

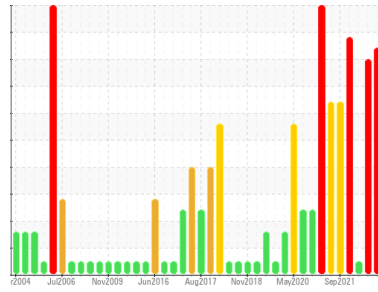


PROBLEM SUMMARY

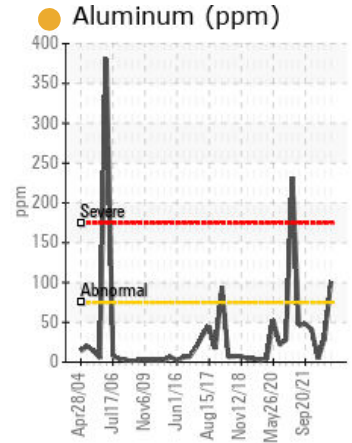
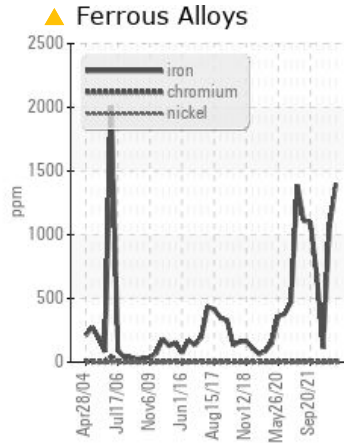
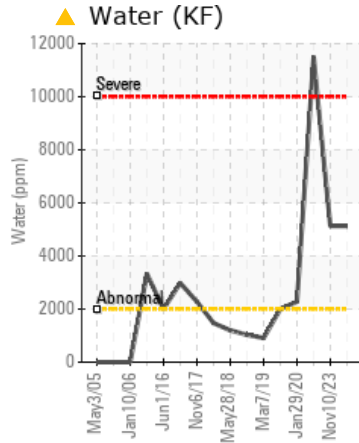
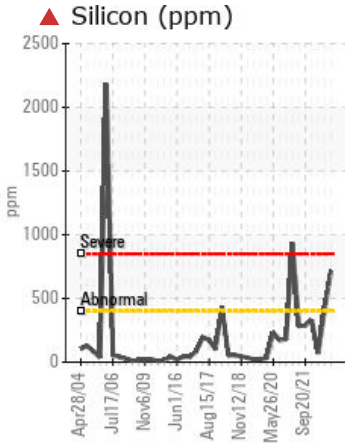


Machine Id
CATERPILLAR 336 F 8324 (S/N RKB00916)
 Component
Right Final Drive
 Fluid
PETRO CANADA SYNGEAR E CD-50 (--- GAL)

Sample Rating Trend



COMPONENT CONDITION SUMMARY



RECOMMENDATION

We advise that you check all areas where dirt can enter the system. We advise that you check for the source of water entry. The oil change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

PROBLEMATIC TEST RESULTS

Sample Status				SEVERE	SEVERE	NORMAL
Iron	ppm	ASTM D5185m	>800	▲ 1400	▲ 1061	113
Silicon	ppm	ASTM D5185m	>400	▲ 717	▲ 404	69
Water	%	ASTM D6304	>0.2	▲ 0.513	▲ 0.513	---
ppm Water	ppm	ASTM D6304	>2000	▲ 5130	▲ 5130	---

Customer Id: TRANEW
 Sample No.: WC0899140
 Lab Number: 06203094
 Test Package: CONST



To manage this report scan the QR code

To discuss the diagnosis or test data:
 Sean Felton +1 919-379-4092
sfelton@wearcheckusa.com

To change component or sample information:
 Customer Service +1 1-800-237-1369
customerservice@wearcheck.com

RECOMMENDED ACTIONS

Action	Status	Date	Done By	Description
Resample	---	---	?	We recommend an early resample to monitor this condition.
Check Dirt Access	---	---	?	We advise that you check all areas where dirt can enter the system.
Check Water Access	---	---	?	We advise that you check for the source of water entry.

HISTORICAL DIAGNOSIS

DIRT



10 Nov 2023 Diag: Sean Felton

We advise that you check all areas where dirt can enter the system. We advise that you check for the source of water entry. The oil change at the time of sampling has been noted. We recommend an early resample to monitor this condition. Gear wear is indicated. Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress. There is a moderate concentration of water present in the oil. The condition of the oil is acceptable for the time in service.

view report



NORMAL



14 Oct 2022 Diag: Jonathan Hester

Resample at the next service interval to monitor. All component wear rates are normal. There is no indication of any contamination in the oil. The condition of the oil is acceptable for the time in service.

view report



DIRT



01 Feb 2022 Diag: Don Baldrige

We advise that you check all areas where dirt can enter the system. The oil change at the time of sampling has been noted. We recommend an early resample to monitor this condition. The iron level has decreased, but is still abnormal. Gear wear is indicated. Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress. The oil viscosity is lower than normal. This plus the additive levels indicates the addition of a different brand, or type of oil. Confirm oil type.

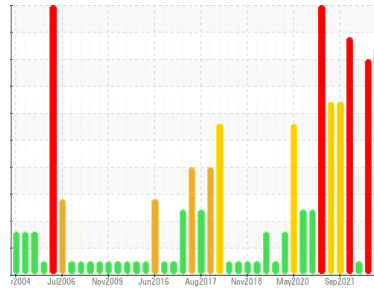
view report





OIL ANALYSIS REPORT

Sample Rating Trend



DIRT



Machine Id
CATERPILLAR 336 F 8324 (S/N RKB00916)
 Component
Right Final Drive
 Fluid
PETRO CANADA SYNGEAR E CD-50 (--- GAL)

DIAGNOSIS

▲ Recommendation

We advise that you check all areas where dirt can enter the system. We advise that you check for the source of water entry. The oil change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

▲ Wear

Gear wear is indicated.

▲ Contamination

Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress. There is a moderate concentration of water present in the oil.

● Fluid Condition

The oil is no longer serviceable due to the presence of contaminants.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		WC0899140	WC0863021	WC0734454
Sample Date	Client Info		30 May 2024	10 Nov 2023	14 Oct 2022
Machine Age	hrs	Client Info	13715	13396	12613
Oil Age	hrs	Client Info	488	529	673
Oil Changed	Client Info		Changed	Changed	Changed
Sample Status			SEVERE	SEVERE	NORMAL

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >800	▲ 1400	▲ 1061	113
Chromium	ppm	ASTM D5185m >10	6	4	1
Nickel	ppm	ASTM D5185m >5	0	2	0
Titanium	ppm	ASTM D5185m >15	9	4	<1
Silver	ppm	ASTM D5185m >2	0	0	0
Aluminum	ppm	ASTM D5185m >75	● 101	● 29	4
Lead	ppm	ASTM D5185m >10	0	0	<1
Copper	ppm	ASTM D5185m >75	2	3	7
Tin	ppm	ASTM D5185m >8	<1	0	0
Antimony	ppm	ASTM D5185m >50	---	---	---
Vanadium	ppm	ASTM D5185m	<1	0	0
Cadmium	ppm	ASTM D5185m	<1	<1	0

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	115	85	24
Barium	ppm	ASTM D5185m	0	0	0
Molybdenum	ppm	ASTM D5185m	<1	<1	2
Manganese	ppm	ASTM D5185m	10	8	2
Magnesium	ppm	ASTM D5185m	13	7	18
Calcium	ppm	ASTM D5185m	271	248	2922
Phosphorus	ppm	ASTM D5185m	425	896	846
Zinc	ppm	ASTM D5185m	86	142	1078
Sulfur	ppm	ASTM D5185m	● 7041	23155	7189

CONTAMINANTS

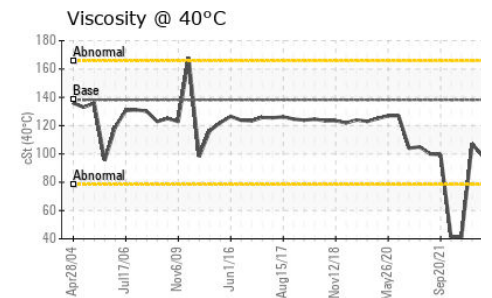
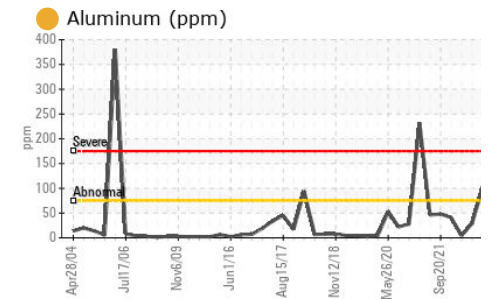
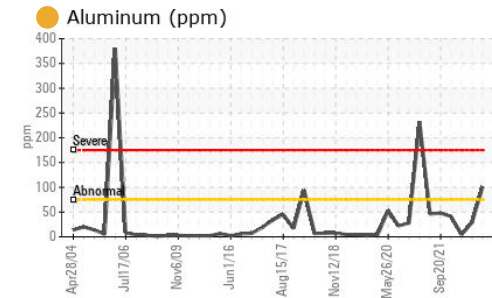
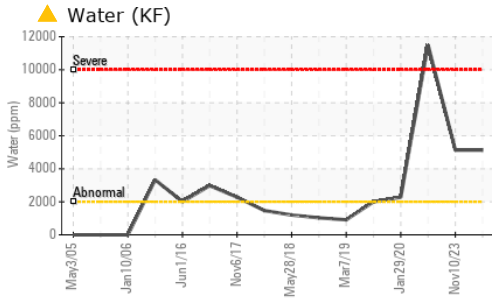
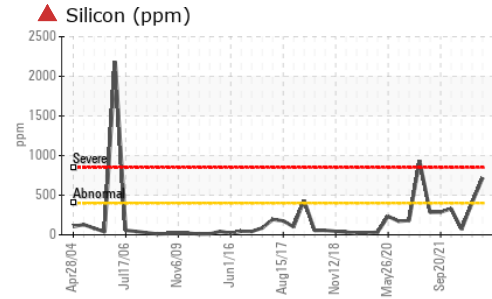
	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >400	▲ 717	▲ 404	69
Sodium	ppm	ASTM D5185m	10	2	2
Potassium	ppm	ASTM D5185m >20	20	11	0
Water	%	ASTM D6304 >0.2	▲ 0.513	▲ 0.513	---
ppm Water	ppm	ASTM D6304 >2000	▲ 5130	▲ 5130	---

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	MODER	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	0.2%	0.2%	NEG
Free Water	scalar	*Visual	NEG	NEG	NEG



OIL ANALYSIS REPORT

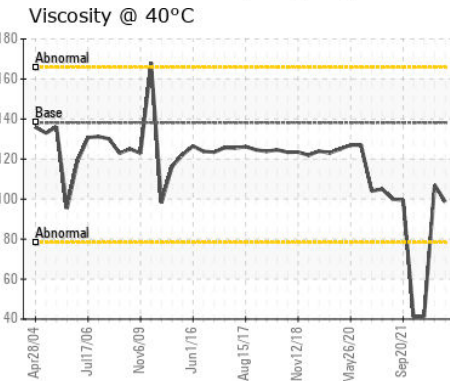
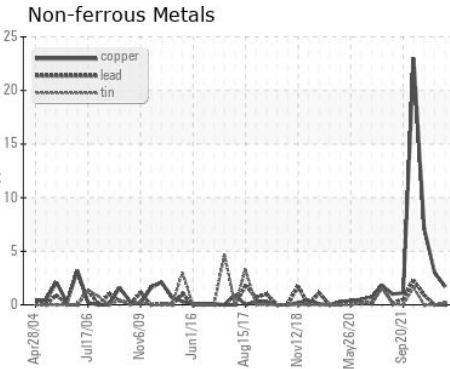
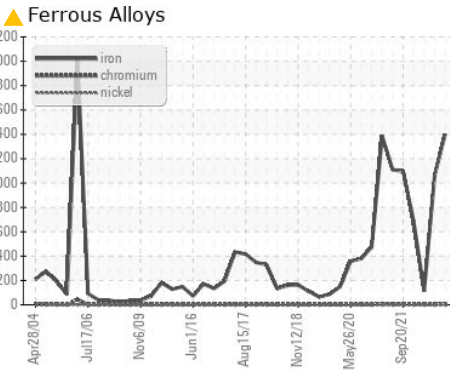


FLUID PROPERTIES	method	limit/base	current	history1	history2	
Visc @ 40°C	cSt	ASTM D445	138.2	98.7	107	41.4

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

GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
 Sample No. : WC0899140
 Lab Number : 06203094
 Unique Number : 11070555
 Test Package : CONST (Additional Tests: KF)

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 US 28563
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 T: (252)633-1399
 F: (252)638-4871

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)