CONST

James River Equipment

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area
[16W16011]
Machine Id
JOHN DEERE 210G 1FF210GXCNF530112
Component
Diesel Engine
Fluid
JOHN DEERE ENGINE OIL PLUS 50 II 15W40 (5 GAL)

RECOMMENDATION

(Customer Sample Comment: 16W16011)

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		JR0206871	JR0185747	JR0173264
Sample Date		Client Info		15 Apr 2024	30 Oct 2023	02 Jun 2023
Machine Age	hrs	Client Info		1471	959	518
Oil Age	hrs	Client Info		512	441	0
Filter Age	hrs	Client Info		512	441	0
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	ABNORMAL	ABNORMAL

WEAR

Iron	ppm	ASTM D5185m	>51	21	20	32
Chromium	ppm	ASTM D5185m	>11	<1	<1	1
Nickel	ppm	ASTM D5185m	>5	3	4	5
Titanium	ppm	ASTM D5185m		0	0	<1
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>31	5	5	4
Lead	ppm	ASTM D5185m	>26	0	0	0
Copper	ppm	ASTM D5185m	>26	14	▲ 59	▲ 360
Tin	ppm	ASTM D5185m	>4	<1	<1	2
Vanadium	ppm	ASTM D5185m		0	<1	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

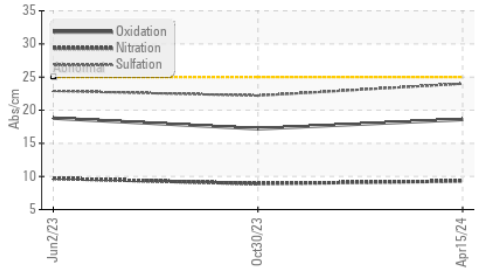
CONTAMINATION

Silicon	ppm	ASTM D5185m	>22	7	8	10
Potassium	ppm	ASTM D5185m	>20	3	1	2
Fuel		WC Method	>2.1	<1.0	<1.0	0.4
Water		WC Method	>0.21	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.4	0.4	0.4
Nitration	Abs/cm	*ASTM D7624	>20	9.3	8.9	9.7
Sulfation	Abs/.1mm	*ASTM D7415	>30	24.0	22.2	22.9
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

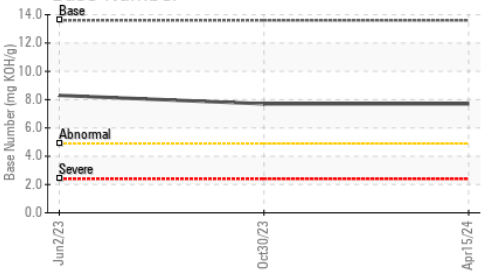
FLUID CONDITION

Sodium	ppm	ASTM D5185m	>31	2	4	5
Boron	ppm	ASTM D5185m		128	149	130
Barium	ppm	ASTM D5185m		0	0	5
Molybdenum	ppm	ASTM D5185m		256	245	209
Manganese	ppm	ASTM D5185m		0	1	4
Magnesium	ppm	ASTM D5185m		866	909	910
Calcium	ppm	ASTM D5185m		1498	1394	1387
Phosphorus	ppm	ASTM D5185m		972	934	907
Zinc	ppm	ASTM D5185m		1151	1192	1095
Sulfur	ppm	ASTM D5185m		2987	2941	3173
Oxidation	Abs/.1mm	*ASTM D7414	>25	18.6	17.2	18.8
Base Number (BN)	mg KOH/g	ASTM D2896	13.6	7.7	7.7	8.3
Visc @ 100°C	cSt	ASTM D445	15.4	13.6	13.1	● 11.3

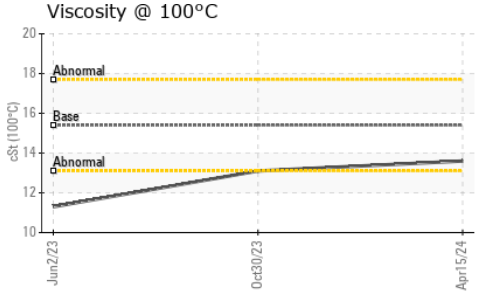
FT-IR (Direct Trend)



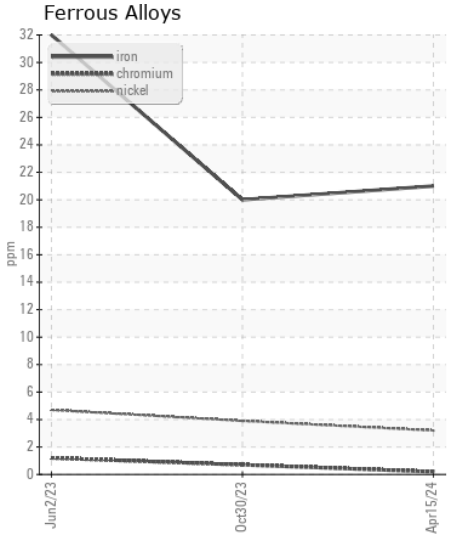
Base Number



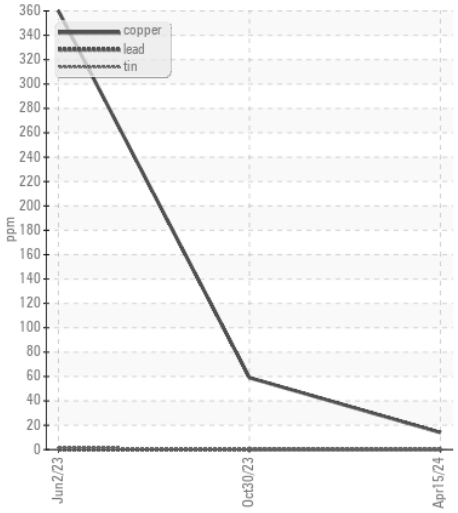
Viscosity @ 100°C



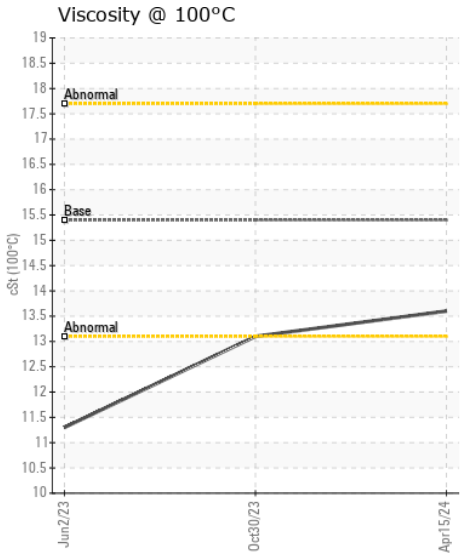
Ferrous Alloys



Non-ferrous Metals



Viscosity @ 100°C



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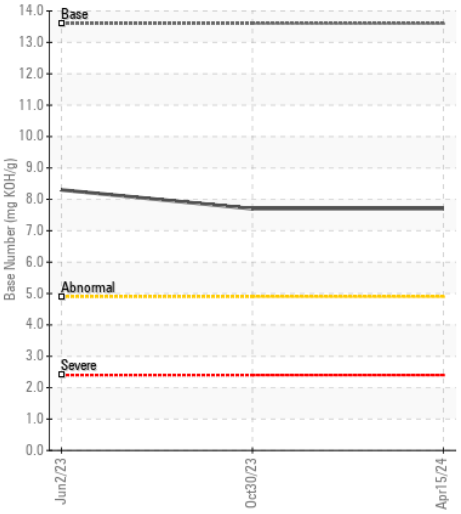

Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : JR0206871 **Received** : 17 Apr 2024
Lab Number : 06151753 **Tested** : 18 Apr 2024
Unique Number : 10981831 **Diagnosed** : 19 Apr 2024 - Sean Felton
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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