



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	ATTENTION

Machine Id
JOHN DEERE 9520R 1RW9520RVME066926

Component
Diesel Engine

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

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.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		JR0214155	JR0182381	JR0189521
Sample Date		Client Info		24 Apr 2024	11 Jan 2024	28 Sep 2023
Machine Age	hrs	Client Info		2583	2040	1736
Oil Age	hrs	Client Info		543	500	0
Filter Age	hrs	Client Info		543	500	0
Oil Changed		Client Info		Changed	Changed	Not Changd
Filter Changed		Client Info		Changed	Changed	Not Changd
Sample Status				ATTENTION	ABNORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>51	12	40	14
Chromium	ppm	ASTM D5185m	>11	<1	<1	<1
Nickel	ppm	ASTM D5185m	>5	<1	3	<1
Titanium	ppm	ASTM D5185m		<1	0	0
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>31	3	16	6
Lead	ppm	ASTM D5185m	>26	2	25	12
Copper	ppm	ASTM D5185m	>26	7	9	4
Tin	ppm	ASTM D5185m	>4	1	3	1
Vanadium	ppm	ASTM D5185m		<1	<1	<1
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

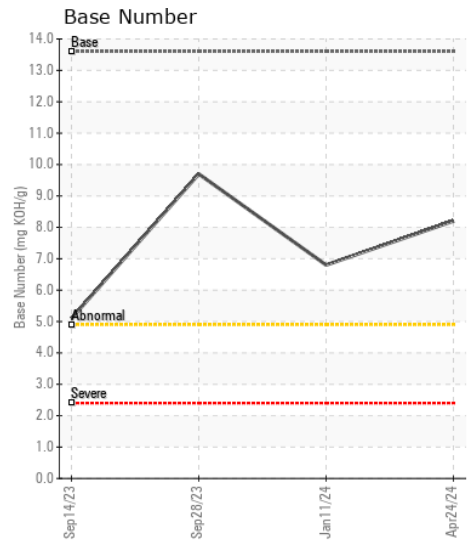
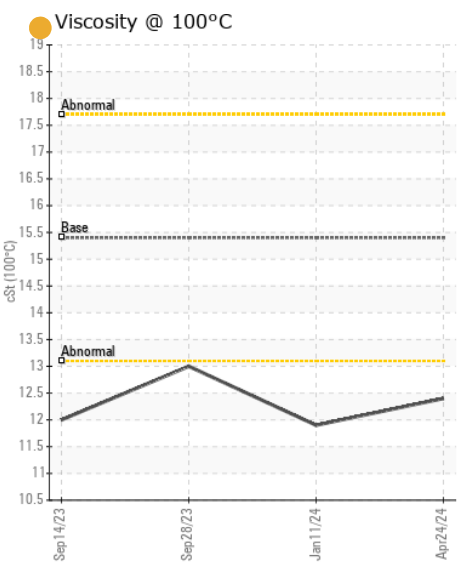
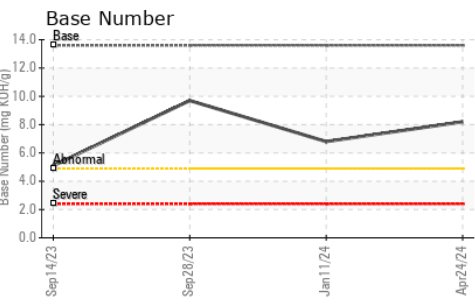
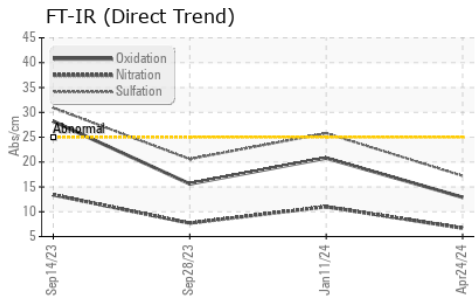
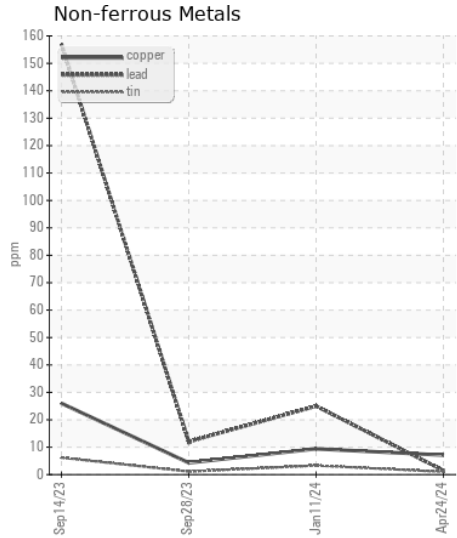
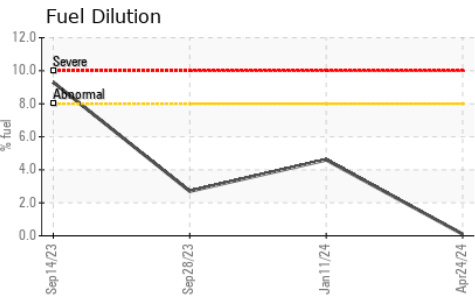
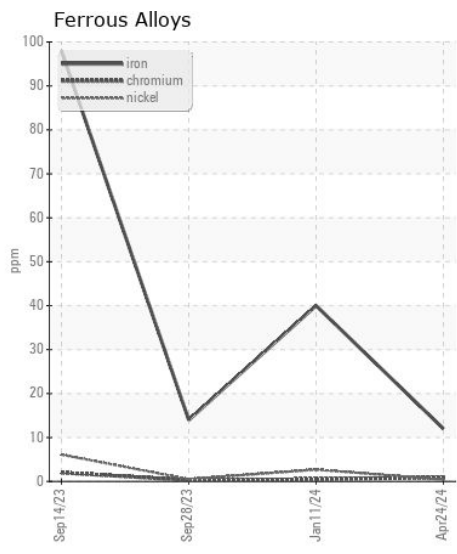
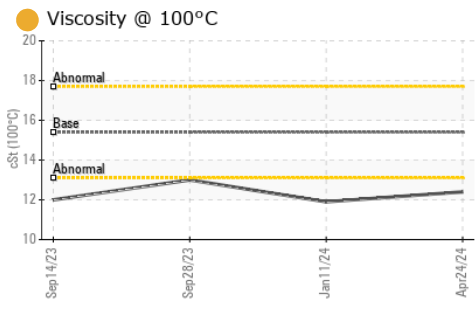
Tests indicate that there is no fuel present in the oil. There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>22	14	7	5
Potassium	ppm	ASTM D5185m	>20	3	38	13
Fuel	%	ASTM D3524	>8.0	0.1	▲ 4.6	2.7
Water		WC Method	>0.21	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.1	0.6	0.2
Nitration	Abs/cm	*ASTM D7624	>20	6.7	11.0	7.7
Sulfation	Abs/.1mm	*ASTM D7415	>30	17.2	25.8	20.6
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

FLUID CONDITION

The oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil. Confirm oil type.

Sodium	ppm	ASTM D5185m	>31	2	4	2
Boron	ppm	ASTM D5185m		250	74	245
Barium	ppm	ASTM D5185m		8	0	0
Molybdenum	ppm	ASTM D5185m		122	240	237
Manganese	ppm	ASTM D5185m		3	1	<1
Magnesium	ppm	ASTM D5185m		400	805	773
Calcium	ppm	ASTM D5185m		1867	1437	1457
Phosphorus	ppm	ASTM D5185m		805	893	897
Zinc	ppm	ASTM D5185m		915	1062	1100
Sulfur	ppm	ASTM D5185m		3571	3005	3126
Oxidation	Abs/.1mm	*ASTM D7414	>25	12.9	20.8	15.6
Base Number (BN)	mg KOH/g	ASTM D2896	13.6	8.2	6.8	9.7
Visc @ 100°C	cSt	ASTM D445	15.4	● 12.4	▲ 11.9	13.0



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : JR0214155 **Received** : 26 Apr 2024
Lab Number : 06161295 **Tested** : 30 Apr 2024
Unique Number : 10996718 **Diagnosed** : 30 Apr 2024 - Sean Felton
Test Package : CONST (Additional Tests: PercentFuel, TBN)

JRE - NEW BERN
 3816 MARTIN LUTHER KING BLVD
 NEW BERN, NC
 US 28562
 Contact: NEW BERN SHOP
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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)