



# OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	NORMAL

Machine Id  
**2016 FORD 2016 FORD**  
 Component  
**Gasoline Engine**  
 Fluid  
**CASTROL EDGE 5W20 (5 LTR)**

## RECOMMENDATION

We advise that you check the air filter, air induction system, and any areas where dirt may enter the component. Oil and filter change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0426074	WC0426078	---
Sample Date		Client Info		13 Apr 2024	06 Jun 2023	---
Machine Age	mls	Client Info		391600	353491	---
Oil Age	mls	Client Info		4743	5129	---
Filter Age	mls	Client Info		4743	5129	---
Oil Changed		Client Info		Changed	Changed	---
Filter Changed		Client Info		Changed	Changed	---
Sample Status				ABNORMAL	NORMAL	---

## WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>150	9	6	---
Chromium	ppm	ASTM D5185(m)	>20	<1	<1	---
Nickel	ppm	ASTM D5185(m)	>5	<1	<1	---
Titanium	ppm	ASTM D5185(m)		19	18	---
Silver	ppm	ASTM D5185(m)	>2	0	0	---
Aluminum	ppm	ASTM D5185(m)	>40	3	2	---
Lead	ppm	ASTM D5185(m)	>50	0	0	---
Copper	ppm	ASTM D5185(m)	>155	8	6	---
Tin	ppm	ASTM D5185(m)	>10	<1	<1	---
Vanadium	ppm	ASTM D5185(m)		0	<1	---

## CONTAMINATION

There is a moderate concentration of dirt present in the oil.

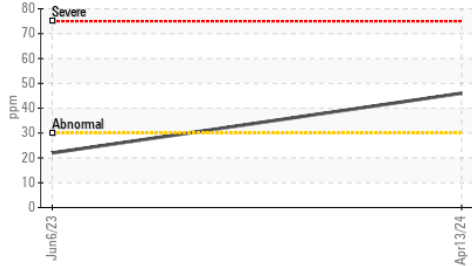
Silicon	ppm	ASTM D5185(m)	>30	▲ 46	22	---
Potassium	ppm	ASTM D5185(m)	>20	<1	<1	---
Fuel		WC Method	>4.0	<1.0	<1.0	---
Water		WC Method	>0.2	NEG	NEG	---
Glycol		WC Method		NEG	NEG	---
Soot %	%	ASTM D7844*		0	0	---
Nitration	Abs/cm	ASTM D7624*	>20	13.5	12.0	---
Sulfation	Abs/.1mm	ASTM D7415*	>30	23.4	22.5	---
Emulsified Water	scalar	Visual*	>0.2	NEG	NEG	---

## FLUID CONDITION

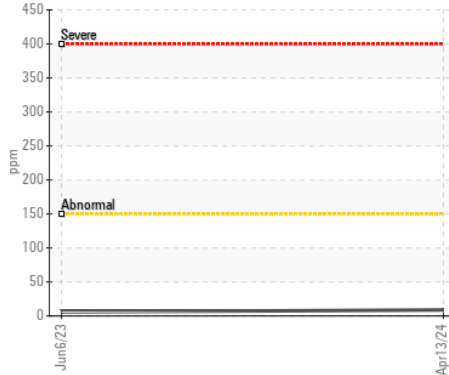
Viscosity of sample indicates oil is within SAE 30 range, advise investigate. The oil is no longer serviceable due to the presence of contaminants.

Sodium	ppm	ASTM D5185(m)	>400	3	4	---
Boron	ppm	ASTM D5185(m)		36	23	---
Barium	ppm	ASTM D5185(m)		0	0	---
Molybdenum	ppm	ASTM D5185(m)		66	64	---
Manganese	ppm	ASTM D5185(m)		0	<1	---
Magnesium	ppm	ASTM D5185(m)		684	687	---
Calcium	ppm	ASTM D5185(m)		884	878	---
Phosphorus	ppm	ASTM D5185(m)		662	675	---
Zinc	ppm	ASTM D5185(m)		762	718	---
Sulfur	ppm	ASTM D5185(m)		1642	1587	---
Oxidation	Abs/.1mm	ASTM D7414*	>25	19.6	19.2	---
Visc @ 100°C	cSt	ASTM D7279(m)		9.4	9.3	---

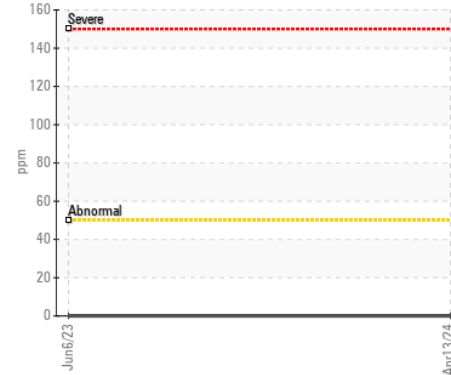
▲ Silicon (ppm)



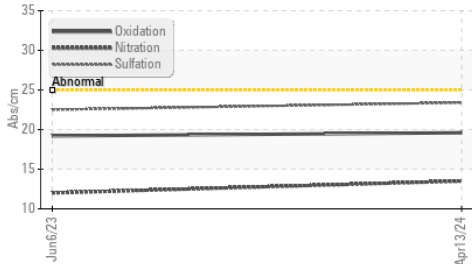
Iron (ppm)



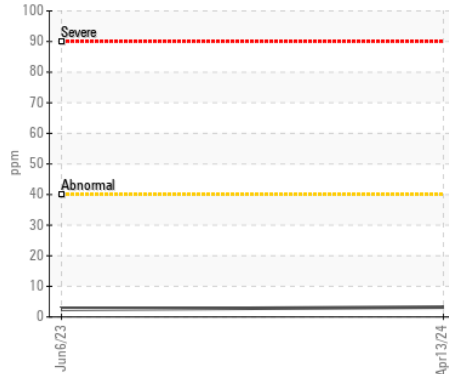
Lead (ppm)



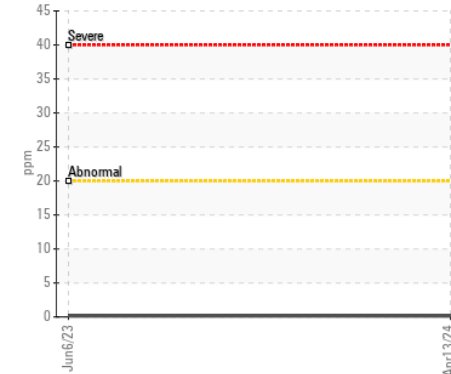
FT-IR (Direct Trend)



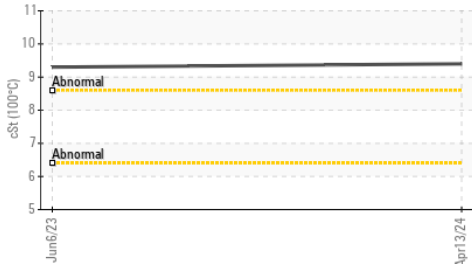
Aluminum (ppm)



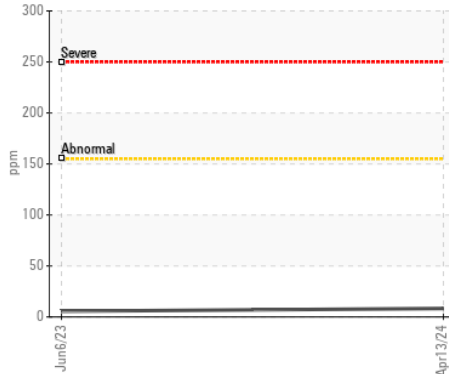
Chromium (ppm)



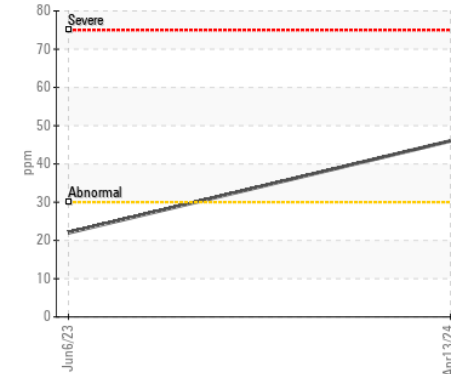
Viscosity @ 100°C



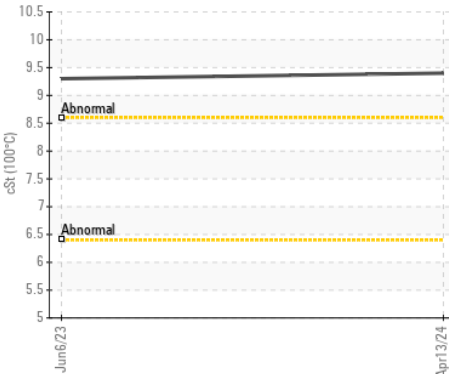
Copper (ppm)



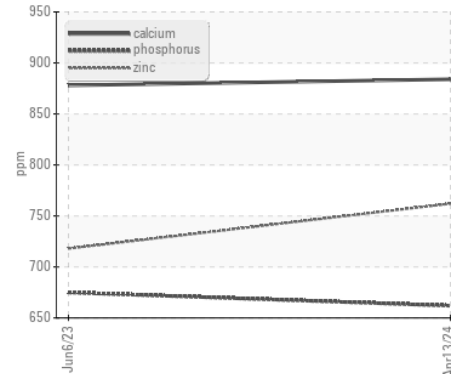
▲ Silicon (ppm)



Viscosity @ 100°C



Additives



ISO 17025:2017  
Accredited  
Laboratory

**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9

**Sample No.** : WC0426074

**Lab Number** : 02629102

**Unique Number** : 5762234

**Test Package** : MOB 1

**Received** : 16 Apr 2024

**Tested** : 16 Apr 2024

**Diagnosed** : 17 Apr 2024 - Kevin Marson

**TMS TRUCK CENTRE LTD.**

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To discuss this sample report, contact Customer Service at 1-800-268-2131.

Test denoted (\*) outside scope of accreditation, (m) method modified, (e) tested at external lab.

Validity of results and interpretation are based on the sample and information as supplied.