James River Equipment

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
JOHN DEERE 700L 1T0700LXJNF432521
Component
Diesel Engine
Fluid
JOHN DEERE ENGINE OIL PLUS 50 II 15W40 (28 QTS)

RECOMMENDATION

Resample at the next service interval to monitor.

WEAR

All component wear rates are normal.

CONTAMINATION

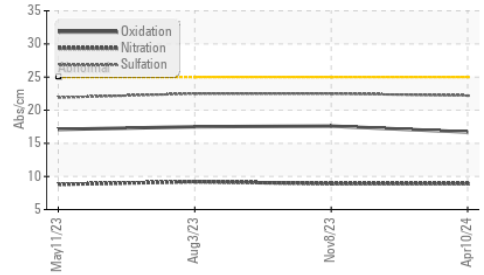
There is no indication of any contamination in the oil.

FLUID CONDITION

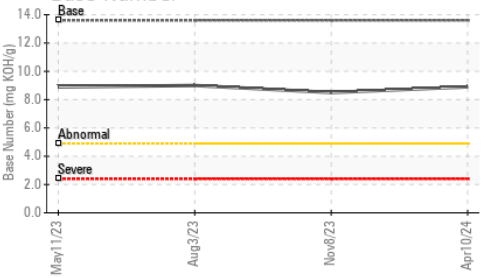
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		JR0211234	JR0192244	JR0181859
Sample Date		Client Info		10 Apr 2024	08 Nov 2023	03 Aug 2023
Machine Age	hrs	Client Info		1948	1478	941
Oil Age	hrs	Client Info		470	537	941
Filter Age	hrs	Client Info		470	0	0
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL
Iron	ppm	ASTM D5185m	>51	13	11	17
Chromium	ppm	ASTM D5185m	>11	<1	<1	<1
Nickel	ppm	ASTM D5185m	>5	1	0	<1
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>31	5	4	3
Lead	ppm	ASTM D5185m	>26	0	0	1
Copper	ppm	ASTM D5185m	>26	8	17	76
Tin	ppm	ASTM D5185m	>4	<1	<1	<1
Vanadium	ppm	ASTM D5185m		0	0	<1
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Silicon	ppm	ASTM D5185m	>22	7	7	6
Potassium	ppm	ASTM D5185m	>20	<1	<1	1
Fuel	%	ASTM D3524	>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	0.3	0.3	0.3
Nitration	Abs/cm	*ASTM D7624	>20	8.9	8.9	9.2
Sulfation	Abs/.1mm	*ASTM D7415	>30	22.2	22.5	22.5
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	1	4
Boron	ppm	ASTM D5185m		253	237	258
Barium	ppm	ASTM D5185m		<1	0	0
Molybdenum	ppm	ASTM D5185m		237	256	274
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m		851	879	891
Calcium	ppm	ASTM D5185m		1779	1461	1667
Phosphorus	ppm	ASTM D5185m		1054	938	962
Zinc	ppm	ASTM D5185m		1230	1171	1178
Sulfur	ppm	ASTM D5185m		3855	3085	3708
Oxidation	Abs/.1mm	*ASTM D7414	>25	16.7	17.6	17.5
Base Number (BN)	mg KOH/g	ASTM D2896	13.6	8.9	8.5	9.0
Visc @ 100°C	cSt	ASTM D445	15.4	12.7	13.7	13.5

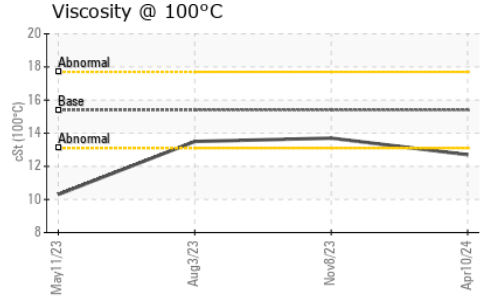
FT-IR (Direct Trend)



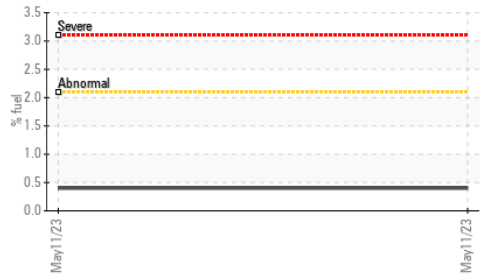
Base Number



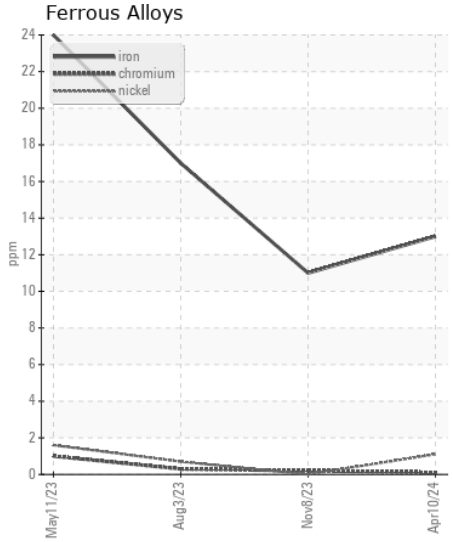
Viscosity @ 100°C



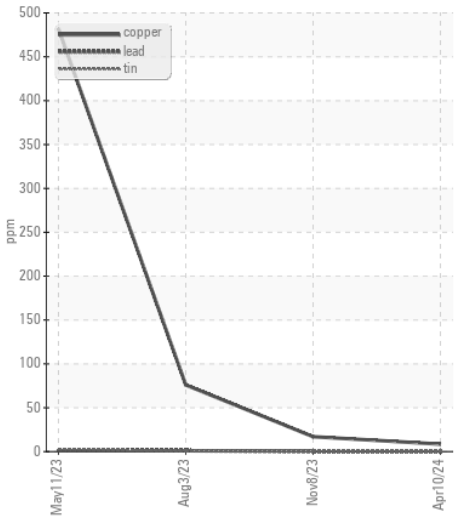
Fuel Dilution



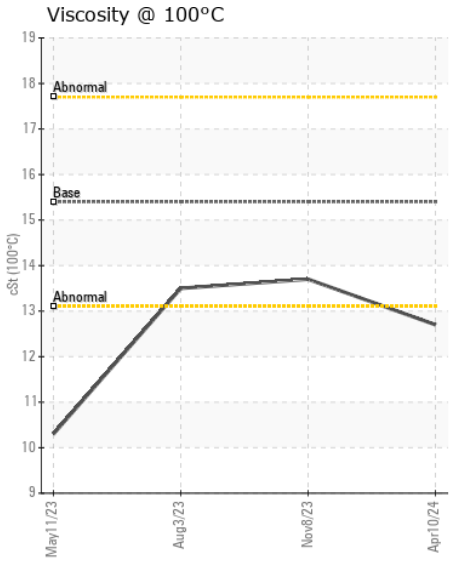
Ferrous Alloys



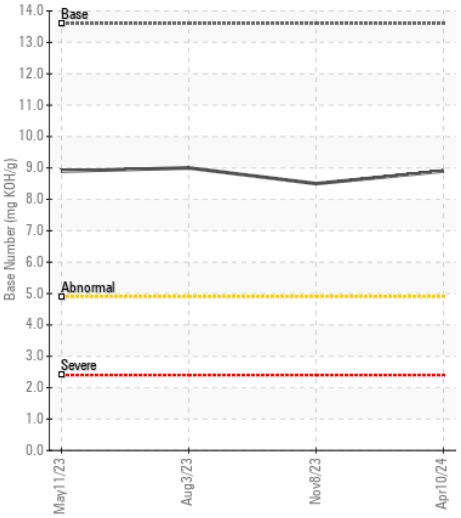
Non-ferrous Metals



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : JR0211234
Lab Number : 06149265
Unique Number : 10979343
Test Package : CONST (Additional Tests: FuelDilution, TBN)

Received : 15 Apr 2024
Tested : 16 Apr 2024
Diagnosed : 17 Apr 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