	ppm	ASTM D5185m >10	<1	<1
Nickel	ppm	ASTM D5185m >10	0	<1
Titanium	ppm	ASTM D5185m	0	0
Silver	ppm	ASTM D5185m	0	1
Aluminum	ppm	ASTM D5185m >10	2	1
Lead	ppm	ASTM D5185m >10	0	7
Copper	ppm	ASTM D5185m >75	0	1
Tin	ppm	ASTM D5185m >10	0	2
Vanadium	ppm	ASTM D5185m	0	1
Cadmium	ppm	ASTM D5185m	0	0

ADDITIVES

method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	<1
Barium	ppm	ASTM D5185m	3	0
Molybdenum	ppm	ASTM D5185m	0	<1
Manganese	ppm	ASTM D5185m	0	0
Magnesium	ppm	ASTM D5185m	1	20
Calcium	ppm	ASTM D5185m 87	98	0
Phosphorus	ppm	ASTM D5185m 727	715	337
Zinc	ppm	ASTM D5185m 900	842	72
Sulfur	ppm	ASTM D5185m 1500	1835	1853

CONTAMINANTS

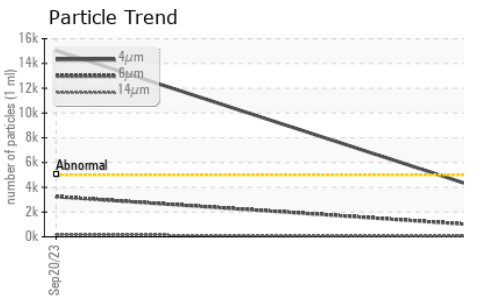
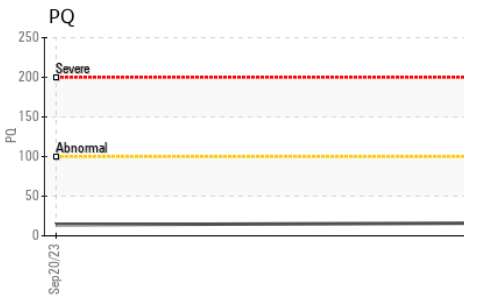
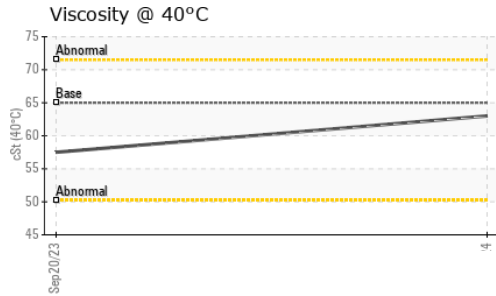
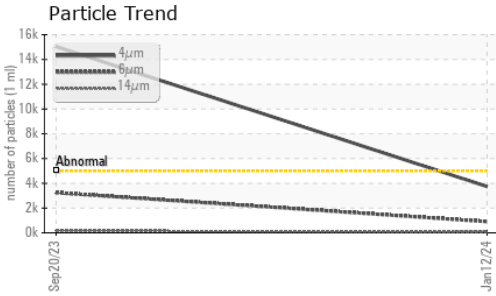
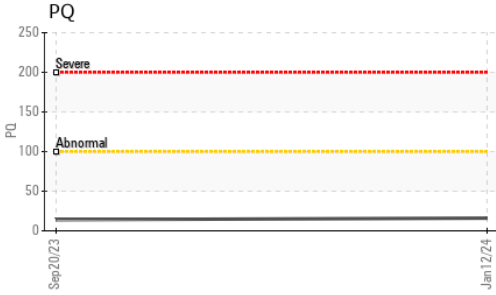
method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >20	0	2
Sodium	ppm	ASTM D5185m	0	39
Potassium	ppm	ASTM D5185m >20	<1	93

FLUID CLEANLINESS

method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647 >5000	3739	▲ 15046	---
Particles >6µm	ASTM D7647 >1300	902	▲ 3239	---
Particles >14µm	ASTM D7647 >160	66	▲ 168	---
Particles >21µm	ASTM D7647 >40	18	32	---
Particles >38µm	ASTM D7647 >10	0	0	---
Particles >71µm	ASTM D7647 >3	0	0	---
Oil Cleanliness	ISO 4406 (c) >19/17/14	19/17/13	▲ 21/19/15	---



OIL ANALYSIS REPORT

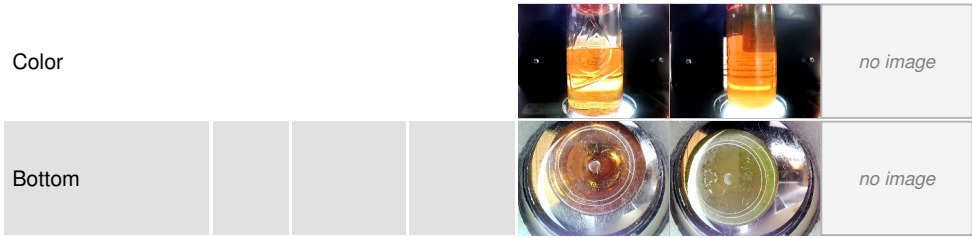


FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	1.0	0.67	0.65	---

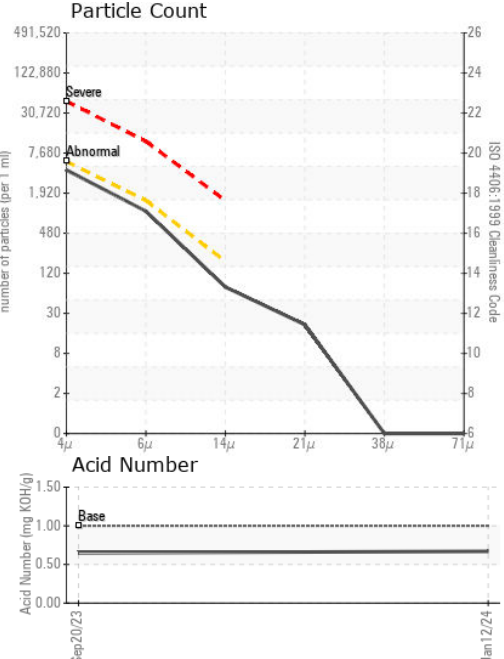
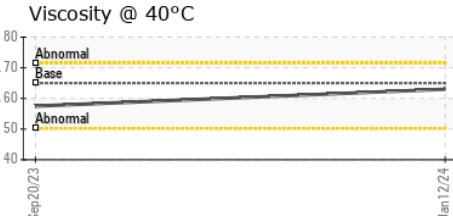
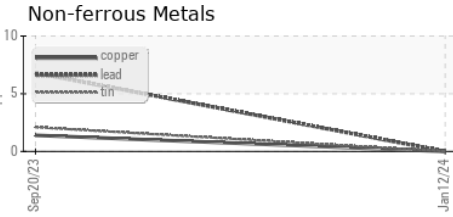
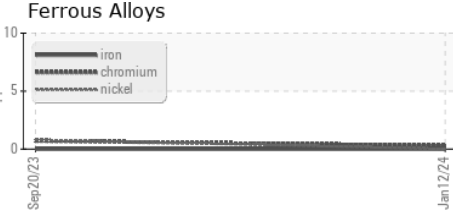
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	---
Precipitate	scalar	*Visual	NONE	NONE	NONE	---
Silt	scalar	*Visual	NONE	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	---
Appearance	scalar	*Visual	NORML	NORML	NORML	---
Odor	scalar	*Visual	NORML	NORML	NORML	---
Emulsified Water	scalar	*Visual	>0.1	NEG	NEG	---
Free Water	scalar	*Visual		NEG	NEG	---

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	65	63.0	57.5	---

SAMPLE IMAGES		method	limit/base	current	history1	history2
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GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WE0006583 **Received** : 17 Jan 2024
Lab Number : **06063517** **Diagnosed** : 19 Jan 2024
Unique Number : 10834899 **Diagnostician** : Wes Davis
Test Package : CONST (Additional Tests: PQ)

WARRIOR TRACTOR AND EQUIPMENT - HUNTSVILLE
 25135 ONE AVIATION WAY SW
 MADISON, AL
 US 35756
 Contact: TODD MITCHELL
 t_mitchell@warriortractor.com
 T: (256)233-1914
 F: (256)233-1971

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)