



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area

[W8459]

Machine Id

HITACHI 160LC-6 1FFDBP70AMF240388

Component

Pump Drive

Fluid

JOHN DEERE ENGINE OIL PLUS 50 II 15W40 (1 GAL)

RECOMMENDATION

Resample at the next service interval to monitor. (Customer Sample Comment: W8459)

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		JR0197169	JR0149923	JR0123390
Sample Date		Client Info		09 Feb 2024	30 Oct 2022	13 Jun 2022
Machine Age	hrs	Client Info		2015	1467	1005
Oil Age	hrs	Client Info		2015	462	557
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Changed	Not Changd	Changed
Filter Changed		Client Info		None	None	N/A
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

PQ	UOM	Method	Limit/Abn	Current	History1	History2
PQ		ASTM D8184		19	13	25
Iron	ppm	ASTM D5185m	>500	100	56	109
Chromium	ppm	ASTM D5185m	>15	2	0	2
Nickel	ppm	ASTM D5185m	>10	<1	0	<1
Titanium	ppm	ASTM D5185m		1	0	<1
Silver	ppm	ASTM D5185m		0	0	<1
Aluminum	ppm	ASTM D5185m	>20	5	2	4
Lead	ppm	ASTM D5185m		0	0	<1
Copper	ppm	ASTM D5185m	>35	<1	0	1
Tin	ppm	ASTM D5185m	>4	0	0	<1
Vanadium	ppm	ASTM D5185m		<1	0	0
White Metal	scalar	*Visual	NONE	NONE	LIGHT	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

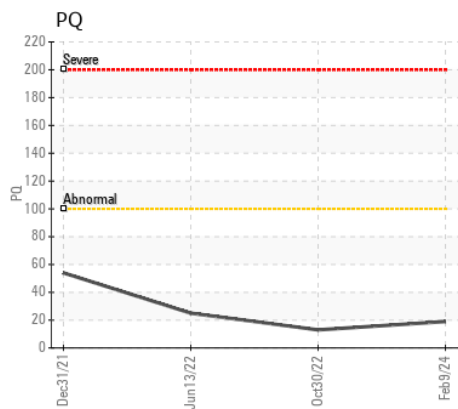
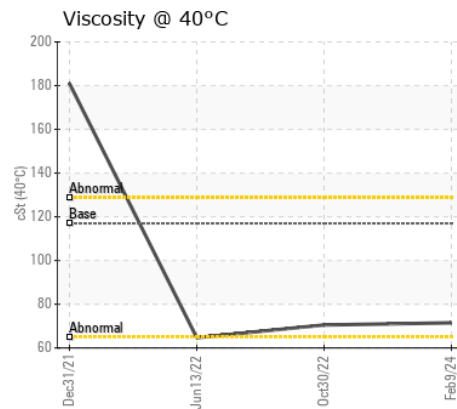
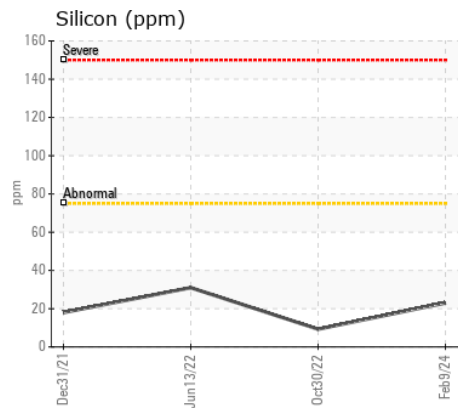
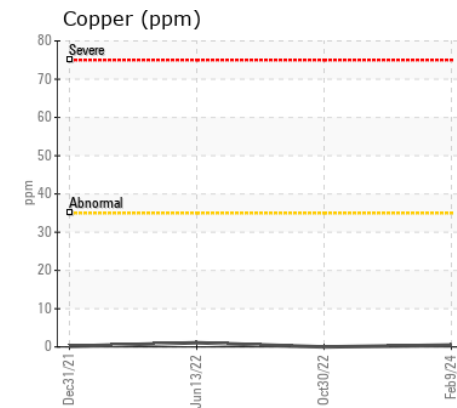
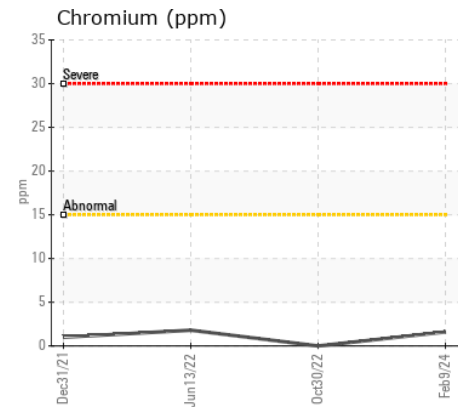
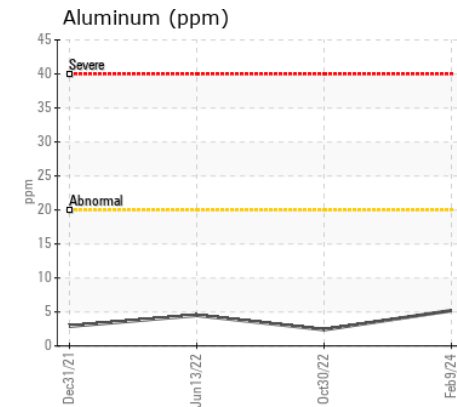
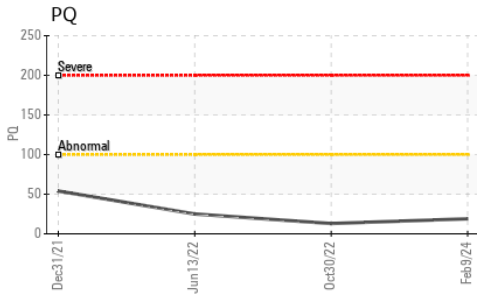
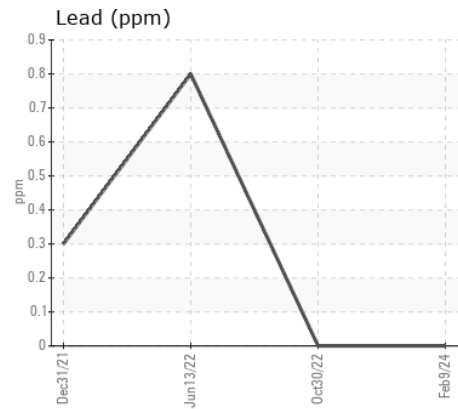
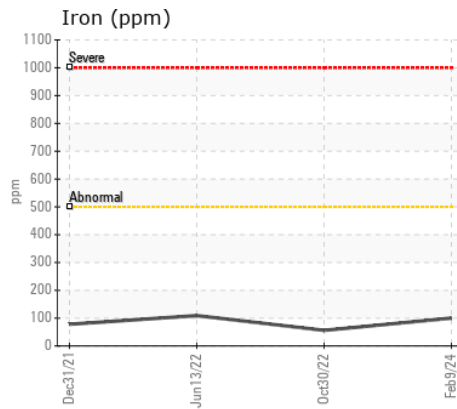
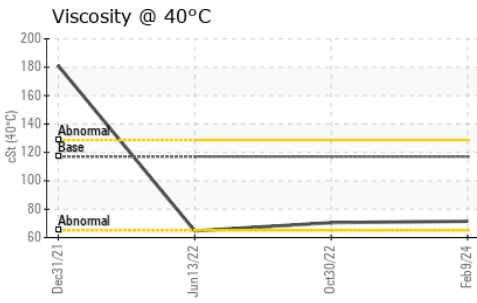
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>75	23	9	31
Potassium	ppm	ASTM D5185m	>20	3	0	0
Water		WC Method	>0.2	NEG	NEG	NEG
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	VLITE	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 condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185m		<1	2	3
Boron	ppm	ASTM D5185m		274	288	70
Barium	ppm	ASTM D5185m		20	0	3
Molybdenum	ppm	ASTM D5185m		205	250	105
Manganese	ppm	ASTM D5185m		2	<1	2
Magnesium	ppm	ASTM D5185m		601	798	21
Calcium	ppm	ASTM D5185m		1138	1679	4173
Phosphorus	ppm	ASTM D5185m		835	943	1172
Zinc	ppm	ASTM D5185m		849	1127	1317
Sulfur	ppm	ASTM D5185m		3810	4163	7836
Visc @ 40°C	cSt	ASTM D445	117	71.5	70.5	64.7



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : JR0197169 **Received** : 13 Feb 2024
Lab Number : 06087651 **Tested** : 14 Feb 2024
Unique Number : 10875096 **Diagnosed** : 14 Feb 2024 - Don Baldrige
Test Package : MOBCE (Additional Tests: PQ)

JRE - HOPE MILLS/FAYETTEVILLE
 5039 HWY 301 SOUTH
 HOPE MILLS, NC
 US 28348
 Contact: FAYETTEVILLE SHOP
 stephen.mullis@jamesriverequipment.com; panastasio@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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F: