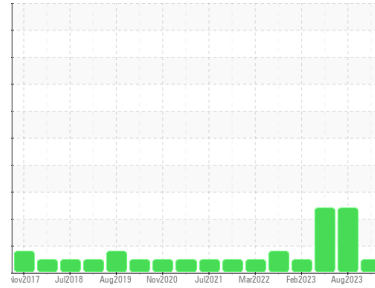


OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Area
[W46883]
Machine Id
JOHN DEERE 310SL 1T0310SLTHF313104
Component
Diesel Engine
Fluid
JOHN DEERE ENGINE OIL PLUS 50 II 15W40 (--- GAL)

DIAGNOSIS

Recommendation

No corrective action is recommended at this time. Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

Fuel content negligible. There is no indication of any contamination in the oil.

Fluid Condition

The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number	Client Info			JR0179194	JR0164995	JR0165599
Sample Date	Client Info			28 Sep 2023	24 Aug 2023	13 Jun 2023
Machine Age	hrs	Client Info		8961	8816	8458
Oil Age	hrs	Client Info		0	400	0
Oil Changed	Client Info			Changed	Not Changd	Changed
Sample Status				NORMAL	SEVERE	SEVERE

CONTAMINATION		method	limit/base	current	history1	history2
Glycol	WC Method			NEG	NEG	NEG

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>51	7	21	31
Chromium	ppm	ASTM D5185m	>11	<1	<1	<1
Nickel	ppm	ASTM D5185m	>5	<1	<1	2
Titanium	ppm	ASTM D5185m		0	0	<1
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>31	4	6	7
Lead	ppm	ASTM D5185m	>26	2	7	5
Copper	ppm	ASTM D5185m	>26	<1	<1	1
Tin	ppm	ASTM D5185m	>4	0	<1	1
Vanadium	ppm	ASTM D5185m		<1	0	<1
Cadmium	ppm	ASTM D5185m		0	0	0

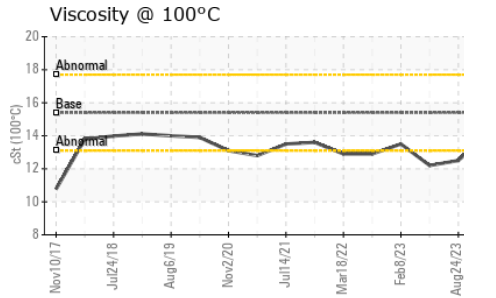
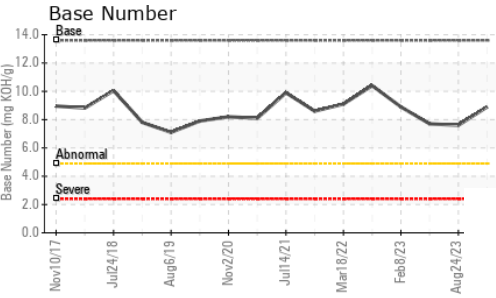
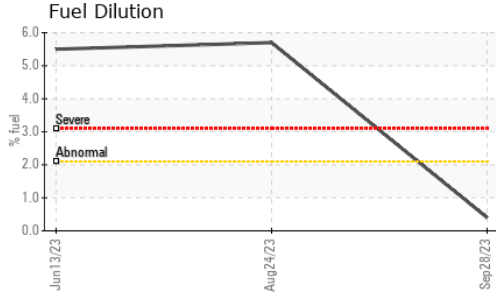
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		284	238	209
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		252	245	223
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m		853	844	824
Calcium	ppm	ASTM D5185m		1371	1443	1376
Phosphorus	ppm	ASTM D5185m		946	911	903
Zinc	ppm	ASTM D5185m		1139	1098	1120
Sulfur	ppm	ASTM D5185m		3290	3792	3798

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>22	6	6	9
Sodium	ppm	ASTM D5185m	>31	<1	1	1
Potassium	ppm	ASTM D5185m	>20	<1	<1	2
Fuel	%	ASTM D3524	>2.1	0.4	5.7	5.5

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>3	0.1	0.1	0.2
Nitration	Abs/cm	*ASTM D7624	>20	6.6	9.0	9.4
Sulfation	Abs/.1mm	*ASTM D7415	>30	19.4	20.4	22.1

FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	14.4	16.0	17.7
Base Number (BN)	mg KOH/g	ASTM D2896	13.6	8.9	7.6	7.7

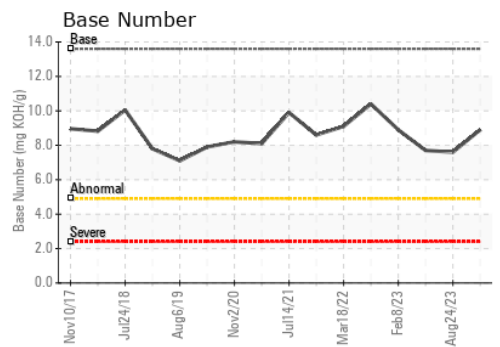
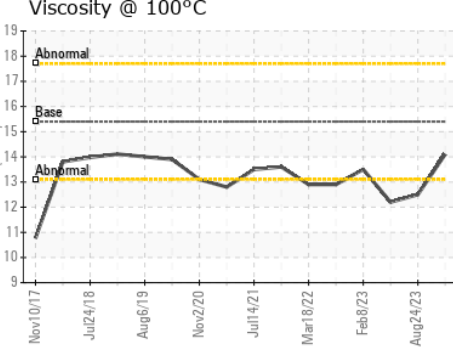
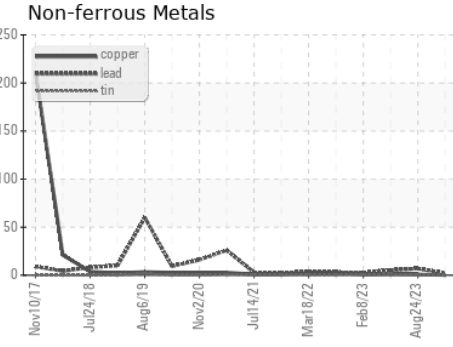
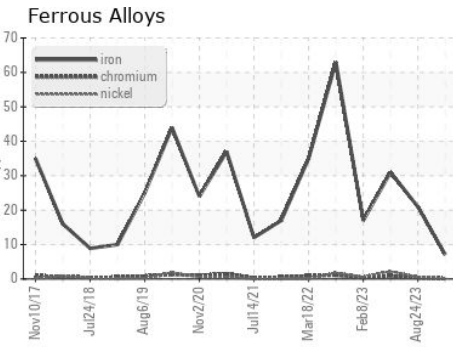
OIL ANALYSIS REPORT



VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
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
Free Water	scalar	*Visual		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	15.4	14.1	▲ 12.5 ▲ 12.2

GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : JR0179194 **Received** : 04 Oct 2023
Lab Number : 05968691 **Diagnosed** : 06 Oct 2023
Unique Number : 10675242 **Diagnostician** : Wes Davis
Test Package : CONST (Additional Tests: PercentFuel, TBN)

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)

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 US 23005

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