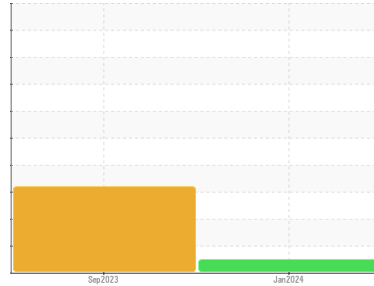




OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL



Area
[A34461]
 Machine Id
JOHN DEERE 450K 1T0450KXPMF390627
 Component
Diesel Engine
 Fluid
JOHN DEERE ENGINE OIL PLUS 50 II 15W40 (--- GAL)

DIAGNOSIS

Recommendation

No corrective action is recommended at this time. Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

Fuel content negligible. There is no indication of any contamination in the oil.

Fluid Condition

The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

SAMPLE INFORMATION

method	limit/base	current	history1	history2
Sample Number	Client Info	WE0005960	WE0005624	---
Sample Date	Client Info	12 Jan 2024	20 Sep 2023	---
Machine Age	hrs	Client Info	1069	1012
Oil Age	hrs	Client Info	60	512
Oil Changed	Client Info	Not Chngd	Changed	---
Sample Status		NORMAL	SEVERE	---

CONTAMINATION

method	limit/base	current	history1	history2
Water	WC Method	>0.21	NEG	NEG
Glycol	WC Method		NEG	NEG

WEAR METALS

method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185m	>51	<1	▲ 56
Chromium	ppm	ASTM D5185m	>11	0	1
Nickel	ppm	ASTM D5185m	>5	<1	<1
Titanium	ppm	ASTM D5185m		0	0
Silver	ppm	ASTM D5185m	>3	0	0
Aluminum	ppm	ASTM D5185m	>31	4	6
Lead	ppm	ASTM D5185m	>26	<1	4
Copper	ppm	ASTM D5185m	>26	0	20
Tin	ppm	ASTM D5185m	>4	<1	1
Vanadium	ppm	ASTM D5185m		<1	<1
Cadmium	ppm	ASTM D5185m		0	0

ADDITIVES

method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185m		268	79
Barium	ppm	ASTM D5185m		0	0
Molybdenum	ppm	ASTM D5185m		239	234
Manganese	ppm	ASTM D5185m		<1	2
Magnesium	ppm	ASTM D5185m		820	816
Calcium	ppm	ASTM D5185m		1353	1373
Phosphorus	ppm	ASTM D5185m		964	763
Zinc	ppm	ASTM D5185m		1097	950
Sulfur	ppm	ASTM D5185m		3192	3466

CONTAMINANTS

method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m	>22	8	9
Sodium	ppm	ASTM D5185m	>31	<1	5
Potassium	ppm	ASTM D5185m	>20	2	2
Fuel	%	ASTM D3524	>2.1	0.2	◆ 9.1

INFRA-RED

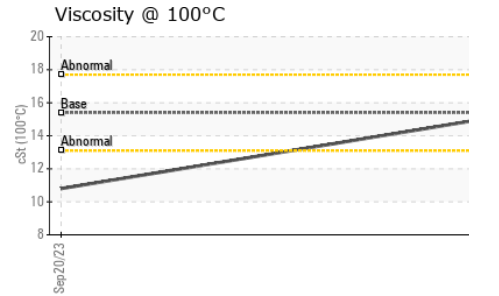
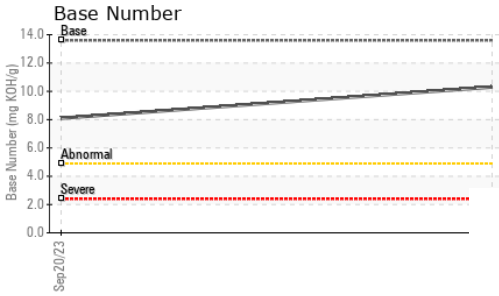
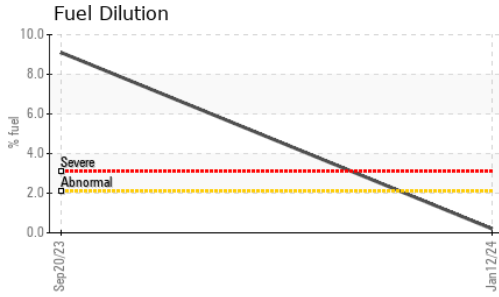
method	limit/base	current	history1	history2	
Soot %	%	*ASTM D7844	>3	0	0.8
Nitration	Abs/cm	*ASTM D7624	>20	5.5	12.1
Sulfation	Abs/.1mm	*ASTM D7415	>30	19.6	25.5

FLUID DEGRADATION

method	limit/base	current	history1	history2	
Oxidation	Abs/.1mm	*ASTM D7414	>25	14.4	21.8
Base Number (BN)	mg KOH/g	ASTM D2896	13.6	10.3	8.1



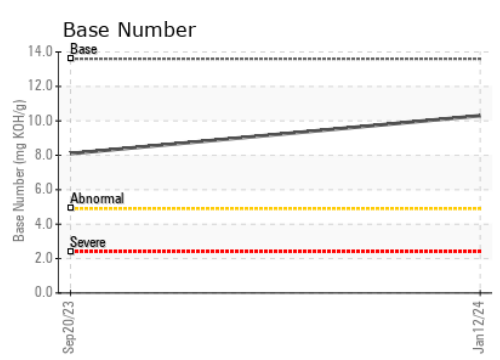
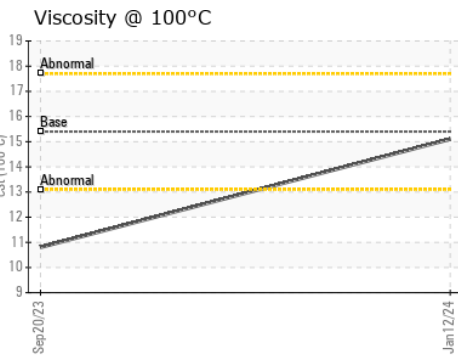
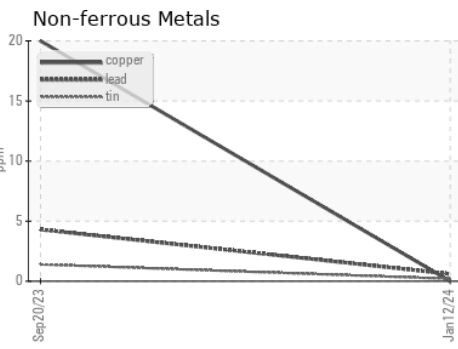
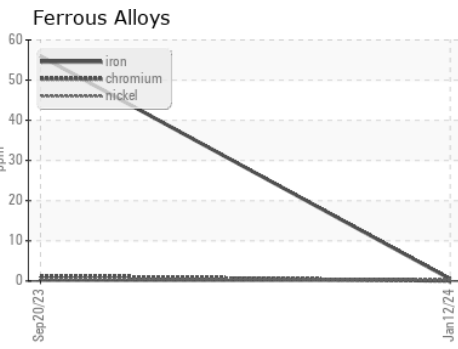
OIL ANALYSIS REPORT



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	>0.21	NEG	---
Free Water	scalar	*Visual		NEG	---

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	15.4	15.1	▲ 10.8

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WE0005960 **Recieved** : 17 Jan 2024
Lab Number : 06063314 **Diagnosed** : 19 Jan 2024
Unique Number : 10834696 **Diagnostician** : Wes Davis
Test Package : CONST (Additional Tests: PercentFuel, TBN)

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)