LESLIE EQUIPMENT CO.

OIL ANALYSIS REPORT

WEAR	ABNORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area
Store 9 - Marietta
Machine Id
JOHN DEERE 1058
Component
Diesel Engine
Fluid
SHELL ROTELLA T 15W40 (--- QTS)

RECOMMENDATION

Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

WEAR

The lead level is abnormal. All other component wear rates are normal.

CONTAMINATION

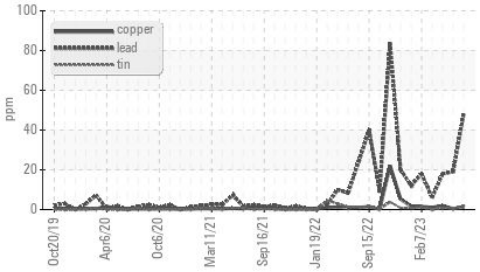
Fuel content negligible. There is no indication of any contamination in the oil.

FLUID CONDITION

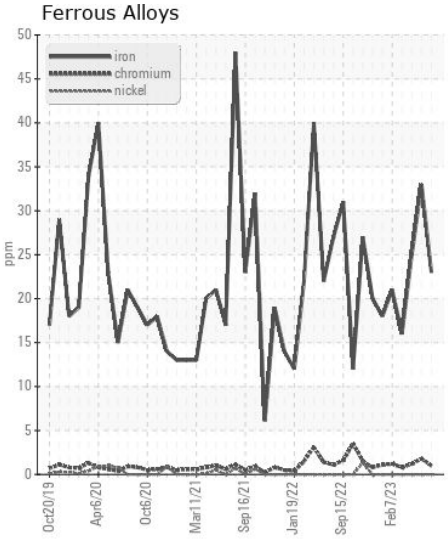
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		LEC0048271	LEC0048280	LEC0039927
Sample Date		Client Info		09 Apr 2024	09 Mar 2024	18 Apr 2023
Machine Age	hrs	Client Info		24893	24371	23176
Oil Age	hrs	Client Info		400	400	400
Filter Age	hrs	Client Info		400	400	400
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				ABNORMAL	ABNORMAL	SEVERE
Iron	ppm	ASTM D5185m	>100	23	33	25
Chromium	ppm	ASTM D5185m	>20	1	2	1
Nickel	ppm	ASTM D5185m	>4	0	0	0
Titanium	ppm	ASTM D5185m		2	3	0
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>20	5	4	2
Lead	ppm	ASTM D5185m	>40	▲ 48	19	18
Copper	ppm	ASTM D5185m	>330	1	<1	2
Tin	ppm	ASTM D5185m	>15	2	<1	<1
Vanadium	ppm	ASTM D5185m		0	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Silicon	ppm	ASTM D5185m	>!20	9	16	8
Potassium	ppm	ASTM D5185m	>20	2	<1	2
Fuel	%	ASTM D3524	>5	1.8	▲ 3.1	▲ 13.4
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.7	0.6	0.6
Nitration	Abs/cm	*ASTM D7624	>20	9.8	10.6	12.1
Sulfation	Abs/.1mm	*ASTM D7415	>30	25.5	24.4	24.3
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
Sodium	ppm	ASTM D5185m		1	5	0
Boron	ppm	ASTM D5185m	316	179	138	152
Barium	ppm	ASTM D5185m	0.0	0	0	0
Molybdenum	ppm	ASTM D5185m	1.2	97	107	105
Manganese	ppm	ASTM D5185m		0	<1	<1
Magnesium	ppm	ASTM D5185m	24	499	710	486
Calcium	ppm	ASTM D5185m	2292	1537	1668	1237
Phosphorus	ppm	ASTM D5185m	1064	997	744	541
Zinc	ppm	ASTM D5185m	1160	1151	885	680
Sulfur	ppm	ASTM D5185m	4996	2953	3039	1829
Oxidation	Abs/.1mm	*ASTM D7414	>25	21.5	21.0	26.6
Base Number (BN)	mg KOH/g	ASTM D2896	10.1	6.2	6.6	5.2
Visc @ 100°C	cSt	ASTM D445	15.7	12.9	▲ 12.4	▲ 10.7

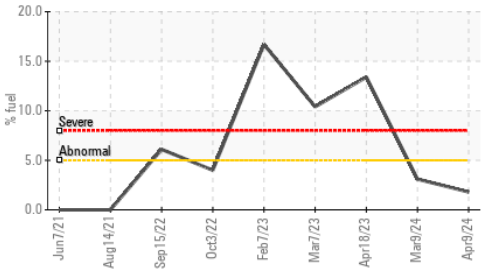
Non-ferrous Metals



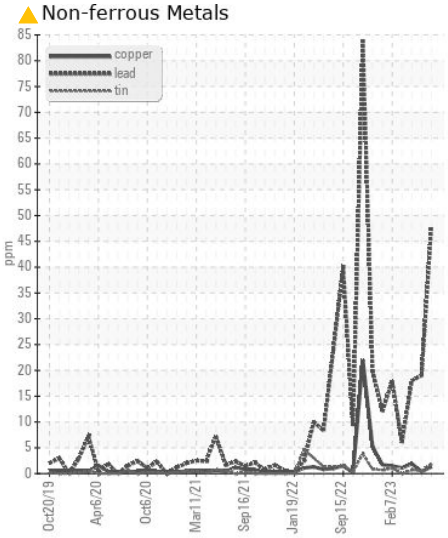
Ferrous Alloys



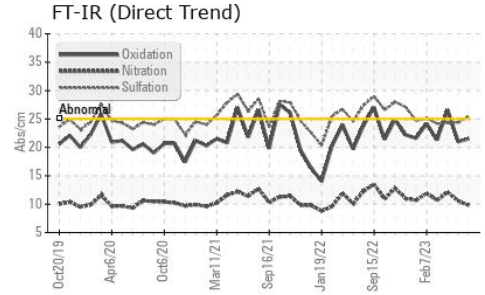
Fuel Dilution



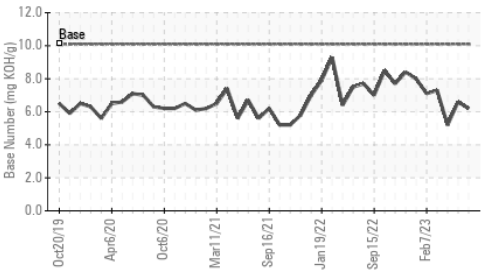
Non-ferrous Metals



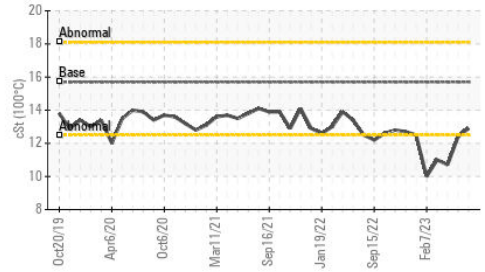
FT-IR (Direct Trend)



Base Number



Viscosity @ 100°C



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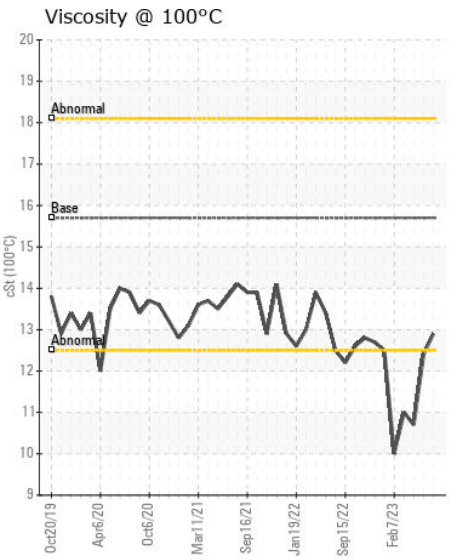

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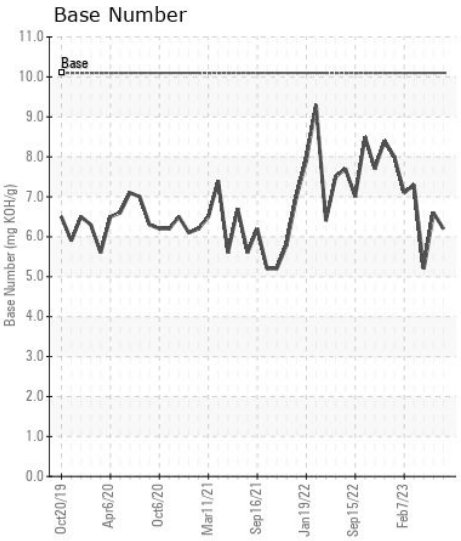

Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : LEC0048271 **Received** : 17 Apr 2024
Lab Number : 06151735 **Tested** : 22 Apr 2024
Unique Number : 10981813 **Diagnosed** : 22 Apr 2024 - Jonathan Hester
Test Package : CONST (Additional Tests: PercentFuel, TBN)

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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