



WEAR	NORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	NORMAL

Machine Id
JOHN DEERE S780 1H0S780SLJ0801957
 Component
Diesel Engine
 Fluid
JOHN DEERE ENGINE OIL PLUS 50 II 15W40 (--- GAL)

RECOMMENDATION

We recommend that you drain the oil from the component if this has not already been done. We recommend an early resample to monitor this condition.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		JR0172352	JR0172408	---
Sample Date		Client Info		21 Jun 2024	18 Dec 2023	---
Machine Age	hrs	Client Info		1800	0	---
Oil Age	hrs	Client Info		0	0	---
Filter Age	hrs	Client Info		0	0	---
Oil Changed		Client Info		N/A	N/A	---
Filter Changed		Client Info		N/A	N/A	---
Sample Status				ABNORMAL	ABNORMAL	---

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>51	3	11	---
Chromium	ppm	ASTM D5185m	>11	<1	<1	---
Nickel	ppm	ASTM D5185m	>5	<1	<1	---
Titanium	ppm	ASTM D5185m		<1	<1	---
Silver	ppm	ASTM D5185m	>3	<1	0	---
Aluminum	ppm	ASTM D5185m	>31	3	4	---
Lead	ppm	ASTM D5185m	>26	2	<1	---
Copper	ppm	ASTM D5185m	>26	17	▲ 77	---
Tin	ppm	ASTM D5185m	>4	<1	1	---
Vanadium	ppm	ASTM D5185m		<1	<1	---
White Metal	scalar	*Visual	NONE	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	---

CONTAMINATION

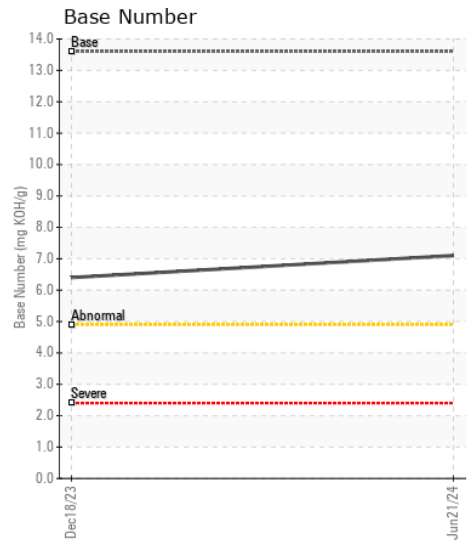
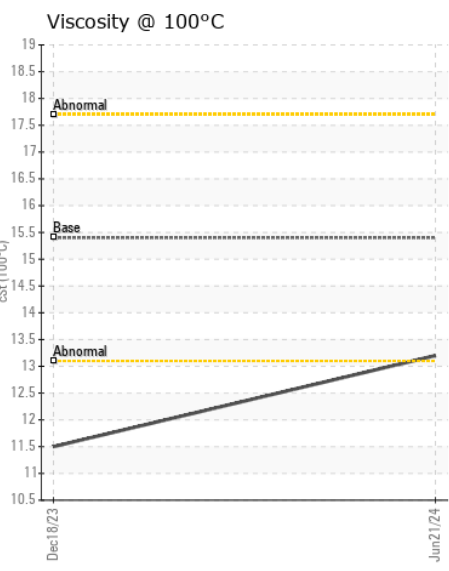
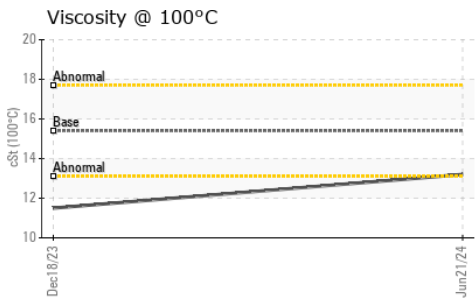
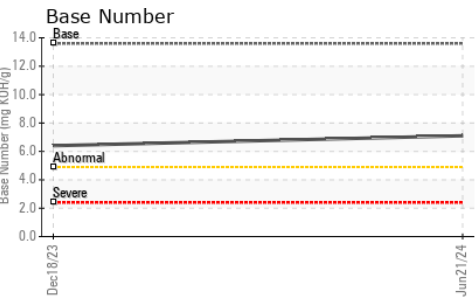
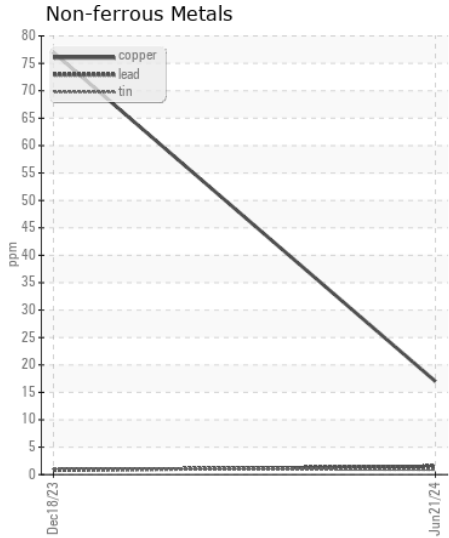
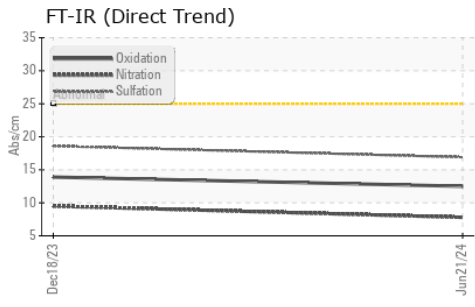
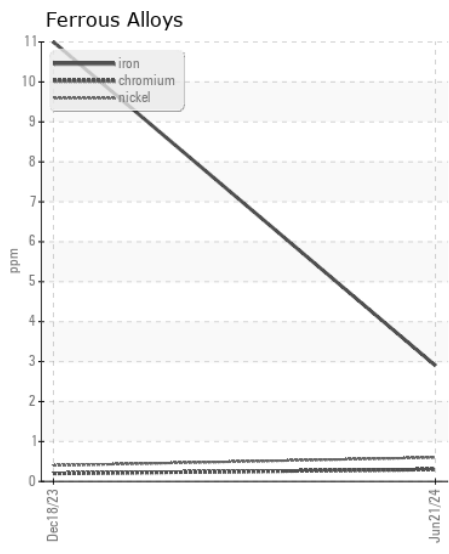
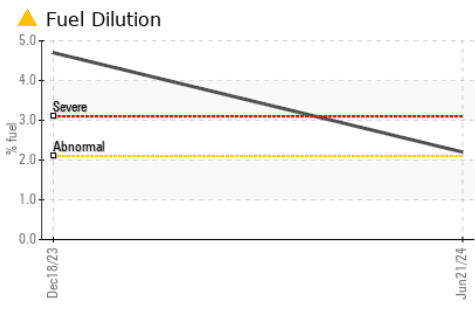
There is a moderate amount of fuel present in the oil. Tests confirm the presence of fuel in the oil.

Silicon	ppm	ASTM D5185m	>22	4	7	---
Potassium	ppm	ASTM D5185m	>20	3	5	---
Fuel	%	ASTM D3524	>2.1	▲ 2.2	▲ 4.7	---
Water		WC Method	>0.21	NEG	NEG	---
Glycol		WC Method		NEG	NEG	---
Soot %	%	*ASTM D7844	>3	0.1	0.2	---
Nitration	Abs/cm	*ASTM D7624	>20	7.8	9.5	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	16.9	18.6	---
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 oil is no longer serviceable due to the presence of contaminants.

Sodium	ppm	ASTM D5185m	>31	6	50	---
Boron	ppm	ASTM D5185m		73	31	---
Barium	ppm	ASTM D5185m		1	0	---
Molybdenum	ppm	ASTM D5185m		92	87	---
Manganese	ppm	ASTM D5185m		<1	<1	---
Magnesium	ppm	ASTM D5185m		55	105	---
Calcium	ppm	ASTM D5185m		2051	1786	---
Phosphorus	ppm	ASTM D5185m		917	913	---
Zinc	ppm	ASTM D5185m		1154	1082	---
Sulfur	ppm	ASTM D5185m		3591	3169	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	12.5	13.9	---
Base Number (BN)	mg KOH/g	ASTM D2896	13.6	7.1	6.4	---
Visc @ 100°C	cSt	ASTM D445	15.4	13.2	▲ 11.5	---



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : JR0172352 **Received** : 25 Jun 2024
Lab Number : 06219509 **Tested** : 28 Jun 2024
Unique Number : 11097706 **Diagnosed** : 28 Jun 2024 - Wes Davis
Test Package : CONST (Additional Tests: PercentFuel, TBN)

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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)