



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	ATTENTION

Area
Store 8 - Pikeville

Machine Id
JOHN DEERE EX-08

Component
Diesel Engine

Fluid
SHELL ROTELLA T4 15W40 (14 GAL)

RECOMMENDATION

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

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		LECP139511	LEC0033820	LECP188501
Sample Date		Client Info		23 Mar 2023	06 Feb 2023	18 May 2018
Machine Age	hrs	Client Info		2380	2104	575
Oil Age	hrs	Client Info		250	568	575
Filter Age	hrs	Client Info		250	568	575
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				ATTENTION	SEVERE	ABNORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>51	19	▲ 104	57
Chromium	ppm	ASTM D5185m	>11	<1	2	<1
Nickel	ppm	ASTM D5185m	>5	0	2	1
Titanium	ppm	ASTM D5185m		0	1	12
Silver	ppm	ASTM D5185m	>3	0	<1	0
Aluminum	ppm	ASTM D5185m	>31	0	● 14	6
Lead	ppm	ASTM D5185m	>26	5	▲ 37	24
Copper	ppm	ASTM D5185m	>26	14	23	▲ 343
Tin	ppm	ASTM D5185m	>4	2	4	4
Vanadium	ppm	ASTM D5185m		0	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

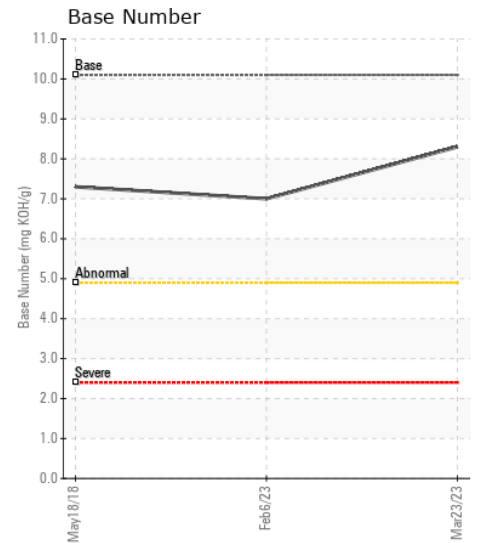
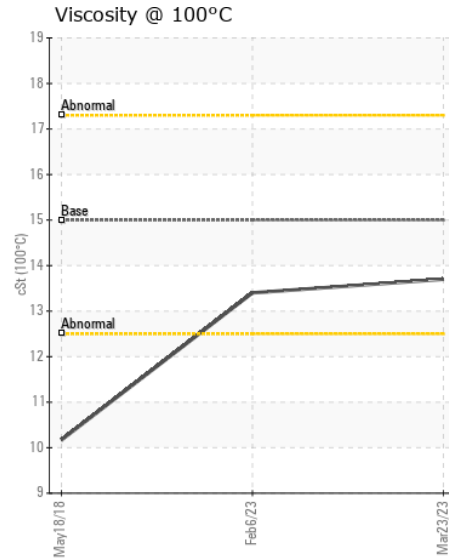
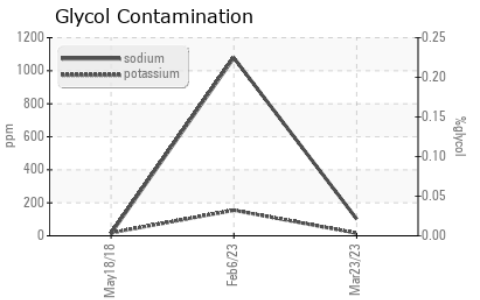
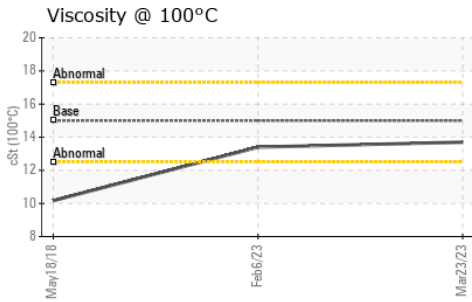
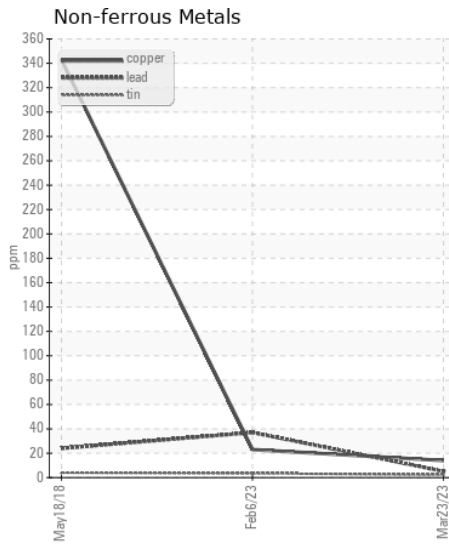
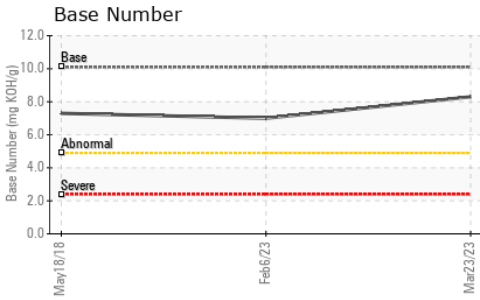
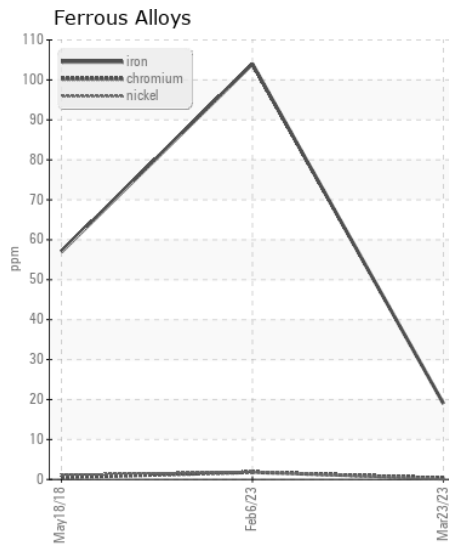
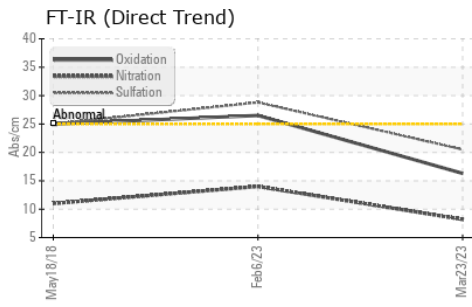
Sodium and/or potassium levels are high. Test for glycol is negative.

Silicon	ppm	ASTM D5185m	>120	6	▲ 35	9
Potassium	ppm	ASTM D5185m	>20	16	▲ 155	18
Fuel		WC Method	>5	<1.0	<1.0	<1.0
Water		WC Method	>0.21	NEG	NEG	NEG
Glycol	%	*ASTM D2982		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.3	0.5	0.3
Nitration	Abs/cm	*ASTM D7624	>20	8.2	14.0	11.
Sulfation	Abs/.1mm	*ASTM D7415	>30	20.5	28.8	25.
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

FLUID CONDITION

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

Sodium	ppm	ASTM D5185m	>31	● 102	▲ 1078	13
Boron	ppm	ASTM D5185m		48	28	62
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		73	259	186
Manganese	ppm	ASTM D5185m		<1	2	4
Magnesium	ppm	ASTM D5185m		358	688	702
Calcium	ppm	ASTM D5185m		1611	1372	1408
Phosphorus	ppm	ASTM D5185m		880	718	819
Zinc	ppm	ASTM D5185m		1087	925	1011
Sulfur	ppm	ASTM D5185m		3325	3725	2290
Oxidation	Abs/.1mm	*ASTM D7414	>25	16.3	26.5	25.
Base Number (BN)	mg KOH/g	ASTM D2896	10.1	8.3	7.0	7.30
Visc @ 100°C	cSt	ASTM D445	15	13.7	13.4	10.17



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : LECP139511 **Received** : 28 Apr 2023
Lab Number : 05832509 **Tested** : 02 May 2023
Unique Number : 10446002 **Diagnosed** : 02 May 2023 - Jonathan Hester
Test Package : CONST (Additional Tests: Glycol, TBN)

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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)