CONST

James River Equipment

OIL ANALYSIS REPORT

WEAR	ABNORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area
[BENCHMARK]
Machine Id
JOHN DEERE 350G 1FF350GXKEE809751
Component
Diesel Engine
Fluid
JOHN DEERE ENGINE OIL PLUS 50 II 15W40 (29 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.

WEAR

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

CONTAMINATION

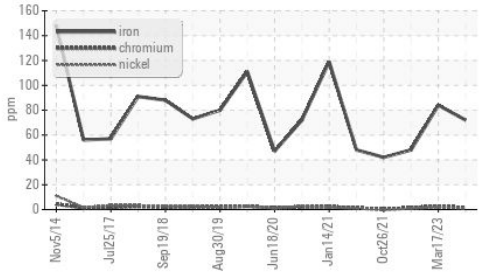
There is no indication of any contamination in the oil.

FLUID CONDITION

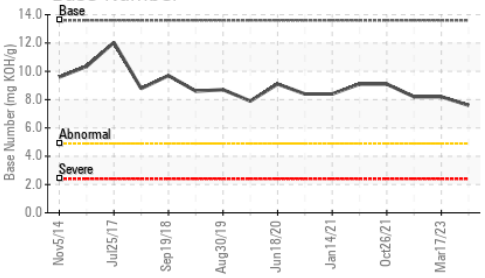
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		JR0203075	JR0153268	JR0132853
Sample Date		Client Info		29 Jan 2024	17 Mar 2023	27 Jun 2022
Machine Age	hrs	Client Info		10096	9283	8481
Oil Age	hrs	Client Info		0	802	901
Filter Age	hrs	Client Info		0	802	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	▲ 72	84	48
Chromium	ppm	ASTM D5185m	>11	2	2	2
Nickel	ppm	ASTM D5185m	>5	<1	2	<1
Titanium	ppm	ASTM D5185m		<1	<1	<1
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>31	6	7	4
Lead	ppm	ASTM D5185m	>26	2	2	6
Copper	ppm	ASTM D5185m	>26	1	3	2
Tin	ppm	ASTM D5185m	>4	<1	<1	<1
Vanadium	ppm	ASTM D5185m		<1	0	<1
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Silicon	ppm	ASTM D5185m	>22	10	15	8
Potassium	ppm	ASTM D5185m	>20	3	3	2
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	0.8	0.7	0.6
Nitration	Abs/cm	*ASTM D7624	>20	11.7	10.7	12.0
Sulfation	Abs/.1mm	*ASTM D7415	>30	26.3	25.7	28.1
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
Sodium	ppm	ASTM D5185m	>31	3	0	3
Boron	ppm	ASTM D5185m		70	121	57
Barium	ppm	ASTM D5185m		<1	0	0
Molybdenum	ppm	ASTM D5185m		179	189	181
Manganese	ppm	ASTM D5185m		1	1	<1
Magnesium	ppm	ASTM D5185m		699	748	767
Calcium	ppm	ASTM D5185m		1357	1647	1800
Phosphorus	ppm	ASTM D5185m		766	884	914
Zinc	ppm	ASTM D5185m		921	1093	1143
Sulfur	ppm	ASTM D5185m		2441	2685	3444
Oxidation	Abs/.1mm	*ASTM D7414	>25	20.7	20.0	24.7
Base Number (BN)	mg KOH/g	ASTM D2896	13.6	7.6	8.2	8.2
Visc @ 100°C	cSt	ASTM D445	15.4	13.5	13.5	14.3

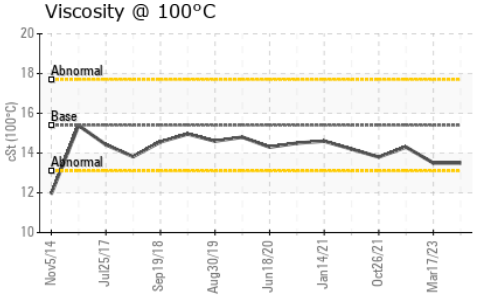
Ferrous Alloys



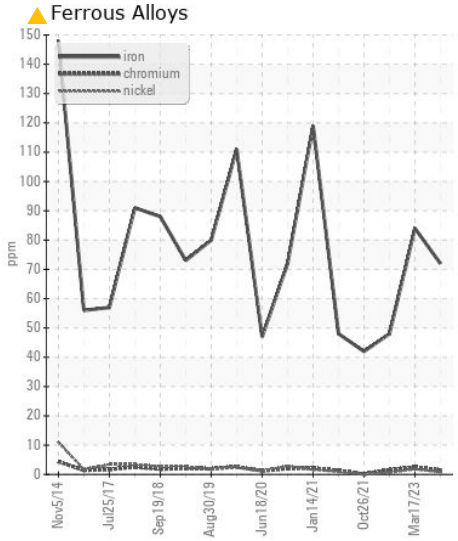
Base Number



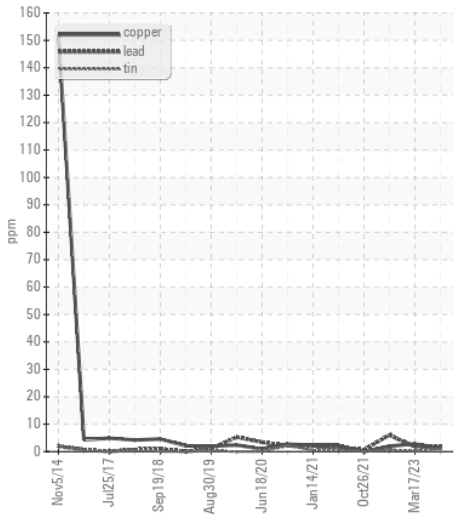
Viscosity @ 100°C



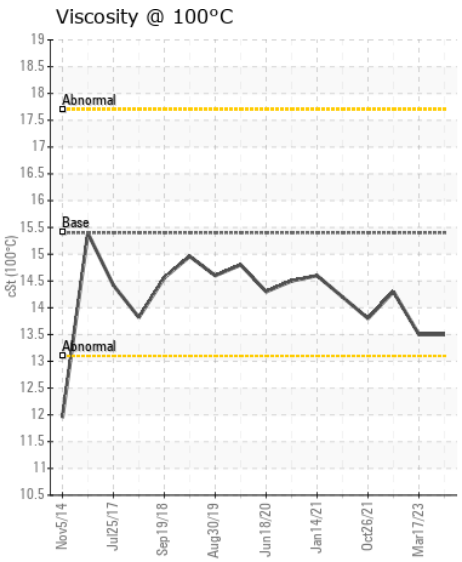
Ferrous Alloys



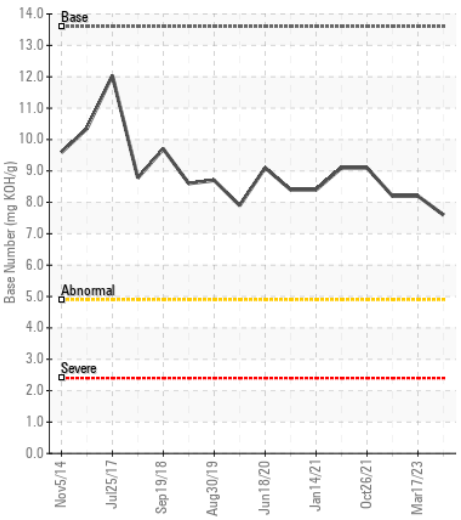
Non-ferrous Metals



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : JR0203075
Lab Number : 06089422
Unique Number : 10876867
Test Package : CONST (Additional Tests: TBN)

Received : 14 Feb 2024
Tested : 15 Feb 2024
Diagnosed : 16 Feb 2024 - Don Baldridge

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)

JRE - MANASSAS PARK
9107 OWENS DRIVE
MANASSAS PARK, VA
US 20111
Contact: DON VEST
dvest@jamesriverequipment.com
T: (703)631-8500
F: (703)631-4715