MAR II WEAR CHECK

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
JOHN DEERE D/G #2 (S/N CD4045CO13008)
Component
2 Diesel Engine
Fluid
DIESEL ENGINE OIL SAE 15W40 (13 LTR)

RECOMMENDATION

Resample at the next service interval to monitor. Please specify the brand, type, and viscosity of the oil on your next sample.

WEAR

All component wear rates are normal.

CONTAMINATION

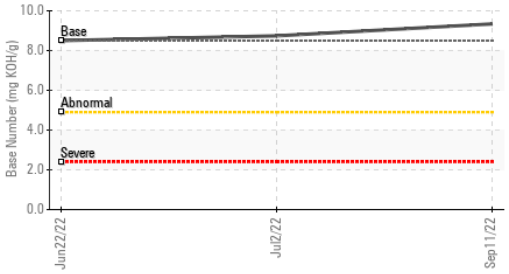
There is no indication of any contamination in the oil.

FLUID CONDITION

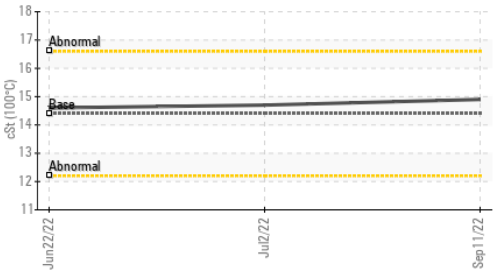
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		**WC0693932**	WC0693933	WC0693929
Sample Date		Client Info		**11 Sep 2022**	02 Jul 2022	22 Jun 2022
Machine Age	hrs	Client Info		**18390**	17888	17394
Oil Age	hrs	Client Info		**502**	500	500
Filter Age	hrs	Client Info		**502**	500	500
Oil Changed		Client Info		**Changed**	Changed	Changed
Filter Changed		Client Info		**Changed**	Changed	Changed
Sample Status				**NORMAL**	NORMAL	NORMAL
Iron	ppm	ASTM D5185(m)	>51	**14**	10	8
Chromium	ppm	ASTM D5185(m)	>11	**<1**	0	0
Nickel	ppm	ASTM D5185(m)	>5	**0**	0	<1
Titanium	ppm	ASTM D5185(m)		**<1**	<1	<1
Silver	ppm	ASTM D5185(m)		**0**	0	0
Aluminum	ppm	ASTM D5185(m)	>31	**1**	2	1
Lead	ppm	ASTM D5185(m)	>26	**1**	0	0
Copper	ppm	ASTM D5185(m)	>26	**<1**	<1	<1
Tin	ppm	ASTM D5185(m)	>4	**0**	0	0
Vanadium	ppm	ASTM D5185(m)		**0**	0	0
Silicon	ppm	ASTM D5185(m)	>22	**3**	3	3
Potassium	ppm	ASTM D5185(m)	>20	**<1**	<1	<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**	0	0
Nitration	Abs/cm	ASTM D7624*	>20	**6.0**	8.8	7.7
Sulfation	Abs/.1mm	ASTM D7415*	>30	**17.0**	21.2	20.4
Emulsified Water	scalar	Visual*	>0.21	**NEG**	NEG	NEG
Sodium	ppm	ASTM D5185(m)	>158	**3**	3	2
Boron	ppm	ASTM D5185(m)	250	**19**	82	99
Barium	ppm	ASTM D5185(m)	10	**0**	0	0
Molybdenum	ppm	ASTM D5185(m)	100	**66**	65	64
Manganese	ppm	ASTM D5185(m)		**<1**	<1	<1
Magnesium	ppm	ASTM D5185(m)	450	**930**	504	416
Calcium	ppm	ASTM D5185(m)	3000	**1434**	1840	1888
Phosphorus	ppm	ASTM D5185(m)	1150	**1169**	1160	1059
Zinc	ppm	ASTM D5185(m)	1350	**1315**	1301	1275
Sulfur	ppm	ASTM D5185(m)	4250	**3019**	3296	3282
Oxidation	Abs/.1mm	ASTM D7414*	>25	**11.1**	18.2	17.2
Base Number (BN)	mg KOH/g	ASTM D2896*	8.5	**9.34**	8.74	8.50
Visc @ 100°C	cSt	ASTM D7279(m)	14.4	**14.9**	14.7	14.6

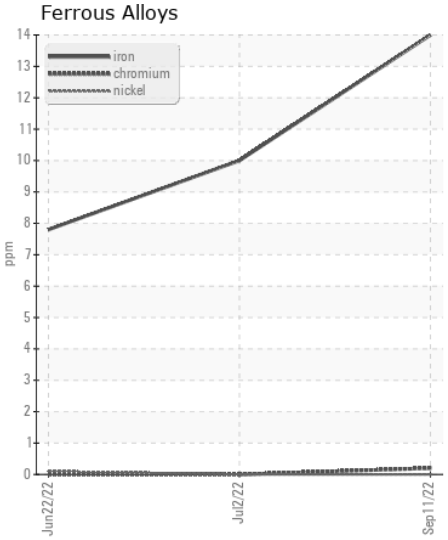
Base Number



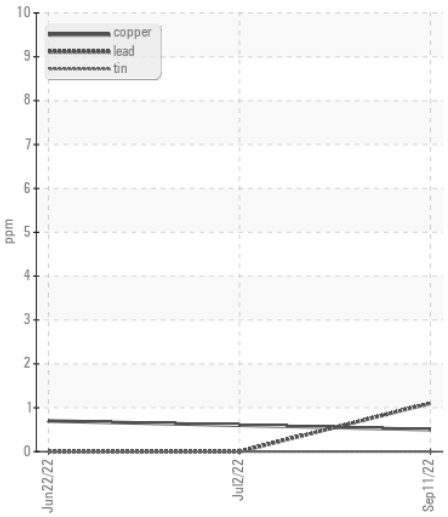
Viscosity @ 100°C



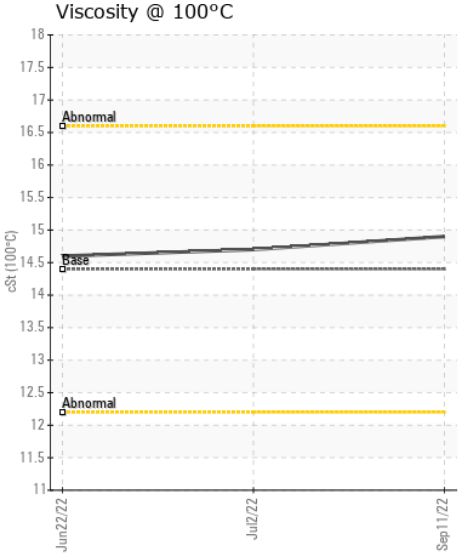
Ferrous Alloys



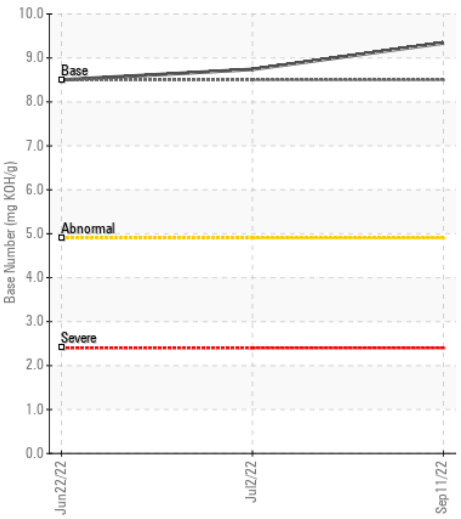
Non-ferrous Metals



Viscosity @ 100°C



Base Number



ISO 17025:2017 Accredited Laboratory

Laboratory	: WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9		
Sample No.	: WC0693932	**Recieved**	: 22 Sep 2022
Lab Number	: 02512290	**Diagnosed**	: 22 Sep 2022
Unique Number	: 5461265	**Diagnostician**	: Kevin Marson
Test Package	: MAR 2		

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To discuss this sample report, contact Customer Service at 1-800-268-2131.
Test denoted (*) outside scope of accreditation, (m) method modified, (e) tested at external lab.
Validity of results and interpretation are based on the sample and information as supplied.