LESLIE EQUIPMENT CO.

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	ABNORMAL

Area
Store 5 - Cross Lanes [RO#147149]
Machine Id
JOHN DEERE 1050K 1T01050PCJF323379
Component
Diesel Engine
Fluid
JOHN DEERE ENGINE OIL PLUS 50 II 15W40 (45 GAL)

RECOMMENDATION

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

WEAR

All component wear rates are normal.

CONTAMINATION

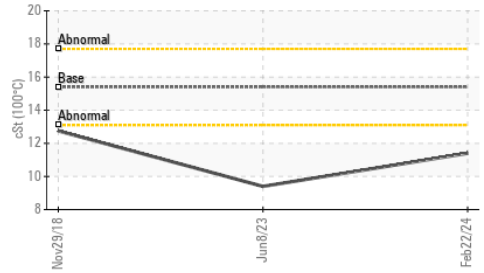
Fuel content negligible. There is no indication of any contamination in the oil.

FLUID CONDITION

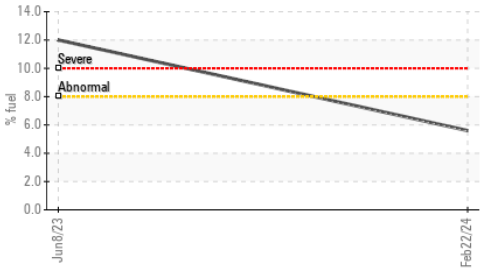
Fuel is present in the oil and is lowering the viscosity. The BN result indicates that there is suitable alkalinity remaining in the oil.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		LEC0048644	LEC0035503	LECP187441
Sample Date		Client Info		22 Feb 2024	08 Jun 2023	29 Nov 2018
Machine Age	hrs	Client Info		1208	643	604
Oil Age	hrs	Client Info		565	39	604
Filter Age	hrs	Client Info		565	39	604
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				ABNORMAL	SEVERE	NORMAL
Iron	ppm	ASTM D5185m	>37	9	6	4
Chromium	ppm	ASTM D5185m	>11	<1	0	<1
Nickel	ppm	ASTM D5185m	>5	0	<1	<1
Titanium	ppm	ASTM D5185m		0	<1	<1
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>31	2	1	1
Lead	ppm	ASTM D5185m	>26	2	3	2
Copper	ppm	ASTM D5185m	>26	28	▲ 95	76
Tin	ppm	ASTM D5185m	>4	2	1	1
Vanadium	ppm	ASTM D5185m		0	<1	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Silicon	ppm	ASTM D5185m	>!20	7	5	7
Potassium	ppm	ASTM D5185m	>20	3	2	3
Fuel	%	ASTM D3524	>8.0	5.6	▲ 12.0	<1.0
Water		WC Method	>0.21	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.1	0.1	0.1
Nitration	Abs/cm	*ASTM D7624	>20	8.5	7.0	5.9
Sulfation	Abs/.1mm	*ASTM D7415	>30	21.0	19.5	18.2
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
Sodium	ppm	ASTM D5185m	>31	<1	4	4
Boron	ppm	ASTM D5185m		205	97	91
Barium	ppm	ASTM D5185m		9	0	<1
Molybdenum	ppm	ASTM D5185m		195	32	28
Manganese	ppm	ASTM D5185m		0	<1	<1
Magnesium	ppm	ASTM D5185m		619	577	557
Calcium	ppm	ASTM D5185m		1235	1262	1236
Phosphorus	ppm	ASTM D5185m		865	848	872
Zinc	ppm	ASTM D5185m		972	1022	937
Sulfur	ppm	ASTM D5185m		2970	3761	3637
Oxidation	Abs/.1mm	*ASTM D7414	>25	15.9	14.4	11.8
Base Number (BN)	mg KOH/g	ASTM D2896	13.6	7.7	8.3	9.1
Visc @ 100°C	cSt	ASTM D445	15.4	▲ 11.4	▲ 9.4	12.75

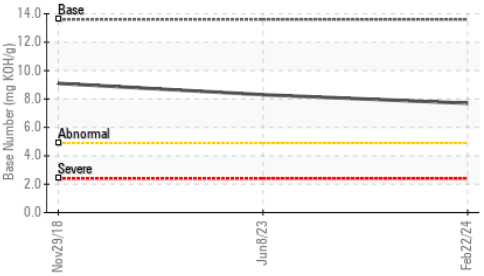
Viscosity @ 100°C



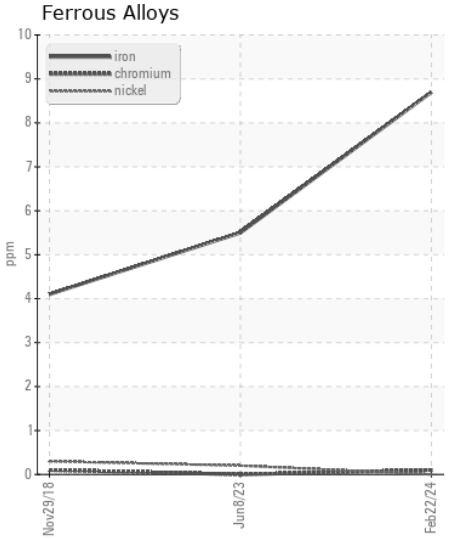
Fuel Dilution



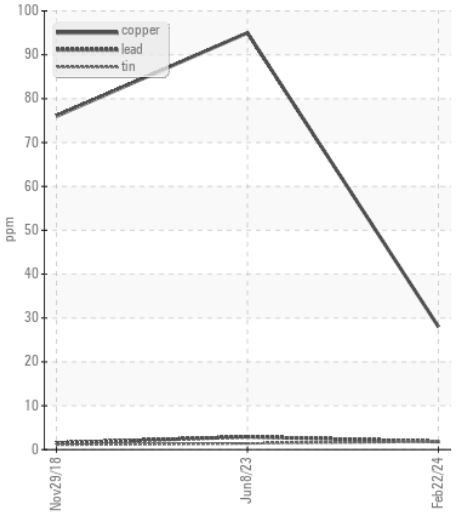
Base Number



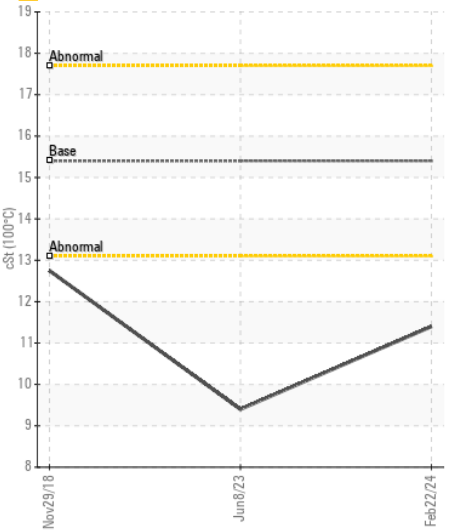
Ferrous Alloys



Non-ferrous Metals



Viscosity @ 100°C



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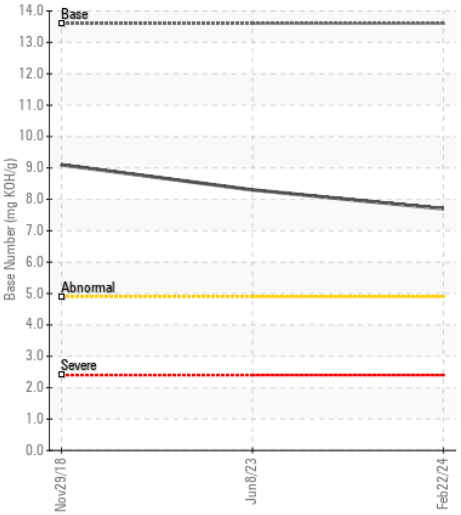

Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : LEC0048644
Lab Number : 06100000
Unique Number : 10898230
Test Package : CONST (Additional Tests: PercentFuel, TBN)

Received : 26 Feb 2024
Tested : 27 Feb 2024
Diagnosed : 28 Feb 2024 - Jonathan Hester

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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