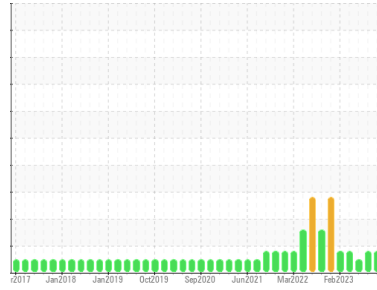


PROBLEM SUMMARY

Sample Rating Trend



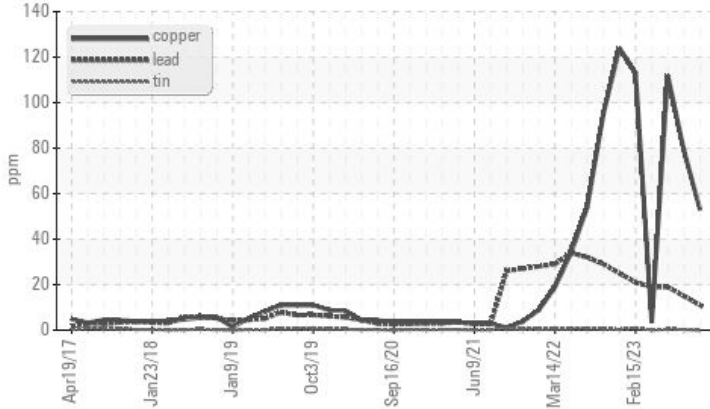
WEAR



Area
TEAM 1
Machine Id
136103 Primary air FD Fan Outboard
Component
Bearing
Fluid
PETRO CANADA TURBOFLO R&O 68 (1 QTS)

COMPONENT CONDITION SUMMARY

▲ Non-ferrous Metals



RECOMMENDATION

Resample at the next service interval to monitor.

PROBLEMATIC TEST RESULTS

Sample Status				ATTENTION	ABNORMAL	NORMAL
Copper	ppm	ASTM D5185(m)	>20	▲ 53	▲ 79	3

Customer Id: CANDRY
Sample No.: PC0069867
Lab Number: 02591774
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

10 Aug 2023 Diag: Kevin Marson

WEAR



We recommend that you drain the oil from the component if this has not already been done. We recommend an early resample to monitor this condition. Copper ppm levels are abnormal. A sharp increase in the copper level is noted. Bearing wear is indicated. There is no indication of any contamination in the oil. The oil is no longer serviceable as a result of the abnormal and/or severe wear.

view report



13 Apr 2023 Diag: Kevin Marson

NORMAL



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

view report



13 Apr 2023 Diag: Kevin Marson

WEAR

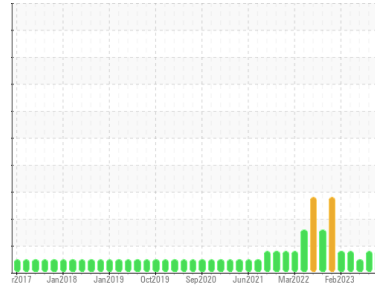


We recommend that you drain the oil from the component if this has not already been done. We recommend an early resample to monitor this condition. Copper ppm levels are abnormal. Bearing wear is indicated. There is no indication of any contamination in the oil. The AN level is acceptable for this fluid. The oil is no longer serviceable as a result of the abnormal and/or severe wear.

view report



Area
TEAM 1
Machine Id
136103 Primary air FD Fan Outboard
Component
Bearing
Fluid
PETRO CANADA TURBOFLO R&O 68 (1 QTS)



DIAGNOSIS

- Recommendation**
Resample at the next service interval to monitor.
- Wear**
Copper ppm levels are noted. All other component wear rates are normal.
- Contamination**
There is no indication of any contamination in the oil.
- 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	PC0069867	PC0074844	PC0070199
Sample Date	Client Info	06 Oct 2023	10 Aug 2023	13 Apr 2023
Machine Age	hrs	Client Info	0	0
Oil Age	hrs	Client Info	0	0
Oil Changed	Client Info	N/A	N/A	N/A
Sample Status		ATTENTION	ABNORMAL	NORMAL

WEAR METALS

method	limit/base	current	history1	history2
PQ	ASTM D8184*	0	---	0
Iron	ppm ASTM D5185(m) >20	1	3	2
Chromium	ppm ASTM D5185(m) >20	0	0	0
Nickel	ppm ASTM D5185(m) >20	0	<1	<1
Titanium	ppm ASTM D5185(m)	0	0	0
Silver	ppm ASTM D5185(m)	<1	0	0
Aluminum	ppm ASTM D5185(m) >20	0	0	0
Lead	ppm ASTM D5185(m) >20	11	15	19
Copper	ppm ASTM D5185(m) >20	▲ 53	▲ 79	3
Tin	ppm ASTM D5185(m) >20	0	<1	<1
Antimony	ppm ASTM D5185(m)	0	0	<1
Vanadium	ppm ASTM D5185(m)	0	0	0
Beryllium	ppm ASTM D5185(m)	0	0	0
Cadmium	ppm ASTM D5185(m)	0	0	0

ADDITIVES

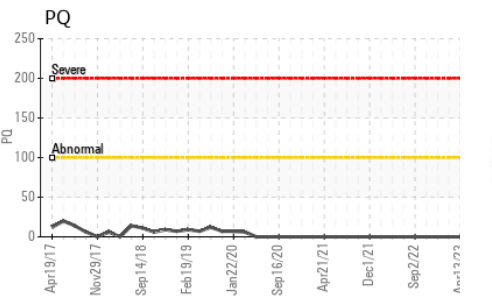
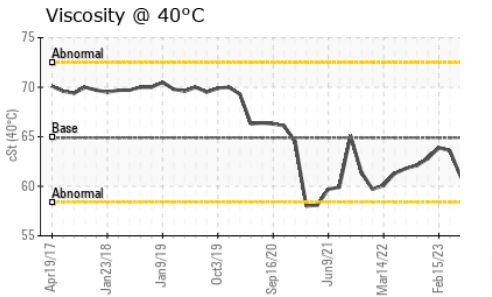
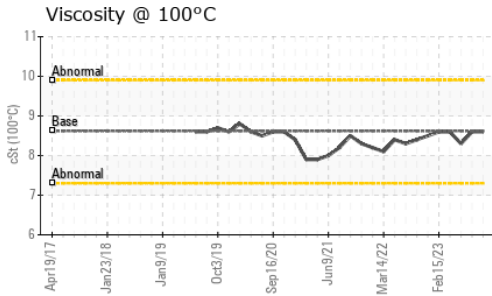
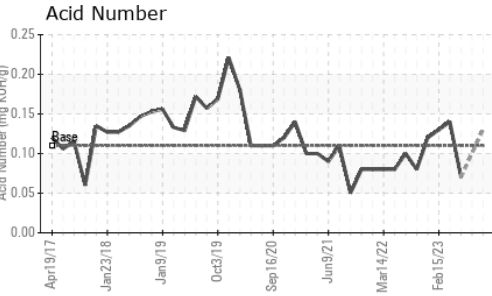
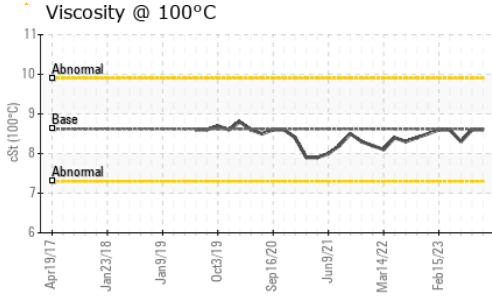
method	limit/base	current	history1	history2
Boron	ppm ASTM D5185(m)	<1	0	0
Barium	ppm ASTM D5185(m)	<1	0	0
Molybdenum	ppm ASTM D5185(m)	0	0	0
Manganese	ppm ASTM D5185(m)	0	0	0
Magnesium	ppm ASTM D5185(m)	0	<1	0
Calcium	ppm ASTM D5185(m) 0	2	1	0
Phosphorus	ppm ASTM D5185(m) 4	17	16	10
Zinc	ppm ASTM D5185(m) 0	26	27	8
Sulfur	ppm ASTM D5185(m)	143	109	383
Lithium	ppm ASTM D5185(m)	<1	<1	<1

CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185(m) >15	0	0	<1
Sodium	ppm ASTM D5185(m)	<1	<1	<1
Potassium	ppm ASTM D5185(m) >20	0	<1	<1

FLUID DEGRADATION

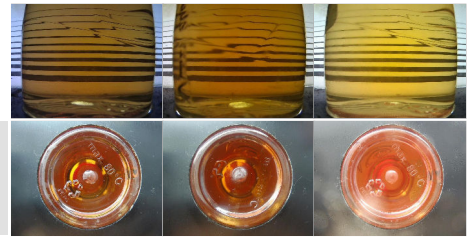
method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g ASTM D974* 0.11	0.13	---	0.07



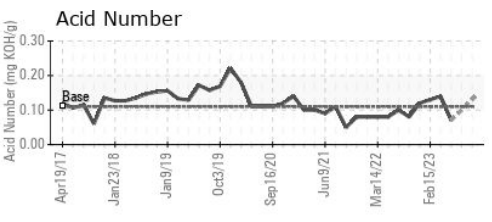
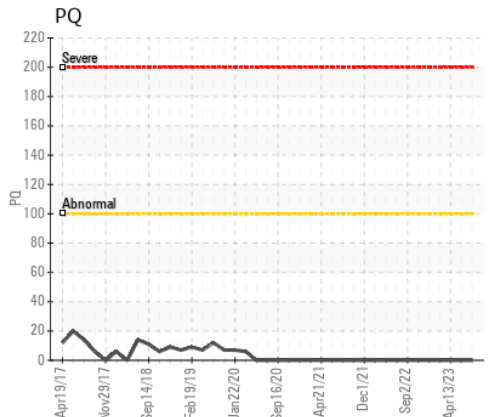
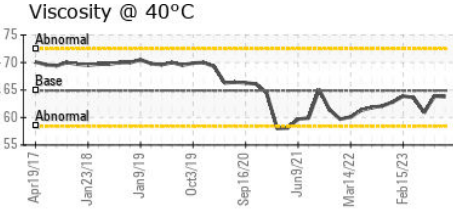
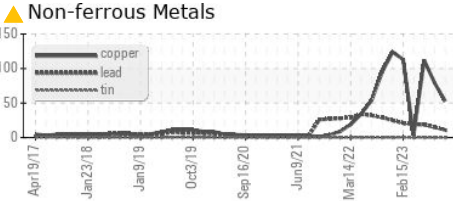
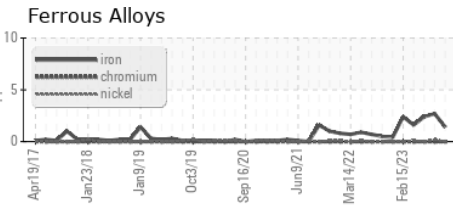
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	NONE	NONE
Yellow Metal	scalar	Visual*	NONE	NONE	NONE
Precipitate	scalar	Visual*	NONE	NONE	NONE
Silt	scalar	Visual*	NONE	NONE	NONE
Debris	scalar	Visual*	NONE	VLITE	NONE
Sand/Dirt	scalar	Visual*	NONE	NONE	NONE
Appearance	scalar	Visual*	NORML	NORML	NORML
Odor	scalar	Visual*	NORML	NORML	NORML
Emulsified Water	scalar	Visual*	>2	NEG	NEG
Free Water	scalar	Visual*		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	64.9	63.9	60.9
Visc @ 100°C	cSt	ASTM D7279(m)	8.62	8.6	8.3
Viscosity Index (VI)	Scale	ASTM D2270*	104	106	105

SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					



GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : PC0069867 **Received** : 25 Oct 2023
Lab Number : 02591774 **Diagnosed** : 26 Oct 2023
Unique Number : 5668853 **Diagnostician** : Kevin Marson
Test Package : IND 2 (Additional Tests: KV100, TAN Man, VI)

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 CA P8N 2Z7
 Contact: Adebukola Adekanye
 AADEKANYE@DRYDENFIBRE.CA
 T: (807)223-9950
 F: (807)223-9176

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.