



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Area
SIMS BARK [A35239]
 Machine Id
JOHN DEERE 644P 1DW644PAAPLX21252
 Component
Case Drain Diesel Engine
 Fluid
JOHN DEERE ENGINE OIL PLUS 50 II 15W40 (8 GAL)

RECOMMENDATION

Resample at the next service interval to monitor. (Customer Sample Comment: A35239)

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WE0006707	WE0006694	---
Sample Date		Client Info		20 Apr 2024	02 Apr 2024	---
Machine Age	hrs	Client Info		1479	1201	---
Oil Age	hrs	Client Info		500	1201	---
Filter Age	hrs	Client Info		500	1201	---
Oil Changed		Client Info		Changed	Not Changed	---
Filter Changed		Client Info		Changed	None	---
Sample Status				NORMAL	ABNORMAL	---

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>51	2	17	---
Chromium	ppm	ASTM D5185m	>11	<1	<1	---
Nickel	ppm	ASTM D5185m	>5	0	2	---
Titanium	ppm	ASTM D5185m		0	<1	---
Silver	ppm	ASTM D5185m	>3	0	0	---
Aluminum	ppm	ASTM D5185m	>31	4	3	---
Lead	ppm	ASTM D5185m	>26	0	1	---
Copper	ppm	ASTM D5185m	>26	2	▲ 203	---
Tin	ppm	ASTM D5185m	>4	0	<1	---
Vanadium	ppm	ASTM D5185m		0	<1	---
White Metal	scalar	*Visual	NONE	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	---

CONTAMINATION

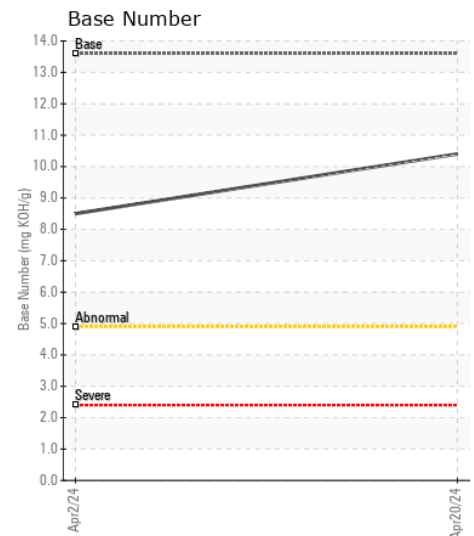
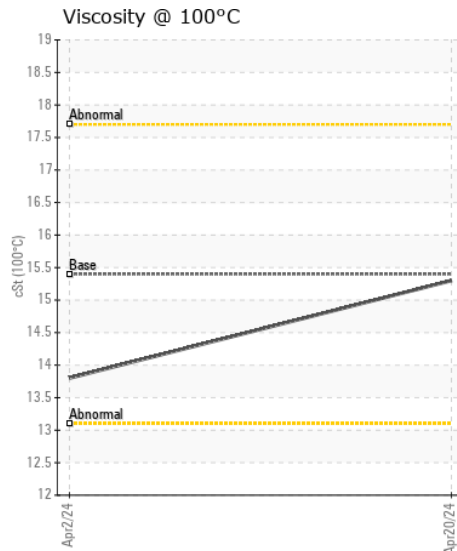
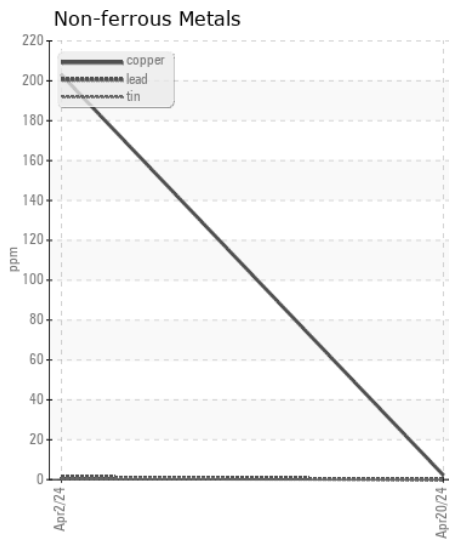
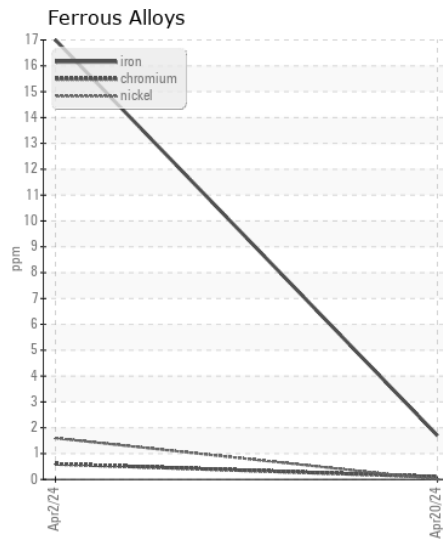
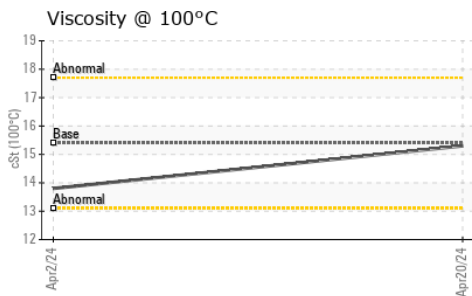
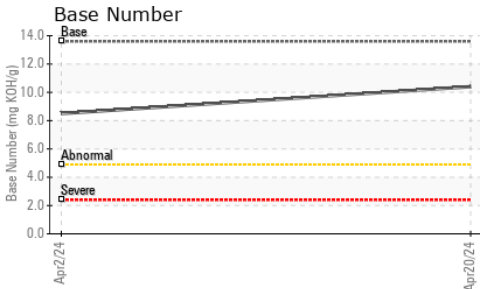
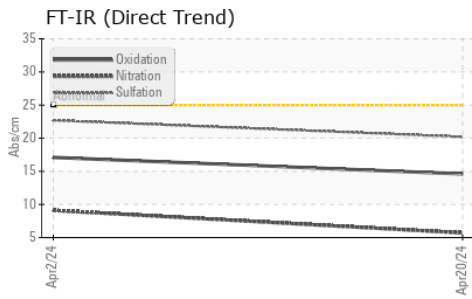
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>22	11	6	---
Potassium	ppm	ASTM D5185m	>20	<1	1	---
Fuel		WC Method	>2.1	<1.0	<1.0	---
Water		WC Method	>0.21	NEG	NEG	---
Glycol		WC Method		NEG	NEG	---
Soot %	%	*ASTM D7844	>3	0.1	0.5	---
Nitration	Abs/cm	*ASTM D7624	>20	5.7	9.1	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	20.2	22.7	---
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	0	3	---
Boron	ppm	ASTM D5185m		300	196	---
Barium	ppm	ASTM D5185m		0	0	---
Molybdenum	ppm	ASTM D5185m		248	261	---
Manganese	ppm	ASTM D5185m		<1	1	---
Magnesium	ppm	ASTM D5185m		828	902	---
Calcium	ppm	ASTM D5185m		1393	1460	---
Phosphorus	ppm	ASTM D5185m		894	883	---
Zinc	ppm	ASTM D5185m		1047	1114	---
Sulfur	ppm	ASTM D5185m		3278	3403	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	14.6	17.1	---
Base Number (BN)	mg KOH/g	ASTM D2896	13.6	10.4	8.5	---
Visc @ 100°C	cSt	ASTM D445	15.4	15.3	13.8	---



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513

Sample No. : WE0006707

Lab Number : 06158907

Unique Number : 10994330

Test Package : CONST (Additional Tests: TBN)

Received : 24 Apr 2024

Tested : 25 Apr 2024

Diagnosed : 26 Apr 2024 - Jonathan Hester

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)

WARRIOR TRACTOR AND EQUIPMENT - HUNTSVILLE

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