



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Area
Store 4 - Fairmont [151139]
Machine Id
JOHN DEERE 210G 1FF210GXVNF529768
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		LEC0045142	LEC0044291	LEC0041672
Sample Date		Client Info		20 May 2024	07 Nov 2023	26 May 2023
Machine Age	hrs	Client Info		2636	1998	1467
Oil Age	hrs	Client Info		638	531	482
Filter Age	hrs	Client Info		638	531	482
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	ABNORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>51	48	32	18
Chromium	ppm	ASTM D5185m	>11	1	<1	0
Nickel	ppm	ASTM D5185m	>5	5	5	1
Titanium	ppm	ASTM D5185m		<1	2	0
Silver	ppm	ASTM D5185m	>3	<1	0	0
Aluminum	ppm	ASTM D5185m	>31	6	4	5
Lead	ppm	ASTM D5185m	>26	1	<1	0
Copper	ppm	ASTM D5185m	>26	9	27	▲ 53
Tin	ppm	ASTM D5185m	>4	<1	<1	0
Vanadium	ppm	ASTM D5185m		<1	0	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.

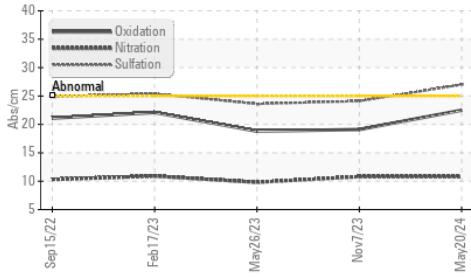
Silicon	ppm	ASTM D5185m	>120	10	11	5
Potassium	ppm	ASTM D5185m	>20	4	<1	0
Fuel		WC Method	>2.1	<1.0	<1.0	<1.0
Water		WC Method	>0.21	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.9	0.6	0.4
Nitration	Abs/cm	*ASTM D7624	>20	10.8	10.8	9.8
Sulfation	Abs/.1mm	*ASTM D7415	>30	27.0	24.1	23.6
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

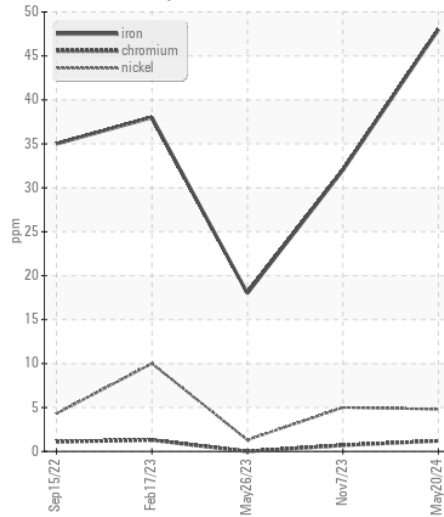
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m	>31	8	4	3
Boron	ppm	ASTM D5185m		74	97	141
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		253	202	229
Manganese	ppm	ASTM D5185m		<1	<1	0
Magnesium	ppm	ASTM D5185m		872	808	850
Calcium	ppm	ASTM D5185m		1822	1653	1533
Phosphorus	ppm	ASTM D5185m		1012	959	897
Zinc	ppm	ASTM D5185m		1276	1235	1127
Sulfur	ppm	ASTM D5185m		3536	2940	3295
Oxidation	Abs/.1mm	*ASTM D7414	>25	22.5	19.1	18.8
Base Number (BN)	mg KOH/g	ASTM D2896	13.6	7.5	8.4	8.1
Visc @ 100°C	cSt	ASTM D445	15.4	14.4	13.9	13.8

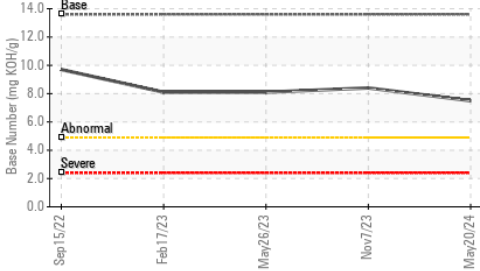
FT-IR (Direct Trend)



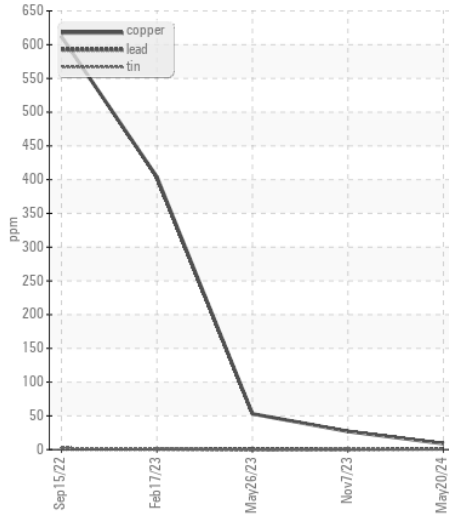
Ferrous Alloys



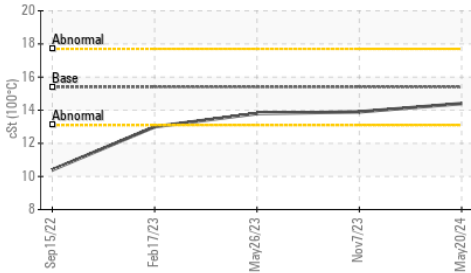
Base Number



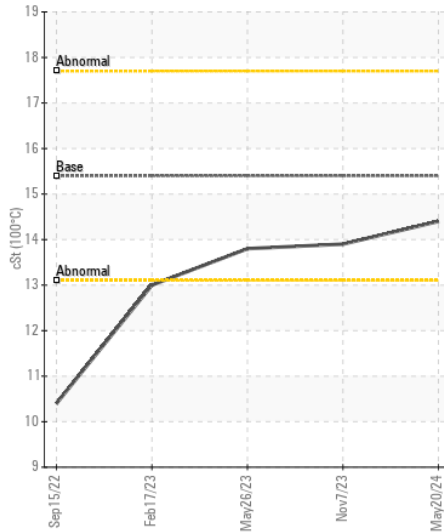
Non-ferrous Metals



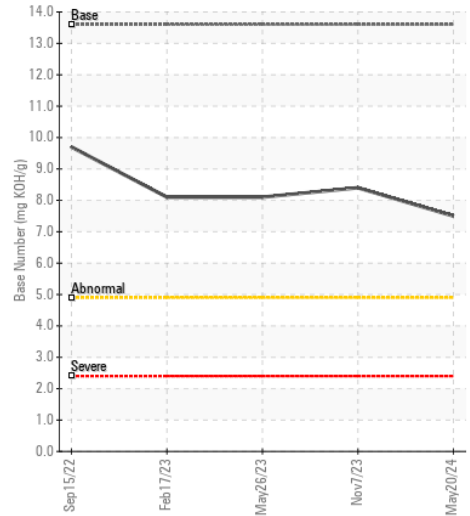
Viscosity @ 100°C



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : LEC0045142 **Received** : 22 May 2024
Lab Number : 06187513 **Tested** : 23 May 2024
Unique Number : 11044265 **Diagnosed** : 23 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)

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