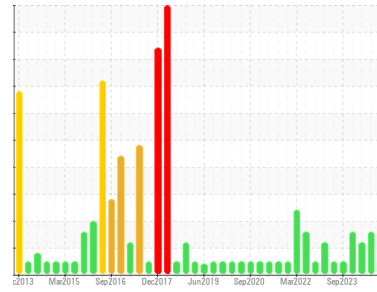




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Area  
**2 Phoenix/020 ISO Dewax/P Pump/100 Feed Pump**  
 Machine Id  
**N/A 20P100 (East)**  
 Component  
**Pump**  
 Fluid  
**PETRO CANADA TURBOFLO 32 (136 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>WC0957461</b>	WC0912446	WC0883392
Sample Date	Client Info	<b>02 Jul 2024</b>	12 Mar 2024	15 Dec 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>	ABNORMAL	ABNORMAL

## CONTAMINATION

method	limit/base	current	history1	history2	
Water	WC Method	<b>&gt;.1</b>	<b>NEG</b>	NEG	NEG

## WEAR METALS

method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185(m)	>90	<b>0</b>	0
Chromium	ppm	ASTM D5185(m)	>5	<b>0</b>	0
Nickel	ppm	ASTM D5185(m)	>5	<b>&lt;1</b>	0
Titanium	ppm	ASTM D5185(m)	>3	<b>0</b>	0
Silver	ppm	ASTM D5185(m)	>3	<b>0</b>	0
Aluminum	ppm	ASTM D5185(m)	>7	<b>0</b>	<1
Lead	ppm	ASTM D5185(m)	>12	<b>0</b>	0
Copper	ppm	ASTM D5185(m)	>30	<b>&lt;1</b>	0
Tin	ppm	ASTM D5185(m)	>9	<b>0</b>	0
Antimony	ppm	ASTM D5185(m)		<b>0</b>	0
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	0
Beryllium	ppm	ASTM D5185(m)		<b>0</b>	0
Cadmium	ppm	ASTM D5185(m)		<b>0</b>	0

## ADDITIVES

method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185(m)	0	<b>&lt;1</b>	0
Barium	ppm	ASTM D5185(m)	0	<b>0</b>	<1
Molybdenum	ppm	ASTM D5185(m)	0	<b>0</b>	0
Manganese	ppm	ASTM D5185(m)		<b>0</b>	0
Magnesium	ppm	ASTM D5185(m)	0	<b>&lt;1</b>	<1
Calcium	ppm	ASTM D5185(m)	0	<b>&lt;1</b>	0
Phosphorus	ppm	ASTM D5185(m)	120	<b>3</b>	<1
Zinc	ppm	ASTM D5185(m)	0.0	<b>1</b>	<1
Sulfur	ppm	ASTM D5185(m)	0	<b>612</b>	790
Lithium	ppm	ASTM D5185(m)		<b>&lt;1</b>	<1

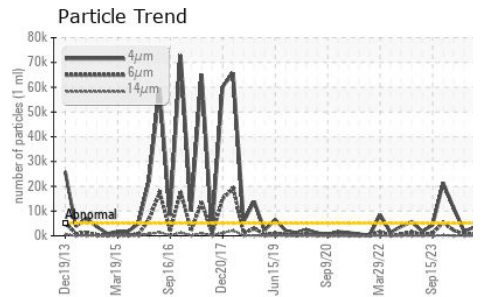
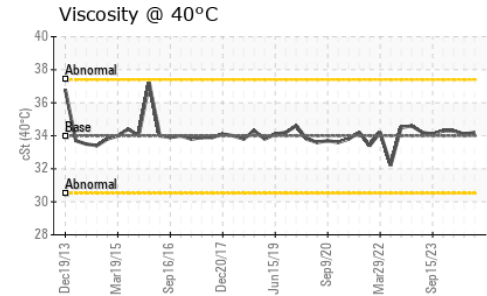
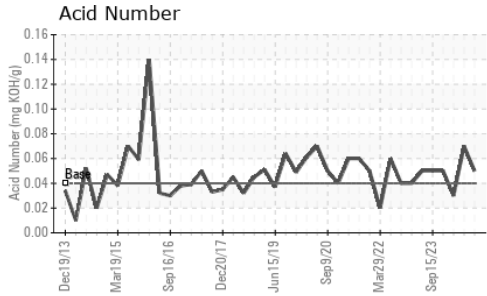
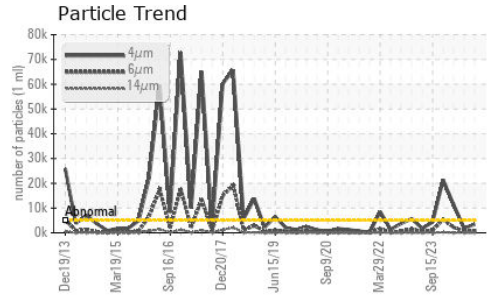
## CONTAMINANTS

method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185(m)	>60	<b>0</b>	0
Sodium	ppm	ASTM D5185(m)		<b>0</b>	0
Potassium	ppm	ASTM D5185(m)	>20	<b>0</b>	<1

## FLUID CLEANLINESS

method	limit/base	current	history1	history2	
Particles >4µm	ASTM D7647	>5000	<b>3439</b>	1851	▲ 11339
Particles >6µm	ASTM D7647	>1300	<b>751</b>	566	● 2218
Particles >14µm	ASTM D7647	>160	<b>39</b>	33	50
Particles >21µm	ASTM D7647	>40	<b>11</b>	10	7
Particles >38µm	ASTM D7647	>10	<b>2</b>	1	0
Particles >71µm	ASTM D7647	>3	<b>1</b>	0	0
Oil Cleanliness	ISO 4406 (c)	>19/17/14	<b>19/17/12</b>	18/16/12	▲ 21/18/13

# OIL ANALYSIS REPORT

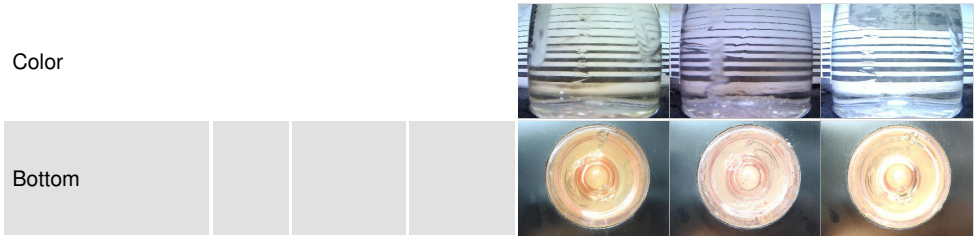


FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974*	0.04	<b>0.05</b>	0.07	0.03

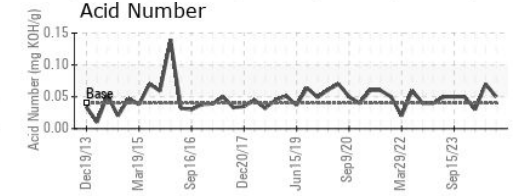
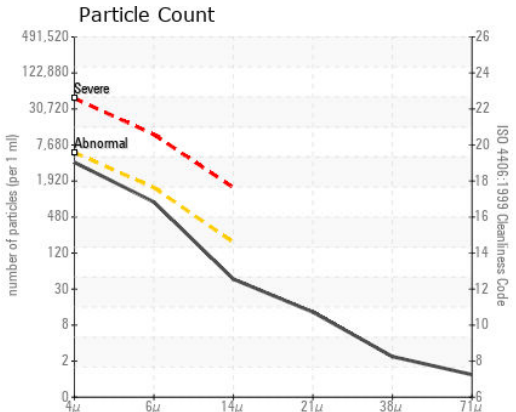
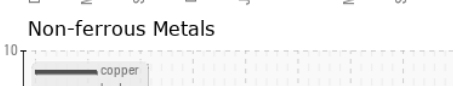
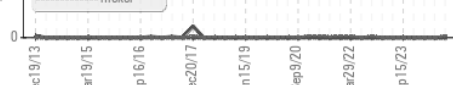
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE
Precipitate	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE
Silt	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	Visual*	NONE	<b>VLITE</b>	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*	>.1	<b>NEG</b>	.2%	NEG
Free Water	scalar	Visual*		<b>NEG</b>	▲ 1%	NEG

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	34.0	<b>34.2</b>	34.1	34.3

SAMPLE IMAGES		method	limit/base	current	history1	history2
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## GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : WC0957461 **Received** : 09 Jul 2024  
**Lab Number** : **02646805** **Tested** : 10 Jul 2024  
**Unique Number** : 5812357 **Diagnosed** : 10 Jul 2024 - Wes Davis  
**Test Package** : IND 2 ( Additional Tests: TAN Man )

**Petro Canada Lubricants Inc.**  
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 Contact: Kyle Blezard  
 kyle.blezard@HFSinclair.com  
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 F: (905)822-6025

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.