



Machine Id
JOHN DEERE S780 1H0S780SEKT806479

Component
Diesel Engine

Fluid
{not provided} (--- GAL)

RECOMMENDATION

We advise that you check the fuel injection system. We recommend that you drain the oil and perform a filter service on this component if not already done. We recommend an early resample to monitor this condition. Please specify the brand, type, and viscosity of the oil on your next sample.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		JR0201771	---	---
Sample Date		Client Info		12 Feb 2024	---	---
Machine Age	hrs	Client Info		0	---	---
Oil Age	hrs	Client Info		0	---	---
Filter Age	hrs	Client Info		0	---	---
Oil Changed		Client Info		N/A	---	---
Filter Changed		Client Info		N/A	---	---
Sample Status				SEVERE	---	---

WEAR

Cylinder, crank, or cam shaft wear is indicated. Bearing and/or bushing wear is indicated.

Iron	ppm	ASTM D5185m	>51	▲ 84	---	---
Chromium	ppm	ASTM D5185m	>11	<1	---	---
Nickel	ppm	ASTM D5185m	>5	2	---	---
Titanium	ppm	ASTM D5185m		<1	---	---
Silver	ppm	ASTM D5185m	>3	0	---	---
Aluminum	ppm	ASTM D5185m	>31	2	---	---
Lead	ppm	ASTM D5185m	>26	▲ 70	---	---
Copper	ppm	ASTM D5185m	>26	▲ 40	---	---
Tin	ppm	ASTM D5185m	>4	▲ 6	---	---
Vanadium	ppm	ASTM D5185m		0	---	---
White Metal	scalar	*Visual	NONE	NONE	---	---
Yellow Metal	scalar	*Visual	NONE	NONE	---	---

CONTAMINATION

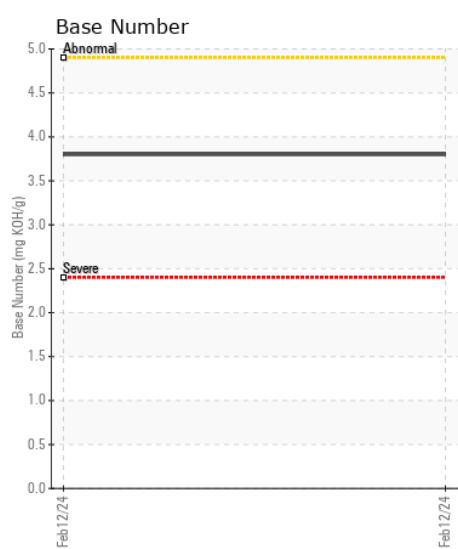
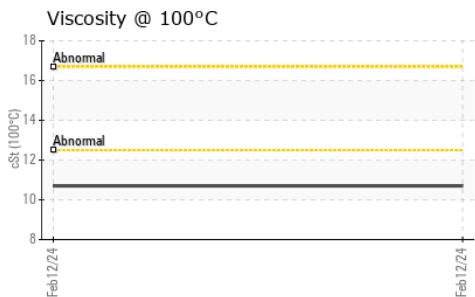
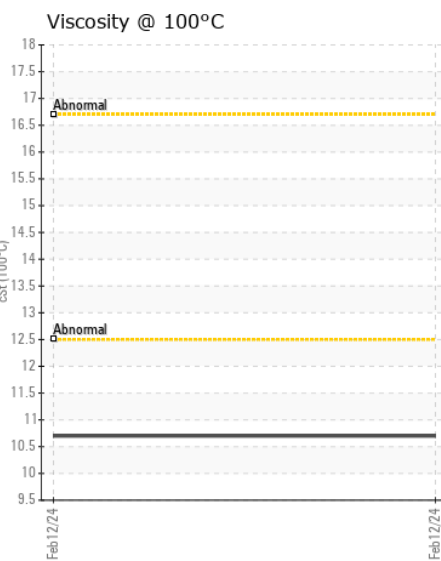
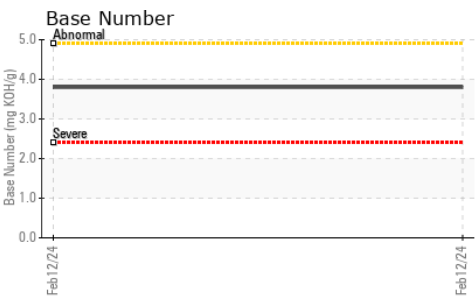
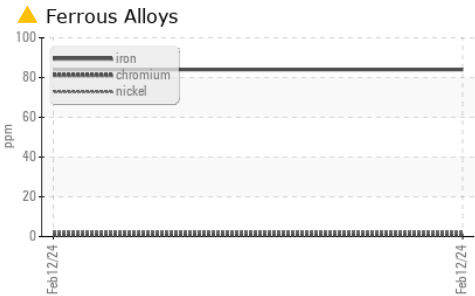
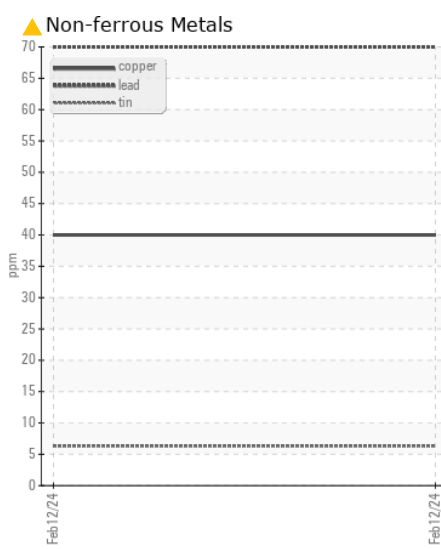
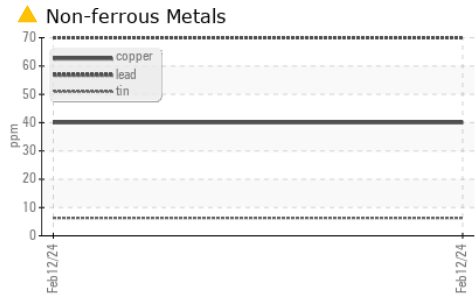
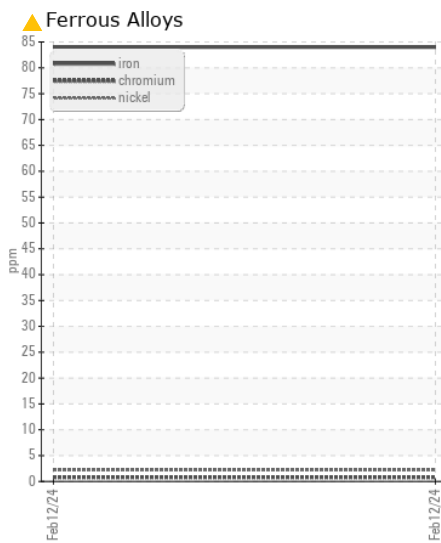
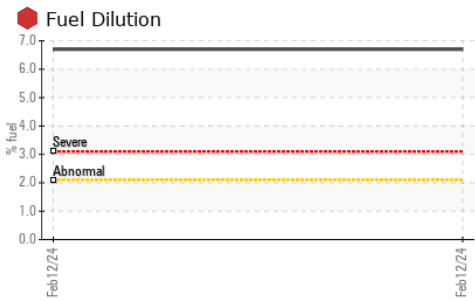
There is a high amount of fuel present in the oil.

Silicon	ppm	ASTM D5185m	>22	8	---	---
Potassium	ppm	ASTM D5185m	>20	11	---	---
Fuel	%	ASTM D3524	>2.1	◆ 6.7	---	---
Water		WC Method	>0.21	NEG	---	---
Glycol		WC Method		NEG	---	---
Soot %	%	*ASTM D7844	>3	0.7	---	---
Nitration	Abs/cm	*ASTM D7624	>20	12.5	---	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	30.9	---	---
Silt	scalar	*Visual	NONE	NONE	---	---
Debris	scalar	*Visual	NONE	NONE	---	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---	---
Appearance	scalar	*Visual	NORML	NORML	---	---
Odor	scalar	*Visual	NORML	NORML	---	---
Emulsified Water	scalar	*Visual	>0.21	NEG	---	---

FLUID CONDITION

The BN result indicates that there is suitable alkalinity remaining in the oil. The oil is no longer serviceable due to the presence of contaminants.

Sodium	ppm	ASTM D5185m	>31	16	---	---
Boron	ppm	ASTM D5185m		26	---	---
Barium	ppm	ASTM D5185m		0	---	---
Molybdenum	ppm	ASTM D5185m		60	---	---
Manganese	ppm	ASTM D5185m		1	---	---
Magnesium	ppm	ASTM D5185m		206	---	---
Calcium	ppm	ASTM D5185m		2065	---	---
Phosphorus	ppm	ASTM D5185m		867	---	---
Zinc	ppm	ASTM D5185m		1176	---	---
Sulfur	ppm	ASTM D5185m		3141	---	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	27.0	---	---
Base Number (BN)	mg KOH/g	ASTM D2896		3.8	---	---
Visc @ 100°C	cSt	ASTM D445		10.7	---	---



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : JR0201771 **Received** : 13 Feb 2024
Lab Number : 06087083 **Tested** : 15 Feb 2024
Unique Number : 10874528 **Diagnosed** : 15 Feb 2024 - Doug Bogart
Test Package : CONST (Additional Tests: FuelDilution, PercentFuel, TBN)

JRE - WAKEFIELD
 10489 GENERAL MAHONE HWY
 WAKEFIELD, VA
 US 23888
 Contact: BILL ACKER
 backer@jamesriverequipment.com
 T: (757)899-3232
 F: (757)899-6464

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)