

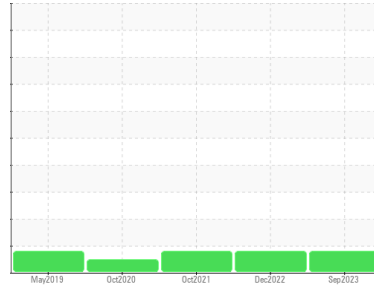
PROBLEM SUMMARY

Sample Rating Trend

WEAR

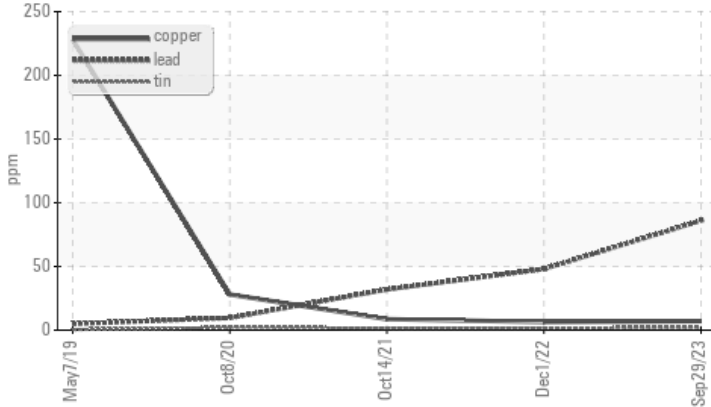


Area
[W46307]
 Machine Id
JOHN DEERE 160G LC 1FF160GXTJF056941
 Component
Diesel Engine
 Fluid
JOHN DEERE ENGINE OIL PLUS 50 II 15W40 (--- GAL)



COMPONENT CONDITION SUMMARY

▲ Non-ferrous Metals



RECOMMENDATION

Oil and filter change at the time of sampling has been noted. No corrective action is recommended at this time. We recommend an early resample to monitor this condition.

PROBLEMATIC TEST RESULTS

Sample Status				ABNORMAL	ABNORMAL	MARGINAL
Lead	ppm	ASTM D5185m	>26	▲ 86	▲ 48	▲ 32

Customer Id: JAMASH
Sample No.: JR0180298
Lab Number: 05967574
Test Package: CONST



To manage this report scan the QR code

To discuss the diagnosis or test data:
 Don Baldrige +1
don.b505@comcast.net

To change component or sample information:
 Customer Service +1 1-800-237-1369
customerservice@wearcheck.com

RECOMMENDED ACTIONS

Action	Status	Date	Done By	Description
Change Fluid	---	---	?	Oil and filter change at the time of sampling has been noted.
Change Filter	---	---	?	Oil and filter change at the time of sampling has been noted.
Resample	---	---	?	We recommend an early resample to monitor this condition.

HISTORICAL DIAGNOSIS

01 Dec 2022 Diag: Don Baldrige

WEAR



No corrective action is recommended at this time. Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor. The lead level is abnormal. All other component wear rates are normal. There is no indication of any contamination in the oil. The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

view report



14 Oct 2021 Diag: Doug Bogart

WEAR



No corrective action is recommended at this time. Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor. The lead level is abnormal. All other component wear rates are normal. There is no indication of any contamination in the oil. The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

view report



08 Oct 2020 Diag: Jonathan Hester

NORMAL



Resample at the next service interval to monitor. All component wear rates are normal. There is no indication of any contamination in the oil. The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

view report

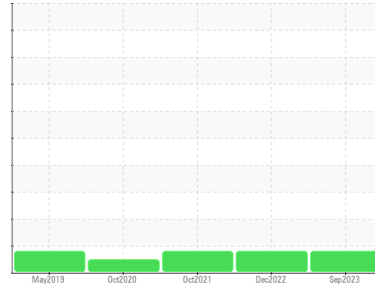


OIL ANALYSIS REPORT

Sample Rating Trend

WEAR


Area
[W46307]
 Machine Id
JOHN DEERE 160G LC 1FF160GXTJF056941
 Component
Diesel Engine
 Fluid
JOHN DEERE ENGINE OIL PLUS 50 II 15W40 (--- GAL)


DIAGNOSIS
▲ Recommendation

Oil and filter change at the time of sampling has been noted. No corrective action is recommended at this time. We recommend an early resample to monitor this condition.

▲ Wear

The lead level is abnormal. All other component wear rates are normal.

Contamination

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 acceptable for the time in service.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		JR0180298	JR0148522	JR0106645
Sample Date	Client Info		29 Sep 2023	01 Dec 2022	14 Oct 2021
Machine Age	hrs	Client Info	2717	1957	1464
Oil Age	hrs	Client Info	0	0	500
Oil Changed	Client Info		Changed	Changed	Changed
Sample Status			ABNORMAL	ABNORMAL	MARGINAL

CONTAMINATION

	method	limit/base	current	history1	history2
Fuel	WC Method	>2.1	<1.0	<1.0	<1.0
Glycol	WC Method		NEG	NEG	NEG

WEAR METALS

	method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185m	>51	38	46	33
Chromium	ppm	ASTM D5185m	>11	<1	<1	<1
Nickel	ppm	ASTM D5185m	>5	<1	0	<1
Titanium	ppm	ASTM D5185m		0	<1	<1
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>31	2	5	7
Lead	ppm	ASTM D5185m	>26	▲ 86	▲ 48	▲ 32
Copper	ppm	ASTM D5185m	>26	7	6	9
Tin	ppm	ASTM D5185m	>4	2	2	2
Antimony	ppm	ASTM D5185m		---	---	0
Vanadium	ppm	ASTM D5185m		<1	<1	<1
Cadmium	ppm	ASTM D5185m		0	0	0

ADDITIVES

	method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185m		19	55	48
Barium	ppm	ASTM D5185m		0	<1	0
Molybdenum	ppm	ASTM D5185m		214	245	237
Manganese	ppm	ASTM D5185m		1	1	1
Magnesium	ppm	ASTM D5185m		763	789	794
Calcium	ppm	ASTM D5185m		1597	1493	1494
Phosphorus	ppm	ASTM D5185m		853	811	788
Zinc	ppm	ASTM D5185m		1093	994	948
Sulfur	ppm	ASTM D5185m		3097	3430	2567

CONTAMINANTS

	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m	>22	11	11	8
Sodium	ppm	ASTM D5185m	>31	5	6	4
Potassium	ppm	ASTM D5185m	>20	0	<1	2

INFRA-RED

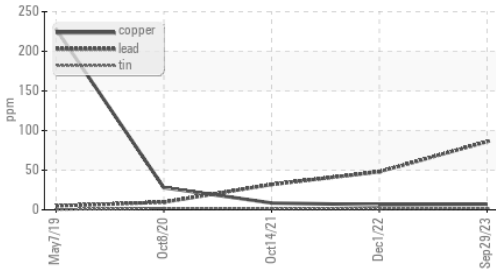
	method	limit/base	current	history1	history2	
Soot %	%	*ASTM D7844	>3	0.6	0.6	0.6
Nitration	Abs/cm	*ASTM D7624	>20	12.5	12.0	10.8
Sulfation	Abs/.1mm	*ASTM D7415	>30	28.0	29.8	26.8

FLUID DEGRADATION

	method	limit/base	current	history1	history2	
Oxidation	Abs/.1mm	*ASTM D7414	>25	23.7	24.3	21.6
Base Number (BN)	mg KOH/g	ASTM D2896	13.6	6.6	7.3	6.8

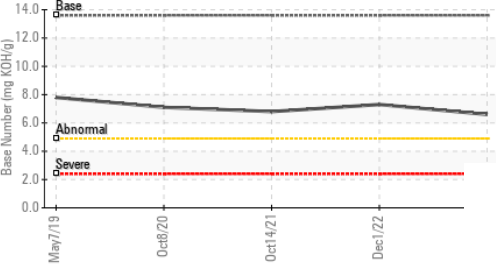
OIL ANALYSIS REPORT

▲ Non-ferrous Metals



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

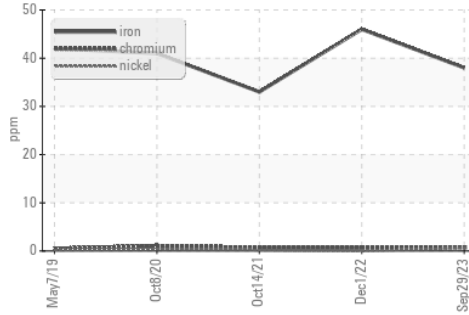
Base Number



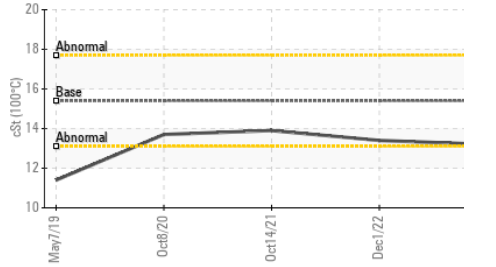
FLUID PROPERTIES	method	limit/base	current	history1	history2	
Visc @ 100°C	cSt	ASTM D445	15.4	13.2	13.4	13.9

GRAPHS

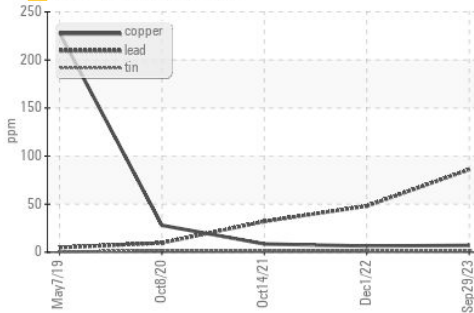
Ferrous Alloys



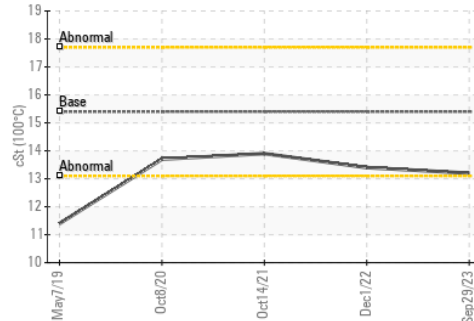
Viscosity @ 100°C



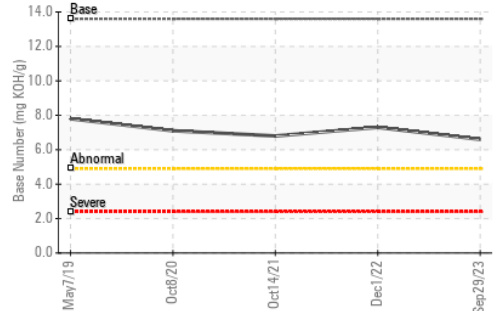
▲ Non-ferrous Metals



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : JR0180298 **Received** : 03 Oct 2023
Lab Number : 05967574 **Diagnosed** : 05 Oct 2023
Unique Number : 10674125 **Diagnostician** : Don Baldrige
Test Package : CONST (Additional Tests: 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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