



WEAR	ABNORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Machine Id
JOHN DEERE 200DLC 1FF200DXLBD512857

Component
Diesel Engine

Fluid
JOHN DEERE ENGINE OIL PLUS 50 II 15W40 (6 QTS)

RECOMMENDATION

Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		JRMC402869	JR0034390	JRMC393565
Sample Date		Client Info		23 Nov 2020	03 Feb 2020	22 May 2019
Machine Age	hrs	Client Info		8215	7748	7265
Oil Age	hrs	Client Info		0	0	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Changed	N/A	Changed
Filter Changed		Client Info		Changed	N/A	Changed
Sample Status				ABNORMAL	ABNORMAL	NORMAL

WEAR

A decrease in the aluminum level is noted. All other component wear rates are normal.

Iron	ppm	ASTM D5185m	>51	▲ 76	▲ 121	50
Chromium	ppm	ASTM D5185m	>11	6	▲ 19	1
Nickel	ppm	ASTM D5185m	>5	1	3	<1
Titanium	ppm	ASTM D5185m		<1	<1	1
Silver	ppm	ASTM D5185m		<1	0	0
Aluminum	ppm	ASTM D5185m	>31	6	12	7
Lead	ppm	ASTM D5185m	>26	3	4	0
Copper	ppm	ASTM D5185m	>26	2	6	1
Tin	ppm	ASTM D5185m	>4	<1	<1	0
Vanadium	ppm	ASTM D5185m		<1	0	0
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.

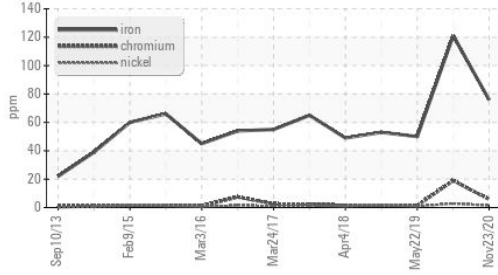
Silicon	ppm	ASTM D5185m	>22	3	9	7
Potassium	ppm	ASTM D5185m	>20	3	4	8
Fuel		WC Method	>2.1	<1.0	<1.0	<1.0
Water		WC Method	>0.21	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	2.5	2.9	2
Nitration	Abs/cm	*ASTM D7624	>20	11	11	9.9
Sulfation	Abs/.1mm	*ASTM D7415	>30	27.7	27.9	25.2
Silt	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

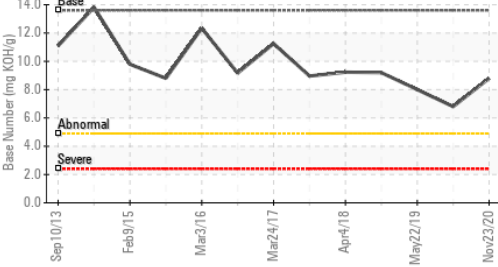
The BN result indicates that there is suitable alkalinity remaining in the oil.

Sodium	ppm	ASTM D5185m	>31	5	18	14
Boron	ppm	ASTM D5185m		161	114	147
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		194	184	196
Manganese	ppm	ASTM D5185m		<1	2	<1
Magnesium	ppm	ASTM D5185m		618	588	690
Calcium	ppm	ASTM D5185m		1861	1642	1762
Phosphorus	ppm	ASTM D5185m		932	822	916
Zinc	ppm	ASTM D5185m		1195	942	1069
Sulfur	ppm	ASTM D5185m		2809	3079	2656
Oxidation	Abs/.1mm	*ASTM D7414	>25	19.3	19.2	18.3
Base Number (BN)	mg KOH/g	ASTM D2896	13.6	8.8	6.8	8
Visc @ 100°C	cSt	ASTM D445	15.4	15.9	16.2	15.5

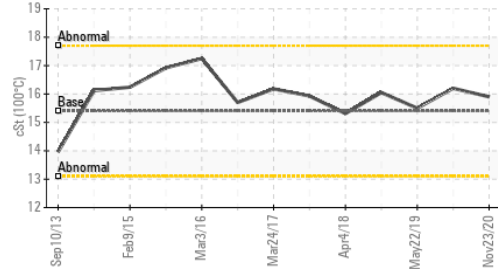
▲ Ferrous Alloys



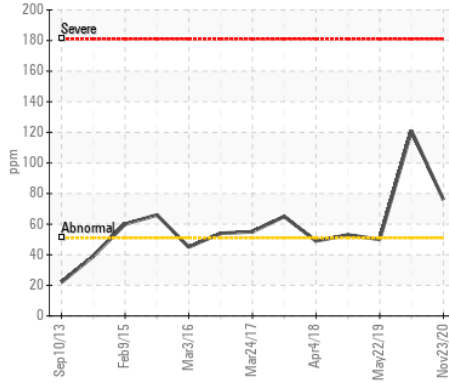
Base Number



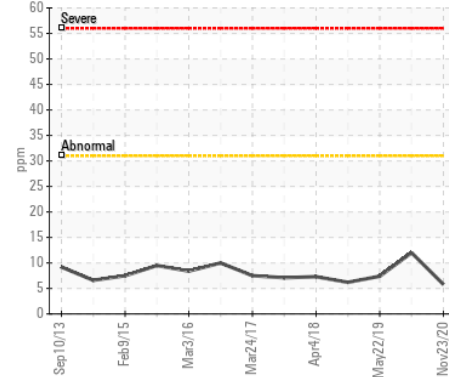
Viscosity @ 100°C



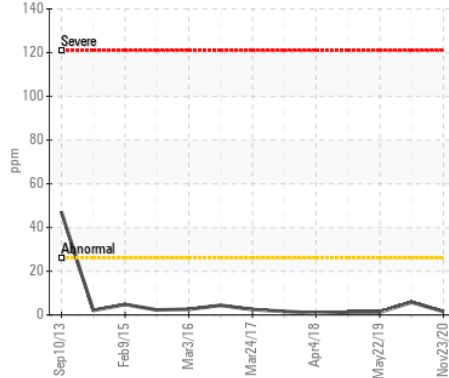
▲ Iron (ppm)



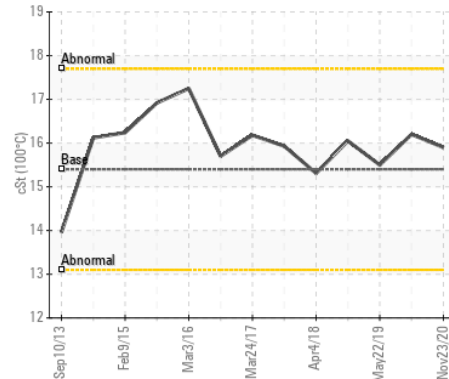
Aluminum (ppm)



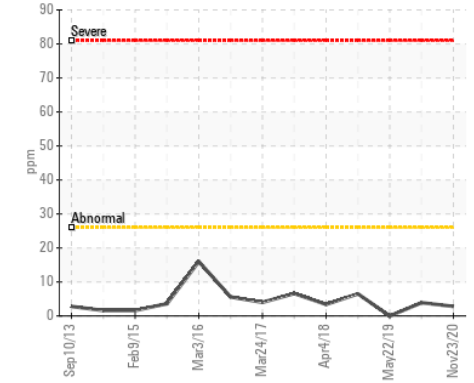
Copper (ppm)



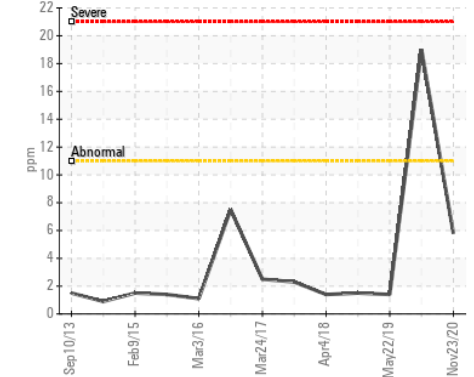
Viscosity @ 100°C



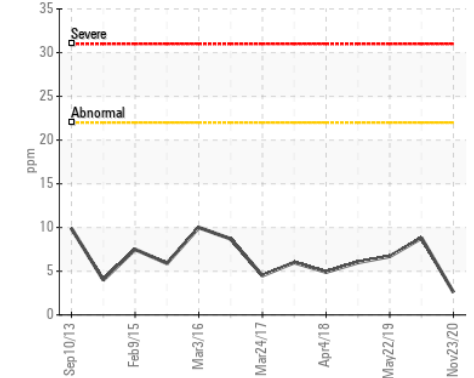
Lead (ppm)



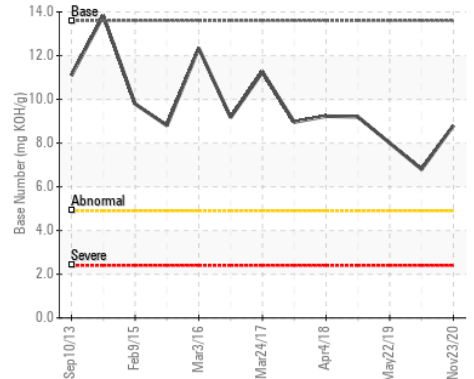
Chromium (ppm)



Silicon (ppm)



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : JRMC402869 **Received** : 25 Nov 2020
Lab Number : 05124804 **Diagnosed** : 30 Nov 2020
Unique Number : 9270073 **Diagnostician** : Angela Borella
Test Package : MOBCE (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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