WEAR CONTAMINATION **FLUID CONDITION** **NORMAL NORMAL NORMAL**

Marsh Bay B barge

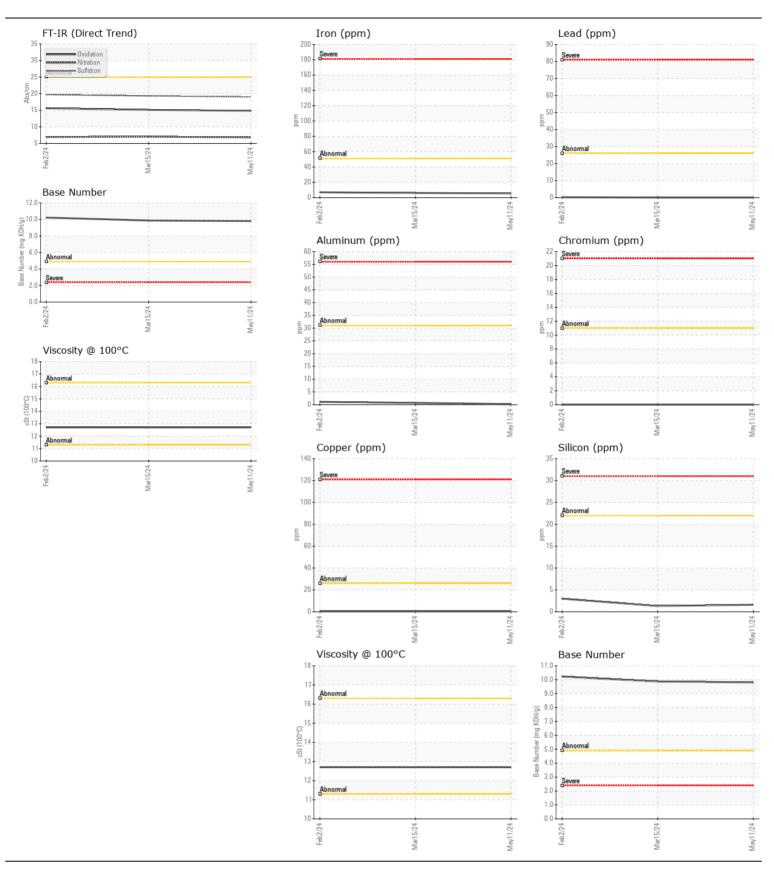
JOHN DEERE John Deere (S/N PE4045N044168)

Diesel Engine

MOBIL 15W40 (30 LTR)

RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
Resample at the next service interval to monitor.	Sample Number		Client Info		WC0894245	WC0894282	WC0894258
	Sample Date		Client Info		11 May 2024	15 Mar 2024	02 Feb 2024
	Machine Age	hrs	Client Info		4360	3380	2560
	Oil Age	hrs	Client Info		900	820	360
	Filter Age	hrs	Client Info		175	290	360
	Oil Changed		Client Info		Changed	Changed	Changed
	Filter Changed		Client Info		Changed	Changed	Changed
	Sample Status				NORMAL	NORMAL	NORMAL
WEAR	Iron	ppm	ASTM D5185(m)	>51	5	6	7
All component wear rates are normal.	Chromium	ppm	ASTM D5185(m)	>11	0	0	0
	Nickel	ppm	ASTM D5185(m)	>5	0	0	<1
	Titanium	ppm	ASTM D5185(m)		0	0	0
	Silver	ppm	ASTM D5185(m)	>3	0	0	0
	Aluminum	ppm	ASTM D5185(m)	>31	<1	<1	1
	Lead	ppm	ASTM D5185(m)	>26	0	0	<1
	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
CONTAMINATION	Silicon	ppm	ASTM D5185(m)	>22	2	1	3
There is no indication of any contamination in the oil.	Potassium	ppm	ASTM D5185(m)	>20	0	0	<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	6.8	7.0	6.9
	Sulfation	Abs/.1mm	ASTM D7415*	>30	19.0	19.3	19.7
	Emulsified Water	scalar	Visual*	>0.21	NEG	NEG	NEG
FLUID CONDITION	Sodium	ppm	ASTM D5185(m)	>118	1	<1	<1
The BN result indicates that there is suitable alkalinity remaining in the	Boron	ppm	ASTM D5185(m)		1	<1	1
oil. The condition of the oil is suitable for further service.	Barium	ppm	ASTM D5185(m)		0	0	0
	Molybdenum	ppm	ASTM D5185(m)		61	61	60
	Manganese	ppm	ASTM D5185(m)		0	0	0
	Magnesium	ppm	ASTM D5185(m)		975	987	992
	Calcium	ppm	ASTM D5185(m)		1048	1052	1082
	Phosphorus	ppm	ASTM D5185(m)		1015	1018	1054
	Zinc	ppm	ASTM D5185(m)		1178	1215	1201
	Sulfur	ppm	ASTM D5185(m)		2643	2670	2896
	Oxidation	Abs/.1mm	ASTM D7414*	>25	14.8	15.1	15.6
	Base Number (BN)	mg KOH/g	ASTM D2896*		9.80	9.87	10.23
	Visc @ 100°C	cSt	ASTM D7279(m)		12.7	12.7	12.7

Submitted By: Brian Dalton





CALA ISO 17025:2017 Accredited Laboratory

Sample No.

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 : WC0894245 Lab Number : 02640421

Unique Number : 5789583 Test Package : MOB 2

Received : 07 Jun 2024 **Tested** : 10 Jun 2024

Diagnosed : 10 Jun 2024 - Kevin Marson

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.

Mowi Canada West 7200 Coho Road Port Hardy, BC CA V0N 2P0 Contact: Brian Dalton

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