



WEAR	MARGINAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area

[W15308]

Machine Id

JOHN DEERE 544 P 1DW544PAPMLZ12265

Component

Diesel Engine

Fluid

JOHN DEERE ENGINE OIL PLUS 50 II 15W40 (5 GAL)

RECOMMENDATION

Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		JR0196283	JR0173675	JR0138258
Sample Date		Client Info		12 Jan 2024	18 May 2023	09 Sep 2022
Machine Age	hrs	Client Info		1009	555	60
Oil Age	hrs	Client Info		0	555	60
Filter Age	hrs	Client Info		0	555	60
Oil Changed		Client Info		Changed	Changed	Not Changd
Filter Changed		Client Info		Changed	Changed	Not Changd
Sample Status				MARGINAL	ABNORMAL	ATTENTION

WEAR

The copper level has decreased, but is still abnormal.

Iron	ppm	ASTM D5185m	>51	21	43	15
Chromium	ppm	ASTM D5185m	>11	<1	1	<1
Nickel	ppm	ASTM D5185m	>5	3	7	3
Titanium	ppm	ASTM D5185m		0	<1	<1
Silver	ppm	ASTM D5185m	>3	0	0	<1
Aluminum	ppm	ASTM D5185m	>31	5	2	3
Lead	ppm	ASTM D5185m	>26	<1	6	2
Copper	ppm	ASTM D5185m	>26	▲ 44	▲ 466	62
Tin	ppm	ASTM D5185m	>4	1	4	2
Vanadium	ppm	ASTM D5185m		<1	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

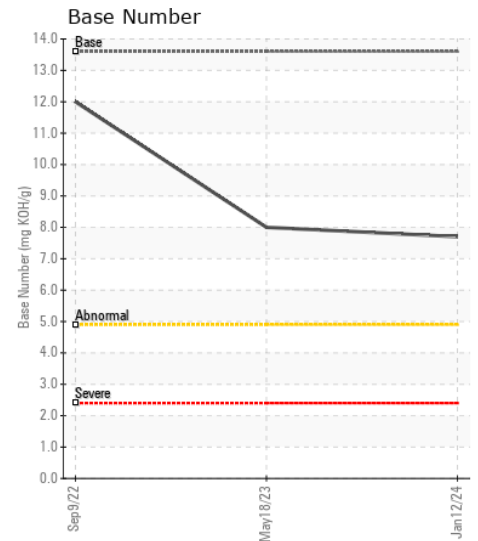
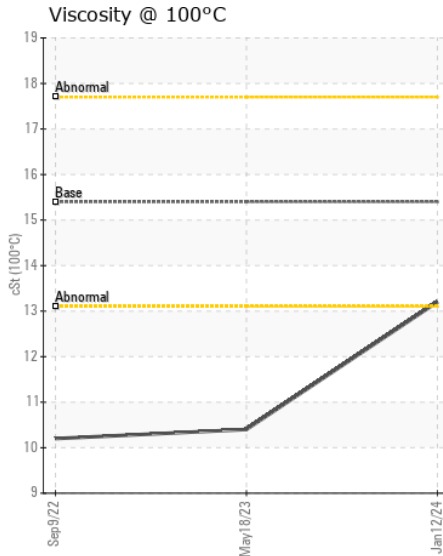
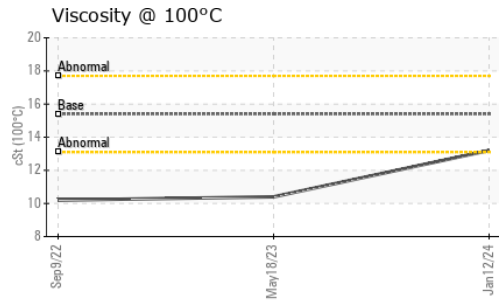
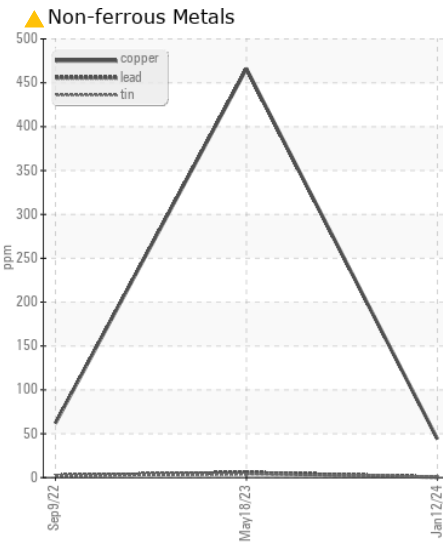
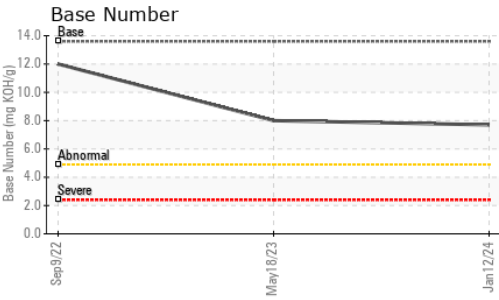
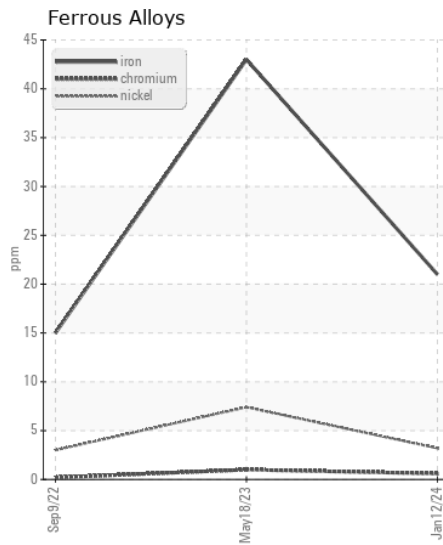
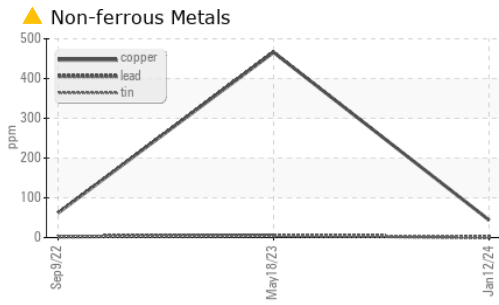
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>22	8	12	10
Potassium	ppm	ASTM D5185m	>20	1	5	0
Fuel		WC Method	>2.1	<1.0	1.1	0.3
Water		WC Method	>0.21	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.4	0.4	0.1
Nitration	Abs/cm	*ASTM D7624	>20	8.7	9.0	7.3
Sulfation	Abs/.1mm	*ASTM D7415	>30	22.5	23.8	21.2
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.21	NEG	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	2	7	5
Boron	ppm	ASTM D5185m		210	178	336
Barium	ppm	ASTM D5185m		0	0	3
Molybdenum	ppm	ASTM D5185m		249	230	251
Manganese	ppm	ASTM D5185m		1	5	4
Magnesium	ppm	ASTM D5185m		840	756	787
Calcium	ppm	ASTM D5185m		1445	1671	1384
Phosphorus	ppm	ASTM D5185m		944	911	880
Zinc	ppm	ASTM D5185m		1117	1139	1025
Sulfur	ppm	ASTM D5185m		2994	3381	2917
Oxidation	Abs/.1mm	*ASTM D7414	>25	16.3	18.4	15.8
Base Number (BN)	mg KOH/g	ASTM D2896	13.6	7.7	8.0	12.0
Visc @ 100°C	cSt	ASTM D445	15.4	13.2	▲ 10.4	▲ 10.2



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : JR0196283 **Received** : 16 Jan 2024
Lab Number : 06060864 **Diagnosed** : 17 Jan 2024
Unique Number : 10832246 **Diagnostician** : Jonathan Hester
Test Package : CONST (Additional Tests: 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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