



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area
Store 9 - Marietta [RO#152382]
Machine Id
PETERBILT 367 667 (S/N 1XPTD40X4LD685993)
Component
Diesel Engine
Fluid
JOHN DEERE ENGINE OIL PLUS 50 II 15W40 (44 QTS)

RECOMMENDATION

Resample at the next service interval to monitor. (Customer Sample Comment: UNIT 667)

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		LEC0049991	LEC0048744	LEC0048503
Sample Date		Client Info		21 Jun 2024	03 May 2024	01 Mar 2024
Machine Age	mls	Client Info		340344	325197	309142
Oil Age	mls	Client Info		15147	16055	15952
Filter Age	mls	Client Info		15147	16055	15952
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>110	27	21	22
Chromium	ppm	ASTM D5185m	>4	1	1	<1
Nickel	ppm	ASTM D5185m	>2	<1	<1	0
Titanium	ppm	ASTM D5185m		<1	<1	0
Silver	ppm	ASTM D5185m	>2	<1	0	0
Aluminum	ppm	ASTM D5185m	>25	13	8	8
Lead	ppm	ASTM D5185m	>45	5	6	1
Copper	ppm	ASTM D5185m	>85	2	1	2
Tin	ppm	ASTM D5185m	>4	<1	<1	<1
Vanadium	ppm	ASTM D5185m		<1	<1	0
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.

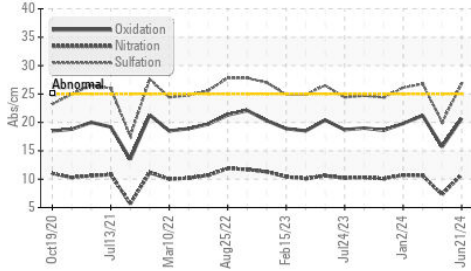
Silicon	ppm	ASTM D5185m	>120	11	8	7
Potassium	ppm	ASTM D5185m	>20	8	4	2
Fuel		WC Method	>5	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.9	0.3	0.7
Nitration	Abs/cm	*ASTM D7624	>20	10.8	7.3	10.6
Sulfation	Abs/.1mm	*ASTM D7415	>30	26.8	20.0	26.8
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

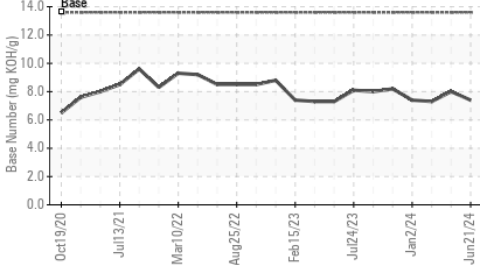
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		1	1	2
Boron	ppm	ASTM D5185m		94	99	116
Barium	ppm	ASTM D5185m		2	<1	0
Molybdenum	ppm	ASTM D5185m		294	254	262
Manganese	ppm	ASTM D5185m		1	<1	<1
Magnesium	ppm	ASTM D5185m		908	770	825
Calcium	ppm	ASTM D5185m		1697	1401	1441
Phosphorus	ppm	ASTM D5185m		965	892	922
Zinc	ppm	ASTM D5185m		1287	1058	1113
Sulfur	ppm	ASTM D5185m		3267	2829	2727
Oxidation	Abs/.1mm	*ASTM D7414	>25	20.7	15.7	21.2
Base Number (BN)	mg KOH/g	ASTM D2896	13.6	7.4	8.0	7.3
Visc @ 100°C	cSt	ASTM D445	15.4	14.1	13.8	14.0

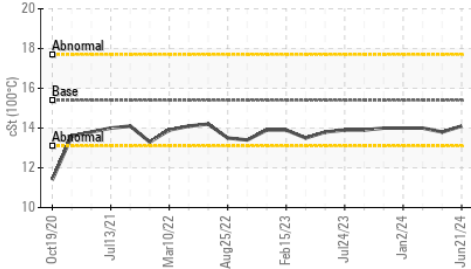
FT-IR (Direct Trend)



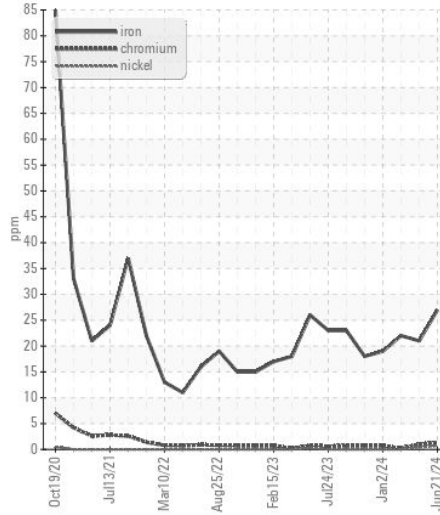
Base Number



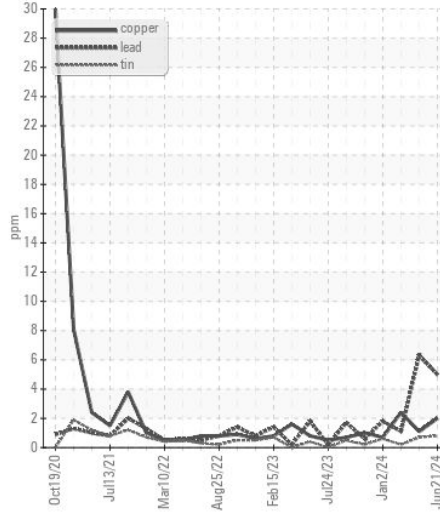
Viscosity @ 100°C



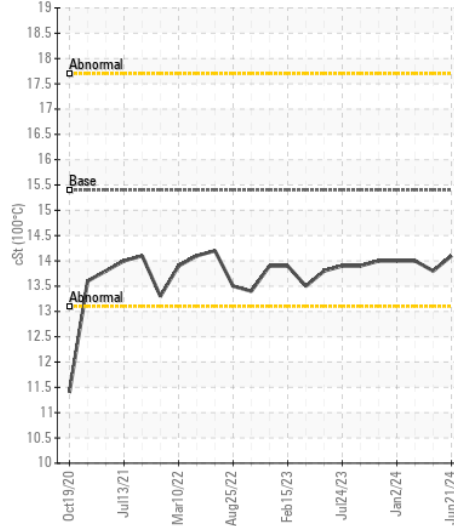
Ferrous Alloys



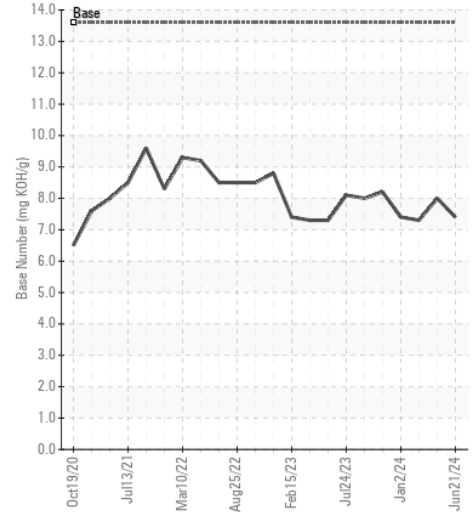
Non-ferrous Metals



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : LEC0049991 **Received** : 25 Jun 2024
Lab Number : 06219531 **Tested** : 26 Jun 2024
Unique Number : 11097728 **Diagnosed** : 26 Jun 2024 - Don Baldrige
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)

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