



# WEAR CHECK

## OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id  
**JOHN DEERE PACIFIC CHALLENGER**  
 Component  
**Front Diesel Engine**  
 Fluid  
**MOBIL 15W40 (11 GAL)**

### RECOMMENDATION

Resample at the next service interval to monitor. ( Customer Sample Comment:  
 Top Up Amount: 1 GAL )

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>KL0011782</b>	KL0011790	KL0011788
Sample Date		Client Info		<b>10 May 2024</b>	12 Apr 2024	08 Mar 2024
Machine Age	hrs	Client Info		<b>98500</b>	97000	98000
Oil Age	hrs	Client Info		<b>750</b>	500	500
Filter Age	hrs	Client Info		<b>250</b>	250	250
Oil Changed		Client Info		<b>Oil Added</b>	Oil Added	Oil Added
Filter Changed		Client Info		<b>Changed</b>	Changed	Changed
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

### WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>51	<b>15</b>	13	14
Chromium	ppm	ASTM D5185m	>11	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185m	>5	<b>0</b>	<1	1
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	<1
Silver	ppm	ASTM D5185m	>3	<b>0</b>	<1	<1
Aluminum	ppm	ASTM D5185m	>31	<b>1</b>	3	4
Lead	ppm	ASTM D5185m	>26	<b>&lt;1</b>	1	4
Copper	ppm	ASTM D5185m	>26	<b>1</b>	2	2
Tin	ppm	ASTM D5185m	>4	<b>&lt;1</b>	<1	2
Vanadium	ppm	ASTM D5185m		<b>0</b>	<1	<1
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

### CONTAMINATION

There is no indication of any contamination in the oil.

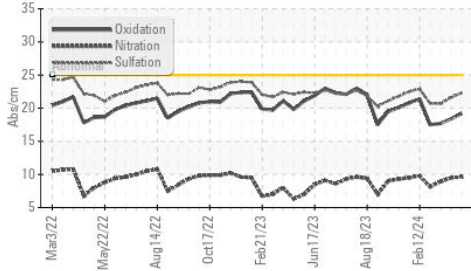
Silicon	ppm	ASTM D5185m	>22	<b>7</b>	7	12
Potassium	ppm	ASTM D5185m	>20	<b>2</b>	4	6
Fuel		WC Method	>2.1	<b>&lt;1.0</b>	<1.0	<1.0
Water		WC Method	>0.21	<b>NEG</b>	NEG	NEG
Glycol		WC Method		<b>NEG</b>	NEG	NEG
Soot %	%	*ASTM D7844	>3	<b>0.7</b>	0.6	0.5
Nitration	Abs/cm	*ASTM D7624	>20	<b>9.6</b>	9.5	8.9
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>22.3</b>	21.6	20.7
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Appearance	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Odor	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Emulsified Water	scalar	*Visual	>0.21	<b>NEG</b>	NEG	NEG

### FLUID CONDITION

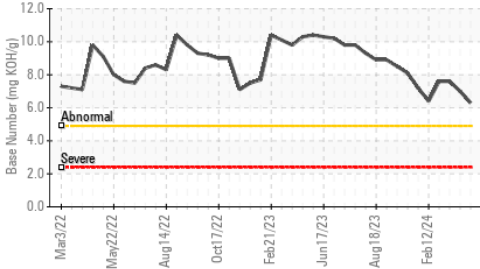
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m	>118	<b>2</b>	0	0
Boron	ppm	ASTM D5185m		<b>41</b>	52	75
Barium	ppm	ASTM D5185m		<b>0</b>	0	<1
Molybdenum	ppm	ASTM D5185m		<b>14</b>	13	13
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m		<b>522</b>	544	564
Calcium	ppm	ASTM D5185m		<b>1779</b>	1656	1767
Phosphorus	ppm	ASTM D5185m		<b>755</b>	809	922
Zinc	ppm	ASTM D5185m		<b>844</b>	931	972
Sulfur	ppm	ASTM D5185m		<b>3883</b>	3406	3729
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>19.2</b>	18.4	17.7
Base Number (BN)	mg KOH/g	ASTM D2896		<b>6.3</b>	7.0	7.6
Visc @ 100°C	cSt	ASTM D445		<b>14.2</b>	14.7	14.2

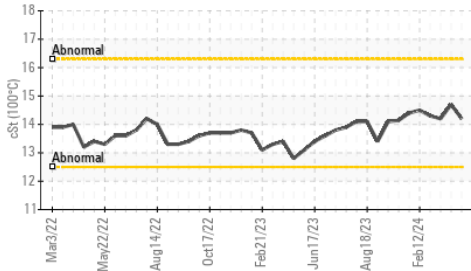
**FT-IR (Direct Trend)**



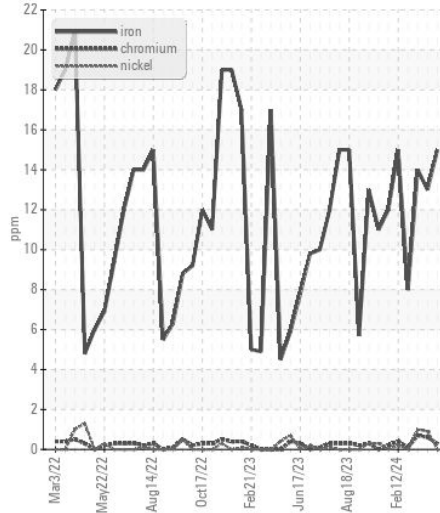
**Base Number**



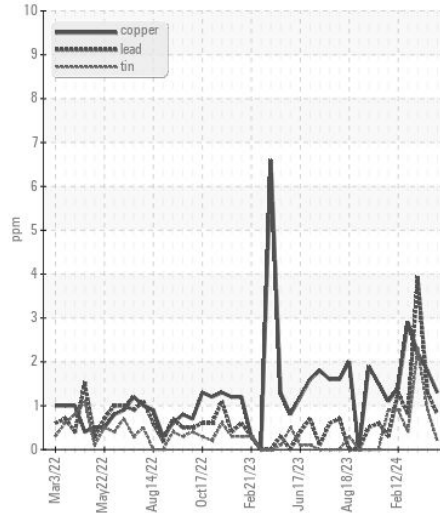
**Viscosity @ 100°C**



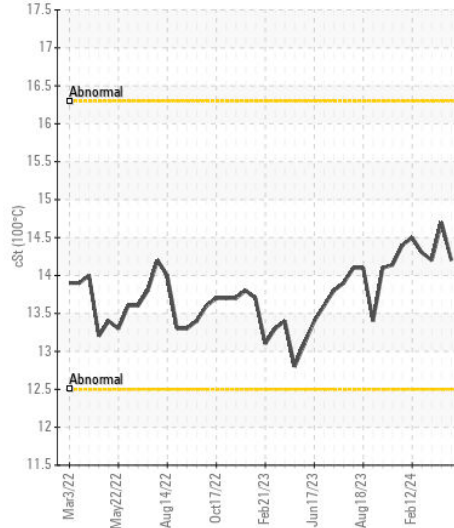
**Ferrous Alloys**



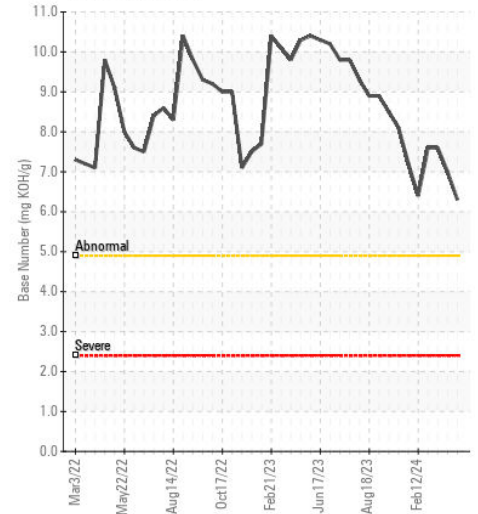
**Non-ferrous Metals**



**Viscosity @ 100°C**



**Base Number**



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : KL0011782  
**Lab Number** : 06196131  
**Unique Number** : 11058254  
**Test Package** : FLEET  
**Received** : 30 May 2024  
**Tested** : 31 May 2024  
**Diagnosed** : 02 Jun 2024 - Don Baldrige

**PACIFIC DAWN LLC**  
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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)