James River Equipment

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
JOHN DEERE 524 P 1DW524PAVPLX19355
Component
Diesel Engine
Fluid
{not provided} (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor. Please specify the brand, type, and viscosity of the oil on your next sample.

WEAR

All component wear rates are normal.

CONTAMINATION

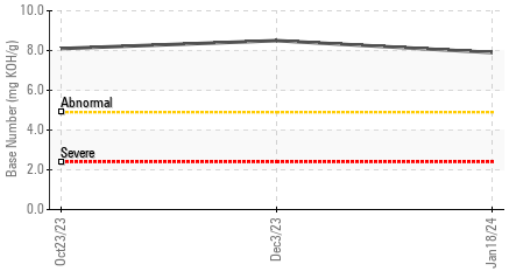
There is no indication of any contamination in the oil.

FLUID CONDITION

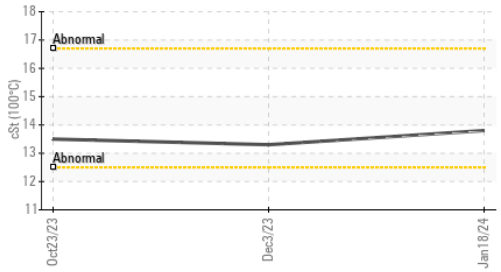
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		JR0194295	JR0194761	JR0187362
Sample Date		Client Info		18 Jan 2024	03 Dec 2023	23 Oct 2023
Machine Age	hrs	Client Info		2195	1506	992
Oil Age	hrs	Client Info		0	0	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		N/A	N/A	N/A
Filter Changed		Client Info		N/A	N/A	N/A
Sample Status				NORMAL	ABNORMAL	ABNORMAL
Iron	ppm	ASTM D5185m	>51	19	14	20
Chromium	ppm	ASTM D5185m	>11	<1	<1	<1
Nickel	ppm	ASTM D5185m	>5	2	1	1
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>31	3	4	4
Lead	ppm	ASTM D5185m	>26	<1	0	4
Copper	ppm	ASTM D5185m	>26	6	▲ 45	▲ 325
Tin	ppm	ASTM D5185m	>4	<1	<1	<1
Vanadium	ppm	ASTM D5185m		<1	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Silicon	ppm	ASTM D5185m	>22	7	6	8
Potassium	ppm	ASTM D5185m	>20	1	2	1
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	0.3	0.4
Nitration	Abs/cm	*ASTM D7624	>20	9.0	8.5	8.6
Sulfation	Abs/.1mm	*ASTM D7415	>30	23.8	22.1	21.7
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		202	242	209
Barium	ppm	ASTM D5185m		<1	3	0
Molybdenum	ppm	ASTM D5185m		274	260	258
Manganese	ppm	ASTM D5185m		<1	<1	1
Magnesium	ppm	ASTM D5185m		941	783	854
Calcium	ppm	ASTM D5185m		1512	1481	1485
Phosphorus	ppm	ASTM D5185m		968	844	882
Zinc	ppm	ASTM D5185m		1213	1062	1104
Sulfur	ppm	ASTM D5185m		3270	3468	2794
Oxidation	Abs/.1mm	*ASTM D7414	>25	19.1	17.0	16.8
Base Number (BN)	mg KOH/g	ASTM D2896		7.9	8.5	8.1
Visc @ 100°C	cSt	ASTM D445		13.8	13.3	13.5

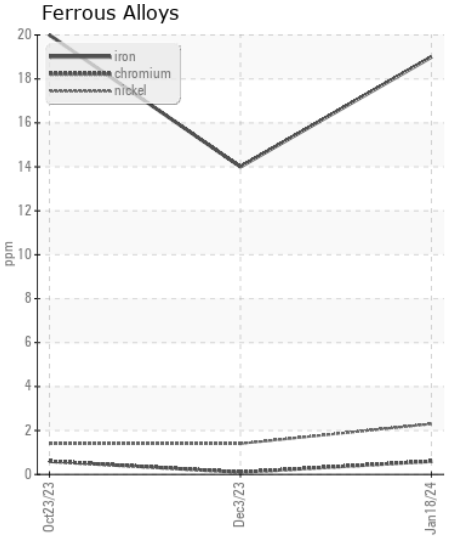
Base Number



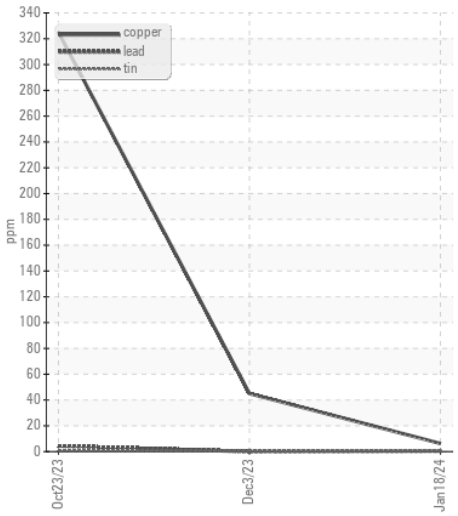
Viscosity @ 100°C



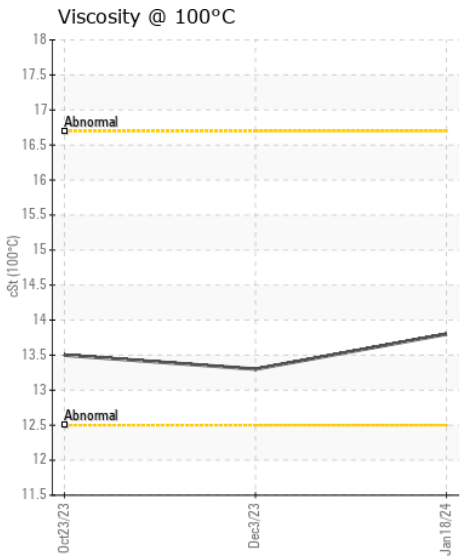
Ferrous Alloys



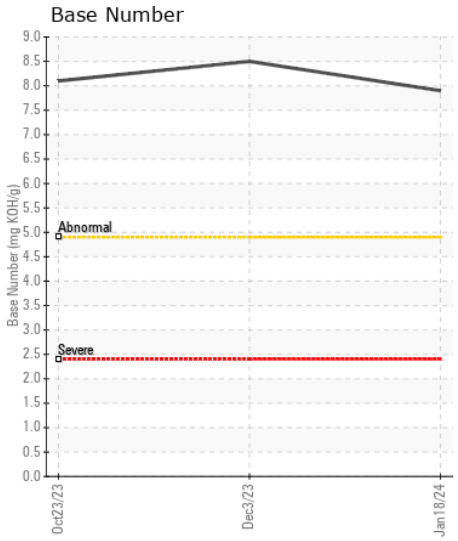
Non-ferrous Metals



Viscosity @ 100°C



Base Number



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : JR0194295 **Recieved** : 19 Jan 2024
Lab Number : 06065423 **Diagnosed** : 22 Jan 2024
Unique Number : 10836805 **Diagnostician** : Wes Davis
Test Package : CONST (Additional Tests: TBN)

Certificate L2367

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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