



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area Store 4 - Fairmont

Machine Id PETERBILT 367 1XPTD40X6LD685994

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		LEC0040749	LEC0047860	LEC0044500
Sample Date		Client Info		07 May 2024	09 Feb 2024	31 Oct 2023
Machine Age	mls	Client Info		330869	314736	294064
Oil Age	mls	Client Info		16133	20672	15947
Filter Age	mls	Client Info		16133	20672	15947
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	28	48	23
Chromium	ppm	ASTM D5185m	>4	<1	2	1
Nickel	ppm	ASTM D5185m	>2	0	0	0
Titanium	ppm	ASTM D5185m		<1	<1	<1
Silver	ppm	ASTM D5185m	>2	0	0	0
Aluminum	ppm	ASTM D5185m	>25	10	15	9
Lead	ppm	ASTM D5185m	>45	2	4	4
Copper	ppm	ASTM D5185m	>85	1	2	1
Tin	ppm	ASTM D5185m	>4	<1	<1	<1
Vanadium	ppm	ASTM D5185m		<1	<1	<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.

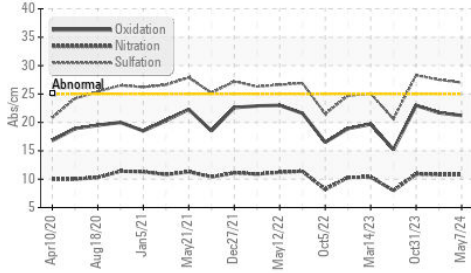
Silicon	ppm	ASTM D5185m	>120	9	14	10
Potassium	ppm	ASTM D5185m	>20	6	6	2
Fuel		WC Method	>5	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	1	1	1
Nitration	Abs/cm	*ASTM D7624	>20	10.8	10.8	10.9
Sulfation	Abs/.1mm	*ASTM D7415	>30	27.0	27.5	28.3
Silt	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

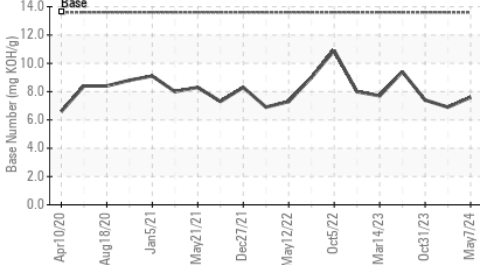
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		2	5	4
Boron	ppm	ASTM D5185m		143	111	93
Barium	ppm	ASTM D5185m		<1	12	0
Molybdenum	ppm	ASTM D5185m		270	395	252
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m		821	1198	780
Calcium	ppm	ASTM D5185m		1528	2093	1461
Phosphorus	ppm	ASTM D5185m		1011	1137	797
Zinc	ppm	ASTM D5185m		1154	1652	1031
Sulfur	ppm	ASTM D5185m		3264	4375	2632
Oxidation	Abs/.1mm	*ASTM D7414	>25	21.2	21.7	23.0
Base Number (BN)	mg KOH/g	ASTM D2896	13.6	7.6	6.9	7.4
Visc @ 100°C	cSt	ASTM D445	15.4	13.9	14.3	14.5

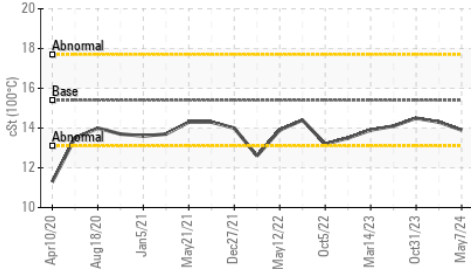
FT-IR (Direct Trend)



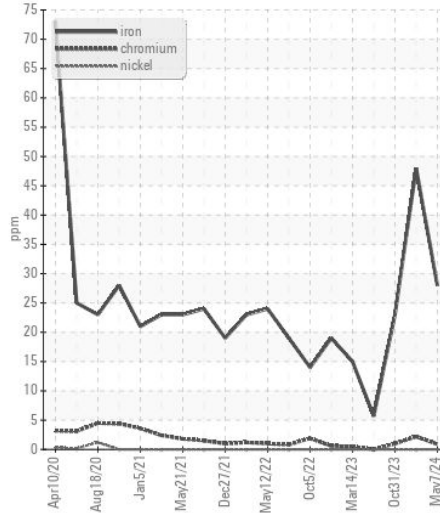
Base Number



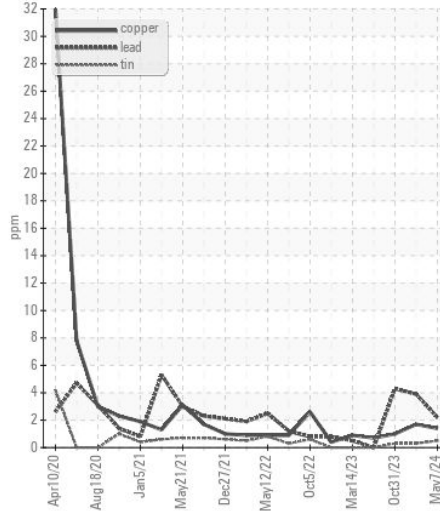
Viscosity @ 100°C



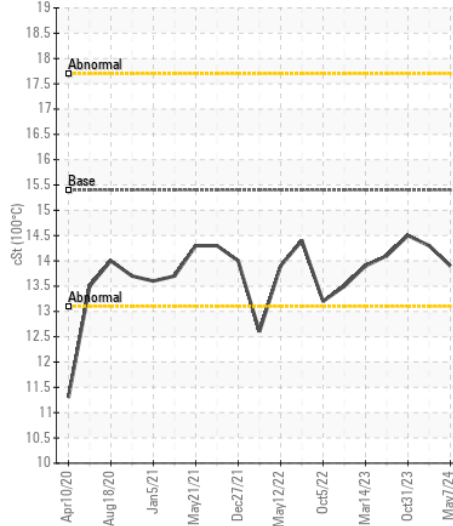
Ferrous Alloys



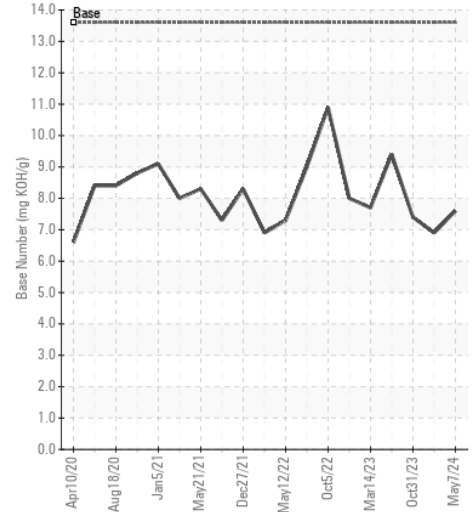
Non-ferrous Metals



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : LEC0040749 **Received** : 09 May 2024
Lab Number : 06174925 **Tested** : 10 May 2024
Unique Number : 11020978 **Diagnosed** : 10 May 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: (740)373-5570