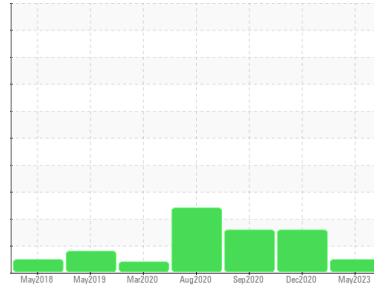




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Area
CAMPBELLFORD PLANT 2
 Machine Id
G2 GEARBOX
 Component
Gearbox
 Fluid
FUCHS RENOLIN CLP ISO 320 (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		WC0736387	WC0423426	WC0423438
Sample Date	Client Info		17 May 2023	17 Dec 2020	29 Sep 2020
Machine Age	yrs	Client Info	25	97913	196548
Oil Age	yrs	Client Info	2	0	7028
Oil Changed	Client Info		Not Chngd	N/A	N/A
Sample Status			NORMAL	ABNORMAL	ABNORMAL

WEAR METALS

	method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185(m)	>200	25	13	60
Chromium	ppm	ASTM D5185(m)	>15	<1	<1	<1
Nickel	ppm	ASTM D5185(m)	>15	0	<1	<1
Titanium	ppm	ASTM D5185(m)		0	0	0
Silver	ppm	ASTM D5185(m)		0	<1	0
Aluminum	ppm	ASTM D5185(m)	>25	<1	<1	3
Lead	ppm	ASTM D5185(m)	>100	0	0	0
Copper	ppm	ASTM D5185(m)	>200	<1	<1	2
Tin	ppm	ASTM D5185(m)	>25	0	0	0
Antimony	ppm	ASTM D5185(m)	>5	0	0	<1
Vanadium	ppm	ASTM D5185(m)		0	0	0
Beryllium	ppm	ASTM D5185(m)		0	0	0
Cadmium	ppm	ASTM D5185(m)		0	0	0

ADDITIVES

	method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185(m)		7	8	5
Barium	ppm	ASTM D5185(m)		0	0	<1
Molybdenum	ppm	ASTM D5185(m)		2	2	10
Manganese	ppm	ASTM D5185(m)		<1	<1	<1
Magnesium	ppm	ASTM D5185(m)		2	2	7
Calcium	ppm	ASTM D5185(m)		0	<1	<1
Phosphorus	ppm	ASTM D5185(m)		350	310	292
Zinc	ppm	ASTM D5185(m)		17	9	46
Sulfur	ppm	ASTM D5185(m)		13642	14471	6160
Lithium	ppm	ASTM D5185(m)		<1	<1	1

CONTAMINANTS

	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185(m)	>50	4	3	10
Sodium	ppm	ASTM D5185(m)		0	0	0
Potassium	ppm	ASTM D5185(m)	>20	<1	<1	<1

FLUID CLEANLINESS

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>20000	11301	▲ 86105	▲ 112147
Particles >6µm	ASTM D7647	>5000	829	▲ 15313	▲ 30044
Particles >14µm	ASTM D7647	>640	24	▲ 1296	▲ 1929
Particles >21µm	ASTM D7647	>160	5	▲ 354	▲ 469
Particles >38µm	ASTM D7647	>40	1	25	23
Particles >71µm	ASTM D7647	>10	0	1	0
Oil Cleanliness	ISO 4406 (c)	>21/19/16	21/17/12	▲ 24/21/17	▲ 24/22/18

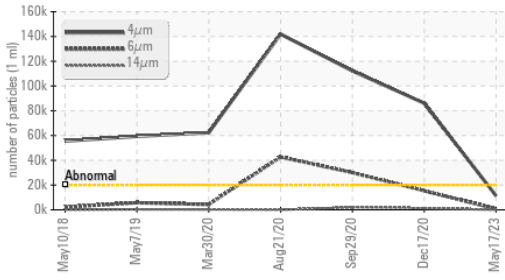
FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974*	0.65	0.54	0.58

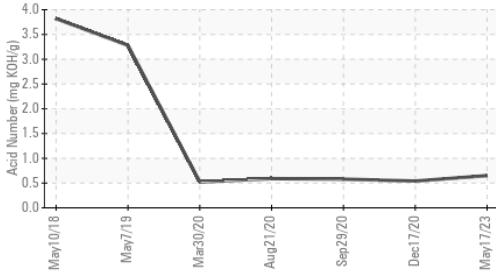


OIL ANALYSIS REPORT

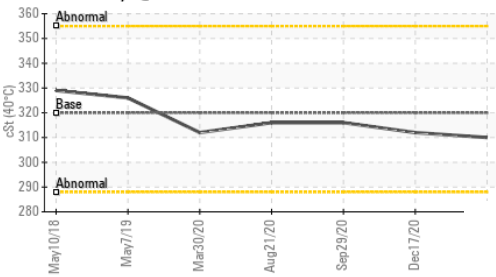
Particle Trend



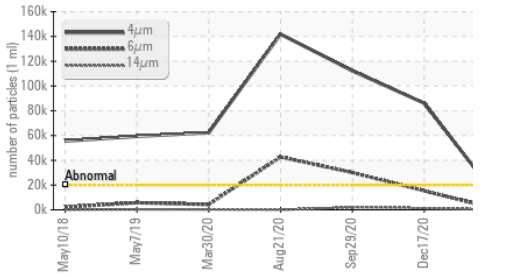
Acid Number



Viscosity @ 40°C



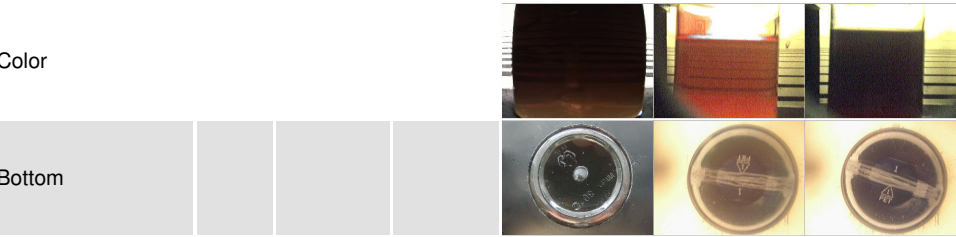
Particle Trend



VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	NONE	NONE
Yellow Metal	scalar	Visual*	NONE	NONE	NONE
Precipitate	scalar	Visual*	NONE	NONE	NONE
Silt	scalar	Visual*	NONE	NONE	NONE
Debris	scalar	Visual*	NONE	NONE	NONE
Sand/Dirt	scalar	Visual*	NONE	NONE	NONE
Appearance	scalar	Visual*	NORML	NORML	NORML
Odor	scalar	Visual*	NORML	NORML	NORML
Emulsified Water	scalar	Visual*	>0.2	NEG	NEG
Free Water	scalar	Visual*		NEG	NEG

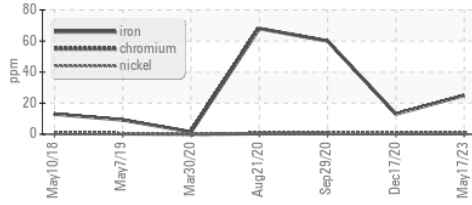
FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	320	310	312

SAMPLE IMAGES	method	limit/base	current	history1	history2
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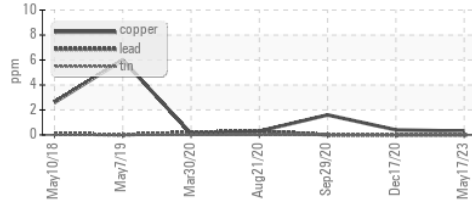


GRAPHS

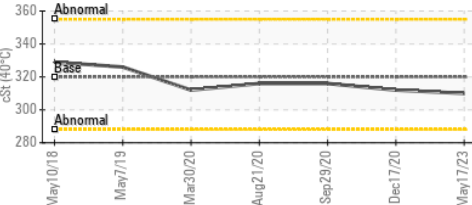
Ferrous Alloys



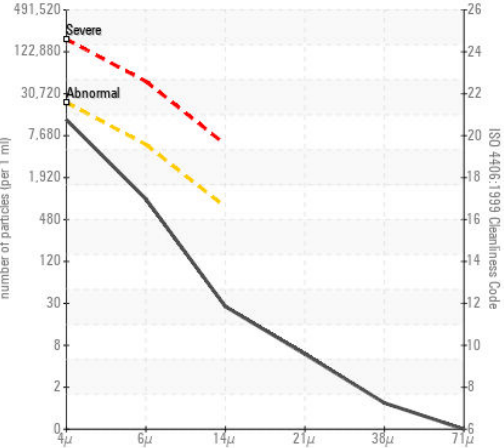
Non-ferrous Metals



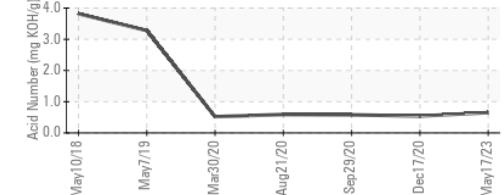
Viscosity @ 40°C



Particle Count



Acid Number



ISO 17025:2017
Accredited
Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
 Sample No. : WC0736387
 Lab Number : 02560390
 Unique Number : 5581430
 Test Package : IND 2 (Additional Tests: PrtCount, TAN Man)

PETERBOROUGH UTILITIES INC
 1867 ASHBURNHAM DRIVE
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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.