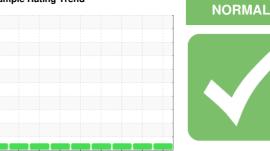


OIL ANALYSIS REPORT

Sample Rating Trend



FORD 617 (S/N 1FM5K8HROGGC41873)

Component

Gasoline Engine

PETRO CANADA SUPREME 5W20 MOTOR OIL (6 GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

There is no indication of any contamination in the oil.

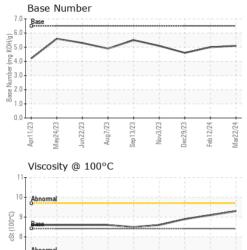
Fluid Condition

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

			/2023 Jun2023 Aug2023			
SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		PCA0117711	PCA0117698	PCA0112918
Sample Date		Client Info		22 Mar 2024	12 Feb 2024	29 Dec 2023
Machine Age	mls	Client Info		108533	106883	105232
Oil Age	mls	Client Info		1650	1651	2211
Oil Changed		Client Info		Changed	Changed	N/A
Sample Status				NORMAL	NORMAL	NORMAL
CONTAMINATI	ION	method	limit/base	current	history1	history2
Fuel		WC Method	>4.0	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
WEAR METALS	S	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>150	4	3	3
Chromium	ppm	ASTM D5185m	>20	<1	<1	<1
Nickel	ppm	ASTM D5185m	>5	<1	0	0
Titanium	ppm	ASTM D5185m		<1	0	<1
Silver	ppm	ASTM D5185m	>2	0	0	0
Aluminum	ppm	ASTM D5185m	>40	3	2	2
Lead	ppm	ASTM D5185m	>50	<1	<1	<1
Copper	ppm	ASTM D5185m	>155	5	6	6
Tin	ppm	ASTM D5185m	>10	<1	<1	<1
Vanadium	ppm	ASTM D5185m		<1	0	0
Cadmium	ppm	ASTM D5185m		<1	0	0
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	183	47	41	34
Barium	ppm	ASTM D5185m	0	<1	0	0
Molybdenum	ppm	ASTM D5185m	36	71	65	69
Manganese	ppm	ASTM D5185m	0	<1	<1	<1
Magnesium	ppm	ASTM D5185m	417	599	592	539
Calcium	ppm	ASTM D5185m	1318	1247	1151	1185
Phosphorus	ppm	ASTM D5185m	773	735	737	704
Zinc	ppm	ASTM D5185m	845	895	876	821
Sulfur	ppm	ASTM D5185m	2690	2651	2560	2458
CONTAMINAN	TS	method				history2
Silicon	ppm	ASTM D5185m	>30	19	18	21
	ppm	ASTM D5185m ASTM D5185m	>30 >400	19 21	18 5	21 4
Silicon	• • • • • • • • • • • • • • • • • • • •					
Silicon Sodium	ppm	ASTM D5185m	>400	21	5	4
Silicon Sodium Potassium	ppm	ASTM D5185m ASTM D5185m	>400 >20	21 2	5 <1	4 <1
Silicon Sodium Potassium INFRA-RED	ppm ppm	ASTM D5185m ASTM D5185m method	>400 >20	21 2 current	5 <1 history1	4 <1 history2
Silicon Sodium Potassium INFRA-RED Soot %	ppm ppm	ASTM D5185m ASTM D5185m method *ASTM D7844	>400 >20 limit/base >20	21 2 current	5 <1 history1 0	4 <1 history2
Silicon Sodium Potassium INFRA-RED Soot % Nitration	ppm ppm % Abs/cm Abs/.1mm	ASTM D5185m ASTM D5185m method *ASTM D7844 *ASTM D7624	>400 >20 limit/base >20	21 2 current 0 7.9	5 <1 history1 0 7.9	4 <1 history2 0 8.2
Silicon Sodium Potassium INFRA-RED Soot % Nitration Sulfation	ppm ppm % Abs/cm Abs/.1mm	ASTM D5185m ASTM D5185m method *ASTM D7844 *ASTM D7624 *ASTM D7415	>400 >20 limit/base >20 >30	21 2 current 0 7.9 19.1	5 <1 history1 0 7.9 19.2	4 <1 history2 0 8.2 20.6



OIL ANALYSIS REPORT



VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG	NEG
FLUID PROPE	RTIES	method	limit/base	current	history1	history2

Visc @ 100°C	cSt	ASTM D445	8.42	9.3	9.1	8.9
GRAPHS						
Iron (ppm)				Lead (ppm)		
400 Severe				150 - Severe		
300				툅100		
Abnormal				50 Abnormal		
0		2 00 1		0		
Apr11/23 May24/23 Jun22/23	Sep 13/23	Nov3/23 Dec29/23 Feb12/24	Mar22/24	Apr11/23 May24/23	Aug7/23	Nov3/23 Dec29/23 Feb12/24
Aluminum (ppm)	0,	0	2	Chromium	0,	
Severe		+		Severe		
co				20		
40 Abnormal		-	-	Abnormal		
20				10		
Apri 1/23 -	Sep13/23	Nov3/23 - Dec29/23 - Feb12/24 -	Mar22/24	Apr11/23 -	Aug7/23 -	Nov3/23 - Dec29/23 - Feb12/24 -
2 7	Sep	Dec Feb	Mai		0,	Nc Dec Feb
Copper (ppm)				Silicon (ppn	1)	
200				60 -		
E 150 Abnormal				Abnormal		
50				20		
723		/23	124	723		/23 + /24 +
Apri 1/23 May24/23 Jun22/23 Aug7/23	Sep13/23	Nov3/23 Dec29/23 Feb12/24	Mar22/24	Apr11/23 May24/23	Aug7/23 Sep13/23	Nov3/23 Dec29/23 Feb12/24
Viscosity @ 100°	С			Base Numb	er	
10 - Abnormal				Base		
8 Base				Bw 4.0		
8 Abnormal				Base Munuher (ID) 4.0 - 2.0 -		
6		77 67 44		0.0	3 3	3 3
Apr11/23 May24/23 Jun22/23	Sep13/23	Nov3/23 Dec29/23 Feb12/24	Mar22/24	Apr11/23 May24/23	Aug7/23 Sep13/23	Nov3/23 Dec29/23 Feb12/24





Laboratory

Sample No. : PCA0117711 Lab Number : 06133905

Unique Number : 10953370

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

: 29 Mar 2024 Diagnosed Test Package : MOB 1 (Additional Tests: TBN)

: 01 Apr 2024 : 01 Apr 2024 - Wes Davis

2345 S DESPLAINES NORTH RIVERSIDE, IL US 60546

VILLAGE OF NORTH RIVERSIDE

Contact: Service Manager vznrdpw@gmail.com T:

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)

F: