



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area
[W8423]
 Machine Id
HITACHI 210LC-6 1FFDC571LJF340529
 Component
Diesel Engine
 Fluid
JOHN DEERE ENGINE OIL PLUS 50 II 15W40 (6 GAL)

RECOMMENDATION

Resample at the next service interval to monitor. (Customer Sample Comment: W8423)

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		JR0183118	JR0141099	JR0140594
Sample Date		Client Info		30 Jan 2024	01 Aug 2023	10 Jan 2023
Machine Age	hrs	Client Info		4001	3505	2943
Oil Age	hrs	Client Info		496	562	465
Filter Age	hrs	Client Info		496	562	0
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	5	15	27
Chromium	ppm	ASTM D5185m	>20	0	<1	<1
Nickel	ppm	ASTM D5185m	>4	0	0	0
Titanium	ppm	ASTM D5185m		0	<1	0
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>20	8	12	<1
Lead	ppm	ASTM D5185m	>40	<1	3	0
Copper	ppm	ASTM D5185m	>330	9	66	4
Tin	ppm	ASTM D5185m	>15	<1	1	<1
Vanadium	ppm	ASTM D5185m		<1	<1	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

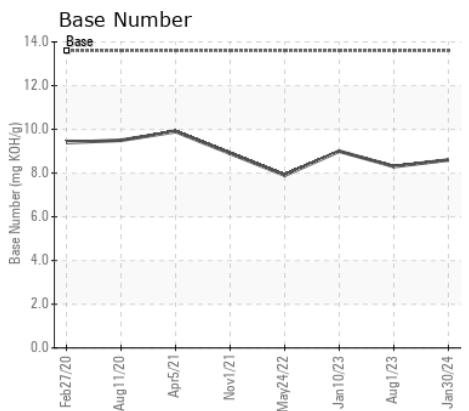
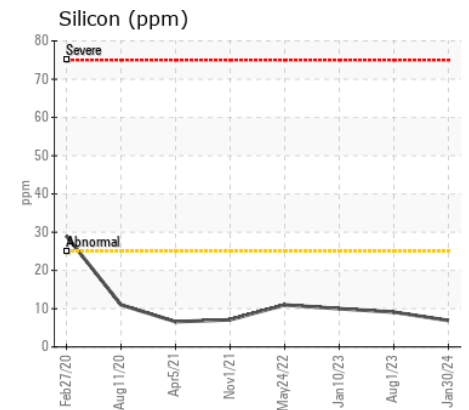
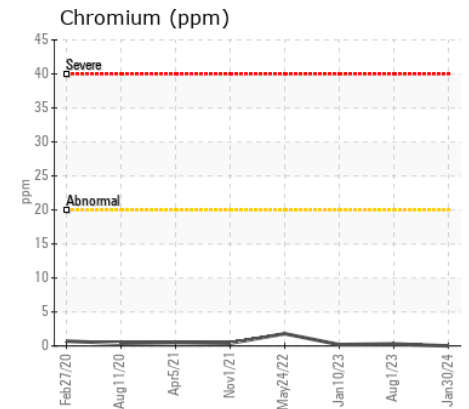
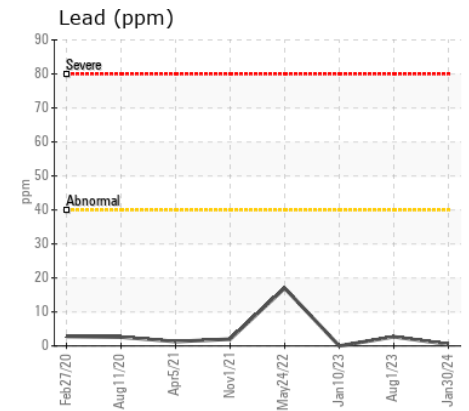
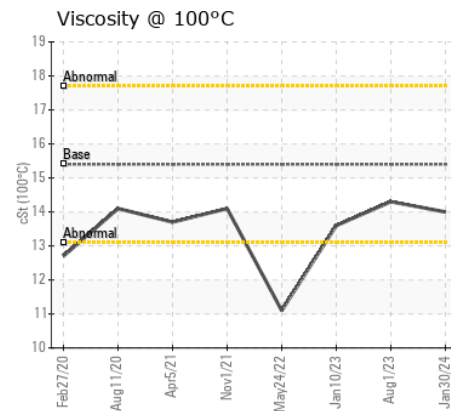
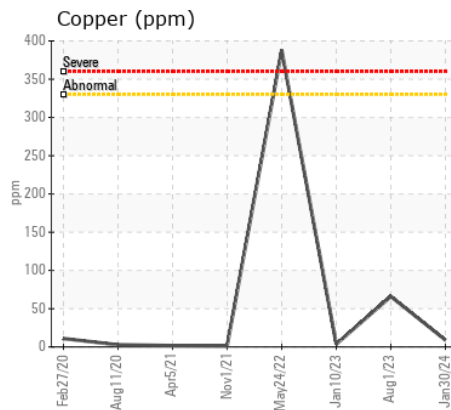
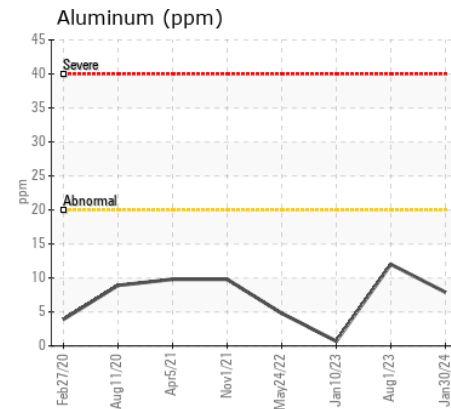
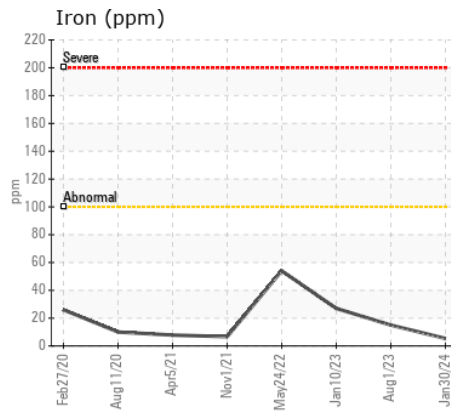
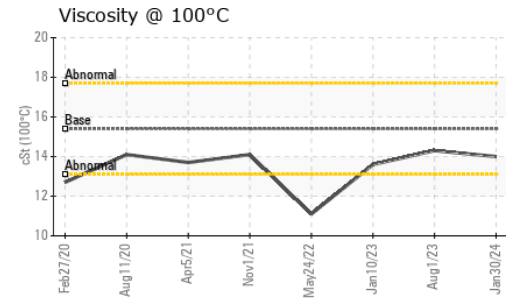
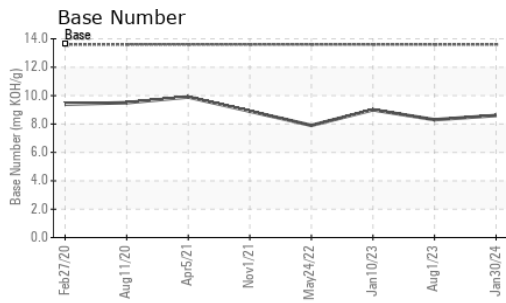
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	7	9	10
Potassium	ppm	ASTM D5185m	>20	<1	<1	1
Fuel		WC Method	>5	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.3	0.6	0.6
Nitration	Abs/cm	*ASTM D7624	>20	8.1	9.7	8.7
Sulfation	Abs/.1mm	*ASTM D7415	>30	21.6	24.1	20.5
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	>0.2	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		<1	2	<1
Boron	ppm	ASTM D5185m		231	113	52
Barium	ppm	ASTM D5185m		<1	0	2
Molybdenum	ppm	ASTM D5185m		258	271	124
Manganese	ppm	ASTM D5185m		<1	1	0
Magnesium	ppm	ASTM D5185m		821	911	663
Calcium	ppm	ASTM D5185m		1348	1585	1510
Phosphorus	ppm	ASTM D5185m		870	810	990
Zinc	ppm	ASTM D5185m		1055	1087	1200
Sulfur	ppm	ASTM D5185m		2838	3203	2981
Oxidation	Abs/.1mm	*ASTM D7414	>25	16.1	18.8	15.5
Base Number (BN)	mg KOH/g	ASTM D2896	13.6	8.6	8.3	9.0
Visc @ 100°C	cSt	ASTM D445	15.4	14.0	14.3	13.6



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : JR0183118 **Received** : 01 Feb 2024
Lab Number : 06076612 **Diagnosed** : 02 Feb 2024
Unique Number : 10858703 **Diagnostician** : Don Baldrige
Test Package : MOBCE (Additional Tests: TBN)

JRE - GARNER
 4161 AUBURN CHURCH RD
 GARNER, NC
 US 27529

Contact: RALEIGH SHOP
 sean.betts@jamesriverequipment.com; catherine.anastasio@wearcheck.com

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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