James River Equipment

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	ATTENTION

Area
[05W44831]
Machine Id
KLEE MC110I K117-0048
Component
Diesel Engine
Fluid
JOHN DEERE ENGINE OIL PLUS 50 II 15W40 (10 GAL)

RECOMMENDATION

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

WEAR

All component wear rates are normal.

CONTAMINATION

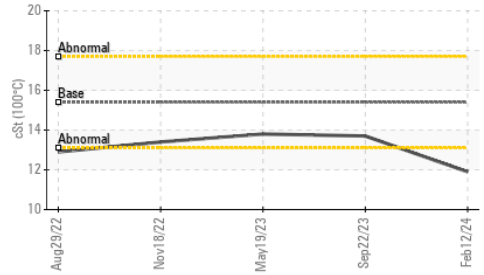
Fuel content negligible. There is no indication of any contamination in the oil.

FLUID CONDITION

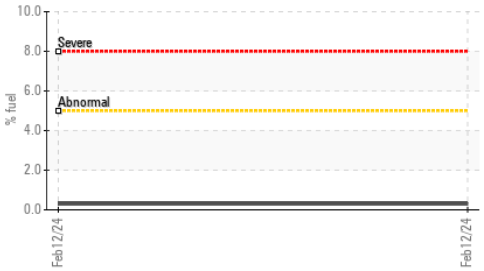
The oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil. Confirm oil type.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		**JR0195924**	JR0187504	JR0174672
Sample Date		Client Info		**12 Feb 2024**	22 Sep 2023	19 May 2023
Machine Age	hrs	Client Info		**2495**	1945	1466
Oil Age	hrs	Client Info		**550**	479	444
Filter Age	hrs	Client Info		**550**	0	444
Oil Changed		Client Info		**Changed**	Changed	Changed
Filter Changed		Client Info		**Changed**	Changed	Changed
Sample Status				**ATTENTION**	NORMAL	NORMAL
Iron	ppm	ASTM D5185m	>100	**3**	2	4
Chromium	ppm	ASTM D5185m	>20	**<1**	<1	<1
Nickel	ppm	ASTM D5185m	>4	**0**	0	0
Titanium	ppm	ASTM D5185m		**0**	0	0
Silver	ppm	ASTM D5185m	>3	**0**	0	0
Aluminum	ppm	ASTM D5185m	>20	**2**	1	4
Lead	ppm	ASTM D5185m	>40	**2**	0	2
Copper	ppm	ASTM D5185m	>330	**3**	5	10
Tin	ppm	ASTM D5185m	>15	**<1**	<1	<1
Vanadium	ppm	ASTM D5185m		**0**	0	<1
White Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Silicon	ppm	ASTM D5185m	>25	**6**	7	10
Potassium	ppm	ASTM D5185m	>20	**<1**	2	3
Fuel	%	ASTM D3524	>5	**0.3**	<1.0	<1.0
Water		WC Method	>0.2	**NEG**	NEG	NEG
Glycol		WC Method		**NEG**	NEG	NEG
Soot %	%	*ASTM D7844	>3	**0**	0.1	0.1
Nitration	Abs/cm	*ASTM D7624	>20	**7.1**	7.9	8.3
Sulfation	Abs/.1mm	*ASTM D7415	>30	**21.0**	20.5	21.7
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	<1
Boron	ppm	ASTM D5185m		**145**	247	259
Barium	ppm	ASTM D5185m		**0**	0	0
Molybdenum	ppm	ASTM D5185m		**128**	240	239
Manganese	ppm	ASTM D5185m		**<1**	<1	<1
Magnesium	ppm	ASTM D5185m		**454**	824	892
Calcium	ppm	ASTM D5185m		**2081**	1607	1526
Phosphorus	ppm	ASTM D5185m		**995**	967	969
Zinc	ppm	ASTM D5185m		**1152**	1174	1210
Sulfur	ppm	ASTM D5185m		**3359**	3665	3921
Oxidation	Abs/.1mm	*ASTM D7414	>25	**15.4**	15.4	16.4
Base Number (BN)	mg KOH/g	ASTM D2896	13.6	**8.6**	8.1	9.5
Visc @ 100°C	cSt	ASTM D445	15.4	▲ **11.9**	13.7	13.8

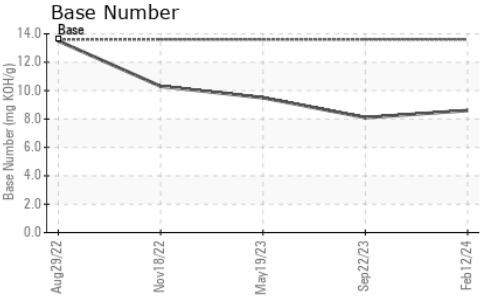
Viscosity @ 100°C



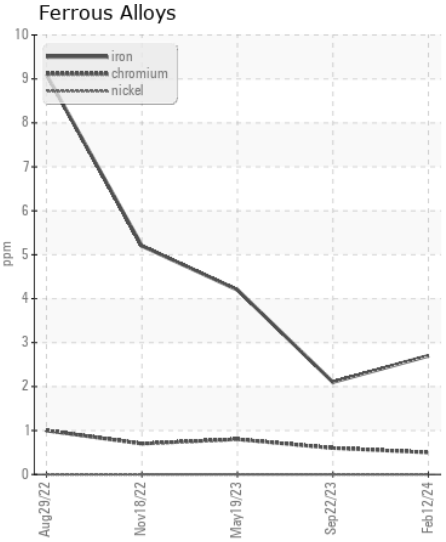
Fuel Dilution



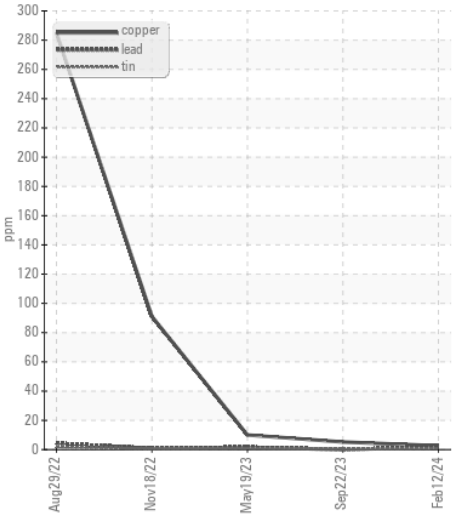
Base Number



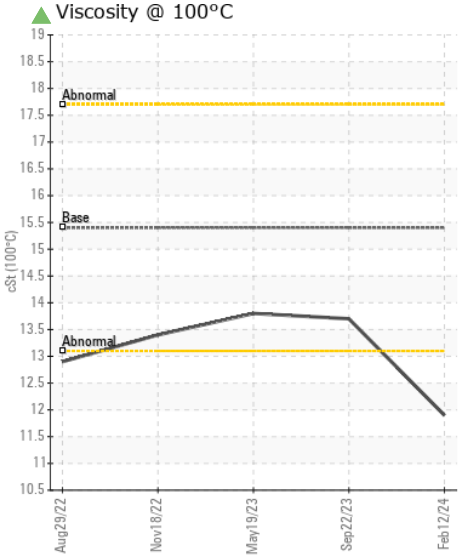
Ferrous Alloys



Non-ferrous Metals



Viscosity @ 100°C



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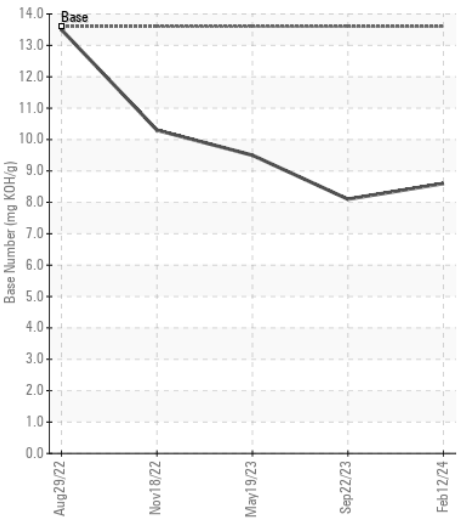

Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : JR0195924 **Received** : 14 Feb 2024
Lab Number : 06089417 **Tested** : 19 Feb 2024
Unique Number : 10876862 **Diagnosed** : 19 Feb 2024 - Jonathan Hester
Test Package : CONST (Additional Tests: FuelDilution, PercentFuel, 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)

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