



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Area
{UNASSIGNED} [A35749]
 Machine Id
JOHN DEERE 544K 1DW544KZCFf670872
 Component
Oil Filter Diesel Engine
 Fluid
SHELL ROTELLA S 10W40 (8 GAL)

RECOMMENDATION

Resample at the next service interval to monitor. (Customer Sample Comment: A35749)

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WE0007603	---	---
Sample Date		Client Info		25 Jun 2024	---	---
Machine Age	hrs	Client Info		14554	---	---
Oil Age	hrs	Client Info		400	---	---
Filter Age	hrs	Client Info		400	---	---
Oil Changed		Client Info		Changed	---	---
Filter Changed		Client Info		Changed	---	---
Sample Status				NORMAL	---	---

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>51	31	---	---
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	3	---	---
Lead	ppm	ASTM D5185m	>26	<1	---	---
Copper	ppm	ASTM D5185m	>26	2	---	---
Tin	ppm	ASTM D5185m	>4	0	---	---
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.

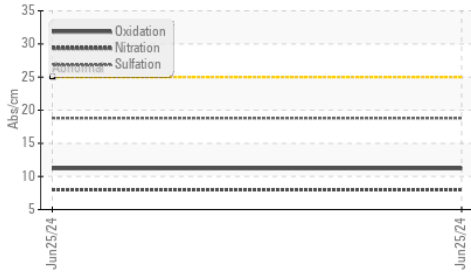
Silicon	ppm	ASTM D5185m	>22	4	---	---
Potassium	ppm	ASTM D5185m	>20	3	---	---
Fuel		WC Method	>2.1	<1.0	---	---
Water		WC Method	>0.21	NEG	---	---
Glycol		WC Method		NEG	---	---
Soot %	%	*ASTM D7844	>3	0.4	---	---
Nitration	Abs/cm	*ASTM D7624	>20	8.0	---	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	18.8	---	---
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

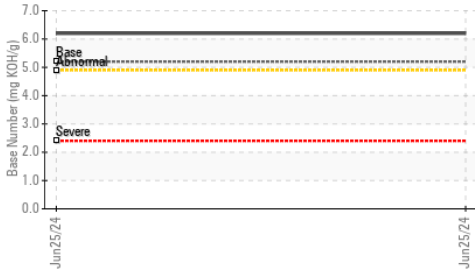
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m	>31	3	---	---
Boron	ppm	ASTM D5185m	0	15	---	---
Barium	ppm	ASTM D5185m		0	---	---
Molybdenum	ppm	ASTM D5185m	0	19	---	---
Manganese	ppm	ASTM D5185m		<1	---	---
Magnesium	ppm	ASTM D5185m	291	57	---	---
Calcium	ppm	ASTM D5185m	392	2126	---	---
Phosphorus	ppm	ASTM D5185m	535	864	---	---
Zinc	ppm	ASTM D5185m	557	1054	---	---
Sulfur	ppm	ASTM D5185m		3413	---	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	11.2	---	---
Base Number (BN)	mg KOH/g	ASTM D2896	5.2	6.2	---	---
Visc @ 100°C	cSt	ASTM D445	14.2	13.2	---	---

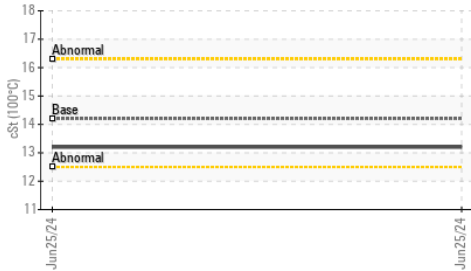
FT-IR (Direct Trend)



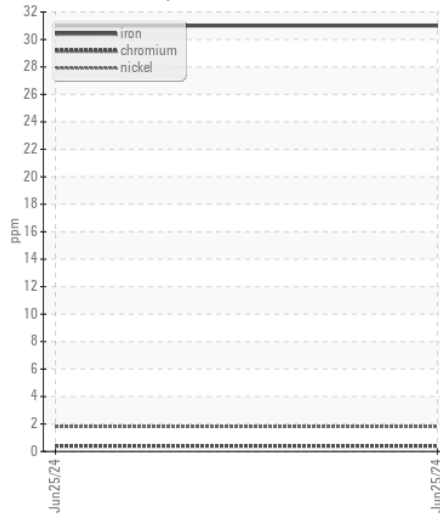
Base Number



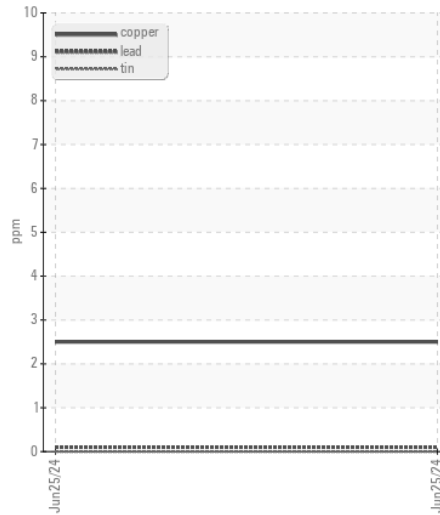
Viscosity @ 100°C



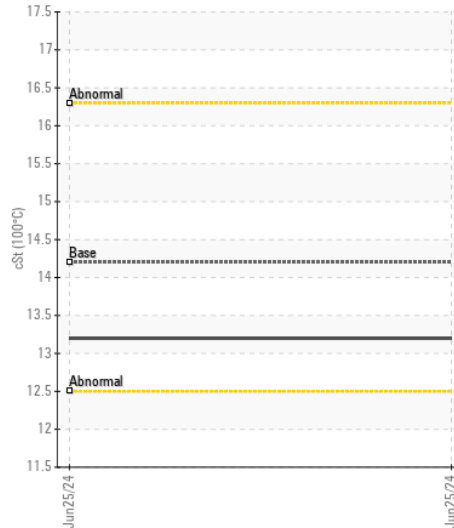
Ferrous Alloys



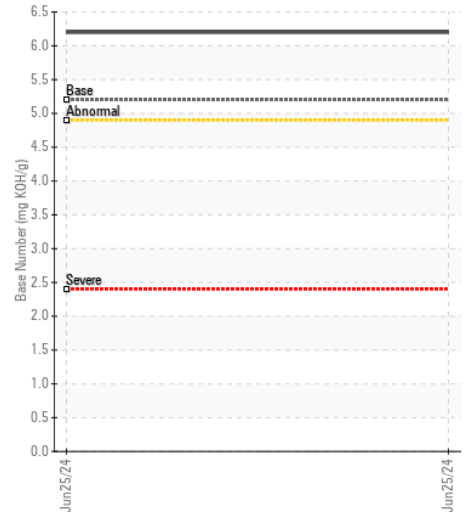
Non-ferrous Metals



Viscosity @ 100°C



Base Number



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WE0007603 **Received** : 27 Jun 2024
Lab Number : 06222015 **Tested** : 27 Jun 2024
Unique Number : 11100212 **Diagnosed** : 28 Jun 2024 - Don Baldrige
Test Package : CONST (Additional Tests: TBN)

WARRIOR TRACTOR AND EQUIPMENT - HUNTSVILLE
 25135 ONE AVIATION WAY SW
 MADISON, AL
 US 35756
 Contact: HERBERT STONE
 WTE013@WARRIORTRACTOR.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)