



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area
[W22835-TREESCAPES]

Machine Id
JOHN DEERE 6120 1P06120ECG0001624

Component
Diesel Engine

Fluid
JOHN DEERE ENGINE OIL PLUS 50 II 15W40 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		JR0225825	JR0041714	---
Sample Date		Client Info		11 Jul 2024	30 Mar 2020	---
Machine Age	hrs	Client Info		711	292	---
Oil Age	hrs	Client Info		0	292	---
Filter Age	hrs	Client Info		0	292	---
Oil Changed		Client Info		Changed	Changed	---
Filter Changed		Client Info		Changed	Changed	---
Sample Status				NORMAL	ABNORMAL	---

WEAR

Metal levels are typical for a new component breaking in.

Iron	ppm	ASTM D5185m	>51	10	12	---
Chromium	ppm	ASTM D5185m	>11	0	<1	---
Nickel	ppm	ASTM D5185m	>5	0	0	---
Titanium	ppm	ASTM D5185m		0	<1	---
Silver	ppm	ASTM D5185m	>3	0	0	---
Aluminum	ppm	ASTM D5185m	>31	6	6	---
Lead	ppm	ASTM D5185m	>26	<1	1	---
Copper	ppm	ASTM D5185m	>26	2	▲ 116	---
Tin	ppm	ASTM D5185m	>4	<1	2	---
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.

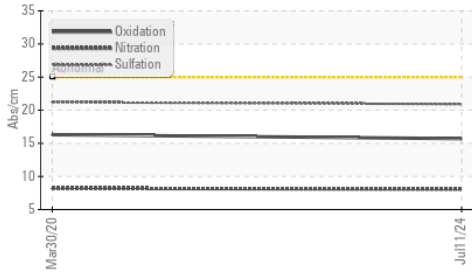
Silicon	ppm	ASTM D5185m	>22	6	6	---
Potassium	ppm	ASTM D5185m	>20	2	4	---
Fuel		WC Method	>2.1	<1.0	<1.0	---
Water		WC Method	>0.21	NEG	NEG	---
Glycol		WC Method		NEG	NEG	---
Soot %	%	*ASTM D7844	>3	0.1	0.1	---
Nitration	Abs/cm	*ASTM D7624	>20	8.1	8.2	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	20.9	21.2	---
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

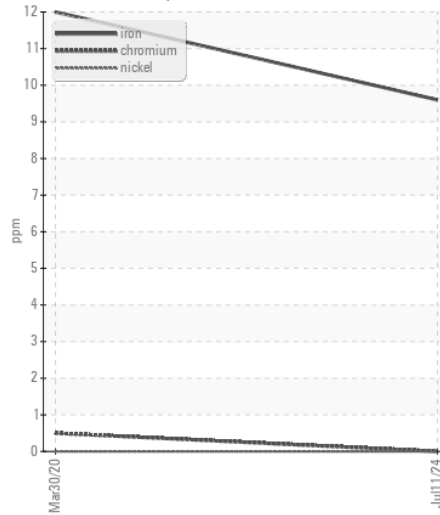
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m	>31	2	2	---
Boron	ppm	ASTM D5185m		254	221	---
Barium	ppm	ASTM D5185m		0	1	---
Molybdenum	ppm	ASTM D5185m		261	257	---
Manganese	ppm	ASTM D5185m		<1	<1	---
Magnesium	ppm	ASTM D5185m		791	893	---
Calcium	ppm	ASTM D5185m		1452	1491	---
Phosphorus	ppm	ASTM D5185m		959	894	---
Zinc	ppm	ASTM D5185m		1116	997	---
Sulfur	ppm	ASTM D5185m		3551	2526	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	15.7	16.3	---
Base Number (BN)	mg KOH/g	ASTM D2896	13.6	8.8	9	---
Visc @ 100°C	cSt	ASTM D445	15.4	14.1	13.7	---

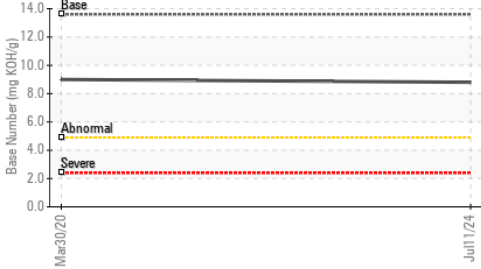
FT-IR (Direct Trend)



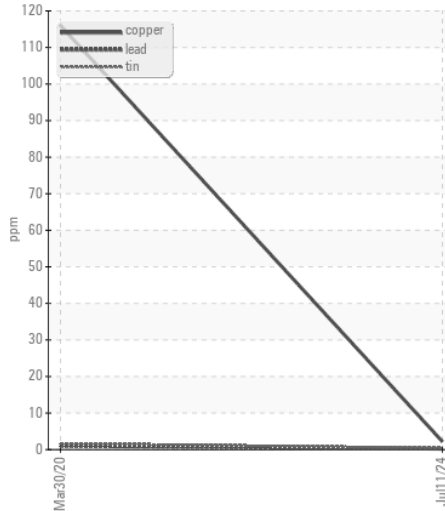
Ferrous Alloys



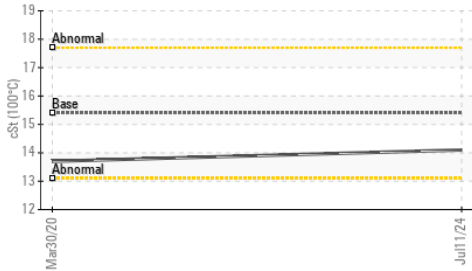
Base Number



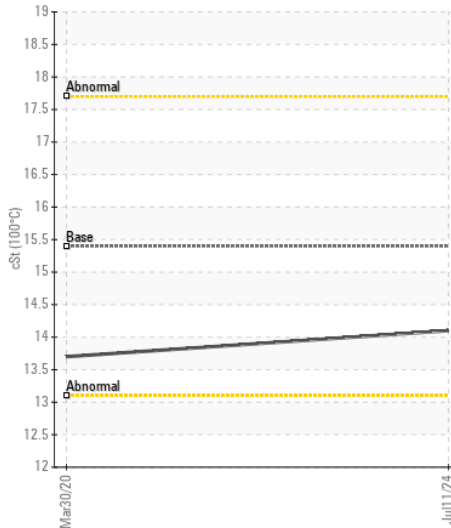
Non-ferrous Metals



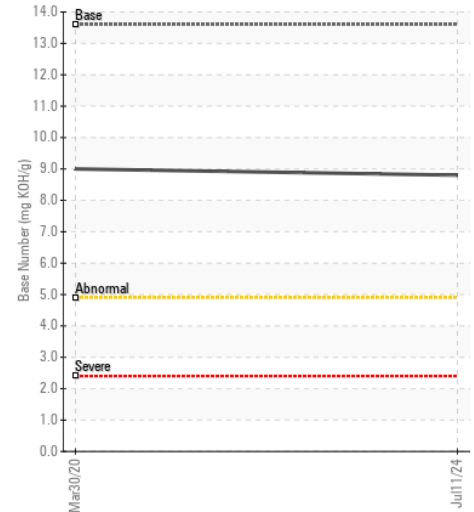
Viscosity @ 100°C



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513

Sample No. : JR0225825

Lab Number : 06237338

Unique Number : 11126172

Test Package : CONST (Additional Tests: TBN)

Received : 15 Jul 2024

Tested : 17 Jul 2024

Diagnosed : 17 Jul 2024 - Wes Davis

JRE - BURKEVILLE

510 WEST COLONIAL DR

BURKEVILLE, VA

US 23922

Contact: BRANDON BOLLING

bbolling@jamesriverequipment.com

T: (434)767-5578

F: (434)767-3774

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)