



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	ATTENTION

Machine Id
KLEEMANN MS15-Z K0470703

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. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		JR0221896	JR0183710	---
Sample Date		Client Info		27 Jun 2024	25 Aug 2023	---
Machine Age	hrs	Client Info		2418	2004	---
Oil Age	hrs	Client Info		414	0	---
Filter Age	hrs	Client Info		414	0	---
Oil Changed		Client Info		Changed	Changed	---
Filter Changed		Client Info		Changed	Changed	---
Sample Status				ATTENTION	ATTENTION	---

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	21	27	---
Chromium	ppm	ASTM D5185m	>20	1	<1	---
Nickel	ppm	ASTM D5185m	>4	<1	0	---
Titanium	ppm	ASTM D5185m		1	<1	---
Silver	ppm	ASTM D5185m	>3	<1	0	---
Aluminum	ppm	ASTM D5185m	>20	8	4	---
Lead	ppm	ASTM D5185m	>40	<1	0	---
Copper	ppm	ASTM D5185m	>330	10	19	---
Tin	ppm	ASTM D5185m	>15	<1	0	---
Vanadium	ppm	ASTM D5185m		<1	0	---
White Metal	scalar	*Visual	NONE	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	---

CONTAMINATION

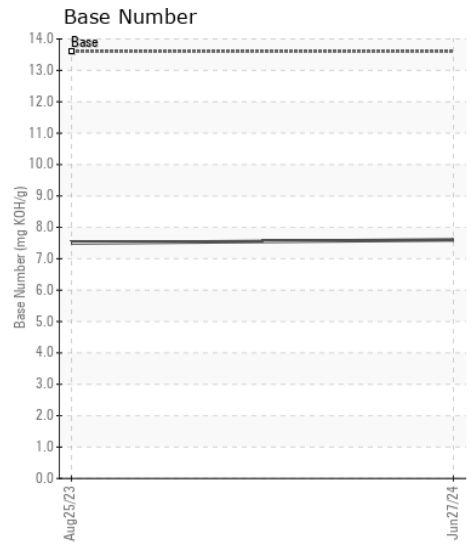
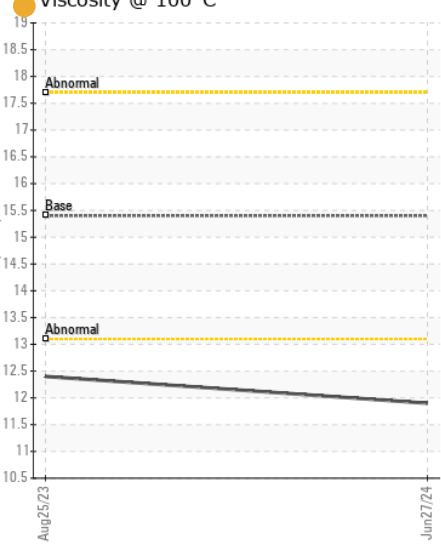
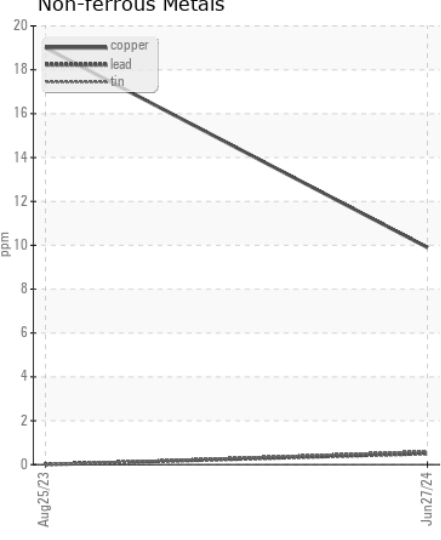
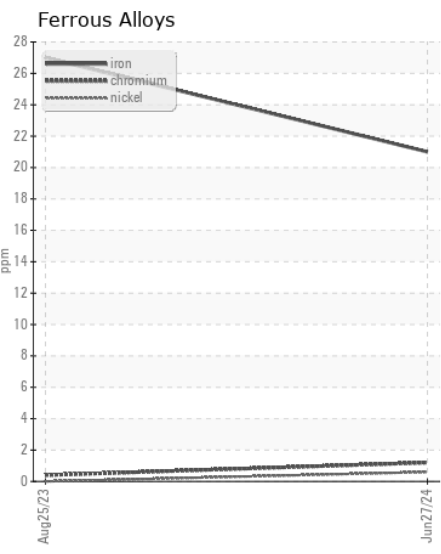
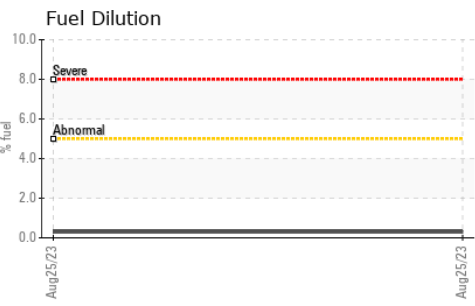
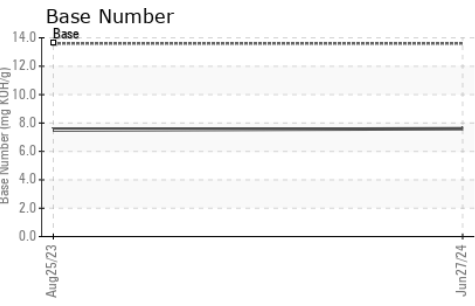
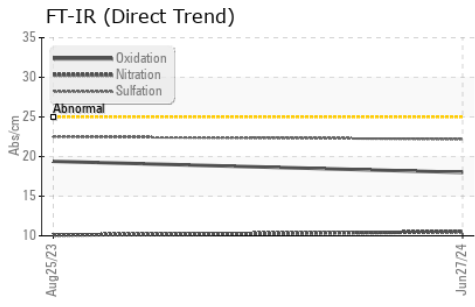
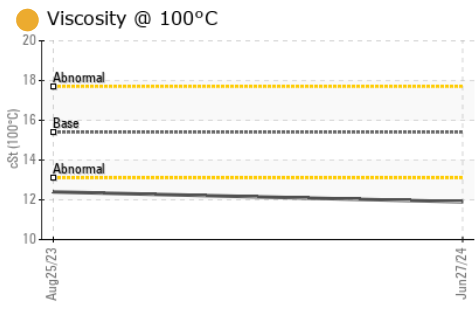
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	13	8	---
Potassium	ppm	ASTM D5185m	>20	3	0	---
Fuel	%	ASTM D3524	>5	<1.0	0.3	---
Water		WC Method	>0.2	NEG	NEG	---
Glycol		WC Method		NEG	NEG	---
Soot %	%	*ASTM D7844	>3	0.1	0.1	---
Nitration	Abs/cm	*ASTM D7624	>20	10.5	10.1	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	22.2	22.5	---
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	>0.2	NEG	NEG	---

FLUID CONDITION

The oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil. Confirm oil type.

Sodium	ppm	ASTM D5185m		2	2	---
Boron	ppm	ASTM D5185m		102	101	---
Barium	ppm	ASTM D5185m		0	0	---
Molybdenum	ppm	ASTM D5185m		186	217	---
Manganese	ppm	ASTM D5185m		1	1	---
Magnesium	ppm	ASTM D5185m		565	869	---
Calcium	ppm	ASTM D5185m		1973	1559	---
Phosphorus	ppm	ASTM D5185m		1018	925	---
Zinc	ppm	ASTM D5185m		1224	1150	---
Sulfur	ppm	ASTM D5185m		3893	4118	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	18.0	19.4	---
Base Number (BN)	mg KOH/g	ASTM D2896	13.6	7.6	7.5	---
Visc @ 100°C	cSt	ASTM D445	15.4	11.9	12.4	---



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : JR0221896 **Received** : 08 Jul 2024
Lab Number : 06229955 **Tested** : 09 Jul 2024
Unique Number : 11113448 **Diagnosed** : 09 Jul 2024 - Don Baldrige
Test Package : CONST (Additional Tests: FuelDilution, PercentFuel, TBN)

JRE - STEPHENSON
 245 YARDMASTER COURT
 STEPHENSON, VA
 US 22656-1761
 Contact: PHIL DAUGHERTY
 pdaugherty@jamesriverequipment.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: x: F: (540)693-2588