James River Equipment

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	SEVERE
FLUID CONDITION	ABNORMAL

Machine Id
JOHN DEERE 460E II 1DW460ELTPF716766
Component
Diesel Engine
Fluid
JOHN DEERE ENGINE OIL PLUS 50 II 15W40 (--- GAL)

RECOMMENDATION

We advise that you check the fuel injection system. Oil and filter change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

WEAR

All component wear rates are normal.

CONTAMINATION

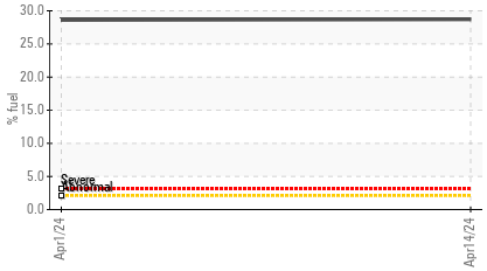
There is a high amount of fuel present in the oil.

FLUID CONDITION

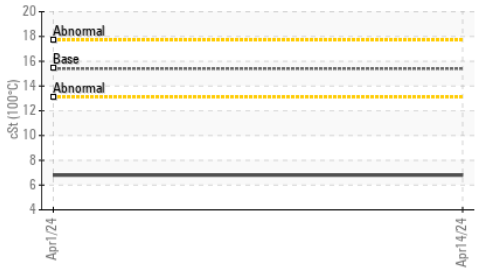
Fuel is present in the oil and is lowering the viscosity. The oil is no longer serviceable due to the presence of contaminants.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		JR0209102	JR0209252	---
Sample Date		Client Info		14 Apr 2024	01 Apr 2024	---
Machine Age	hrs	Client Info		947	947	---
Oil Age	hrs	Client Info		947	396	---
Filter Age	hrs	Client Info		0	396	---
Oil Changed		Client Info		Changed	N/A	---
Filter Changed		Client Info		Changed	N/A	---
Sample Status				SEVERE	SEVERE	---
Iron	ppm	ASTM D5185m	>51	12	13	---
Chromium	ppm	ASTM D5185m	>11	<1	0	---
Nickel	ppm	ASTM D5185m	>5	0	0	---
Titanium	ppm	ASTM D5185m		0	0	---
Silver	ppm	ASTM D5185m	>3	0	0	---
Aluminum	ppm	ASTM D5185m	>31	4	3	---
Lead	ppm	ASTM D5185m	>26	9	8	---
Copper	ppm	ASTM D5185m	>26	96	89	---
Tin	ppm	ASTM D5185m	>4	4	4	---
Vanadium	ppm	ASTM D5185m		0	<1	---
White Metal	scalar	*Visual	NONE	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	---
Silicon	ppm	ASTM D5185m	>22	6	5	---
Potassium	ppm	ASTM D5185m	>20	3	<1	---
Fuel	%	ASTM D3524	>2.1	▲ 28.7	▲ 28.6	---
Water		WC Method	>0.21	NEG	NEG	---
Glycol		WC Method		NEG	NEG	---
Soot %	%	*ASTM D7844	>3	0.2	0.2	---
Nitration	Abs/cm	*ASTM D7624	>20	8.5	8.4	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	19.9	19.6	---
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	2	4	---
Boron	ppm	ASTM D5185m		112	118	---
Barium	ppm	ASTM D5185m		0	<1	---
Molybdenum	ppm	ASTM D5185m		190	187	---
Manganese	ppm	ASTM D5185m		<1	1	---
Magnesium	ppm	ASTM D5185m		558	594	---
Calcium	ppm	ASTM D5185m		1046	1018	---
Phosphorus	ppm	ASTM D5185m		649	649	---
Zinc	ppm	ASTM D5185m		747	774	---
Sulfur	ppm	ASTM D5185m		1980	2350	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	14.5	14.6	---
Base Number (BN)	mg KOH/g	ASTM D2896	13.6	7.1	7.2	---
Visc @ 100°C	cSt	ASTM D445	15.4	▲ 6.8	▲ 6.8	---

Fuel Dilution

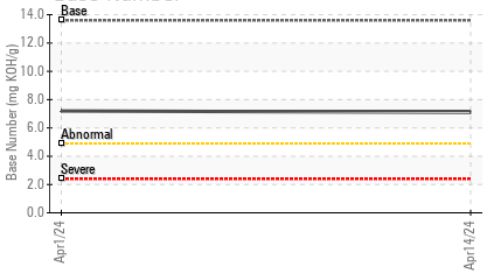


Viscosity @ 100°C

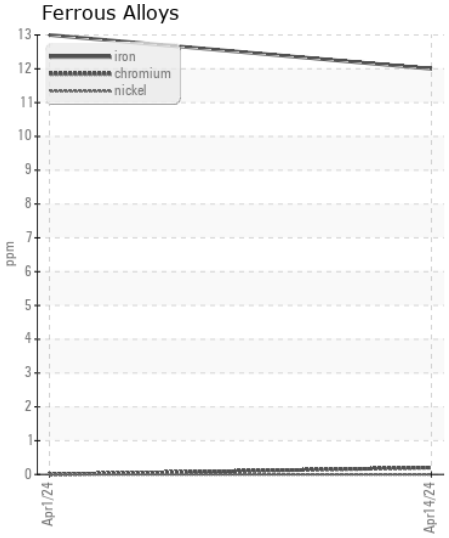


FT-IR (Direct Trend)

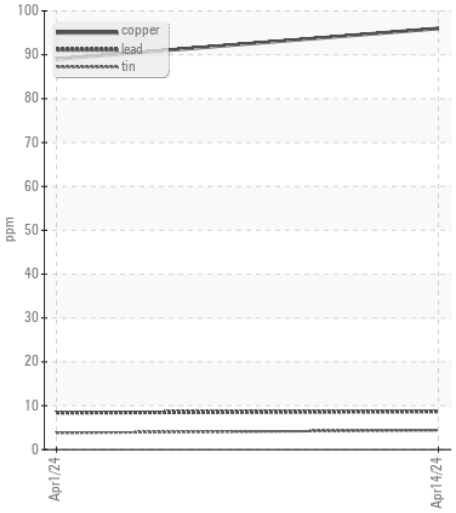
Base Number



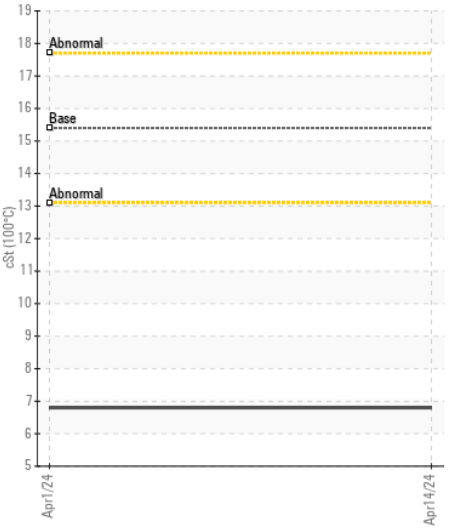
Ferrous Alloys



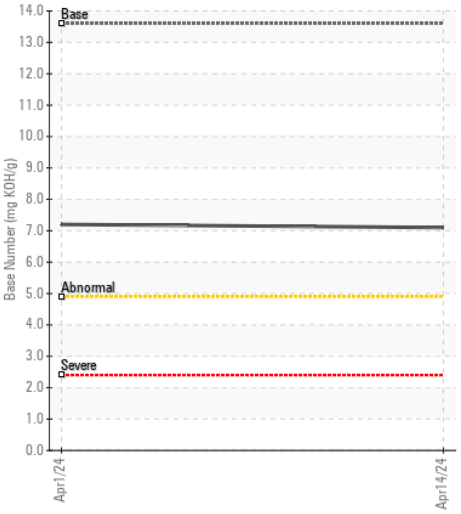
Non-ferrous Metals



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : JR0209102
Lab Number : 06151742
Unique Number : 10981820
Test Package : CONST (Additional Tests: PercentFuel, TBN)

Received : 17 Apr 2024
Tested : 22 Apr 2024
Diagnosed : 22 Apr 2024 - Jonathan Hester

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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