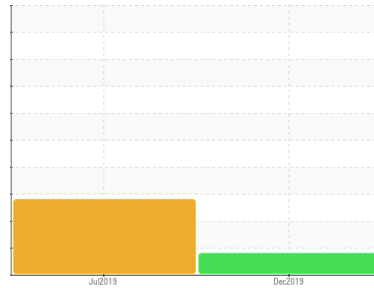




# OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Machine Id

**BARREL**

Component

**Hydraulic System**

Fluid

**AW HYDRAULIC OIL ISO 32 (--- LTR)**

## DIAGNOSIS

### Recommendation

Little or no information is provided as to the component and lubricant being tested. Recommendations are therefore generic in nature and may not apply to the current application. Please forward information as to equipment type, reservoir capacity, lubricant type and any pertinent information to allow for a more accurate assessment. We recommend you service the filters on this component. We recommend an early resample to monitor this condition. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample. Please specify the brand, type, and viscosity of the oil on your next sample.

### Wear

All component wear rates are normal.

### Contamination

Particles >4µm are abnormally high. Particles >6µm are abnormally high. MPC (Membrane Patch Colorimetry) test indicates acceptable levels of varnish present. The system cleanliness is above the acceptable limit for the target ISO 4406 cleanliness code.

### 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>WC0312714</b>	PP0312718	---
Sample Date	Client Info	<b>21 Dec 2019</b>	06 Jul 2019	---
Machine Age	hrs	Client Info	0	---
Oil Age	hrs	Client Info	0	---
Oil Changed	Client Info	<b>N/A</b>	N/A	---
Sample Status		<b>ABNORMAL</b>	SEVERE	---

## 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)	>10	<b>0</b>	0	---
Nickel	ppm	ASTM D5185(m)	>10	<b>0</b>	<1	---
Titanium	ppm	ASTM D5185(m)		<b>0</b>	0	---
Silver	ppm	ASTM D5185(m)		<b>0</b>	0	---
Aluminum	ppm	ASTM D5185(m)	>10	<b>&lt;1</b>	<1	---
Lead	ppm	ASTM D5185(m)	>20	<b>0</b>	<1	---
Copper	ppm	ASTM D5185(m)	>20	<b>1</b>	1	---
Tin	ppm	ASTM D5185(m)	>10	<b>0</b>	0	---
Antimony	ppm	ASTM D5185(m)		<b>&lt;1</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>	<1	---

## ADDITIVES

method	limit/base	current	history1	history2		
Boron	ppm	ASTM D5185(m)	5	<b>&lt;1</b>	0	---
Barium	ppm	ASTM D5185(m)	5	<b>0</b>	0	---
Molybdenum	ppm	ASTM D5185(m)	5	<b>0</b>	0	---
Manganese	ppm	ASTM D5185(m)		<b>0</b>	<1	---
Magnesium	ppm	ASTM D5185(m)	25	<b>0</b>	<1	---
Calcium	ppm	ASTM D5185(m)	200	<b>18</b>	18	---
Phosphorus	ppm	ASTM D5185(m)	300	<b>335</b>	327	---
Zinc	ppm	ASTM D5185(m)	370	<b>290</b>	295	---
Sulfur	ppm	ASTM D5185(m)	2500	<b>3350</b>	3393	---
Lithium	ppm	ASTM D5185(m)		<b>&lt;1</b>	0	---

## CONTAMINANTS

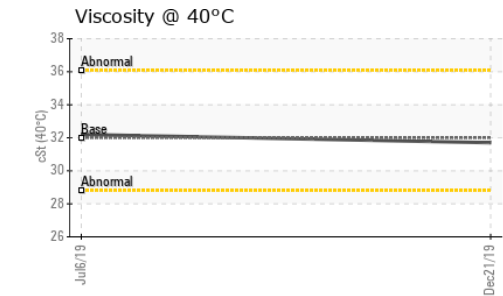
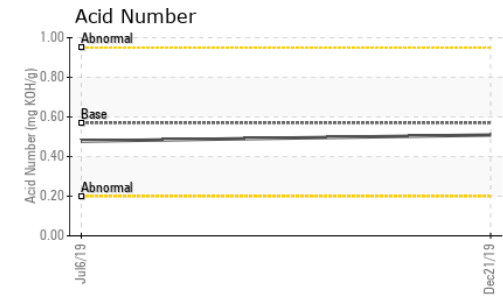
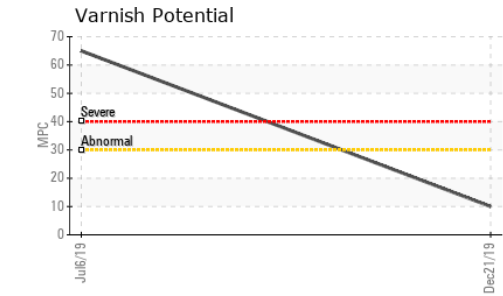
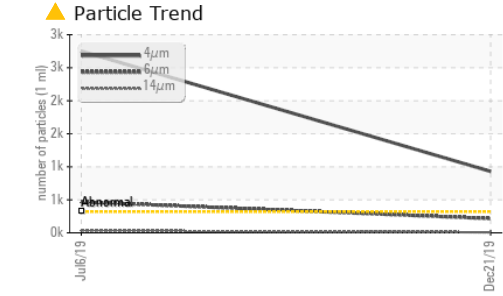
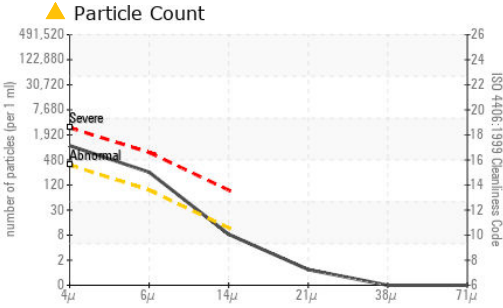
method	limit/base	current	history1	history2		
Silicon	ppm	ASTM D5185(m)	>15	<b>&lt;1</b>	<1	---
Sodium	ppm	ASTM D5185(m)		<b>&lt;1</b>	1	---
Potassium	ppm	ASTM D5185(m)	>20	<b>&lt;1</b>	<1	---

## FLUID CLEANLINESS

method	limit/base	current	history1	history2	
Particles >4µm	ASTM D7647	>320	<b>▲ 930</b>	● 2752	---
Particles >6µm	ASTM D7647	>80	<b>▲ 215</b>	▲ 467	---
Particles >14µm	ASTM D7647	>10	<b>7</b>	▲ 33	---
Particles >21µm	ASTM D7647	>3	<b>1</b>	▲ 10	---
Particles >38µm	ASTM D7647	>3	<b>0</b>	1	---
Particles >71µm	ASTM D7647	>3	<b>0</b>	0	---
Oil Cleanliness	ISO 4406 (c)	>15/13/10	<b>▲ 17/15/10</b>	● 19/16/12	---



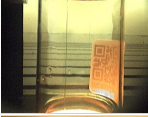

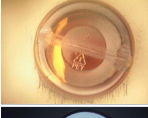
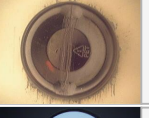


# OIL ANALYSIS REPORT



FLUID DEGRADATION	method	limit/base	current	history1	history2	
Acid Number (AN)	mg KOH/g	ASTM D974*	0.57	<b>0.509</b>	0.478	---
MPC Varnish Potential	Scale	ASTM D7843(m)*	>15	<b>10</b>	65	---

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>NONE</b>	NONE	---
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)	32	<b>31.7</b>	32.2	---

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



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : WC0312714  
**Lab Number** : **02329115**  
**Unique Number** : 4980418  
**Test Package** : IND 2 ( Additional Tests: MPC, TAN Man )  
 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.

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MPC (Varnish Test)



Sample Color & Clarity



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