



OIL ANALYSIS REPORT

WEAR	ABNORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Area
Store 8 - Pikeville [147135]
Machine Id
JOHN DEERE 650K 1T0650KKKHF316340
Component
Diesel Engine
Fluid
{not provided} (--- QTS)

RECOMMENDATION

Oil and filter change at the time of sampling has been noted. No corrective action is recommended at this time. Resample at the next service interval to monitor. Please specify the brand, type, and viscosity of the oil on your next sample.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		LEC0043026	LEC0028423	---
Sample Date		Client Info		30 Jan 2024	26 Jul 2022	---
Machine Age	hrs	Client Info		522	396	---
Oil Age	hrs	Client Info		522	396	---
Filter Age	hrs	Client Info		522	396	---
Oil Changed		Client Info		Changed	Not Changed	---
Filter Changed		Client Info		Changed	Not Changed	---
Sample Status				ABNORMAL	ABNORMAL	---

WEAR

The copper level is abnormal. The iron level is abnormal. Elemental level of copper (Cu) probably due to leaching of copper from copper components (i.e. cooling core) by the oil additives.

Iron	ppm	ASTM D5185m	>51	▲ 136	▲ 112	---
Chromium	ppm	ASTM D5185m	>11	2	2	---
Nickel	ppm	ASTM D5185m	>5	<1	<1	---
Titanium	ppm	ASTM D5185m		<1	<1	---
Silver	ppm	ASTM D5185m	>3	0	0	---
Aluminum	ppm	ASTM D5185m	>31	17	12	---
Lead	ppm	ASTM D5185m	>26	6	6	---
Copper	ppm	ASTM D5185m	>26	▲ 167	▲ 170	---
Tin	ppm	ASTM D5185m	>4	4	3	---
Vanadium	ppm	ASTM D5185m		<1	0	---
White Metal	scalar	*Visual	NONE	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	---

CONTAMINATION

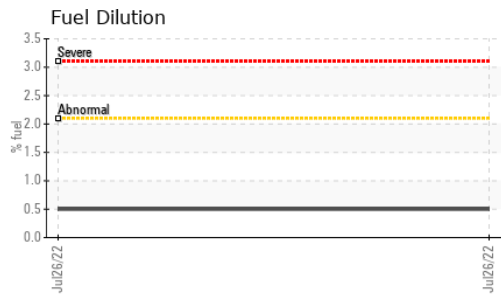
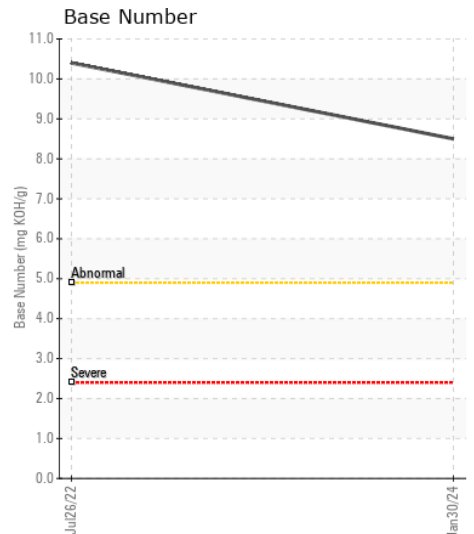
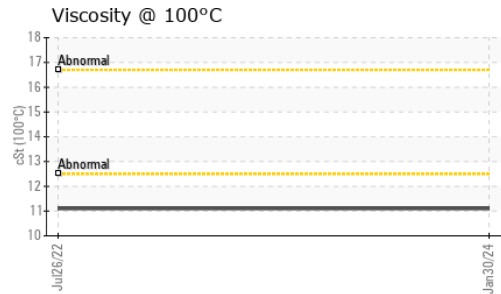
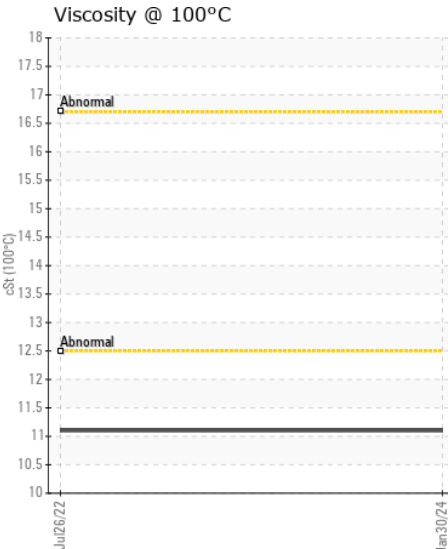
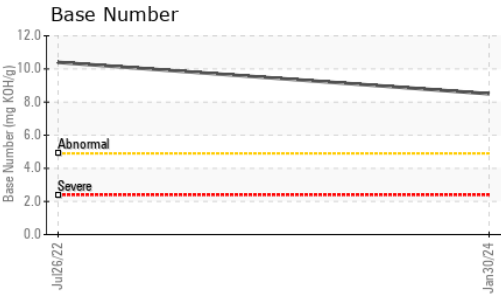
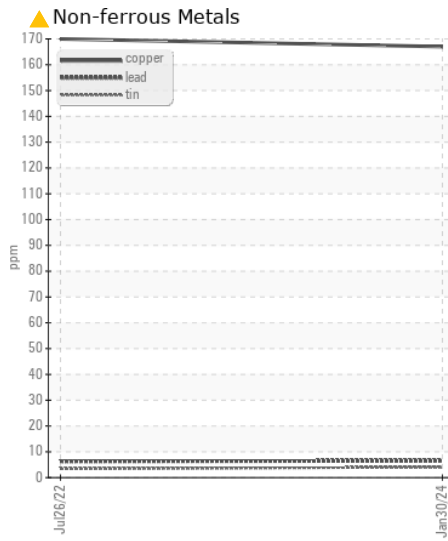
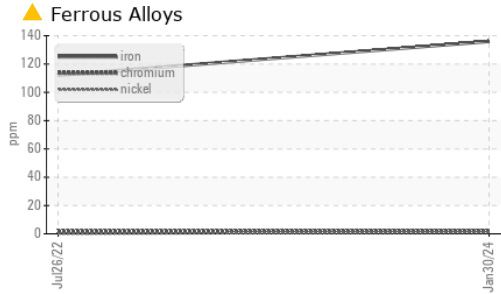
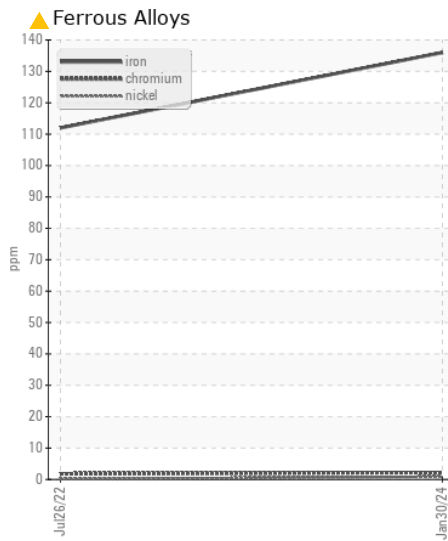
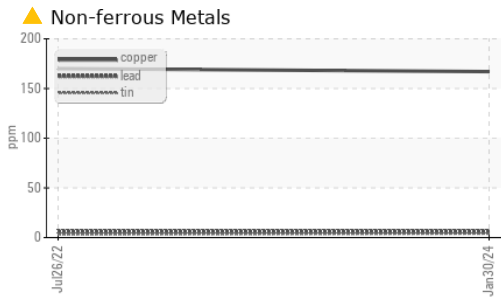
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>120	13	12	---
Potassium	ppm	ASTM D5185m	>20	5	4	---
Fuel	%	ASTM D3524	>2.1	<1.0	0.5	---
Water		WC Method	>0.21	NEG	NEG	---
Glycol		WC Method		NEG	NEG	---
Soot %	%	*ASTM D7844	>3	0.5	0.4	---
Nitration	Abs/cm	*ASTM D7624	>20	10.6	11.3	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	25.7	25.5	---
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	---

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	8	8	---
Boron	ppm	ASTM D5185m		174	240	---
Barium	ppm	ASTM D5185m		5	3	---
Molybdenum	ppm	ASTM D5185m		279	268	---
Manganese	ppm	ASTM D5185m		7	6	---
Magnesium	ppm	ASTM D5185m		859	857	---
Calcium	ppm	ASTM D5185m		1423	1465	---
Phosphorus	ppm	ASTM D5185m		912	896	---
Zinc	ppm	ASTM D5185m		1120	1129	---
Sulfur	ppm	ASTM D5185m		2795	3046	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	21.3	21.0	---
Base Number (BN)	mg KOH/g	ASTM D2896		8.5	10.4	---
Visc @ 100°C	cSt	ASTM D445		11.1	11.1	---



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : LEC0043026 **Received** : 01 Feb 2024
Lab Number : 06076617 **Diagnosed** : 02 Feb 2024
Unique Number : 10858708 **Diagnostician** : Don Baldrige
Test Package : CONST (Additional Tests: FuelDilution, TBN)

KENTUCKY DIVISION OF FORESTRY
 255 RODBURN HOLLOW
 MOREHEAD, KY
 US 40351
 Contact: FLOYD WILLIS

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)

T: (606)783-8626

F: