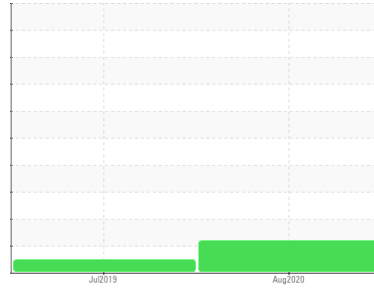




OIL ANALYSIS REPORT

Sample Rating Trend



ISO



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

DIAGNOSIS

Recommendation

We recommend you service the filters on this component. Confirm the source of the lubricant being utilized for top-up/fill. We recommend an early resample to monitor this condition. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample.

Wear

All component wear rates are normal.

Contamination

Particles >4µm are abnormally high. Particles >6µm are abnormally high. Particles >14µm are notably high.

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		WC0488629	WC0306727	---
Sample Date	Client Info		27 Aug 2020	25 Jul 2019	---
Machine Age	yrs	Client Info	10	0	---
Oil Age	yrs	Client Info	5	0	---
Oil Changed	Client Info		Not Changed	Not Changed	---
Sample Status			ABNORMAL	NORMAL	---

CONTAMINATION

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

WEAR METALS

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

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m) 0	<1	0	---
Barium	ppm	ASTM D5185(m) 0	0	0	---
Molybdenum	ppm	ASTM D5185(m) 0	0	0	---
Manganese	ppm	ASTM D5185(m) 0	0	<1	---
Magnesium	ppm	ASTM D5185(m) 0	<1	1	---
Calcium	ppm	ASTM D5185(m) 0	60	59	---
Phosphorus	ppm	ASTM D5185(m) 650	357	350	---
Zinc	ppm	ASTM D5185(m) 0	383	379	---
Sulfur	ppm	ASTM D5185(m) 1280	989	978	---
Lithium	ppm	ASTM D5185(m)	<1	0	---

CONTAMINANTS

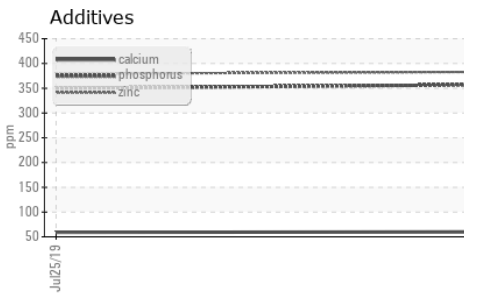
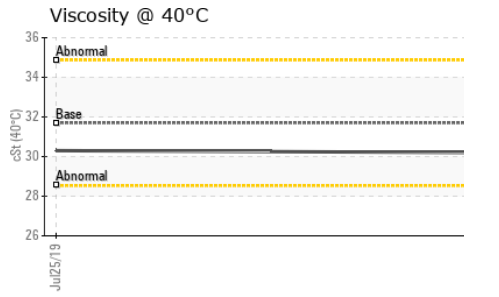
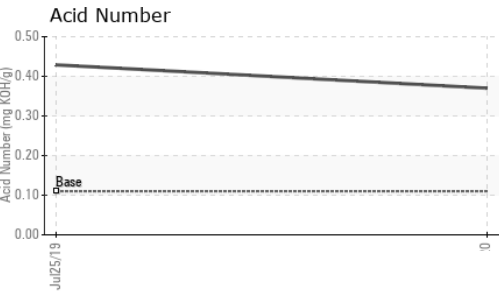
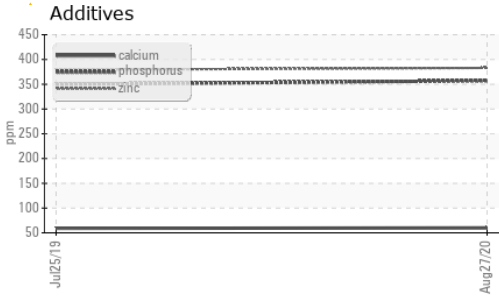
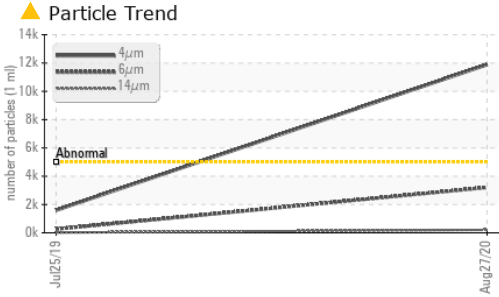
	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m) >15	0	<1	---
Sodium	ppm	ASTM D5185(m)	0	0	---
Potassium	ppm	ASTM D5185(m) >20	<1	0	---

FLUID CLEANLINESS

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>5000	▲ 11884	1590	---
Particles >6µm	ASTM D7647	>1300	▲ 3208	264	---
Particles >14µm	ASTM D7647	>160	▲ 207	18	---
Particles >21µm	ASTM D7647	>40	54	7	---
Particles >38µm	ASTM D7647	>10	2	1	---
Particles >71µm	ASTM D7647	>3	0	0	---
Oil Cleanliness	ISO 4406 (c)	>19/17/14	▲ 21/19/15	18/15/11	---



OIL ANALYSIS REPORT



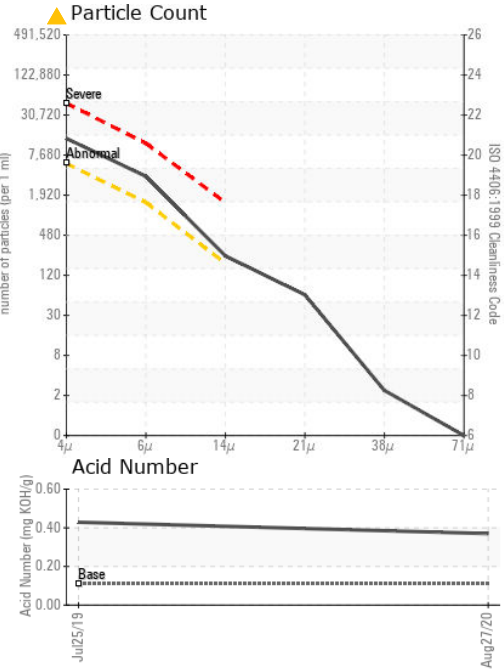
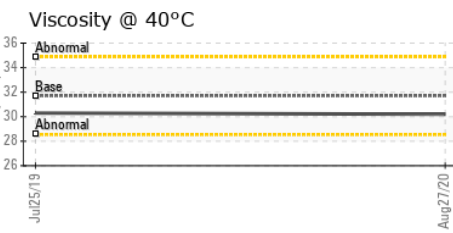
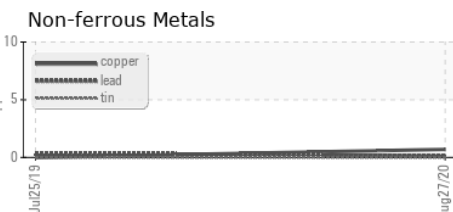
FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974*	0.11	0.37	0.429	---

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

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	31.7	30.2	30.3	---

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

GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0488629 **Received** : 01 Sep 2020
Lab Number : **02373511** **Diagnosed** : 02 Sep 2020
Unique Number : 5096959 **Diagnostician** : Kevin Marson
Test Package : IND 2

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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.