



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
JOHN DEERE 544 P 1DW544PACPLZ16938

Component
Diesel Engine

Fluid
{not provided} (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		JR0223375	JR0194155	JR0174380
Sample Date		Client Info		30 Jun 2024	12 Nov 2023	06 Jul 2023
Machine Age	hrs	Client Info		1971	1041	530
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	MARGINAL	ABNORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>51	20	26	29
Chromium	ppm	ASTM D5185m	>11	<1	<1	<1
Nickel	ppm	ASTM D5185m	>5	2	4	2
Titanium	ppm	ASTM D5185m		<1	<1	0
Silver	ppm	ASTM D5185m	>3	0	<1	0
Aluminum	ppm	ASTM D5185m	>31	3	5	<1
Lead	ppm	ASTM D5185m	>26	0	<1	4
Copper	ppm	ASTM D5185m	>26	3	▲ 87	▲ 563
Tin	ppm	ASTM D5185m	>4	<1	1	2
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.

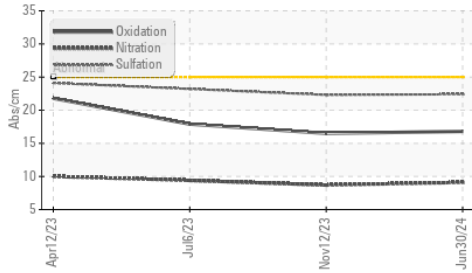
Silicon	ppm	ASTM D5185m	>22	7	10	11
Potassium	ppm	ASTM D5185m	>20	0	3	<1
Fuel		WC Method	>2.1	<1.0	<1.0	0.3
Water		WC Method	>0.21	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	0.0
Soot %	%	*ASTM D7844	>3	0.4	0.4	0.3
Nitration	Abs/cm	*ASTM D7624	>20	9.1	8.7	9.4
Sulfation	Abs/.1mm	*ASTM D7415	>30	22.4	22.3	23.2
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

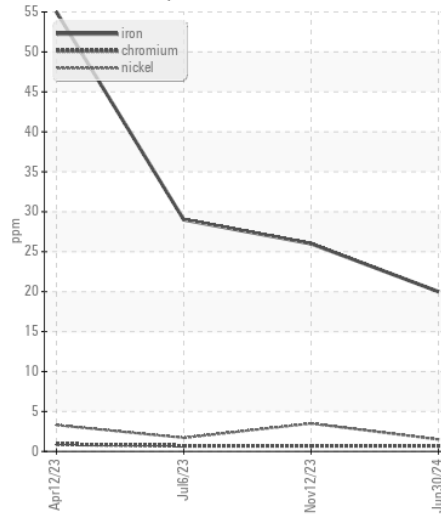
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m	>31	3	0	6
Boron	ppm	ASTM D5185m		176	253	244
Barium	ppm	ASTM D5185m		<1	1	0
Molybdenum	ppm	ASTM D5185m		251	301	255
Manganese	ppm	ASTM D5185m		<1	2	5
Magnesium	ppm	ASTM D5185m		897	931	848
Calcium	ppm	ASTM D5185m		1647	1712	1480
Phosphorus	ppm	ASTM D5185m		1013	1043	878
Zinc	ppm	ASTM D5185m		1227	1264	1047
Sulfur	ppm	ASTM D5185m		3851	3168	3238
Oxidation	Abs/.1mm	*ASTM D7414	>25	16.8	16.5	17.9
Base Number (BN)	mg KOH/g	ASTM D2896		8.5	8.2	8.7
Visc @ 100°C	cSt	ASTM D445		13.2	13.0	● 10.9

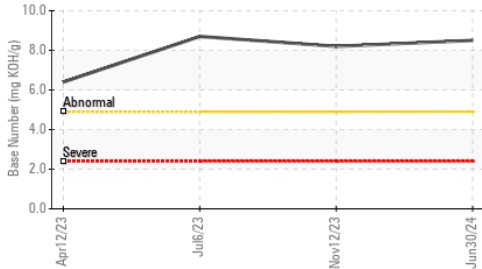
FT-IR (Direct Trend)



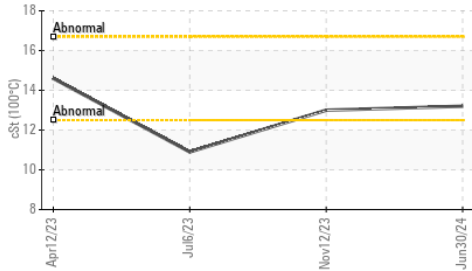
Ferrous Alloys



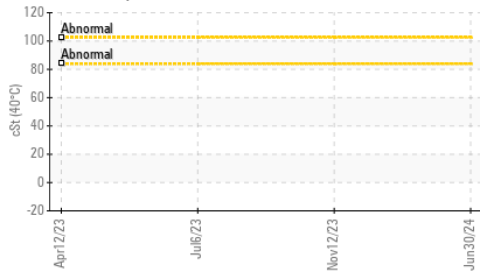
Base Number



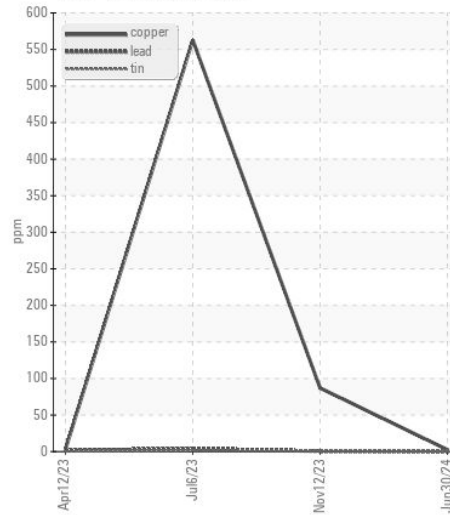
Viscosity @ 100°C



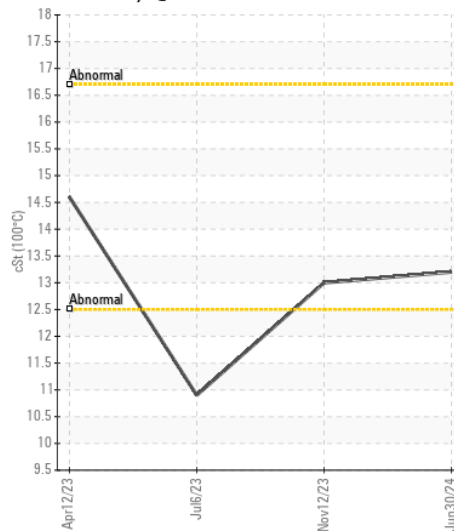
Viscosity @ 40°C



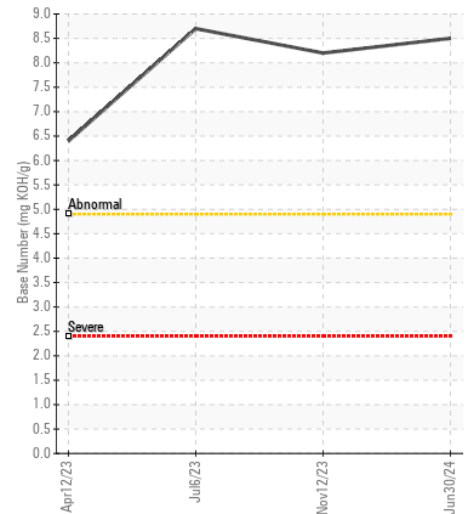
Non-ferrous Metals



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : JR0223375 **Received** : 01 Jul 2024
Lab Number : 06224400 **Tested** : 02 Jul 2024
Unique Number : 11102597 **Diagnosed** : 02 Jul 2024 - Jonathan Hester
Test Package : CONST (Additional Tests: KV40, TBN)

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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