OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area
Contracting [01-80240]
Machine Id
5537 5537
Component
Diesel Engine
Fluid
JOHN DEERE ENGINE OIL PLUS 50 II 15W40 (5 GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

WEAR

All component wear rates are normal.

CONTAMINATION

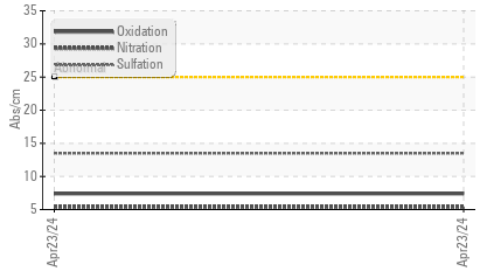
There is no indication of any contamination in the oil. The amount and size of particulates present in the system are acceptable.

FLUID CONDITION

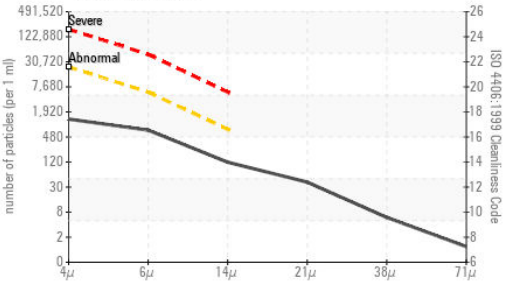
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0861667	---	---
Sample Date		Client Info		23 Apr 2024	---	---
Machine Age		Client Info		6	---	---
Oil Age		Client Info		6	---	---
Filter Age		Client Info		6	---	---
Oil Changed		Client Info		Not Changd	---	---
Filter Changed		Client Info		Not Changd	---	---
Sample Status				NORMAL	---	---
Iron	ppm	ASTM D5185m	>51	7	---	---
Chromium	ppm	ASTM D5185m	>11	<1	---	---
Nickel	ppm	ASTM D5185m	>5	<1	---	---
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	18	---	---
Tin	ppm	ASTM D5185m	>4	<1	---	---
Vanadium	ppm	ASTM D5185m		<1	---	---
White Metal	scalar	*Visual	NONE	NONE	---	---
Yellow Metal	scalar	*Visual	NONE	NONE	---	---
Silicon	ppm	ASTM D5185m	>22	17	---	---
Potassium	ppm	ASTM D5185m	>20	5	---	---
Fuel	%	ASTM D3524	>2.1	<1.0	---	---
Water		WC Method	>0.21	NEG	---	---
Glycol		WC Method		NEG	---	---
Soot %	%	*ASTM D7844	>3	0	---	---
Nitration	Abs/cm	*ASTM D7624	>20	5.4	---	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	13.5	---	---
Particles >4µm		ASTM D7647	>20000	1129	---	---
Particles >6µm		ASTM D7647	>5000	615	---	---
Particles >14µm		ASTM D7647	>640	105	---	---
Particles >21µm		ASTM D7647	>160	35	---	---
Particles >38µm		ASTM D7647	>40	5	---	---
Particles >71µm		ASTM D7647	>10	1	---	---
Oil Cleanliness		ISO 4406 (c)	>21/19/16	17/16/14	---	---
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	---	---
Sodium	ppm	ASTM D5185m	>31	1	---	---
Boron	ppm	ASTM D5185m		171	---	---
Barium	ppm	ASTM D5185m		3	---	---
Molybdenum	ppm	ASTM D5185m		1	---	---
Manganese	ppm	ASTM D5185m		<1	---	---
Magnesium	ppm	ASTM D5185m		15	---	---
Calcium	ppm	ASTM D5185m		2655	---	---
Phosphorus	ppm	ASTM D5185m		986	---	---
Zinc	ppm	ASTM D5185m		1152	---	---
Sulfur	ppm	ASTM D5185m		3362	---	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	7.4	---	---
Base Number (BN)	mg KOH/g	ASTM D2896	13.6	10.0	---	---
Visc @ 100°C	cSt	ASTM D445	15.4	12.7	---	---

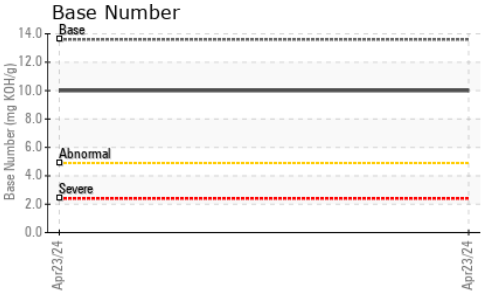
FT-IR (Direct Trend)



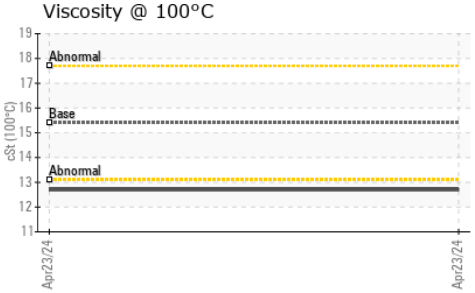
Particle Count



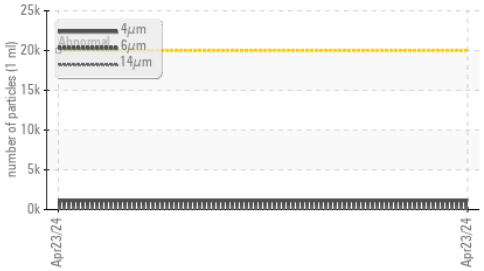
Base Number



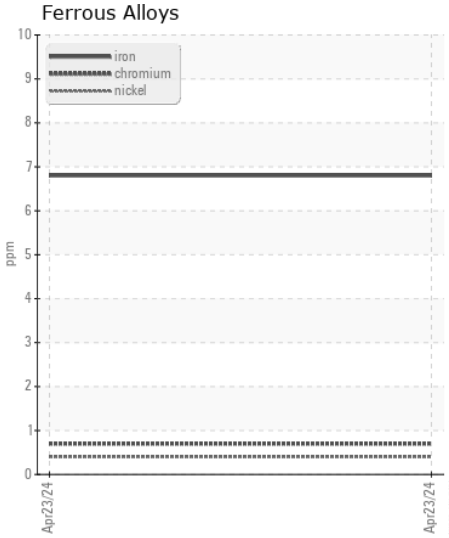
Viscosity @ 100°C



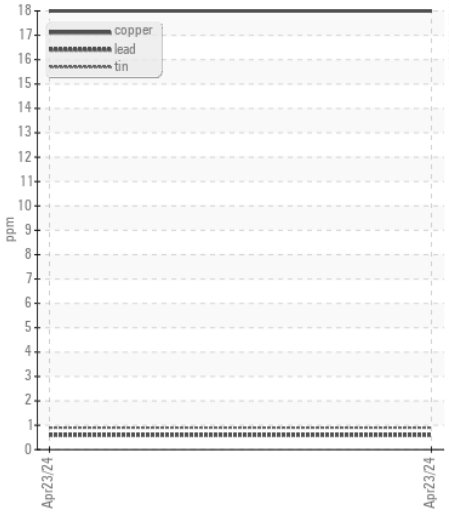
Particle Trend



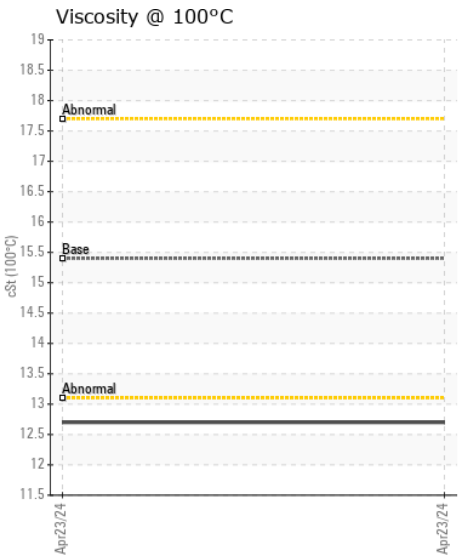
Ferrous Alloys



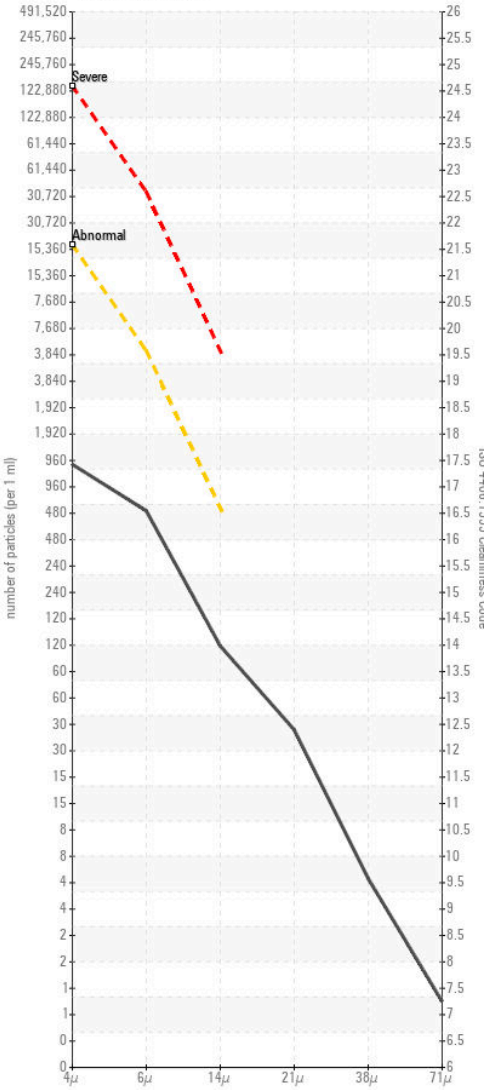
Non-ferrous Metals



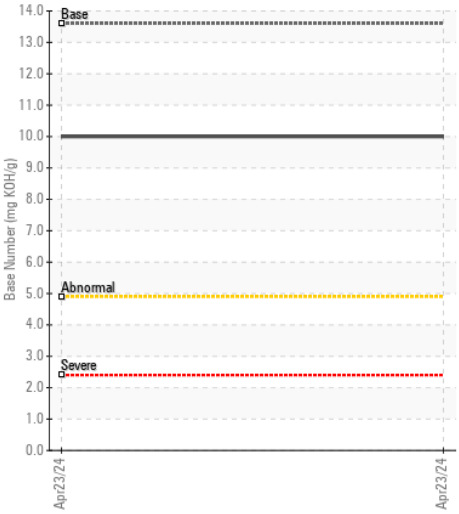
Viscosity @ 100°C



Particle Count



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0861667 **Received** : 26 Apr 2024
Lab Number : 06161325 **Tested** : 30 Apr 2024
Unique Number : 10996748 **Diagnosed** : 30 Apr 2024 - Jonathan Hester
Test Package : CONST (Additional Tests: FuelDilution, PrtCount, TBN)

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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