



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area

BLACKBURN LOGGING

Machine Id

JOHN DEERE 437E 1T0437EDENL433216

Component

Diesel Engine

Fluid

{not provided} (8 GAL)

RECOMMENDATION

Resample at the next service interval to monitor. Please specify the brand, type, and viscosity of the oil on your next sample. (Customer Sample Comment: A32755)

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WE0004941	---	---
Sample Date		Client Info		21 Jun 2023	---	---
Machine Age	hrs	Client Info		965	---	---
Oil Age	hrs	Client Info		0	---	---
Filter Age	hrs	Client Info		0	---	---
Oil Changed		Client Info		N/A	---	---
Filter Changed		Client Info		N/A	---	---
Sample Status				NORMAL	---	---

WEAR

Metal levels are typical for a new component breaking in.

Iron	ppm	ASTM D5185m	>51	62	---	---
Chromium	ppm	ASTM D5185m	>11	1	---	---
Nickel	ppm	ASTM D5185m	>5	2	---	---
Titanium	ppm	ASTM D5185m		<1	---	---
Silver	ppm	ASTM D5185m	>3	0	---	---
Aluminum	ppm	ASTM D5185m	>31	5	---	---
Lead	ppm	ASTM D5185m	>26	1	---	---
Copper	ppm	ASTM D5185m	>26	65	---	---
Tin	ppm	ASTM D5185m	>4	2	---	---
Vanadium	ppm	ASTM D5185m		0	---	---
White Metal	scalar	*Visual	NONE	NONE	---	---
Yellow Metal	scalar	*Visual	NONE	NONE	---	---

CONTAMINATION

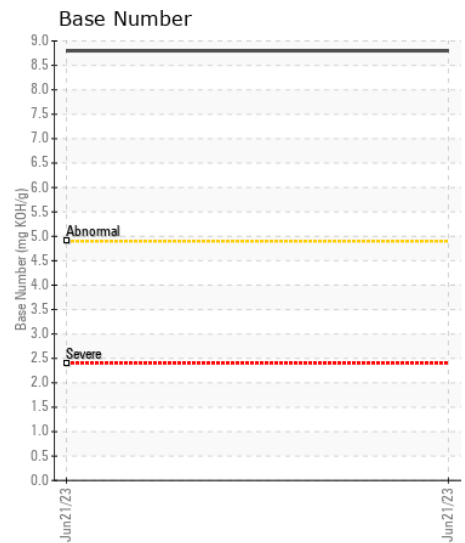
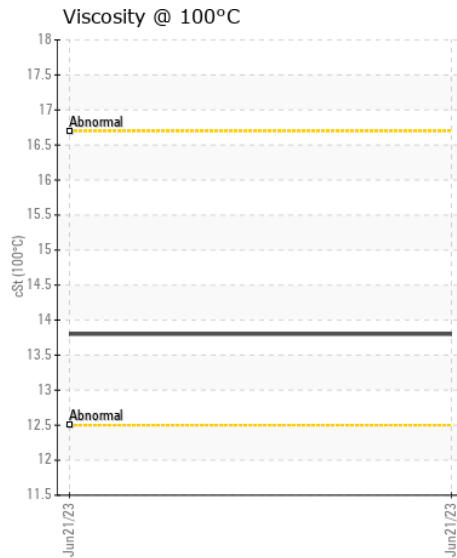
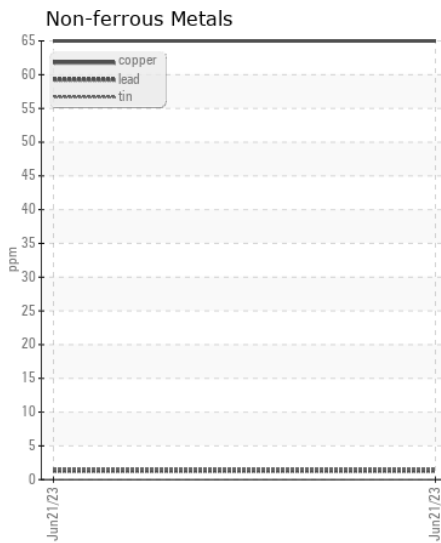
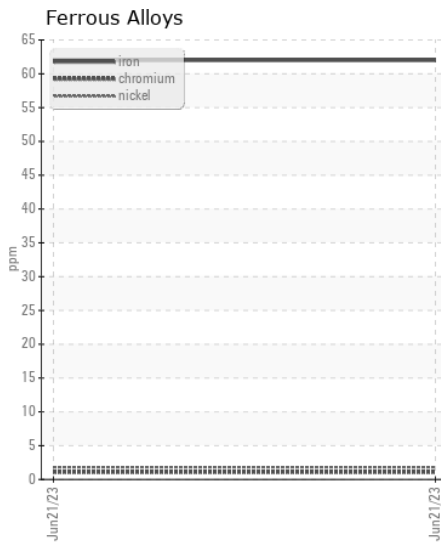
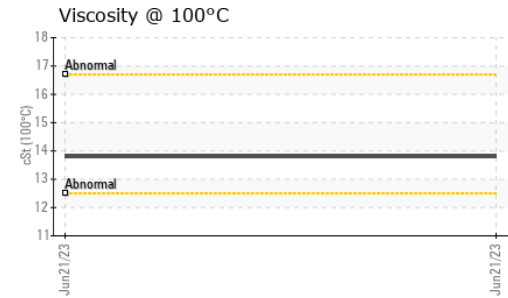
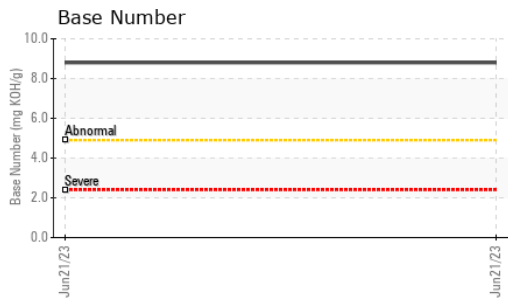
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>22	13	---	---
Potassium	ppm	ASTM D5185m	>20	9	---	---
Fuel		WC Method	>2.1	<1.0	---	---
Water		WC Method	>0.21	NEG	---	---
Glycol		WC Method		NEG	---	---
Soot %	%	*ASTM D7844	>3	0.8	---	---
Nitration	Abs/cm	*ASTM D7624	>20	11.1	---	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	25.4	---	---
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	---	---

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.

Sodium	ppm	ASTM D5185m	>31	<1	---	---
Boron	ppm	ASTM D5185m		206	---	---
Barium	ppm	ASTM D5185m		0	---	---
Molybdenum	ppm	ASTM D5185m		404	---	---
Manganese	ppm	ASTM D5185m		2	---	---
Magnesium	ppm	ASTM D5185m		1179	---	---
Calcium	ppm	ASTM D5185m		2023	---	---
Phosphorus	ppm	ASTM D5185m		1190	---	---
Zinc	ppm	ASTM D5185m		1456	---	---
Sulfur	ppm	ASTM D5185m		4130	---	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	20.6	---	---
Base Number (BN)	mg KOH/g	ASTM D2896		8.8	---	---
Visc @ 100°C	cSt	ASTM D445		13.8	---	---



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WE0004941 **Received** : 26 Jun 2023
Lab Number : 05883074 **Diagnosed** : 28 Jun 2023
Unique Number : 10533557 **Diagnostician** : Wes Davis
Test Package : CONST (Additional Tests: TBN)

WARRIOR TRACTOR AND EQUIPMENT - HUNTSVILLE
 25135 ONE AVIATION WAY SW
 MADISON, AL
 US 35756
 Contact: BOBBY LUCKY
 warriorparts033@gmail.com

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)

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F: