MOB

James River Equipment

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	SEVERE
FLUID CONDITION	ABNORMAL

Area
[W8549]
Machine Id
JOHN DEERE Generator (S/N 048957)
Component
Diesel Engine
Fluid
JOHN DEERE ENGINE OIL PLUS 50 II 15W40 (9 QTS)

RECOMMENDATION

We advise that you check the fuel injection system. Oil and filter change at the time of sampling has been noted. We recommend an early resample to monitor this condition. (Customer Sample Comment: W8549)

WEAR

All component wear rates are normal.

CONTAMINATION

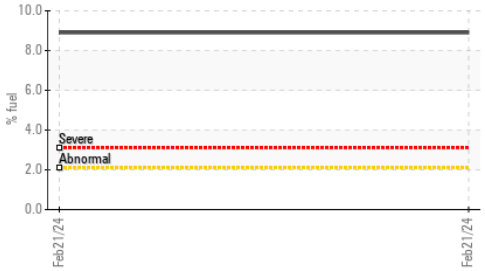
There is a high amount of fuel present in the oil.

FLUID CONDITION

Fuel is present in the oil and is lowering the viscosity. The BN result indicates that there is suitable alkalinity remaining in the oil. The oil is no longer serviceable due to the presence of contaminants.

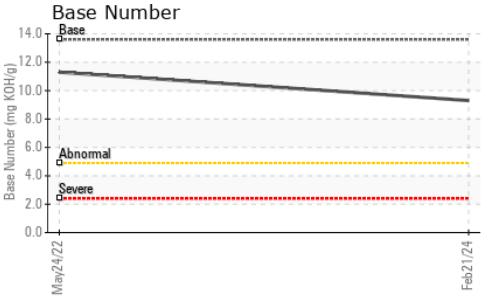
Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		JR0196920	JR0097871	---
Sample Date		Client Info		21 Feb 2024	24 May 2022	---
Machine Age	hrs	Client Info		302	293	---
Oil Age	hrs	Client Info		9	293	---
Filter Age	hrs	Client Info		9	0	---
Oil Changed		Client Info		Changed	Changed	---
Filter Changed		Client Info		Changed	Changed	---
Sample Status				SEVERE	NORMAL	---
Iron	ppm	ASTM D5185m	>51	2	3	---
Chromium	ppm	ASTM D5185m	>11	<1	<1	---
Nickel	ppm	ASTM D5185m	>5	0	<1	---
Titanium	ppm	ASTM D5185m		0	0	---
Silver	ppm	ASTM D5185m	>3	0	<1	---
Aluminum	ppm	ASTM D5185m	>31	2	1	---
Lead	ppm	ASTM D5185m	>26	0	<1	---
Copper	ppm	ASTM D5185m	>26	<1	1	---
Tin	ppm	ASTM D5185m	>4	0	<1	---
Vanadium	ppm	ASTM D5185m		0	0	---
White Metal	scalar	*Visual	NONE	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	---
Silicon	ppm	ASTM D5185m	>22	13	10	---
Potassium	ppm	ASTM D5185m	>20	2	0	---
Fuel	%	ASTM D3524	>2.1	8.9	<1.0	---
Water		WC Method	>0.21	NEG	NEG	---
Glycol		WC Method		NEG	NEG	---
Soot %	%	*ASTM D7844	>3	0	0	---
Nitration	Abs/cm	*ASTM D7624	>20	6.2	6.1	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	19.2	21.4	---
Silt	scalar	*Visual	NONE	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	LIGHT	---
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	---
Appearance	scalar	*Visual	NORML	NORML	NORML	---
Odor	scalar	*Visual	NORML	NORML	NORML	---
Emulsified Water	scalar	*Visual	>0.21	NEG	NEG	---
Sodium	ppm	ASTM D5185m	>31	0	3	---
Boron	ppm	ASTM D5185m		222	98	---
Barium	ppm	ASTM D5185m		9	0	---
Molybdenum	ppm	ASTM D5185m		183	77	---
Manganese	ppm	ASTM D5185m		0	<1	---
Magnesium	ppm	ASTM D5185m		593	464	---
Calcium	ppm	ASTM D5185m		1218	2013	---
Phosphorus	ppm	ASTM D5185m		783	997	---
Zinc	ppm	ASTM D5185m		879	1156	---
Sulfur	ppm	ASTM D5185m		2845	3279	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	15.3	19.3	---
Base Number (BN)	mg KOH/g	ASTM D2896	13.6	9.3	11.3	---
Visc @ 100°C	cSt	ASTM D445	15.4	11.1	12.8	---

Fuel Dilution

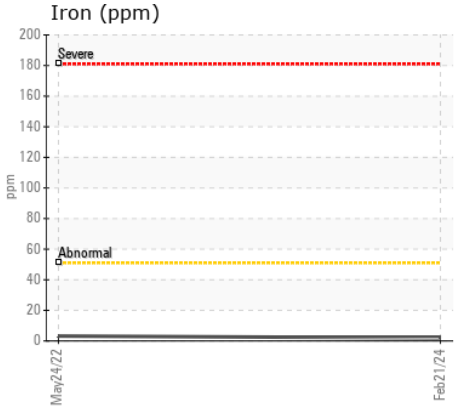


Viscosity @ 100°C

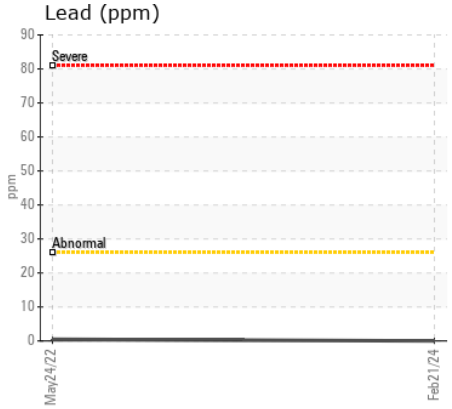
Base Number



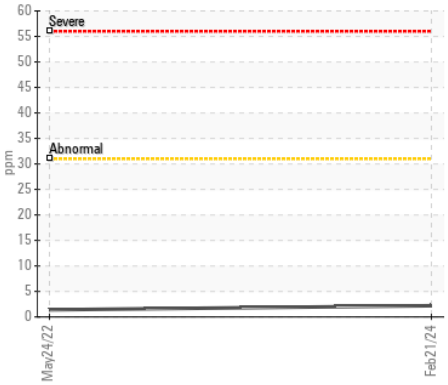
Iron (ppm)



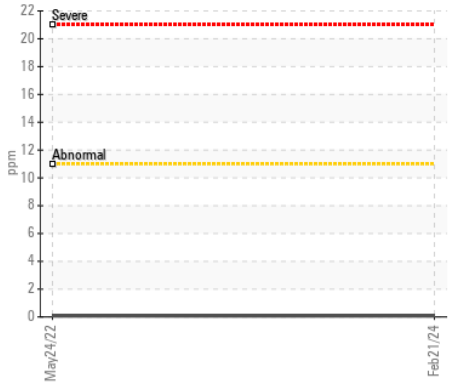
Lead (ppm)



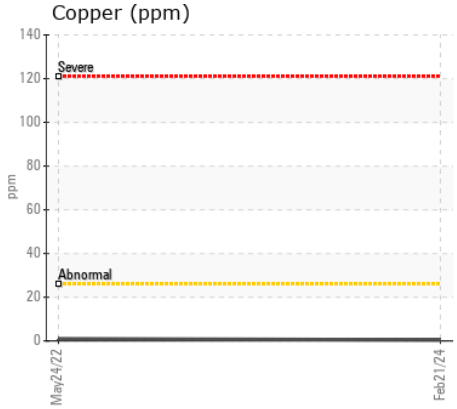
Aluminum (ppm)



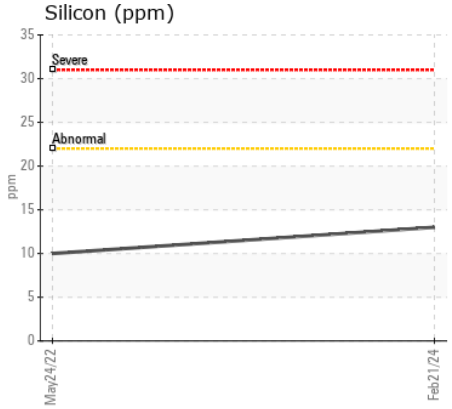
Chromium (ppm)



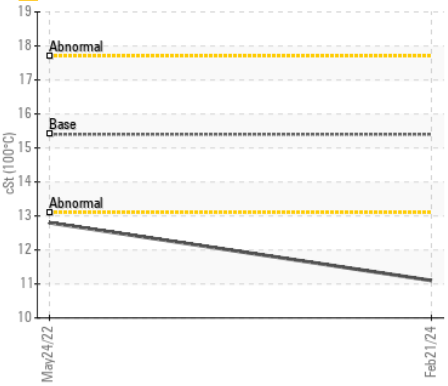
Copper (ppm)



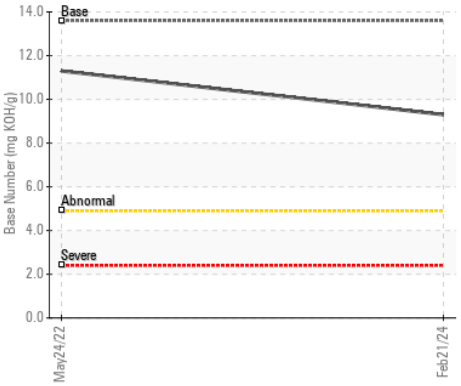
Silicon (ppm)



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : JR0196920
Lab Number : 06099977
Unique Number : 10898207
Test Package : MOBCE (Additional Tests: FuelDilution, PercentFuel, TBN)

Received : 26 Feb 2024
Tested : 28 Feb 2024
Diagnosed : 28 Feb 2024 - Jonathan Hester

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 - HOPE MILLS/FAYETTEVILLE
5039 HWY 301 SOUTH
HOPE MILLS, NC
US 28348
Contact: FAYETTEVILLE SHOP
stephen.mullis@jamesriverequipment.com;canastasio@wearcheck.com
T:
F: