

WEAR CONTAMINATION FLUID CONDITION

NORMAL NORMAL

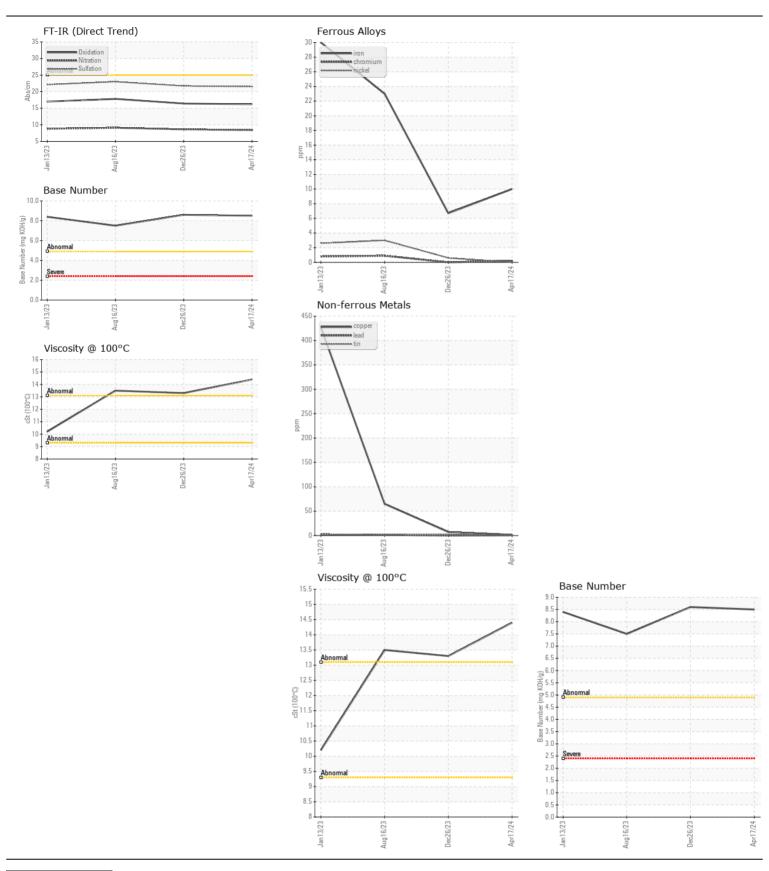


CHRISTOPHER CONTRACTING [A35176] Machine Id JOHN DEERE 524P 1DW524PAJMLZ12954

Diesel Engine

JOHN DEERE ENGINE OIL PLUS 50 II 10W30 (8 GAL)

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RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
	Sample Number	OOW	Client Info	LITTIOTION	WE0006557	WE0005909	WE0004868
Resample at the next service interval to monitor. (Customer Sample Comment: A35176)	Sample Date		Client Info		17 Apr 2024	26 Dec 2023	16 Aug 2023
	Machine Age	hrs	Client Info		1945	1512	1005
	Oil Age	hrs	Client Info		430	1512	500
	Filter Age	hrs	Client Info		430	1512	500
	Oil Changed		Client Info		Changed	Not Changd	Changed
	Filter Changed		Client Info		Changed	Not Changd	Changed
	Sample Status				NORMAL	NORMAL	ABNORMAL
WEAR All component wear rates are normal.	Iron	ppm	ASTM D5185m		10	7	23
	Chromium	ppm	ASTM D5185m		<1	0	<1
	Nickel	ppm	ASTM D5185m	>5	0	<1	3
	Titanium	ppm	ASTM D5185m	_	0	0	<1
	Silver	ppm	ASTM D5185m		0	0	<1
	Aluminum	ppm	ASTM D5185m		4	5	4
	Lead	ppm		>26	<1	0	1
	Copper	ppm	ASTM D5185m		2	7	<u>^</u> 65
	Tin	ppm	ASTM D5185m	>4	<1	2	1
	Vanadium	ppm	ASTM D5185m		<1	0	<1
	White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
CONTAMINATION	Silicon	ppm	ASTM D5185m	>22	6	5	8
CONTAINIVATION	Potassium	ppm	ASTM D5185m		0	0	3
There is no indication of any contamination in the oil.	Fuel	1-1-		>2.1	<1.0	<1.0	<1.0
	Water		WC Method		NEG	NEG	NEG
	Glycol		WC Method		NEG	NEG	NEG
	Soot %	%	*ASTM D7844	>3	0.2	0.2	0.3
	Nitration	Abs/cm	*ASTM D7624	>20	8.4	8.6	9.1
	Sulfation	Abs/.1mm	*ASTM D7415		21.5	21.7	23.0
	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	011		AOTM DE405	04	•		4
FLUID CONDITION	Sodium	ppm	ASTM D5185m	>31	2	074	4
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is acceptable for the time in service.	Boron Barium	ppm	ASTM D5185m ASTM D5185m		267	271	199
	Molybdenum	ppm			<1 258	0	0 270
	•	ppm	ASTM D5185m ASTM D5185m			246	2
	Manganese	ppm			<1 964	<1	
	Magnesium Calcium	ppm	ASTM D5185m ASTM D5185m		864 1484	810 1380	882 1502
	Phosphorus	ppm	ASTM D5185m		918	934	848
	Zinc	ppm	ASTM D5185m		1053	1135	1070
	Sulfur	ppm				3022	3286
	Oxidation	ppm Abs/.1mm	*ASTM D5185m	>25	3585 16.2	16.4	17.8
	Base Number (BN)		ASTM D2896	>20	8.5	8.6	7.5
	Visc @ 100°C	cSt	ASTM D2090		14.4	13.3	13.5
	VISC @ 100 C	COL	AGTIVI D443		14.4	10.0	10.0





Laboratory Sample No.

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Lab Number : 06154128

: WE0006557 Unique Number : 10989551

Received **Tested** Diagnosed

: 19 Apr 2024 : 23 Apr 2024 : 23 Apr 2024 - Sean Felton

WARRIOR TRACTOR AND EQUIPMENT - HUNTSVILLE 25135 ONE AVIATION WAY SW

MADISON, AL US 35756

Test Package : CONST (Additional Tests: TBN) Contact: BOBBY LUCKY To discuss this sample report, contact Customer Service at 1-800-237-1369. warriorparts033@gmail.com

* - 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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