



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
JOHN DEERE 17G 1FF017GXEKK228961
 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		JR0214550	JR0068664	JR0048937
Sample Date		Client Info		18 Apr 2024	20 Nov 2020	07 Aug 2020
Machine Age	hrs	Client Info		795	412	322
Oil Age	hrs	Client Info		795	412	72
Filter Age	hrs	Client Info		795	412	72
Oil Changed		Client Info		Changed	Changed	Not Changd
Filter Changed		Client Info		N/A	Changed	Not Changd
Sample Status				NORMAL	ABNORMAL	ABNORMAL

WEAR

Metal levels are typical for a new component breaking in.

Iron	ppm	ASTM D5185m	>51	101	43	48
Chromium	ppm	ASTM D5185m	>11	<1	<1	<1
Nickel	ppm	ASTM D5185m	>5	0	<1	<1
Titanium	ppm	ASTM D5185m		0	<1	0
Silver	ppm	ASTM D5185m	>3	0	<1	0
Aluminum	ppm	ASTM D5185m	>31	11	3	5
Lead	ppm	ASTM D5185m	>26	0	<1	<1
Copper	ppm	ASTM D5185m	>26	11	14	17
Tin	ppm	ASTM D5185m	>4	1	<1	1
Vanadium	ppm	ASTM D5185m		0	<1	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

There is no indication of any contamination in the oil.

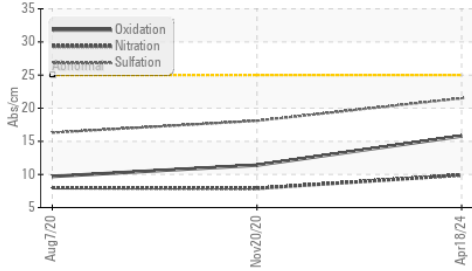
Silicon	ppm	ASTM D5185m	>22	29	▲ 62	▲ 95
Potassium	ppm	ASTM D5185m	>20	2	1	2
Fuel		WC Method	>2.1	<1.0	1.1	<1.0
Water		WC Method	>0.21	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.5	0.3	0.2
Nitration	Abs/cm	*ASTM D7624	>20	9.9	7.9	8
Sulfation	Abs/.1mm	*ASTM D7415	>30	21.5	18.1	16.3
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

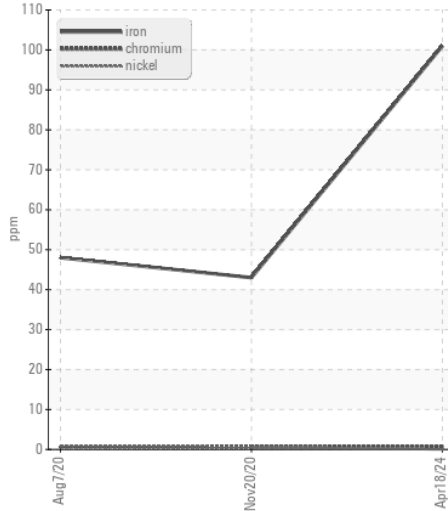
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m	>31	9	14	20
Boron	ppm	ASTM D5185m		227	125	38
Barium	ppm	ASTM D5185m		<1	6	7
Molybdenum	ppm	ASTM D5185m		262	143	111
Manganese	ppm	ASTM D5185m		3	4	6
Magnesium	ppm	ASTM D5185m		825	221	15
Calcium	ppm	ASTM D5185m		1775	3242	4219
Phosphorus	ppm	ASTM D5185m		948	1014	1130
Zinc	ppm	ASTM D5185m		1178	1189	1263
Sulfur	ppm	ASTM D5185m		3726	4426	7722
Oxidation	Abs/.1mm	*ASTM D7414	>25	15.8	11.4	9.7
Base Number (BN)	mg KOH/g	ASTM D2896	13.6	9.0	12.3	12.9
Visc @ 100°C	cSt	ASTM D445	15.4	13.2	● 10.1	9.4

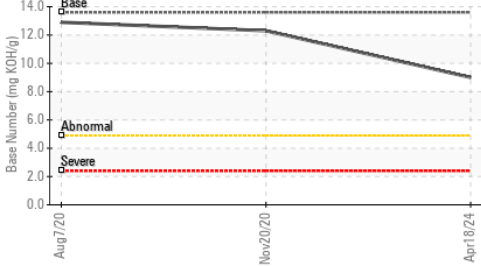
FT-IR (Direct Trend)



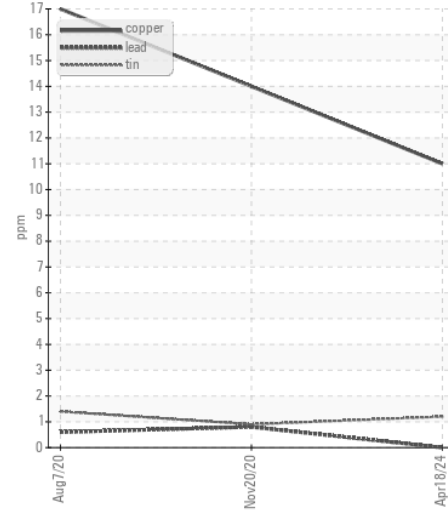
Ferrous Alloys



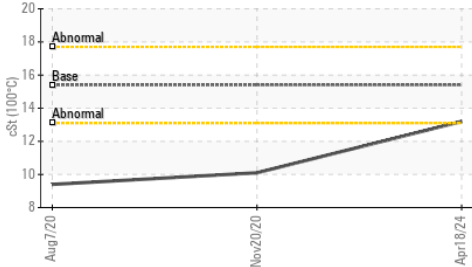
Base Number



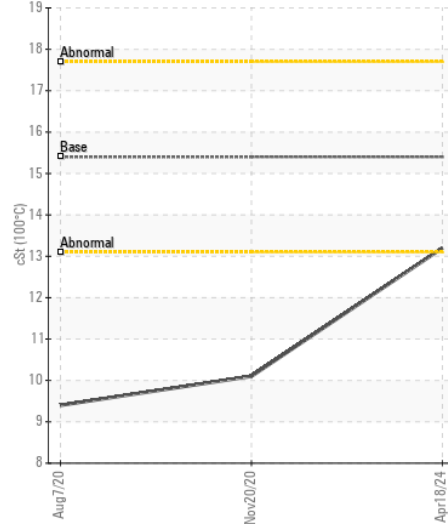
Non-ferrous Metals



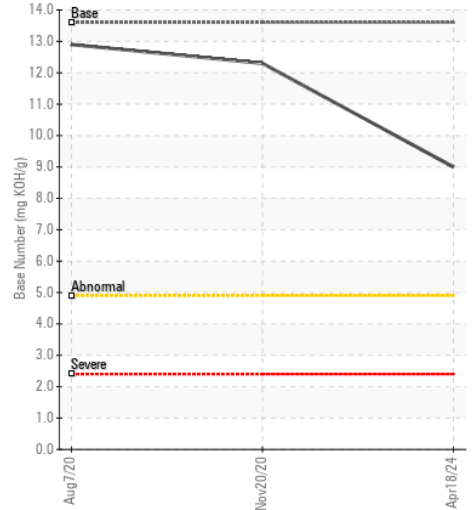
Viscosity @ 100°C



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : JR0214550 **Received** : 23 Apr 2024
Lab Number : 06158275 **Tested** : 24 Apr 2024
Unique Number : 10993698 **Diagnosed** : 24 Apr 2024 - Wes Davis
Test Package : CONST (Additional Tests: TBN)

JRE - MANASSAS PARK
 9107 OWENS DRIVE
 MANASSAS PARK, VA
 US 20111

Contact: DON VEST
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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)