



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id  
**FORD 617 (S/N 1FM5K8HROGGC41873)**

Component  
**Gasoline Engine**

Fluid  
**PETRO CANADA SUPREME 5W20 MOTOR OIL (6 GAL)**

**RECOMMENDATION**

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>PCA0123154</b>	PCA0117711	PCA0117698
Sample Date		Client Info		<b>22 May 2024</b>	22 Mar 2024	12 Feb 2024
Machine Age	mls	Client Info		<b>110504</b>	108533	106883
Oil Age	mls	Client Info		<b>1971</b>	1650	1651
Filter Age	mls	Client Info		<b>1971</b>	1650	1651
Oil Changed		Client Info		<b>Changed</b>	Changed	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	>150	<b>6</b>	4	3
Chromium	ppm	ASTM D5185m	>20	<b>0</b>	<1	<1
Nickel	ppm	ASTM D5185m	>5	<b>0</b>	<1	0
Titanium	ppm	ASTM D5185m		<b>0</b>	<1	0
Silver	ppm	ASTM D5185m	>2	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>40	<b>1</b>	3	2
Lead	ppm	ASTM D5185m	>50	<b>0</b>	<1	<1
Copper	ppm	ASTM D5185m	>155	<b>5</b>	5	6
Tin	ppm	ASTM D5185m	>10	<b>0</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.

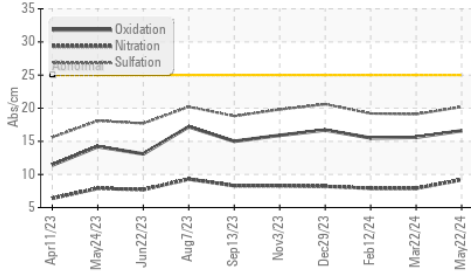
Silicon	ppm	ASTM D5185m	>30	<b>19</b>	19	18
Potassium	ppm	ASTM D5185m	>20	<b>1</b>	2	<1
Fuel		WC Method	>4.0	<b>&lt;1.0</b>	<1.0	<1.0
Water		WC Method	>0.2	<b>NEG</b>	NEG	NEG
Glycol		WC Method		<b>NEG</b>	NEG	NEG
Soot %	%	*ASTM D7844		<b>0.1</b>	0	0
Nitration	Abs/cm	*ASTM D7624	>20	<b>9.2</b>	7.9	7.9
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>20.2</b>	19.1	19.2
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**

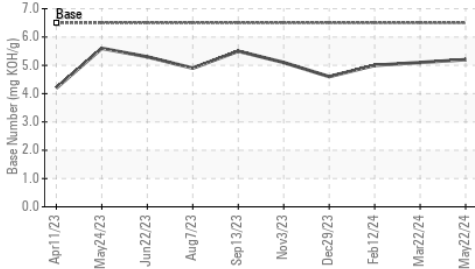
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m	>400	<b>39</b>	21	5
Boron	ppm	ASTM D5185m	183	<b>32</b>	47	41
Barium	ppm	ASTM D5185m	0	<b>0</b>	<1	0
Molybdenum	ppm	ASTM D5185m	36	<b>68</b>	71	65
Manganese	ppm	ASTM D5185m	0	<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m	417	<b>630</b>	599	592
Calcium	ppm	ASTM D5185m	1318	<b>1330</b>	1247	1151
Phosphorus	ppm	ASTM D5185m	773	<b>763</b>	735	737
Zinc	ppm	ASTM D5185m	845	<b>931</b>	895	876
Sulfur	ppm	ASTM D5185m	2690	<b>3088</b>	2651	2560
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>16.6</b>	15.6	15.5
Base Number (BN)	mg KOH/g	ASTM D2896	6.5	<b>5.2</b>	5.1	5.0
Visc @ 100°C	cSt	ASTM D445	8.42	<b>9.4</b>	9.3	9.1

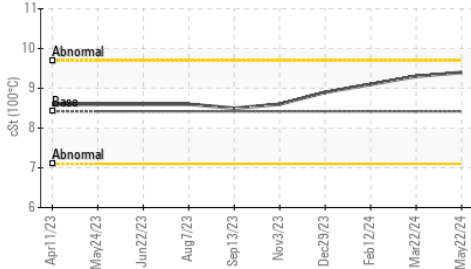
**FT-IR (Direct Trend)**



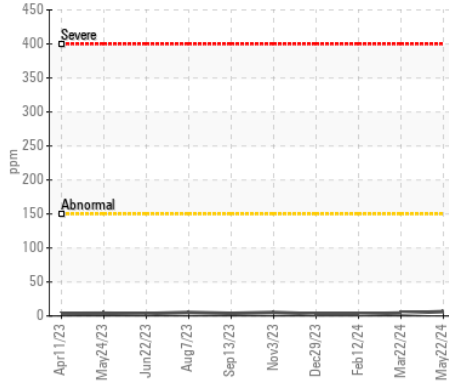
**Base Number**



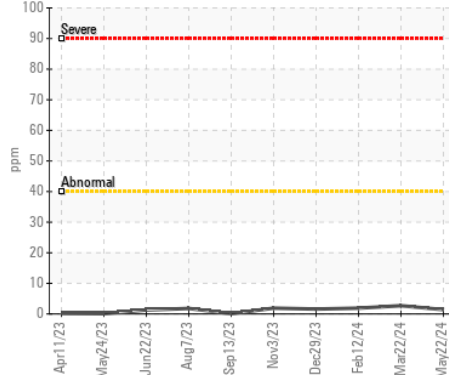
**Viscosity @ 100°C**



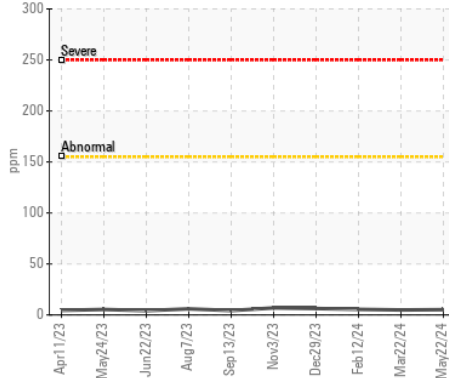
**Iron (ppm)**



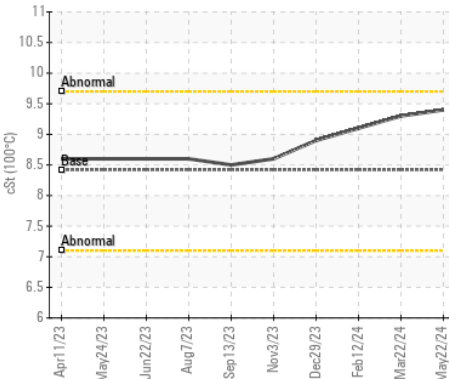
**Aluminum (ppm)**



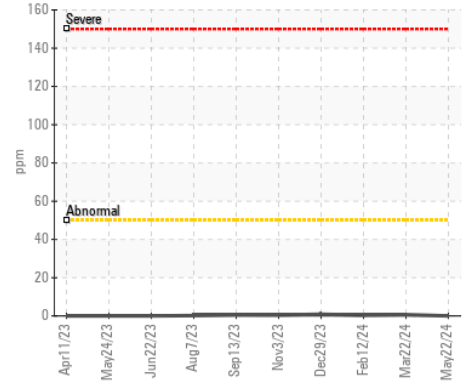
**Copper (ppm)**



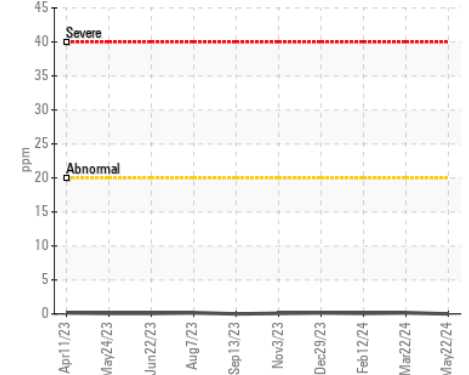
**Viscosity @ 100°C**



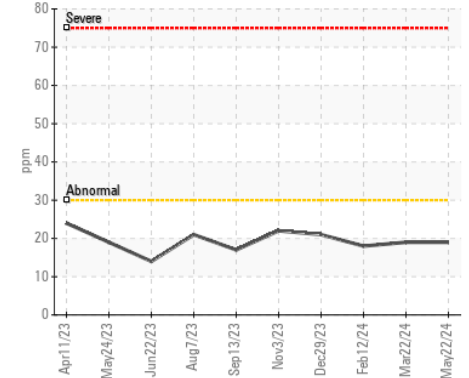
**Lead (ppm)**



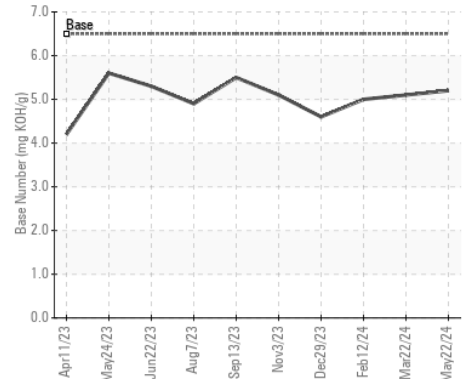
**Chromium (ppm)**



**Silicon (ppm)**



**Base Number**



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513

**Sample No.** : PCA0123154

**Lab Number** : 06229521

**Unique Number** : 11113014

**Test Package** : MOB 1 ( Additional Tests: TBN )

**Received** : 05 Jul 2024

**Tested** : 09 Jul 2024

**Diagnosed** : 09 Jul 2024 - Wes Davis

**VILLAGE OF NORTH RIVERSIDE**

2345 S DESPLAINES

NORTH RIVERSIDE, IL

US 60546

Contact: Service Manager

vznrpdw@gmail.com

T:

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)