



WEAR	ABNORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area

[44633]

Machine Id

JOHN DEERE 350G 1FF350GXTHF811706

Component

Diesel Engine

Fluid

JOHN DEERE ENGINE OIL PLUS 50 II 15W40 (28 QTS)

RECOMMENDATION

Oil and filter change at the time of sampling has been noted. No corrective action is recommended at this time. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		JR0203177	JR0183864	JR0144082
Sample Date		Client Info		13 Feb 2024	15 Aug 2023	30 Sep 2022
Machine Age	hrs	Client Info		6937	6446	5464
Oil Age	hrs	Client Info		491	5527	5030
Filter Age	hrs	Client Info		0	5527	0
Oil Changed		Client Info		Changed	Changed	N/A
Filter Changed		Client Info		Changed	Changed	N/A
Sample Status				ABNORMAL	ABNORMAL	NORMAL

WEAR

Cylinder, crank, or cam shaft wear is indicated. All other component wear rates are normal.

Iron	ppm	ASTM D5185m	>51	▲ 63	▲ 71	32
Chromium	ppm	ASTM D5185m	>11	2	6	1
Nickel	ppm	ASTM D5185m	>5	2	2	2
Titanium	ppm	ASTM D5185m		<1	<1	<1
Silver	ppm	ASTM D5185m	>3	0	0	<1
Aluminum	ppm	ASTM D5185m	>31	7	▲ 12	3
Lead	ppm	ASTM D5185m	>26	2	1	2
Copper	ppm	ASTM D5185m	>26	2	6	2
Tin	ppm	ASTM D5185m	>4	1	<1	2
Vanadium	ppm	ASTM D5185m		<1	0	2
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

There is no indication of any contamination in the oil.

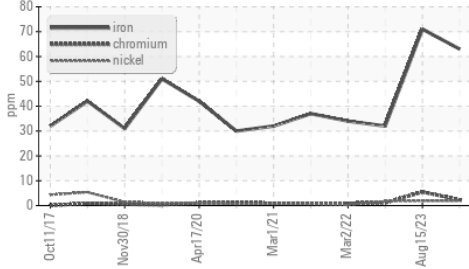
Silicon	ppm	ASTM D5185m	>22	14	▲ 36	11
Potassium	ppm	ASTM D5185m	>20	4	4	0
Fuel		WC Method	>2.1	<1.0	<1.0	<1.0
Water		WC Method	>0.21	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.4	0.5	0.4
Nitration	Abs/cm	*ASTM D7624	>20	9.2	8.7	10.0
Sulfation	Abs/.1mm	*ASTM D7415	>30	22.9	22.3	24.1
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.21	NEG	NEG	NEG

FLUID CONDITION

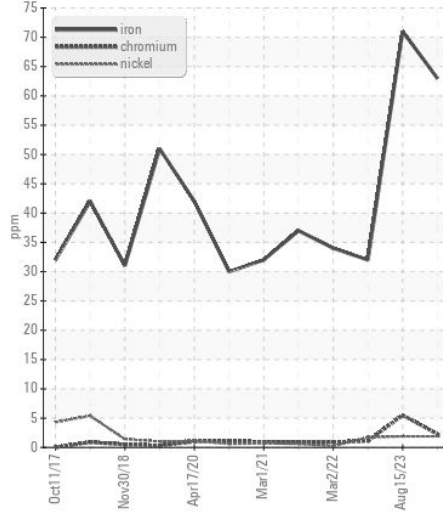
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m	>31	2	2	2
Boron	ppm	ASTM D5185m		138	174	165
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		224	249	248
Manganese	ppm	ASTM D5185m		1	<1	1
Magnesium	ppm	ASTM D5185m		745	779	855
Calcium	ppm	ASTM D5185m		1285	1448	1470
Phosphorus	ppm	ASTM D5185m		792	853	926
Zinc	ppm	ASTM D5185m		986	1074	1077
Sulfur	ppm	ASTM D5185m		2563	2995	3274
Oxidation	Abs/.1mm	*ASTM D7414	>25	17.0	16.2	17.8
Base Number (BN)	mg KOH/g	ASTM D2896	13.6	8.4	8.0	10.0
Visc @ 100°C	cSt	ASTM D445	15.4	13.5	13.6	13.4

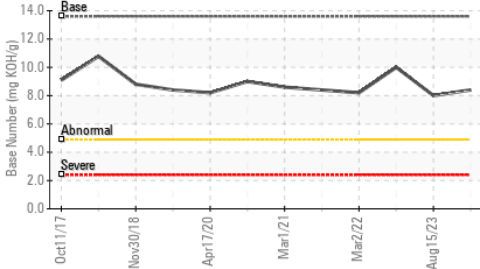
▲ Ferrous Alloys



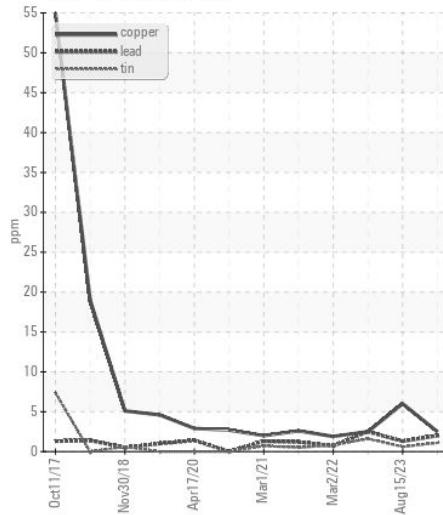
▲ Ferrous Alloys



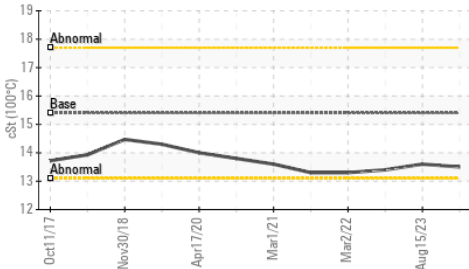
Base Number



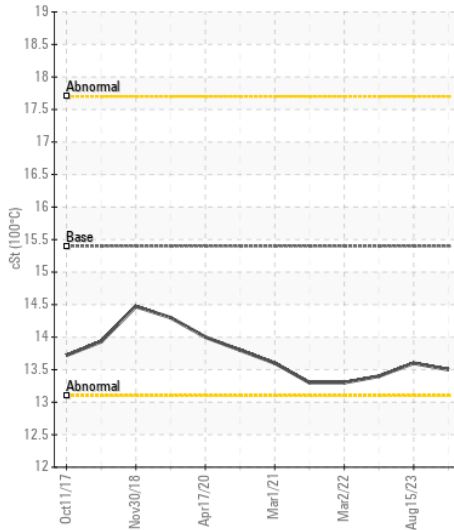
Non-ferrous Metals



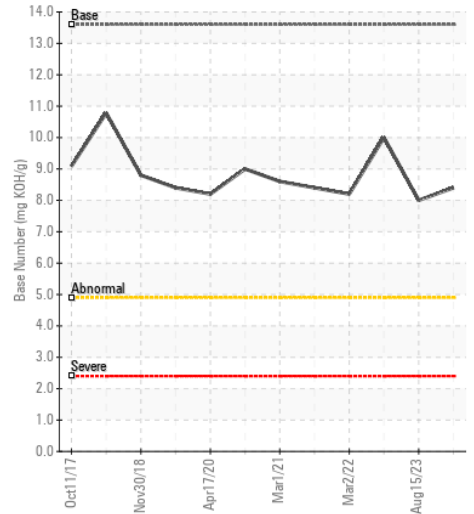
Viscosity @ 100°C



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : JR0203177 **Received** : 14 Feb 2024
Lab Number : 06089437 **Tested** : 15 Feb 2024
Unique Number : 10876882 **Diagnosed** : 16 Feb 2024 - Don Baldrige
Test Package : CONST (Additional Tests: TBN)

JRE - MANASSAS PARK
 9107 OWENS DRIVE
 MANASSAS PARK, VA
 US 20111

Contact: DON VEST
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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)