James River Equipment

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area
[THELMA MOOMAW]
Machine Id
JOHN DEERE 5100E 1LV5100ETXY440458
Component
Diesel Engine
Fluid
JOHN DEERE ENGINE OIL PLUS 50 II 15W40 (3 GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

WEAR

Metal levels are typical for a new component breaking in.

CONTAMINATION

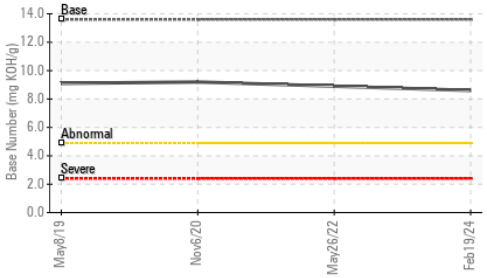
There is no indication of any contamination in the oil.

FLUID CONDITION

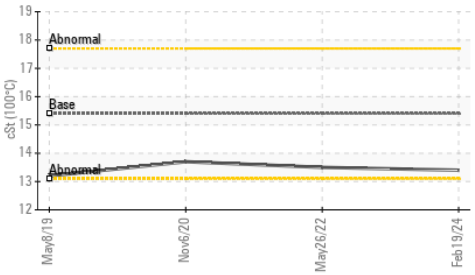
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		JR0196751	JR0120559	JR0038909
Sample Date		Client Info		19 Feb 2024	26 May 2022	06 Nov 2020
Machine Age	hrs	Client Info		935	761	562
Oil Age	hrs	Client Info		174	199	228
Filter Age	hrs	Client Info		174	199	228
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL
Iron	ppm	ASTM D5185m	>51	14	18	14
Chromium	ppm	ASTM D5185m	>11	<1	<1	<1
Nickel	ppm	ASTM D5185m	>5	<1	0	0
Titanium	ppm	ASTM D5185m		<1	0	<1
Silver	ppm	ASTM D5185m	>3	0	0	<1
Aluminum	ppm	ASTM D5185m	>31	6	5	2
Lead	ppm	ASTM D5185m	>26	<1	<1	<1
Copper	ppm	ASTM D5185m	>26	2	5	30
Tin	ppm	ASTM D5185m	>4	<1	<1	<1
Vanadium	ppm	ASTM D5185m		<1	<1	<1
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Silicon	ppm	ASTM D5185m	>22	8	7	10
Potassium	ppm	ASTM D5185m	>20	2	3	1
Fuel		WC Method	>2.1	<1.0	<1.0	<1.0
Water		WC Method	>0.21	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.1	0.1	0.1
Nitration	Abs/cm	*ASTM D7624	>20	8.0	8.5	8.9
Sulfation	Abs/.1mm	*ASTM D7415	>30	20.8	20.8	22.4
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	>0.21	NEG	NEG	NEG
Sodium	ppm	ASTM D5185m	>31	1	<1	<1
Boron	ppm	ASTM D5185m		228	270	322
Barium	ppm	ASTM D5185m		2	0	<1
Molybdenum	ppm	ASTM D5185m		250	268	255
Manganese	ppm	ASTM D5185m		1	<1	<1
Magnesium	ppm	ASTM D5185m		738	791	792
Calcium	ppm	ASTM D5185m		1278	1415	1355
Phosphorus	ppm	ASTM D5185m		783	891	849
Zinc	ppm	ASTM D5185m		977	1086	987
Sulfur	ppm	ASTM D5185m		2899	3702	2476
Oxidation	Abs/.1mm	*ASTM D7414	>25	15.7	15.8	17.1
Base Number (BN)	mg KOH/g	ASTM D2896	13.6	8.6	8.9	9.2
Visc @ 100°C	cSt	ASTM D445	15.4	13.4	13.5	13.7

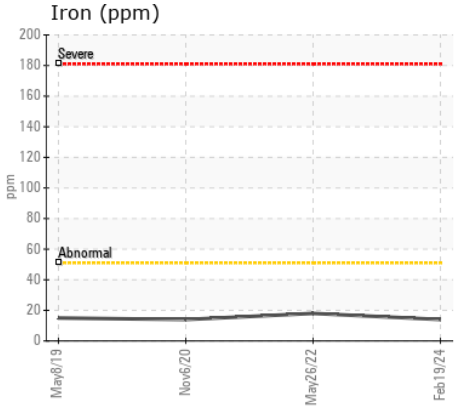
Base Number



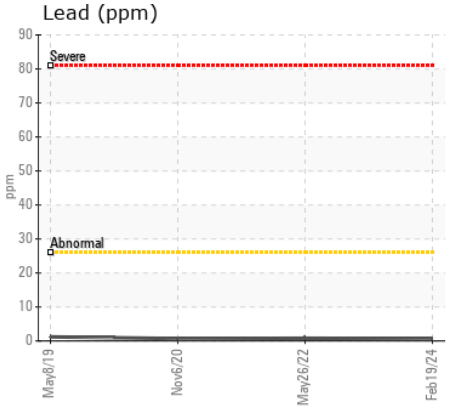
Viscosity @ 100°C



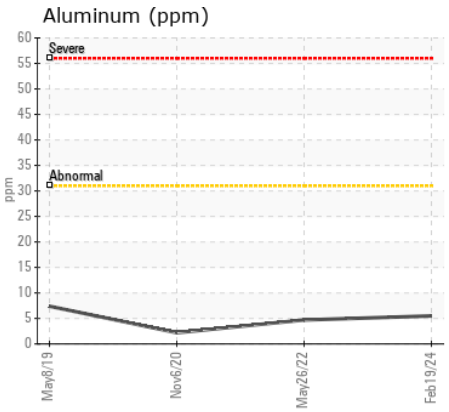
Iron (ppm)



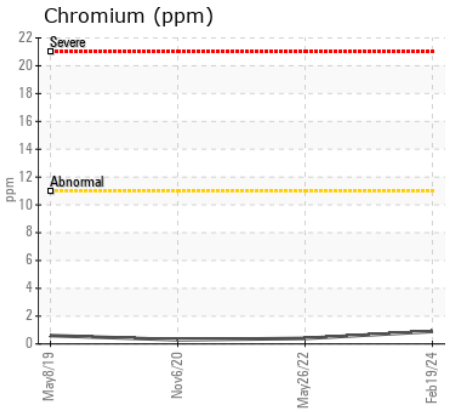
Lead (ppm)



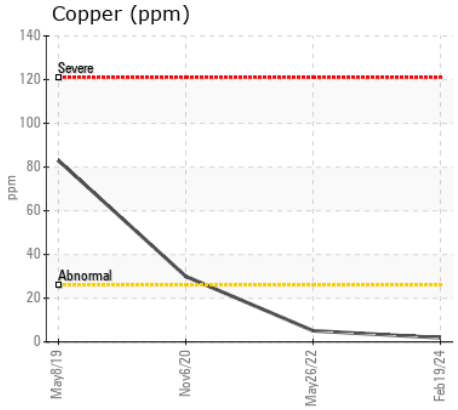
Aluminum (ppm)



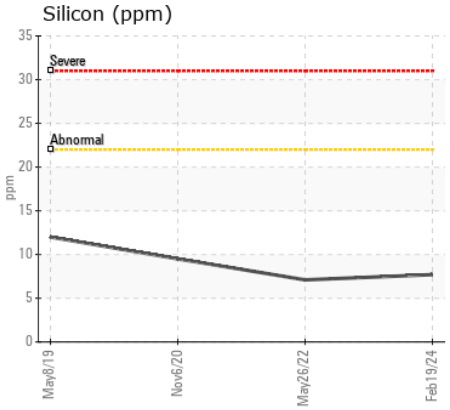
Chromium (ppm)



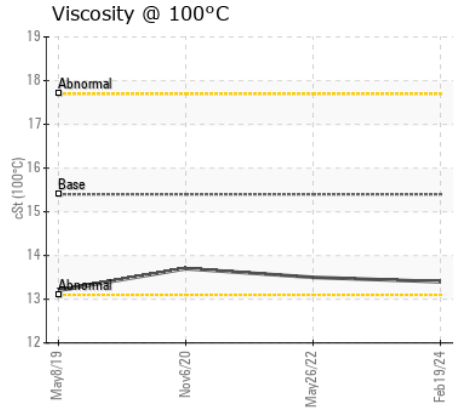
Copper (ppm)



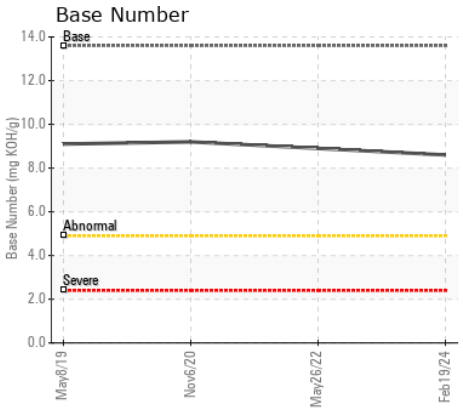
Silicon (ppm)



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : JR0196751
Lab Number : 06102717
Unique Number : 10900947
Test Package : MOBCE (Additional Tests: TBN)

Received : 28 Feb 2024
Tested : 29 Feb 2024
Diagnosed : 29 Feb 2024 - Wes Davis

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 - EDINBURG
601 NORTH MAIN ST
WOODSTOCK, VA
US 22664
Contact: MIKE SECHLER
MSECHLER@JAMESRIVEREQUIPMENT.COM
T:
F: