

PROBLEM SUMMARY

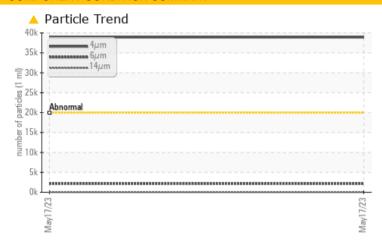
CAMPBELLFORD PLANT 2 Machine Id G1 GEARBOX

Component **Gearbox**

FUCHS RENOLIN CLP ISO 320 (200 LTR)

Sample Rating Trend ISO

COMPONENT CONDITION SUMMARY



RECOMMENDATION

We recommend you service the filters on this component. Resample at the next service interval to monitor.

PROBLEMATIC T	EST RESULTS			
Sample Status			ATTENTION	
Particles >4µm	ASTM D7647	>20000	38900	
Oil Cleanliness	ISO 4406 (c)	>21/19/16	A 22/18/12	

Customer Id: PET412PET Sample No.: WC0736384 Lab Number: 02560391 Test Package: IND 2

To manage this report scan the QR code

To discuss the diagnosis or test data: Wes Davis +1 905-569-8600 x223 wesd@wearcheck.ca

To change component or sample information: Gloria Gonzalez +1 (289)291-4643 x4643 gloria.gonzalez@wearcheck.com

RECOMMENDED ACTIONS					
Action	Status	Date	Done By	Description	
Change Filter			?	We recommend you service the filters on this component.	

HISTORICAL DIAGNOSIS



OIL ANALYSIS REPORT

CAMPBELLFORD PLANT 2 **G1 GEARBOX**

Component

Gearbox

FUCHS RENOLIN CLP ISO 320 (200 LTR)

Sample Rating Trend ISO

DIAGNOSIS

Recommendation

We recommend you service the filters on this component. Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

There is a light amount of silt (particulates < 14 microns in size) present in the oil.

Fluid Condition

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

Sample Date Client Info 17 May 2023					May2023		
Client Info 17 May 2023	SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Machine Age yrs Client Info 25	Sample Number		Client Info		WC0736384		
Oil Age	Sample Date		Client Info		17 May 2023		
Client Info Not Changd ATTENTION	Machine Age	yrs	Client Info		25		
MEAR METALS method limit/base current history1 history2	Oil Age	yrs	Client Info		2		
WEAR METALS method limit/base current history1 history2 Iron ppm ASTM D5185(m) >200 18	Oil Changed		Client Info		Not Changd		
Chromium	Sample Status				ATTENTION		
Chromium ppm ASTM D5185(m) >15 0 Nickel ppm ASTM D5185(m) >15 0 Silver ppm ASTM D5185(m) 0 ALuminum ppm ASTM D5185(m) >25 <1	WEAR METALS		method	limit/base	current	history1	history2
Nickel ppm ASTM D5185(m) >15 0	Iron	ppm	ASTM D5185(m)	>200	18		
Description	Chromium	ppm	ASTM D5185(m)	>15	0		
Silver	Nickel	ppm	ASTM D5185(m)	>15	0		
Aluminum ppm ASTM D5185(m) >2.5 <1	Titanium	ppm	ASTM D5185(m)		0		
Lead ppm ASTM D518S(m) >100 <1	Silver	ppm	ASTM D5185(m)		0		
Copper	Aluminum	ppm	ASTM D5185(m)	>25	<1		
Trin ppm ASTM D5185(m) >2.5 0	Lead	ppm	ASTM D5185(m)	>100	<1		
Antimony ppm ASTM D5185(m) >5 <1	Copper	ppm	ASTM D5185(m)	>200	<1		
Vanadium ppm ASTM D5185(m) 0	Tin	ppm	ASTM D5185(m)	>25	0		
Beryllium	Antimony	ppm	ASTM D5185(m)	>5	<1		
Cadmium ppm ASTM D5185(m) <1 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185(m) 8 Barium ppm ASTM D5185(m) 0 Molybdenum ppm ASTM D5185(m) 10 Manganese ppm ASTM D5185(m) 7 Magnesium ppm ASTM D5185(m) 6 Calcium ppm ASTM D5185(m) 331 Phosphorus ppm ASTM D5185(m) 10 Zinc ppm ASTM D5185(m) 10 Sulfur ppm ASTM D5185(m) 11773 Lithium ppm ASTM D5185(m) >50 8 CONTAMINANTS method limit/base curr	Vanadium	ppm	ASTM D5185(m)		0		
Boron ppm ASTM D5185(m) 8 Barium ppm ASTM D5185(m) 0 Molybdenum ppm ASTM D5185(m) 10 Manganese ppm ASTM D5185(m) 7 Magnesium ppm ASTM D5185(m) 7 Calcium ppm ASTM D5185(m) 6 Phosphorus ppm ASTM D5185(m) 331 Zinc ppm ASTM D5185(m) 10 Sulfur ppm ASTM D5185(m) 11773 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185(m) >50 8 FLUID CLEANLINESS method limit/base current history1 history2 Particles > 4µm ASTM D5185(m) >20 1 Particles > 14µm ASTM D7647 >640 31 Particles > 21µm ASTM D7647 >40 0 Particles > 38µm ASTM D7647 >40 0 Particles > 71µm ASTM D7647 >10 0 Oil Cleanliness ISO 4406 (c) >21/19/16 22/18/12 Oil Cleanliness ISO 4406 (c) >21/19/16 22/18/12 Oil Cleanliness ISO 4406 (c) >21/19/16 22/18/12 Oil Cleanliness ISO 4406 (c) >21/19/16 22/18/12 Oil Cleanliness ISO 4406 (c) >21/19/16 22/18/12 Oil Cleanliness ISO 4406 (c) >21/19/16 22/18/12	Beryllium	ppm	ASTM D5185(m)		0		
Boron ppm ASTM D5185(m) 0	Cadmium	ppm	ASTM D5185(m)		<1		
Barium ppm ASTM D5185(m) 10	ADDITIVES		method	limit/base	current	history1	history2
Molybdenum	Boron	ppm	ASTM D5185(m)		8		
Manganese ppm ASTM D5185(m) -1 Magnesium ppm ASTM D5185(m) 7 Calcium ppm ASTM D5185(m) 6 Phosphorus ppm ASTM D5185(m) 10 Zinc ppm ASTM D5185(m) 11773 Sulfur ppm ASTM D5185(m) <1	Barium	ppm	ASTM D5185(m)		0		
Magnesium ppm ASTM D5185(m) 7 Calcium ppm ASTM D5185(m) 6 Phosphorus ppm ASTM D5185(m) 10 Zinc ppm ASTM D5185(m) 11773 Sulfur ppm ASTM D5185(m) <1	Molybdenum	ppm	ASTM D5185(m)		10		
Calcium ppm ASTM D5185(m) 6 Phosphorus ppm ASTM D5185(m) 331 Zinc ppm ASTM D5185(m) 10 Sulfur ppm ASTM D5185(m) 11773 Lithium ppm ASTM D5185(m) <1	Manganese	ppm	ASTM D5185(m)		<1		
Phosphorus ppm ASTM D5185(m) 331 Zinc ppm ASTM D5185(m) 10 Sulfur ppm ASTM D5185(m) 11773 Lithium ppm ASTM D5185(m) <1	Magnesium	ppm	ASTM D5185(m)		7		
Zinc ppm ASTM D5185(m) 110 Sulfur ppm ASTM D5185(m) 11773	Calcium	ppm	ASTM D5185(m)		6		
Sulfur ppm ASTM D5185(m) 11773	Phosphorus	ppm	ASTM D5185(m)		331		
Lithium ppm ASTM D5185(m) <1	Zinc	ppm	ASTM D5185(m)		10		
CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185(m) >50 8 Sodium ppm ASTM D5185(m) 0 Potassium ppm ASTM D5185(m) >20 1 FLUID CLEANLINESS method limit/base current history1 history2 Particles >4μm ASTM D7647 >20000 Δ8900 Particles >6μm ASTM D7647 >5000 2144 Particles >14μm ASTM D7647 >640 31 Particles >21μm ASTM D7647 >160 11 Particles >71μm ASTM D7647 >10 0 Oil Cleanliness ISO 4406 (c) >21/19/16 22/18/12	Sulfur	ppm	ASTM D5185(m)		11773		
Silicon ppm ASTM D5185(m) >50 8 Sodium ppm ASTM D5185(m) 0 Sodium ppm ASTM D5185(m) 0 Sodium ppm ASTM D5185(m) >20 1 STLUID CLEANLINESS method limit/base current history1 history2 Particles >4µm ASTM D7647 >20000 ▲ 38900 STRUID STAND D7647 >5000 2144 STAND D7647 >640 31 STAND D7647 >640 31 STAND D7647 >160 11 STAND D7647 >160 11 STAND D7647 >40 0 STAND D7647 >10 0 STAND D7647 >10 O ST	Lithium	ppm	ASTM D5185(m)		<1		
Sodium ppm ASTM D5185(m) 0 Potassium ppm ASTM D5185(m) >20 1 FLUID CLEANLINESS method limit/base current history1 history2 Particles >4μm ASTM D7647 >20000 38900 Particles >6μm ASTM D7647 >5000 2144 Particles >14μm ASTM D7647 >640 31 Particles >21μm ASTM D7647 >160 11 Particles >38μm ASTM D7647 >40 0 Particles >71μm ASTM D7647 >10 0 Oil Cleanliness ISO 4406 (c) >21/19/16 22/18/12	CONTAMINANTS	3	method	limit/base	current	history1	history2
Sodium ppm ASTM D5185(m) 0 Potassium ppm ASTM D5185(m) >20 1 FLUID CLEANLINESS method limit/base current history1 history2 Particles >4μm ASTM D7647 >20000 38900 Particles >6μm ASTM D7647 >5000 2144 Particles >14μm ASTM D7647 >640 31 Particles >21μm ASTM D7647 >160 11 Particles >38μm ASTM D7647 >40 0 Particles >71μm ASTM D7647 >10 0 Oil Cleanliness ISO 4406 (c) >21/19/16 22/18/12	Silicon	ppm	ASTM D5185(m)	>50	8		
Potassium ppm ASTM D5185(m) >20 1 FLUID CLEANLINESS method limit/base current history1 history2 Particles >4μm ASTM D7647 >20000 ▲ 38900 Particles >6μm ASTM D7647 >5000 2144 Particles >14μm ASTM D7647 >640 31 Particles >21μm ASTM D7647 >160 11 Particles >38μm ASTM D7647 >40 0 Particles >71μm ASTM D7647 >10 0 Oil Cleanliness ISO 4406 (c) >21/19/16 ▲ 22/18/12	Sodium				0		
Particles >4μm ASTM D7647 >20000 ▲ 38900 Particles >6μm ASTM D7647 >5000 2144 Particles >14μm ASTM D7647 >640 31 Particles >21μm ASTM D7647 >160 11 Particles >38μm ASTM D7647 >40 0 Particles >71μm ASTM D7647 >10 0 Oil Cleanliness ISO 4406 (c) >21/19/16 22/18/12	Potassium			>20	1		
Particles >6μm ASTM D7647 >5000 2144 Particles >14μm ASTM D7647 >640 31 Particles >21μm ASTM D7647 >160 11 Particles >38μm ASTM D7647 >40 0 Particles >71μm ASTM D7647 >10 0 Oil Cleanliness ISO 4406 (c) >21/19/16 22/18/12	FLUID CLEANLIN	NESS	method	limit/base	current	history1	history2
Particles >14μm ASTM D7647 >640 31 Particles >21μm ASTM D7647 >160 11 Particles >38μm ASTM D7647 >40 0 Particles >71μm ASTM D7647 >10 0 Oil Cleanliness ISO 4406 (c) >21/19/16	Particles >4µm		ASTM D7647	>20000	▲ 38900		
Particles >21μm ASTM D7647 >160 11 Particles >38μm ASTM D7647 >40 0 Particles >71μm ASTM D7647 >10 0 Oil Cleanliness ISO 4406 (c) >21/19/16 Δ 22/18/12	Particles >6µm		ASTM D7647	>5000	2144		
Particles >38μm ASTM D7647 >40 0 Particles >71μm ASTM D7647 >10 0 Oil Cleanliness ISO 4406 (c) >21/19/16 Δ 22/18/12	Particles >14μm		ASTM D7647	>640	31		
Particles >71μm	Particles >21μm		ASTM D7647	>160	11		
Oil Cleanliness ISO 4406 (c) >21/19/16 🛕 22/18/12	Particles >38µm		ASTM D7647	>40	0		
	Particles >71μm		ASTM D7647	>10	0		
FLUID DEGRADATION method limit/base current history1 history2	Oil Cleanliness		ISO 4406 (c)	>21/19/16	22/18/12		
	FLUID DEGRADA	NOITA	method	limit/base	current	history1	history2

Acid Number (AN)

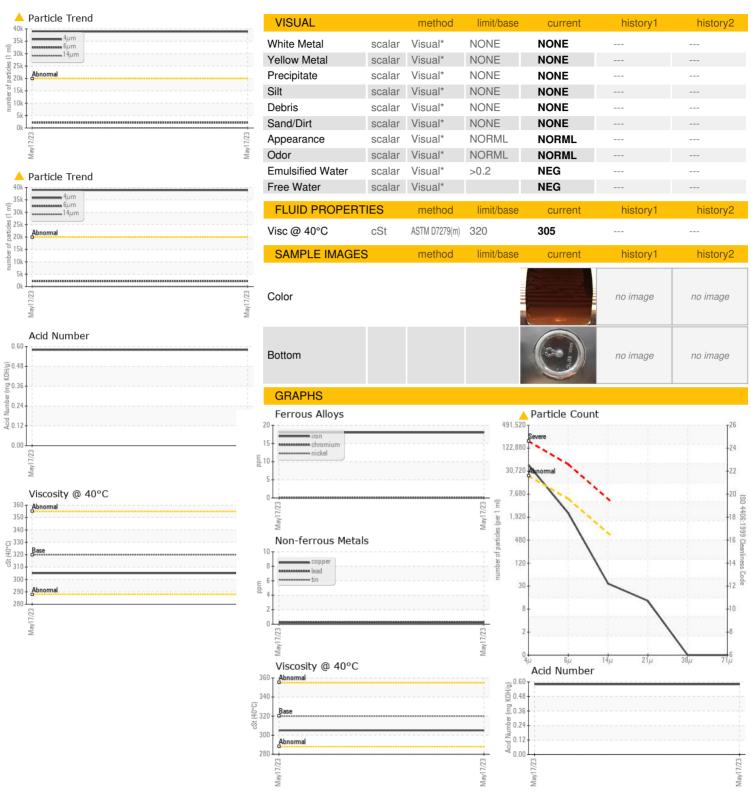
mg KOH/g ASTM D974*

Report Id: PET412PET [WCAMIS] 02560391 (Generated: 09/21/2023 11:06:37) Rev: 1

Contact/Location: Nelson Ross - PET412PET



OIL ANALYSIS REPORT





CALA ISO 17025:2017 Accredited Laboratory

Laboratory Sample No. Lab Number **Unique Number**

: WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 : WC0736384 : 02560391

: 5581431

Diagnosed Diagnostician : Wes Davis

Received

: 29 May 2023

: 30 May 2023

Test Package : IND 2 (Additional Tests: PrtCount, 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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