



OIL ANALYSIS REPORT

WEAR	ABNORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Area
Store 9 - Marietta
Machine Id
John Deere 544K 1DW544KZHEE659476
Component
Diesel Engine
Fluid
JOHN DEERE ENGINE OIL PLUS 50 II 15W40 (5 GAL)

RECOMMENDATION

Oil and filter change at the time of sampling has been noted. 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		LEC0045029	LEC0025957	LEC0025570
Sample Date		Client Info		26 Feb 2024	16 Mar 2022	30 Nov 2021
Machine Age	hrs	Client Info		10641	6830	6215
Oil Age	hrs	Client Info		500	615	814
Filter Age	hrs	Client Info		500	615	814
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				ABNORMAL	NORMAL	NORMAL

WEAR

Cylinder, crank, or cam shaft wear is indicated. All other component wear rates are normal.

Iron	ppm	ASTM D5185m	>51	▲ 84	18	35
Chromium	ppm	ASTM D5185m	>11	3	<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	7	2	3
Lead	ppm	ASTM D5185m	>26	3	2	4
Copper	ppm	ASTM D5185m	>26	3	<1	1
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

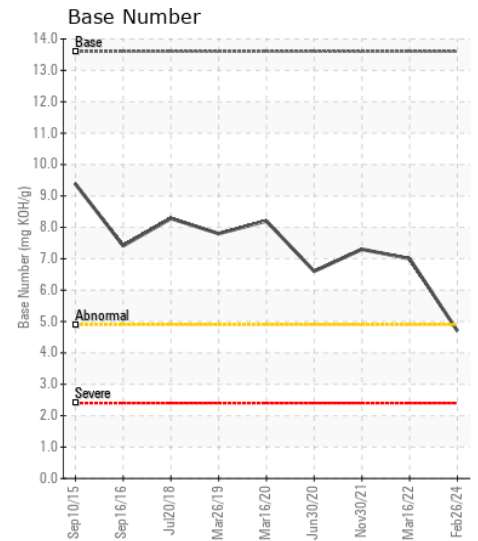
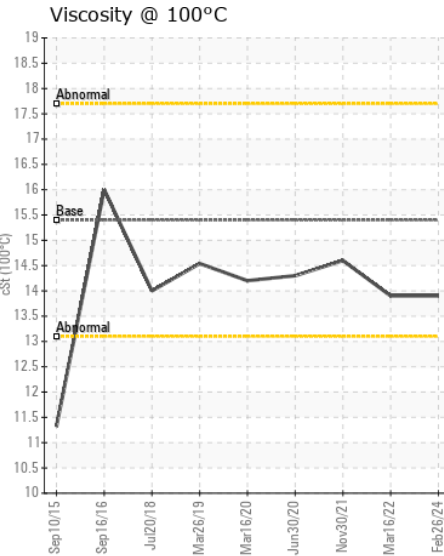
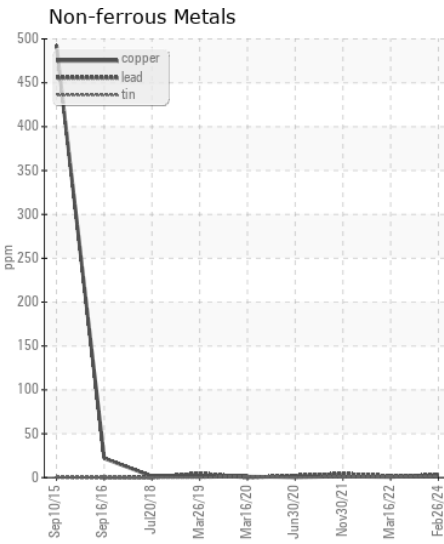
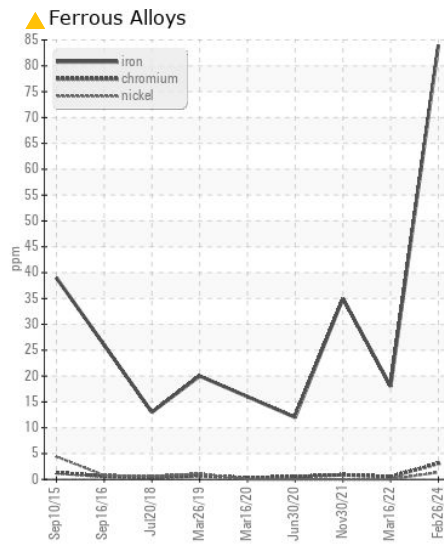
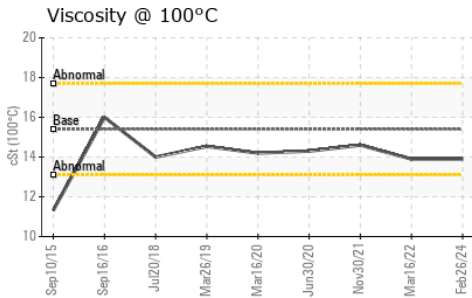
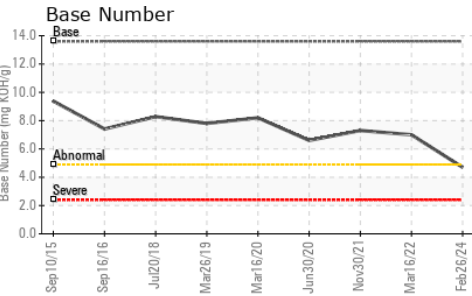
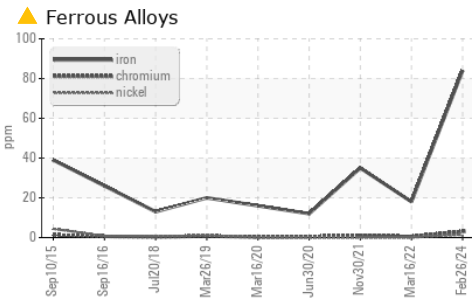
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>120	12	6	7
Potassium	ppm	ASTM D5185m	>20	2	0	<1
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	1.4	0.5	1
Nitration	Abs/cm	*ASTM D7624	>20	14.3	9.6	13
Sulfation	Abs/.1mm	*ASTM D7415	>30	31.2	24.5	29.6
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	5	2	3
Boron	ppm	ASTM D5185m		18	148	29
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		163	284	241
Manganese	ppm	ASTM D5185m		2	<1	<1
Magnesium	ppm	ASTM D5185m		423	881	767
Calcium	ppm	ASTM D5185m		1926	1599	1546
Phosphorus	ppm	ASTM D5185m		1041	1013	883
Zinc	ppm	ASTM D5185m		1235	1153	1065
Sulfur	ppm	ASTM D5185m		3528	3037	2624
Oxidation	Abs/.1mm	*ASTM D7414	>25	26.9	19.0	25.3
Base Number (BN)	mg KOH/g	ASTM D2896	13.6	4.7	7.0	7.3
Visc @ 100°C	cSt	ASTM D445	15.4	13.9	13.9	14.6



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : LEC0045029 **Received** : 28 Feb 2024
Lab Number : 06102783 **Tested** : 29 Feb 2024
Unique Number : 10901013 **Diagnosed** : 29 Feb 2024 - Don Baldrige
Test Package : CONST (Additional Tests: TBN)

LESLIE EQUIPMENT COMPANY
 105 TENNIS CENTER DR.
 MARIETTA, OH
 US 45750-9765
 Contact: LEANNE KENDALL
 KendalLeanne@lec1.com

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)

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