



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
JOHN DEERE 624 P 1DW624PAKPLZ17188

Component
Diesel Engine

Fluid
JOHN DEERE ENGINE OIL PLUS 50 II 15W40 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		JR0225124	JR0164514	---
Sample Date		Client Info		15 Jul 2024	18 Jul 2023	---
Machine Age	hrs	Client Info		1213	456	---
Oil Age	hrs	Client Info		0	0	---
Filter Age	hrs	Client Info		0	0	---
Oil Changed		Client Info		Changed	Changed	---
Filter Changed		Client Info		Changed	Changed	---
Sample Status				NORMAL	ATTENTION	---

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>51	23	37	---
Chromium	ppm	ASTM D5185m	>11	<1	1	---
Nickel	ppm	ASTM D5185m	>5	5	7	---
Titanium	ppm	ASTM D5185m		<1	<1	---
Silver	ppm	ASTM D5185m	>3	0	0	---
Aluminum	ppm	ASTM D5185m	>31	3	3	---
Lead	ppm	ASTM D5185m	>26	0	1	---
Copper	ppm	ASTM D5185m	>26	3	32	---
Tin	ppm	ASTM D5185m	>4	0	3	---
Vanadium	ppm	ASTM D5185m		0	<1	---
White Metal	scalar	*Visual	NONE	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	---

CONTAMINATION

There is no indication of any contamination in the oil.

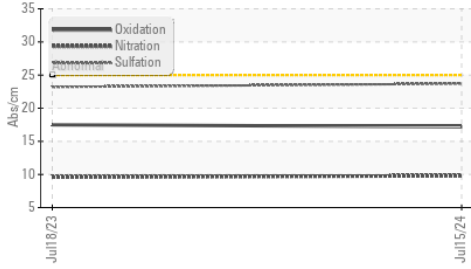
Silicon	ppm	ASTM D5185m	>22	7	13	---
Potassium	ppm	ASTM D5185m	>20	<1	2	---
Fuel		WC Method	>2.1	<1.0	0.6	---
Water		WC Method	>0.21	NEG	NEG	---
Glycol		WC Method		NEG	NEG	---
Soot %	%	*ASTM D7844	>3	0.5	0.4	---
Nitration	Abs/cm	*ASTM D7624	>20	9.8	9.6	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	23.7	23.2	---
Silt	scalar	*Visual	NONE	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	---
Appearance	scalar	*Visual	NORML	NORML	NORML	---
Odor	scalar	*Visual	NORML	NORML	NORML	---
Emulsified Water	scalar	*Visual	>0.21	NEG	NEG	---

FLUID CONDITION

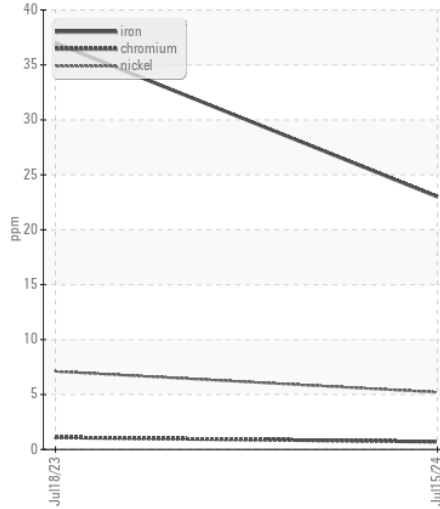
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m	>31	4	7	---
Boron	ppm	ASTM D5185m		109	193	---
Barium	ppm	ASTM D5185m		<1	0	---
Molybdenum	ppm	ASTM D5185m		212	264	---
Manganese	ppm	ASTM D5185m		1	5	---
Magnesium	ppm	ASTM D5185m		728	890	---
Calcium	ppm	ASTM D5185m		1671	1514	---
Phosphorus	ppm	ASTM D5185m		897	916	---
Zinc	ppm	ASTM D5185m		1071	1116	---
Sulfur	ppm	ASTM D5185m		3510	3536	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	17.2	17.5	---
Base Number (BN)	mg KOH/g	ASTM D2896	13.6	7.4	8.8	---
Visc @ 100°C	cSt	ASTM D445	15.4	13.2	11.1	---

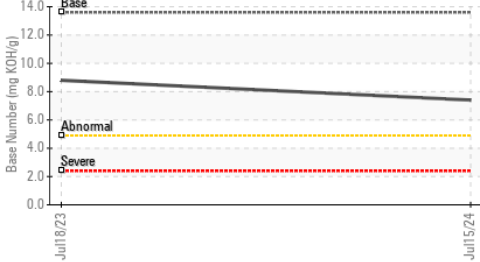
FT-IR (Direct Trend)



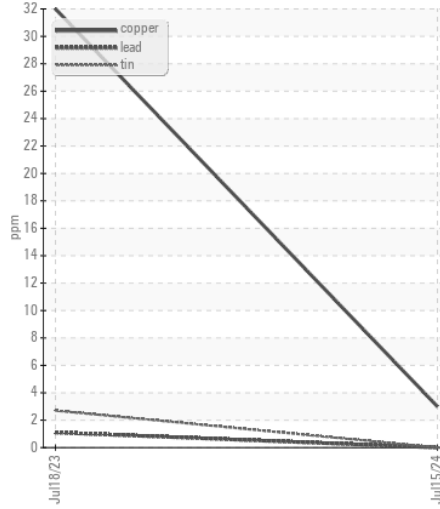
Ferrous Alloys



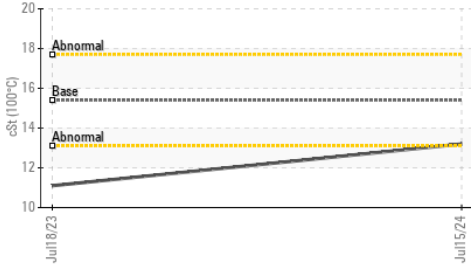
Base Number



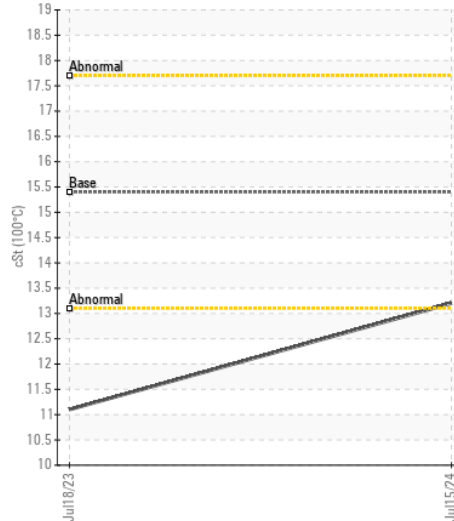
Non-ferrous Metals



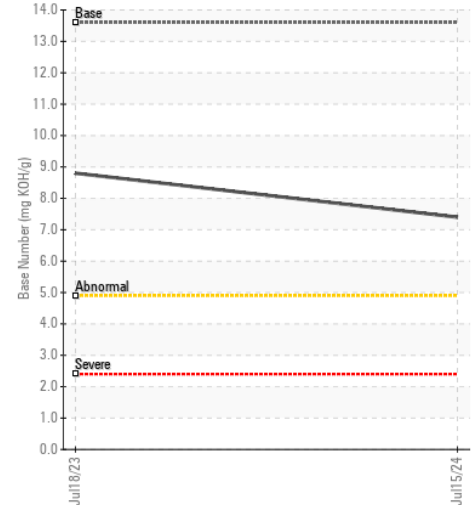
Viscosity @ 100°C



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : JR0225124 **Received** : 17 Jul 2024
Lab Number : 06238929 **Tested** : 18 Jul 2024
Unique Number : 11127763 **Diagnosed** : 18 Jul 2024 - Wes Davis
Test Package : CONST (Additional Tests: TBN)

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 US 23005
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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)