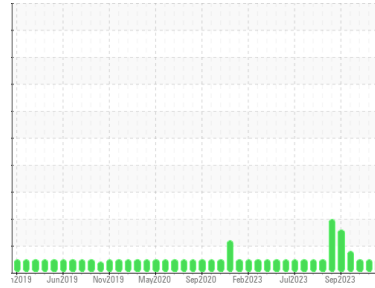




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Area  
**Main Power Generation [450237391]**  
 Machine Id  
**Generator MPG (Stbd) - Lubrication System (S/N Sample Tag XX-80101-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 water content is negligible. 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>PP</b>	PC0076714	PC
Sample Date	Client Info		<b>13 Dec 2023</b>	10 Nov 2023	21 Oct 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>NORMAL</b>	NORMAL	NORMAL

## WEAR METALS

	method	limit/base	current	history1	history2
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>	<1	0
Titanium	ppm	ASTM D5185(m)	<b>0</b>	0	0
Silver	ppm	ASTM D5185(m)	<b>0</b>	<1	<1
Aluminum	ppm	ASTM D5185(m) >10	<b>&lt;1</b>	0	<1
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>2</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>0</b>	<1	0
Barium	ppm	ASTM D5185(m) 0	<b>0</b>	<1	<1
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>0</b>	0	0
Calcium	ppm	ASTM D5185(m) 0	<b>0</b>	<1	0
Phosphorus	ppm	ASTM D5185(m) 120	<b>261</b>	253	259
Zinc	ppm	ASTM D5185(m) 0.0	<b>&lt;1</b>	1	<1
Sulfur	ppm	ASTM D5185(m) 0	<b>631</b>	495	606
Lithium	ppm	ASTM D5185(m)	<b>&lt;1</b>	<1	<1

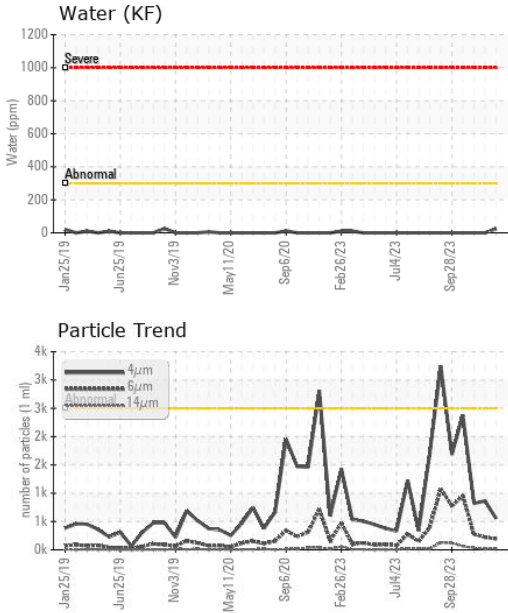
## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m) >15	<b>0</b>	<1	0
Sodium	ppm	ASTM D5185(m)	<b>0</b>	<1	0
Potassium	ppm	ASTM D5185(m) >20	<b>&lt;1</b>	0	0
Water	%	ASTM D6304* >0.03	<b>0.002</b>	---	---
ppm Water	ppm	ASTM D6304* >300	<b>25</b>	---	---

## FLUID CLEANLINESS

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>2500	<b>554</b>	864	820
Particles >6µm	ASTM D7647	>640	<b>192</b>	221	275
Particles >14µm	ASTM D7647	>80	<b>22</b>	11	35
Particles >21µm	ASTM D7647	>20	<b>8</b>	2	6
Particles >38µm	ASTM D7647	>4	<b>1</b>	1	1
Particles >71µm	ASTM D7647	>3	<b>1</b>	0	0
Oil Cleanliness	ISO 4406 (c)	>18/16/13	<b>16/15/12</b>	17/15/11	17/15/12

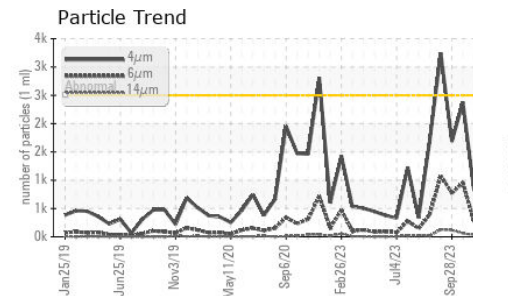
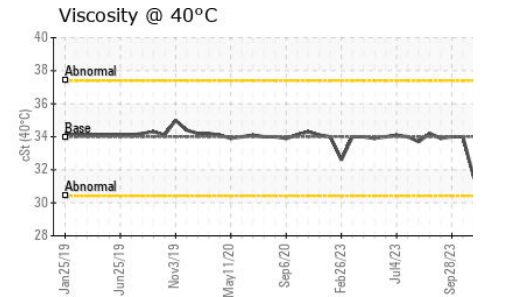
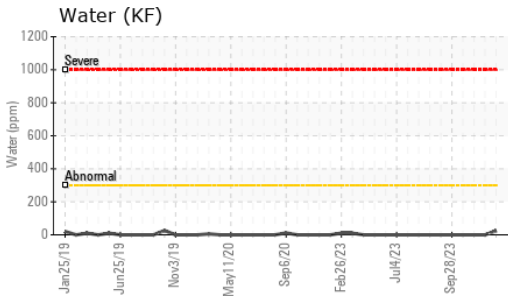
# OIL ANALYSIS REPORT



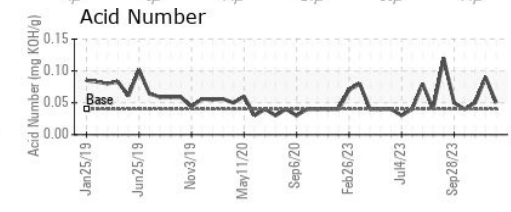
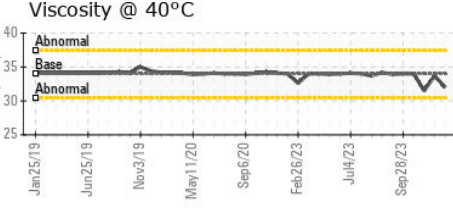
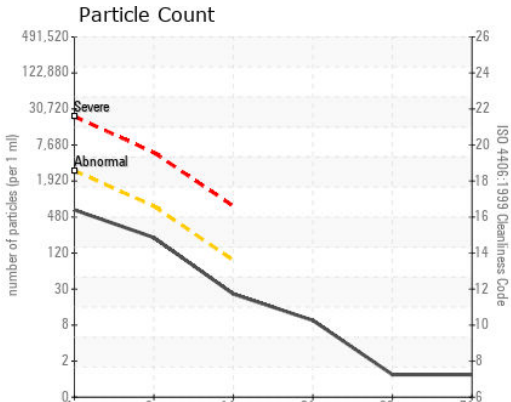
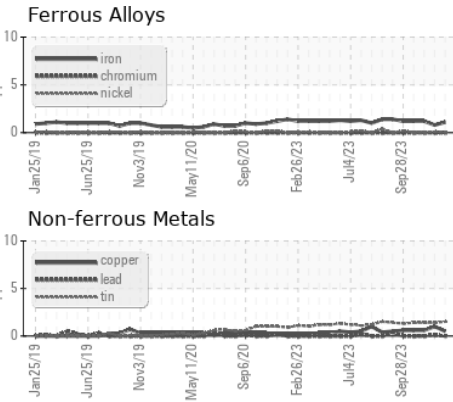
FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974*	0.04	<b>0.05</b>	0.09	0.05
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE
Precipitate	scalar	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>32.0</b>	33.7	31.5

SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					



## GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : PP  
**Lab Number** : 02609305  
**Unique Number** : 5710391  
**Test Package** : IND 2  
**Received** : 17 Jan 2024  
**Diagnosed** : 18 Jan 2024  
**Diagnostician** : Kevin Marson

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

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.