James River Equipment

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
JOHN DEERE 544K 1DW544KZCHF680278
Component
Diesel Engine
Fluid
JOHN DEERE ENGINE OIL PLUS 50 II 15W40 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

WEAR

All component wear rates are normal.

CONTAMINATION

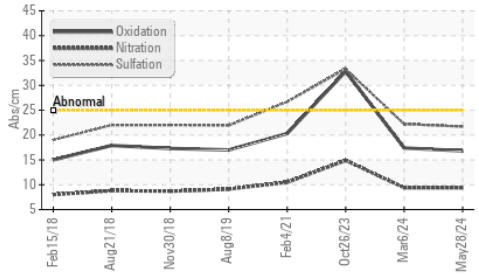
There is no indication of any contamination in the oil.

FLUID CONDITION

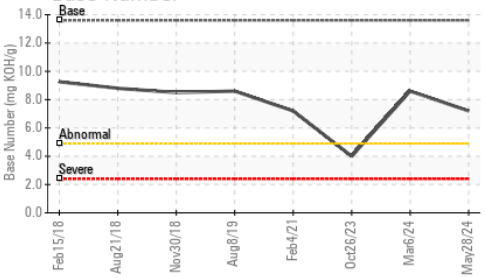
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		JR0211408	JR0199890	JR0180231
Sample Date		Client Info		28 May 2024	06 Mar 2024	26 Oct 2023
Machine Age	hrs	Client Info		7484	6960	6411
Oil Age	hrs	Client Info		0	0	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	ABNORMAL
Iron	ppm	ASTM D5185m	>51	9	19	▲ 113
Chromium	ppm	ASTM D5185m	>11	0	<1	4
Nickel	ppm	ASTM D5185m	>5	0	1	2
Titanium	ppm	ASTM D5185m		0	0	<1
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>31	5	6	8
Lead	ppm	ASTM D5185m	>26	<1	1	12
Copper	ppm	ASTM D5185m	>26	<1	<1	9
Tin	ppm	ASTM D5185m	>4	<1	1	3
Vanadium	ppm	ASTM D5185m		0	<1	<1
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Silicon	ppm	ASTM D5185m	>22	6	6	10
Potassium	ppm	ASTM D5185m	>20	1	3	0
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	0.2	0.3	1.1
Nitration	Abs/cm	*ASTM D7624	>20	9.4	9.4	14.9
Sulfation	Abs/.1mm	*ASTM D7415	>30	21.7	22.2	33.3
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	3	8
Boron	ppm	ASTM D5185m		136	216	28
Barium	ppm	ASTM D5185m		<1	0	4
Molybdenum	ppm	ASTM D5185m		163	236	247
Manganese	ppm	ASTM D5185m		<1	<1	3
Magnesium	ppm	ASTM D5185m		447	804	758
Calcium	ppm	ASTM D5185m		1757	1316	1266
Phosphorus	ppm	ASTM D5185m		974	879	874
Zinc	ppm	ASTM D5185m		1124	1083	945
Sulfur	ppm	ASTM D5185m		3888	2991	2404
Oxidation	Abs/.1mm	*ASTM D7414	>25	16.8	17.4	32.8
Base Number (BN)	mg KOH/g	ASTM D2896	13.6	7.2	8.6	4.0
Visc @ 100°C	cSt	ASTM D445	15.4	13.1	13.6	13.4

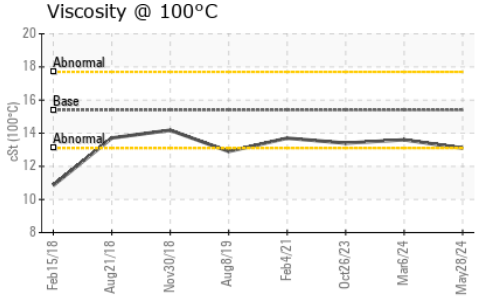
FT-IR (Direct Trend)



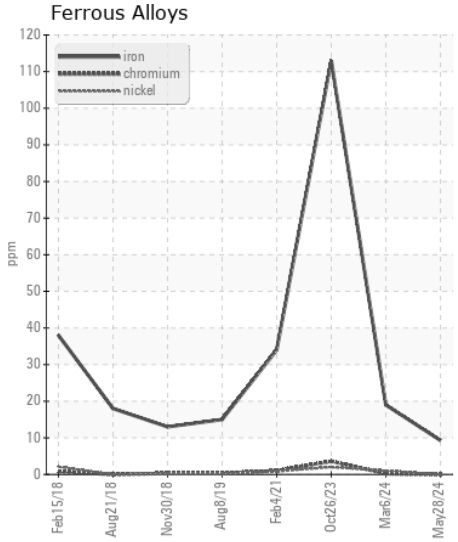
Base Number



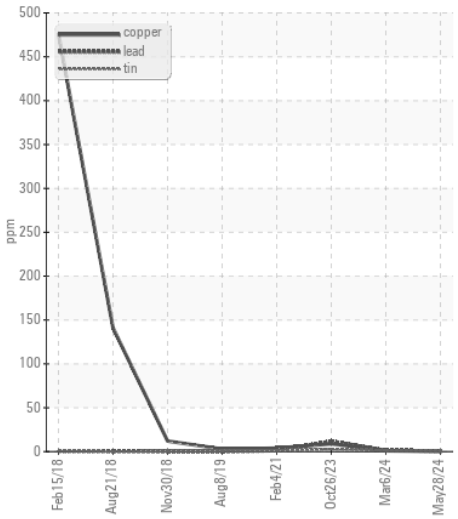
Viscosity @ 100°C



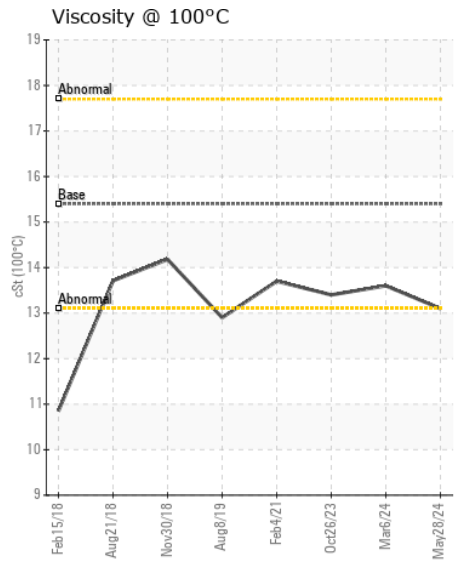
Ferrous Alloys



Non-ferrous Metals



Viscosity @ 100°C



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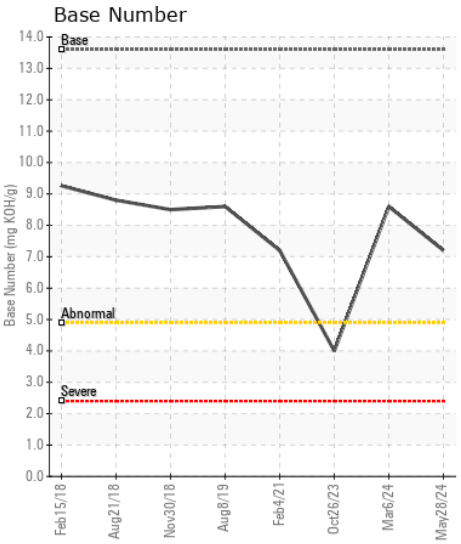

Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : JR0211408
Lab Number : 06195300
Unique Number : 11057423
Test Package : CONST (Additional Tests: TBN)

Received : 30 May 2024
Tested : 31 May 2024
Diagnosed : 31 May 2024 - Wes Davis

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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