



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Area

BURKEVILLE

Machine Id

JOHN DEERE 300D M01-0305 1DW300DXECE650170

Component

Diesel Engine

Fluid

JOHN DEERE ENGINE OIL PLUS 50 II 15W40 (8 GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		JR0211861	JR0124849	JR0124857
Sample Date		Client Info		02 Jul 2024	01 May 2024	01 May 2024
Machine Age	hrs	Client Info		12271	12041	760
Oil Age	hrs	Client Info		0	190	261
Filter Age	hrs	Client Info		0	190	261
Oil Changed		Client Info		Changed	N/A	Not Changd
Filter Changed		Client Info		Changed	Not Changd	Not Changd
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>51	39	25	24
Chromium	ppm	ASTM D5185m	>11	<1	<1	<1
Nickel	ppm	ASTM D5185m	>5	<1	0	10
Titanium	ppm	ASTM D5185m		0	0	<1
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>31	4	3	6
Lead	ppm	ASTM D5185m	>26	0	<1	<1
Copper	ppm	ASTM D5185m	>26	0	0	4
Tin	ppm	ASTM D5185m	>4	0	<1	1
Vanadium	ppm	ASTM D5185m		<1	<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.

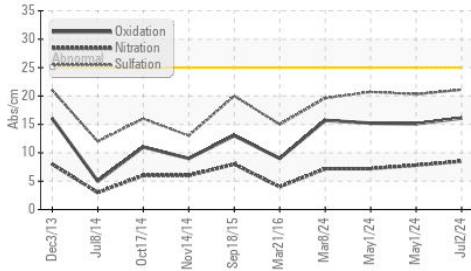
Silicon	ppm	ASTM D5185m	>22	7	7	8
Potassium	ppm	ASTM D5185m	>20	2	<1	8
Fuel		WC Method	>2.1	<1.0	<1.0	<1.0
Water		WC Method	>0.21	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.3	0.2	0.2
Nitration	Abs/cm	*ASTM D7624	>20	8.5	7.8	7.2
Sulfation	Abs/.1mm	*ASTM D7415	>30	21.1	20.3	20.7
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

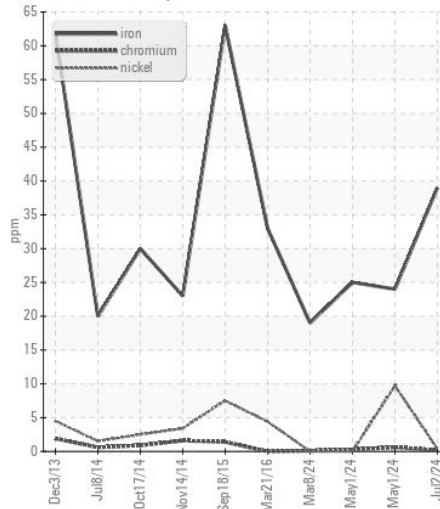
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m	>31	2	<1	0
Boron	ppm	ASTM D5185m		189	255	300
Barium	ppm	ASTM D5185m		0	<1	3
Molybdenum	ppm	ASTM D5185m		207	240	265
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m		858	881	785
Calcium	ppm	ASTM D5185m		1569	1784	1404
Phosphorus	ppm	ASTM D5185m		1013	1112	950
Zinc	ppm	ASTM D5185m		1231	1336	1034
Sulfur	ppm	ASTM D5185m		3986	4511	3292
Oxidation	Abs/.1mm	*ASTM D7414	>25	16.1	15.1	15.2
Base Number (BN)	mg KOH/g	ASTM D2896	13.6	9.0	8.9	9.4
Visc @ 100°C	cSt	ASTM D445	15.4	13.4	13.6	12.6

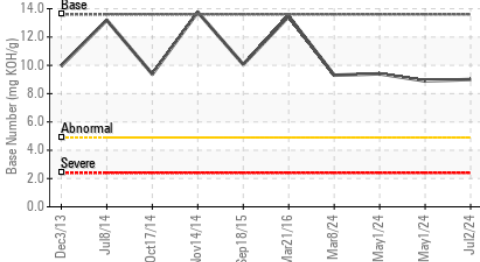
FT-IR (Direct Trend)



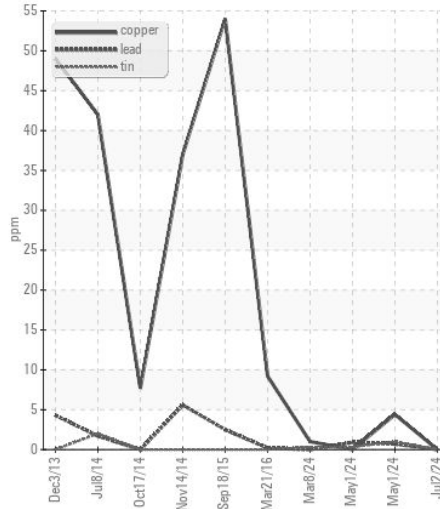
Ferrous Alloys



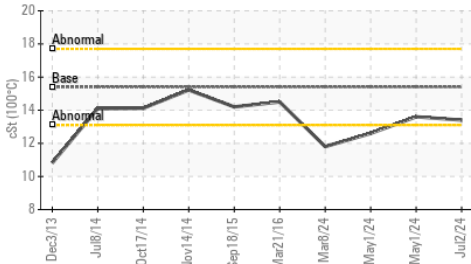
Base Number



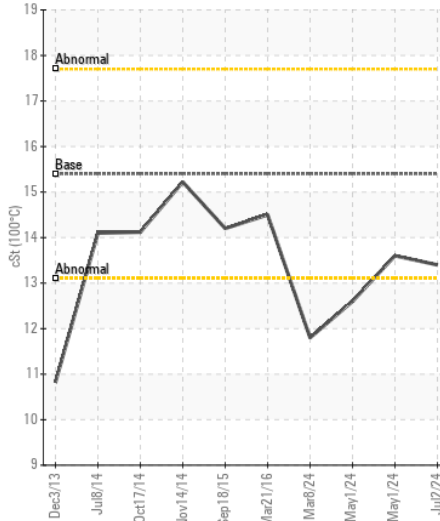
Non-ferrous Metals



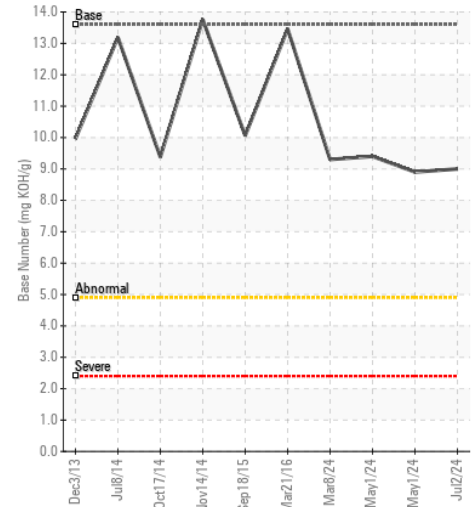
Viscosity @ 100°C



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : JR0211861 **Received** : 05 Jul 2024
Lab Number : 06228234 **Tested** : 08 Jul 2024
Unique Number : 11111727 **Diagnosed** : 08 Jul 2024 - Wes Davis
Test Package : CONST (Additional Tests: 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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