



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area
Store 9 - Marietta

Machine Id
JOHN DEERE 250G EX39 (S/N 1FF250GXPNF611949)

Component
Diesel Engine

Fluid
JOHN DEERE ENGINE OIL PLUS 50 II 15W40 (5 GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		LEC0048944	LEC0047656	LEC0043823
Sample Date		Client Info		21 May 2024	15 Dec 2023	16 Aug 2023
Machine Age	hrs	Client Info		2973	2457	1906
Oil Age	hrs	Client Info		500	500	500
Filter Age	hrs	Client Info		500	500	500
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>51	25	5	32
Chromium	ppm	ASTM D5185m	>11	<1	0	1
Nickel	ppm	ASTM D5185m	>5	6	1	5
Titanium	ppm	ASTM D5185m		0	0	<1
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>31	3	3	2
Lead	ppm	ASTM D5185m	>26	0	<1	<1
Copper	ppm	ASTM D5185m	>26	4	0	12
Tin	ppm	ASTM D5185m	>4	<1	<1	1
Vanadium	ppm	ASTM D5185m		0	<1	<1
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

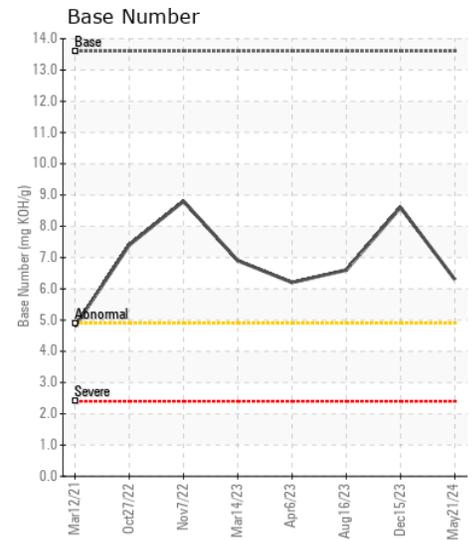
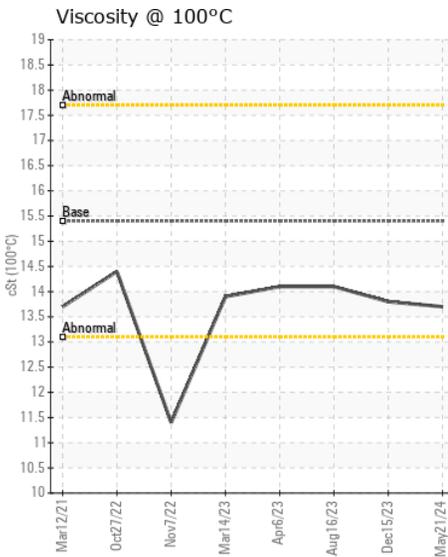
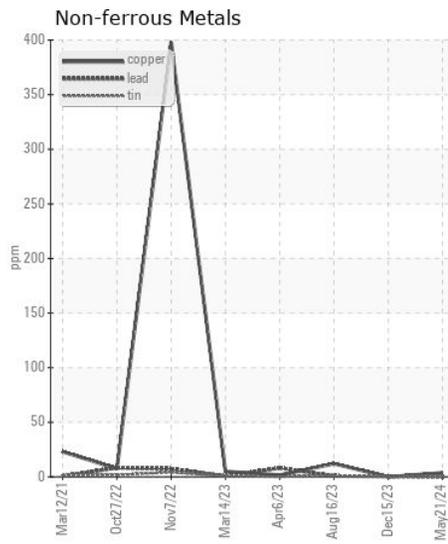
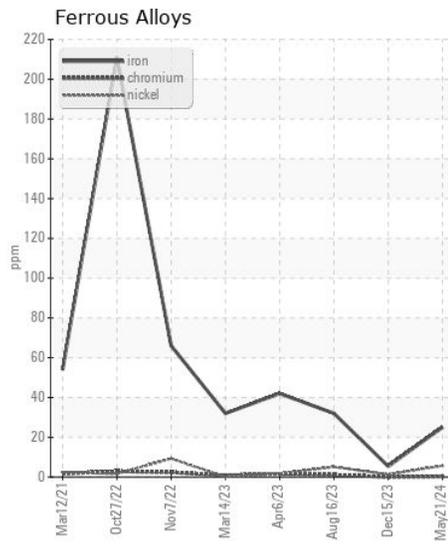
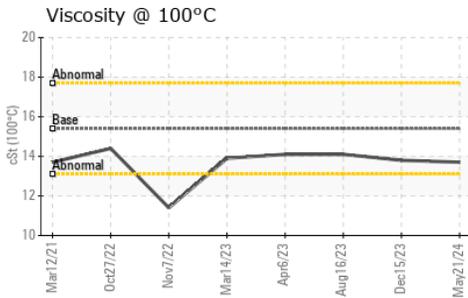
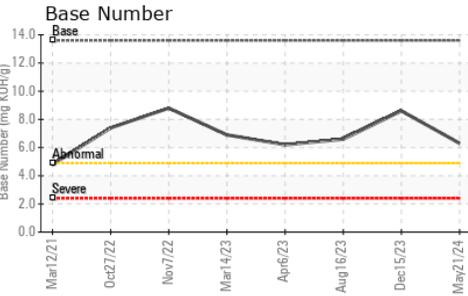
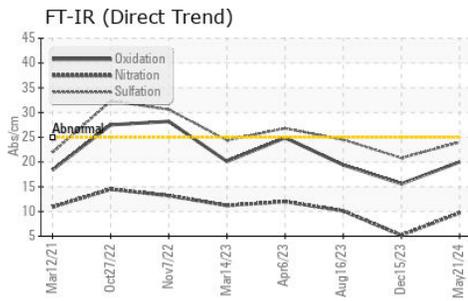
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>120	7	5	6
Potassium	ppm	ASTM D5185m	>20	<1	<1	2
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	0.5	0.1	0.6
Nitration	Abs/cm	*ASTM D7624	>20	9.7	5.2	10.1
Sulfation	Abs/.1mm	*ASTM D7415	>30	24.0	20.8	24.5
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 acceptable for the time in service.

Sodium	ppm	ASTM D5185m	>31	5	2	4
Boron	ppm	ASTM D5185m		146	326	117
Barium	ppm	ASTM D5185m		<1	0	0
Molybdenum	ppm	ASTM D5185m		81	77	101
Manganese	ppm	ASTM D5185m		<1	<1	1
Magnesium	ppm	ASTM D5185m		436	459	557
Calcium	ppm	ASTM D5185m		1475	1431	1635
Phosphorus	ppm	ASTM D5185m		1054	1042	1044
Zinc	ppm	ASTM D5185m		1254	1261	1365
Sulfur	ppm	ASTM D5185m		3257	3270	3589
Oxidation	Abs/.1mm	*ASTM D7414	>25	20.0	15.6	19.4
Base Number (BN)	mg KOH/g	ASTM D2896	13.6	6.3	8.6	6.6
Visc @ 100°C	cSt	ASTM D445	15.4	13.7	13.8	14.1



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : LEC0048944
Lab Number : 06196418
Unique Number : 11058541
Test Package : CONST (Additional Tests: TBN)

Received : 31 May 2024
Tested : 03 Jun 2024
Diagnosed : 03 Jun 2024 - Don Baldrige

LANE PIPELINE
 2946 E MAIN ST
 BRIDGEPORT, WV
 US 26330

Contact: JESSE WILBURN
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F:

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)