



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Area
Store 2 - Beaver [RO#150716]
Machine Id
JOHN DEERE 450J 1T0450JXVCD228725
Component
Diesel Engine
Fluid
JOHN DEERE ENGINE OIL PLUS 50 II 15W40 (15 QTS)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		LEC0048742	LECP170622	---
Sample Date		Client Info		07 May 2024	22 Dec 2016	---
Machine Age	hrs	Client Info		912	504	---
Oil Age	hrs	Client Info		408	504	---
Filter Age	hrs	Client Info		408	504	---
Oil Changed		Client Info		Changed	Changed	---
Filter Changed		Client Info		Changed	Changed	---
Sample Status				NORMAL	ABNORMAL	---

WEAR

Metal levels are typical for a new component breaking in.

Iron	ppm	ASTM D5185m	>51	65	98	---
Chromium	ppm	ASTM D5185m	>11	1	2	---
Nickel	ppm	ASTM D5185m	>5	1	1	---
Titanium	ppm	ASTM D5185m		<1	0	---
Silver	ppm	ASTM D5185m	>3	0	0	---
Aluminum	ppm	ASTM D5185m	>31	7	12	---
Lead	ppm	ASTM D5185m	>26	2	6	---
Copper	ppm	ASTM D5185m	>26	34	▲ 239	---
Tin	ppm	ASTM D5185m	>4	1	2	---
Vanadium	ppm	ASTM D5185m		<1	0	---
White Metal	scalar	*Visual	NONE	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	---

CONTAMINATION

There is no indication of any contamination in the oil.

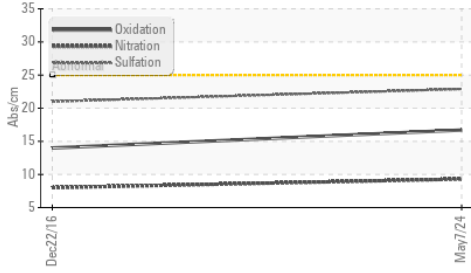
Silicon	ppm	ASTM D5185m	>120	9	10	---
Potassium	ppm	ASTM D5185m	>20	3	4	---
Fuel		WC Method	>2.1	<1.0	<1.0	---
Water		WC Method	>0.21	NEG	NEG	---
Glycol		WC Method		NEG	NEG	---
Soot %	%	*ASTM D7844	>3	1.2	1	---
Nitration	Abs/cm	*ASTM D7624	>20	9.3	8.	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	22.9	21.	---
Silt	scalar	*Visual	NONE	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	---
Appearance	scalar	*Visual	NORML	NORML	NORML	---
Odor	scalar	*Visual	NORML	NORML	NORML	---
Emulsified Water	scalar	*Visual	>0.21	NEG	NEG	---

FLUID CONDITION

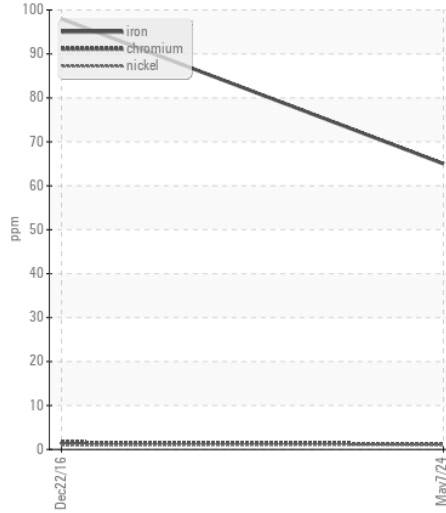
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m	>31	0	4	---
Boron	ppm	ASTM D5185m		243	172	---
Barium	ppm	ASTM D5185m		3	2	---
Molybdenum	ppm	ASTM D5185m		276	250	---
Manganese	ppm	ASTM D5185m		2	6	---
Magnesium	ppm	ASTM D5185m		806	834	---
Calcium	ppm	ASTM D5185m		1374	1390	---
Phosphorus	ppm	ASTM D5185m		910	868	---
Zinc	ppm	ASTM D5185m		1027	981	---
Sulfur	ppm	ASTM D5185m		3107	2375	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	16.7	14.	---
Base Number (BN)	mg KOH/g	ASTM D2896	13.6	8.7	10.42	---
Visc @ 100°C	cSt	ASTM D445	15.4	13.7	10.76	---

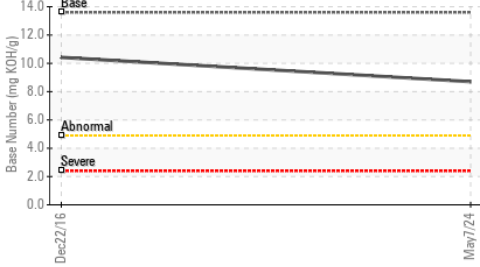
FT-IR (Direct Trend)



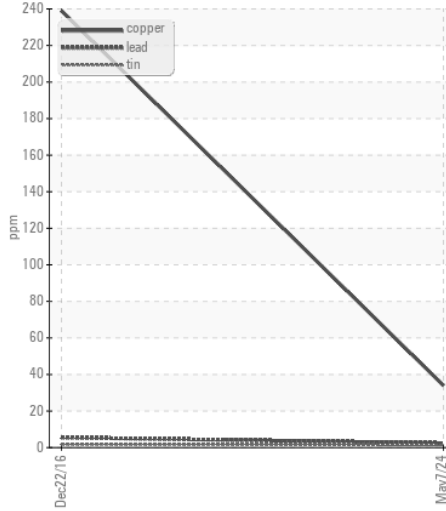
Ferrous Alloys



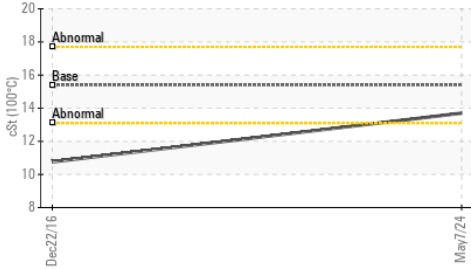
Base Number



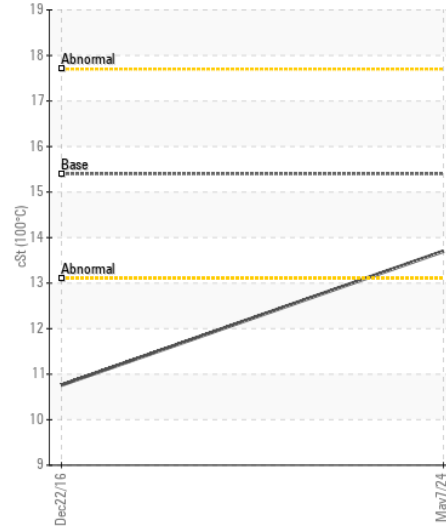
Non-ferrous Metals



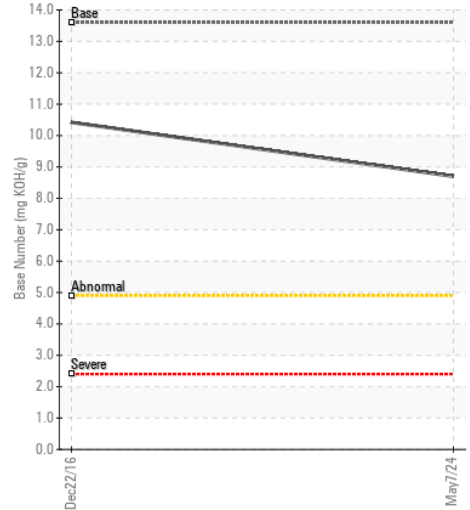
Viscosity @ 100°C



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : LEC0048742 **Received** : 10 May 2024
Lab Number : 06176531 **Tested** : 13 May 2024
Unique Number : 11022584 **Diagnosed** : 13 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
 T:
 F: (740)373-5570

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)