James River Equipment

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
HAMM H12iP H2352105
Component
Diesel Engine
Fluid
JOHN DEERE ENGINE OIL PLUS 50 II 15W40 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

WEAR

All component wear rates are normal.

CONTAMINATION

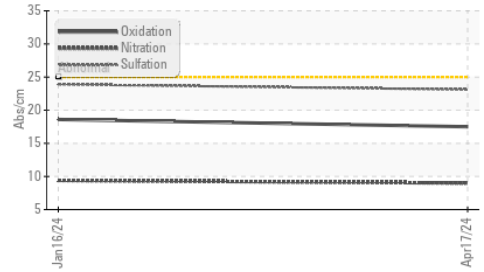
There is no indication of any contamination in the oil.

FLUID CONDITION

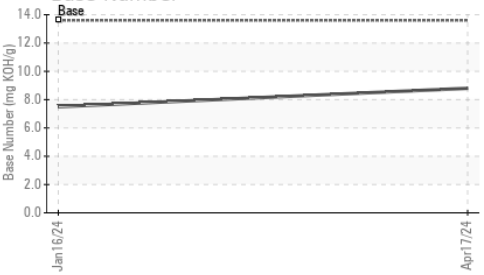
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		JR0209095	JR0197672	---
Sample Date		Client Info		17 Apr 2024	16 Jan 2024	---
Machine Age	hrs	Client Info		1986	1518	---
Oil Age	hrs	Client Info		468	0	---
Filter Age	hrs	Client Info		468	0	---
Oil Changed		Client Info		Changed	Changed	---
Filter Changed		Client Info		Changed	Changed	---
Sample Status				NORMAL	NORMAL	---
Iron	ppm	ASTM D5185m	>100	30	57	---
Chromium	ppm	ASTM D5185m	>20	<1	2	---
Nickel	ppm	ASTM D5185m	>4	0	<1	---
Titanium	ppm	ASTM D5185m		0	<1	---
Silver	ppm	ASTM D5185m	>3	0	0	---
Aluminum	ppm	ASTM D5185m	>20	5	5	---
Lead	ppm	ASTM D5185m	>40	2	4	---
Copper	ppm	ASTM D5185m	>330	3	10	---
Tin	ppm	ASTM D5185m	>15	<1	<1	---
Vanadium	ppm	ASTM D5185m		<1	<1	---
White Metal	scalar	*Visual	NONE	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	---
Silicon	ppm	ASTM D5185m	>25	12	16	---
Potassium	ppm	ASTM D5185m	>20	0	1	---
Fuel		WC Method	>5	<1.0	<1.0	---
Water		WC Method	>0.2	NEG	NEG	---
Glycol		WC Method		NEG	NEG	---
Soot %	%	*ASTM D7844	>3	0.5	0.5	---
Nitration	Abs/cm	*ASTM D7624	>20	9.0	9.4	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	23.1	23.9	---
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	---
Sodium	ppm	ASTM D5185m		2	3	---
Boron	ppm	ASTM D5185m		191	66	---
Barium	ppm	ASTM D5185m		<1	0	---
Molybdenum	ppm	ASTM D5185m		261	196	---
Manganese	ppm	ASTM D5185m		<1	1	---
Magnesium	ppm	ASTM D5185m		885	895	---
Calcium	ppm	ASTM D5185m		1564	1514	---
Phosphorus	ppm	ASTM D5185m		922	883	---
Zinc	ppm	ASTM D5185m		1096	1201	---
Sulfur	ppm	ASTM D5185m		3544	3052	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	17.5	18.6	---
Base Number (BN)	mg KOH/g	ASTM D2896	13.6	8.8	7.5	---
Visc @ 100°C	cSt	ASTM D445	15.4	13.3	13.0	---

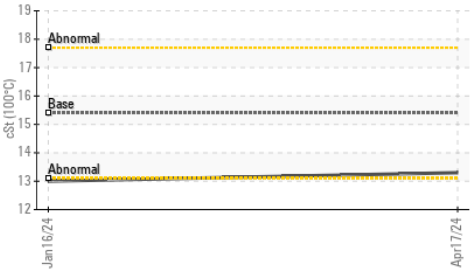
FT-IR (Direct Trend)



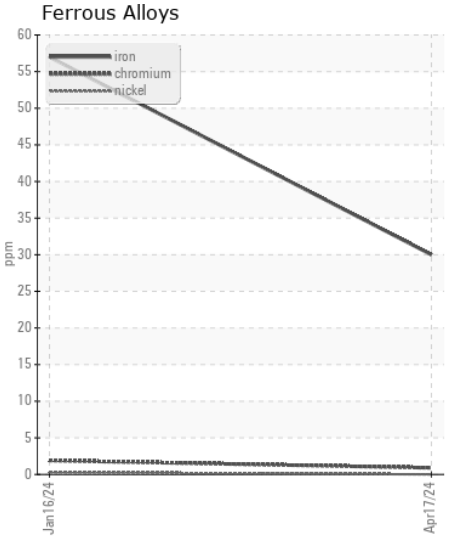
Base Number



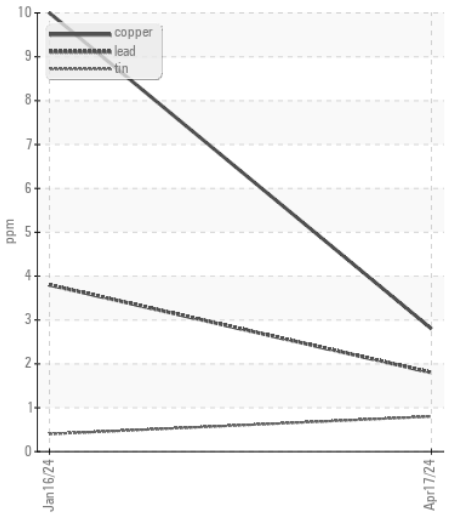
Viscosity @ 100°C



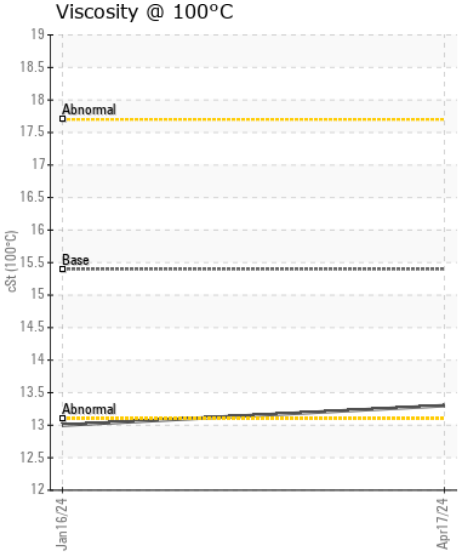
Ferrous Alloys



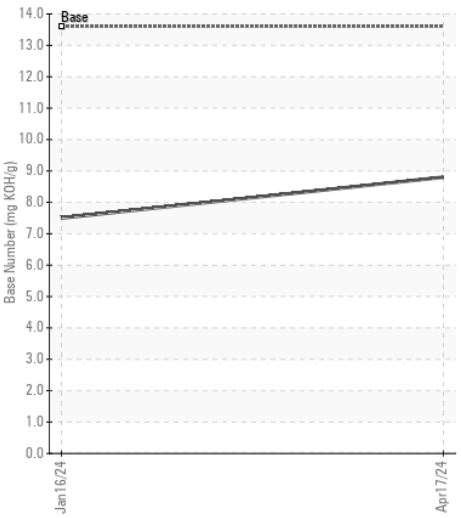
Non-ferrous Metals



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : JR0209095 **Received** : 19 Apr 2024
Lab Number : 06154134 **Tested** : 22 Apr 2024
Unique Number : 10989557 **Diagnosed** : 22 Apr 2024 - Wes Davis
Test Package : CONST (Additional Tests: TBN)

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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