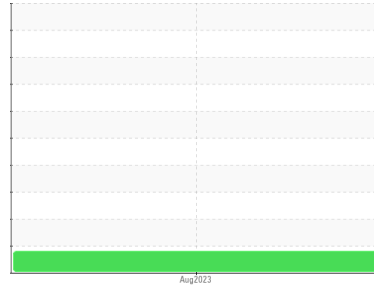


PROBLEM SUMMARY



Machine Id
CATERPILLAR 30-341 (S/N CAT0349FHBZ220803)
Component
New (Unused) Oil
Fluid
PETRO CANADA ENVIRON AW 46 (20 LTR)

Sample Rating Trend

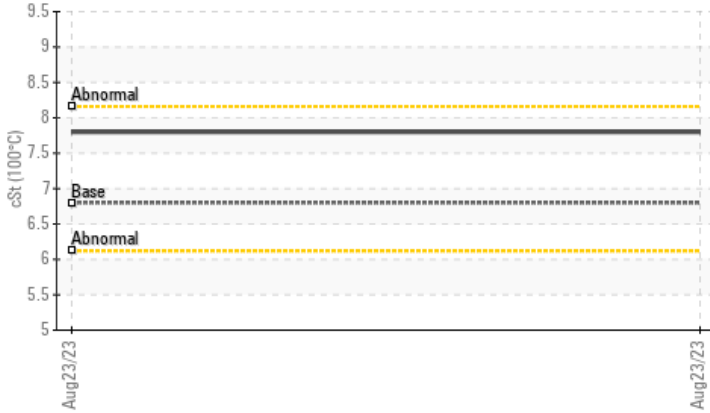


OFF SPEC



COMPONENT CONDITION SUMMARY

▲ Viscosity @ 100°C



RECOMMENDATION

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

PROBLEMATIC TEST RESULTS

Sample Status				ABNORMAL	---	---
Visc @ 100°C	cSt	ASTM D7279(m)	6.8	▲ 7.8	---	---
Viscosity Index (VI)	Scale	ASTM D2270*	104	▲ 150	---	---

Customer Id: LESNEW
Sample No.: PC0052382
Lab Number: 02579103
Test Package: IND 2



To manage this report scan the QR code

To discuss the diagnosis or test data:
Kevin Marson +1 (289)291-4644 x4644
Kevin.Marson@wearcheck.com

To change component or sample information:
Gloria Gonzalez +1 (289)291-4643 x4643
gloria.gonzalez@wearcheck.com

RECOMMENDED ACTIONS

There are no recommended actions for this sample.

HISTORICAL DIAGNOSIS

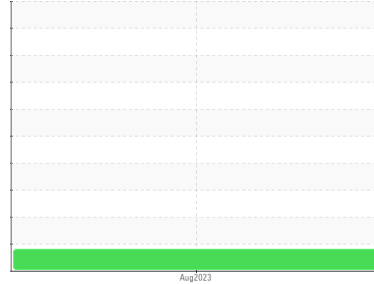
OIL ANALYSIS REPORT

Sample Rating Trend

OFF SPEC



Machine Id
CATERPILLAR 30-341 (S/N CAT0349FHBZ220803)
Component
New (Unused) Oil
Fluid
PETRO CANADA ENVIRON AW 46 (20 LTR)



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 oil viscosity is higher than typical. 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		PC0052382	---	---
Sample Date	Client Info		23 Aug 2023	---	---
Machine Age	hrs	Client Info	0	---	---
Oil Age	hrs	Client Info	0	---	---
Oil Changed	Client Info		N/A	---	---
Sample Status			ABNORMAL	---	---

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m) >5	0	---	---
Chromium	ppm	ASTM D5185(m) >5	0	---	---
Nickel	ppm	ASTM D5185(m) >5	0	---	---
Titanium	ppm	ASTM D5185(m)	0	---	---
Silver	ppm	ASTM D5185(m) >5	0	---	---
Aluminum	ppm	ASTM D5185(m) >5	0	---	---
Lead	ppm	ASTM D5185(m) >5	0	---	---
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) 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) 0	<1	---	---
Calcium	ppm	ASTM D5185(m) 0	<1	---	---
Phosphorus	ppm	ASTM D5185(m) 650	636	---	---
Zinc	ppm	ASTM D5185(m) 0	2	---	---
Sulfur	ppm	ASTM D5185(m) 1280	1326	---	---
Lithium	ppm	ASTM D5185(m)	<1	---	---

CONTAMINANTS

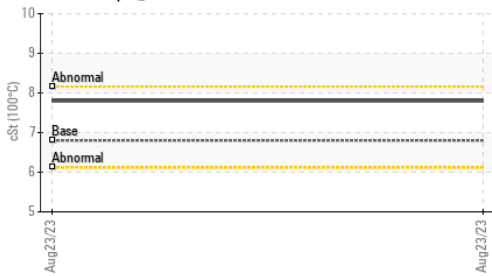
	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m) >15	0	---	---
Sodium	ppm	ASTM D5185(m)	0	---	---
Potassium	ppm	ASTM D5185(m) >20	0	---	---

INFRA-RED

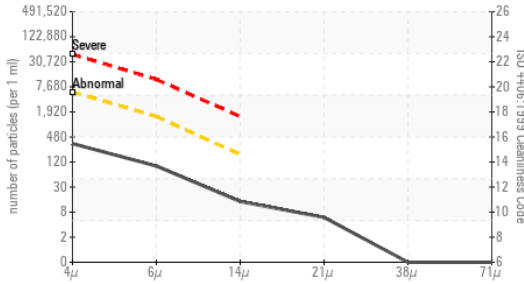
	method	limit/base	current	history1	history2
Soot %	%	ASTM D7844*	0	---	---
Nitration	Abs/cm	ASTM D7624*	2.1	---	---
Sulfation	Abs/.1mm	ASTM D7415*	20.1	---	---

OIL ANALYSIS REPORT

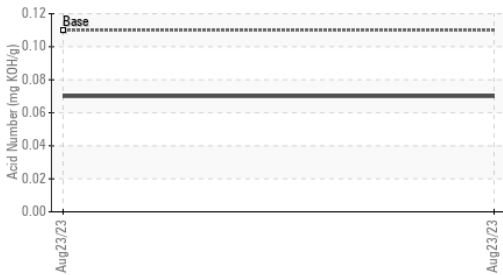
▲ Viscosity @ 100°C



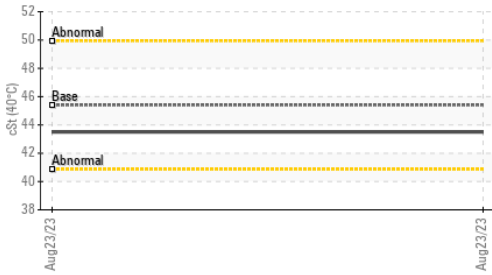
Particle Count



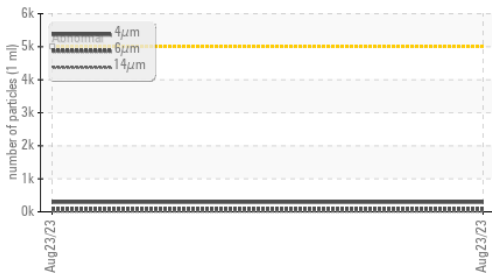
Acid Number



Viscosity @ 40°C



Particle Trend



FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>5000	293	---	---	
Particles >6µm	ASTM D7647	>1300	85	---	---	
Particles >14µm	ASTM D7647	>160	12	---	---	
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	15/14/11	---	---	

FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs./1mm	ASTM D7414*		11.1	---	---
Acid Number (AN)	mg KOH/g	ASTM D974*	0.11	0.07	---	---

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)	45.4	43.5	---	---
Visc @ 100°C	cSt	ASTM D7279(m)	6.8	▲ 7.8	---	---
Viscosity Index (VI)	Scale	ASTM D2270*	104	▲ 150	---	---

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. : PC0052382
Lab Number : **02579103**
Unique Number : 5632163
Test Package : IND 2 (Additional Tests: FT-IR, ICP-NewOil, KV100, PrtCount, VI)

LES ENTREPRISES PEC
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 Contact: Service Manager
 info@lepec.ca
 T: (418)534-3777
 F:

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.