



# WEAR CHECK

## OIL ANALYSIS REPORT

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

Area

**5C07**

Machine Id

**FORD F-550 TVK9665 (S/N 1FDUF5GT7GEC16787)**

Component

**Diesel Engine**

Fluid

**PETRO CANADA 15W40 (14 QTS)**

### RECOMMENDATION

We advise that you check the fuel injection system. We recommend that you drain the oil and perform a filter service on this component if not already done. We recommend an early resample to monitor this condition.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>ARI0006730</b>	ARI0006743	ARI05838990
Sample Date		Client Info		<b>24 Aug 2023</b>	21 Aug 2023	04 May 2023
Machine Age	mls	Client Info		<b>115440</b>	0	0
Oil Age	mls	Client Info		<b>0</b>	0	0
Filter Age	mls	Client Info		<b>0</b>	0	0
Oil Changed		Client Info		<b>Not Chngd</b>	N/A	N/A
Filter Changed		Client Info		<b>Not Chngd</b>	N/A	N/A
Sample Status				<b>SEVERE</b>	NORMAL	NORMAL

### WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	<b>34</b>	38	29
Chromium	ppm	ASTM D5185m	>20	<b>2</b>	2	1
Nickel	ppm	ASTM D5185m	>2	<b>&lt;1</b>	<1	0
Titanium	ppm	ASTM D5185m	>2	<b>0</b>	<1	0
Silver	ppm	ASTM D5185m	>2	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>25	<b>4</b>	6	4
Lead	ppm	ASTM D5185m	>40	<b>0</b>	0	0
Copper	ppm	ASTM D5185m	>330	<b>2</b>	3	1
Tin	ppm	ASTM D5185m	>15	<b>0</b>	<1	0
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

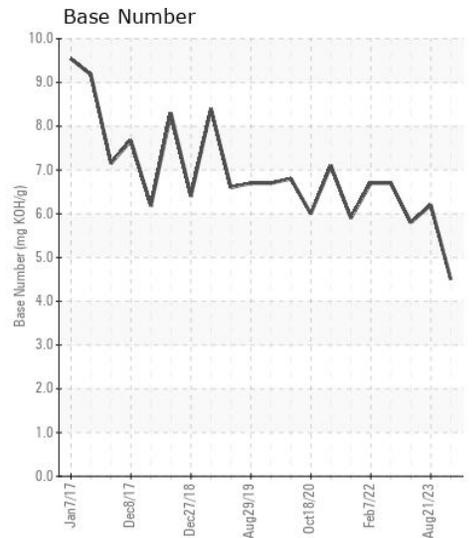
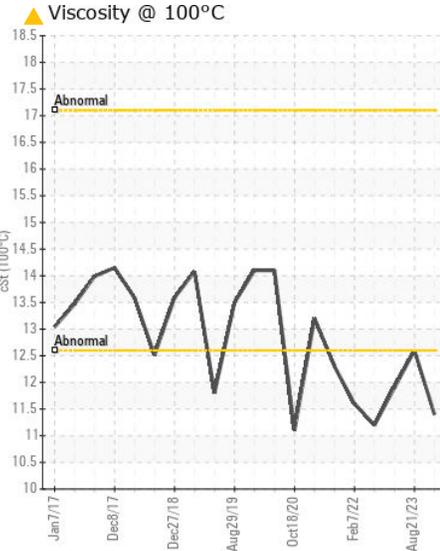
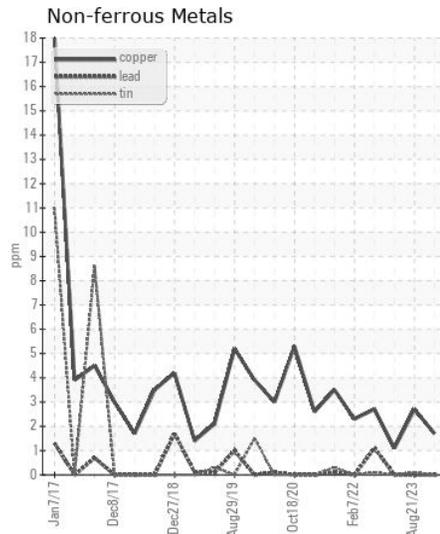
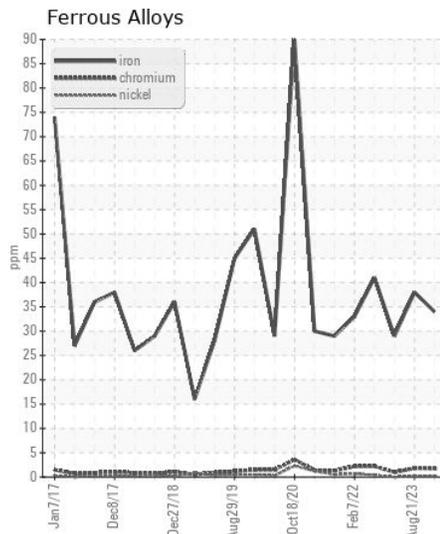
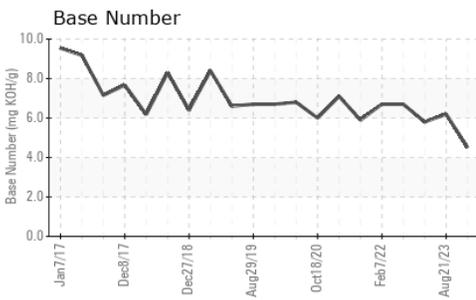
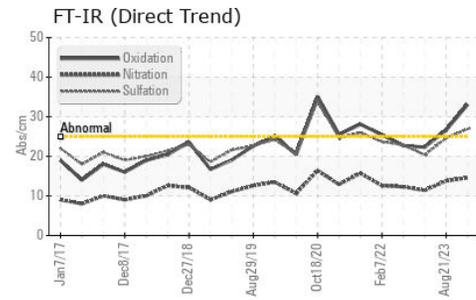
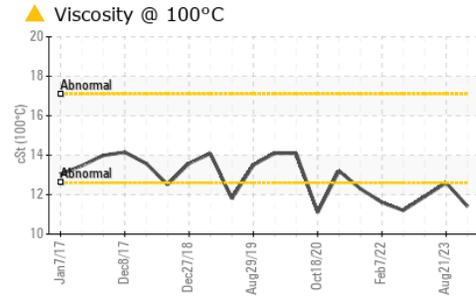
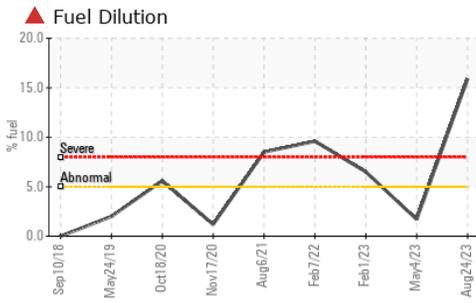
There is a high amount of fuel present in the oil.

Silicon	ppm	ASTM D5185m	>25	<b>12</b>	11	9
Potassium	ppm	ASTM D5185m	>20	<b>0</b>	0	<1
Fuel	%	ASTM D3524	>5	<b>▲ 15.9</b>	<1.0	1.7
Water		WC Method	>0.2	<b>NEG</b>	NEG	NEG
Glycol		WC Method		<b>NEG</b>	NEG	NEG
Soot %	%	*ASTM D7844	>3	<b>0.4</b>	0.6	0.4
Nitration	Abs/cm	*ASTM D7624	>20	<b>14.6</b>	13.8	11.4
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>26.9</b>	24.6	20.4
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

Fuel is present in the oil and is lowering the viscosity. The oil is no longer serviceable due to the presence of contaminants.

Sodium	ppm	ASTM D5185m		<b>2</b>	2	<1
Boron	ppm	ASTM D5185m		<b>1</b>	<1	2
Barium	ppm	ASTM D5185m		<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m		<b>49</b>	59	57
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m		<b>861</b>	952	946
Calcium	ppm	ASTM D5185m		<b>892</b>	1051	1055
Phosphorus	ppm	ASTM D5185m		<b>909</b>	987	986
Zinc	ppm	ASTM D5185m		<b>1093</b>	1204	1254
Sulfur	ppm	ASTM D5185m		<b>2576</b>	3328	3169
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>33.1</b>	26.6	22.3
Base Number (BN)	mg KOH/g	ASTM D2896		<b>4.5</b>	6.2	5.8
Visc @ 100°C	cSt	ASTM D445		<b>▲ 11.4</b>	12.6	11.9



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : ARI0006730  
**Lab Number** : 05970077  
**Unique Number** : 10682027  
**Test Package** : CONST ( Additional Tests: FuelDilution, PercentFuel, TBN )

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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)