



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area  
**Store 4 - Fairmont**  
 Machine Id  
**PETERBILT 337 2NP2HJ6X5JM493179**  
 Component  
**Diesel Engine**  
 Fluid  
**JOHN DEERE ENGINE OIL PLUS 50 II 15W40 (--- QTS)**

**RECOMMENDATION**

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>LEC0047822</b>	LEC0034480	LEC0029171
Sample Date		Client Info		<b>17 Feb 2024</b>	21 Sep 2022	27 Apr 2022
Machine Age	mls	Client Info		<b>129971</b>	100087	89520
Oil Age	mls	Client Info		<b>9269</b>	10567	14564
Filter Age	mls	Client Info		<b>9269</b>	10567	14564
Oil Changed		Client Info		<b>Changed</b>	Not Changed	Changed
Filter Changed		Client Info		<b>Changed</b>	N/A	Changed
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

**WEAR**

Metal levels are typical for a new component breaking in.

Iron	ppm	ASTM D5185m	>110	<b>19</b>	26	30
Chromium	ppm	ASTM D5185m	>4	<b>&lt;1</b>	2	1
Nickel	ppm	ASTM D5185m	>2	<b>1</b>	0	1
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
Silver	ppm	ASTM D5185m	>2	<b>&lt;1</b>	<1	<1
Aluminum	ppm	ASTM D5185m	>25	<b>7</b>	17	10
Lead	ppm	ASTM D5185m	>45	<b>0</b>	<1	0
Copper	ppm	ASTM D5185m	>85	<b>2</b>	2	4
Tin	ppm	ASTM D5185m	>4	<b>&lt;1</b>	<1	<1
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	<1
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

**CONTAMINATION**

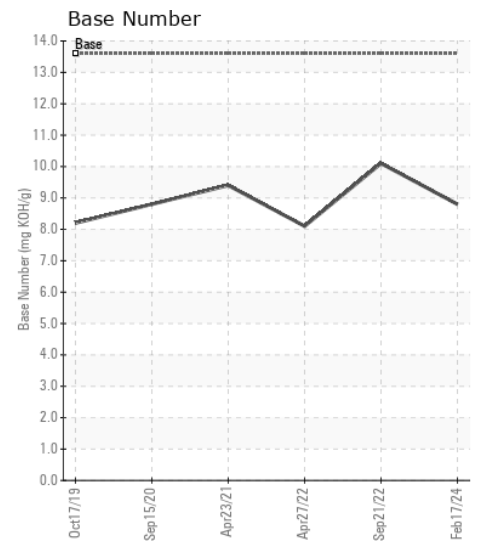
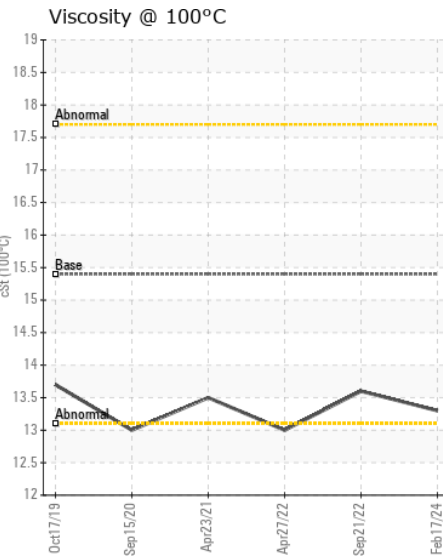
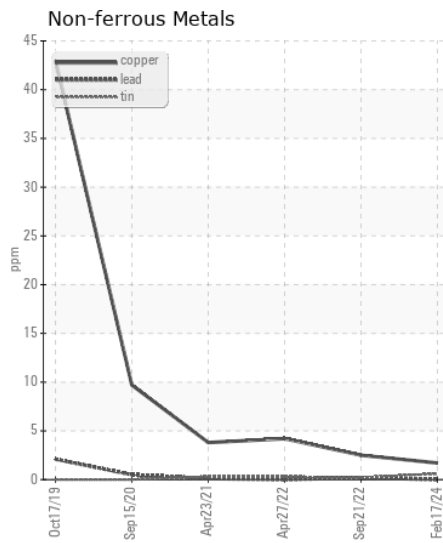
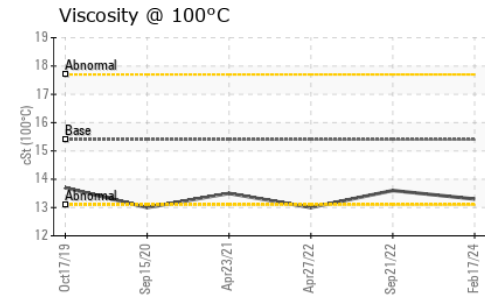
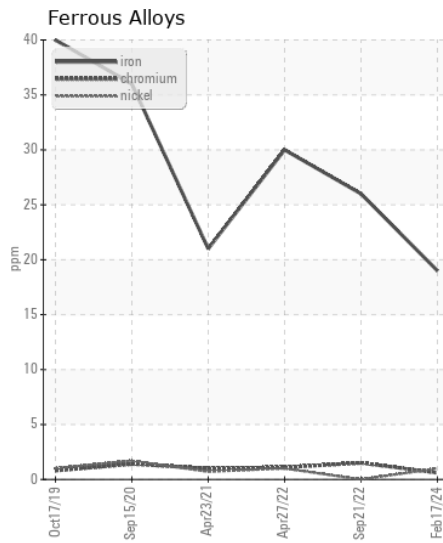
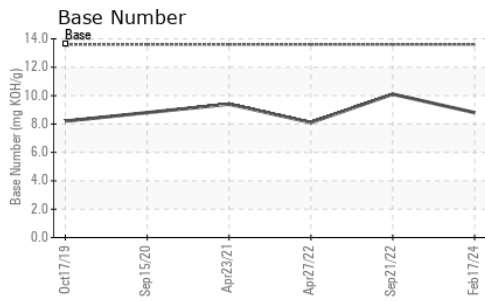
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>120	<b>7</b>	7	6
Potassium	ppm	ASTM D5185m	>20	<b>6</b>	26	7
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>0.4</b>	0.6	0.6
Nitration	Abs/cm	*ASTM D7624	>20	<b>9.6</b>	10.9	10.3
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>22.6</b>	23.4	22.2
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>4</b>	<1	2
Boron	ppm	ASTM D5185m		<b>197</b>	137	148
Barium	ppm	ASTM D5185m		<b>0</b>	3	0
Molybdenum	ppm	ASTM D5185m		<b>235</b>	184	187
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m		<b>745</b>	604	689
Calcium	ppm	ASTM D5185m		<b>1358</b>	1549	1707
Phosphorus	ppm	ASTM D5185m		<b>863</b>	887	851
Zinc	ppm	ASTM D5185m		<b>1027</b>	1064	1025
Sulfur	ppm	ASTM D5185m		<b>2840</b>	3279	2828
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>18.3</b>	19.1	17.9
Base Number (BN)	mg KOH/g	ASTM D2896	13.6	<b>8.8</b>	10.1	8.1
Visc @ 100°C	cSt	ASTM D445	15.4	<b>13.3</b>	13.6	13.0



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : LEC0047822 **Received** : 23 Feb 2024  
**Lab Number** : 06098079 **Tested** : 25 Feb 2024  
**Unique Number** : 10896309 **Diagnosed** : 25 Feb 2024 - Wes Davis  
**Test Package** : CONST ( Additional Tests: TBN )

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