LESLIE EQUIPMENT CO.

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area
Store 8 - Pikeville [139128]
Machine Id
JOHN DEERE 310E 1DW310EXVNF714534
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

All component wear rates are normal.

CONTAMINATION

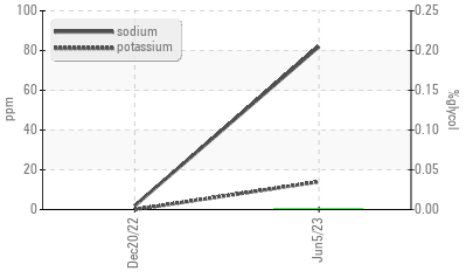
Test for glycol is negative. There is no indication of any contamination in the oil.

FLUID CONDITION

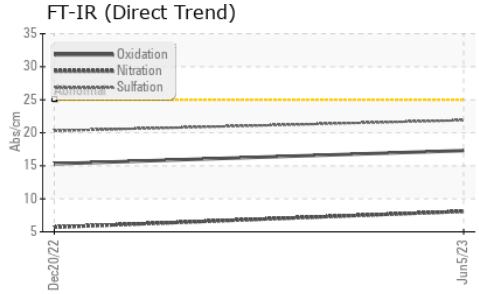
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		LEC0040432	LEC0036852	---
Sample Date		Client Info		05 Jun 2023	20 Dec 2022	---
Machine Age	hrs	Client Info		1046	486	---
Oil Age	hrs	Client Info		560	486	---
Filter Age	hrs	Client Info		560	486	---
Oil Changed		Client Info		Changed	Changed	---
Filter Changed		Client Info		Changed	Changed	---
Sample Status				NORMAL	NORMAL	---
Iron	ppm	ASTM D5185m	>51	44	19	---
Chromium	ppm	ASTM D5185m	>11	<1	<1	---
Nickel	ppm	ASTM D5185m	>5	13	10	---
Titanium	ppm	ASTM D5185m		0	0	---
Silver	ppm	ASTM D5185m	>3	0	0	---
Aluminum	ppm	ASTM D5185m	>31	2	2	---
Lead	ppm	ASTM D5185m	>26	<1	<1	---
Copper	ppm	ASTM D5185m	>26	5	4	---
Tin	ppm	ASTM D5185m	>4	<1	2	---
Vanadium	ppm	ASTM D5185m		0	0	---
White Metal	scalar	*Visual	NONE	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	---
Silicon	ppm	ASTM D5185m	>!20	9	4	---
Potassium	ppm	ASTM D5185m	>20	14	0	---
Fuel		WC Method	>2.1	<1.0	<1.0	---
Water		WC Method	>0.21	NEG	NEG	---
Glycol	%	*ASTM D2982		0.0	NEG	---
Soot %	%	*ASTM D7844	>3	0.3	0.2	---
Nitration	Abs/cm	*ASTM D7624	>20	8.1	5.7	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	21.9	20.3	---
Silt	scalar	*Visual	NONE	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	---
Appearance	scalar	*Visual	NORML	NORML	NORML	---
Odor	scalar	*Visual	NORML	NORML	NORML	---
Emulsified Water	scalar	*Visual	>0.21	NEG	NEG	---
Sodium	ppm	ASTM D5185m	>31	82	2	---
Boron	ppm	ASTM D5185m		216	136	---
Barium	ppm	ASTM D5185m		0	0	---
Molybdenum	ppm	ASTM D5185m		223	88	---
Manganese	ppm	ASTM D5185m		1	<1	---
Magnesium	ppm	ASTM D5185m		799	425	---
Calcium	ppm	ASTM D5185m		1539	1832	---
Phosphorus	ppm	ASTM D5185m		923	1138	---
Zinc	ppm	ASTM D5185m		1171	1297	---
Sulfur	ppm	ASTM D5185m		3735	4079	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	17.3	15.3	---
Base Number (BN)	mg KOH/g	ASTM D2896	13.6	8.4	10.5	---
Visc @ 100°C	cSt	ASTM D445	15.4	13.2	12.8	---

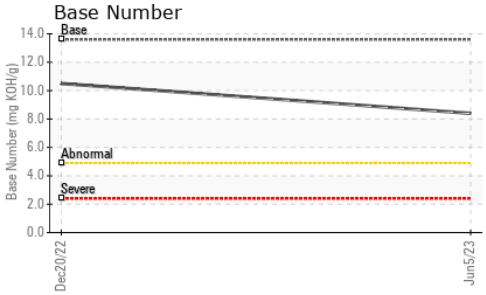
Glycol Contamination



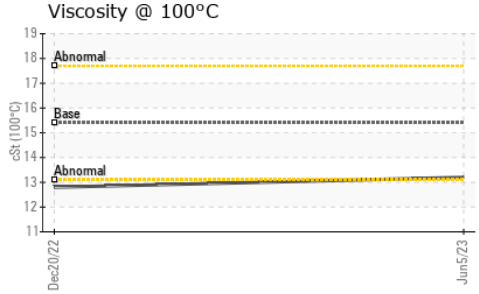
FT-IR (Direct Trend)



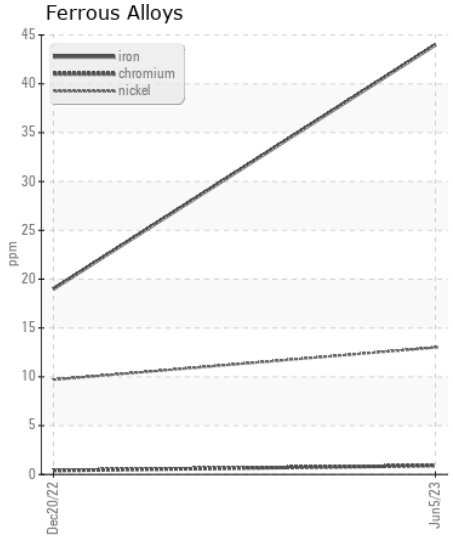
Base Number



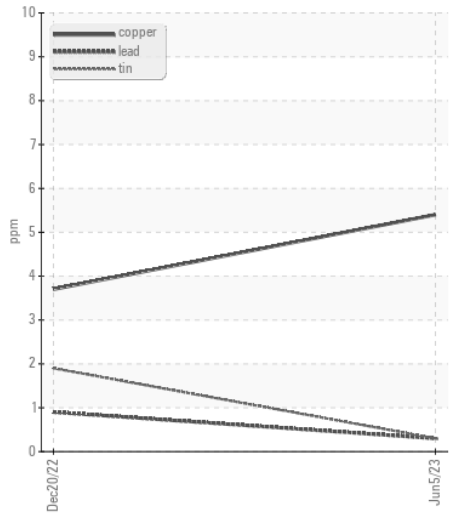
Viscosity @ 100°C



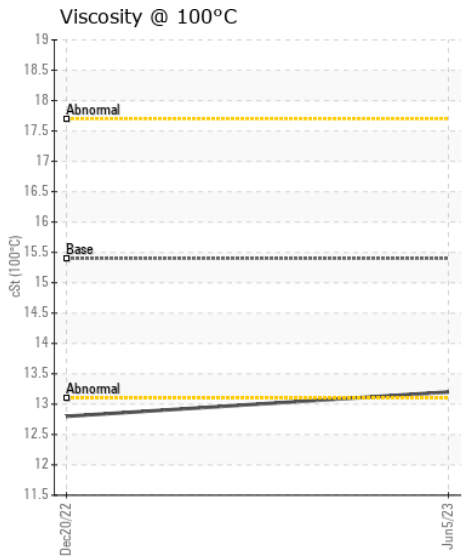
Ferrous Alloys



Non-ferrous Metals



Viscosity @ 100°C



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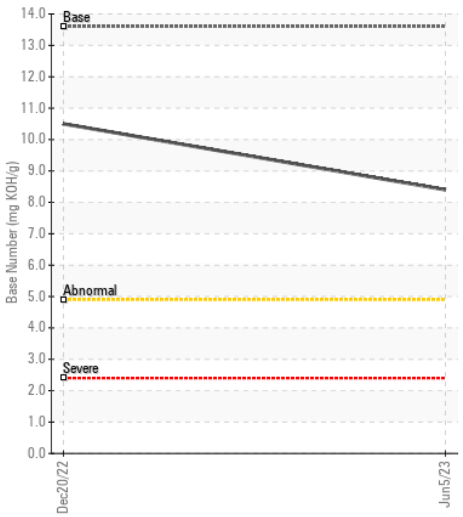

Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : LEC0040432 **Received** : 08 Jun 2023
Lab Number : 05867702 **Tested** : 14 Jun 2023
Unique Number : 10507486 **Diagnosed** : 22 Jun 2023 - Doug Bogart
Test Package : CONST (Additional Tests: Glycol, 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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