



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	ABNORMAL



Machine Id
JOHN DEERE 744K 1DW744KXCJF689230

Component
Diesel Engine

Fluid
JOHN DEERE ENGINE OIL PLUS 50 II 15W40 (36 QTS)

RECOMMENDATION

Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		JR0203066	JR0190050	JR0176108
Sample Date		Client Info		21 Feb 2024	19 Oct 2023	05 Jul 2023
Machine Age	hrs	Client Info		4983	4438	3946
Oil Age	hrs	Client Info		545	0	490
Filter Age	hrs	Client Info		545	0	490
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				ABNORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>51	40	25	27
Chromium	ppm	ASTM D5185m	>11	<1	<1	<1
Nickel	ppm	ASTM D5185m	>5	<1	0	0
Titanium	ppm	ASTM D5185m		0	<1	0
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>31	4	5	4
Lead	ppm	ASTM D5185m	>26	<1	<1	0
Copper	ppm	ASTM D5185m	>26	1	1	2
Tin	ppm	ASTM D5185m	>4	1	0	<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

Fuel content negligible. There is no indication of any contamination in the oil.

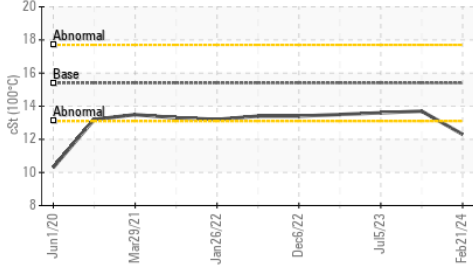
Silicon	ppm	ASTM D5185m	>22	6	7	8
Potassium	ppm	ASTM D5185m	>20	0	5	3
Fuel	%	ASTM D3524	>2.1	0.2	<1.0	<1.0
Water		WC Method	>0.21	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.3	0.4	0.4
Nitration	Abs/cm	*ASTM D7624	>20	7.1	7.5	8.4
Sulfation	Abs/.1mm	*ASTM D7415	>30	21.1	20.7	22.2
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

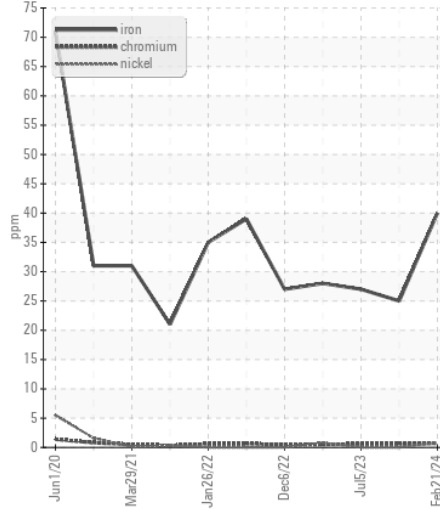
The oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil. Confirm oil type.

Sodium	ppm	ASTM D5185m	>31	1	2	1
Boron	ppm	ASTM D5185m		188	261	276
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		198	267	257
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m		660	842	876
Calcium	ppm	ASTM D5185m		1732	1553	1510
Phosphorus	ppm	ASTM D5185m		889	912	948
Zinc	ppm	ASTM D5185m		1061	1156	1177
Sulfur	ppm	ASTM D5185m		3009	3227	3926
Oxidation	Abs/.1mm	*ASTM D7414	>25	14.5	14.8	15.9
Base Number (BN)	mg KOH/g	ASTM D2896	13.6	8.7	8.3	9.3
Visc @ 100°C	cSt	ASTM D445	15.4	▲ 12.3	13.7	13.6

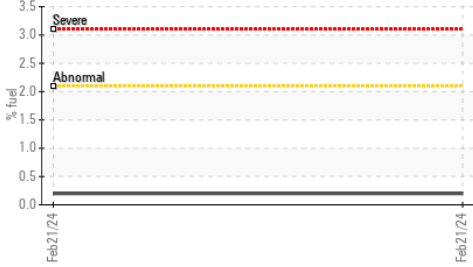
▲ Viscosity @ 100°C



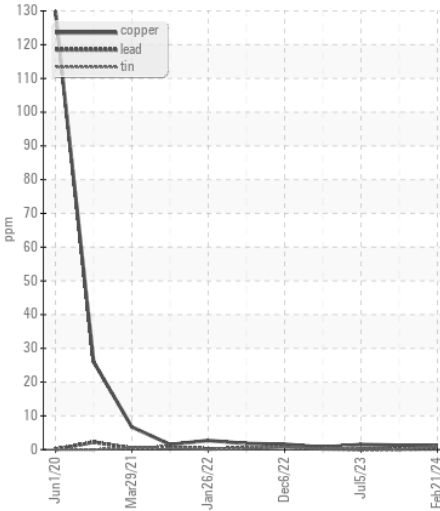
Ferrous Alloys



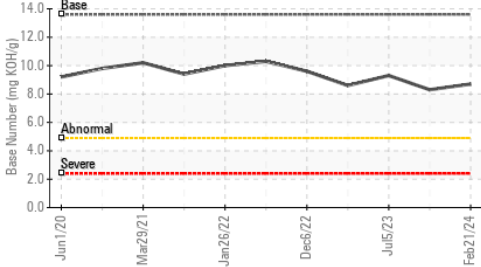
Fuel Dilution



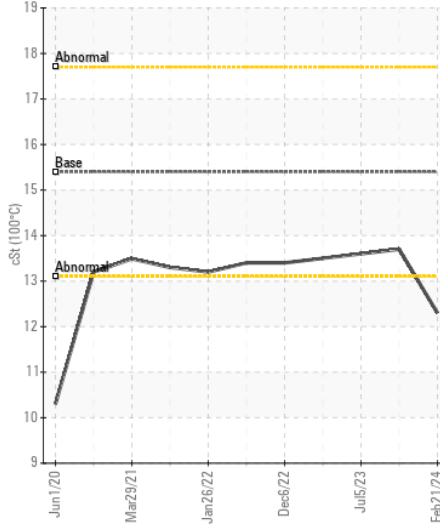
Non-ferrous Metals



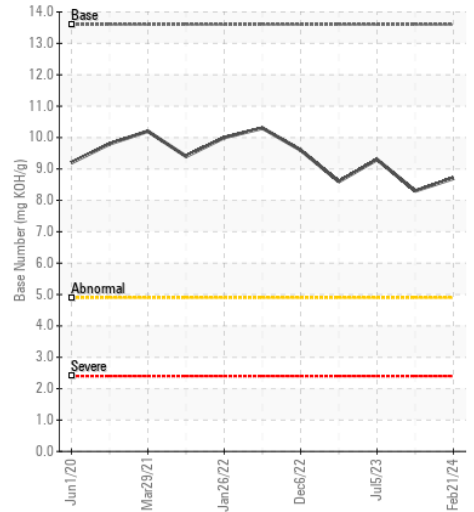
Base Number



▲ Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : JR0203066 **Received** : 22 Feb 2024
Lab Number : 06097406 **Tested** : 26 Feb 2024
Unique Number : 10890259 **Diagnosed** : 26 Feb 2024 - Sean Felton
Test Package : CONST (Additional Tests: FuelDilution, PercentFuel, TBN)

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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)