



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area  
**Store 3 - Norton**

Machine Id  
**PETERBILT 367 1XPTP4EX3MD762290**

Component  
**Diesel Engine**

Fluid  
**JOHN DEERE ENGINE OIL PLUS 50 II 15W40 (48 QTS)**

**RECOMMENDATION**

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>LEC0050109</b>	LEC0045200	LEC0045040
Sample Date		Client Info		<b>29 May 2024</b>	05 Apr 2024	26 Feb 2024
Machine Age	hrs	Client Info		<b>344409</b>	328355	314017
Oil Age	hrs	Client Info		<b>16054</b>	14338	15210
Filter Age	hrs	Client Info		<b>16054</b>	14338	15210
Oil Changed		Client Info		<b>Changed</b>	Changed	Changed
Filter Changed		Client Info		<b>Changed</b>	Changed	Changed
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

**WEAR**

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>110	<b>14</b>	15	18
Chromium	ppm	ASTM D5185m	>4	<b>&lt;1</b>	1	1
Nickel	ppm	ASTM D5185m	>2	<b>0</b>	<1	<1
Titanium	ppm	ASTM D5185m		<b>0</b>	<1	<1
Silver	ppm	ASTM D5185m	>2	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>25	<b>8</b>	7	7
Lead	ppm	ASTM D5185m	>45	<b>&lt;1</b>	1	<1
Copper	ppm	ASTM D5185m	>85	<b>&lt;1</b>	6	<1
Tin	ppm	ASTM D5185m	>4	<b>&lt;1</b>	1	<1
Vanadium	ppm	ASTM D5185m		<b>0</b>	<1	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 oil.

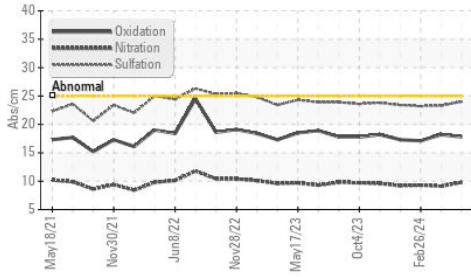
Silicon	ppm	ASTM D5185m	>120	<b>8</b>	11	10
Potassium	ppm	ASTM D5185m	>20	<b>2</b>	5	4
Fuel		WC Method	>5	<b>&lt;1.0</b>	<1.0	<1.0
Water		WC Method	>0.2	<b>NEG</b>	NEG	NEG
Glycol		WC Method		<b>NEG</b>	NEG	NEG
Soot %	%	*ASTM D7844	>3	<b>0.8</b>	0.4	0.5
Nitration	Abs/cm	*ASTM D7624	>20	<b>9.8</b>	9.1	9.3
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>24.0</b>	23.3	23.2
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**

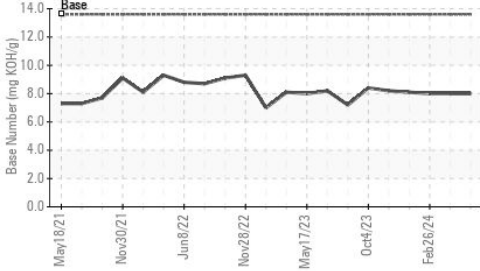
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		<b>13</b>	12	20
Boron	ppm	ASTM D5185m		<b>166</b>	200	182
Barium	ppm	ASTM D5185m		<b>&lt;1</b>	1	0
Molybdenum	ppm	ASTM D5185m		<b>248</b>	241	249
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	1	<1
Magnesium	ppm	ASTM D5185m		<b>831</b>	797	783
Calcium	ppm	ASTM D5185m		<b>1437</b>	1429	1498
Phosphorus	ppm	ASTM D5185m		<b>927</b>	942	951
Zinc	ppm	ASTM D5185m		<b>1101</b>	1114	1144
Sulfur	ppm	ASTM D5185m		<b>3297</b>	3358	3350
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>17.8</b>	18.2	17.1
Base Number (BN)	mg KOH/g	ASTM D2896	13.6	<b>8.0</b>	8.0	8.0
Visc @ 100°C	cSt	ASTM D445	15.4	<b>13.3</b>	13.5	13.6

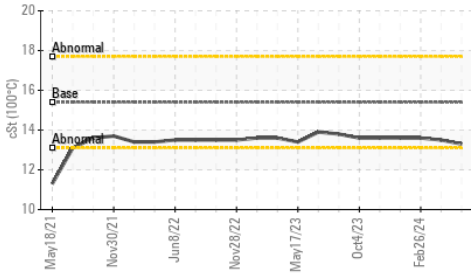
**FT-IR (Direct Trend)**



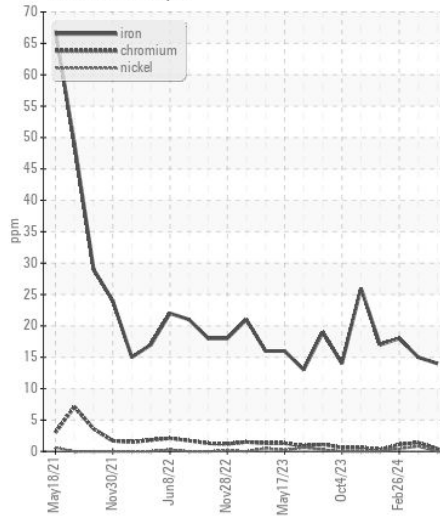
**Base Number**



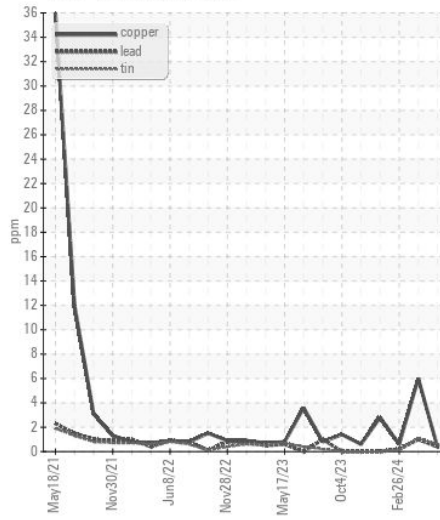
**Viscosity @ 100°C**



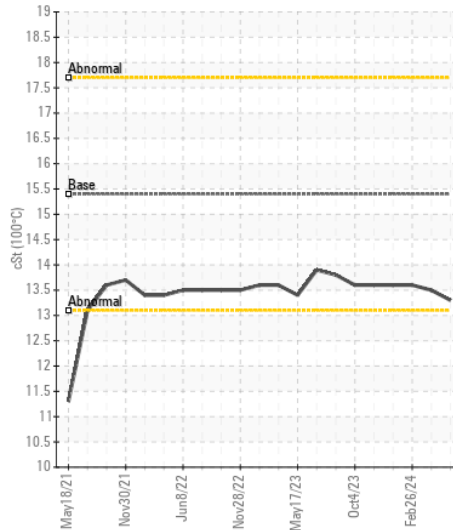
**Ferrous Alloys**



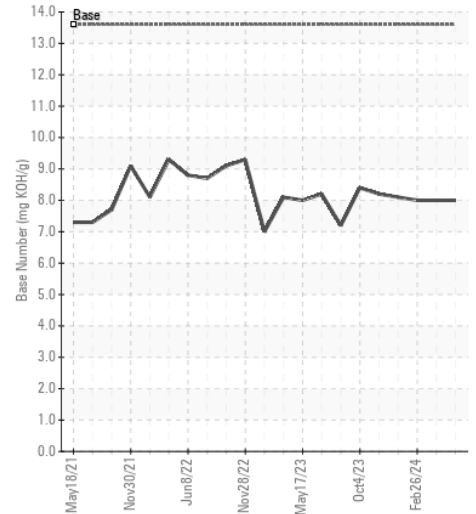
**Non-ferrous Metals**



**Viscosity @ 100°C**



**Base Number**



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : LEC0050109 **Received** : 31 May 2024  
**Lab Number** : 06196420 **Tested** : 02 Jun 2024  
**Unique Number** : 11058543 **Diagnosed** : 02 Jun 2024 - Wes Davis  
**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)

T:  
 F: (740)373-5570