



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

Machine Id  
**FORD F150 V101**  
 Component  
**Rear Differential**  
 Fluid  
**GEAR OIL SAE 80W90 (--- GAL)**

### RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>JR0219622</b>	JR0198402	JR0193337
Sample Date		Client Info		<b>21 Jun 2024</b>	04 Apr 2024	16 Jan 2024
Machine Age	mls	Client Info		<b>124797</b>	119627	114673
Oil Age	mls	Client Info		<b>5170</b>	46410	20687
Filter Age	mls	Client Info		<b>0</b>	0	0
Oil Changed		Client Info		<b>Not Changd</b>	Not Changd	Not Changd
Filter Changed		Client Info		<b>N/A</b>	Changed	Changed
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

### WEAR

All component wear rates are normal.

PQ		ASTM D8184		<b>17</b>	19	17
Iron	ppm	ASTM D5185m	>1206	<b>148</b>	236	108
Chromium	ppm	ASTM D5185m	>9	<b>&lt;1</b>	1	<1
Nickel	ppm	ASTM D5185m	>9	<b>10</b>	12	11
Titanium	ppm	ASTM D5185m		<b>2</b>	2	2
Silver	ppm	ASTM D5185m	>2	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>72	<b>6</b>	4	3
Lead	ppm	ASTM D5185m	>56	<b>0</b>	0	0
Copper	ppm	ASTM D5185m	>57	<b>&lt;1</b>	<1	0
Tin	ppm	ASTM D5185m	>6	<b>&lt;1</b>	<1	<1
Vanadium	ppm	ASTM D5185m		<b>0</b>	<1	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

### CONTAMINATION

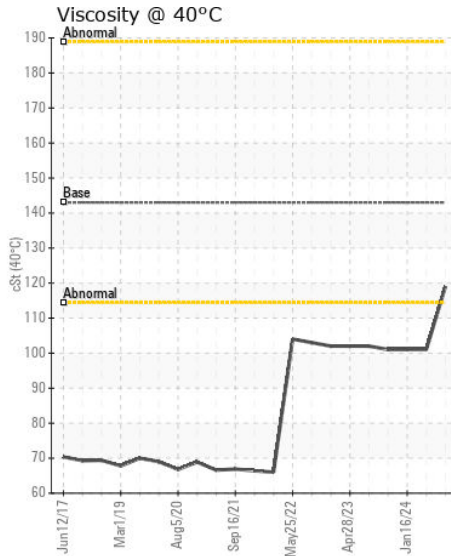
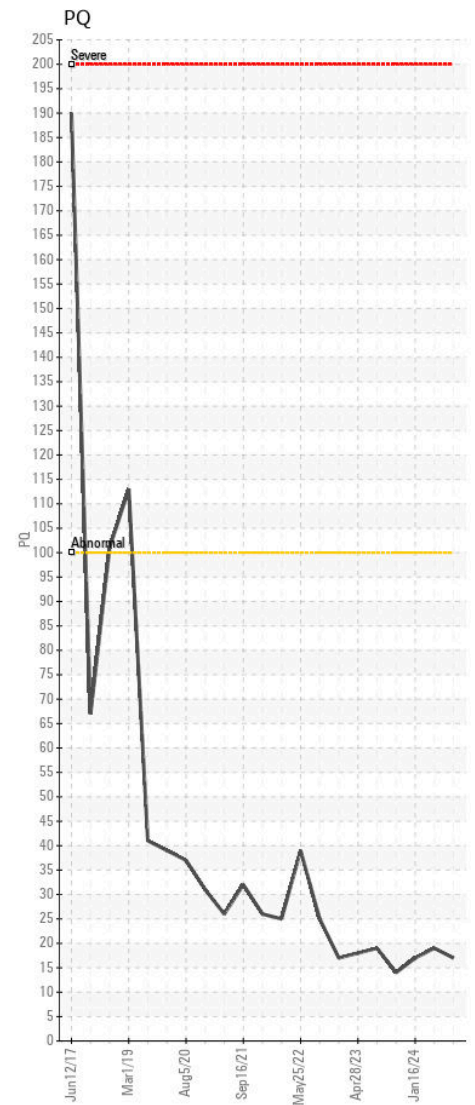
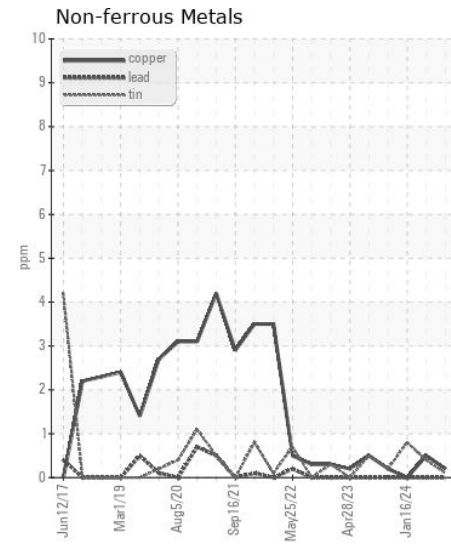
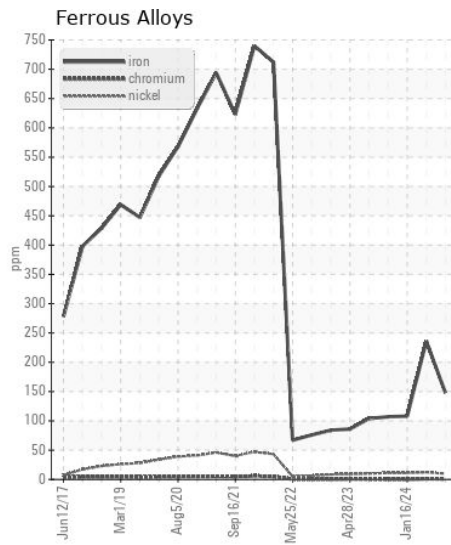
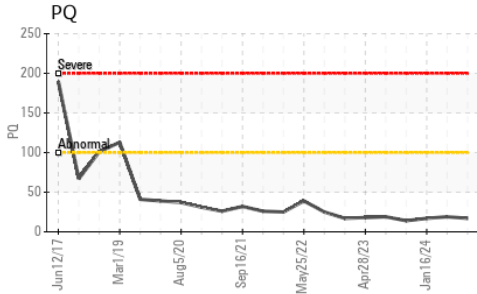
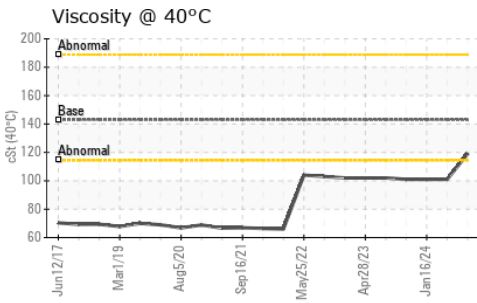
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>344	<b>114</b>	124	122
Potassium	ppm	ASTM D5185m	>20	<b>2</b>	<1	0
Water		WC Method	>.2	<b>NEG</b>	NEG	NEG
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	>.2	<b>NEG</b>	NEG	NEG

### FLUID CONDITION

The condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185m	>170	<b>0</b>	<1	1
Boron	ppm	ASTM D5185m	400	<b>237</b>	235	239
Barium	ppm	ASTM D5185m	200	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	12	<b>&lt;1</b>	0	0
Manganese	ppm	ASTM D5185m		<b>3</b>	5	4
Magnesium	ppm	ASTM D5185m	12	<b>0</b>	2	1
Calcium	ppm	ASTM D5185m	150	<b>0</b>	14	0
Phosphorus	ppm	ASTM D5185m	1650	<b>1375</b>	1410	1422
Zinc	ppm	ASTM D5185m	125	<b>0</b>	9	0
Sulfur	ppm	ASTM D5185m	22500	<b>22081</b>	27890	23273
Visc @ 40°C	cSt	ASTM D445	143	<b>119</b>	101	101



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : JR0219622 **Received** : 02 Jul 2024  
**Lab Number** : 06226546 **Tested** : 03 Jul 2024  
**Unique Number** : 11110039 **Diagnosed** : 05 Jul 2024 - Don Baldridge  
**Test Package** : CONST ( Additional Tests: PQ )

**MATTHEWS CONSTRUCTION**  
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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)