



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Machine Id
JOHN DEERE 410E-II 1DW410ELCMF712054
 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		JR0138437	JR0174271	JR0174200
Sample Date		Client Info		15 Apr 2024	09 Oct 2023	12 Jun 2023
Machine Age	hrs	Client Info		2870	2499	1973
Oil Age	hrs	Client Info		300	0	0
Filter Age	hrs	Client Info		300	0	0
Oil Changed		Client Info		Changed	N/A	N/A
Filter Changed		Client Info		N/A	N/A	N/A
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>51	10	19	13
Chromium	ppm	ASTM D5185m	>11	<1	<1	<1
Nickel	ppm	ASTM D5185m	>5	2	3	<1
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>31	6	5	4
Lead	ppm	ASTM D5185m	>26	1	8	5
Copper	ppm	ASTM D5185m	>26	6	10	5
Tin	ppm	ASTM D5185m	>4	<1	2	1
Vanadium	ppm	ASTM D5185m		0	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

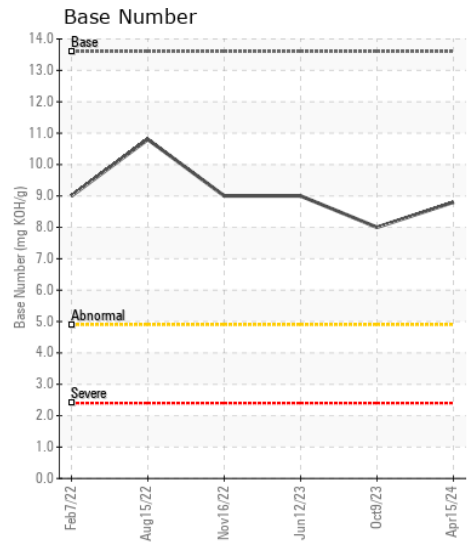
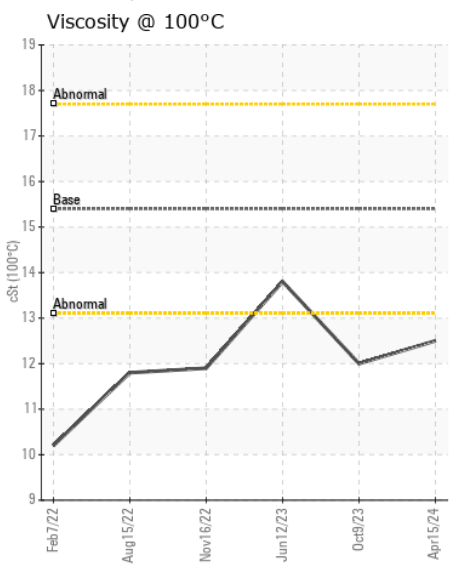
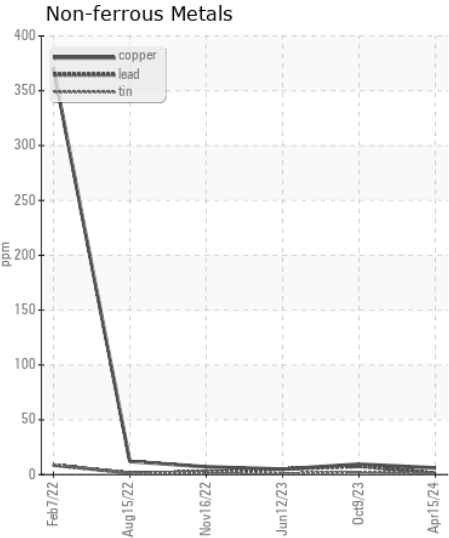
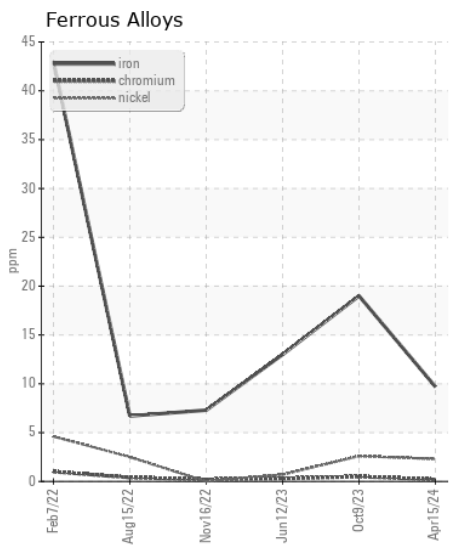
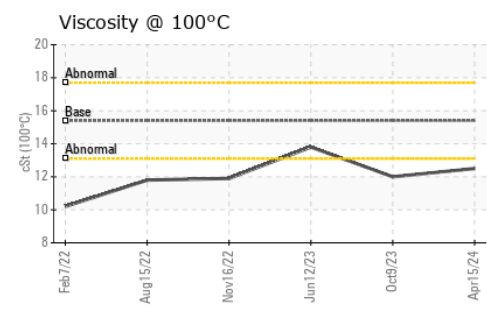
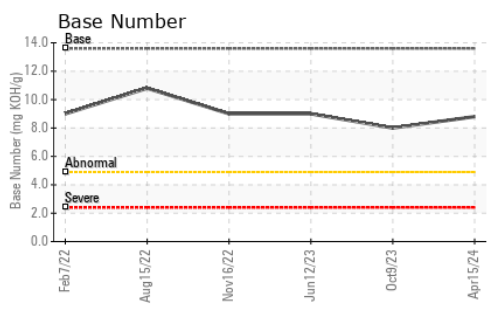
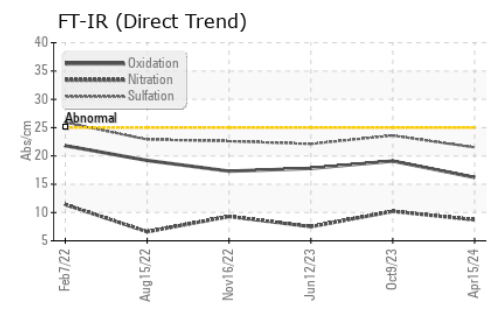
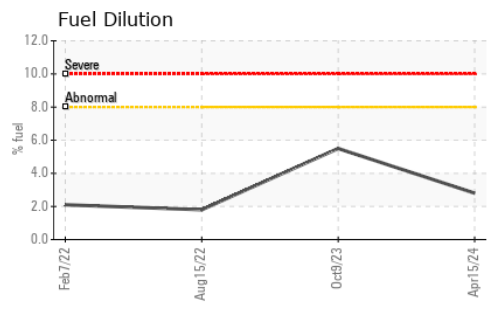
Fuel content negligible. There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>22	7	8	9
Potassium	ppm	ASTM D5185m	>20	3	0	4
Fuel	%	ASTM D3524	>8.0	2.8	5.5	<1.0
Water		WC Method	>0.21	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.3	0.4	0.2
Nitration	Abs/cm	*ASTM D7624	>20	8.7	10.2	7.5
Sulfation	Abs/.1mm	*ASTM D7415	>30	21.5	23.6	22.1
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	4	5	3
Boron	ppm	ASTM D5185m		203	85	212
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		244	234	230
Manganese	ppm	ASTM D5185m		0	<1	<1
Magnesium	ppm	ASTM D5185m		765	795	818
Calcium	ppm	ASTM D5185m		1454	1478	1512
Phosphorus	ppm	ASTM D5185m		964	836	881
Zinc	ppm	ASTM D5185m		1085	1055	1085
Sulfur	ppm	ASTM D5185m		2968	2773	3615
Oxidation	Abs/.1mm	*ASTM D7414	>25	16.2	19.1	17.8
Base Number (BN)	mg KOH/g	ASTM D2896	13.6	8.8	8.0	9.0
Visc @ 100°C	cSt	ASTM D445	15.4	12.5	12.0	13.8



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : JR0138437 **Received** : 17 Apr 2024
Lab Number : 06151730 **Tested** : 22 Apr 2024
Unique Number : 10981808 **Diagnosed** : 22 Apr 2024 - Jonathan Hester
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)