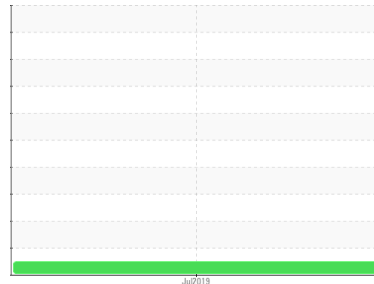




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Machine Id  
**TRPC DRAFT TUBE HPU**  
 Component  
**Hydraulic System**  
 Fluid  
**PETRO CANADA ENVIRON AW 32 (--- GAL)**

## DIAGNOSIS

### Recommendation

Confirm the source of the lubricant being utilized for top-up/fill. Resample at the next service interval to monitor. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample.

### 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

Additive levels indicate the addition of a different brand, or type of oil. 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>WC0306727</b>	---	---
Sample Date	Client Info		<b>25 Jul 2019</b>	---	---
Machine Age	yrs	Client Info	<b>0</b>	---	---
Oil Age	yrs	Client Info	<b>0</b>	---	---
Oil Changed	Client Info		<b>Not Chngd</b>	---	---
Sample Status			<b>NORMAL</b>	---	---

## CONTAMINATION

	method	limit/base	current	history1	history2
Water	WC Method	>0.05	<b>NEG</b>	---	---

## WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m) >20	<b>&lt;1</b>	---	---
Chromium	ppm	ASTM D5185(m) >20	<b>0</b>	---	---
Nickel	ppm	ASTM D5185(m) >20	<b>0</b>	---	---
Titanium	ppm	ASTM D5185(m)	<b>0</b>	---	---
Silver	ppm	ASTM D5185(m)	<b>0</b>	---	---
Aluminum	ppm	ASTM D5185(m) >20	<b>0</b>	---	---
Lead	ppm	ASTM D5185(m) >20	<b>&lt;1</b>	---	---
Copper	ppm	ASTM D5185(m) >20	<b>0</b>	---	---
Tin	ppm	ASTM D5185(m) >20	<b>0</b>	---	---
Antimony	ppm	ASTM D5185(m)	<b>0</b>	---	---
Vanadium	ppm	ASTM D5185(m)	<b>0</b>	---	---
Beryllium	ppm	ASTM D5185(m)	<b>0</b>	---	---
Cadmium	ppm	ASTM D5185(m)	<b>0</b>	---	---

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m) 0	<b>0</b>	---	---
Barium	ppm	ASTM D5185(m) 0	<b>0</b>	---	---
Molybdenum	ppm	ASTM D5185(m) 0	<b>0</b>	---	---
Manganese	ppm	ASTM D5185(m) 0	<b>&lt;1</b>	---	---
Magnesium	ppm	ASTM D5185(m) 0	<b>1</b>	---	---
Calcium	ppm	ASTM D5185(m) 0	<b>59</b>	---	---
Phosphorus	ppm	ASTM D5185(m) 650	<b>350</b>	---	---
Zinc	ppm	ASTM D5185(m) 0	<b>379</b>	---	---
Sulfur	ppm	ASTM D5185(m) 1280	<b>978</b>	---	---
Lithium	ppm	ASTM D5185(m)	<b>0</b>	---	---

## CONTAMINANTS

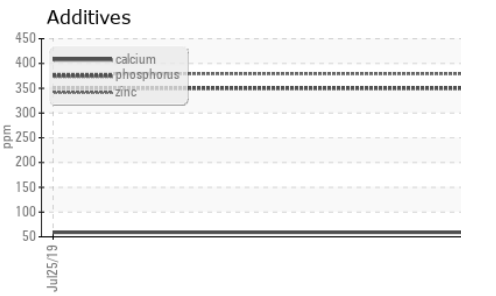
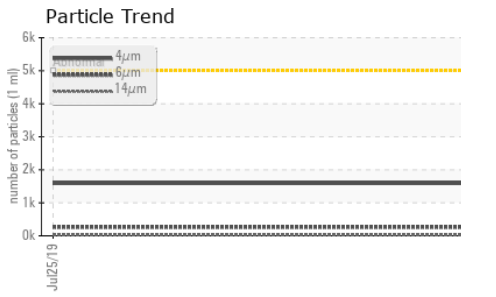
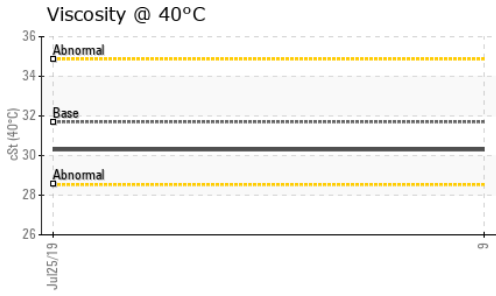
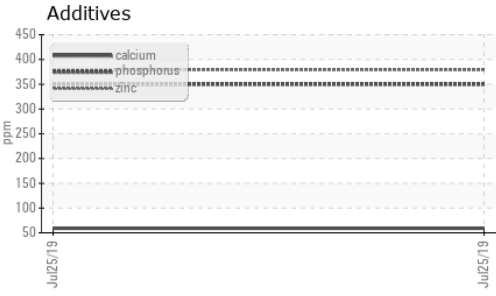
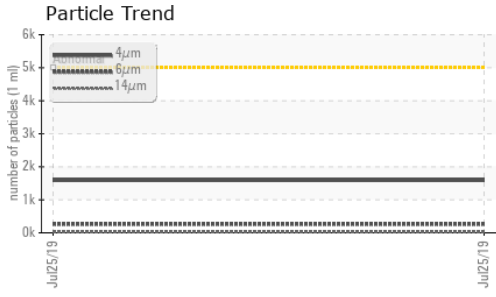
	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m) >15	<b>&lt;1</b>	---	---
Sodium	ppm	ASTM D5185(m)	<b>0</b>	---	---
Potassium	ppm	ASTM D5185(m) >20	<b>0</b>	---	---

## FLUID CLEANLINESS

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>5000	<b>1590</b>	---	---
Particles >6µm	ASTM D7647	>1300	<b>264</b>	---	---
Particles >14µm	ASTM D7647	>160	<b>18</b>	---	---
Particles >21µm	ASTM D7647	>40	<b>7</b>	---	---
Particles >38µm	ASTM D7647	>10	<b>1</b>	---	---
Particles >71µm	ASTM D7647	>3	<b>0</b>	---	---
Oil Cleanliness	ISO 4406 (c)	>19/17/14	<b>18/15/11</b>	---	---



# OIL ANALYSIS REPORT



FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974*	0.11	<b>0.429</b>	---	---

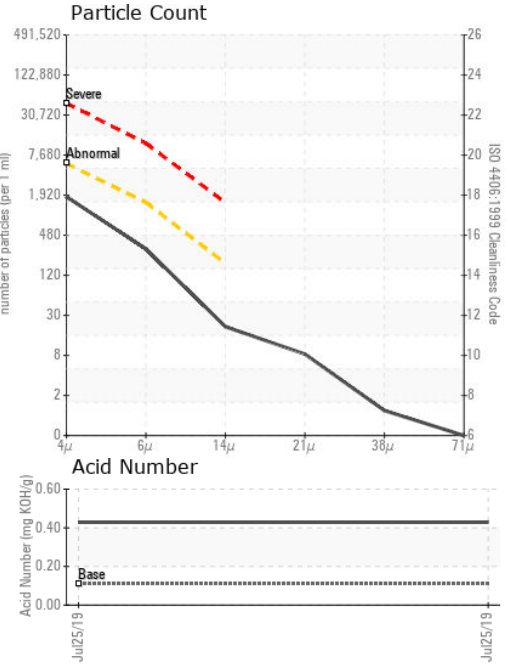
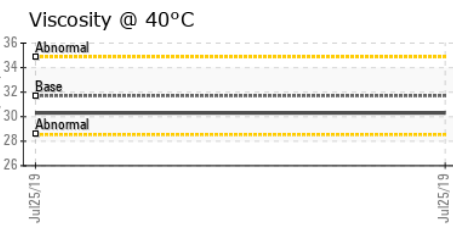
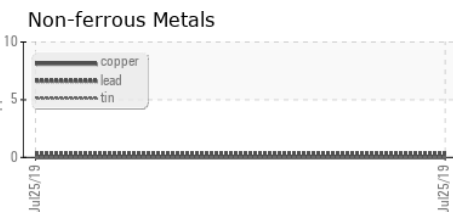
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	<b>NONE</b>	---	---
Yellow Metal	scalar	Visual*	NONE	<b>NONE</b>	---	---
Precipitate	scalar	Visual*	NONE	<b>NONE</b>	---	---
Silt	scalar	Visual*	NONE	<b>NONE</b>	---	---
Debris	scalar	Visual*	NONE	<b>VLITE</b>	---	---
Sand/Dirt	scalar	Visual*	NONE	<b>NONE</b>	---	---
Appearance	scalar	Visual*	NORML	<b>NORML</b>	---	---
Odor	scalar	Visual*	NORML	<b>NORML</b>	---	---
Emulsified Water	scalar	Visual*	>0.05	<b>NEG</b>	---	---
Free Water	scalar	Visual*		<b>NEG</b>	---	---

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	31.7	<b>30.3</b>	---	---

### SAMPLE IMAGES

method	limit/base	current	history1	history2
Color			no image	no image
Bottom			no image	no image

### GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : WC0306727 **Received** : 31 Jul 2019  
**Lab Number** : **02300140** **Diagnosed** : 01 Aug 2019  
**Unique Number** : 4903413 **Diagnostician** : Kevin Marson  
**Test Package** : IND 2

**PETERBOROUGH UTILITIES INC**  
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 CA K9L 1P8  
 Contact: Nelson Ross  
 nross@pui.ca  
 T: (705)760-6119  
 F: (705)748-3138

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.