



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area

[W68119]

Machine Id

JOHN DEERE 460P 1DW460PAEPFB06202

Component

Diesel Engine

Fluid

JOHN DEERE ENGINE OIL PLUS 50 II 15W40 (14 GAL)

RECOMMENDATION

Resample at the next service interval to monitor. (Customer Sample Comment: W68119)

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		JR0204041	JR0191096	---
Sample Date		Client Info		25 Jun 2024	16 Nov 2023	---
Machine Age	hrs	Client Info		1043	563	---
Oil Age	hrs	Client Info		1043	563	---
Filter Age	hrs	Client Info		0	563	---
Oil Changed		Client Info		Changed	N/A	---
Filter Changed		Client Info		Changed	N/A	---
Sample Status				NORMAL	NORMAL	---

WEAR

Metal levels are typical for a new component breaking in.

Iron	ppm	ASTM D5185m	>51	17	37	---
Chromium	ppm	ASTM D5185m	>11	0	<1	---
Nickel	ppm	ASTM D5185m	>5	0	<1	---
Titanium	ppm	ASTM D5185m		0	<1	---
Silver	ppm	ASTM D5185m	>3	0	0	---
Aluminum	ppm	ASTM D5185m	>31	6	4	---
Lead	ppm	ASTM D5185m	>26	7	12	---
Copper	ppm	ASTM D5185m	>26	75	326	---
Tin	ppm	ASTM D5185m	>4	7	12	---
Vanadium	ppm	ASTM D5185m		0	0	---
White Metal	scalar	*Visual	NONE	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	---

CONTAMINATION

There is no indication of any contamination in the oil.

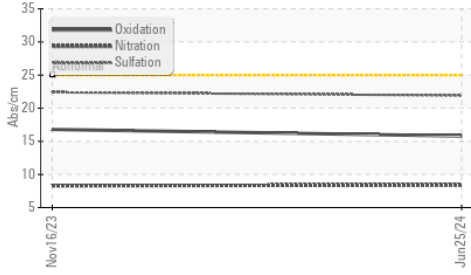
Silicon	ppm	ASTM D5185m	>22	7	14	---
Potassium	ppm	ASTM D5185m	>20	4	6	---
Fuel	%	ASTM D3524	>2.1	<1.0	0.6	---
Water		WC Method	>0.21	NEG	NEG	---
Glycol		WC Method		NEG	NEG	---
Soot %	%	*ASTM D7844	>3	0.3	0.3	---
Nitration	Abs/cm	*ASTM D7624	>20	8.4	8.3	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	21.9	22.4	---
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	>0.21	NEG	NEG	---

FLUID CONDITION

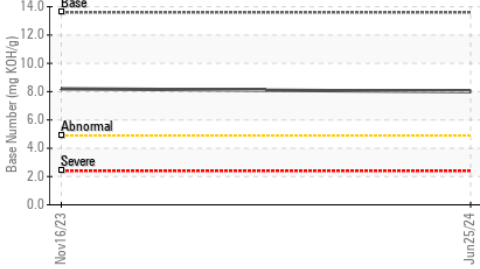
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m	>31	6	6	---
Boron	ppm	ASTM D5185m		169	204	---
Barium	ppm	ASTM D5185m		<1	0	---
Molybdenum	ppm	ASTM D5185m		253	243	---
Manganese	ppm	ASTM D5185m		2	11	---
Magnesium	ppm	ASTM D5185m		850	779	---
Calcium	ppm	ASTM D5185m		1392	1320	---
Phosphorus	ppm	ASTM D5185m		911	907	---
Zinc	ppm	ASTM D5185m		1074	1055	---
Sulfur	ppm	ASTM D5185m		3277	3028	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	15.8	16.8	---
Base Number (BN)	mg KOH/g	ASTM D2896	13.6	8.0	8.2	---
Visc @ 100°C	cSt	ASTM D445	15.4	12.7	10.1	---

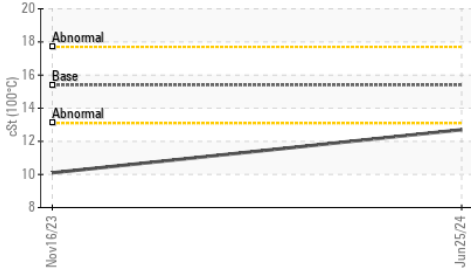
FT-IR (Direct Trend)



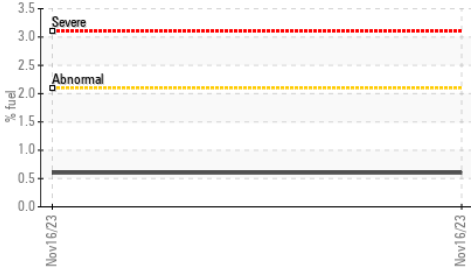
Base Number



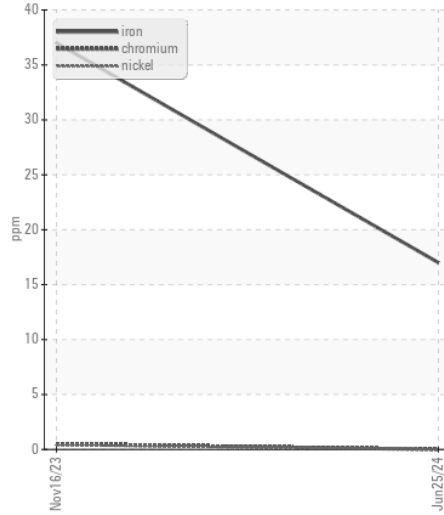
Viscosity @ 100°C



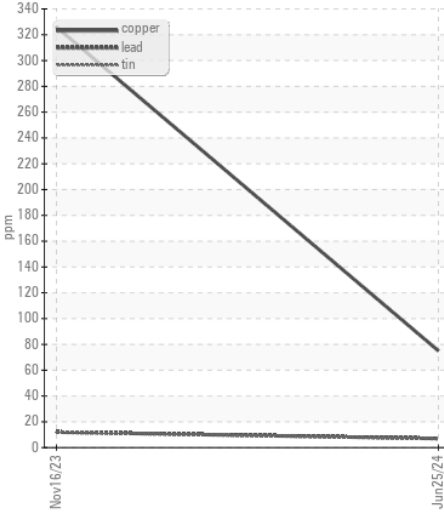
Fuel Dilution



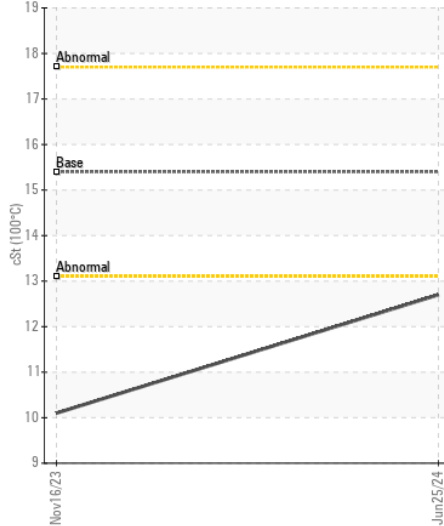
Ferrous Alloys



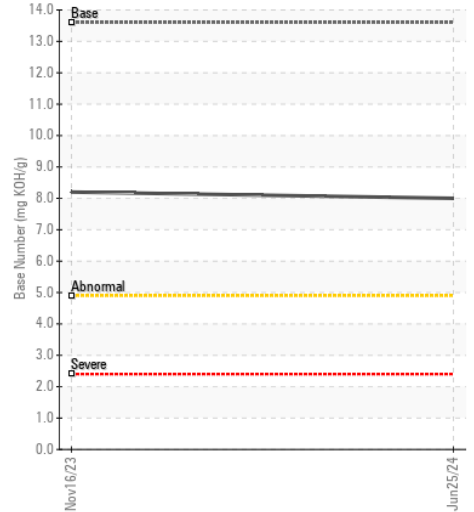
Non-ferrous Metals



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : JR0204041 **Received** : 26 Jun 2024
Lab Number : 06220828 **Tested** : 27 Jun 2024
Unique Number : 11099025 **Diagnosed** : 27 Jun 2024 - Sean Felton
Test Package : CONST (Additional Tests: FuelDilution, TBN)

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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)