LESLIE EQUIPMENT CO.

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	SEVERE
FLUID CONDITION	ABNORMAL

Area
Store 4 - Fairmont
Machine Id
JOHN DEERE 850K 1T0850KXEJF335829
Component
Diesel Engine
Fluid
JOHN DEERE ENGINE OIL PLUS 50 II 15W40 (7 GAL)

RECOMMENDATION

We advise that you check the fuel injection system. The oil change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

WEAR

All component wear rates are normal.

CONTAMINATION

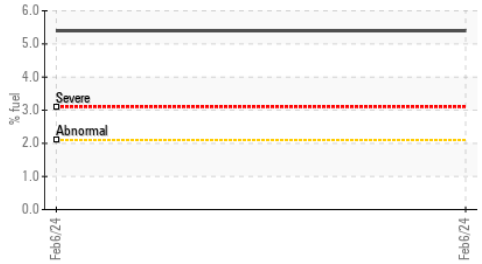
There is a high amount of fuel present in the oil. Tests confirm the presence of fuel in the oil.

FLUID CONDITION

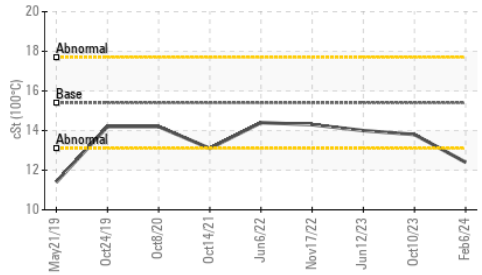
The BN result indicates that there is suitable alkalinity remaining in the oil. Fuel is present in the oil and is lowering the viscosity. The oil is no longer serviceable due to the presence of contaminants.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		**LEC0046686**	LEC0045492	LEC0042282
Sample Date		Client Info		**06 Feb 2024**	10 Oct 2023	12 Jun 2023
Machine Age	hrs	Client Info		**4131**	3614	3091
Oil Age	hrs	Client Info		**517**	523	433
Filter Age	hrs	Client Info		**517**	523	433
Oil Changed		Client Info		**Changed**	Changed	Changed
Filter Changed		Client Info		**Changed**	Changed	Changed
Sample Status				**SEVERE**	NORMAL	NORMAL
Iron	ppm	ASTM D5185m	>51	**14**	20	26
Chromium	ppm	ASTM D5185m	>11	**<1**	1	<1
Nickel	ppm	ASTM D5185m	>5	**0**	<1	<1
Titanium	ppm	ASTM D5185m		**0**	<1	0
Silver	ppm	ASTM D5185m	>3	**0**	0	0
Aluminum	ppm	ASTM D5185m	>31	**5**	3	1
Lead	ppm	ASTM D5185m	>26	**0**	0	1
Copper	ppm	ASTM D5185m	>26	**0**	2	2
Tin	ppm	ASTM D5185m	>4	**<1**	<1	<1
Vanadium	ppm	ASTM D5185m		**0**	0	<1
White Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Silicon	ppm	ASTM D5185m	>!20	**5**	6	8
Potassium	ppm	ASTM D5185m	>20	**1**	2	4
Fuel	%	ASTM D3524	>2.1	**5.4**	<1.0	<1.0
Water		WC Method	>0.21	**NEG**	NEG	NEG
Glycol		WC Method		**NEG**	NEG	NEG
Soot %	%	*ASTM D7844	>3	**0.3**	0.4	0.4
Nitration	Abs/cm	*ASTM D7624	>20	**9.3**	9.1	9.5
Sulfation	Abs/.1mm	*ASTM D7415	>30	**22.2**	22.2	23.5
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
Sodium	ppm	ASTM D5185m	>31	**2**	0	4
Boron	ppm	ASTM D5185m		**233**	165	188
Barium	ppm	ASTM D5185m		**<1**	0	0
Molybdenum	ppm	ASTM D5185m		**246**	239	261
Manganese	ppm	ASTM D5185m		**<1**	0	<1
Magnesium	ppm	ASTM D5185m		**767**	722	933
Calcium	ppm	ASTM D5185m		**1377**	1407	1753
Phosphorus	ppm	ASTM D5185m		**873**	818	994
Zinc	ppm	ASTM D5185m		**1056**	1009	1274
Sulfur	ppm	ASTM D5185m		**2785**	2810	4003
Oxidation	Abs/.1mm	*ASTM D7414	>25	**17.2**	17.0	17.6
Base Number (BN)	mg KOH/g	ASTM D2896	13.6	**8.5**	8.2	8.6
Visc @ 100°C	cSt	ASTM D445	15.4	**12.4**	13.8	14.0

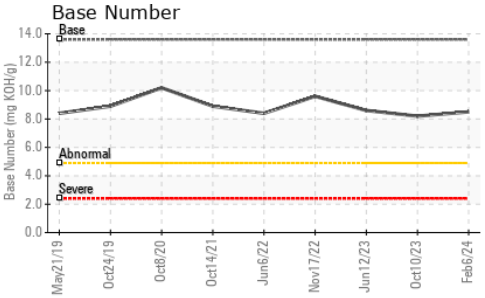
Fuel Dilution



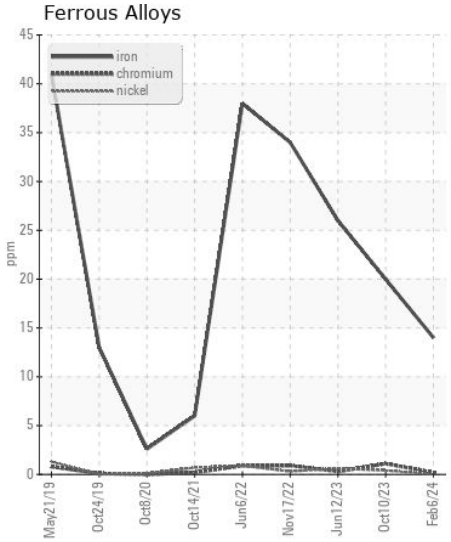
Viscosity @ 100°C



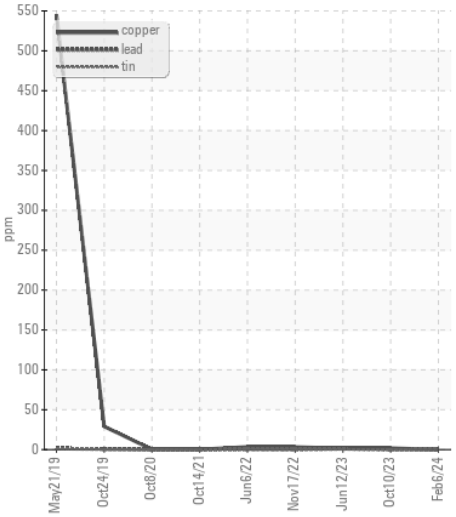
Base Number



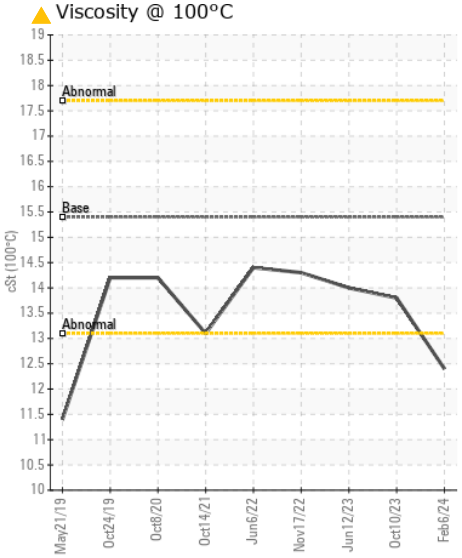
Ferrous Alloys



Non-ferrous Metals



Viscosity @ 100°C



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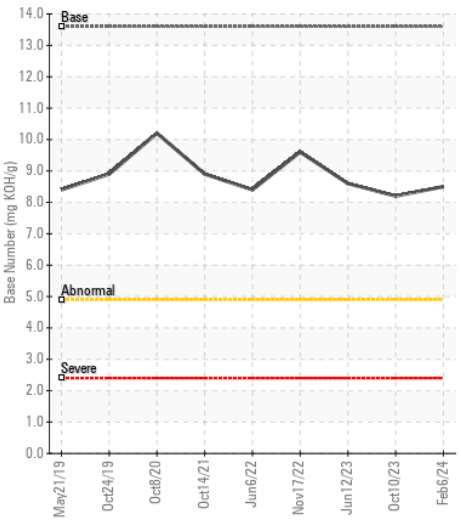

Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : LEC0046686
Lab Number : 06083440
Unique Number : 10870885
Test Package : CONST (Additional Tests: FuelDilution, PercentFuel, TBN)

Received : 08 Feb 2024
Tested : 13 Feb 2024
Diagnosed : 13 Feb 2024 - Wes Davis

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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