



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

Machine Id  
**FORD F250 V68**  
 Component  
**Diesel Engine**  
 Fluid  
**JOHN DEERE ENGINE OIL PLUS 50 II 15W40 (--- GAL)**

### RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>JR0206207</b>	JR0198931	JR0178772
Sample Date		Client Info		<b>16 Apr 2024</b>	01 Feb 2024	08 Nov 2023
Machine Age	mls	Client Info		<b>342742</b>	337036	331494
Oil Age	mls	Client Info		<b>22163</b>	14457	10915
Filter Age	mls	Client Info		<b>5706</b>	5542	5642
Oil Changed		Client Info		<b>Changed</b>	Not Changed	Not Changed
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	>100	<b>13</b>	12	11
Chromium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185m	>2	<b>0</b>	0	0
Titanium	ppm	ASTM D5185m	>2	<b>0</b>	0	0
Silver	ppm	ASTM D5185m	>2	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>25	<b>4</b>	5	4
Lead	ppm	ASTM D5185m	>40	<b>4</b>	5	5
Copper	ppm	ASTM D5185m	>330	<b>2</b>	4	6
Tin	ppm	ASTM D5185m	>15	<b>0</b>	<1	0
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

### CONTAMINATION

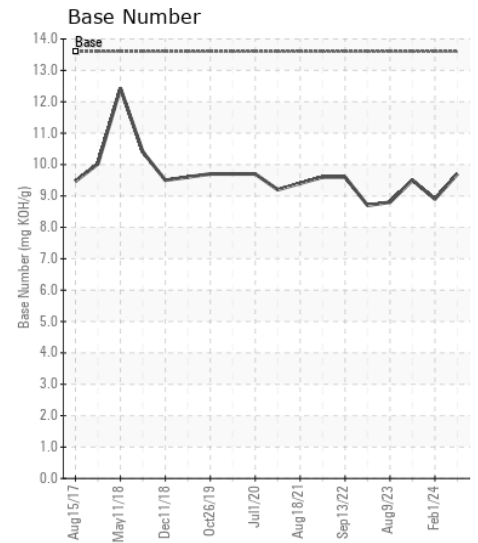
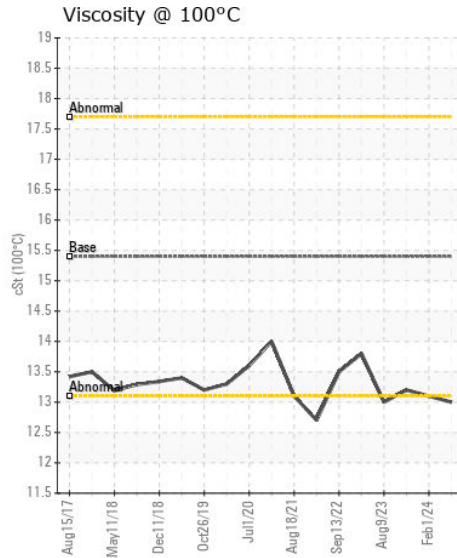
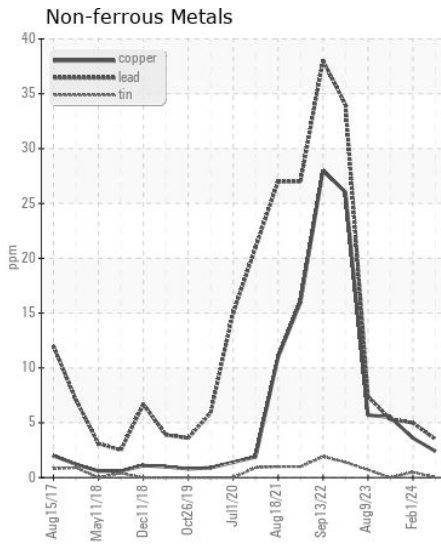
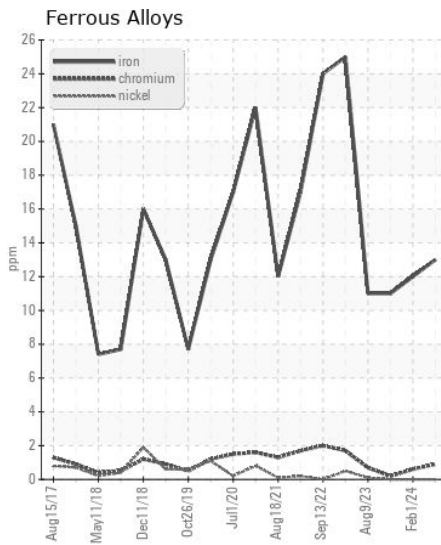
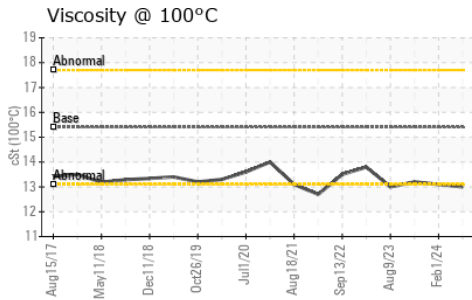
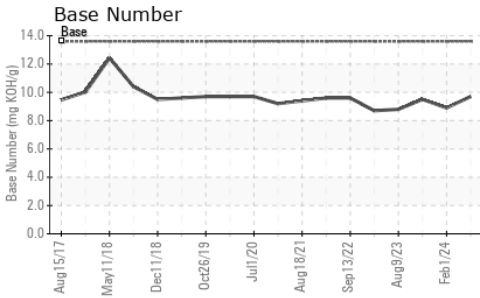
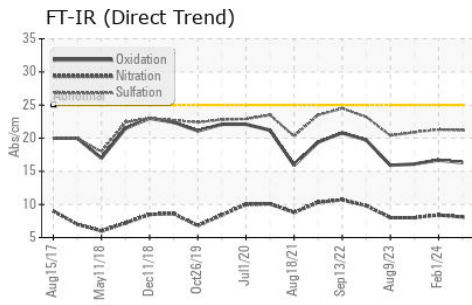
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	<b>7</b>	7	8
Potassium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	<1	5
Fuel		WC Method	>5	<b>&lt;1.0</b>	<1.0	<1.0
Water		WC Method	>0.2	<b>NEG</b>	NEG	NEG
Glycol		WC Method		<b>NEG</b>	NEG	NEG
Soot %	%	*ASTM D7844	>3	<b>0.1</b>	0.1	0.1
Nitration	Abs/cm	*ASTM D7624	>20	<b>8.1</b>	8.4	8.0
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>21.2</b>	21.3	20.9
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	>0.2	<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		<b>24</b>	26	14
Boron	ppm	ASTM D5185m		<b>246</b>	237	251
Barium	ppm	ASTM D5185m		<b>&lt;1</b>	0	3
Molybdenum	ppm	ASTM D5185m		<b>269</b>	255	252
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	<1	0
Magnesium	ppm	ASTM D5185m		<b>892</b>	818	791
Calcium	ppm	ASTM D5185m		<b>1575</b>	1353	1383
Phosphorus	ppm	ASTM D5185m		<b>888</b>	917	884
Zinc	ppm	ASTM D5185m		<b>1160</b>	1088	1028
Sulfur	ppm	ASTM D5185m		<b>3816</b>	2947	3278
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>16.3</b>	16.7	16.1
Base Number (BN)	mg KOH/g	ASTM D2896	13.6	<b>9.7</b>	8.9	9.5
Visc @ 100°C	cSt	ASTM D445	15.4	<b>13.0</b>	13.1	13.2



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : JR0206207 **Received** : 24 Apr 2024  
**Lab Number** : 06159661 **Tested** : 25 Apr 2024  
**Unique Number** : 10995084 **Diagnosed** : 25 Apr 2024 - Wes Davis  
**Test Package** : CONST ( Additional Tests: TBN )

**MATTHEWS CONSTRUCTION**  
 127 GRAYSON RD  
 ROCK HILL, SC  
 US 29732  
 Contact: Tad Clinton  
 tclinton@matthewsconstructionco.com

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)

T: (803)207-5607

F: