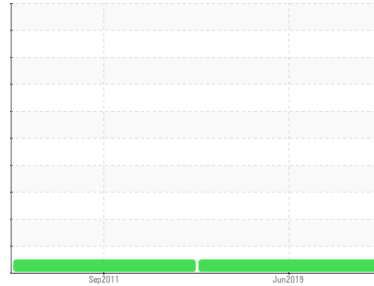


OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL



Area
[71126180]
Machine Id
PC TURBOFLO EP 32
Component
New (Unused) Oil
Fluid
PETRO CANADA TURBOFLO EP 32 (--- GAL)

DIAGNOSIS

Recommendation

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

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

Linear Sweep Voltammetry (RULER – ASTM D6971) testing indicates normal levels of anti-oxidants present in the oil. 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			PC	PC	---
Sample Date	Client Info			10 Jun 2019	23 Sep 2011	---
Machine Age	cyc	Client Info		0	0	---
Oil Age	cyc	Client Info		0	0	---
Oil Changed	Client Info			N/A	Changed	---
Sample Status				NORMAL	NORMAL	---

CONTAMINATION		method	limit/base	current	history1	history2
Water	WC Method			NEG	NEG	---

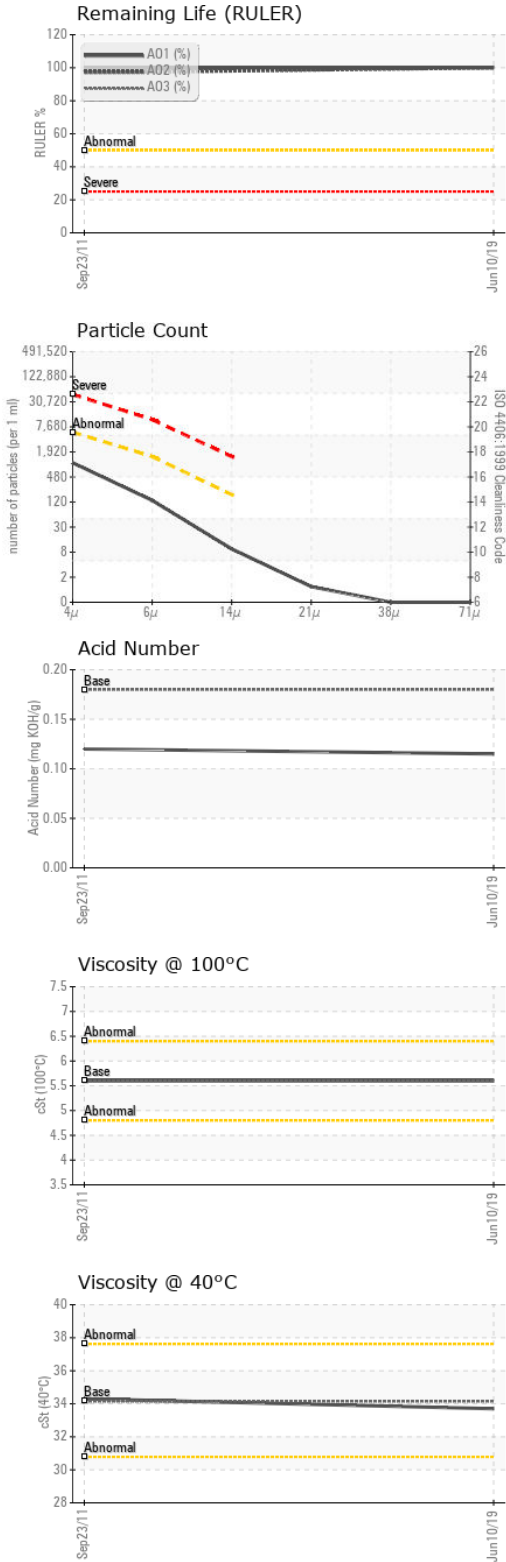
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)		0	0	---
Chromium	ppm	ASTM D5185(m)		0	0	---
Nickel	ppm	ASTM D5185(m)		0	0	---
Titanium	ppm	ASTM D5185(m)		0	0	---
Silver	ppm	ASTM D5185(m)		0	0	---
Aluminum	ppm	ASTM D5185(m)		0	0	---
Lead	ppm	ASTM D5185(m)		<1	<1	---
Copper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

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)		0	0	---
Barium	ppm	ASTM D5185(m)		0	0	---
Molybdenum	ppm	ASTM D5185(m)		0	0	---
Manganese	ppm	ASTM D5185(m)		0	0	---
Magnesium	ppm	ASTM D5185(m)		<1	1	---
Calcium	ppm	ASTM D5185(m)		<1	0	---
Phosphorus	ppm	ASTM D5185(m)	280	288	295	---
Zinc	ppm	ASTM D5185(m)	0.0	1	2	---
Sulfur	ppm	ASTM D5185(m)		745	942	---
Lithium	ppm	ASTM D5185(m)		0	<1	---

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)		0	<1	---
Sodium	ppm	ASTM D5185(m)		0	0	---
Potassium	ppm	ASTM D5185(m)	>20	0	2	---

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	ASTM D7844*		0	---	---
Nitration	Abs/cm	ASTM D7624*		2.2	---	---
Sulfation	Abs/.1mm	ASTM D7415*		12.9	---	---

OIL ANALYSIS REPORT



FLUID CLEANLINESS	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>5000	925	---	---
Particles >6µm	ASTM D7647	>1300	116	---	---
Particles >14µm	ASTM D7647	>160	8	---	---
Particles >21µm	ASTM D7647	>40	1	---	---
Particles >38µm	ASTM D7647	>10	0	---	---
Particles >71µm	ASTM D7647	>3	0	---	---
Oil Cleanliness	ISO 4406 (c)	>19/17/14	17/14/10	---	---

FLUID DEGRADATION	method	limit/base	current	history1	history2
Oxidation	Abs./1mm	ASTM D7414*	2.2	---	---
Acid Number (AN)	mg KOH/g	ASTM D974*	0.115	0.12	---
Anti-Oxidant 1	%	ASTM D6971*	100	100	---
Anti-Oxidant 2	%	ASTM D6971*	100	97	---

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	NEG	---
Free Water	scalar	Visual*	NEG	NEG	---

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	34.15	33.7	34.3
Visc @ 100°C	cSt	ASTM D7279(m)	5.60	5.6	5.6
Viscosity Index (VI)	Scale	ASTM D2270*	100	103	100

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



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : PC
Lab Number : **02291243**
Unique Number : 4886509
Test Package : MAR 2 (Additional Tests: FT-IR, KV100, PrtCount, RULer, TAN Man, VI)
Received : 14 Jun 2019
Tested : 19 Jun 2019
Diagnosed : 19 Jun 2019 - Kevin Marson

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 St. John's, NL
 CA A1C 1B6
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 T: (709)778-3575
 F: (709)724-2835

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.