



# OIL ANALYSIS REPORT

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

Machine Id  
**FORD FORD F250**  
 Component  
**Diesel Engine**  
 Fluid  
**SHELL ROTELLA T 15W40 (13 QTS)**

## RECOMMENDATION

No corrective action is recommended at this time. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>KLMFA19066</b>	KLMFA19054	KLMFA17002
Sample Date		Client Info		<b>01 Feb 2024</b>	03 Apr 2023	06 Aug 2022
Machine Age	mls	Client Info		<b>181197</b>	165952	149955
Oil Age	mls	Client Info		<b>46301</b>	31056	15059
Filter Age	mls	Client Info		<b>15245</b>	15997	15059
Oil Changed		Client Info		<b>Not Changd</b>	Not Changd	Not Changd
Filter Changed		Client Info		<b>Changed</b>	Changed	Changed
Sample Status				<b>ABNORMAL</b>	ABNORMAL	ABNORMAL

## WEAR

Cylinder, crank, or cam shaft wear is indicated. All other component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	<b>▲ 108</b>	▲ 126	71
Chromium	ppm	ASTM D5185m	>20	<b>2</b>	2	2
Nickel	ppm	ASTM D5185m	>2	<b>&lt;1</b>	1	<1
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>6</b>	6	5
Lead	ppm	ASTM D5185m	>40	<b>0</b>	<1	<1
Copper	ppm	ASTM D5185m	>330	<b>5</b>	6	3
Tin	ppm	ASTM D5185m	>15	<b>&lt;1</b>	0	<1
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	<1
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

## CONTAMINATION

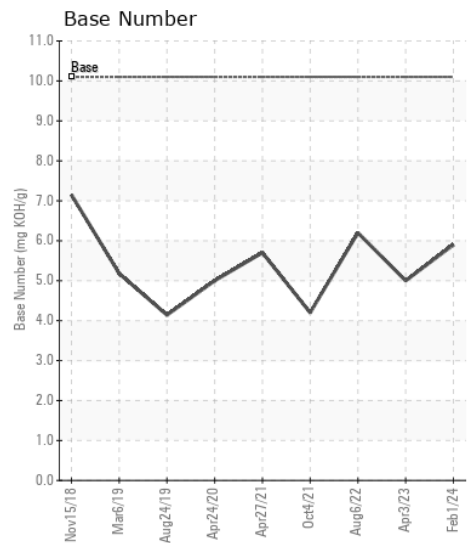
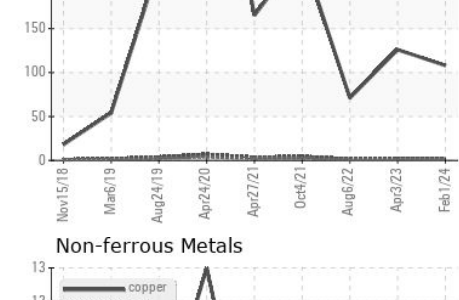
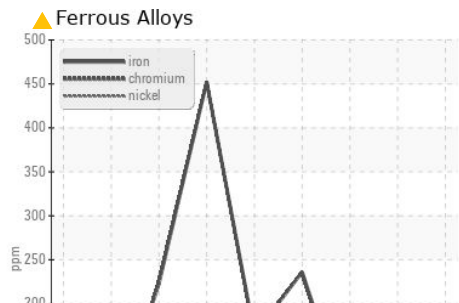
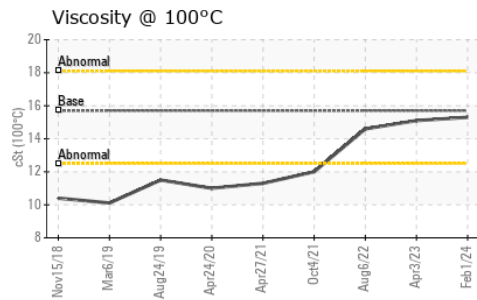
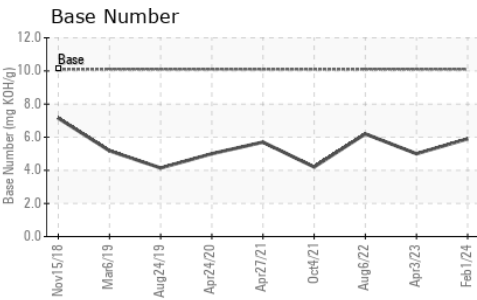
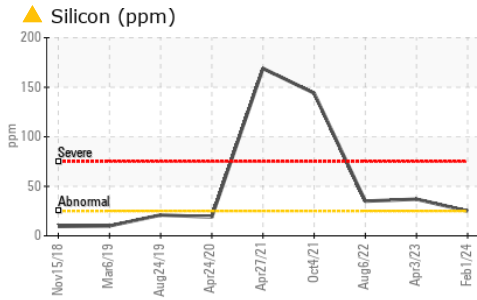
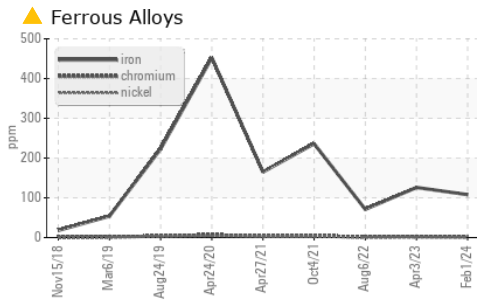
Elemental level of silicon (Si) above normal.

Silicon	ppm	ASTM D5185m	>25	<b>▲ 25</b>	▲ 37	▲ 35
Potassium	ppm	ASTM D5185m	>20	<b>5</b>	6	6
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>1.1</b>	1.3	1.3
Nitration	Abs/cm	*ASTM D7624	>20	<b>12.2</b>	13.7	14.2
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>29.2</b>	31.9	31.1
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>3</b>	0	3
Boron	ppm	ASTM D5185m	316	<b>58</b>	46	62
Barium	ppm	ASTM D5185m	0.0	<b>&lt;1</b>	0	0
Molybdenum	ppm	ASTM D5185m	1.2	<b>0</b>	<1	2
Manganese	ppm	ASTM D5185m		<b>2</b>	2	1
Magnesium	ppm	ASTM D5185m	24	<b>51</b>	76	101
Calcium	ppm	ASTM D5185m	2292	<b>2214</b>	2400	2076
Phosphorus	ppm	ASTM D5185m	1064	<b>1039</b>	1040	942
Zinc	ppm	ASTM D5185m	1160	<b>1118</b>	1158	1098
Sulfur	ppm	ASTM D5185m	4996	<b>4117</b>	4575	3901
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>26.2</b>	28.8	29.4
Base Number (BN)	mg KOH/g	ASTM D2896	10.1	<b>5.9</b>	5.0	6.2
Visc @ 100°C	cSt	ASTM D445	15.7	<b>15.3</b>	15.1	14.6



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : KLMFA19066 **Received** : 08 Feb 2024  
**Lab Number** : 06083510 **Tested** : 09 Feb 2024  
**Unique Number** : 10870955 **Diagnosed** : 09 Feb 2024 - Don Baldrige  
**Test Package** : FLEET

**LARRY URBAN**  
 506 FORREST DR  
 DUMAS, TX  
 US 79029  
 Contact: LARRY URBAN  
 larryurban@windstream.net  
 T: (806)930-0450  
 F:

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)