



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Area
Store 1 - Cowen [RO#147626]
Machine Id
JOHN DEERE 850K 1T0850KXCEE259008
Component
Diesel Engine
Fluid
JOHN DEERE ENGINE OIL PLUS 50 II 15W40 (7 GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		LEC0046865	LEC0041452	LECP185257
Sample Date		Client Info		09 Feb 2024	13 Jun 2023	27 Jan 2019
Machine Age	hrs	Client Info		7356	6318	4318
Oil Age	hrs	Client Info		1038	1724	4318
Filter Age	hrs	Client Info		1038	1724	0
Oil Changed		Client Info		Changed	Changed	N/A
Filter Changed		Client Info		Changed	Changed	N/A
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>51	46	44	22
Chromium	ppm	ASTM D5185m	>11	<1	<1	<1
Nickel	ppm	ASTM D5185m	>5	3	4	2
Titanium	ppm	ASTM D5185m		<1	0	0
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>31	2	1	1
Lead	ppm	ASTM D5185m	>26	0	0	0
Copper	ppm	ASTM D5185m	>26	2	2	1
Tin	ppm	ASTM D5185m	>4	0	<1	<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

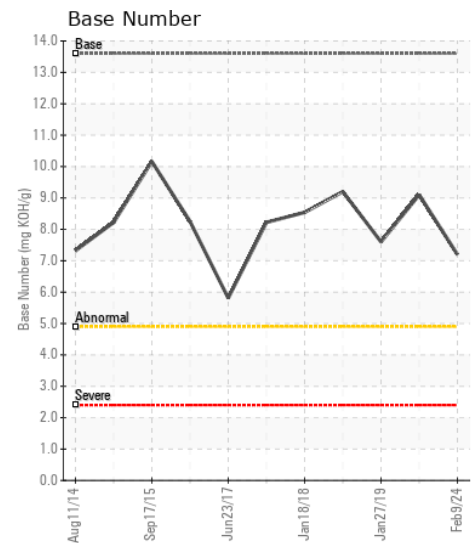
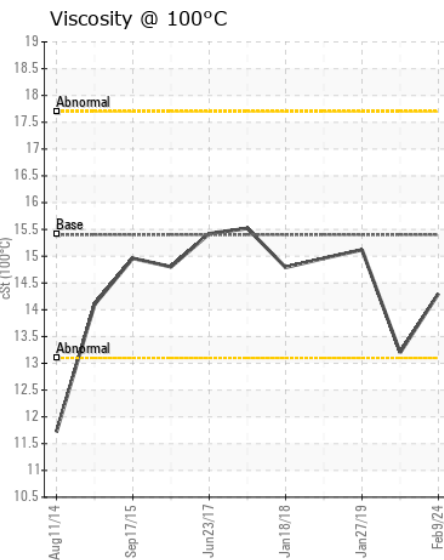
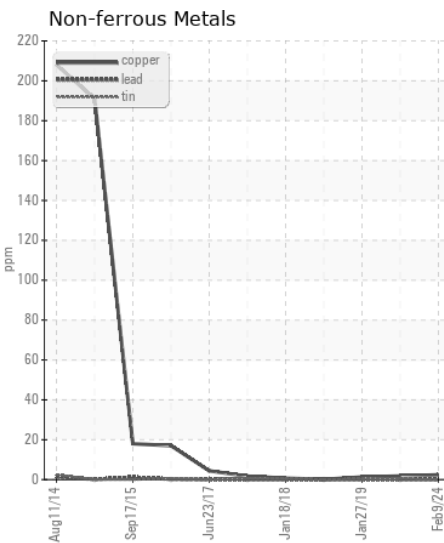
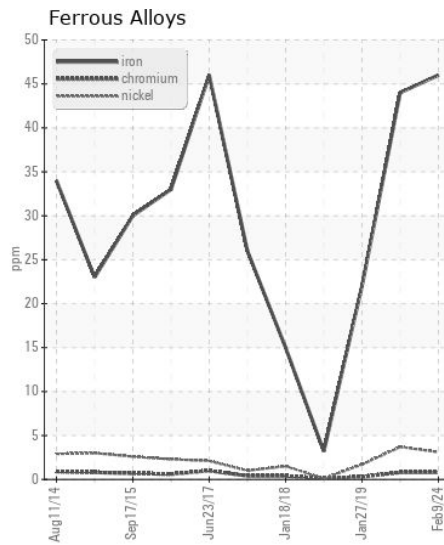
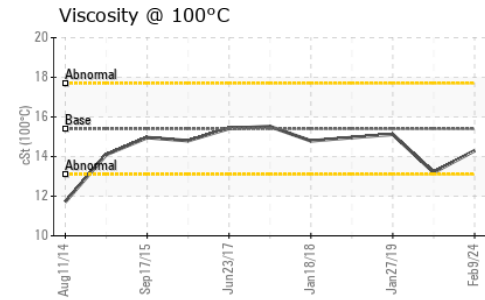
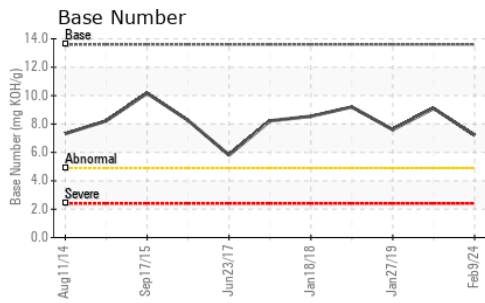
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>120	7	8	6
Potassium	ppm	ASTM D5185m	>20	1	3	11
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	0.6	0.6	0.6
Nitration	Abs/cm	*ASTM D7624	>20	9.5	8.2	9
Sulfation	Abs/.1mm	*ASTM D7415	>30	21.5	19.9	21.8
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	1	2	3
Boron	ppm	ASTM D5185m		16	43	134
Barium	ppm	ASTM D5185m		12	0	0
Molybdenum	ppm	ASTM D5185m		54	43	10
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m		519	272	37
Calcium	ppm	ASTM D5185m		1550	2061	2401
Phosphorus	ppm	ASTM D5185m		1069	1009	830
Zinc	ppm	ASTM D5185m		1201	1210	1180
Sulfur	ppm	ASTM D5185m		3942	3342	3050
Oxidation	Abs/.1mm	*ASTM D7414	>25	17.3	14.9	17.7
Base Number (BN)	mg KOH/g	ASTM D2896	13.6	7.2	9.1	7.6
Visc @ 100°C	cSt	ASTM D445	15.4	14.3	13.2	15.12



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : LEC0046865 **Received** : 14 Feb 2024
Lab Number : 06088663 **Tested** : 15 Feb 2024
Unique Number : 10876108 **Diagnosed** : 15 Feb 2024 - Sean Felton
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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