



**James River
Equipment**

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area

[05W45990]

Machine Id

JOHN DEERE 624L 1DW624LTLLF708606

Component

Diesel Engine

Fluid

JOHN DEERE ENGINE OIL PLUS 50 II 15W40 (21 QTS)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		JR0211028	JR0203336	JR0195865
Sample Date		Client Info		20 Apr 2024	12 Feb 2024	01 Dec 2023
Machine Age	hrs	Client Info		8049	7517	7041
Oil Age	hrs	Client Info		532	476	541
Filter Age	hrs	Client Info		532	476	541
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>51	11	10	15
Chromium	ppm	ASTM D5185m	>11	<1	<1	<1
Nickel	ppm	ASTM D5185m	>5	0	<1	0
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>31	5	5	6
Lead	ppm	ASTM D5185m	>26	0	<1	0
Copper	ppm	ASTM D5185m	>26	1	<1	<1
Tin	ppm	ASTM D5185m	>4	0	<1	0
Vanadium	ppm	ASTM D5185m		0	<1	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

There is no indication of any contamination in the oil.

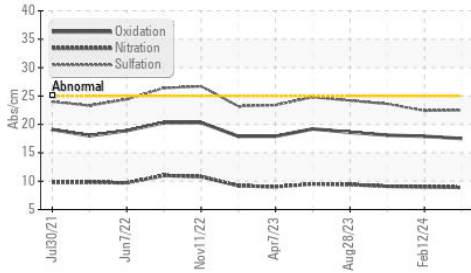
Silicon	ppm	ASTM D5185m	>22	6	6	9
Potassium	ppm	ASTM D5185m	>20	2	4	10
Fuel		WC Method	>2.1	<1.0	<1.0	<1.0
Water		WC Method	>0.21	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.4	0.4	0.5
Nitration	Abs/cm	*ASTM D7624	>20	8.9	9.0	9.1
Sulfation	Abs/.1mm	*ASTM D7415	>30	22.5	22.4	23.6
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

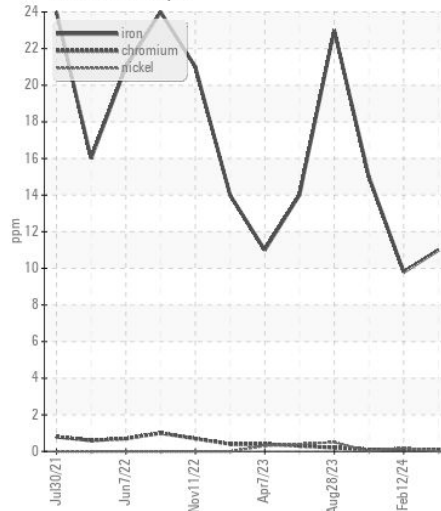
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m	>31	2	2	<1
Boron	ppm	ASTM D5185m		183	139	184
Barium	ppm	ASTM D5185m		0	0	3
Molybdenum	ppm	ASTM D5185m		226	181	261
Manganese	ppm	ASTM D5185m		<1	<1	0
Magnesium	ppm	ASTM D5185m		823	680	764
Calcium	ppm	ASTM D5185m		1432	1353	1411
Phosphorus	ppm	ASTM D5185m		888	829	823
Zinc	ppm	ASTM D5185m		1061	966	1027
Sulfur	ppm	ASTM D5185m		3345	2646	3118
Oxidation	Abs/.1mm	*ASTM D7414	>25	17.5	17.9	18.1
Base Number (BN)	mg KOH/g	ASTM D2896	13.6	8.2	8.0	8.0
Visc @ 100°C	cSt	ASTM D445	15.4	13.2	13.3	13.9

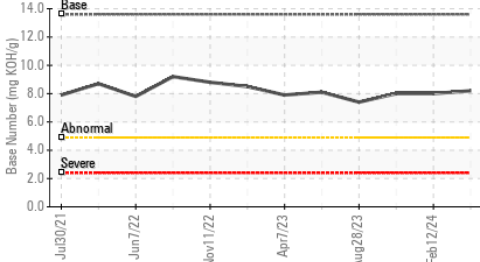
FT-IR (Direct Trend)



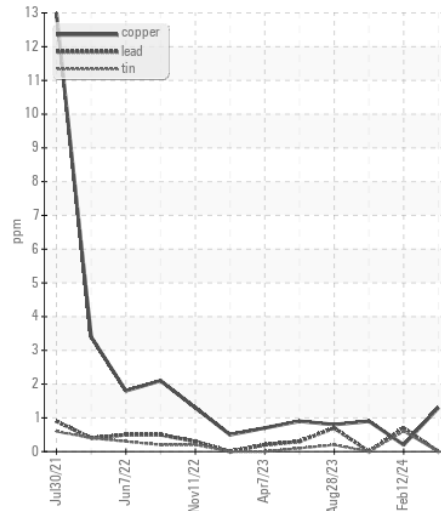
Ferrous Alloys



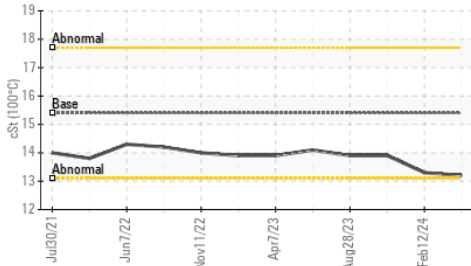
Base Number



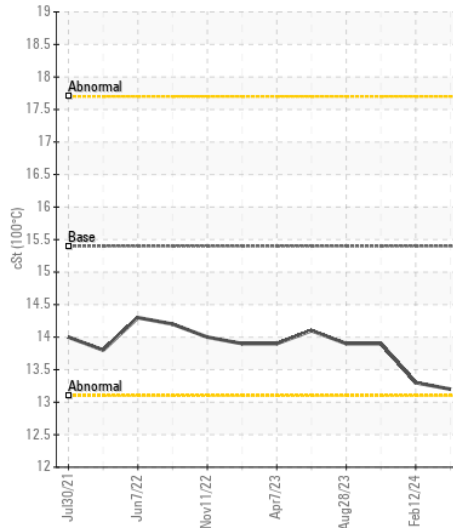
Non-ferrous Metals



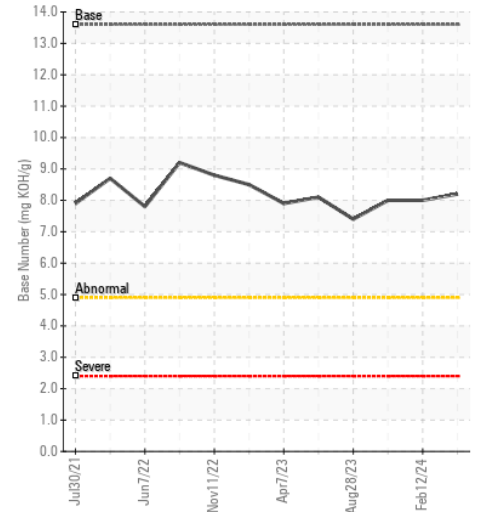
Viscosity @ 100°C



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513

Sample No. : JR0211028

Lab Number : 06158271

Unique Number : 10993694

Test Package : CONST (Additional Tests: TBN)

Received : 23 Apr 2024

Tested : 24 Apr 2024

Diagnosed : 24 Apr 2024 - Wes Davis

JRE - MANASSAS PARK

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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)