



OIL ANALYSIS REPORT

WEAR	ABNORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area
[W8291]
 Machine Id
JOHN DEERE 944K 1DW944KXLML703646
 Component
Diesel Engine
 Fluid
JOHN DEERE ENGINE OIL PLUS 50 II 15W40 (--- GAL)

RECOMMENDATION

Oil and filter change at the time of sampling has been noted. No corrective action is recommended at this time. Resample at the next service interval to monitor. (Customer Sample Comment: W8291)

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		JR0183112	JR0183368	---
Sample Date		Client Info		21 Dec 2023	06 Oct 2023	---
Machine Age	hrs	Client Info		4059	3400	---
Oil Age	hrs	Client Info		500	3400	---
Filter Age	hrs	Client Info		500	0	---
Oil Changed		Client Info		Changed	N/A	---
Filter Changed		Client Info		Changed	N/A	---
Sample Status				ABNORMAL	ABNORMAL	---

WEAR

The lead level has decreased, but is still abnormal. All other component wear rates are normal.

Iron	ppm	ASTM D5185m	>51	31	50	---
Chromium	ppm	ASTM D5185m	>11	<1	<1	---
Nickel	ppm	ASTM D5185m	>5	0	<1	---
Titanium	ppm	ASTM D5185m		<1	<1	---
Silver	ppm	ASTM D5185m	>3	0	0	---
Aluminum	ppm	ASTM D5185m	>31	7	15	---
Lead	ppm	ASTM D5185m	>26	▲ 30	▲ 98	---
Copper	ppm	ASTM D5185m	>26	12	16	---
Tin	ppm	ASTM D5185m	>4	3	3	---
Vanadium	ppm	ASTM D5185m		<1	<1	---
White Metal	scalar	*Visual	NONE	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	---

CONTAMINATION

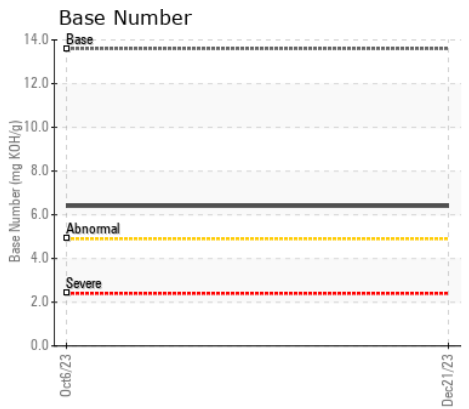
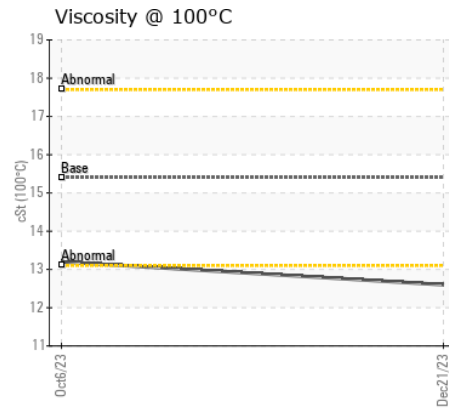
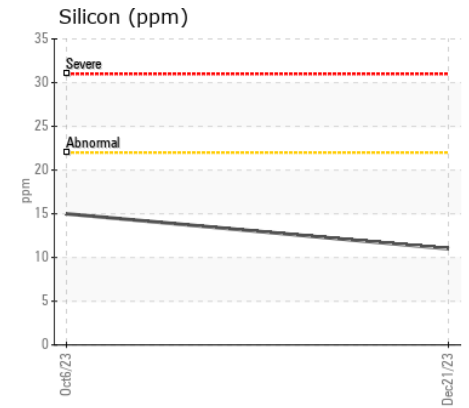
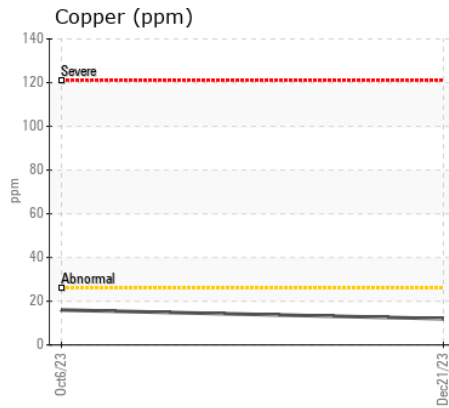
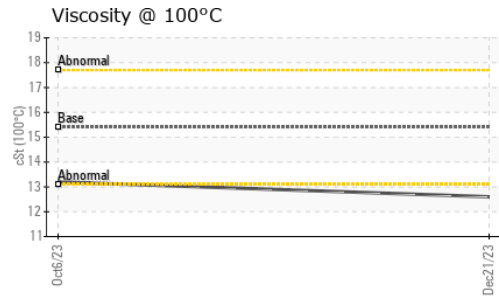
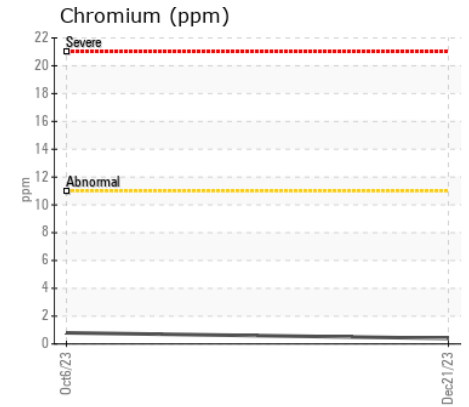
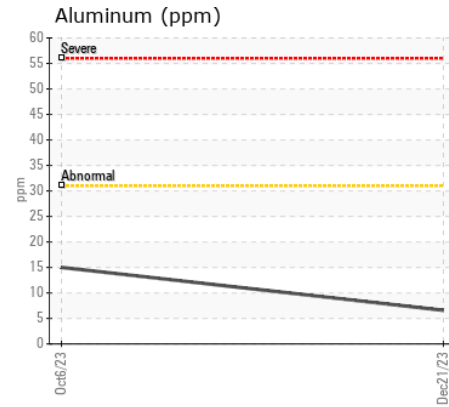
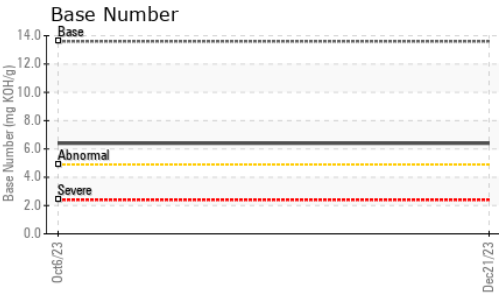
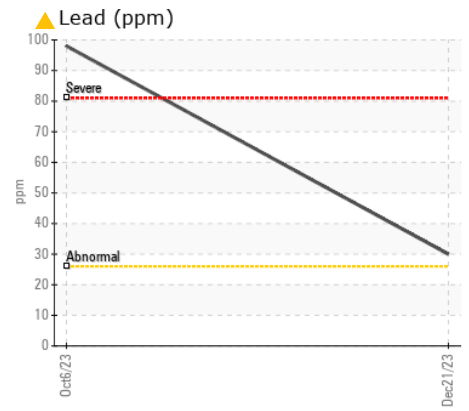
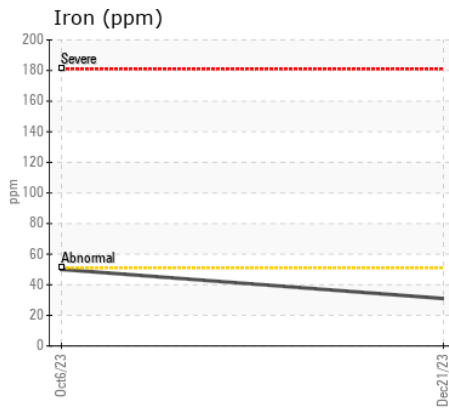
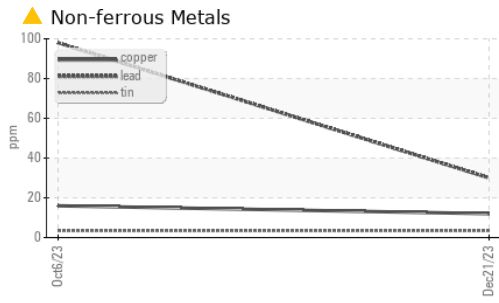
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>22	11	15	---
Potassium	ppm	ASTM D5185m	>20	4	9	---
Fuel	%	ASTM D3524	>2.1	<1.0	<1.0	---
Water		WC Method	>0.21	NEG	NEG	---
Glycol		WC Method		NEG	NEG	---
Soot %	%	*ASTM D7844	>3	0.7	0.7	---
Nitration	Abs/cm	*ASTM D7624	>20	11.1	11.4	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	26.3	26.0	---
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 acceptable for the time in service.

Sodium	ppm	ASTM D5185m	>31	6	9	---
Boron	ppm	ASTM D5185m		22	8	---
Barium	ppm	ASTM D5185m		<1	2	---
Molybdenum	ppm	ASTM D5185m		219	140	---
Manganese	ppm	ASTM D5185m		1	2	---
Magnesium	ppm	ASTM D5185m		893	772	---
Calcium	ppm	ASTM D5185m		1418	1333	---
Phosphorus	ppm	ASTM D5185m		944	916	---
Zinc	ppm	ASTM D5185m		1133	1140	---
Sulfur	ppm	ASTM D5185m		3165	3088	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	21.2	21.7	---
Base Number (BN)	mg KOH/g	ASTM D2896	13.6	6.4	6.4	---
Visc @ 100°C	cSt	ASTM D445	15.4	12.6	13.2	---



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : JR0183112 **Received** : 29 Dec 2023
Lab Number : 06047651 **Diagnosed** : 02 Jan 2024
Unique Number : 10808259 **Diagnostician** : Don Baldrige
Test Package : MOBCE (Additional Tests: FuelDilution, TBN)

WAKE STONE CORP
 6811 HWY 64 EAST
 KNIGHTDALE, NC
 US 27545

Contact: PAUL SPRUILL
 paulspruill@wakestonecorp.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)

T:
F: