



# OIL ANALYSIS REPORT

WEAR	<b>NORMAL</b>
CONTAMINATION	<b>NORMAL</b>
FLUID CONDITION	<b>NORMAL</b>

Machine Id  
**JOHN DEERE MITCHELLS BAY SPS**  
 Component  
**Diesel Engine**  
 Fluid  
**DIESEL ENGINE OIL SAE 15W40 (--- GAL)**

## RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>WC0919638</b>	WC0791184	WC0668175
Sample Date		Client Info		<b>10 Apr 2024</b>	19 Apr 2023	19 Apr 2022
Machine Age	hrs	Client Info		<b>389</b>	369	349
Oil Age	hrs	Client Info		<b>0</b>	0	0
Filter Age	hrs	Client Info		<b>0</b>	0	0
Oil Changed		Client Info		<b>Not Changed</b>	Not Changed	Not Changed
Filter Changed		Client Info		<b>Not Changed</b>	Not Changed	Not Changed
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

## WEAR

Metal levels are typical for a new component breaking in.

Iron	ppm	ASTM D5185(m)	>51	<b>3</b>	3	3
Chromium	ppm	ASTM D5185(m)	>11	<b>0</b>	0	0
Nickel	ppm	ASTM D5185(m)	>5	<b>0</b>	<1	<1
Titanium	ppm	ASTM D5185(m)		<b>&lt;1</b>	<1	0
Silver	ppm	ASTM D5185(m)	>3	<b>0</b>	0	<1
Aluminum	ppm	ASTM D5185(m)	>31	<b>&lt;1</b>	<1	<1
Lead	ppm	ASTM D5185(m)	>26	<b>0</b>	<1	<1
Copper	ppm	ASTM D5185(m)	>26	<b>&lt;1</b>	<1	<1
Tin	ppm	ASTM D5185(m)	>4	<b>0</b>	0	0
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	0	0

## CONTAMINATION

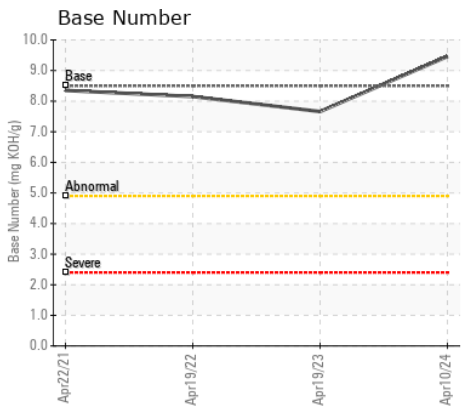
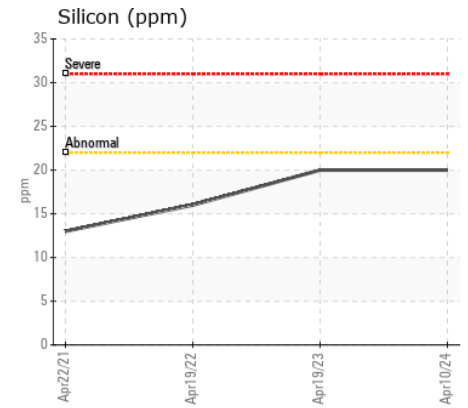
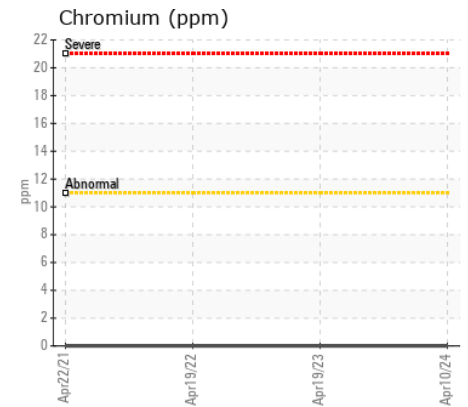
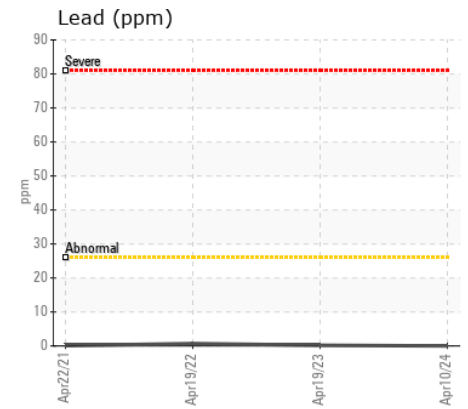
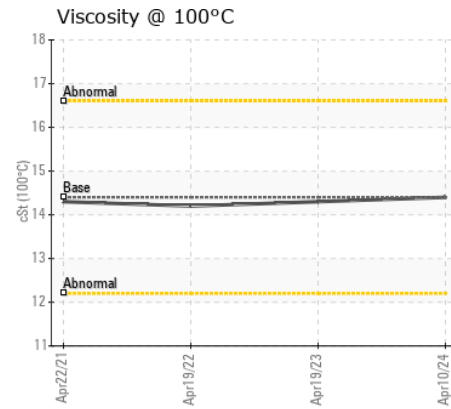
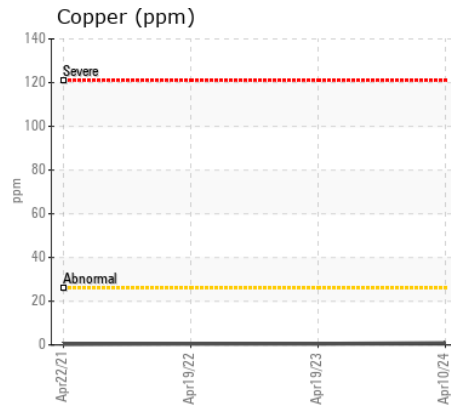
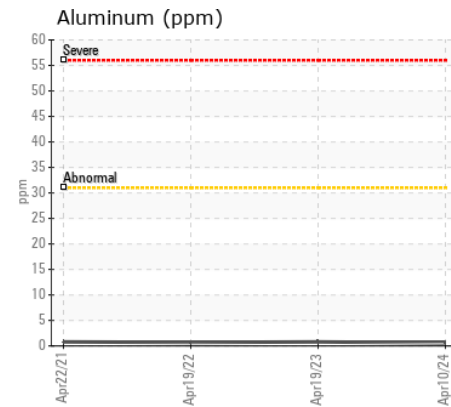
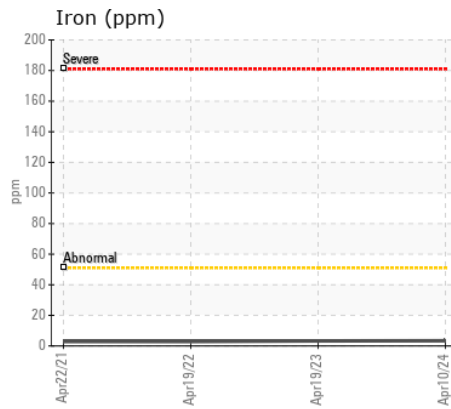
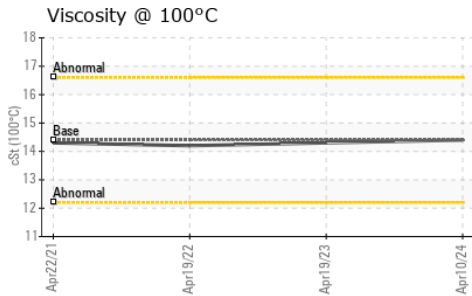
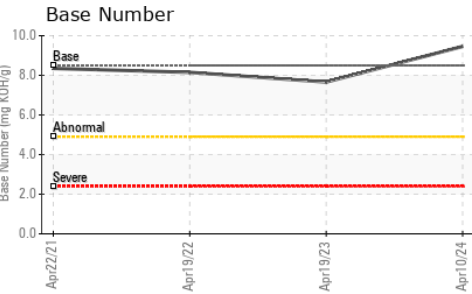
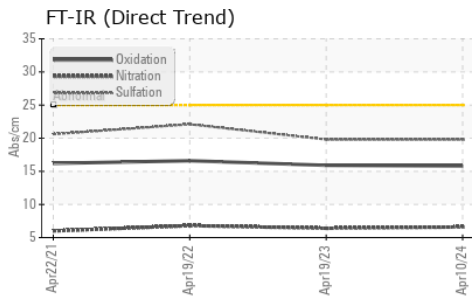
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>22	<b>20</b>	20	16
Potassium	ppm	ASTM D5185(m)	>20	<b>7</b>	7	8
Fuel		WC Method	>2.1	<b>&lt;1.0</b>	<1.0	<1.0
Water		WC Method	>0.21	<b>NEG</b>	NEG	NEG
Glycol		WC Method		<b>NEG</b>	NEG	NEG
Soot %	%	ASTM D7844*	>3	<b>0</b>	0	0
Nitration	Abs/cm	ASTM D7624*	>20	<b>6.6</b>	6.4	6.8
Sulfation	Abs/.1mm	ASTM D7415*	>30	<b>19.8</b>	19.8	22.1
Emulsified Water	scalar	Visual*	>0.21	<b>NEG</b>	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 D5185(m)	>158	<b>3</b>	3	3
Boron	ppm	ASTM D5185(m)	250	<b>161</b>	163	163
Barium	ppm	ASTM D5185(m)	10	<b>&lt;1</b>	0	<1
Molybdenum	ppm	ASTM D5185(m)	100	<b>0</b>	1	2
Manganese	ppm	ASTM D5185(m)		<b>0</b>	<1	<1
Magnesium	ppm	ASTM D5185(m)	450	<b>12</b>	14	18
Calcium	ppm	ASTM D5185(m)	3000	<b>2208</b>	2274	2163
Phosphorus	ppm	ASTM D5185(m)	1150	<b>941</b>	1027	1036
Zinc	ppm	ASTM D5185(m)	1350	<b>1093</b>	1112	1137
Sulfur	ppm	ASTM D5185(m)	4250	<b>2923</b>	3059	3055
Oxidation	Abs/.1mm	ASTM D7414*	>25	<b>15.8</b>	15.9	16.6
Base Number (BN)	mg KOH/g	ASTM D2896*	8.5	<b>9.46</b>	7.66	8.15
Visc @ 100°C	cSt	ASTM D7279(m)	14.4	<b>14.4</b>	14.3	14.2



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : WC0919638  
**Lab Number** : 02628655  
**Unique Number** : 5761787  
**Test Package** : MOB 2  
**Received** : 15 Apr 2024  
**Tested** : 16 Apr 2024  
**Diagnosed** : 16 Apr 2024 - Wes Davis

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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.