



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
JOHN DEERE 624P 1DW624PAPNLZ15906

Component
Diesel Engine

Fluid
JOHN DEERE ENGINE OIL PLUS 50 II 15W40 (2 QTS)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		JR0219826	JR0198324	JR0170993
Sample Date		Client Info		07 Jul 2024	06 Feb 2024	12 Jul 2023
Machine Age	hrs	Client Info		1545	1065	493
Oil Age	hrs	Client Info		480	572	493
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		N/A	Changed	Changed
Filter Changed		Client Info		N/A	Changed	Changed
Sample Status				NORMAL	ABNORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>51	15	25	7
Chromium	ppm	ASTM D5185m	>11	<1	<1	<1
Nickel	ppm	ASTM D5185m	>5	1	▲ 11	2
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>31	3	5	2
Lead	ppm	ASTM D5185m	>26	<1	0	0
Copper	ppm	ASTM D5185m	>26	2	11	48
Tin	ppm	ASTM D5185m	>4	0	1	<1
Vanadium	ppm	ASTM D5185m		0	<1	<1
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.

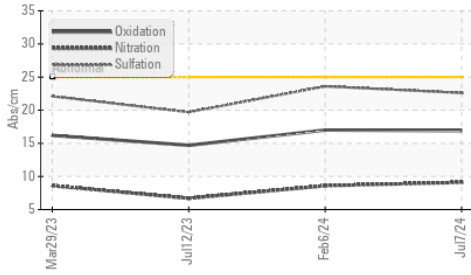
Silicon	ppm	ASTM D5185m	>22	6	7	6
Potassium	ppm	ASTM D5185m	>20	2	<1	<1
Fuel		WC Method	>2.1	<1.0	<1.0	<1.0
Water		WC Method	>0.21	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.3	0.4	0.1
Nitration	Abs/cm	*ASTM D7624	>20	9.1	8.6	6.7
Sulfation	Abs/.1mm	*ASTM D7415	>30	22.6	23.6	19.7
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

FLUID CONDITION

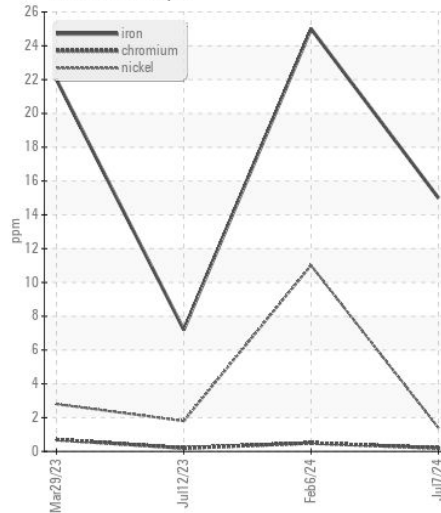
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m	>31	3	3	2
Boron	ppm	ASTM D5185m		183	189	333
Barium	ppm	ASTM D5185m		0	0	<1
Molybdenum	ppm	ASTM D5185m		251	246	267
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m		848	783	933
Calcium	ppm	ASTM D5185m		1569	1275	1587
Phosphorus	ppm	ASTM D5185m		956	861	1015
Zinc	ppm	ASTM D5185m		1135	1059	1209
Sulfur	ppm	ASTM D5185m		3527	2852	4130
Oxidation	Abs/.1mm	*ASTM D7414	>25	16.9	17.0	14.7
Base Number (BN)	mg KOH/g	ASTM D2896	13.6	8.1	7.4	10.0
Visc @ 100°C	cSt	ASTM D445	15.4	13.2	13.2	13.6

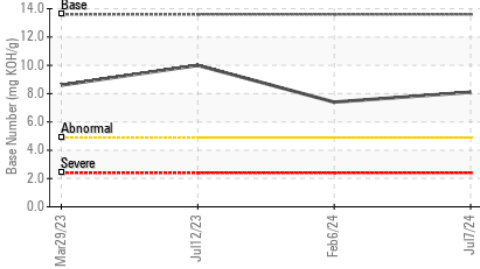
FT-IR (Direct Trend)



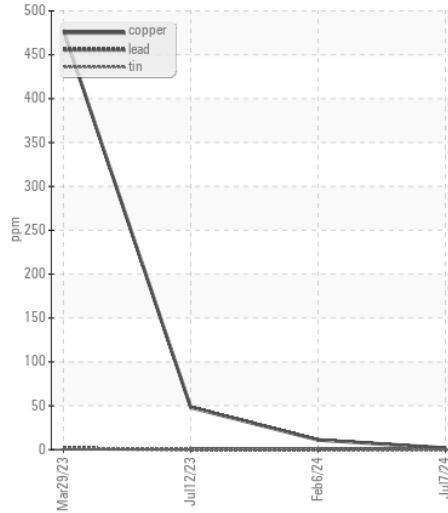
Ferrous Alloys



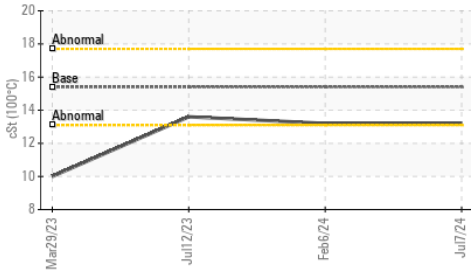
Base Number



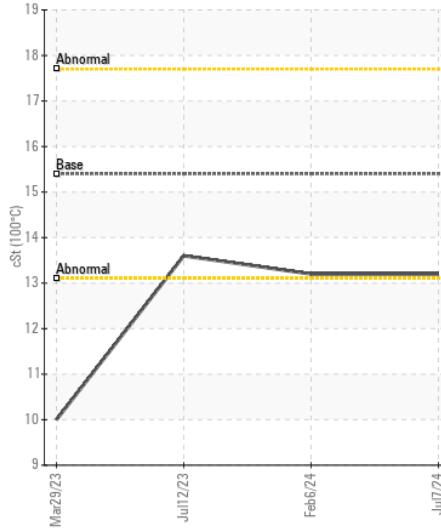
Non-ferrous Metals



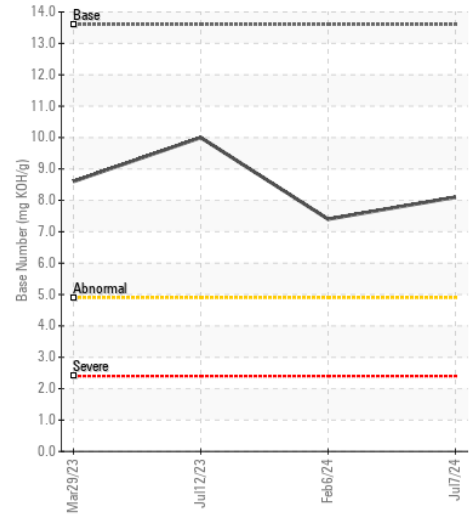
Viscosity @ 100°C



Viscosity @ 100°C



Base Number



Certificate L2367

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

Sample No. : JR0219826

Lab Number : 06231273

Unique Number : 11114766

Test Package : CONST (Additional Tests: TBN)

Received : 09 Jul 2024

Tested : 10 Jul 2024

Diagnosed : 10 Jul 2024 - Wes Davis

JRE - CHARLOTTE

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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)