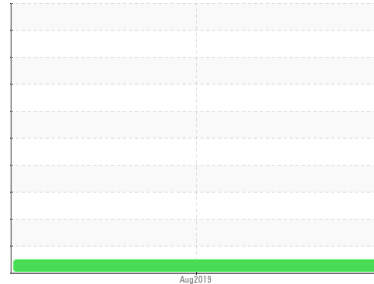




# OIL ANALYSIS REPORT

Sample Rating Trend

**NORMAL**



Machine Id  
**PLANT 1 23-HPU3**  
 Component  
**Pump Hydraulic System**  
 Fluid  
**PETRO CANADA SV 36 (60 GAL)**

## DIAGNOSIS

### Recommendation

Resample at the next service interval to monitor. The fluid was specified as PETRO CANADA SV 36, however, a fluid match indicates that this fluid is ISO 32 AW Hydraulic Oil. Please confirm the oil type and grade on your 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

The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

SAMPLE INFORMATION		method	limit/base	current	history 1	history 2
Sample Number	Client Info			<b>WC0373478</b>	---	---
Sample Date	Client Info			<b>14 Aug 2019</b>	---	---
Machine Age	hrs	Client Info		<b>0</b>	---	---
Oil Age	hrs	Client Info		<b>6000</b>	---	---
Oil Changed	Client Info			<b>Not Changed</b>	---	---
Sample Status				<b>NORMAL</b>	---	---

WEAR METALS		method	limit/base	current	history 1	history 2
Iron	ppm	ASTM D5185(m)	>20	<b>1</b>	---	---
Chromium	ppm	ASTM D5185(m)	>20	<b>&lt;1</b>	---	---
Nickel	ppm	ASTM D5185(m)	>20	<b>0</b>	---	---
Titanium	ppm	ASTM D5185(m)		<b>0</b>	---	---
Silver	ppm	ASTM D5185(m)		<b>&lt;1</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>7</b>	---	---
Tin	ppm	ASTM D5185(m)	>20	<b>1</b>	---	---
Antimony	ppm	ASTM D5185(m)		<b>&lt;1</b>	---	---
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	---	---
Beryllium	ppm	ASTM D5185(m)		<b>0</b>	---	---
Cadmium	ppm	ASTM D5185(m)		<b>2</b>	---	---

ADDITIVES		method	limit/base	current	history 1	history 2
Boron	ppm	ASTM D5185(m)		<b>&lt;1</b>	---	---
Barium	ppm	ASTM D5185(m)		<b>&lt;1</b>	---	---
Molybdenum	ppm	ASTM D5185(m)		<b>0</b>	---	---
Manganese	ppm	ASTM D5185(m)		<b>0</b>	---	---
Magnesium	ppm	ASTM D5185(m)		<b>&lt;1</b>	---	---
Calcium	ppm	ASTM D5185(m)		<b>99</b>	---	---
Phosphorus	ppm	ASTM D5185(m)		<b>227</b>	---	---
Zinc	ppm	ASTM D5185(m)		<b>302</b>	---	---
Sulfur	ppm	ASTM D5185(m)		<b>543</b>	---	---
Lithium	ppm	ASTM D5185(m)		<b>&lt;1</b>	---	---

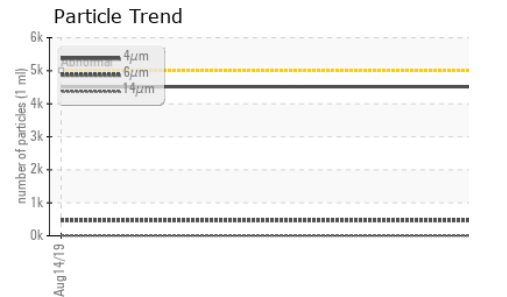
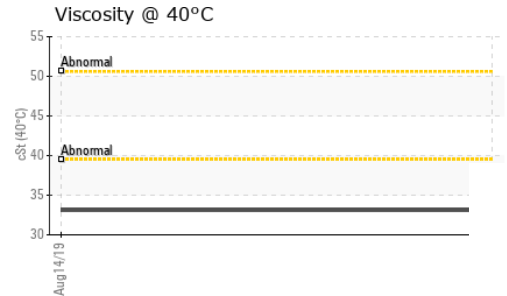
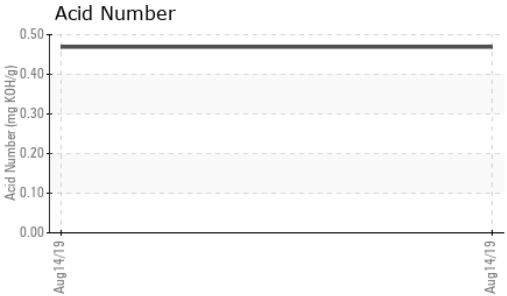
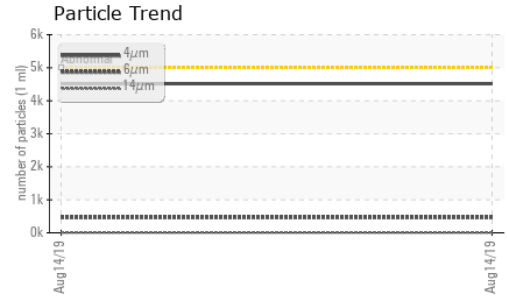
CONTAMINANTS		method	limit/base	current	history 1	history 2
Silicon	ppm	ASTM D5185(m)	>15	<b>0</b>	---	---
Sodium	ppm	ASTM D5185(m)		<b>0</b>	---	---
Potassium	ppm	ASTM D5185(m)	>20	<b>&lt;1</b>	---	---

FLUID CLEANLINESS		method	limit/base	current	history 1	history 2
Particles >4µm		ASTM D7647	>5000	<b>4517</b>	---	---
Particles >6µm		ASTM D7647	>1300	<b>466</b>	---	---
Particles >14µm		ASTM D7647	>160	<b>8</b>	---	---
Particles >21µm		ASTM D7647	>40	<b>2</b>	---	---
Particles >38µm		ASTM D7647	>10	<b>0</b>	---	---
Particles >71µm		ASTM D7647	>3	<b>0</b>	---	---
Oil Cleanliness		ISO 4406 (c)	>19/17/14	<b>19/16/10</b>	---	---

FLUID DEGRADATION		method	limit/base	current	history 1	history 2
Acid Number (AN)	mg KOH/g	ASTM D974*		<b>0.469</b>	---	---



# OIL ANALYSIS REPORT



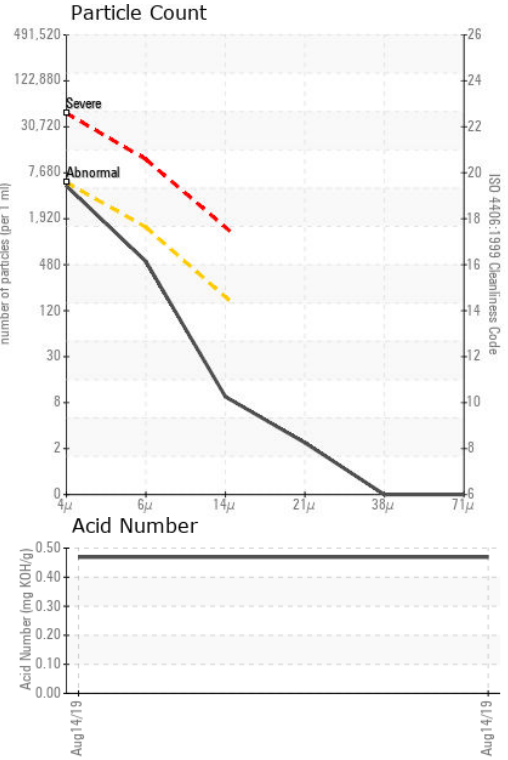
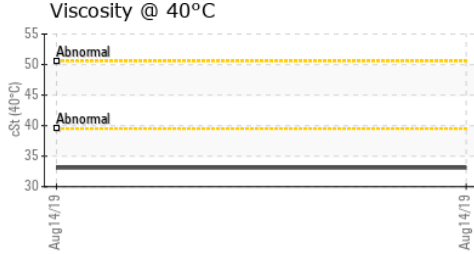
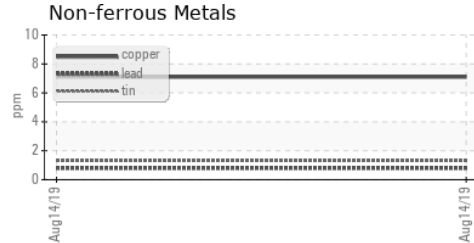
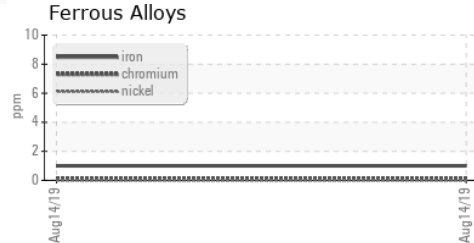
VISUAL	method	limit/base	current	history 1	history 2	
White Metal	scalar	Visual*	NONE	NONE	---	---
Yellow Metal	scalar	Visual*	NONE	NONE	---	---
Precipitate	scalar	Visual*	NONE	NONE	---	---
Silt	scalar	Visual*	NONE	NONE	---	---
Debris	scalar	Visual*	NONE	NONE	---	---
Sand/Dirt	scalar	Visual*	NONE	NONE	---	---
Appearance	scalar	Visual*	NORML	NORML	---	---
Odor	scalar	Visual*	NORML	NORML	---	---
Emulsified Water	scalar	Visual*	>0.05	NEG	---	---
Free Water	scalar	Visual*		NEG	---	---

FLUID PROPERTIES	method	limit/base	current	history 1	history 2
Visc @ 40°C	cSt	ASTM D7279(m)	<b>33.1</b>	---	---

SAMPLE IMAGES	method	limit/base	current	history 1	history 2
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Color				no image	no image
Bottom				no image	no image

## GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : WC0373478 **Received** : 15 Aug 2019  
**Lab Number** : **02302838** **Diagnosed** : 16 Aug 2019  
**Unique Number** : 4914114 **Diagnostician** : Kevin Marson  
**Test Package** : IND 2

**PETERBOROUGH UTILITIES INC**  
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 CA K9L 1P8  
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 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.