



# OIL ANALYSIS REPORT

Sample Rating Trend



ISO



## Machine Id GENERAL ELEC L.S. PLANT 1 UNIT 1 HPU

Component  
Pump Hydraulic System

Fluid  
PETRO CANADA ENDURATEX EP 68 (140 LTR)

### DIAGNOSIS

#### ▲ Recommendation

We recommend you service the filters on this component. We recommend an early resample to monitor this condition.

#### Wear

All component wear rates are normal.

#### ▲ Contamination

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

#### 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>WC0488596</b>	WC0306749	---
Sample Date	Client Info	<b>22 Jun 2021</b>	09 Jul 2019	---
Machine Age	hrs	Client Info	0	---
Oil Age	hrs	Client Info	8000	---
Oil Changed	Client Info	<b>Not Chngd</b>	Not Chngd	---
Sample Status		<b>ABNORMAL</b>	ABNORMAL	---

### CONTAMINATION

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

### WEAR METALS

method	limit/base	current	history1	history2		
Iron	ppm	ASTM D5185(m)	>20	<b>&lt;1</b>	<1	---
Chromium	ppm	ASTM D5185(m)	>20	<b>0</b>	0	---
Nickel	ppm	ASTM D5185(m)	>20	<b>&lt;1</b>	0	---
Titanium	ppm	ASTM D5185(m)		<b>0</b>	0	---
Silver	ppm	ASTM D5185(m)		<b>&lt;1</b>	0	---
Aluminum	ppm	ASTM D5185(m)	>20	<b>0</b>	0	---
Lead	ppm	ASTM D5185(m)	>20	<b>&lt;1</b>	<1	---
Copper	ppm	ASTM D5185(m)	>20	<b>1</b>	<1	---
Tin	ppm	ASTM D5185(m)	>20	<b>&lt;1</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)	69	<b>60</b>	62	---
Barium	ppm	ASTM D5185(m)	1	<b>&lt;1</b>	0	---
Molybdenum	ppm	ASTM D5185(m)	1	<b>0</b>	0	---
Manganese	ppm	ASTM D5185(m)	1	<b>0</b>	<1	---
Magnesium	ppm	ASTM D5185(m)	1	<b>0</b>	<1	---
Calcium	ppm	ASTM D5185(m)	1	<b>2</b>	1	---
Phosphorus	ppm	ASTM D5185(m)	246	<b>254</b>	262	---
Zinc	ppm	ASTM D5185(m)	1	<b>5</b>	4	---
Sulfur	ppm	ASTM D5185(m)	3670	<b>4359</b>	4527	---
Lithium	ppm	ASTM D5185(m)		<b>&lt;1</b>	0	---

### CONTAMINANTS

method	limit/base	current	history1	history2		
Silicon	ppm	ASTM D5185(m)	>15	<b>3</b>	<1	---
Sodium	ppm	ASTM D5185(m)		<b>&lt;1</b>	<1	---
Potassium	ppm	ASTM D5185(m)	>20	<b>0</b>	<1	---

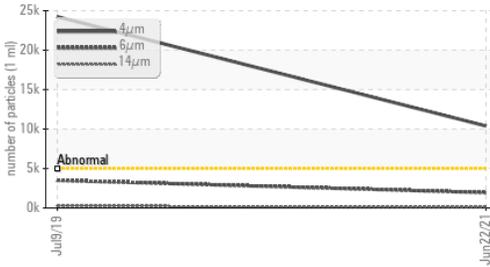
### FLUID CLEANLINESS

method	limit/base	current	history1	history2	
Particles >4µm	ASTM D7647	>5000	<b>▲ 10392</b>	▲ 24241	---
Particles >6µm	ASTM D7647	>1300	<b>▲ 1940</b>	▲ 3499	---
Particles >14µm	ASTM D7647	>160	<b>125</b>	▲ 255	---
Particles >21µm	ASTM D7647	>40	<b>29</b>	▲ 92	---
Particles >38µm	ASTM D7647	>10	<b>3</b>	5	---
Particles >71µm	ASTM D7647	>3	<b>0</b>	0	---
Oil Cleanliness	ISO 4406 (c)	>19/17/14	<b>▲ 21/18/14</b>	▲ 22/19/15	---

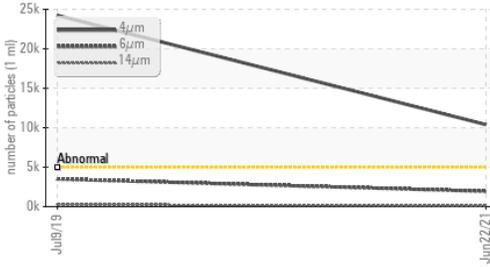


# OIL ANALYSIS REPORT

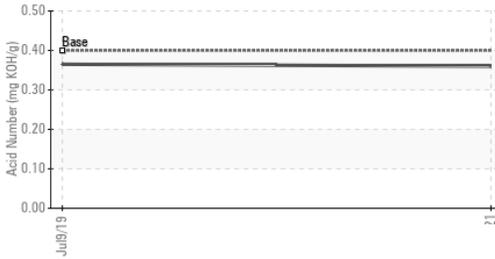
## Particle Trend



## Particle Trend



## Acid Number



## Viscosity @ 40°C



FLUID DEGRADATION	method	limit/base	current	history1	history2	
Acid Number (AN)	mg KOH/g	ASTM D974*	0.4	<b>0.36</b>	0.365	---

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

FLUID PROPERTIES	method	limit/base	current	history1	history2	
Visc @ 40°C	cSt	ASTM D7279(m)	68.0	<b>68.4</b>	69.4	---

## SAMPLE IMAGES



## GRAPHS

### Ferrous Alloys



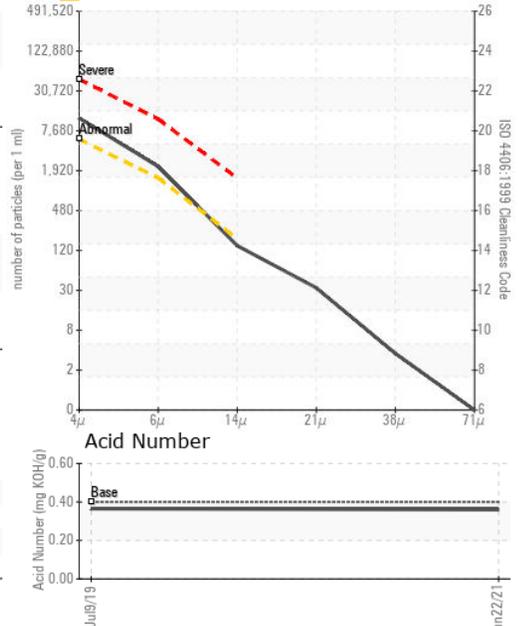
### Non-ferrous Metals



### Viscosity @ 40°C



### Particle Count



ISO 17025:2017  
Accredited  
Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
 Sample No. : WC0488596  
 Lab Number : 02429827  
 Unique Number : 5241328  
 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.