MOB

LESLIE EQUIPMENT CO.

OIL ANALYSIS REPORT

WEAR	ABNORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area
Store 9 - Marietta
Machine Id
JOHN DEERE 310E 1DW310EXKHF681857
Component
Diesel Engine
Fluid
JOHN DEERE ENGINE OIL PLUS 50 II 15W40 (9 GAL)

RECOMMENDATION

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

WEAR

Cylinder, crank, or cam shaft wear is indicated.

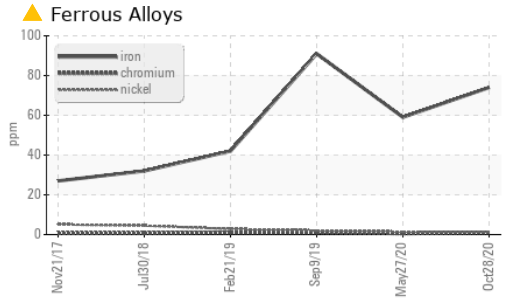
CONTAMINATION

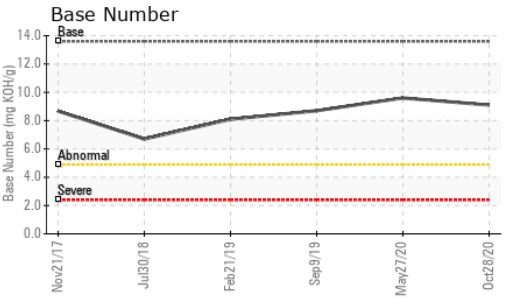
There is no indication of any contamination in the oil.

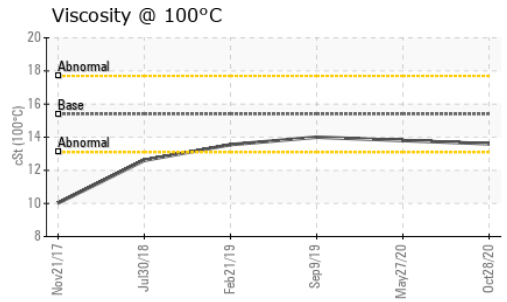
FLUID CONDITION

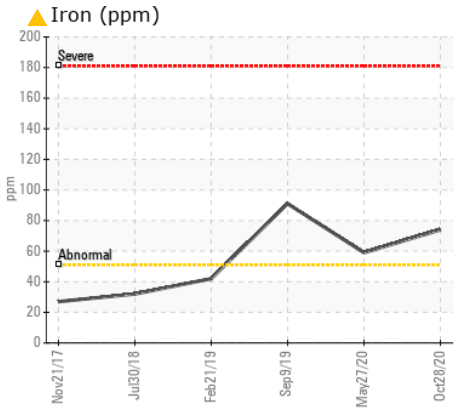
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

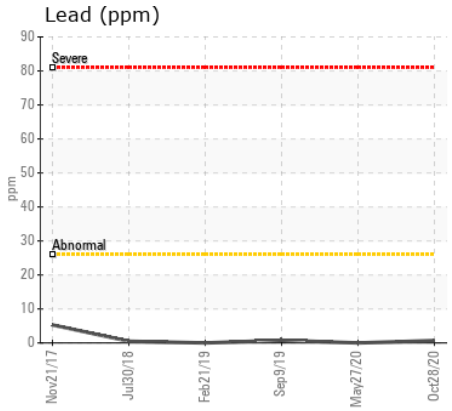
Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		LEC0015535	LEC0013312	LEC0006403
Sample Date		Client Info		28 Oct 2020	27 May 2020	09 Sep 2019
Machine Age	hrs	Client Info		3956	3183	2681
Oil Age	hrs	Client Info		773	502	835
Filter Age	hrs	Client Info		773	502	835
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				ABNORMAL	ABNORMAL	ABNORMAL
Iron	ppm	ASTM D5185m	>51	▲ 74	▲ 59	▲ 91
Chromium	ppm	ASTM D5185m	>11	1	<1	1
Nickel	ppm	ASTM D5185m	>5	1	1	2
Titanium	ppm	ASTM D5185m		<1	0	<1
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>31	7	7	9
Lead	ppm	ASTM D5185m	>26	<1	0	<1
Copper	ppm	ASTM D5185m	>26	3	4	25
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
Silicon	ppm	ASTM D5185m	>22	9	4	8
Potassium	ppm	ASTM D5185m	>20	2	1	10
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	0.6	0.3	0.6
Nitration	Abs/cm	*ASTM D7624	>20	9.1	8.6	9.2
Sulfation	Abs/.1mm	*ASTM D7415	>30	23.4	21.2	22.9
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	5	4	4
Boron	ppm	ASTM D5185m		190	206	167
Barium	ppm	ASTM D5185m		1	0	0
Molybdenum	ppm	ASTM D5185m		254	236	250
Manganese	ppm	ASTM D5185m		1	<1	<1
Magnesium	ppm	ASTM D5185m		787	784	854
Calcium	ppm	ASTM D5185m		1442	1383	1528
Phosphorus	ppm	ASTM D5185m		845	823	834
Zinc	ppm	ASTM D5185m		1065	943	1072
Sulfur	ppm	ASTM D5185m		2459	2797	2497
Oxidation	Abs/.1mm	*ASTM D7414	>25	16.7	15.5	17
Base Number (BN)	mg KOH/g	ASTM D2896	13.6	9.1	9.6	8.7
Visc @ 100°C	cSt	ASTM D445	15.4	13.6	13.8	14.0

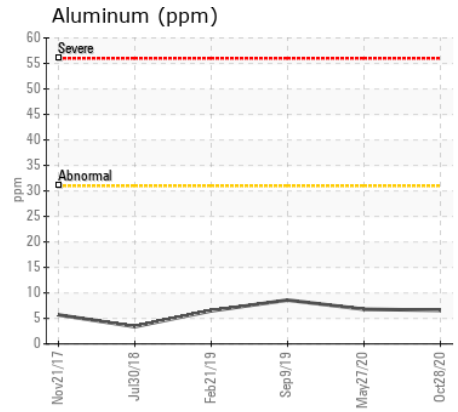


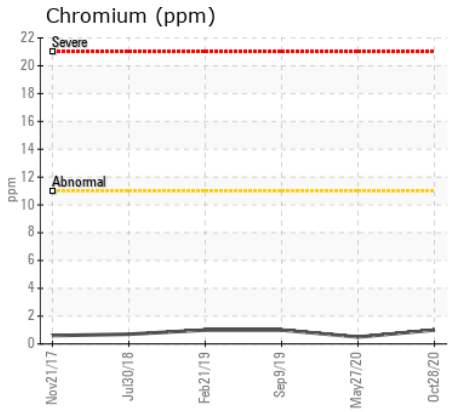


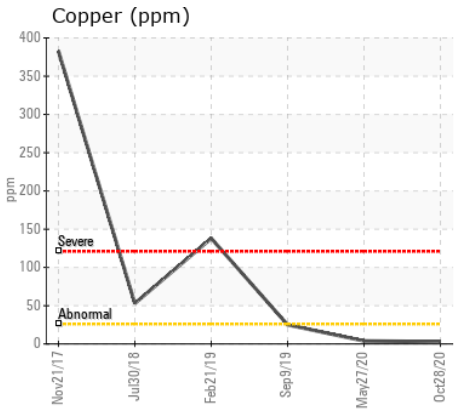


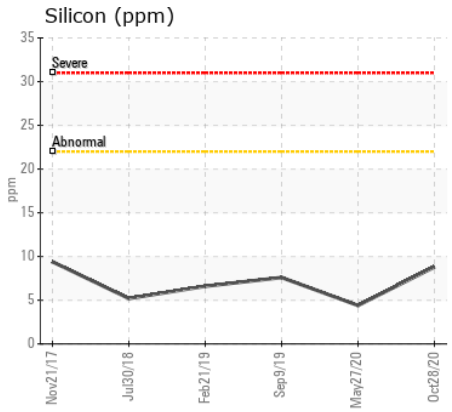


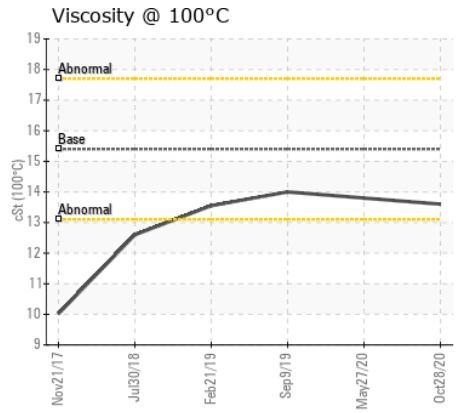


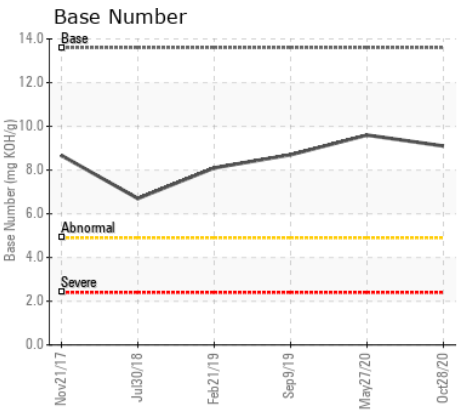












Nov21/17 Jul30/18 Feb21/19 Sep9/19 May27/20 Oct28/20

Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : LEC0015535 **Recieved** : 30 Oct 2020
Lab Number : 05104982 **Diagnosed** : 03 Nov 2020
Unique Number : 9235236 **Diagnostician** : Don Baldridge
Test Package : MOBCE (Additional Tests: PQ, 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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