MOB

James River Equipment

OIL ANALYSIS REPORT

WEAR	ABNORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area
[W7577]
Machine Id
JOHN DEERE 250G 1FF250GXJJF610863
Component
Diesel Engine
Fluid
JOHN DEERE ENGINE OIL PLUS 50 II 15W40 (5 GAL)

RECOMMENDATION

Oil and filter change at the time of sampling has been noted. We recommend an early resample to monitor this condition. (Customer Sample Comment: W7577)

WEAR

Iron ppm levels are abnormal. Cylinder, crank, or cam shaft wear is indicated.

CONTAMINATION

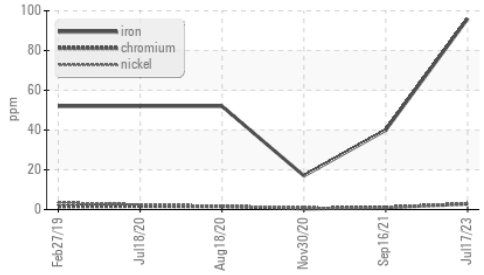
There is no indication of any contamination in the oil.

FLUID CONDITION

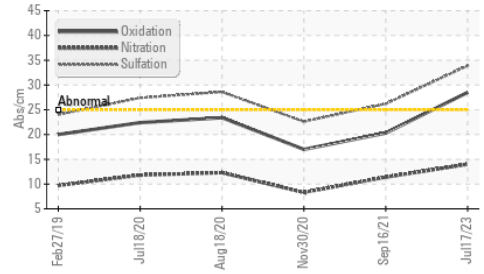
The BN result indicates that there is suitable alkalinity remaining in the oil.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		JR0141043	JR0095792	JR0065701
Sample Date		Client Info		17 Jul 2023	16 Sep 2021	30 Nov 2020
Machine Age	hrs	Client Info		4502	2212	1478
Oil Age	hrs	Client Info		500	500	0
Filter Age	hrs	Client Info		500	500	0
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				ABNORMAL	NORMAL	NORMAL
Iron	ppm	ASTM D5185m	>51	▲ 96	40	17
Chromium	ppm	ASTM D5185m	>11	3	1	<1
Nickel	ppm	ASTM D5185m	>5	3	<1	<1
Titanium	ppm	ASTM D5185m		<1	<1	<1
Silver	ppm	ASTM D5185m	>3	0	<1	0
Aluminum	ppm	ASTM D5185m	>31	11	4	6
Lead	ppm	ASTM D5185m	>26	8	<1	0
Copper	ppm	ASTM D5185m	>26	8	19	11
Tin	ppm	ASTM D5185m	>4	2	1	0
Vanadium	ppm	ASTM D5185m		<1	<1	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Silicon	ppm	ASTM D5185m	>22	13	9	6
Potassium	ppm	ASTM D5185m	>20	16	2	6
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	2.2	0.9	0.4
Nitration	Abs/cm	*ASTM D7624	>20	14.0	11.4	8.3
Sulfation	Abs/.1mm	*ASTM D7415	>30	33.9	26.2	22.6
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
Sodium	ppm	ASTM D5185m	>31	14	1	3
Boron	ppm	ASTM D5185m		22	108	213
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		256	281	229
Manganese	ppm	ASTM D5185m		2	<1	<1
Magnesium	ppm	ASTM D5185m		970	866	804
Calcium	ppm	ASTM D5185m		2010	1609	1423
Phosphorus	ppm	ASTM D5185m		1195	884	854
Zinc	ppm	ASTM D5185m		1475	1119	985
Sulfur	ppm	ASTM D5185m		3948	2400	2344
Oxidation	Abs/.1mm	*ASTM D7414	>25	28.5	20.3	17
Base Number (BN)	mg KOH/g	ASTM D2896	13.6	7.2	8.4	9.9
Visc @ 100°C	cSt	ASTM D445	15.4	15.5	14.1	14.3

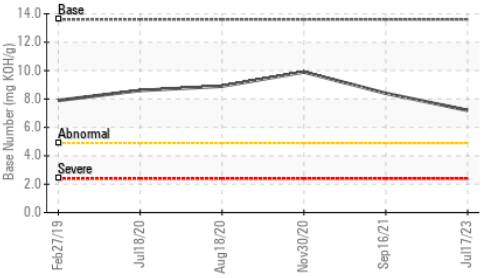
Ferrous Alloys



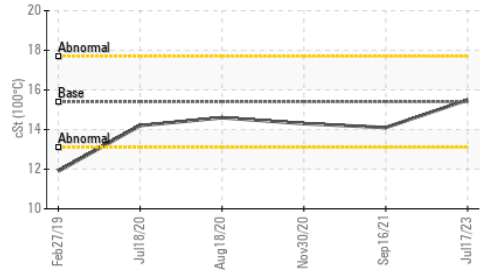
FT-IR (Direct Trend)



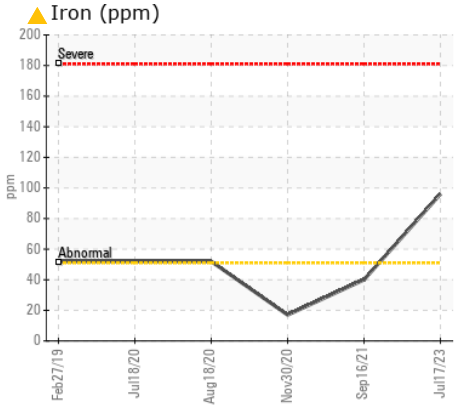
Base Number



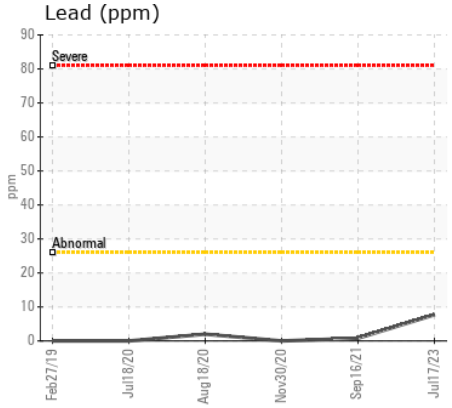
Viscosity @ 100°C



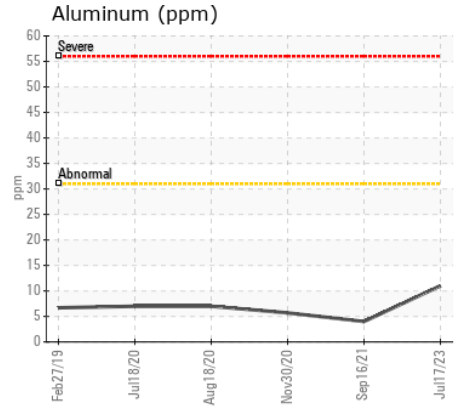
Iron (ppm)



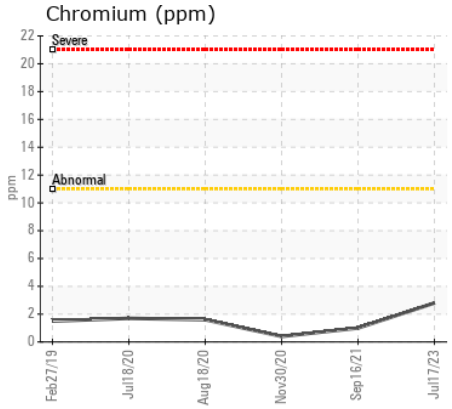
Lead (ppm)



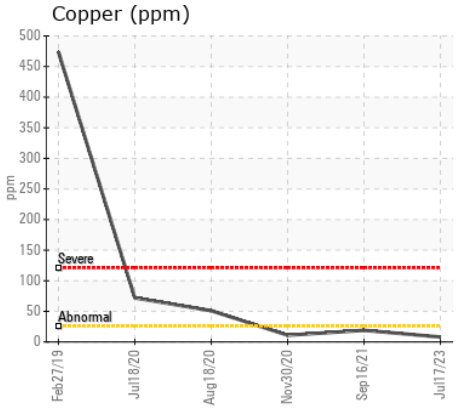
Aluminum (ppm)



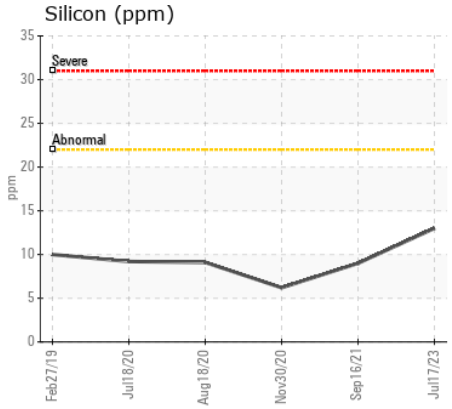
Chromium (ppm)



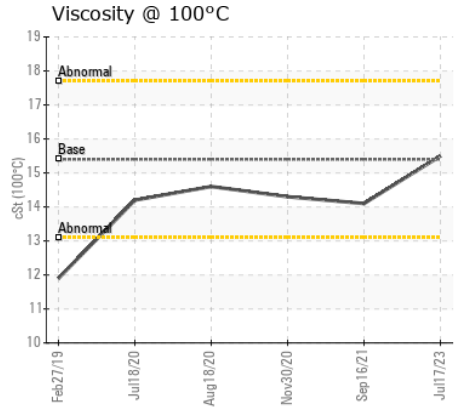
Copper (ppm)



Silicon (ppm)



Viscosity @ 100°C



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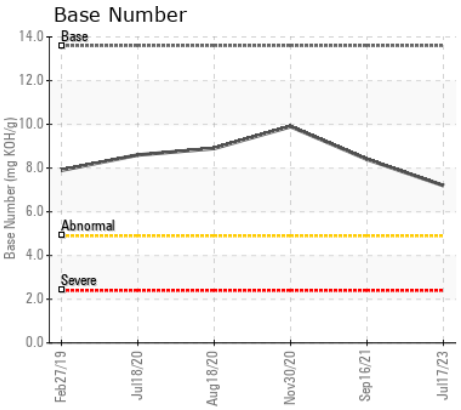

Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : JR0141043
Lab Number : 05902108
Unique Number : 10563464
Test Package : MOBCE (Additional Tests: TBN)

Received : 19 Jul 2023
Tested : 19 Jul 2023
Diagnosed : 20 Jul 2023 - Angela Borella

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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