James River Equipment

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area

[05W46859]

Machine Id

SENNEBOGEN 821M 821.0.2814

Component

Diesel Engine

Fluid

JOHN DEERE ENGINE OIL PLUS 50 II 15W40 (21 QTS)

RECOMMENDATION

Resample at the next service interval to monitor.

WEAR

All component wear rates are normal.

CONTAMINATION

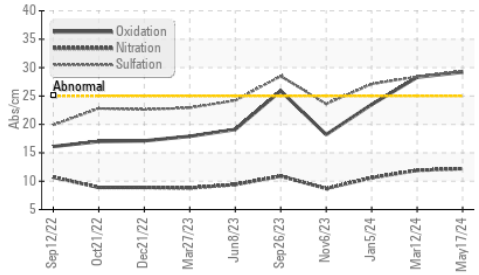
There is no indication of any contamination in the oil.

FLUID CONDITION

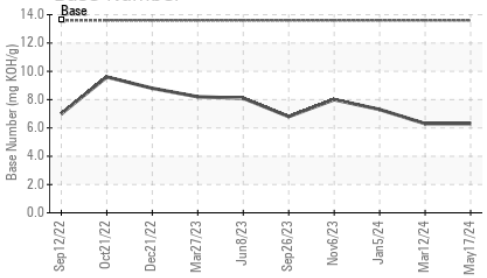
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		JR0214340	JR0208461	JR0199342
Sample Date		Client Info		17 May 2024	12 Mar 2024	05 Jan 2024
Machine Age	hrs	Client Info		4551	4023	3489
Oil Age	hrs	Client Info		528	534	467
Filter Age	hrs	Client Info		528	534	467
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL
Iron	ppm	ASTM D5185m	>100	23	18	15
Chromium	ppm	ASTM D5185m	>20	<1	<1	<1
Nickel	ppm	ASTM D5185m	>4	0	<1	<1
Titanium	ppm	ASTM D5185m		0	<1	<1
Silver	ppm	ASTM D5185m	>3	0	<1	0
Aluminum	ppm	ASTM D5185m	>20	6	3	3
Lead	ppm	ASTM D5185m	>40	<1	2	0
Copper	ppm	ASTM D5185m	>330	2	2	2
Tin	ppm	ASTM D5185m	>15	<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
Silicon	ppm	ASTM D5185m	>25	10	6	6
Potassium	ppm	ASTM D5185m	>20	<1	3	3
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	0.3	0.2
Nitration	Abs/cm	*ASTM D7624	>20	12.2	11.9	10.6
Sulfation	Abs/.1mm	*ASTM D7415	>30	29.4	28.4	27.1
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
Sodium	ppm	ASTM D5185m		1	2	0
Boron	ppm	ASTM D5185m		108	91	176
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		288	211	178
Manganese	ppm	ASTM D5185m		1	1	0
Magnesium	ppm	ASTM D5185m		970	876	638
Calcium	ppm	ASTM D5185m		1704	1802	1741
Phosphorus	ppm	ASTM D5185m		1023	940	1239
Zinc	ppm	ASTM D5185m		1276	1232	1049
Sulfur	ppm	ASTM D5185m		3573	3653	6011
Oxidation	Abs/.1mm	*ASTM D7414	>25	29.2	28.3	23.5
Base Number (BN)	mg KOH/g	ASTM D2896	13.6	6.3	6.3	7.3
Visc @ 100°C	cSt	ASTM D445	15.4	15.0	14.4	13.4

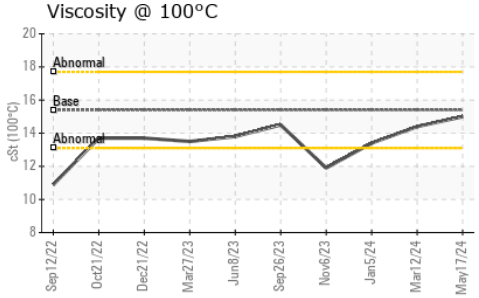
FT-IR (Direct Trend)



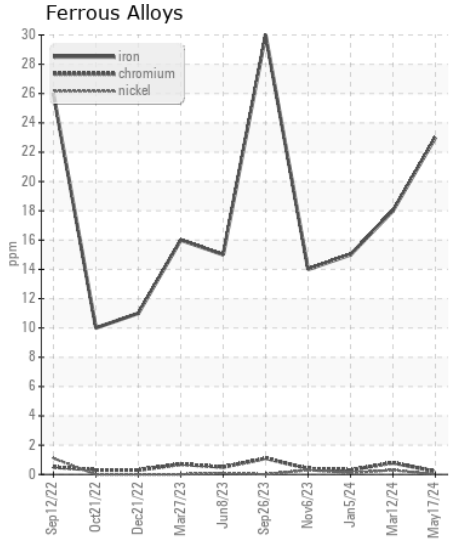
Base Number



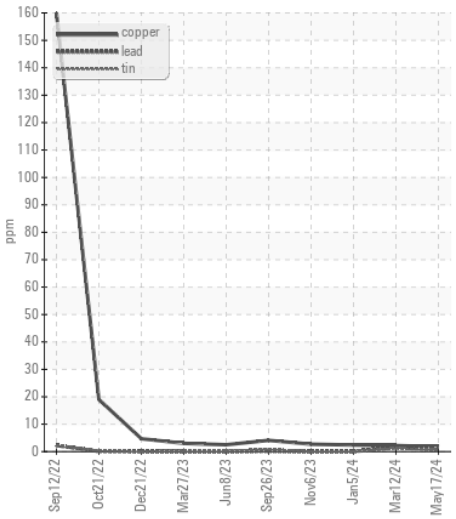
Viscosity @ 100°C



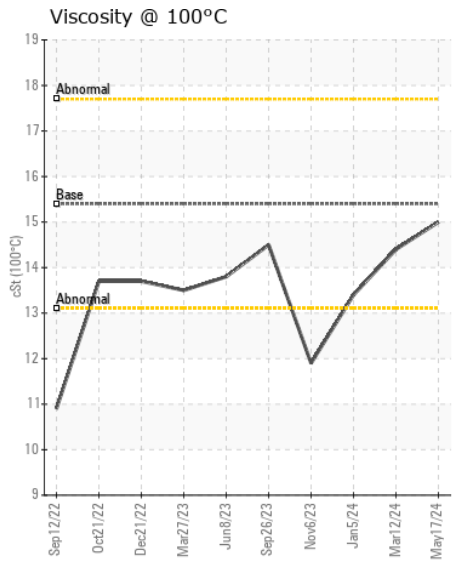
Ferrous Alloys



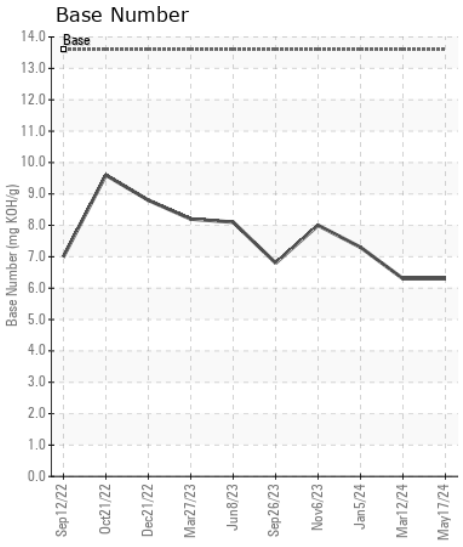
Non-ferrous Metals



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : JR0214340
Lab Number : 06187055
Unique Number : 11043807
Test Package : CONST (Additional Tests: TBN)

Received : 21 May 2024
Tested : 23 May 2024
Diagnosed : 23 May 2024 - Sean Felton

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)

JRE - MANASSAS PARK
9107 OWENS DRIVE
MANASSAS PARK, VA
US 20111
Contact: DON VEST
dvest@jamesriverequipment.com
T: (703)631-8500
F: (703)631-4715