

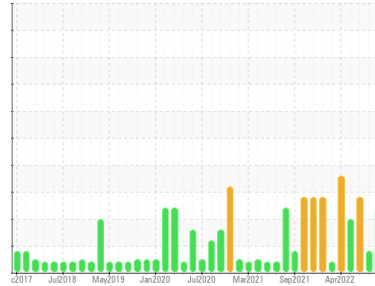


PROBLEM SUMMARY

Sample Rating Trend

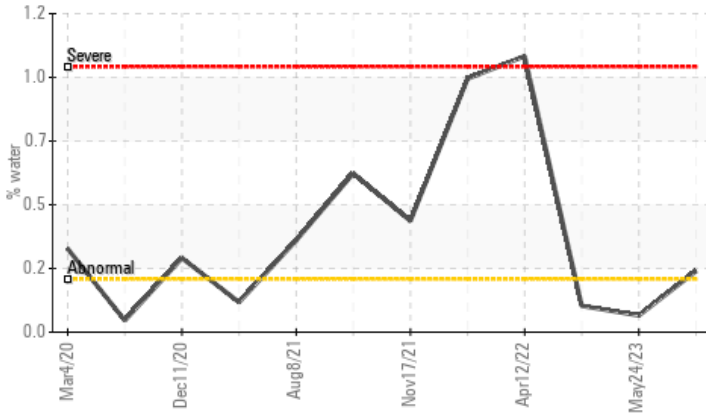
WATER

Area
COOK ROOM 1 [10023447936]
 Machine Id
B53369 NORTH THERMABLEND COOKER 1 (S/N 1800938426000002)
 Component
Gearbox
 Fluid
PETRO CANADA PURITY FG EP GEAR OIL 220 (39 LTR)



COMPONENT CONDITION SUMMARY

▲ Water



RECOMMENDATION

No corrective action is recommended at this time.
 Resample at the next service interval to monitor.

PROBLEMATIC TEST RESULTS

Sample Status				ABNORMAL	ABNORMAL	ABNORMAL
Water	%	ASTM D6304	>0.2	▲ 0.230	---	0.063
ppm Water	ppm	ASTM D6304	>2000	▲ 2300	---	630
Appearance	scalar	*Visual	NORML	▲ HAZY	NORML	▲ HAZY

Customer Id: PRODUB
 Sample No.: WCI2329416
 Lab Number: 05934293
 Test Package: IND 2



To manage this report scan the QR code

To discuss the diagnosis or test data:
 Don Baldrige +1
don.b505@comcast.net

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

RECOMMENDED ACTIONS

There are no recommended actions for this sample.

HISTORICAL DIAGNOSIS

ISO



05 Jul 2023 Diag: Wes Davis

We recommend you service the filters on this component. We recommend an early resample to monitor this condition. All component wear rates are normal. There is a moderate amount of silt (particulates < 14 microns in size) present in the oil. The system cleanliness is above the acceptable limit for the target ISO 4406 cleanliness code. The AN level is acceptable for this fluid. The oil is still serviceable provided that the contaminant(s) can be reduced to acceptable levels.

view report



WATER



24 May 2023 Diag: Jonathan Hester

We advise that you check for the source of water entry. We advise that you follow the water drain-off procedure for this component, and use off-line filtration to improve the cleanliness of the system fluid. Resample at the next service interval to monitor. We were unable to perform a particle count due to a high concentration of particles present in this sample. All component wear rates are normal. Appearance is hazy. Free water present. Moderate concentration of visible dirt/debris present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report



CONTAMINANT



07 Feb 2023 Diag: Jonathan Hester

We recommend you service the filters on this component. Resample at the next service interval to monitor. All component wear rates are normal. Appearance is hazy. There is a high amount of particulates present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

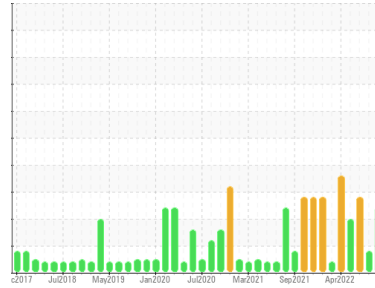
view report





OIL ANALYSIS REPORT

Sample Rating Trend



WATER



Area
COOK ROOM 1 [10023447936]
 Machine Id
B53369 NORTH THERMABLEND COOKER 1 (S/N 1800938426000002)
 Component
Gearbox
 Fluid
PETRO CANADA PURITY FG EP GEAR OIL 220 (39 LTR)

DIAGNOSIS

Recommendation

No corrective action is recommended at this time. Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

Appearance is hazy. There is a light concentration of water present in the oil. The amount and size of particulates present in the system are acceptable.

Fluid Condition

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

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		WC12329416	WC0358832	WC0775071
Sample Date	Client Info		23 Aug 2023	05 Jul 2023	24 May 2023
Machine Age	mths	Client Info	0	0	0
Oil Age	mths	Client Info	0	0	0
Oil Changed	Client Info		N/A	N/A	N/A
Sample Status			ABNORMAL	ABNORMAL	ABNORMAL

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >200	123	71	70
Chromium	ppm	ASTM D5185m >15	1	<1	<1
Nickel	ppm	ASTM D5185m >15	<1	0	<1
Titanium	ppm	ASTM D5185m	<1	<1	0
Silver	ppm	ASTM D5185m	1	0	0
Aluminum	ppm	ASTM D5185m >25	0	<1	2
Lead	ppm	ASTM D5185m >100	0	0	0
Copper	ppm	ASTM D5185m >200	<1	<1	0
Tin	ppm	ASTM D5185m >25	0	<1	0
Vanadium	ppm	ASTM D5185m	<1	<1	0
Cadmium	ppm	ASTM D5185m	<1	0	0

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	0	0
Barium	ppm	ASTM D5185m	0	<1	0
Molybdenum	ppm	ASTM D5185m	<1	0	0
Manganese	ppm	ASTM D5185m	<1	<1	<1
Magnesium	ppm	ASTM D5185m	2	3	0
Calcium	ppm	ASTM D5185m	25	16	10
Phosphorus	ppm	ASTM D5185m	607	476	375
Zinc	ppm	ASTM D5185m	10	4	0
Sulfur	ppm	ASTM D5185m	1528	1416	1363

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >50	6	4	2
Sodium	ppm	ASTM D5185m	6	4	2
Potassium	ppm	ASTM D5185m >20	2	2	<1
Water	%	ASTM D6304 >0.2	▲ 0.230	---	0.063
ppm Water	ppm	ASTM D6304 >2000	▲ 2300	---	630

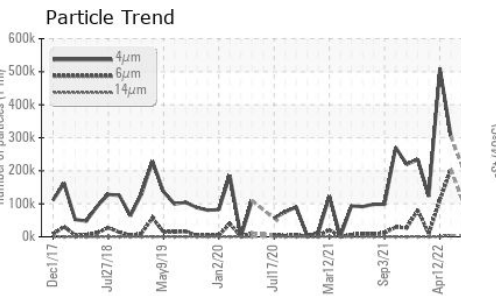
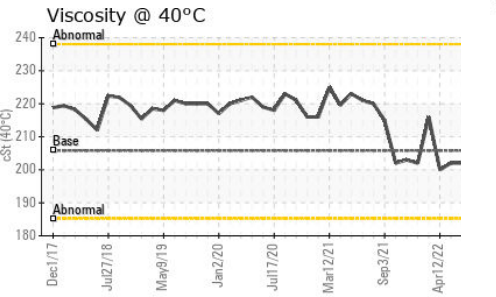
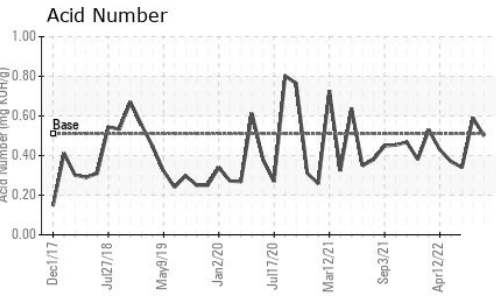
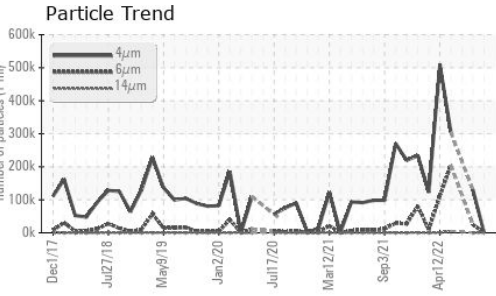
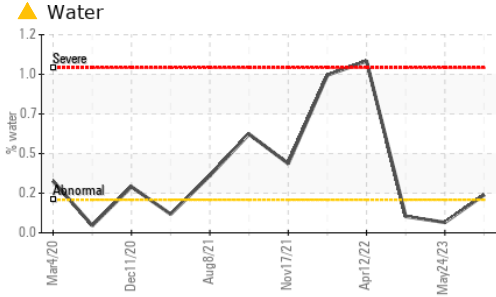
FLUID CLEANLINESS

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647		1401	129167	---
Particles >6µm	ASTM D7647 >5000		763	▲ 24414	---
Particles >14µm	ASTM D7647 >640		130	107	---
Particles >21µm	ASTM D7647 >160		44	17	---
Particles >38µm	ASTM D7647 >40		7	3	---
Particles >71µm	ASTM D7647 >10		1	2	---
Oil Cleanliness	ISO 4406 (c)	>--/19/16	18/17/14	▲ 24/22/14	---

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045 0.51	0.50	0.59	0.34

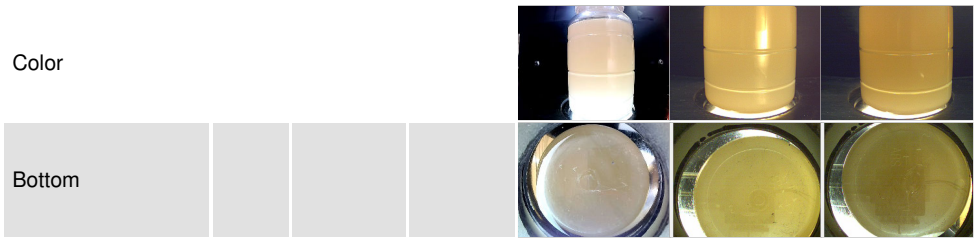
OIL ANALYSIS REPORT



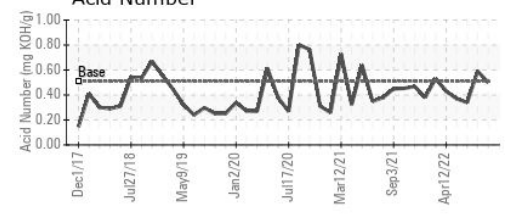
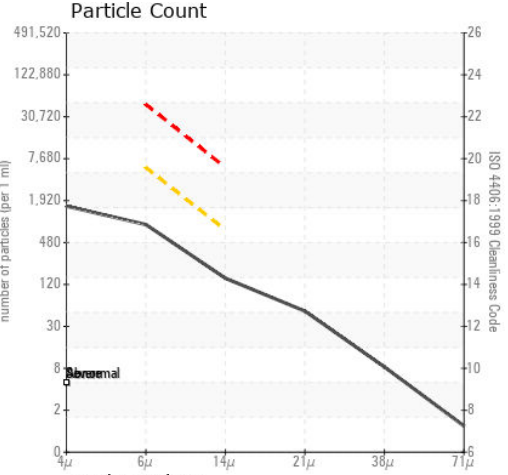
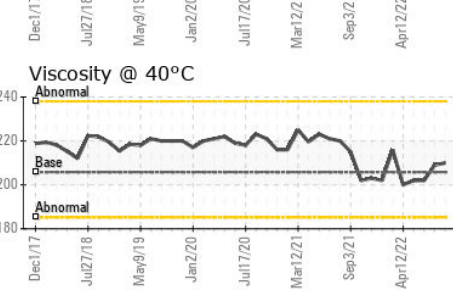
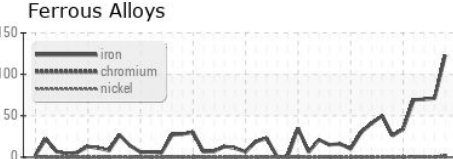
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	▲ MODER
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	▲ HAZY	▲ HAZY
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	0.2%	NEG
Free Water	scalar	*Visual		NEG	▲ 1.0

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	205.8	210	209

SAMPLE IMAGES	method	limit/base	current	history1	history2
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GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC12329416 **Received** : 24 Aug 2023
Lab Number : 05934293 **Diagnosed** : 30 Aug 2023
Unique Number : 10619564 **Diagnostician** : Don Baldrige
Test Package : IND 2 (Additional Tests: KF, PrtCount)

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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)