



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area
BOSCOBEL [W49780]
 Machine Id
JOHN DEERE 944K M02-0891 1DW944KXVHE684670
 Component
Diesel Engine
 Fluid
JOHN DEERE ENGINE OIL PLUS 50 II 15W40 (11 GAL)

RECOMMENDATION

No corrective action is recommended at this time. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		JR0181076	JR0124628	JR0164736
Sample Date		Client Info		12 Feb 2024	05 Feb 2024	01 Aug 2023
Machine Age	hrs	Client Info		9069	8853	7978
Oil Age	hrs	Client Info		200	500	500
Filter Age	hrs	Client Info		200	500	500
Oil Changed		Client Info		Not Changd	Changed	Changed
Filter Changed		Client Info		Not Changd	Changed	Changed
Sample Status				NORMAL	ATTENTION	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>51	13	22	15
Chromium	ppm	ASTM D5185m	>11	<1	<1	<1
Nickel	ppm	ASTM D5185m	>5	<1	0	0
Titanium	ppm	ASTM D5185m		<1	<1	<1
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>31	3	2	2
Lead	ppm	ASTM D5185m	>26	5	12	21
Copper	ppm	ASTM D5185m	>26	4	6	4
Tin	ppm	ASTM D5185m	>4	<1	<1	<1
Vanadium	ppm	ASTM D5185m		0	0	<1
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

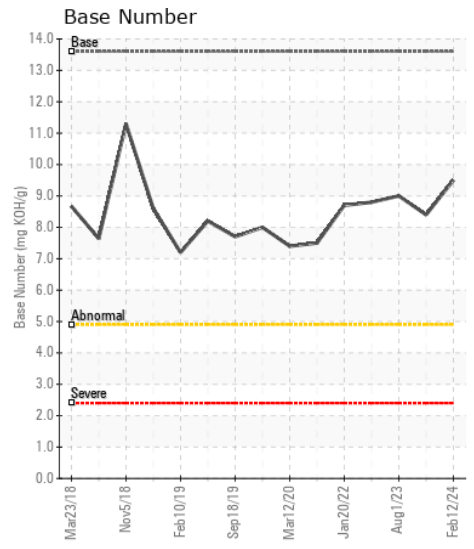
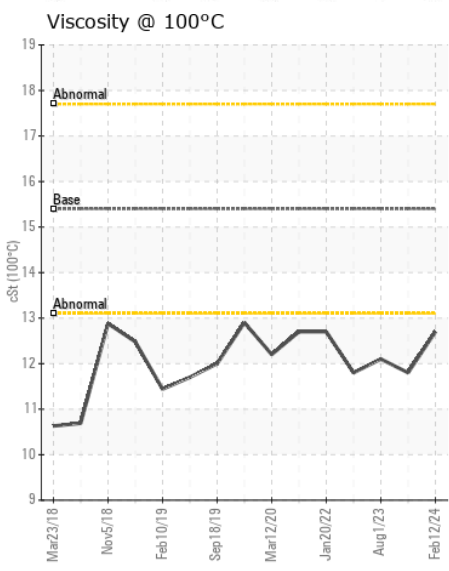
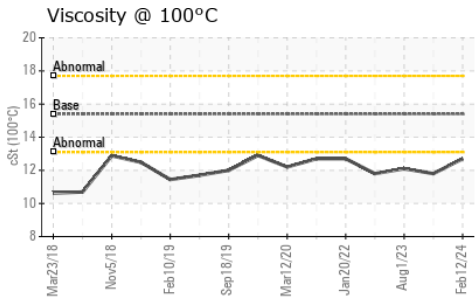
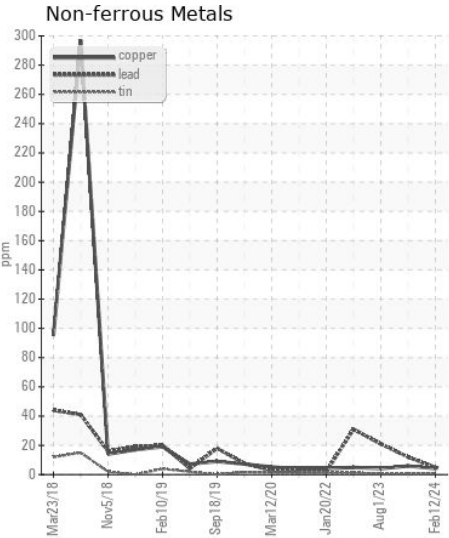
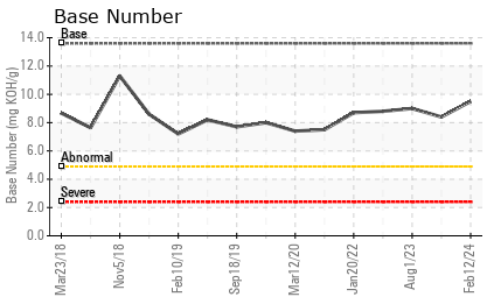
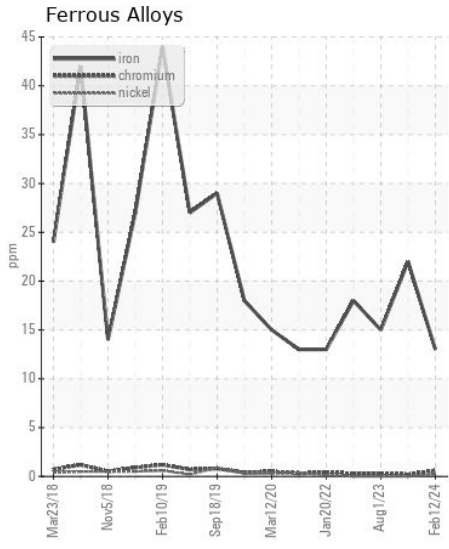
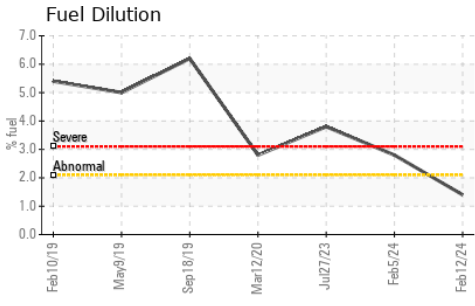
Fuel content negligible. There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>22	8	5	4
Potassium	ppm	ASTM D5185m	>20	2	3	0
Fuel	%	ASTM D3524	>2.1	1.4	2.8	<1.0
Water		WC Method	>0.21	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.4	0.9	0.8
Nitration	Abs/cm	*ASTM D7624	>20	7.0	9.7	8.5
Sulfation	Abs/.1mm	*ASTM D7415	>30	19.0	19.9	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	7	2	6
Boron	ppm	ASTM D5185m		127	31	42
Barium	ppm	ASTM D5185m		12	5	0
Molybdenum	ppm	ASTM D5185m		91	68	64
Manganese	ppm	ASTM D5185m		0	0	<1
Magnesium	ppm	ASTM D5185m		1548	1085	1045
Calcium	ppm	ASTM D5185m		1339	944	1006
Phosphorus	ppm	ASTM D5185m		1552	894	987
Zinc	ppm	ASTM D5185m		1741	1233	1216
Sulfur	ppm	ASTM D5185m		5736	3123	3614
Oxidation	Abs/.1mm	*ASTM D7414	>25	14.4	15.8	14.8
Base Number (BN)	mg KOH/g	ASTM D2896	13.6	9.5	8.4	9.0
Visc @ 100°C	cSt	ASTM D445	15.4	12.7	▲ 11.8	12.1



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : JR0181076 **Received** : 14 Feb 2024
Lab Number : 06088624 **Tested** : 19 Feb 2024
Unique Number : 10876069 **Diagnosed** : 19 Feb 2024 - Doug Bogart
Test Package : CONST (Additional Tests: FuelDilution, PercentFuel, TBN)

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Certificate L2367
 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)