



WEAR	NORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	NORMAL

Machine Id
JOHN DEERE 50G 1FF050GXVGH284506

Component
Diesel Engine
Fluid
{not provided} (2 GAL)

RECOMMENDATION

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

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		JR0194397	JR0145570	JR0099712
Sample Date		Client Info		11 Jan 2024	20 Oct 2022	19 Sep 2021
Machine Age	hrs	Client Info		3500	2966	2492
Oil Age	hrs	Client Info		0	0	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		N/A	N/A	N/A
Filter Changed		Client Info		N/A	N/A	N/A
Sample Status				ABNORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>51	27	15	21
Chromium	ppm	ASTM D5185m	>11	<1	5	<1
Nickel	ppm	ASTM D5185m	>5	<1	0	0
Titanium	ppm	ASTM D5185m		<1	0	<1
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>31	11	4	6
Lead	ppm	ASTM D5185m	>26	2	2	2
Copper	ppm	ASTM D5185m	>26	2	<1	4
Tin	ppm	ASTM D5185m	>4	<1	<1	<1
Vanadium	ppm	ASTM D5185m		<1	<1	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

Elemental level of silicon (Si) above normal.

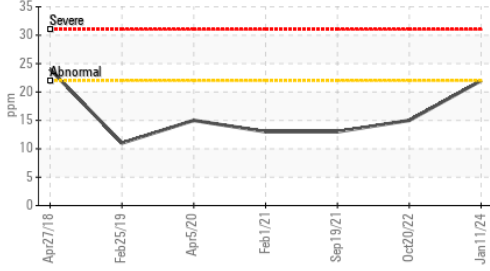
Silicon	ppm	ASTM D5185m	>22	▲ 22	15	13
Potassium	ppm	ASTM D5185m	>20	3	1	3
Fuel		WC Method	>2.1	<1.0	<1.0	<1.0
Water		WC Method	>0.21	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.5	0.5	0.5
Nitration	Abs/cm	*ASTM D7624	>20	10.4	11.2	9.9
Sulfation	Abs/.1mm	*ASTM D7415	>30	23.8	25.2	22.6
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

FLUID CONDITION

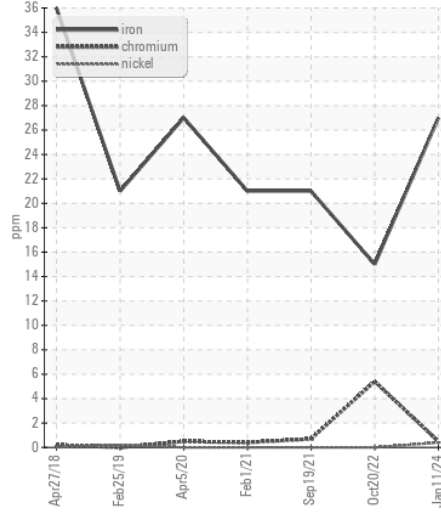
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m	>31	0	0	9
Boron	ppm	ASTM D5185m		218	156	196
Barium	ppm	ASTM D5185m		3	0	0
Molybdenum	ppm	ASTM D5185m		251	213	206
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m		784	755	656
Calcium	ppm	ASTM D5185m		1433	1391	1664
Phosphorus	ppm	ASTM D5185m		839	787	910
Zinc	ppm	ASTM D5185m		1000	958	1066
Sulfur	ppm	ASTM D5185m		3162	2891	2653
Oxidation	Abs/.1mm	*ASTM D7414	>25	21.1	21.4	19
Base Number (BN)	mg KOH/g	ASTM D2896		7.9	9.2	8.5
Visc @ 100°C	cSt	ASTM D445		13.3	13.1	13.7

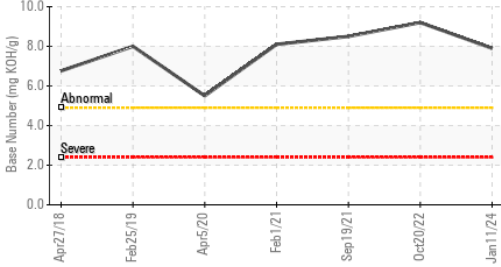
▲ Silicon (ppm)



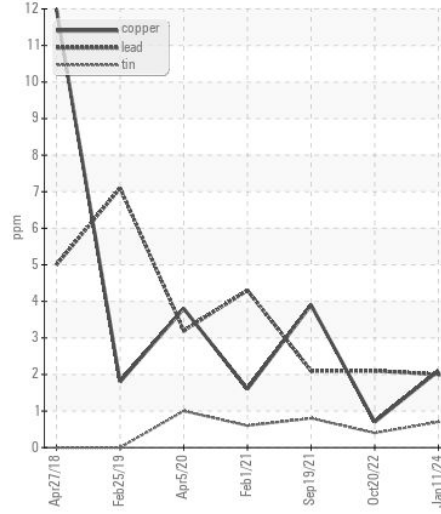
Ferrous Alloys



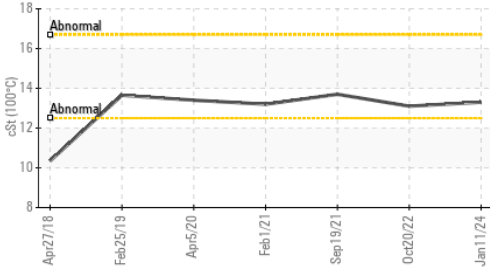
Base Number



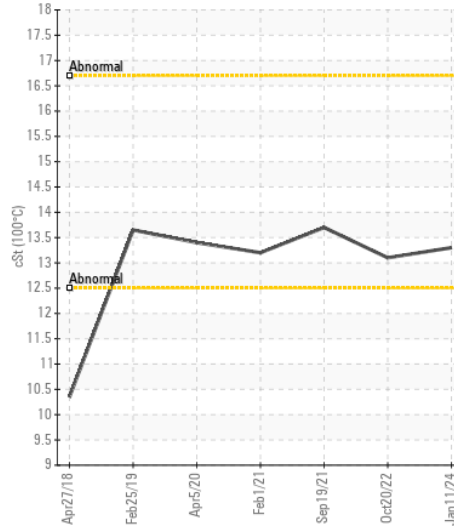
Non-ferrous Metals



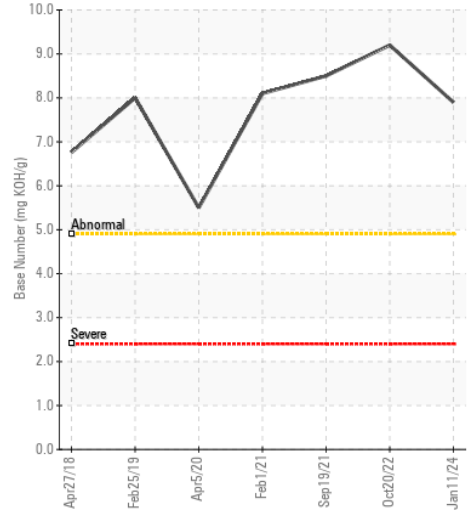
Viscosity @ 100°C



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : JR0194397 **Received** : 12 Jan 2024
Lab Number : 06059146 **Diagnosed** : 15 Jan 2024
Unique Number : 10830528 **Diagnostician** : Don Baldrige
Test Package : CONST (Additional Tests: TBN)

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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)