



OIL ANALYSIS REPORT

WEAR	<b>ABNORMAL</b>
CONTAMINATION	<b>NORMAL</b>
FLUID CONDITION	<b>NORMAL</b>

Area

[W09556]

Machine Id

JOHN DEERE 350G 1FF350G XKJF812346

Component

Diesel Engine

Fluid

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

**RECOMMENDATION**

No corrective action is recommended at this time. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		JR0074556	JR0146024	JR0102809
Sample Date		Client Info		05 May 2023	12 Oct 2022	31 Aug 2021
Machine Age	hrs	Client Info		6305	5832	4406
Oil Age	hrs	Client Info		0	5832	400
Filter Age	hrs	Client Info		0	0	400
Oil Changed		Client Info		N/A	Changed	Changed
Filter Changed		Client Info		N/A	Changed	Changed
Sample Status				ABNORMAL	ABNORMAL	NORMAL

**WEAR**

The copper level is abnormal. All other component wear rates are normal.

Iron	ppm	ASTM D5185m	>51	▲ 108	▲ 145	46
Chromium	ppm	ASTM D5185m	>11	2	4	1
Nickel	ppm	ASTM D5185m	>5	2	2	<1
Titanium	ppm	ASTM D5185m		<1	<1	<1
Silver	ppm	ASTM D5185m	>3	<1	0	0
Aluminum	ppm	ASTM D5185m	>31	4	7	0
Lead	ppm	ASTM D5185m	>26	3	7	<1
Copper	ppm	ASTM D5185m	>26	11	▲ 34	2
Tin	ppm	ASTM D5185m	>4	1	2	<1
Vanadium	ppm	ASTM D5185m		<1	<1	<1
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.

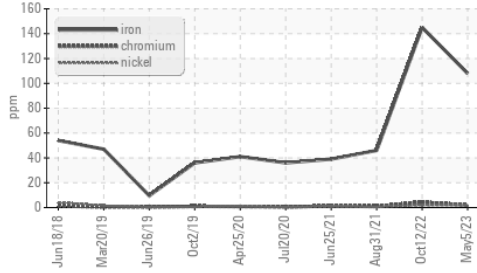
Silicon	ppm	ASTM D5185m	>22	8	9	6
Potassium	ppm	ASTM D5185m	>20	3	6	2
Fuel		WC Method	>2.1	<1.0	<1.0	<1.0
Water		WC Method	>0.21	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.5	1.2	0.4
Nitration	Abs/cm	*ASTM D7624	>20	8.1	11.7	8.2
Sulfation	Abs/.1mm	*ASTM D7415	>30	21.2	29.6	21.5
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**

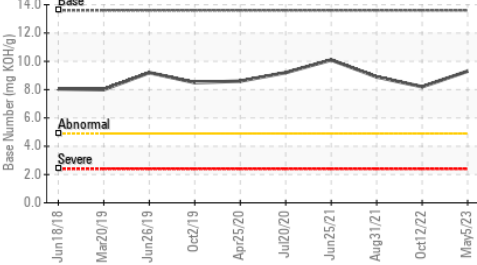
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m	>31	4	1	0
Boron	ppm	ASTM D5185m		95	10	202
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		166	253	251
Manganese	ppm	ASTM D5185m		2	2	<1
Magnesium	ppm	ASTM D5185m		624	810	767
Calcium	ppm	ASTM D5185m		1646	1669	1509
Phosphorus	ppm	ASTM D5185m		875	914	858
Zinc	ppm	ASTM D5185m		1064	1195	988
Sulfur	ppm	ASTM D5185m		3372	3618	2435
Oxidation	Abs/.1mm	*ASTM D7414	>25	14.5	21.9	15.3
Base Number (BN)	mg KOH/g	ASTM D2896	13.6	9.3	8.2	8.9
Visc @ 100°C	cSt	ASTM D445	15.4	13.4	13.6	13.1

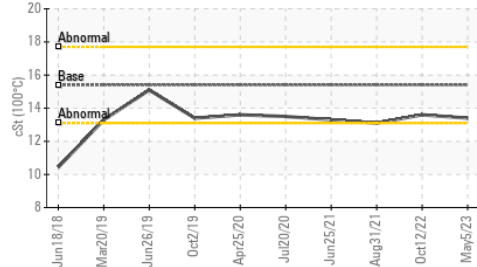
▲ Ferrous Alloys



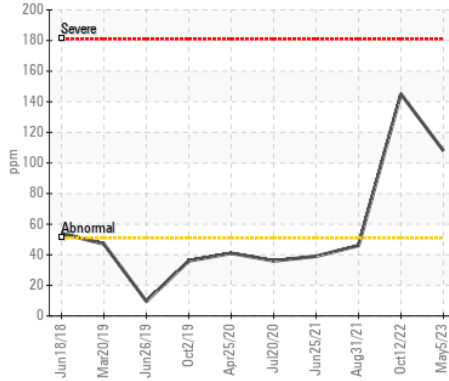
Base Number



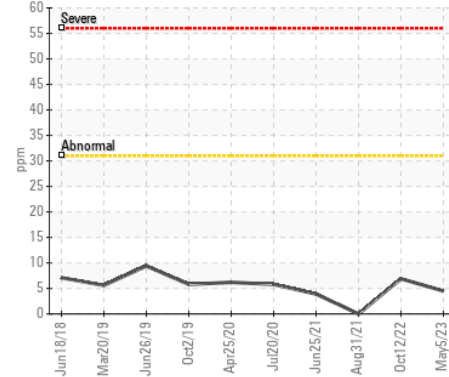
Viscosity @ 100°C



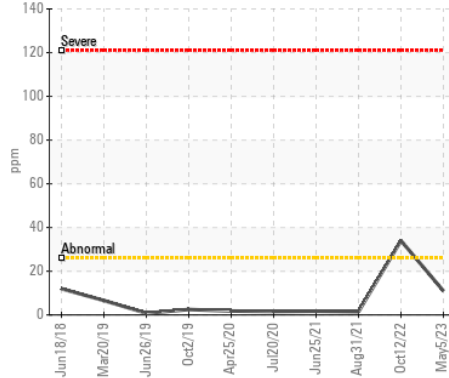
▲ Iron (ppm)



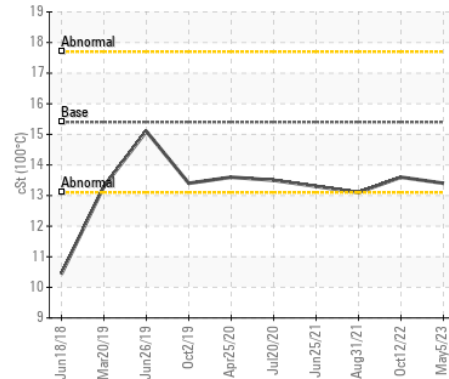
Aluminum (ppm)



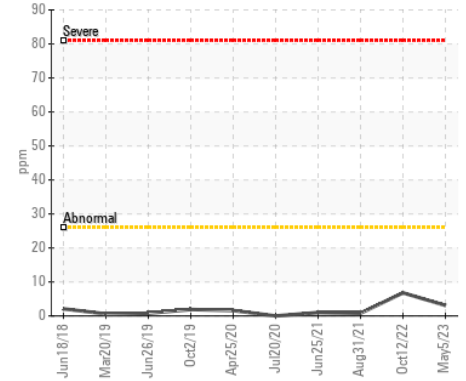
Copper (ppm)



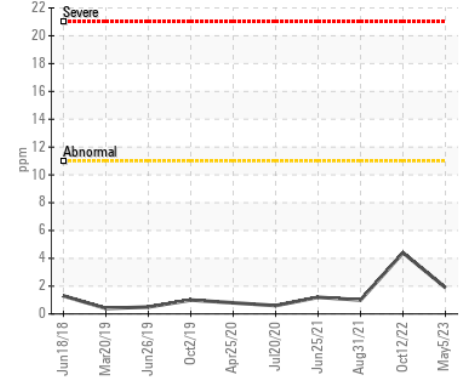
Viscosity @ 100°C



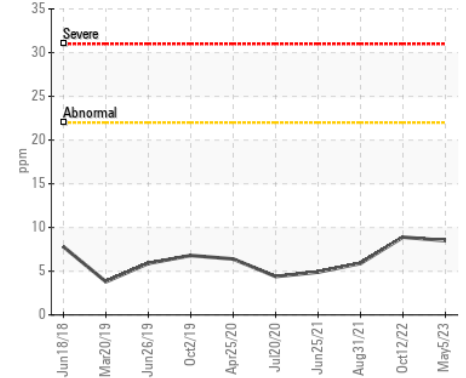
Lead (ppm)



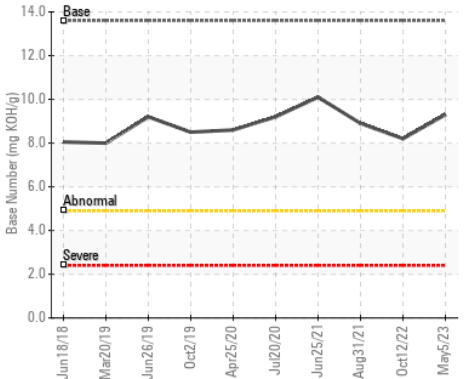
Chromium (ppm)



Silicon (ppm)



Base Number



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : JR0074556  
**Lab Number** : 05857629  
**Unique Number** : 10486984  
**Test Package** : MOBCE ( Additional Tests: TBN )

**Received** : 26 May 2023  
**Tested** : 26 May 2023  
**Diagnosed** : 28 May 2023 - Jonathan Hester

**JRE - SALEM**

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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)