



WEAR	NORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	NORMAL

Area

[05W46990]

Machine Id

JOHN DEERE 000748

Component

Pump Drive

Fluid

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

RECOMMENDATION

No corrective action is recommended at this time. The oil change at the time of sampling has been noted. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		JR0218008	JR0203127	JR0192433
Sample Date		Client Info		28 May 2024	23 Feb 2024	17 Nov 2023
Machine Age	hrs	Client Info		1983	1490	967
Oil Age	hrs	Client Info		1000	523	967
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Changed	Not Changd	Changed
Filter Changed		Client Info		N/A	N/A	N/A
Sample Status				ABNORMAL	NORMAL	ABNORMAL

WEAR

All component wear rates are normal.

PQ	UOM	Method	Limit/Abn	Current	History1	History2
PQ		ASTM D8184		16	18	11
Iron	ppm	ASTM D5185m	>151	60	36	69
Chromium	ppm	ASTM D5185m	>11	1	<1	2
Nickel	ppm	ASTM D5185m	>10	<1	0	0
Titanium	ppm	ASTM D5185m		<1	<1	<1
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>21	5	5	4
Lead	ppm	ASTM D5185m	>51	<1	1	0
Copper	ppm	ASTM D5185m	>51	5	<1	<1
Tin	ppm	ASTM D5185m	>4	<1	<1	0
Vanadium	ppm	ASTM D5185m		0	<1	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

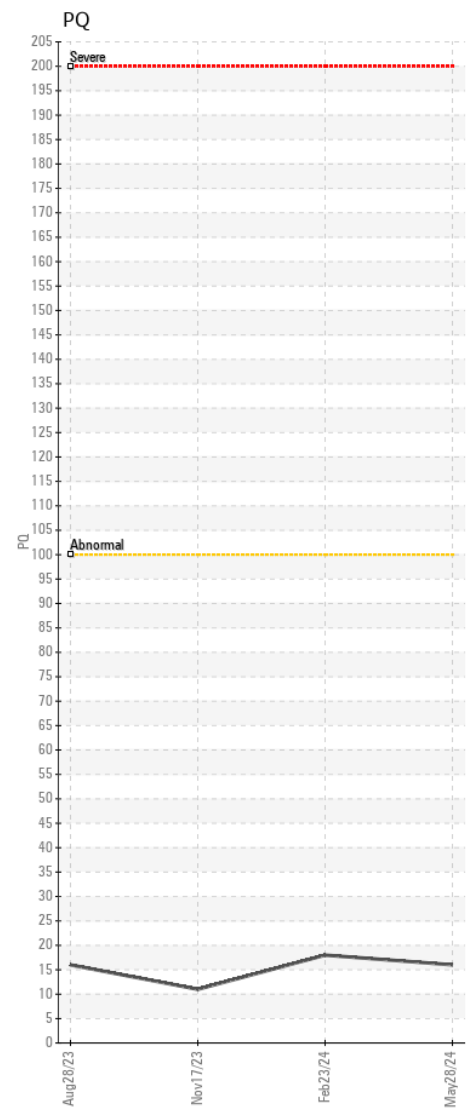
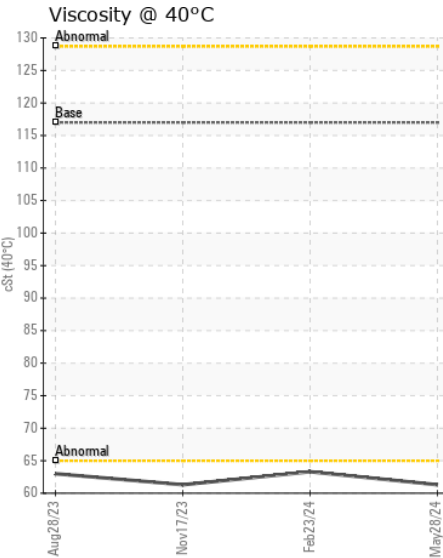
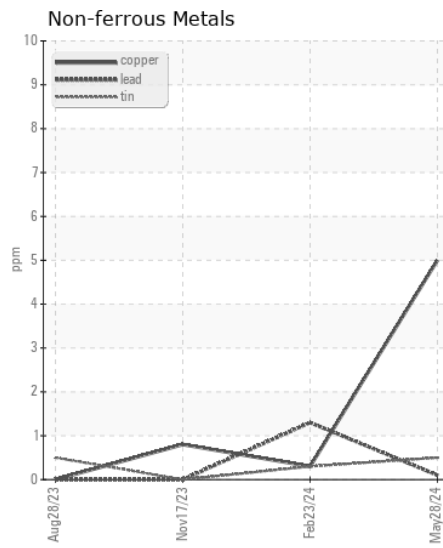
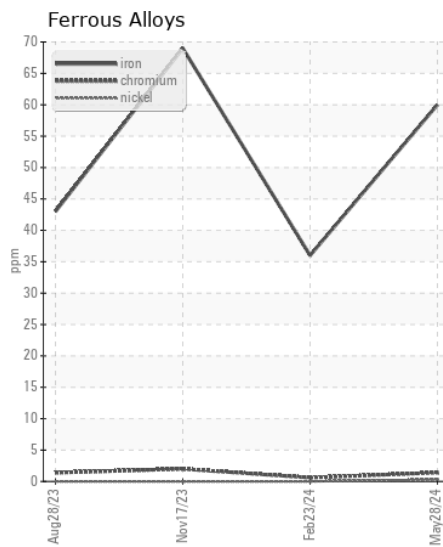
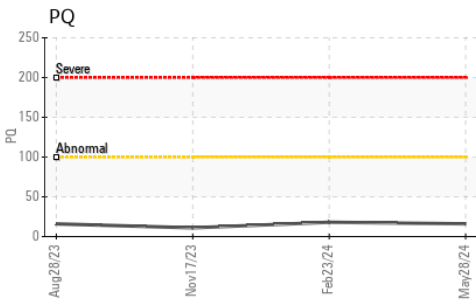
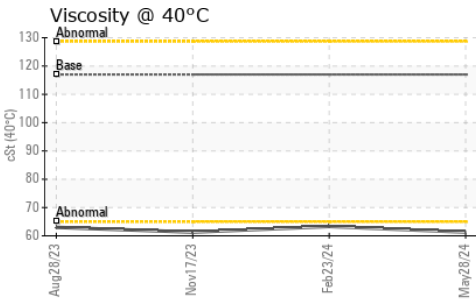
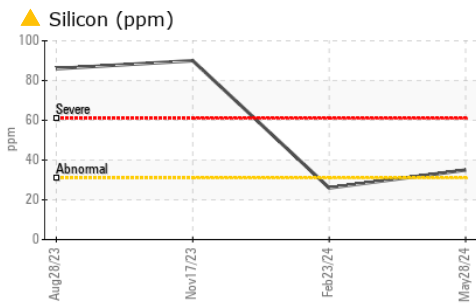
Elemental level of silicon (Si) above normal indicating ingress of seal material.

Silicon	ppm	ASTM D5185m	>31	▲ 35	26	▲ 90
Potassium	ppm	ASTM D5185m	>20	3	2	4
Water		WC Method	>0.1	NEG	NEG	NEG
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	LIGHT	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	>0.1	NEG	NEG	NEG

FLUID CONDITION

The condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185m	>51	1	3	0
Boron	ppm	ASTM D5185m		275	267	66
Barium	ppm	ASTM D5185m		2	0	<1
Molybdenum	ppm	ASTM D5185m		222	221	112
Manganese	ppm	ASTM D5185m		2	1	4
Magnesium	ppm	ASTM D5185m		689	723	13
Calcium	ppm	ASTM D5185m		1812	1849	4231
Phosphorus	ppm	ASTM D5185m		1104	1000	1153
Zinc	ppm	ASTM D5185m		1137	1154	1312
Sulfur	ppm	ASTM D5185m		3820	3882	8129
Visc @ 40°C	cSt	ASTM D445	117	61.3	63.3	61.3



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : JR0218008 **Received** : 29 May 2024
Lab Number : 06194714 **Tested** : 31 May 2024
Unique Number : 11056837 **Diagnosed** : 31 May 2024 - Don Baldrige
Test Package : CONST (Additional Tests: PQ)

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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)