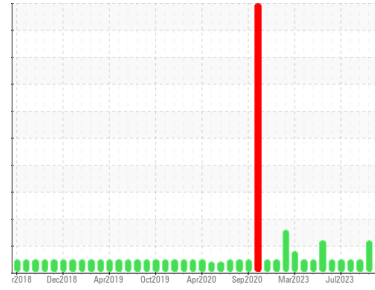


Area  
**Main Power Generation [450204191]**  
Machine Id  
**Generator - MPG (Port) Lube Oil System (S/N Sample Tag XX-80201-S1)**  
Component  
**Turbine**  
Fluid  
**PETRO CANADA TURBOFLO 32 (8300 LTR)**



**DIAGNOSIS**

**Recommendation**  
Resample at the next service interval to monitor.

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

**Contamination**  
The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is 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	<b>PC0011831</b>	PC0011834	PC0052566
Sample Date	Client Info	<b>09 Sep 2023</b>	09 Sep 2023	22 Aug 2023
Machine Age	hrs	Client Info	<b>0</b>	0
Oil Age	hrs	Client Info	<b>0</b>	0
Oil Changed	Client Info	<b>N/A</b>	N/A	N/A
Sample Status		<b>NORMAL</b>	ATTENTION	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	0
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>	<1	0
Lead	ppm	ASTM D5185(m)	<b>0</b>	0	<1
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>	<1	0
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>	<1	0
Calcium	ppm	ASTM D5185(m) 0	<b>&lt;1</b>	<1	<1
Phosphorus	ppm	ASTM D5185(m) 120	<b>271</b>	263	288
Zinc	ppm	ASTM D5185(m) 0.0	<b>1</b>	2	2
Sulfur	ppm	ASTM D5185(m) 0	<b>503</b>	486	525
Lithium	ppm	ASTM D5185(m)	<b>&lt;1</b>	<1	<1

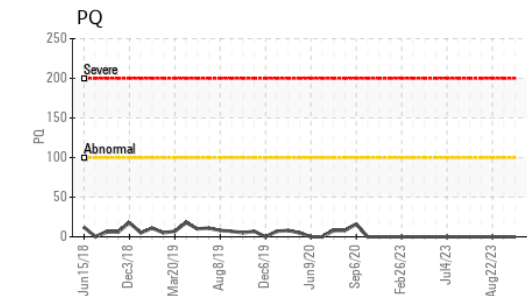
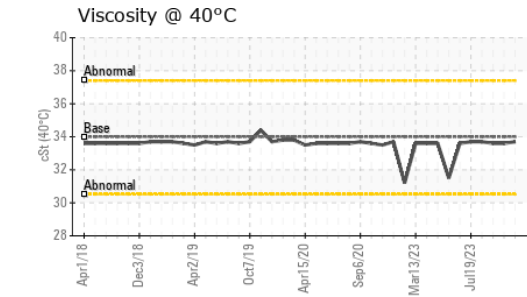
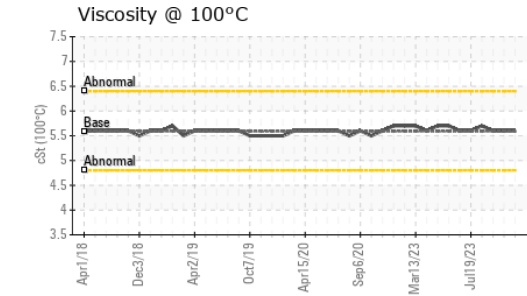
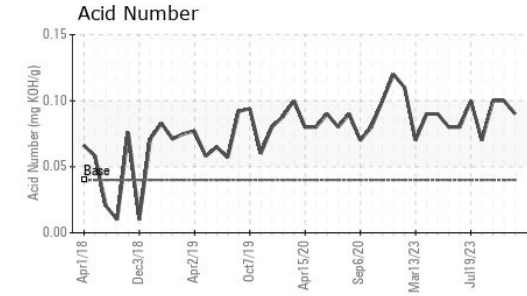
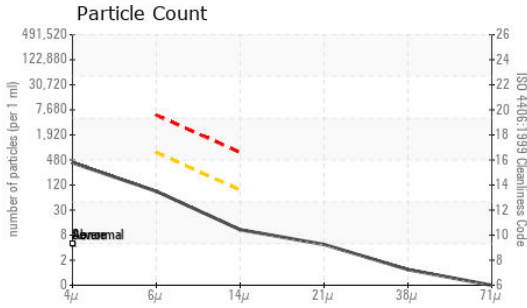
**CONTAMINANTS** method limit/base current history1 history2

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>10</b>	0	<1

**FLUID CLEANLINESS** method limit/base current history1 history2

Particles >4µm	ASTM D7647		<b>362</b>	3676	2003
Particles >6µm	ASTM D7647	>640	<b>75</b>	▲ 1163	548
Particles >14µm	ASTM D7647	>80	<b>9</b>	▲ 86	56
Particles >21µm	ASTM D7647	>20	<b>4</b>	27	18
Particles >38µm	ASTM D7647	>4	<b>1</b>	1	0
Particles >71µm	ASTM D7647	>3	<b>0</b>	0	0
Oil Cleanliness	ISO 4406 (c)	>--/16/13	<b>16/13/10</b>	▲ 19/17/14	18/16/13

# OIL ANALYSIS REPORT

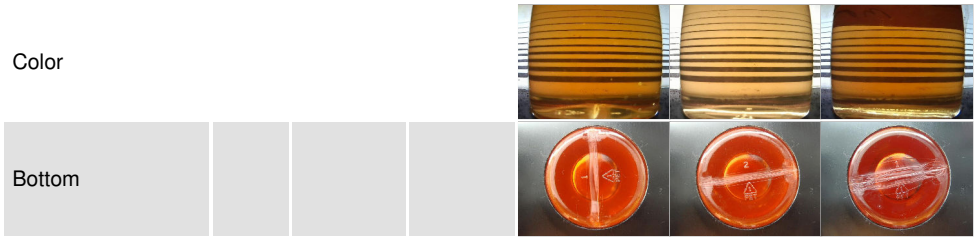


FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974*	0.04	<b>0.09</b>	0.10	0.10

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>33.7</b>	33.6	33.6
Visc @ 100°C	cSt	ASTM D7279(m)	5.59	<b>5.6</b>	5.6	5.6
Viscosity Index (VI)	Scale	ASTM D2270*	110	<b>103</b>	103	103

## SAMPLE IMAGES



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : PC0011831 **Received** : 22 Sep 2023  
**Lab Number** : **02584668** **Diagnosed** : 26 Sep 2023  
**Unique Number** : 5645733 **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.

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