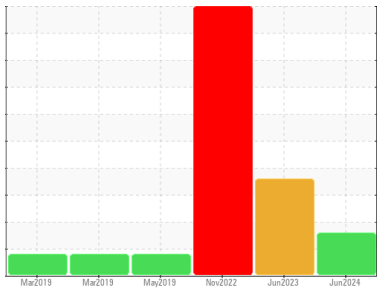
OIL ANALYSIS REPORT

Area
[W11544]
Machine Id
JOHN DEERE 844K 1DW844KCAJF690205
Component
Diesel Engine
Fluid
{not provided} (--- QTS)

Sample Rating Trend



GLYCOL

DIAGNOSIS

Recommendation
No corrective action is recommended at this time. Resample at the next service interval to monitor.

Wear
All component wear rates are normal.

Contamination
Sodium and/or potassium levels are high. Fuel content negligible. Test for glycol is negative.

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.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number		Client Info		**JR06208374**	JR0170514	JR0126244
Sample Date		Client Info		**12 Jun 2024**	23 Jun 2023	04 Nov 2022
Machine Age	hrs	Client Info		**0**	8527	7603
Oil Age	hrs	Client Info		**0**	7603	0
Oil Changed		Client Info		**N/A**	Changed	Changed
Sample Status				**ABNORMAL**	ABNORMAL	SEVERE

CONTAMINATION		method	limit/base	current	history1	history2
Water		WC Method	>0.21	**NEG**	NEG	NEG

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>51	**21**	21	▲ 71
Chromium	ppm	ASTM D5185m	>11	**<1**	<1	1
Nickel	ppm	ASTM D5185m	>5	**<1**	<1	<1
Titanium	ppm	ASTM D5185m		**<1**	<1	<1
Silver	ppm	ASTM D5185m	>3	**0**	<1	0
Aluminum	ppm	ASTM D5185m	>31	**10**	● 18	● 18
Lead	ppm	ASTM D5185m	>26	**15**	10	▲ 94
Copper	ppm	ASTM D5185m	>26	**6**	11	▲ 29
Tin	ppm	ASTM D5185m	>4	**1**	3	4
Antimony	ppm	ASTM D5185m		**---**	---	---
Vanadium	ppm	ASTM D5185m		**0**	<1	0
Cadmium	ppm	ASTM D5185m		**0**	<1	0

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		**30**	139	13
Barium	ppm	ASTM D5185m		**0**	<1	0
Molybdenum	ppm	ASTM D5185m		**170**	246	235
Manganese	ppm	ASTM D5185m		**0**	2	2
Magnesium	ppm	ASTM D5185m		**638**	856	734
Calcium	ppm	ASTM D5185m		**1358**	1413	1263
Phosphorus	ppm	ASTM D5185m		**848**	786	672
Zinc	ppm	ASTM D5185m		**996**	997	892
Sulfur	ppm	ASTM D5185m		**2984**	3363	2835

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>22	**16**	▲ 23	▲ 30
Sodium	ppm	ASTM D5185m	>31	**● 65**	14	24
Potassium	ppm	ASTM D5185m	>20	**10**	8	12
Fuel	%	ASTM D3524	>8.0	**7.1**	▲ 6.2	▲ 9.4
Glycol	%	*ASTM D2982		**0.0**	NEG	NEG

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>3	**0.4**	0.3	0.8
Nitration	Abs/cm	*ASTM D7624	>20	**9.8**	9.6	17.9
Sulfation	Abs/.1mm	*ASTM D7415	>30	**23.5**	24.5	34.2

FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	**17.6**	19.8	35.2
Base Number (BN)	mg KOH/g	ASTM D2896		**6.6**	7.6	4.9

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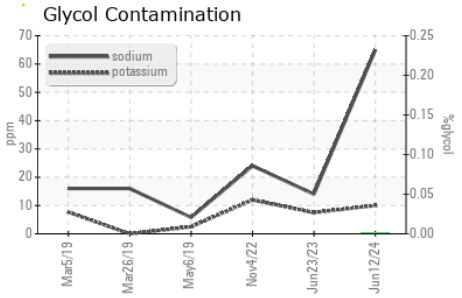
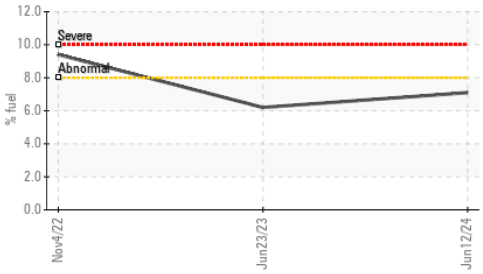
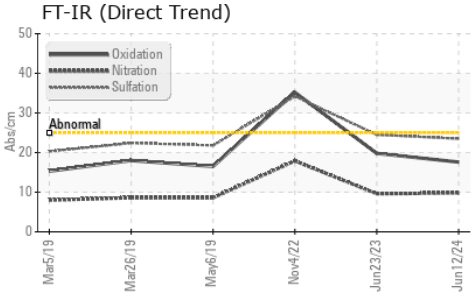
Glycol Contamination



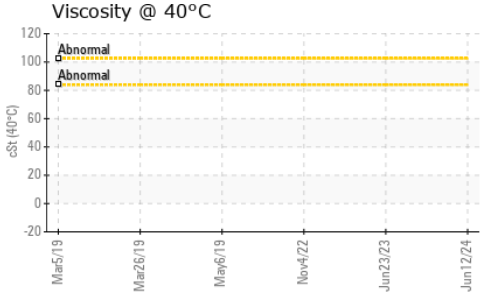
Fuel Dilution



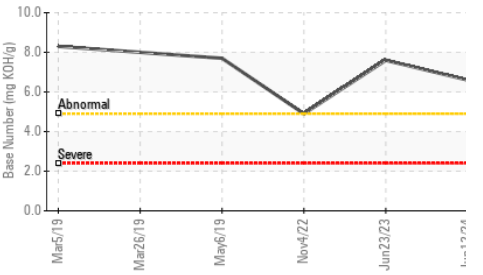
FT-IR (Direct Trend)



Viscosity @ 40°C



Base Number

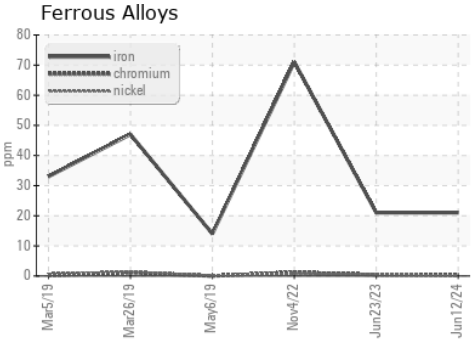


VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Precipitate	scalar	*Visual	NONE	**NONE**	NONE	NONE
Silt	scalar	*Visual	NONE	**NONE**	NONE	NONE
Debris	scalar	*Visual	NONE	**NONE**	NONE	NONE
Sand/Dirt	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
Free Water	scalar	*Visual		**NEG**	NEG	NEG

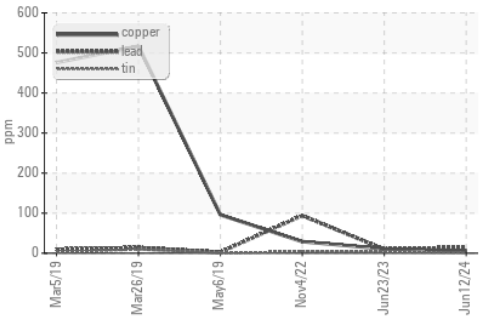
FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445		▲ **11.5**	▲ 12.1	▲ 10.7

GRAPHS

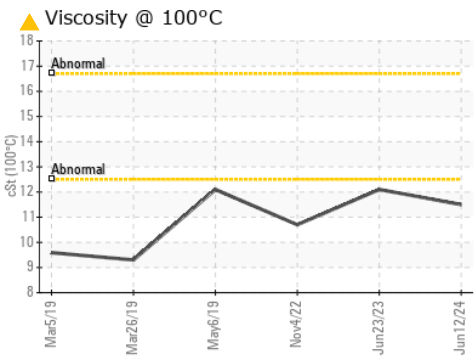
Ferrous Alloys



Non-ferrous Metals



▲ Viscosity @ 100°C



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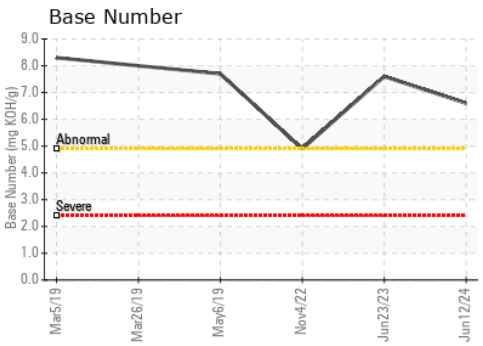

Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : JR06208374 **Received** : 13 Jun 2024
Lab Number : 06208374 **Tested** : 19 Jun 2024
Unique Number : 11075835 **Diagnosed** : 19 Jun 2024 - Jonathan Hester
Test Package : CONST (Additional Tests: Glycol, KV40, 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)

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Report Id: JAMSALJR [WUSCAR] 06208374 (Generated: 06/25/2024 12:45:30) Rev: 1

Submitted By: BRETT LAWRENCE