



OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL



Machine Id
TOTE #1 232961

Component
New (Unused) Oil

Fluid
PETRO CANADA PRODURO TO-4 SYNTHETIC ALL SEASON (--- 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	PC0069766	---	---
Sample Date	Client Info	17 Jan 2024	---	---
Machine Age	hrs Client Info	0	---	---
Oil Age	hrs Client Info	0	---	---
Oil Changed	Client Info	N/A	---	---
Sample Status		NORMAL	---	---

CONTAMINATION

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

WEAR METALS

method	limit/base	current	history1	history2
Iron	ppm ASTM D5185(m)	2	---	---
Chromium	ppm ASTM D5185(m)	0	---	---
Nickel	ppm ASTM D5185(m)	0	---	---
Titanium	ppm ASTM D5185(m)	0	---	---
Silver	ppm ASTM D5185(m)	0	---	---
Aluminum	ppm ASTM D5185(m)	1	---	---
Lead	ppm ASTM D5185(m)	<1	---	---
Copper	ppm ASTM D5185(m)	0	---	---
Tin	ppm ASTM D5185(m)	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) 5	<1	---	---
Barium	ppm ASTM D5185(m) 0	0	---	---
Molybdenum	ppm ASTM D5185(m) 0	0	---	---
Manganese	ppm ASTM D5185(m) 1	0	---	---
Magnesium	ppm ASTM D5185(m) 10	11	---	---
Calcium	ppm ASTM D5185(m) 3068	3001	---	---
Phosphorus	ppm ASTM D5185(m) 1081	1010	---	---
Zinc	ppm ASTM D5185(m) 1199	1149	---	---
Sulfur	ppm ASTM D5185(m) 4636	4451	---	---
Lithium	ppm ASTM D5185(m)	<1	---	---

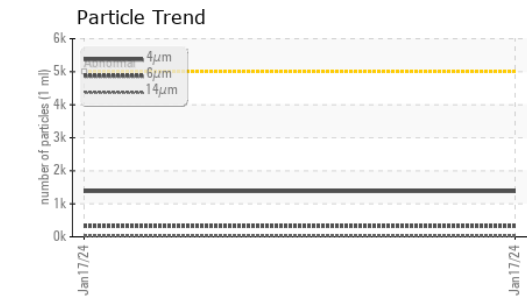
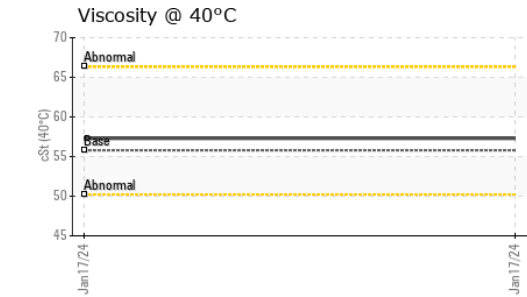
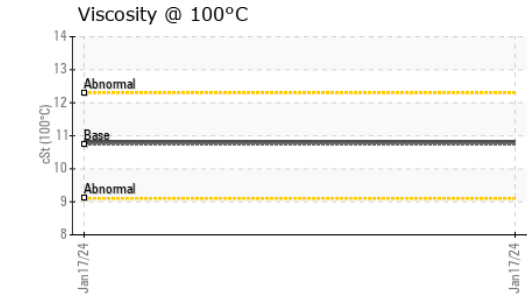
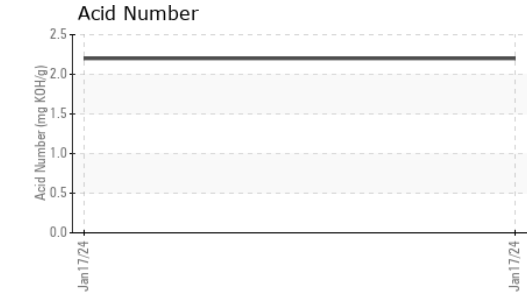
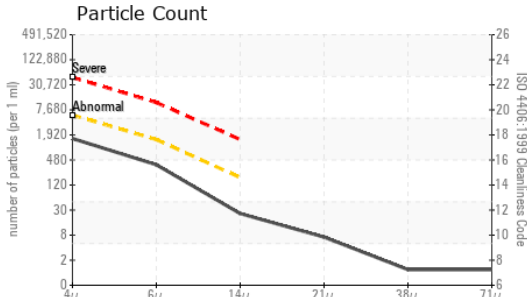
CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185(m)	8	---	---
Sodium	ppm ASTM D5185(m)	<1	---	---
Potassium	ppm ASTM D5185(m) >20	<1	---	---

INFRA-RED

method	limit/base	current	history1	history2
Soot %	% ASTM D7844*	0	---	---
Nitration	Abs/cm ASTM D7624*	3.1	---	---
Sulfation	Abs/.1mm ASTM D7415*	46.1	---	---

OIL ANALYSIS REPORT

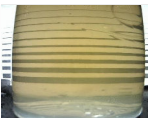



FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>5000	1380	---	---	
Particles >6µm	ASTM D7647	>1300	324	---	---	
Particles >14µm	ASTM D7647	>160	22	---	---	
Particles >21µm	ASTM D7647	>40	6	---	---	
Particles >38µm	ASTM D7647	>10	1	---	---	
Particles >71µm	ASTM D7647	>3	1	---	---	
Oil Cleanliness	ISO 4406 (c)	>19/17/14	18/16/12	---	---	

FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	ASTM D7414*		33.5	---	---
Acid Number (AN)	mg KOH/g	ASTM D974*		2.20	---	---

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)	55.79	57.3	---	---
Visc @ 100°C	cSt	ASTM D7279(m)	10.74	10.8	---	---
Viscosity Index (VI)	Scale	ASTM D2270*	187	182	---	---

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
Sample No. : PC0069766
Lab Number : **02611485**
Unique Number : 5720580
Test Package : IND 2 (Additional Tests: FT-IR, ICP-NewOil, KV100, PrtCount, VI)

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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.