



OIL ANALYSIS REPORT

Sample Rating Trend



WATER



Area

MINING

Machine Id

ME-124 JOHN DEERE 844L 1DW844LXKLF706566

Component

Diesel Engine

Fluid

SHELL RIMULA SUPER SAE 15W40 (--- GAL)

DIAGNOSIS

▲ 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

There is a light concentration of water present 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.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		WC0920496	---	---
Sample Date	Client Info		09 May 2024	---	---
Machine Age	hrs	Client Info	8198	---	---
Oil Age	hrs	Client Info	0	---	---
Oil Changed	Client Info		Changed	---	---
Sample Status			MARGINAL	---	---

CONTAMINATION

	method	limit/base	current	history1	history2
Fuel	WC Method	>2.1	<1.0	---	---

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>51	33	---
Chromium	ppm	ASTM D5185m	>11	<1	---
Nickel	ppm	ASTM D5185m	>5	0	---
Titanium	ppm	ASTM D5185m		0	---
Silver	ppm	ASTM D5185m	>3	0	---
Aluminum	ppm	ASTM D5185m	>31	5	---
Lead	ppm	ASTM D5185m	>26	6	---
Copper	ppm	ASTM D5185m	>26	13	---
Tin	ppm	ASTM D5185m	>4	2	---
Vanadium	ppm	ASTM D5185m		<1	---
Cadmium	ppm	ASTM D5185m		0	---

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		28	---
Barium	ppm	ASTM D5185m		0	---
Molybdenum	ppm	ASTM D5185m		75	---
Manganese	ppm	ASTM D5185m		<1	---
Magnesium	ppm	ASTM D5185m		19	---
Calcium	ppm	ASTM D5185m	2840	2431	---
Phosphorus	ppm	ASTM D5185m	1150	1149	---
Zinc	ppm	ASTM D5185m	1270	1450	---
Sulfur	ppm	ASTM D5185m	2829	6210	---

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>22	<1	---
Sodium	ppm	ASTM D5185m	>31	3	---
Potassium	ppm	ASTM D5185m	>20	<1	---
Water	%	ASTM D6304	>0.21	▲ 0.187	---
ppm Water	ppm	ASTM D6304	>2100	▲ 1870	---
Glycol	%	*ASTM D2982		NEG	---

INFRA-RED

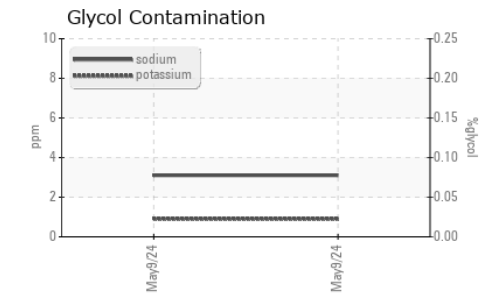
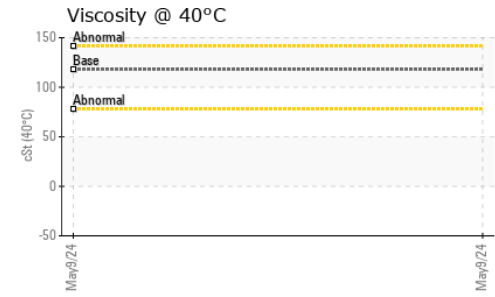
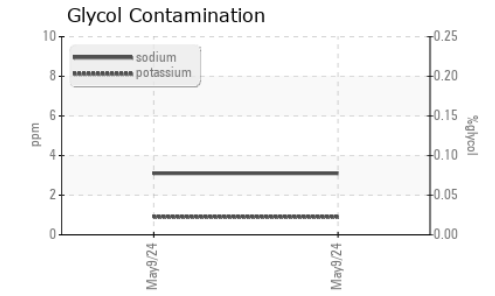
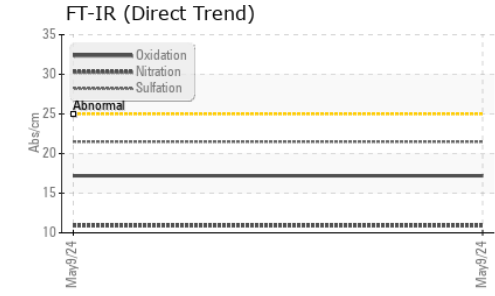
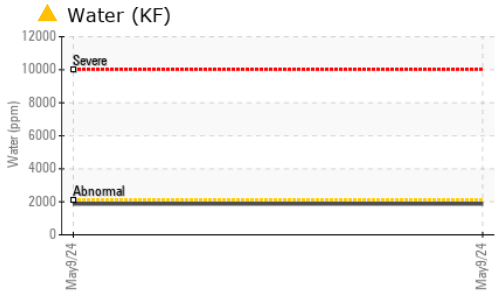
	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>3	0.5	---
Nitration	Abs/cm	*ASTM D7624	>20	10.9	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	21.5	---

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	17.2	---
Base Number (BN)	mg KOH/g	ASTM D2896	10.6	5.4	---



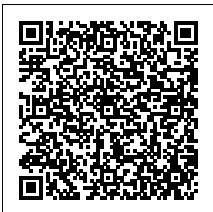
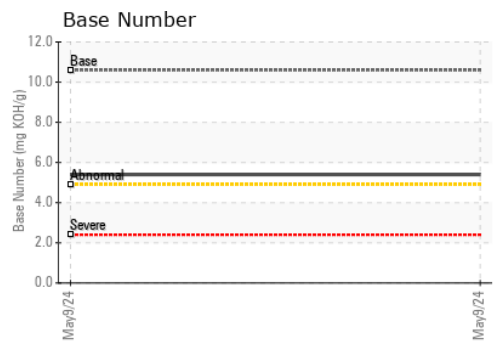
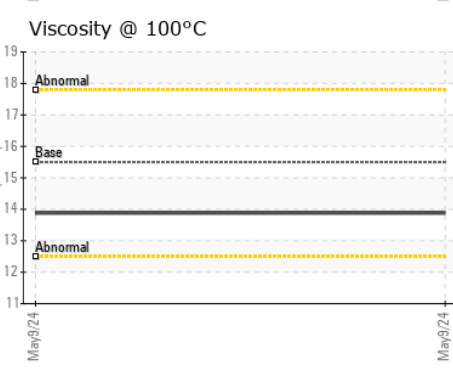
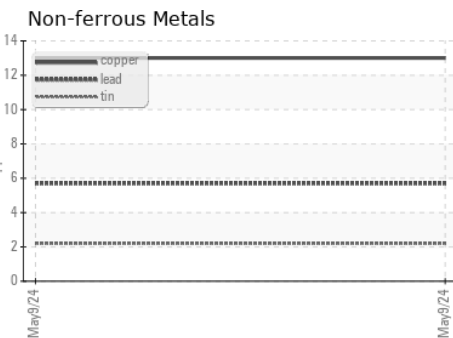
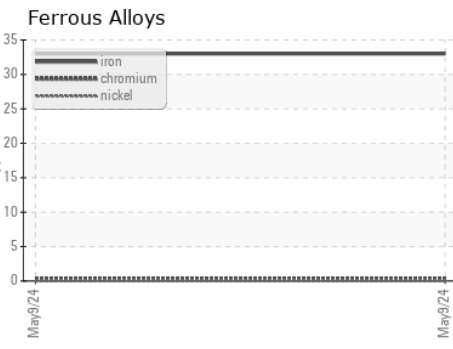
OIL ANALYSIS REPORT



VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	---
Precipitate	scalar	*Visual	NONE	NONE	---
Silt	scalar	*Visual	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---
Appearance	scalar	*Visual	NORML	NORML	---
Odor	scalar	*Visual	NORML	NORML	---
Emulsified Water	scalar	*Visual	>0.21	0.2%	---
Free Water	scalar	*Visual		NEG	---

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	15.5	13.88	---

GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0920496 **Received** : 04 Jun 2024
Lab Number : 06199605 **Tested** : 12 Jun 2024
Unique Number : 11061728 **Diagnosed** : 12 Jun 2024 - Jonathan Hester
Test Package : CONST (Additional Tests: Glycol, KF, KV40, TBN, VI)

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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)