



WEAR	ABNORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Machine Id
JOHN DEERE 200D 1FF200DXTBD513786

Component
Diesel Engine

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

RECOMMENDATION

The oil 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		JR0161253	JRMC356991	JRMC355353
Sample Date		Client Info		08 Feb 2024	09 Jul 2012	02 Jul 2012
Machine Age	hrs	Client Info		4783	277	222
Oil Age	hrs	Client Info		0	277	222
Filter Age	hrs	Client Info		0	277	222
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				ABNORMAL	NORMAL	NORMAL

WEAR

Cylinder, crank, or cam shaft wear is indicated.

Iron	ppm	ASTM D5185m	>51	▲ 67	62	38
Chromium	ppm	ASTM D5185m	>11	1	2	1
Nickel	ppm	ASTM D5185m	>5	<1	1	<1
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>31	7	9	10
Lead	ppm	ASTM D5185m	>26	9	2	2
Copper	ppm	ASTM D5185m	>26	3	8	7
Tin	ppm	ASTM D5185m	>4	<1	2	2
Vanadium	ppm	ASTM D5185m		0	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.

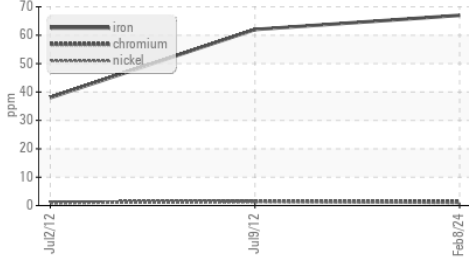
Silicon	ppm	ASTM D5185m	>22	5	10	10
Potassium	ppm	ASTM D5185m	>20	2	3	4
Fuel		WC Method	>2.1	<1.0	<1.0	<1.0
Water		WC Method	>0.21	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	1.9	0.9	0.5
Nitration	Abs/cm	*ASTM D7624	>20	10.7	8.	7.
Sulfation	Abs/.1mm	*ASTM D7415	>30	26.8	23.	22.
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

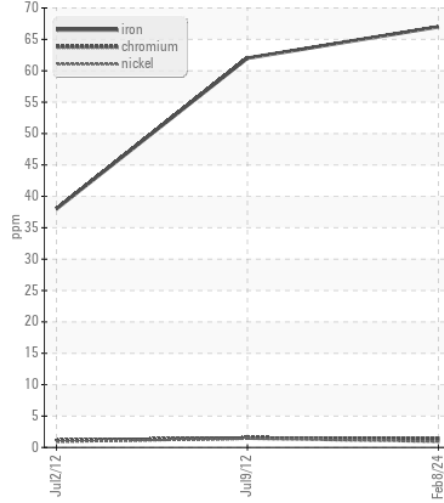
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m	>31	2	4	5
Boron	ppm	ASTM D5185m		152	208	240
Barium	ppm	ASTM D5185m		0	<1	0
Molybdenum	ppm	ASTM D5185m		199	234	243
Manganese	ppm	ASTM D5185m		2	4	4
Magnesium	ppm	ASTM D5185m		634	811	830
Calcium	ppm	ASTM D5185m		1648	1442	1436
Phosphorus	ppm	ASTM D5185m		865	918	938
Zinc	ppm	ASTM D5185m		1093	1020	1039
Sulfur	ppm	ASTM D5185m		2752	2515	2648
Oxidation	Abs/.1mm	*ASTM D7414	>25	20.5	16.	16.
Base Number (BN)	mg KOH/g	ASTM D2896	13.6	7.3	10.26	10.46
Visc @ 100°C	cSt	ASTM D445	15.4	15.8	11.62	10.66

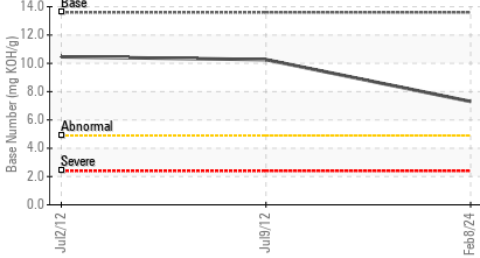
▲ Ferrous Alloys



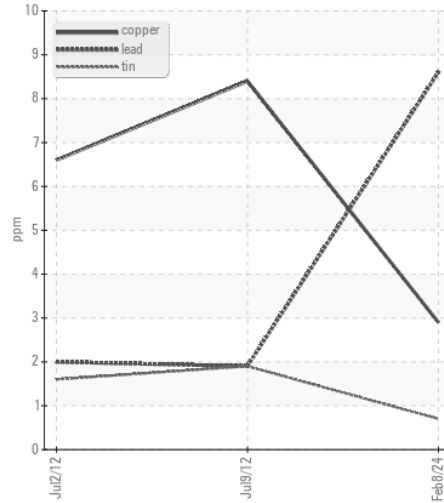
▲ Ferrous Alloys



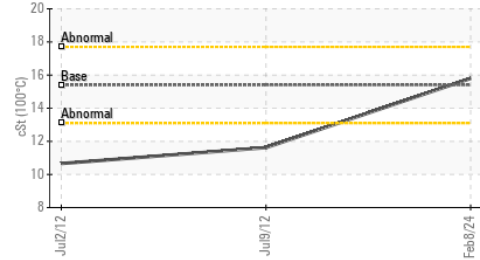
Base Number



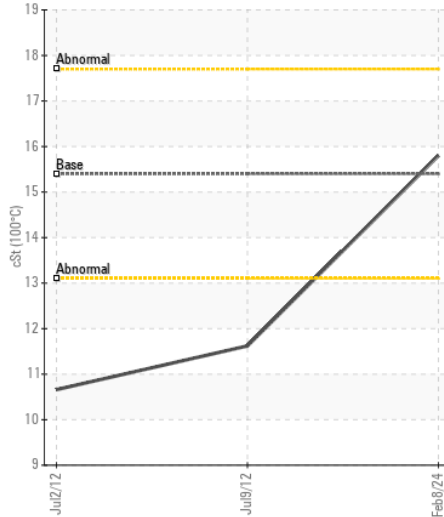
Non-ferrous Metals



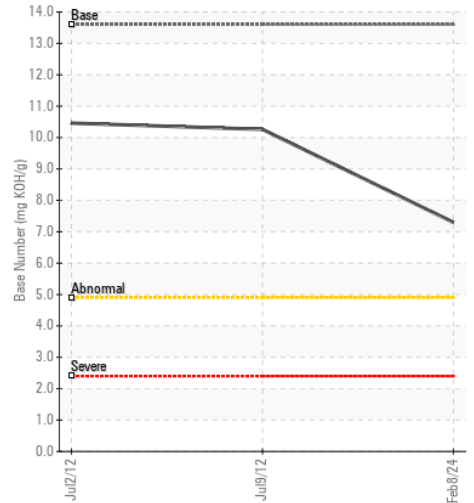
Viscosity @ 100°C



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : JR0161253 **Received** : 09 Feb 2024
Lab Number : 06084656 **Tested** : 12 Feb 2024
Unique Number : 10872101 **Diagnosed** : 12 Feb 2024 - Sean Felton
Test Package : CONST (Additional Tests: TBN)

JRE - MOUNT GILEAD
 305 NORTH MAIN STREET
 MOUNT GILEAD, NC
 US 27306

Contact: ADAM CRUMP
 adam.crump@jamesriverequipment.com

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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