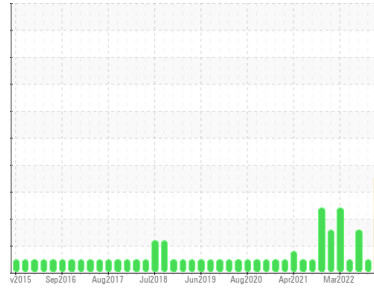


PROBLEM SUMMARY

Area
TEAM 1
Machine Id
122649 Pump Inboard
Component
Bearing
Fluid
PETRO CANADA TURBOFLO R&O 32 (2 LTR)

Sample Rating Trend



WATER



COMPONENT CONDITION SUMMARY

No relevant graphs to display

RECOMMENDATION

We advise that you check for the source of water entry. Check seals and/or filters for points of contaminant entry. We advise that you check for visible metal particles in the oil. The air breather requires service. If unrated, we recommend that you replace with a suitable micron rated and/or desiccant air breather. If rated, we recommend that you service/replace the breather. 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.

PROBLEMATIC TEST RESULTS

Sample Status				ABNORMAL	NORMAL	ABNORMAL
White Metal	scalar	Visual*	NONE	▲ LIGHT	NONE	NONE
Appearance	scalar	Visual*	NORML	▲ WGOIL	NORML	NORML
Emulsified Water	scalar	Visual*	>2	▲ .5%	NEG	1%
Free Water	scalar	Visual*		▲ 1%	NEG	▲ 5%

Customer Id: CANDRY
Sample No.: PC0069835
Lab Number: 02577194
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

Action	Status	Date	Done By	Description
Change Fluid	---	---	?	We recommend that you drain the oil from the component if this has not already been done.
Resample	---	---	?	We recommend an early resample to monitor this condition.
Check Breathers	---	---	?	The air breather requires service. If unrated, we recommend that you replace with a suitable micron rated and/or desiccant air breather. If rated, we recommend that you service/replace the breather.
Check Water Access	---	---	?	We advise that you check for the source of water entry.
Check For Visual Metal	---	---	?	We advise that you check for visible metal particles in the oil.
Check Seals	---	---	?	Check seals and/or filters for points of contaminant entry.

HISTORICAL DIAGNOSIS

01 Nov 2022 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



02 Sep 2022 Diag: Kevin Marson

WATER



We advise that you check for the source of water entry. Check seals and/or filters for points of contaminant entry. The air breather requires service. If unrated, we recommend that you replace with a suitable micron rated and/or desiccant air breather. If rated, we recommend that you service/replace the breather. We advise that you follow the water drain-off procedure for this component. We recommend an early resample to monitor this condition. All component wear rates are normal. Free water present. 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



18 May 2022 Diag: Bill Quesnel

NORMAL

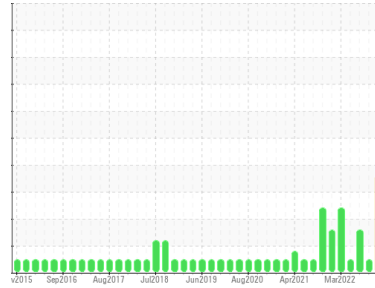


Resample at the next service interval to monitor. All component wear rates are normal. The water content is negligible. There is no indication of any contamination in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report



Area
TEAM 1
Machine Id
122649 Pump Inboard
Component
Bearing
Fluid
PETRO CANADA TURBOFLO R&O 32 (2 LTR)



DIAGNOSIS

Recommendation

We advise that you check for the source of water entry. Check seals and/or filters for points of contaminant entry. We advise that you check for visible metal particles in the oil. The air breather requires service. If unrated, we recommend that you replace with a suitable micron rated and/or desiccant air breather. If rated, we recommend that you service/replace the breather. 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.

Wear

Light concentration of visible metal present. Bearing wear is indicated.

Contamination

There is a moderate concentration of water present in the oil. Free water present.

Fluid Condition

The AN level is acceptable for this fluid. The oil is no longer serviceable as a result of the abnormal and/or severe wear.

SAMPLE INFORMATION

method	limit/base	current	history1	history2
Sample Number	Client Info	PC0069835	PC0061839	PC0061613
Sample Date	Client Info	10 Aug 2023	01 Nov 2022	02 Sep 2022
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		ABNORMAL	NORMAL	ABNORMAL

WEAR METALS

method	limit/base	current	history1	history2
PQ	ASTM D8184*	0	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	<1	0	0
Titanium	ppm ASTM D5185(m)	0	0	0
Silver	ppm ASTM D5185(m)	0	0	0
Aluminum	ppm ASTM D5185(m) >20	0	0	0
Lead	ppm ASTM D5185(m) >20	<1	<1	0
Copper	ppm ASTM D5185(m) >20	<1	2	1
Tin	ppm ASTM D5185(m) >20	0	1	<1
Antimony	ppm ASTM D5185(m)	0	<1	0
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	<1	<1
Barium	ppm ASTM D5185(m)	0	0	0
Molybdenum	ppm ASTM D5185(m)	0	0	0
Manganese	ppm ASTM D5185(m)	0	0	0
Magnesium	ppm ASTM D5185(m)	0	0	0
Calcium	ppm ASTM D5185(m) 0	<1	0	0
Phosphorus	ppm ASTM D5185(m) 4	4	3	4
Zinc	ppm ASTM D5185(m) 0	3	3	3
Sulfur	ppm ASTM D5185(m)	148	172	163
Lithium	ppm ASTM D5185(m)	<1	<1	<1

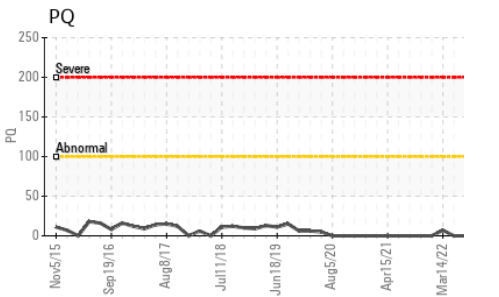
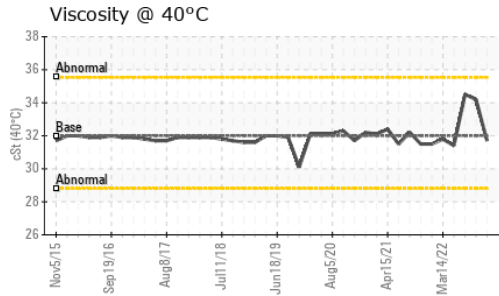
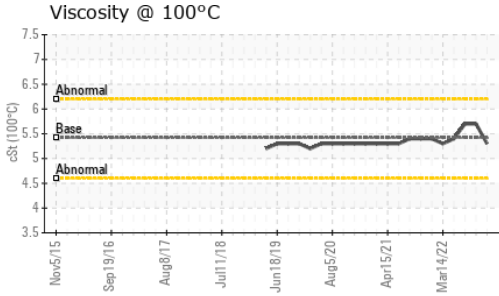
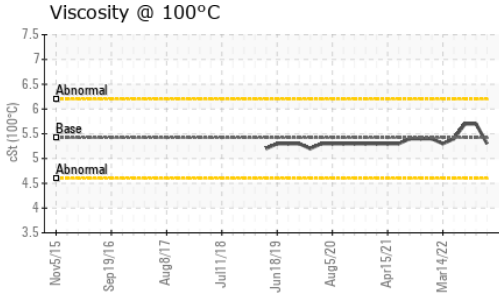
CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185(m) >15	2	<1	0
Sodium	ppm ASTM D5185(m)	<1	0	0
Potassium	ppm ASTM D5185(m) >20	3	0	<1

FLUID DEGRADATION

method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g ASTM D974* 0.15	0.07	0.03	0.05

OIL ANALYSIS REPORT

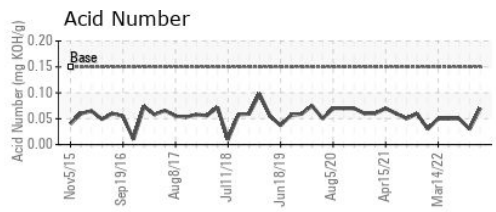
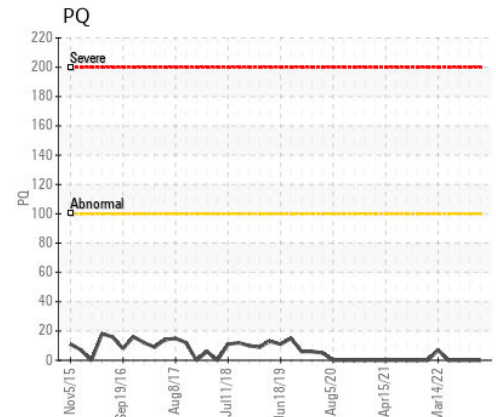
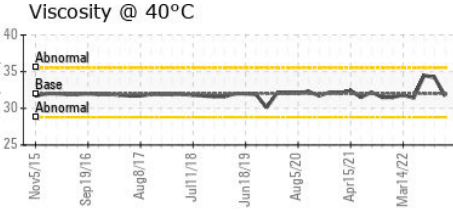
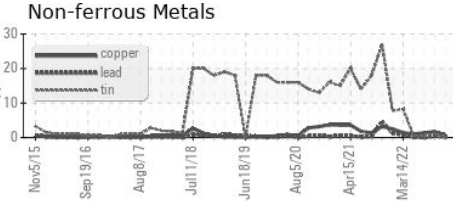
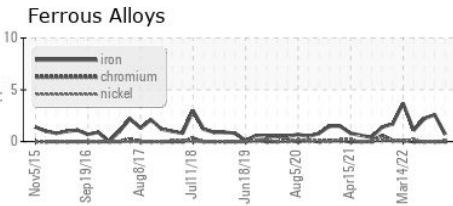


VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	▲ LIGHT	NONE
Yellow Metal	scalar	Visual*	NONE	NONE	NONE
Precipitate	scalar	Visual*	NONE	NONE	NONE
Silt	scalar	Visual*	NONE	NONE	NONE
Debris	scalar	Visual*	NONE	VLITE	NONE
Sand/Dirt	scalar	Visual*	NONE	NONE	NONE
Appearance	scalar	Visual*	NORML	▲ WGOIL	NORML
Odor	scalar	Visual*	NORML	NORML	NORML
Emulsified Water	scalar	Visual*	>2	▲ .5%	NEG
Free Water	scalar	Visual*		▲ 1%	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	32.0	31.7	34.2
Visc @ 100°C	cSt	ASTM D7279(m)	5.42	5.3	5.7
Viscosity Index (VI)	Scale	ASTM D2270*	103	97	105

SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					

GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : PC0069835 **Received** : 21 Aug 2023
Lab Number : 02577194 **Diagnosed** : 22 Aug 2023
Unique Number : 5630254 **Diagnostician** : Kevin Marson
Test Package : IND 2 (Additional Tests: KV100, TAN Man, VI)

Dryden Fibre
 Box 3001, 1 Duke Street
 Dryden, ON
 CA P8N 2Z7
 Contact: Yvon St. Laurent
 yvon.stlaurent@domtar.com
 T: (807)223-9838
 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.