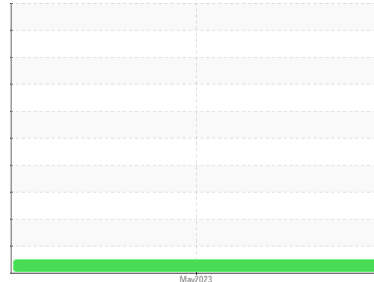


OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id
Supreme Synthetic 5W-20

Component
1 New (Unused) Oil
Fluid

PETRO CANADA SUPREME 5W20 MOTOR OIL (--- GAL)

DIAGNOSIS

Recommendation

This is the baseline readout on this new (unused) oil. The fluid is suitable for service.

Wear

{not applicable}

Contamination

The system cleanliness is acceptable for your target ISO 4406 cleanliness code. There is no indication of any contamination in the new (unused) oil.

Fluid Condition

The AN level is acceptable for this fluid. The condition of the oil is suitable for service.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		PC0078670	---	---
Sample Date	Client Info		02 May 2023	---	---
Machine Age	hrs	Client Info	0	---	---
Oil Age	hrs	Client Info	0	---	---
Oil Changed	Client Info		N/A	---	---
Sample Status			NORMAL	---	---

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m) >5	<1	---	---
Chromium	ppm	ASTM D5185(m) >5	0	---	---
Nickel	ppm	ASTM D5185(m) >5	<1	---	---
Titanium	ppm	ASTM D5185(m)	0	---	---
Silver	ppm	ASTM D5185(m) >5	0	---	---
Aluminum	ppm	ASTM D5185(m) >5	<1	---	---
Lead	ppm	ASTM D5185(m) >5	<1	---	---
Copper	ppm	ASTM D5185(m) >5	0	---	---
Tin	ppm	ASTM D5185(m) >5	0	---	---
Antimony	ppm	ASTM D5185(m)	0	---	---
Vanadium	ppm	ASTM D5185(m)	0	---	---
Beryllium	ppm	ASTM D5185(m)	0	---	---
Cadmium	ppm	ASTM D5185(m)	0	---	---

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m) 183	160	---	---
Barium	ppm	ASTM D5185(m) 0	0	---	---
Molybdenum	ppm	ASTM D5185(m) 36	67	---	---
Manganese	ppm	ASTM D5185(m) 0	0	---	---
Magnesium	ppm	ASTM D5185(m) 417	500	---	---
Calcium	ppm	ASTM D5185(m) 1318	1090	---	---
Phosphorus	ppm	ASTM D5185(m) 773	700	---	---
Zinc	ppm	ASTM D5185(m) 845	760	---	---
Sulfur	ppm	ASTM D5185(m) 2690	2690	---	---
Lithium	ppm	ASTM D5185(m)	<1	---	---

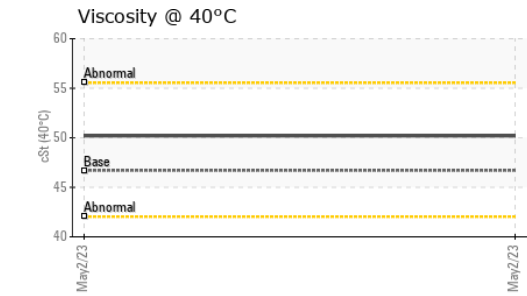
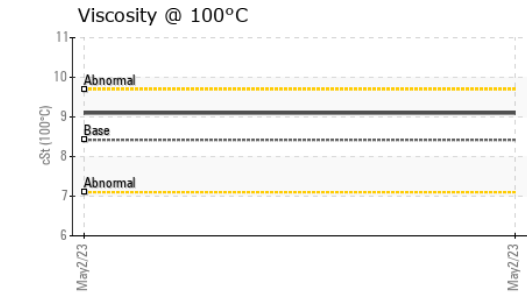
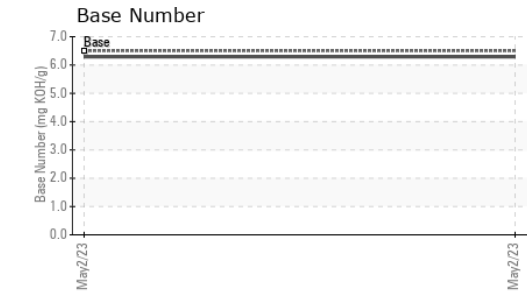
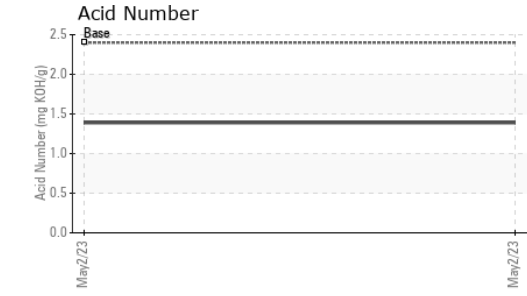
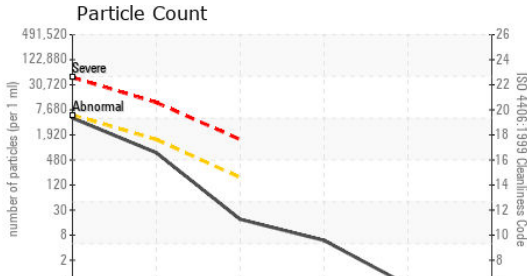
CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m) >15	4	---	---
Sodium	ppm	ASTM D5185(m)	2	---	---
Potassium	ppm	ASTM D5185(m) >20	0	---	---

INFRA-RED

	method	limit/base	current	history1	history2
Soot %	%	ASTM D7844*	0	---	---
Nitration	Abs/cm	ASTM D7624*	3.8	---	---
Sulfation	Abs/.1mm	ASTM D7415*	15.8	---	---

OIL ANALYSIS REPORT



FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>5000	4261	---	---	
Particles >6µm	ASTM D7647	>1300	630	---	---	
Particles >14µm	ASTM D7647	>160	16	---	---	
Particles >21µm	ASTM D7647	>40	5	---	---	
Particles >38µm	ASTM D7647	>10	0	---	---	
Particles >71µm	ASTM D7647	>3	0	---	---	
Oil Cleanliness	ISO 4406 (c)	>19/17/14	19/16/11	---	---	

FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	ASTM D7414*		8.2	---	---
Acid Number (AN)	mg KOH/g	ASTM D974*	2.4	1.39	---	---
Base Number (BN)	mg KOH/g	ASTM D2896*	6.5	6.29	---	---

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

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	46.7	50.2	---	---
Visc @ 100°C	cSt	ASTM D7279(m)	8.42	9.1	---	---
Viscosity Index (VI)	Scale	ASTM D2270*	158	164	---	---

SAMPLE IMAGES		method	limit/base	current	history1	history2
Color					no image	no image
Bottom					no image	no image



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 **Petro-Canada Technical/Yen Garcia**
Sample No. : PC0078670 **Received** : 03 May 2023
Lab Number : **02555029** **Diagnosed** : 05 May 2023
Unique Number : 5568044 **Diagnostician** : Kevin Marson
Test Package : IND 2 (Additional Tests: FT-IR, ICP-NewOil, KV100, PrtCount, TBN, VI)
 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.

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