



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	ATTENTION

Area
[SPARTAN RENTAL]
 Machine Id
HAMM H12iP H284.0289 (S/N WGH0H284VAA00289)
 Component
Diesel Engine
 Fluid
JOHN DEERE ENGINE OIL PLUS 50 II 15W40 (--- PNT)

RECOMMENDATION

Oil and filter 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		JR0214599	JR0176073	---
Sample Date		Client Info		30 May 2024	12 Jun 2023	---
Machine Age	hrs	Client Info		1473	805	---
Oil Age	hrs	Client Info		1473	805	---
Filter Age	hrs	Client Info		1473	805	---
Oil Changed		Client Info		Changed	Changed	---
Filter Changed		Client Info		Changed	Changed	---
Sample Status				ATTENTION	ATTENTION	---

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	15	40	---
Chromium	ppm	ASTM D5185m	>20	<1	2	---
Nickel	ppm	ASTM D5185m	>4	0	0	---
Titanium	ppm	ASTM D5185m		<1	<1	---
Silver	ppm	ASTM D5185m	>3	0	0	---
Aluminum	ppm	ASTM D5185m	>20	5	5	---
Lead	ppm	ASTM D5185m	>40	0	3	---
Copper	ppm	ASTM D5185m	>330	3	26	---
Tin	ppm	ASTM D5185m	>15	<1	1	---
Vanadium	ppm	ASTM D5185m		0	<1	---
White Metal	scalar	*Visual	NONE	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	---

CONTAMINATION

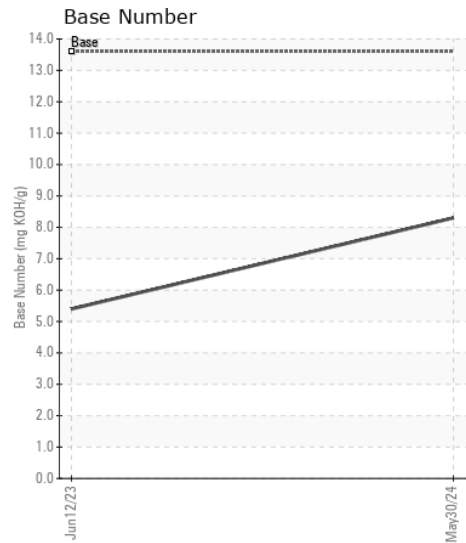
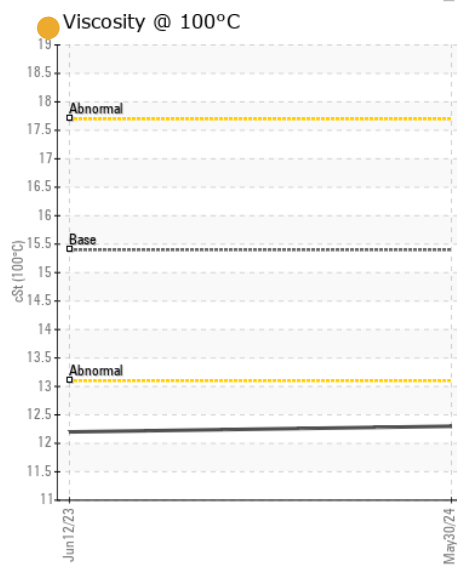
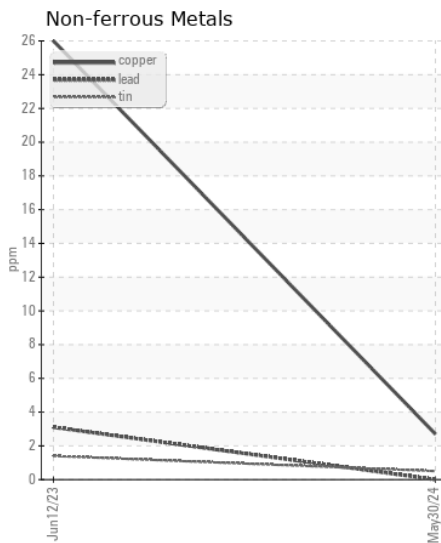
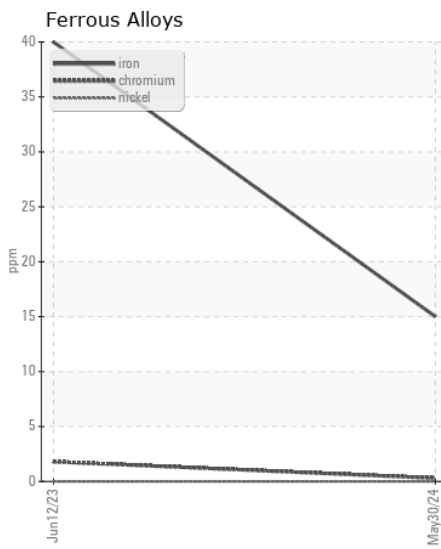
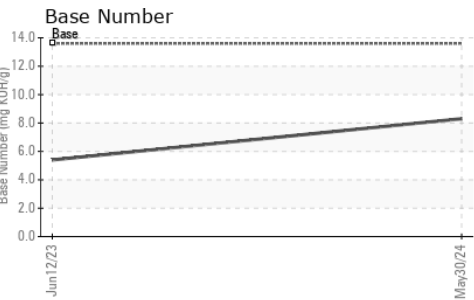
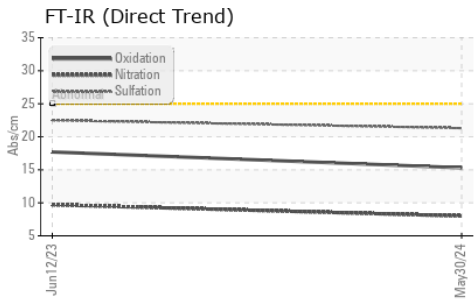
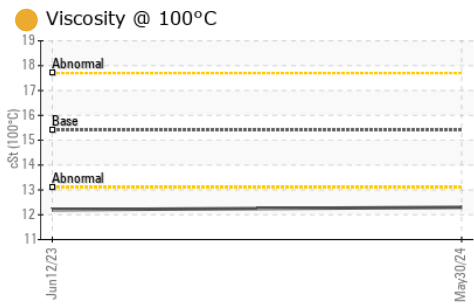
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	15	24	---
Potassium	ppm	ASTM D5185m	>20	0	2	---
Fuel		WC Method	>5	<1.0	0.2	---
Water		WC Method	>0.2	NEG	NEG	---
Glycol		WC Method		NEG	NEG	---
Soot %	%	*ASTM D7844	>3	0.2	0.3	---
Nitration	Abs/cm	*ASTM D7624	>20	8.0	9.7	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	21.3	22.5	---
Silt	scalar	*Visual	NONE	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	---
Appearance	scalar	*Visual	NORML	NORML	NORML	---
Odor	scalar	*Visual	NORML	NORML	NORML	---
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	---

FLUID CONDITION

The oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil. Confirm oil type.

Sodium	ppm	ASTM D5185m		2	4	---
Boron	ppm	ASTM D5185m		234	54	---
Barium	ppm	ASTM D5185m		<1	2	---
Molybdenum	ppm	ASTM D5185m		195	86	---
Manganese	ppm	ASTM D5185m		<1	3	---
Magnesium	ppm	ASTM D5185m		685	257	---
Calcium	ppm	ASTM D5185m		1713	2137	---
Phosphorus	ppm	ASTM D5185m		997	1003	---
Zinc	ppm	ASTM D5185m		1177	1306	---
Sulfur	ppm	ASTM D5185m		3619	4866	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	15.3	17.7	---
Base Number (BN)	mg KOH/g	ASTM D2896	13.6	8.3	5.4	---
Visc @ 100°C	cSt	ASTM D445	15.4	12.3	12.2	---



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : JR0214599 **Received** : 31 May 2024
Lab Number : 06196392 **Tested** : 03 Jun 2024
Unique Number : 11058515 **Diagnosed** : 03 Jun 2024 - Don Baldrige
Test Package : CONST (Additional Tests: TBN)

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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)