



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area **Store 1 - Cowen**

Machine Id **PETERBILT 337 2NP2HJ6X1MM732487**

Component **Diesel Engine**

Fluid **JOHN DEERE ENGINE OIL PLUS 50 II 15W40 (6 GAL)**

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		LEC0032816	LEC0024042	LEC0021322
Sample Date		Client Info		12 Jul 2022	14 Oct 2021	19 May 2021
Machine Age	mls	Client Info		30738	19950	9474
Oil Age	mls	Client Info		10788	10476	9474
Filter Age	mls	Client Info		0	10476	0
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	ABNORMAL	ABNORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>110	24	26	38
Chromium	ppm	ASTM D5185m	>4	<1	<1	1
Nickel	ppm	ASTM D5185m	>2	0	0	<1
Titanium	ppm	ASTM D5185m		<1	0	<1
Silver	ppm	ASTM D5185m	>2	<1	<1	1
Aluminum	ppm	ASTM D5185m	>25	25	50	24
Lead	ppm	ASTM D5185m	>45	<1	2	<1
Copper	ppm	ASTM D5185m	>85	155	▲ 272	▲ 346
Tin	ppm	ASTM D5185m	>4	<1	<1	1
Vanadium	ppm	ASTM D5185m		0	0	<1
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

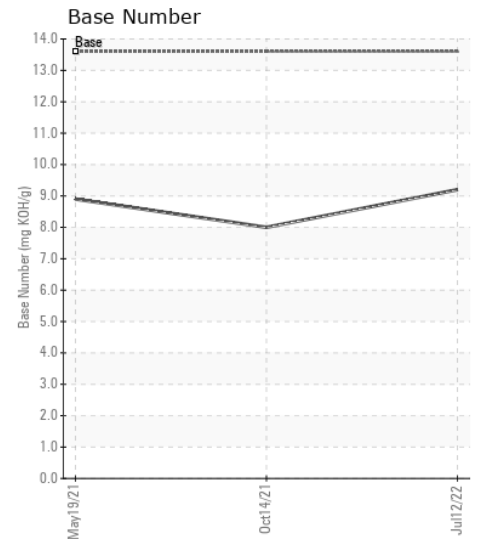
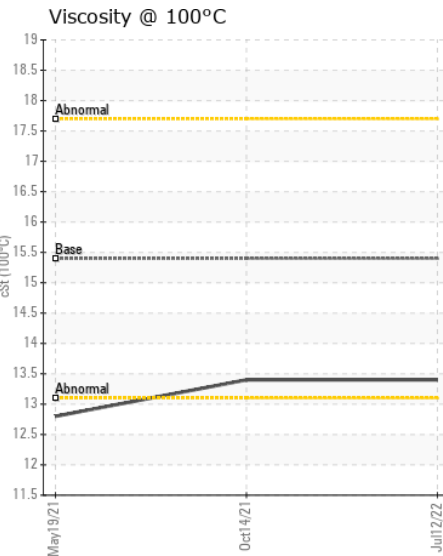
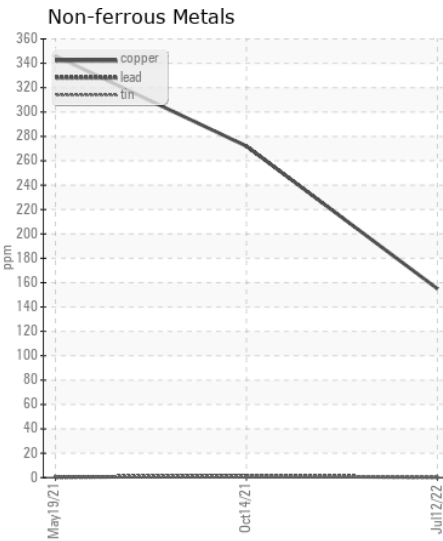
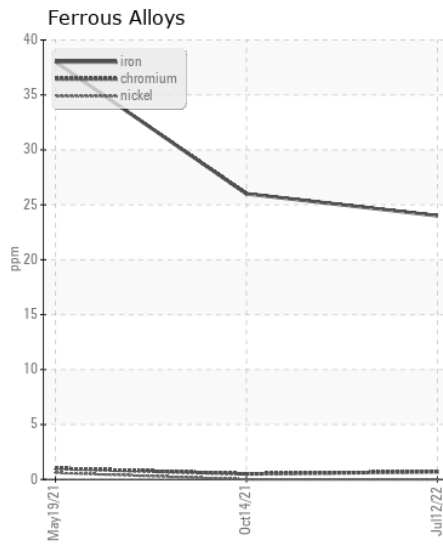
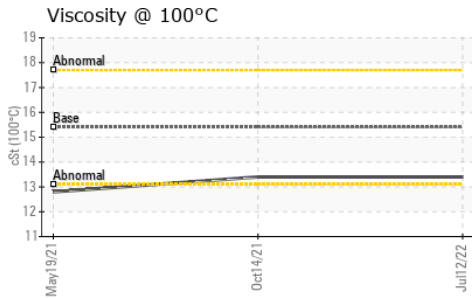
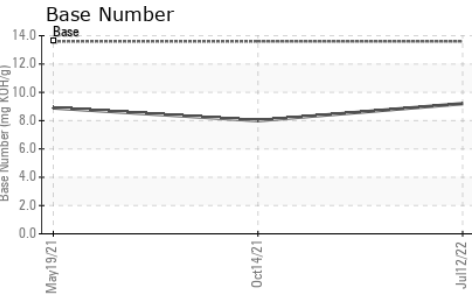
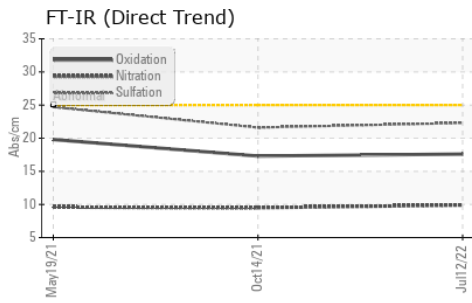
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>120	10	12	23
Potassium	ppm	ASTM D5185m	>20	50	142	▲ 76
Fuel		WC Method	>5	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.4	0.4	0.3
Nitration	Abs/cm	*ASTM D7624	>20	9.9	9.5	9.6
Sulfation	Abs/.1mm	*ASTM D7415	>30	22.3	21.6	24.7
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	>0.2	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		2	3	6
Boron	ppm	ASTM D5185m		209	170	246
Barium	ppm	ASTM D5185m		0	0	7
Molybdenum	ppm	ASTM D5185m		213	171	104
Manganese	ppm	ASTM D5185m		<1	2	7
Magnesium	ppm	ASTM D5185m		664	596	673
Calcium	ppm	ASTM D5185m		1676	1450	1428
Phosphorus	ppm	ASTM D5185m		884	778	694
Zinc	ppm	ASTM D5185m		1135	915	801
Sulfur	ppm	ASTM D5185m		3791	2308	1957
Oxidation	Abs/.1mm	*ASTM D7414	>25	17.6	17.3	19.8
Base Number (BN)	mg KOH/g	ASTM D2896	13.6	9.2	8	8.9
Visc @ 100°C	cSt	ASTM D445	15.4	13.4	13.4	12.8



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : LEC0032816 **Received** : 14 Jul 2022
Lab Number : 05590959 **Tested** : 15 Jul 2022
Unique Number : 10050406 **Diagnosed** : 15 Jul 2022 - Jonathan Hester
Test Package : CONST (Additional Tests: TBN)

LESLIE EQUIPMENT COMPANY
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 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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