



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	MARGINAL
FLUID CONDITION	NORMAL

Area
Store 9 - Marietta [RO#140448]
Machine Id
JOHN DEERE 370E 1DW370ETPKF694464
Component
Diesel Engine
Fluid
JOHN DEERE ENGINE OIL PLUS 50 II 15W40 (11 GAL)

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		LEC0041497	LEC0038163	LEC0032575
Sample Date		Client Info		22 Jun 2023	03 Apr 2023	03 Aug 2022
Machine Age	hrs	Client Info		2693	2182	1719
Oil Age	hrs	Client Info		511	463	675
Filter Age	hrs	Client Info		511	463	675
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				MARGINAL	ABNORMAL	ABNORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>51	15	16	22
Chromium	ppm	ASTM D5185m	>11	<1	1	<1
Nickel	ppm	ASTM D5185m	>5	<1	<1	1
Titanium	ppm	ASTM D5185m		0	0	<1
Silver	ppm	ASTM D5185m	>3	0	0	<1
Aluminum	ppm	ASTM D5185m	>31	4	8	5
Lead	ppm	ASTM D5185m	>26	4	3	9
Copper	ppm	ASTM D5185m	>26	16	16	34
Tin	ppm	ASTM D5185m	>4	3	3	6
Vanadium	ppm	ASTM D5185m		0	<1	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

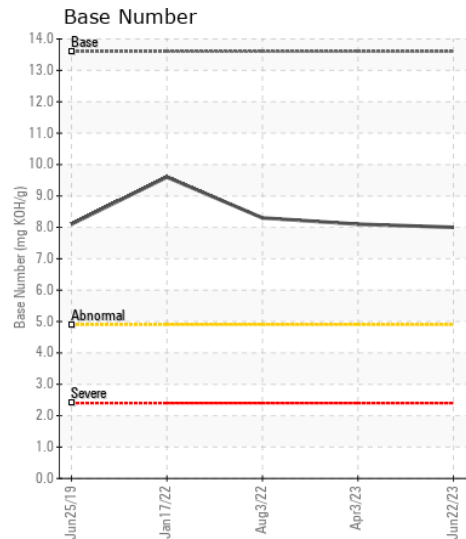
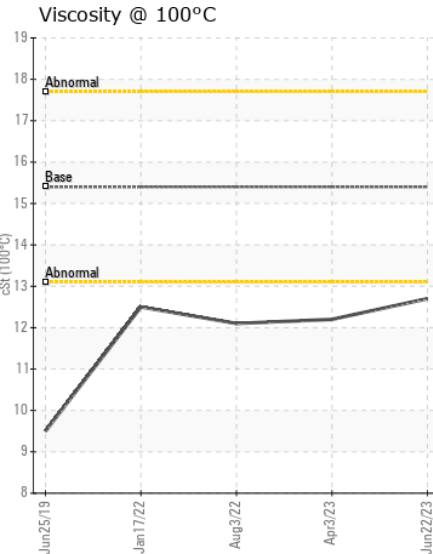
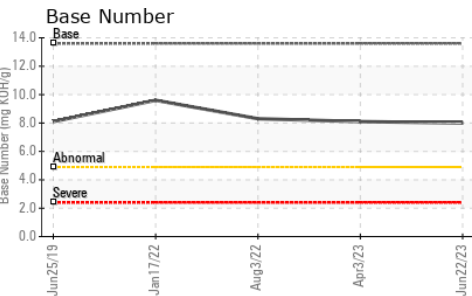
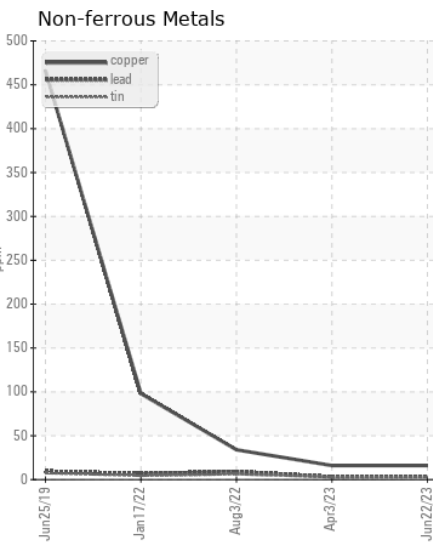
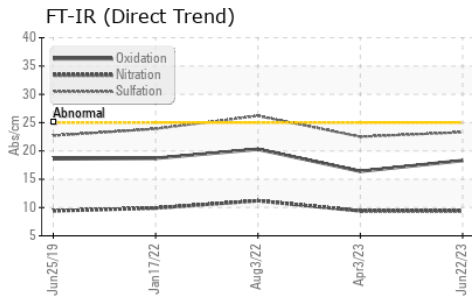
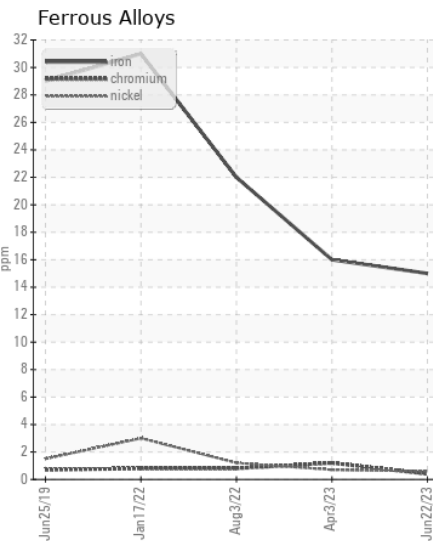
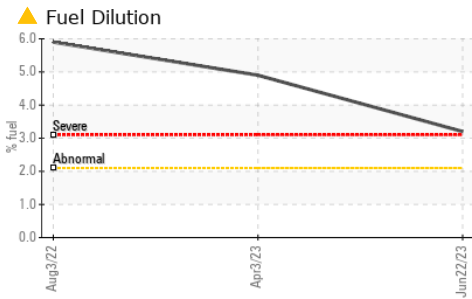
Light fuel dilution occurring.

Silicon	ppm	ASTM D5185m	>120	6	7	6
Potassium	ppm	ASTM D5185m	>20	3	3	<1
Fuel	%	ASTM D3524	>2.1	▲ 3.2	▲ 4.9	▲ 5.9
Water		WC Method	>0.21	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.4	0.4	0.4
Nitration	Abs/cm	*ASTM D7624	>20	9.4	9.4	11.2
Sulfation	Abs/.1mm	*ASTM D7415	>30	23.3	22.5	26.2
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 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	0	4	3
Boron	ppm	ASTM D5185m		151	168	84
Barium	ppm	ASTM D5185m		0	0	<1
Molybdenum	ppm	ASTM D5185m		261	233	227
Manganese	ppm	ASTM D5185m		<1	1	<1
Magnesium	ppm	ASTM D5185m		731	813	648
Calcium	ppm	ASTM D5185m		1481	1459	1422
Phosphorus	ppm	ASTM D5185m		888	861	716
Zinc	ppm	ASTM D5185m		1053	1043	922
Sulfur	ppm	ASTM D5185m		3118	3689	2837
Oxidation	Abs/.1mm	*ASTM D7414	>25	18.3	16.4	20.3
Base Number (BN)	mg KOH/g	ASTM D2896	13.6	8.0	8.1	8.3
Visc @ 100°C	cSt	ASTM D445	15.4	12.7	▲ 12.2	▲ 12.1



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : LEC0041497 **Received** : 27 Jun 2023
Lab Number : 05884244 **Tested** : 29 Jun 2023
Unique Number : 10534727 **Diagnosed** : 29 Jun 2023 - Jonathan Hester
Test Package : CONST (Additional Tests: 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)