James River Equipment

OIL ANALYSIS REPORT

WEAR	ABNORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
JOHN DEERE 85P 1FF085PACPJ000078
Component
Diesel Engine
Fluid
{not provided} (--- GAL)

RECOMMENDATION

Oil and filter change at the time of sampling has been noted. No corrective action is recommended at this time. Resample at the next service interval to monitor. Please specify the brand, type, and viscosity of the oil on your next sample.

WEAR

The copper level is abnormal. In the absence of other significant wear metals, suspect copper due to sources other than wear (i.e. cooling core). All other metal levels are typical for a new component breaking in.

CONTAMINATION

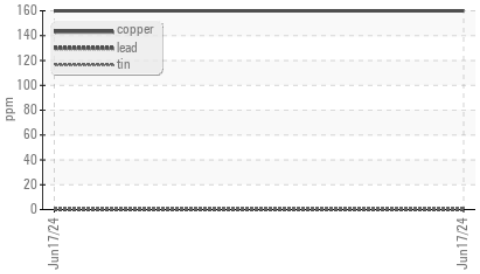
Fuel content negligible. Elevated aluminum (Al) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components.

FLUID CONDITION

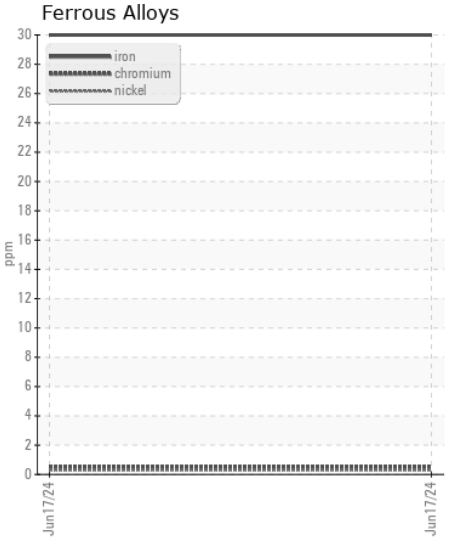
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is acceptable for the time in service.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		JR0220751	---	---
Sample Date		Client Info		17 Jun 2024	---	---
Machine Age	hrs	Client Info		532	---	---
Oil Age	hrs	Client Info		532	---	---
Filter Age	hrs	Client Info		532	---	---
Oil Changed		Client Info		Changed	---	---
Filter Changed		Client Info		Changed	---	---
Sample Status				ABNORMAL	---	---
Iron	ppm	ASTM D5185m	>51	30	---	---
Chromium	ppm	ASTM D5185m	>11	<1	---	---
Nickel	ppm	ASTM D5185m	>5	<1	---	---
Titanium	ppm	ASTM D5185m		<1	---	---
Silver	ppm	ASTM D5185m	>3	0	---	---
Aluminum	ppm	ASTM D5185m	>31	4	---	---
Lead	ppm	ASTM D5185m	>26	0	---	---
Copper	ppm	ASTM D5185m	>26	▲ 160	---	---
Tin	ppm	ASTM D5185m	>4	<1	---	---
Vanadium	ppm	ASTM D5185m		0	---	---
White Metal	scalar	*Visual	NONE	NONE	---	---
Yellow Metal	scalar	*Visual	NONE	NONE	---	---
Silicon	ppm	ASTM D5185m	>22	43	---	---
Potassium	ppm	ASTM D5185m	>20	202	---	---
Fuel	%	ASTM D3524	>2.1	1.5	---	---
Water		WC Method	>0.21	NEG	---	---
Glycol	%	*ASTM D2982		NEG	---	---
Soot %	%	*ASTM D7844	>3	0.3	---	---
Nitration	Abs/cm	*ASTM D7624	>20	7.5	---	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	17.8	---	---
Silt	scalar	*Visual	NONE	NONE	---	---
Debris	scalar	*Visual	NONE	NONE	---	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---	---
Appearance	scalar	*Visual	NORML	NORML	---	---
Odor	scalar	*Visual	NORML	NORML	---	---
Emulsified Water	scalar	*Visual	>0.21	NEG	---	---
Sodium	ppm	ASTM D5185m	>31	14	---	---
Boron	ppm	ASTM D5185m		180	---	---
Barium	ppm	ASTM D5185m		4	---	---
Molybdenum	ppm	ASTM D5185m		169	---	---
Manganese	ppm	ASTM D5185m		1	---	---
Magnesium	ppm	ASTM D5185m		30	---	---
Calcium	ppm	ASTM D5185m		2299	---	---
Phosphorus	ppm	ASTM D5185m		693	---	---
Zinc	ppm	ASTM D5185m		808	---	---
Sulfur	ppm	ASTM D5185m		3376	---	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	12.3	---	---
Base Number (BN)	mg KOH/g	ASTM D2896		6.7	---	---
Visc @ 100°C	cSt	ASTM D445		10.0	---	---

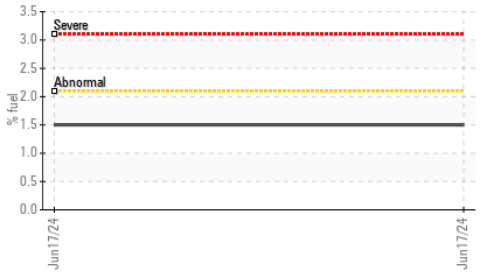
Non-ferrous Metals



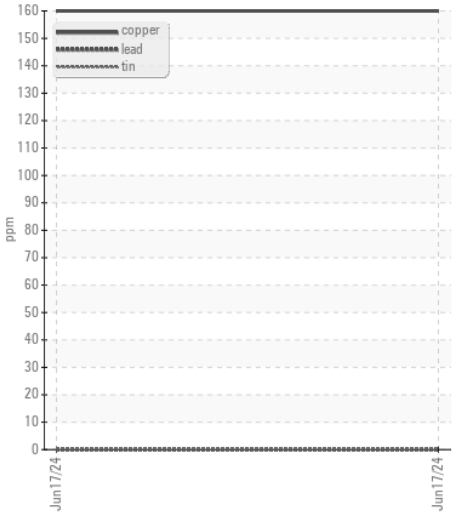
Ferrous Alloys



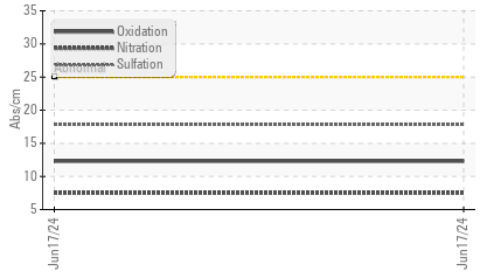
Fuel Dilution



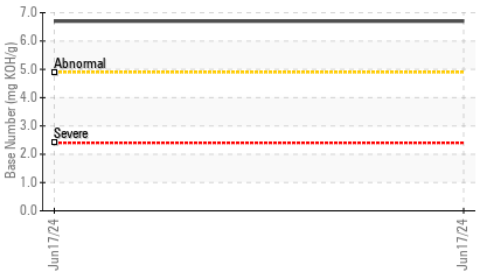
Non-ferrous Metals



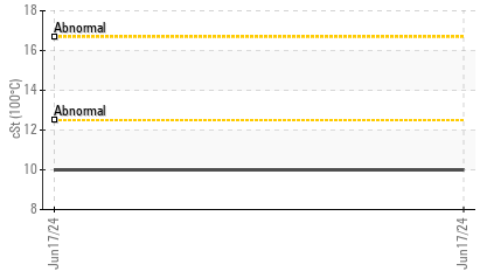
FT-IR (Direct Trend)



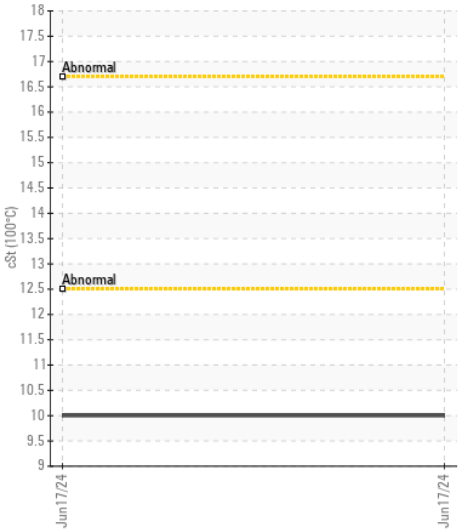
Base Number



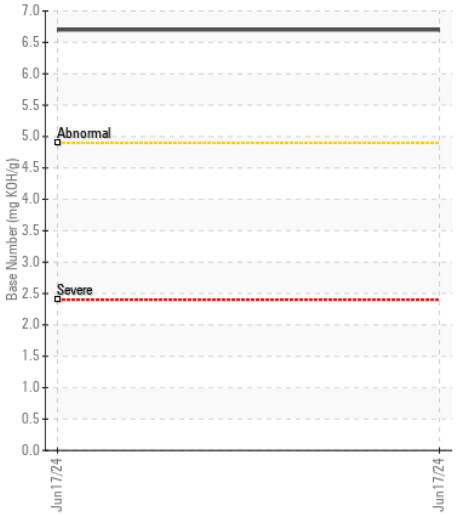
Viscosity @ 100°C



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : JR0220751
Lab Number : 06213325
Unique Number : 11086189
Test Package : CONST (Additional Tests: FuelDilution, Glycol, PercentFuel, TBN)

Received : 18 Jun 2024
Tested : 20 Jun 2024
Diagnosed : 20 Jun 2024 - Sean Felton

JRE - NEW BERN
3816 MARTIN LUTHER KING BLVD
NEW BERN, NC
US 28562
Contact: NEW BERN SHOP
nick.etherdridge@jamesriverequipment.com;canastasio@wearcheckusa.com
T:
F:

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)