



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	SEVERE
FLUID CONDITION	ABNORMAL

Area
[A35870]

Machine Id
JOHN DEERE 748L 1DW748LBCKF696416

Component
Diesel Engine

Fluid
JOHN DEERE ENGINE OIL PLUS 50 II 15W40 (8 GAL)

RECOMMENDATION

We advise that you check the fuel injection system. Oil and filter change at the time of sampling has been noted. We recommend an early resample to monitor this condition. (Customer Sample Comment: A35870)

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WE0007615	WE0005846	WE0005511
Sample Date		Client Info		16 Jul 2024	14 Dec 2023	10 Nov 2023
Machine Age	hrs	Client Info		6899	6287	6160
Oil Age	hrs	Client Info		500	100	500
Filter Age	hrs	Client Info		500	100	500
Oil Changed		Client Info		Changed	Not Changd	Changed
Filter Changed		Client Info		Changed	Not Changed	Changed
Sample Status				SEVERE	SEVERE	SEVERE

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>51	20	10	11
Chromium	ppm	ASTM D5185m	>11	1	<1	<1
Nickel	ppm	ASTM D5185m	>5	3	2	3
Titanium	ppm	ASTM D5185m		<1	<1	<1
Silver	ppm	ASTM D5185m	>3	0	0	<1
Aluminum	ppm	ASTM D5185m	>31	5	4	5
Lead	ppm	ASTM D5185m	>26	2	0	0
Copper	ppm	ASTM D5185m	>26	3	2	2
Tin	ppm	ASTM D5185m	>4	<1	0	0
Vanadium	ppm	ASTM D5185m		0	<1	<1
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

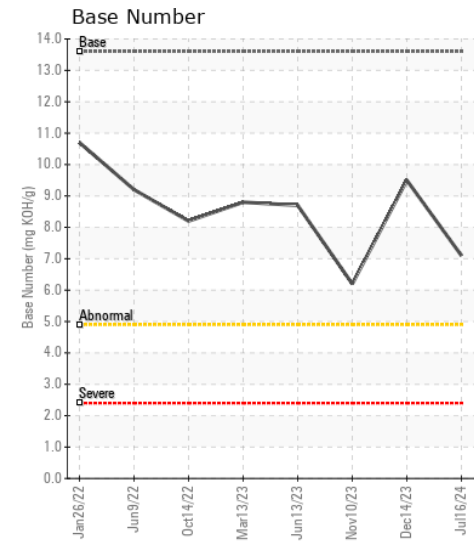
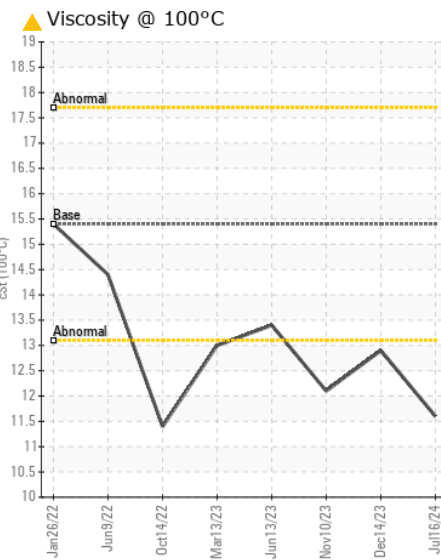
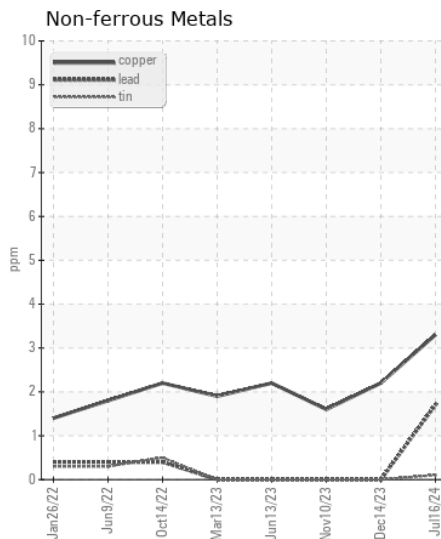
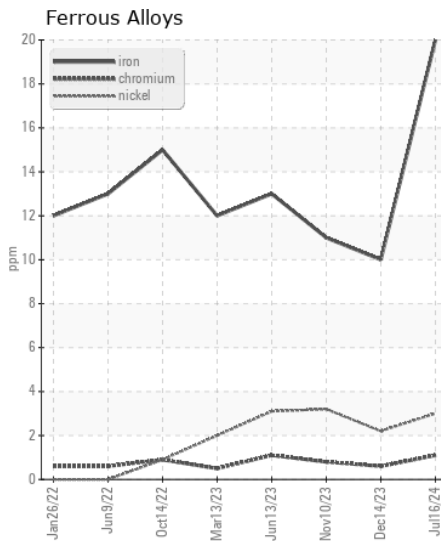
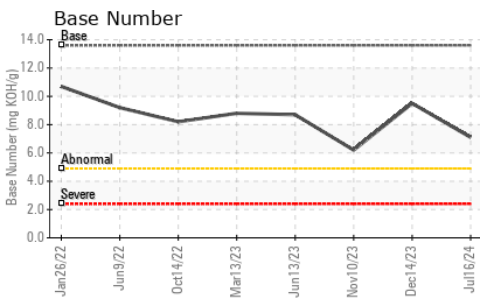
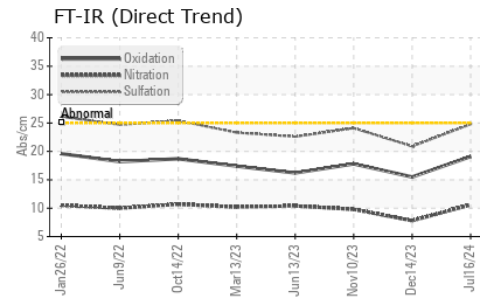
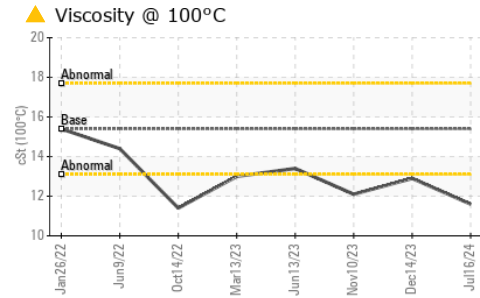
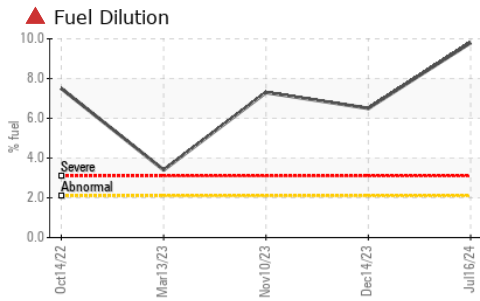
There is a high amount of fuel present in the oil. Tests confirm the presence of fuel in the oil.

Silicon	ppm	ASTM D5185m	>22	10	10	10
Potassium	ppm	ASTM D5185m	>20	4	3	2
Fuel	%	ASTM D3524	>2.1	▲ 9.8	▲ 6.5	▲ 7.3
Water		WC Method	>0.21	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.5	0.2	0.6
Nitration	Abs/cm	*ASTM D7624	>20	10.6	7.8	9.8
Sulfation	Abs/.1mm	*ASTM D7415	>30	24.8	20.9	24.1
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

Fuel is present in the oil and is lowering the viscosity. The oil is no longer serviceable due to the presence of contaminants.

Sodium	ppm	ASTM D5185m	>31	3	0	3
Boron	ppm	ASTM D5185m		39	292	77
Barium	ppm	ASTM D5185m		<1	0	0
Molybdenum	ppm	ASTM D5185m		228	254	237
Manganese	ppm	ASTM D5185m		1	<1	<1
Magnesium	ppm	ASTM D5185m		731	786	791
Calcium	ppm	ASTM D5185m		1280	1297	1268
Phosphorus	ppm	ASTM D5185m		750	821	889
Zinc	ppm	ASTM D5185m		869	997	1052
Sulfur	ppm	ASTM D5185m		2826	3210	3033
Oxidation	Abs/.1mm	*ASTM D7414	>25	19.1	15.5	17.8
Base Number (BN)	mg KOH/g	ASTM D2896	13.6	7.1	9.5	6.2
Visc @ 100°C	cSt	ASTM D445	15.4	▲ 11.6	▲ 12.9	▲ 12.1



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WE0007615 **Received** : 18 Jul 2024
Lab Number : 06239934 **Tested** : 19 Jul 2024
Unique Number : 11128768 **Diagnosed** : 19 Jul 2024 - Don Baldridge
Test Package : CONST (Additional Tests: PercentFuel, TBN)

WARRIOR TRACTOR AND EQUIPMENT - HUNTSVILLE
 25135 ONE AVIATION WAY SW
 MADISON, AL
 US 35756
 Contact: HERBERT STONE
 WTE013@WARRIORTRACTOR.COM

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)