



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Area
Store 2 - Beaver [RO#146776]
Machine Id
JOHN DEERE 410E 1DW410EBCNF713827
Component
Diesel Engine
Fluid
JOHN DEERE ENGINE OIL PLUS 50 II 15W40 (11 GAL)

RECOMMENDATION

Resample at the next service interval to monitor. (Customer Sample
Comment: NEED RUSHED. FOLLOW UP SAMPLE)

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		LEC0046874	LEC0042218	LEC0045737
Sample Date		Client Info		11 Jan 2024	01 Dec 2023	08 Nov 2023
Machine Age	hrs	Client Info		2925	2874	2763
Oil Age	hrs	Client Info		162	111	541
Filter Age	hrs	Client Info		162	111	541
Oil Changed		Client Info		Not Chngd	Not Chngd	Changed
Filter Changed		Client Info		Not Chngd	Not Chngd	Changed
Sample Status				NORMAL	SEVERE	ABNORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>51	16	264	20
Chromium	ppm	ASTM D5185m	>11	<1	35	<1
Nickel	ppm	ASTM D5185m	>5	<1	12	0
Titanium	ppm	ASTM D5185m		<1	12	<1
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>31	4	213	7
Lead	ppm	ASTM D5185m	>26	2	0	3
Copper	ppm	ASTM D5185m	>26	11	65	51
Tin	ppm	ASTM D5185m	>4	2	4	2
Vanadium	ppm	ASTM D5185m		<1	<1	<1
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

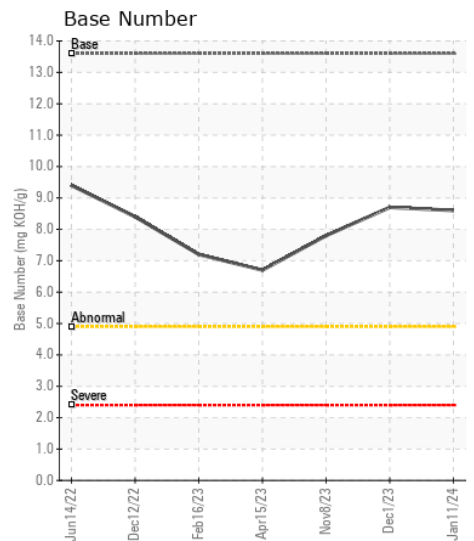
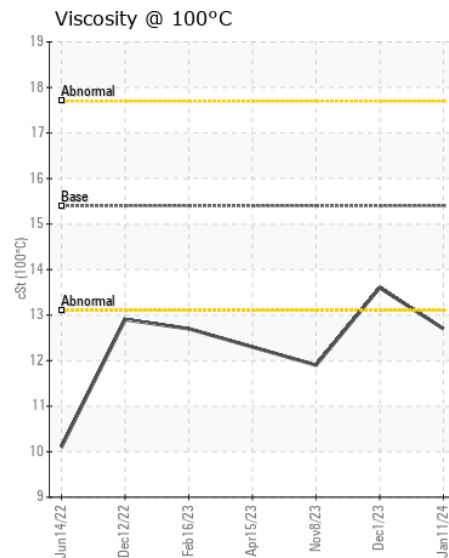
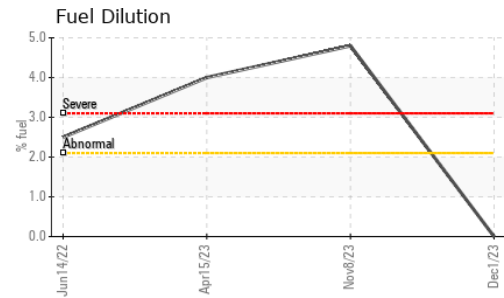
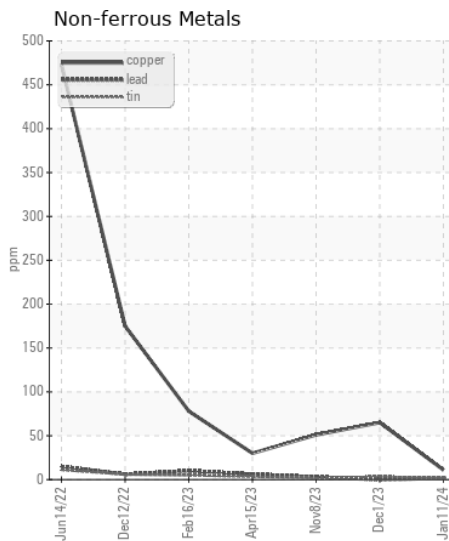
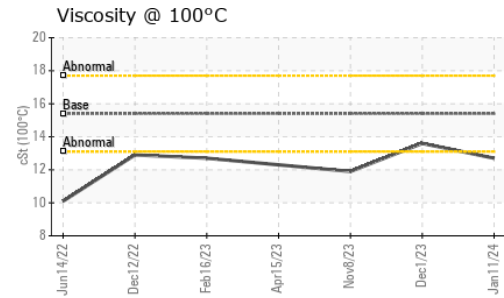
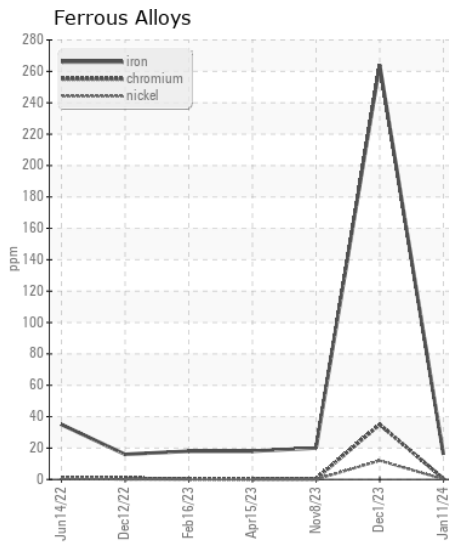
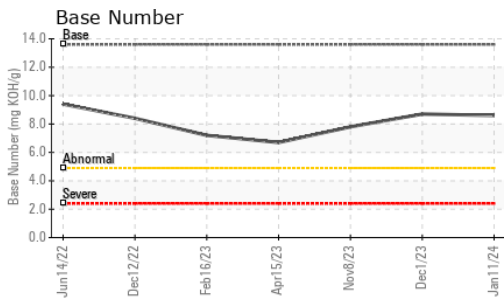
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>120	8	483	8
Potassium	ppm	ASTM D5185m	>20	<1	66	3
Fuel	%	ASTM D3524	>2.1	<1.0	0.0	4.8
Water		WC Method	>0.21	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.4	0.3	0.3
Nitration	Abs/cm	*ASTM D7624	>20	7.9	7.5	8.8
Sulfation	Abs/.1mm	*ASTM D7415	>30	21.7	19.8	22.9
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	3	12	2
Boron	ppm	ASTM D5185m		222	75	174
Barium	ppm	ASTM D5185m		<1	3	7
Molybdenum	ppm	ASTM D5185m		243	39	241
Manganese	ppm	ASTM D5185m		<1	4	<1
Magnesium	ppm	ASTM D5185m		845	454	738
Calcium	ppm	ASTM D5185m		1350	1697	1358
Phosphorus	ppm	ASTM D5185m		963	949	821
Zinc	ppm	ASTM D5185m		1108	1159	1000
Sulfur	ppm	ASTM D5185m		3049	4533	3447
Oxidation	Abs/.1mm	*ASTM D7414	>25	15.7	12.4	18.4
Base Number (BN)	mg KOH/g	ASTM D2896	13.6	8.6	8.7	7.8
Visc @ 100°C	cSt	ASTM D445	15.4	12.7	13.6	11.9



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : LEC0046874 **Received** : 12 Jan 2024
Lab Number : 06060058 **Diagnosed** : 16 Jan 2024
Unique Number : 10831440 **Diagnostician** : Doug Bogart
Test Package : CONST (Additional Tests: FuelDilution, PercentFuel, TBN)

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

T:
 F: (740)373-5570