



OIL ANALYSIS REPORT

WEAR	<b>NORMAL</b>
CONTAMINATION	<b>NORMAL</b>
FLUID CONDITION	<b>NORMAL</b>

Area  
**Store 4 - Fairmont**  
 Machine Id  
**CHEV 3500HD 1GB4YSEY5LF233821**  
 Component  
**Diesel Engine**  
 Fluid  
**JOHN DEERE ENGINE OIL PLUS 50 II 15W40 (10 QTS)**

**RECOMMENDATION**

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>LEC0042190</b>	LEC0038192	LEC0033433
Sample Date		Client Info		<b>05 Sep 2023</b>	08 May 2023	28 Sep 2022
Machine Age	mls	Client Info		<b>142839</b>	123238	98069
Oil Age	mls	Client Info		<b>28296</b>	8695	7500
Filter Age	mls	Client Info		<b>28296</b>	8695	7500
Oil Changed		Client Info		<b>Changed</b>	Changed	Not Changd
Filter Changed		Client Info		<b>Changed</b>	Changed	N/A
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

**WEAR**

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	<b>42</b>	35	35
Chromium	ppm	ASTM D5185m	>20	<b>2</b>	1	1
Nickel	ppm	ASTM D5185m	>4	<b>0</b>	0	0
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	<1
Silver	ppm	ASTM D5185m	>3	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>20	<b>13</b>	9	12
Lead	ppm	ASTM D5185m	>40	<b>2</b>	2	2
Copper	ppm	ASTM D5185m	>330	<b>2</b>	4	12
Tin	ppm	ASTM D5185m	>15	<b>&lt;1</b>	<1	1
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

**CONTAMINATION**

There is no indication of any contamination in the component.

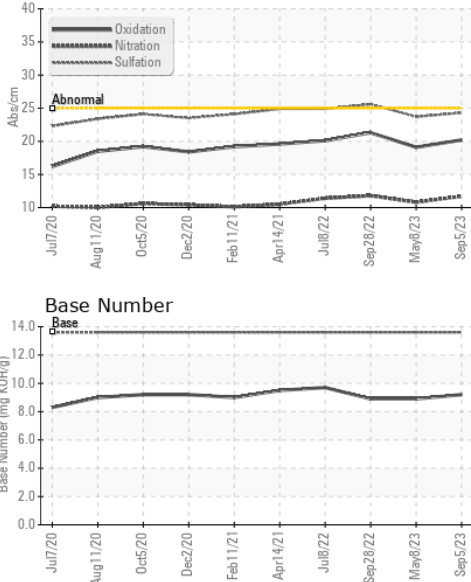
Silicon	ppm	ASTM D5185m	>120	<b>8</b>	8	7
Potassium	ppm	ASTM D5185m	>20	<b>9</b>	8	14
Fuel	%	ASTM D3524	>5	<b>&lt;1.0</b>	<1.0	<1.0
Water		WC Method	>0.2	<b>NEG</b>	NEG	NEG
Glycol		WC Method		<b>NEG</b>	NEG	NEG
Soot %	%	*ASTM D7844	>3	<b>1</b>	0.8	0.9
Nitration	Abs/cm	*ASTM D7624	>20	<b>11.7</b>	10.8	11.8
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>24.3</b>	23.7	25.6
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Appearance	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Odor	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	<b>NEG</b>	NEG	NEG

**FLUID CONDITION**

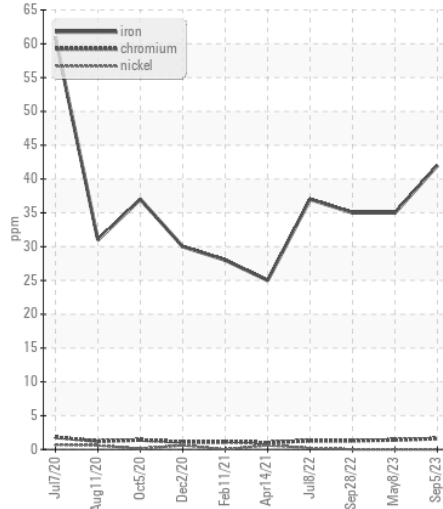
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	0
Boron	ppm	ASTM D5185m		<b>127</b>	159	123
Barium	ppm	ASTM D5185m		<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m		<b>218</b>	226	188
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m		<b>742</b>	766	613
Calcium	ppm	ASTM D5185m		<b>1373</b>	1519	1556
Phosphorus	ppm	ASTM D5185m		<b>791</b>	865	900
Zinc	ppm	ASTM D5185m		<b>1000</b>	1094	1068
Sulfur	ppm	ASTM D5185m		<b>3247</b>	3292	3279
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>20.2</b>	19.1	21.3
Base Number (BN)	mg KOH/g	ASTM D2896	13.6	<b>9.2</b>	8.9	8.9
Visc @ 100°C	cSt	ASTM D445	15.4	<b>12.7</b>	13.3	13.8

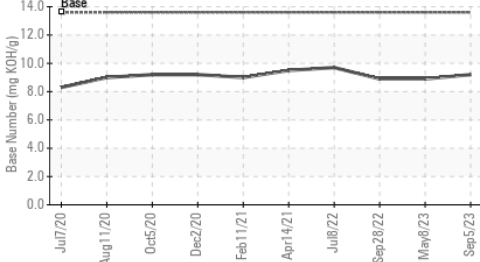
**FT-IR (Direct Trend)**



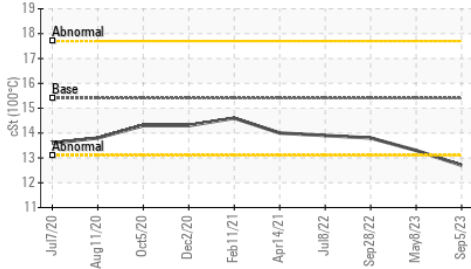
**Ferrous Alloys**



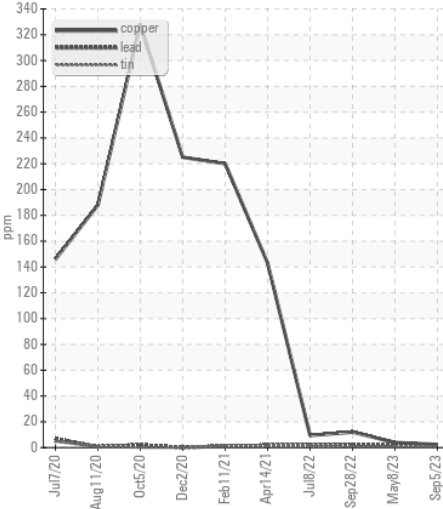
**Base Number**



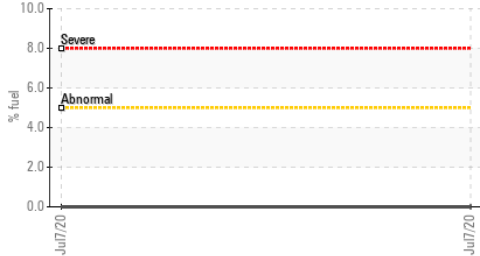
**Viscosity @ 100°C**



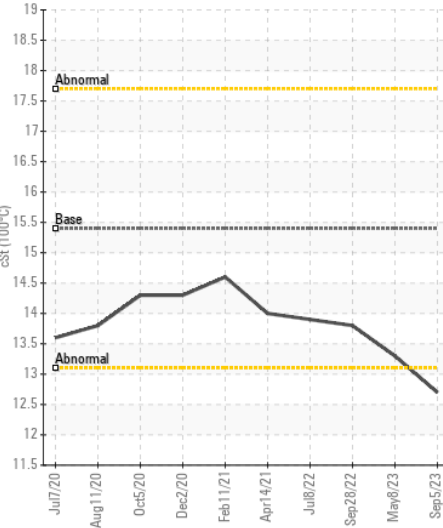
**Non-ferrous Metals**



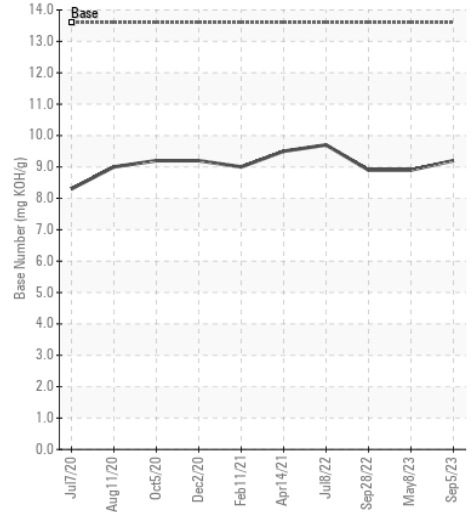
**Fuel Dilution**



**Viscosity @ 100°C**



**Base Number**



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : LEC0042190 **Received** : 07 Sep 2023  
**Lab Number** : 05944450 **Tested** : 08 Sep 2023  
**Unique Number** : 10635062 **Diagnosed** : 09 Sep 2023 - Don Baldrige  
**Test Package** : CONST ( Additional Tests: FuelDilution, 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)

T: (740)373-5570