



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Area
Store 5 - Cross Lanes [RO#144502]
Machine Id
JOHN DEERE 1050K 1T01050PAHF323007
Component
Diesel Engine
Fluid
JOHN DEERE ENGINE OIL PLUS 50 II 15W40 (12 GAL)

RECOMMENDATION

Resample at the next service interval to monitor. Please note that this is a corrected copy for data entry updates.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		LEC0045391	LEC0043577	LEC0041532
Sample Date		Client Info		01 Nov 2023	23 Oct 2023	20 Jun 2023
Machine Age	hrs	Client Info		1349	1347	965
Oil Age	hrs	Client Info		384	382	256
Filter Age	hrs	Client Info		384	382	256
Oil Changed		Client Info		Changed	Not Changd	Changed
Filter Changed		Client Info		Changed	Not Changed	Changed
Sample Status				NORMAL	NORMAL	ABNORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>37	14	15	12
Chromium	ppm	ASTM D5185m	>11	<1	<1	<1
Nickel	ppm	ASTM D5185m	>5	<1	<1	<1
Titanium	ppm	ASTM D5185m		<1	<1	0
Silver	ppm	ASTM D5185m	>3	0	0	<1
Aluminum	ppm	ASTM D5185m	>31	4	4	1
Lead	ppm	ASTM D5185m	>26	2	<1	5
Copper	ppm	ASTM D5185m	>26	20	23	▲ 189
Tin	ppm	ASTM D5185m	>4	2	2	4
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.

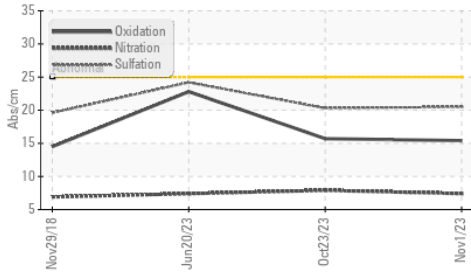
Silicon	ppm	ASTM D5185m	>120	8	9	12
Potassium	ppm	ASTM D5185m	>20	1	0	3
Fuel	%	ASTM D3524	>2.1	<1.0	3.6	▲ 3.5
Water		WC Method	>0.21	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.2	0.1	0.1
Nitration	Abs/cm	*ASTM D7624	>20	7.4	7.9	7.4
Sulfation	Abs/.1mm	*ASTM D7415	>30	20.5	20.3	24.2
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	>0.21	NEG	NEG	NEG

FLUID CONDITION

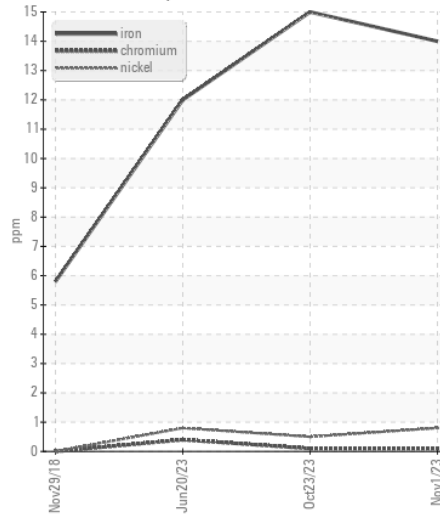
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m	>31	3	5	6
Boron	ppm	ASTM D5185m		243	211	271
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		226	205	234
Manganese	ppm	ASTM D5185m		<1	<1	2
Magnesium	ppm	ASTM D5185m		826	755	848
Calcium	ppm	ASTM D5185m		1455	1341	1467
Phosphorus	ppm	ASTM D5185m		953	762	893
Zinc	ppm	ASTM D5185m		1197	1068	1177
Sulfur	ppm	ASTM D5185m		3299	2968	4010
Oxidation	Abs/.1mm	*ASTM D7414	>25	15.4	15.7	22.8
Base Number (BN)	mg KOH/g	ASTM D2896	13.6	8.7	9.3	8.8
Visc @ 100°C	cSt	ASTM D445	15.4	12.7	12.4	▲ 11.7

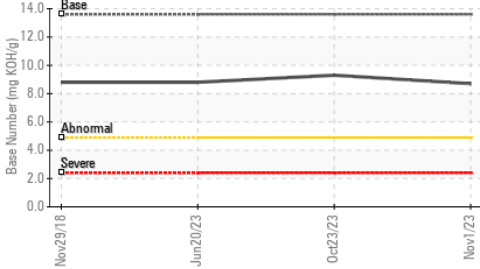
FT-IR (Direct Trend)



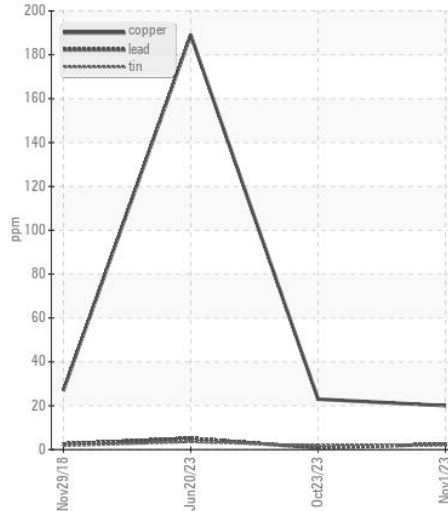
Ferrous Alloys



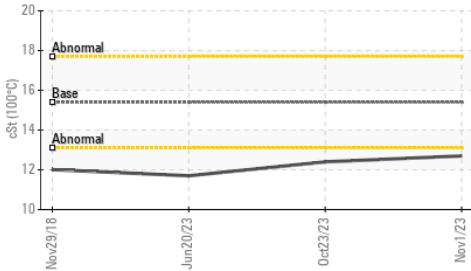
Base Number



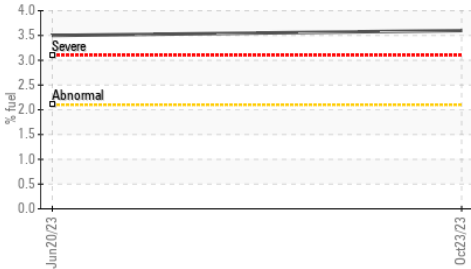
Non-ferrous Metals



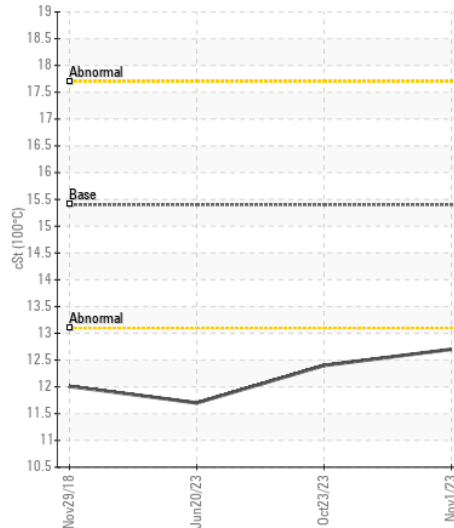
Viscosity @ 100°C



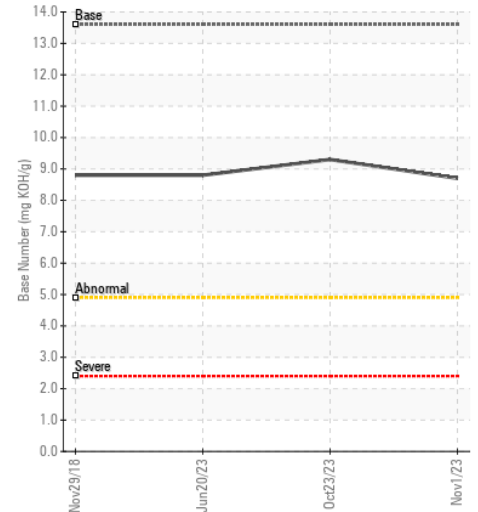
Fuel Dilution



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : LEC0045391 **Received** : 06 Nov 2023
Lab Number : 05998918 **Tested** : 20 Nov 2023
Unique Number : 10727278 **Diagnosed** : 20 Nov 2023 - Doug Bogart
Test Package : CONST (Additional Tests: FuelDilution, 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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