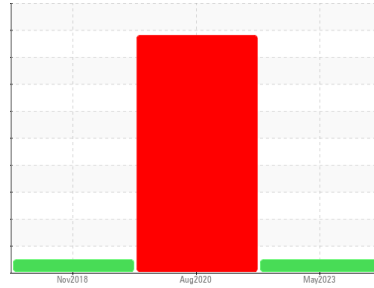




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Area  
**LSGS PLANT 2**  
 Machine Id  
**G4 HPU**

Component  
**Pump Hydraulic System**  
 Fluid

**PETRO CANADA ENVIRON AW 32 (200 LTR)**

## DIAGNOSIS

### Recommendation

Resample at the next service interval to monitor.

### 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	history1	history2
Sample Number	Client Info		<b>WC0774036</b>	WC0373472	WC985019
Sample Date	Client Info		<b>18 May 2023</b>	12 Aug 2020	14 Nov 2018
Machine Age	yrs	Client Info	<b>8</b>	18714	7664
Oil Age	yrs	Client Info	<b>2</b>	2942	7664
Oil Changed	Client Info		<b>Not Changed</b>	Not Changed	Not Changed
Sample Status			<b>NORMAL</b>	SEVERE	NORMAL

## CONTAMINATION

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

## WEAR METALS

	method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185(m)	>20	<b>2</b>	2	<1
Chromium	ppm	ASTM D5185(m)	>20	<b>0</b>	<1	0
Nickel	ppm	ASTM D5185(m)	>20	<b>0</b>	0	<1
Titanium	ppm	ASTM D5185(m)		<b>0</b>	0	0
Silver	ppm	ASTM D5185(m)		<b>0</b>	0	0
Aluminum	ppm	ASTM D5185(m)	>20	<b>&lt;1</b>	0	0
Lead	ppm	ASTM D5185(m)	>20	<b>0</b>	0	0
Copper	ppm	ASTM D5185(m)	>20	<b>&lt;1</b>	<1	0
Tin	ppm	ASTM D5185(m)	>20	<b>0</b>	0	0
Antimony	ppm	ASTM D5185(m)		<b>&lt;1</b>	<1	0
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	0	0
Beryllium	ppm	ASTM D5185(m)		<b>0</b>	0	0
Cadmium	ppm	ASTM D5185(m)		<b>0</b>	0	0

## ADDITIVES

	method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185(m)	0	<b>&lt;1</b>	<1	<1
Barium	ppm	ASTM D5185(m)	0	<b>&lt;1</b>	<1	<1
Molybdenum	ppm	ASTM D5185(m)	0	<b>0</b>	0	<1
Manganese	ppm	ASTM D5185(m)	0	<b>0</b>	0	<1
Magnesium	ppm	ASTM D5185(m)	0	<b>0</b>	<1	1
Calcium	ppm	ASTM D5185(m)	0	<b>5</b>	<1	<1
Phosphorus	ppm	ASTM D5185(m)	650	<b>566</b>	555	517
Zinc	ppm	ASTM D5185(m)	0	<b>64</b>	8	4
Sulfur	ppm	ASTM D5185(m)	1280	<b>1238</b>	1216	1227
Lithium	ppm	ASTM D5185(m)		<b>&lt;1</b>	<1	0

## CONTAMINANTS

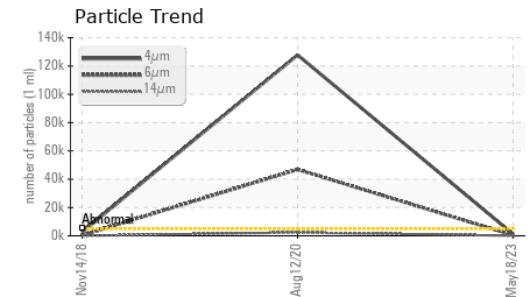
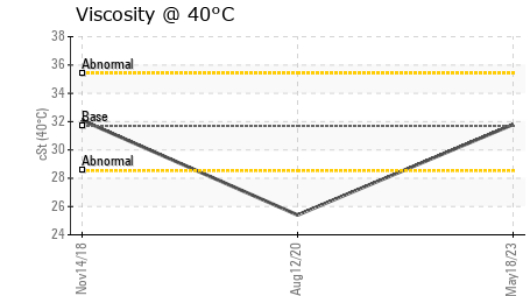
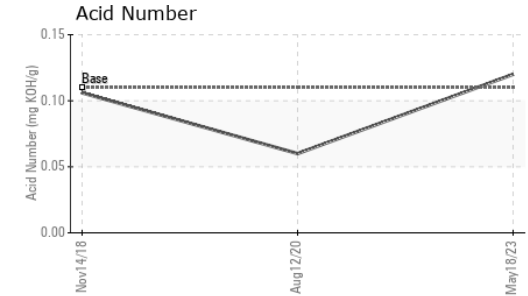
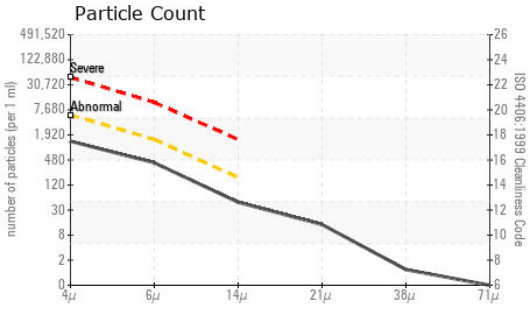
	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185(m)	>15	<b>&lt;1</b>	<1	<1
Sodium	ppm	ASTM D5185(m)		<b>0</b>	0	0
Potassium	ppm	ASTM D5185(m)	>20	<b>0</b>	<1	0

## FLUID CLEANLINESS

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>5000	<b>1188</b>	127797	2683
Particles >6µm	ASTM D7647	>1300	<b>361</b>	46844	386
Particles >14µm	ASTM D7647	>160	<b>41</b>	2377	22
Particles >21µm	ASTM D7647	>40	<b>12</b>	584	6
Particles >38µm	ASTM D7647	>10	<b>1</b>	19	0
Particles >71µm	ASTM D7647	>3	<b>0</b>	2	0
Oil Cleanliness	ISO 4406 (c)	>19/17/14	<b>17/16/13</b>	24/23/18	19/16/12



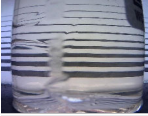


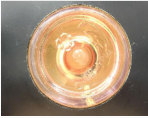



# OIL ANALYSIS REPORT



FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974*	0.11	<b>0.12</b>	0.06	0.106

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

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	31.7	<b>31.8</b>	▲ 25.4	32.1

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



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : WC0774036 **Received** : 29 May 2023  
**Lab Number** : **02560186** **Diagnosed** : 30 May 2023  
**Unique Number** : 5581226 **Diagnostician** : Wes Davis  
**Test Package** : IND 2 ( Additional Tests: TAN Man )

**PETERBOROUGH UTILITIES INC**  
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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.