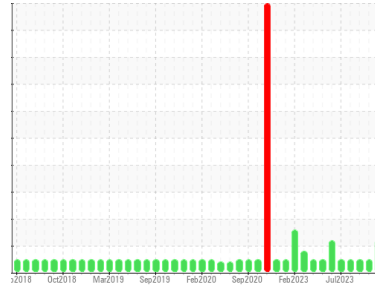


# PROBLEM SUMMARY

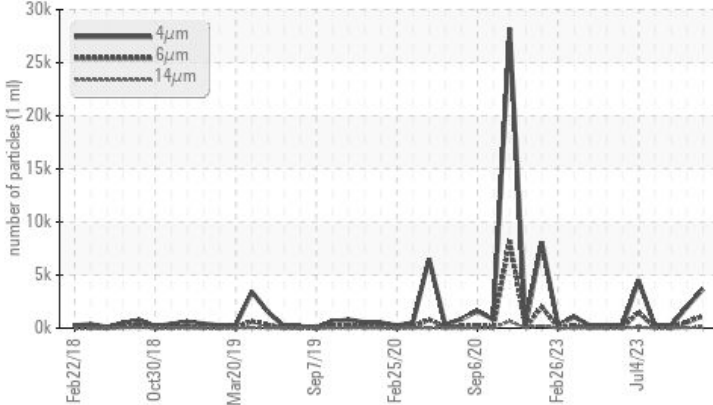
Area  
**Main Power Generation [450204191]**  
 Machine Id  
**Generator - MPG (Port) Lube Oil System (S/N Sample Tag XX-80201-S1)**  
 Component  
**Turbine**  
 Fluid  
**PETRO CANADA TURBOFLO 32 (8300 LTR)**

Sample Rating Trend



## COMPONENT CONDITION SUMMARY

▲ Particle Trend



### RECOMMENDATION

We recommend you service the filters on this component. Resample at the next service interval to monitor.

### PROBLEMATIC TEST RESULTS

Sample Status			ATTENTION	NORMAL	NORMAL
Particles >6µm	ASTM D7647	>640	▲ <b>1163</b>	548	47
Particles >14µm	ASTM D7647	>80	▲ <b>86</b>	56	5
Oil Cleanliness	ISO 4406 (c)	>--/16/13	▲ <b>19/17/14</b>	18/16/13	15/13/10

Customer Id: TERHAM  
 Sample No.: PC0011834  
 Lab Number: 02584667  
 Test Package: MAR 2



To manage this report scan the QR code

To discuss the diagnosis or test data:  
 Bill Quesnel CLS, OMA II, MLA-III, LLA-I +1  
 (289)291-4641 x4641  
[Bill.Quesnel@wearcheck.com](mailto:Bill.Quesnel@wearcheck.com)

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

## RECOMMENDED ACTIONS

Action	Status	Date	Done By	Description
Change Filter	---	---	?	We recommend you service the filters on this component.

## HISTORICAL DIAGNOSIS

### 22 Aug 2023 Diag: Kevin Marson

NORMAL



Resample at the next service interval to monitor. All component wear rates are normal. The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report



### 28 Jul 2023 Diag: Kevin Marson

NORMAL



Resample at the next service interval to monitor. All component wear rates are normal. The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report



### 19 Jul 2023 Diag: Kevin Marson

NORMAL

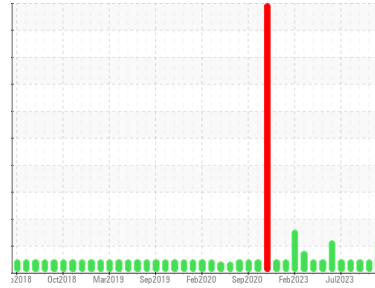


Resample at the next service interval to monitor. Please contact your representative for information regarding the proper sampling kits for your service. NOTE: We recommend using Advanced Oil Monitoring (AOM) kits for this system. The AOM test package includes advanced level testing to determine the suitability of turbine and large industrial compressor oils for continued use. this testkit includes Analytical Ferrography which provides a detailed morphological analysis of wear particles present in the fluid. Component wear rates appear to be normal (unconfirmed). The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report



Area  
**Main Power Generation [450204191]**  
Machine Id  
**Generator - MPG (Port) Lube Oil System (S/N Sample Tag XX-80201-S1)**  
Component  
**Turbine**  
Fluid  
**PETRO CANADA TURBOFLO 32 (8300 LTR)**



## DIAGNOSIS

**Recommendation**  
We recommend you service the filters on this component. Resample at the next service interval to monitor.

**Wear**  
All component wear rates are normal.

**Contamination**  
There is a light amount of silt (particulates < 14 microns in size) present 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			<b>PC0011834</b>	PC0052566	PC
Sample Date	Client Info			<b>09 Sep 2023</b>	22 Aug 2023	28 Jul 2023
Machine Age	hrs	Client Info		<b>0</b>	0	0
Oil Age	hrs	Client Info		<b>0</b>	0	0
Oil Changed	Client Info			<b>N/A</b>	N/A	N/A
Sample Status				<b>ATTENTION</b>	NORMAL	NORMAL

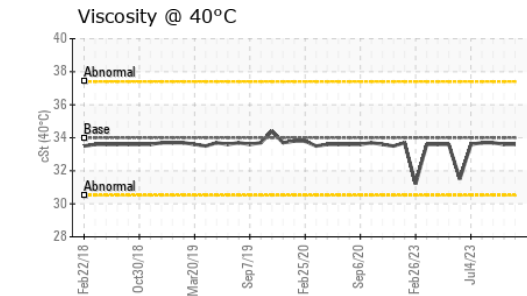
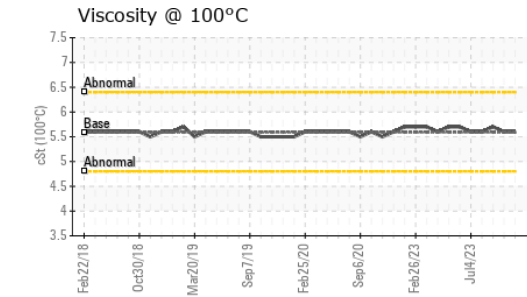
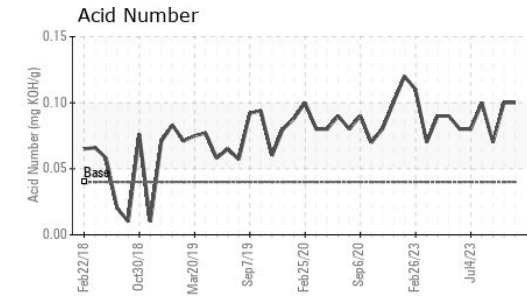
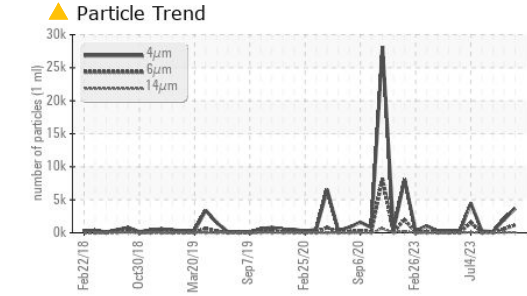
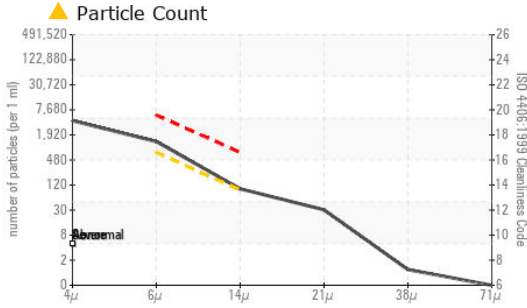
WEAR METALS		method	limit/base	current	history1	history2
PQ		ASTM D8184*		<b>0</b>	0	0
Iron	ppm	ASTM D5185(m)	>15	<b>1</b>	1	<1
Chromium	ppm	ASTM D5185(m)	>4	<b>0</b>	0	0
Nickel	ppm	ASTM D5185(m)	>2	<b>0</b>	0	<1
Titanium	ppm	ASTM D5185(m)		<b>0</b>	0	0
Silver	ppm	ASTM D5185(m)		<b>0</b>	0	0
Aluminum	ppm	ASTM D5185(m)	>10	<b>&lt;1</b>	0	0
Lead	ppm	ASTM D5185(m)		<b>0</b>	<1	0
Copper	ppm	ASTM D5185(m)	>5	<b>&lt;1</b>	1	<1
Tin	ppm	ASTM D5185(m)	>5	<b>1</b>	1	1
Antimony	ppm	ASTM D5185(m)		<b>0</b>	0	0
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	0	0
Beryllium	ppm	ASTM D5185(m)		<b>0</b>	0	0
Cadmium	ppm	ASTM D5185(m)		<b>0</b>	0	0

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)	0	<b>&lt;1</b>	0	<1
Barium	ppm	ASTM D5185(m)	0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185(m)	0	<b>0</b>	0	0
Manganese	ppm	ASTM D5185(m)		<b>0</b>	0	0
Magnesium	ppm	ASTM D5185(m)	0	<b>&lt;1</b>	0	<1
Calcium	ppm	ASTM D5185(m)	0	<b>&lt;1</b>	<1	<1
Phosphorus	ppm	ASTM D5185(m)	120	<b>263</b>	288	270
Zinc	ppm	ASTM D5185(m)	0.0	<b>2</b>	2	2
Sulfur	ppm	ASTM D5185(m)	0	<b>486</b>	525	503
Lithium	ppm	ASTM D5185(m)		<b>&lt;1</b>	<1	<1

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

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647		<b>3676</b>	2003	174
Particles >6µm		ASTM D7647	>640	<b>▲ 1163</b>	548	47
Particles >14µm		ASTM D7647	>80	<b>▲ 86</b>	56	5
Particles >21µm		ASTM D7647	>20	<b>27</b>	18	1
Particles >38µm		ASTM D7647	>4	<b>1</b>	0	0
Particles >71µm		ASTM D7647	>3	<b>0</b>	0	0
Oil Cleanliness		ISO 4406 (c)	>--/16/13	<b>▲ 19/17/14</b>	18/16/13	15/13/10

# OIL ANALYSIS REPORT



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : PC0011834 **Received** : 22 Sep 2023  
**Lab Number** : **02584667** **Diagnosed** : 26 Sep 2023  
**Unique Number** : 5645732 **Diagnostician** : Bill Quesnel  
**Test Package** : MAR 2 ( Additional Tests: KV100, PQ, TAN Man, VI )

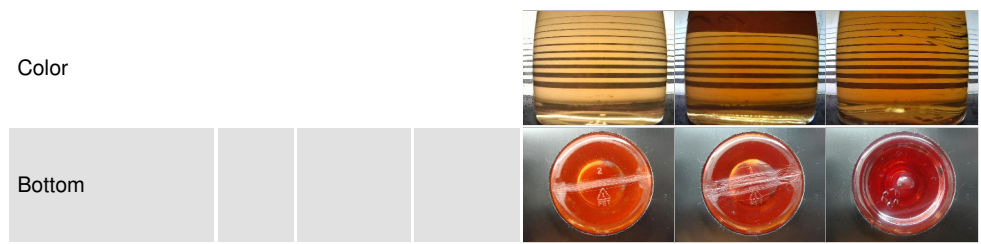
To discuss this sample report, contact Customer Service at 1-800-268-2131.  
 Test denoted (\*) outside scope of accreditation, (m) method modified, (e) tested at external lab.  
 Validity of results and interpretation are based on the sample and information as supplied.

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974*	0.04	<b>0.10</b>	0.10	0.07

VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE
Precipitate	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE
Silt	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE
Sand/Dirt	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE
Appearance	scalar	Visual*	NORML	<b>NORML</b>	NORML	NORML
Odor	scalar	Visual*	NORML	<b>NORML</b>	NORML	NORML
Emulsified Water	scalar	Visual*	>0.03	<b>NEG</b>	NEG	NEG
Free Water	scalar	Visual*		<b>NEG</b>	NEG	NEG

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	34.0	<b>33.6</b>	33.6	33.7
Visc @ 100°C	cSt	ASTM D7279(m)	5.59	<b>5.6</b>	5.6	5.7
Viscosity Index (VI)	Scale	ASTM D2270*	110	<b>103</b>	103	108

## SAMPLE IMAGES



**Suncor - Terra Nova Projects**  
 Scotia Centre, 235 Water Strret  
 St. John's, NL  
 CA A1C 1B6  
 Contact: Josh Hynes  
 joshynes@suncor.com  
 T: (709)778-3575  
 F: (709)724-2835