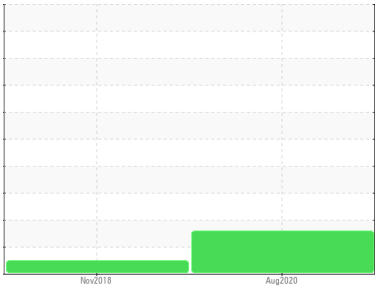
PROBLEM SUMMARY

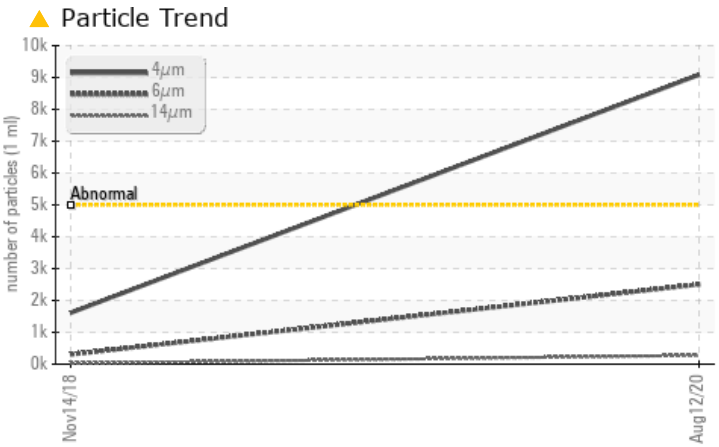
Sample Rating Trend



ISO

Area
LSGS PLANT 2
Machine Id
G4
Component
Pump Hydraulic System
Fluid
PETRO CANADA ENDURATEX EP 68 (200 LTR)

COMPONENT CONDITION SUMMARY



RECOMMENDATION

We advise that you perform a filter service, and use off-line filtration to improve the cleanliness of the system fluid. We recommend an early resample to monitor this condition.

PROBLEMATIC TEST RESULTS

Sample Status				**ABNORMAL**	NORMAL	---
Particles >4µm		ASTM D7647	>5000	▲ **9089**	1613	---
Particles >6µm		ASTM D7647	>1300	▲ **2501**	303	---
Particles >14µm		ASTM D7647	>160	▲ **276**	24	---
Particles >21µm		ASTM D7647	>40	▲ **92**	7	---
Oil Cleanliness		ISO 4406 (c)	>19/17/14	▲ **20/19/15**	18/15/12	---

Customer Id: PET412PET
Sample No.: WC0373466
Lab Number: 02373506
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	MISSED	May 30 2023	?	We advise that you perform a filter service, and use off-line filtration to improve the cleanliness of the system fluid.
Resample	MISSED	May 30 2023	?	We recommend an early resample to monitor this condition.
Filter Fluid	MISSED	May 30 2023	?	We advise that you perform a filter service, and use off-line filtration to improve the cleanliness of the system fluid.

HISTORICAL DIAGNOSIS

14 Nov 2018 Diag: Wes Davis

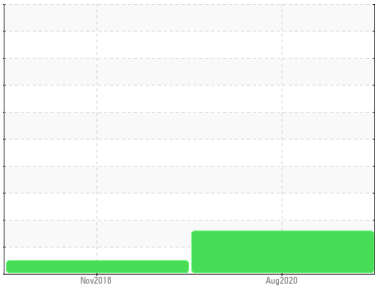
NORMAL

Resample at the next service interval to monitor.All component wear rates are normal. The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report

OIL ANALYSIS REPORT

Sample Rating Trend



ISO

Area
LSGS PLANT 2
Machine Id
G4
Component
Pump Hydraulic System
Fluid
PETRO CANADA ENDURATEX EP 68 (200 LTR)

DIAGNOSIS

Recommendation

We advise that you perform a filter service, and use off-line filtration to improve the cleanliness of the system fluid. We recommend an early resample to monitor this condition.

Wear

All component wear rates are normal.

Contamination

Particles >21µm are abnormally high. Particles >6µm are abnormally high. Particles >14µm are notably high. Particles >4µm are notably high.

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		**WC0373466**	WC985020	---
Sample Date		Client Info		**12 Aug 2020**	14 Nov 2018	---
Machine Age	yrs	Client Info		**18761**	7660	---
Oil Age	yrs	Client Info		**18761**	7660	---
Oil Changed		Client Info		**Not Changd**	Not Changd	---
Sample Status				**ABNORMAL**	NORMAL	---

WEAR METALS		method	limit/base	current	history 1	history 2
Iron	ppm	ASTM D5185(m)	>20	**0**	0	---
Chromium	ppm	ASTM D5185(m)	>20	**0**	0	---
Nickel	ppm	ASTM D5185(m)	>20	**0**	0	---
Titanium	ppm	ASTM D5185(m)		**0**	0	---
Silver	ppm	ASTM D5185(m)		**0**	0	---
Aluminum	ppm	ASTM D5185(m)	>20	**0**	0	---
Lead	ppm	ASTM D5185(m)	>20	**<1**	<1	---
Copper	ppm	ASTM D5185(m)	>20	**<1**	<1	---
Tin	ppm	ASTM D5185(m)	>20	**0**	0	---
Antimony	ppm	ASTM D5185(m)		**<1**	0	---
Vanadium	ppm	ASTM D5185(m)		**0**	0	---
Beryllium	ppm	ASTM D5185(m)		**0**	0	---
Cadmium	ppm	ASTM D5185(m)		**0**	0	---

ADDITIVES		method	limit/base	current	history 1	history 2
Boron	ppm	ASTM D5185(m)	69	**45**	47	---
Barium	ppm	ASTM D5185(m)	1	**<1**	0	---
Molybdenum	ppm	ASTM D5185(m)	1	**0**	0	---
Manganese	ppm	ASTM D5185(m)	1	**0**	<1	---
Magnesium	ppm	ASTM D5185(m)	1	**<1**	<1	---
Calcium	ppm	ASTM D5185(m)	1	**3**	3	---
Phosphorus	ppm	ASTM D5185(m)	246	**265**	253	---
Zinc	ppm	ASTM D5185(m)	1	**19**	18	---
Sulfur	ppm	ASTM D5185(m)	3670	**3249**	3480	---
Lithium	ppm	ASTM D5185(m)		**<1**	0	---

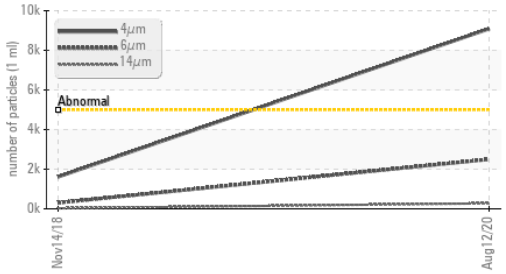
CONTAMINANTS		method	limit/base	current	history 1	history 2
Silicon	ppm	ASTM D5185(m)	>15	**2**	2	---
Sodium	ppm	ASTM D5185(m)		**0**	<1	---
Potassium	ppm	ASTM D5185(m)	>20	**<1**	0	---

FLUID CLEANLINESS		method	limit/base	current	history 1	history 2
Particles >4µm		ASTM D7647	>5000	▲ **9089**	1613	---
Particles >6µm		ASTM D7647	>1300	▲ **2501**	303	---
Particles >14µm		ASTM D7647	>160	▲ **276**	24	---
Particles >21µm		ASTM D7647	>40	▲ **92**	7	---
Particles >38µm		ASTM D7647	>10	**2**	0	---
Particles >71µm		ASTM D7647	>3	**0**	0	---
Oil Cleanliness		ISO 4406 (c)	>19/17/14	▲ **20/19/15**	18/15/12	---

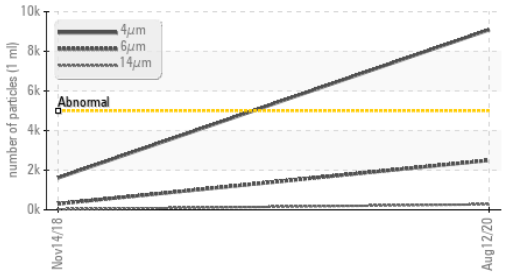
FLUID DEGRADATION		method	limit/base	current	history 1	history 2
Acid Number (AN)	mg KOH/g	ASTM D974*	0.4	**0.32**	0.392	---

OIL ANALYSIS REPORT

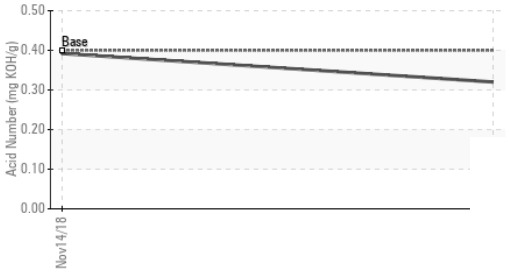
Particle Trend



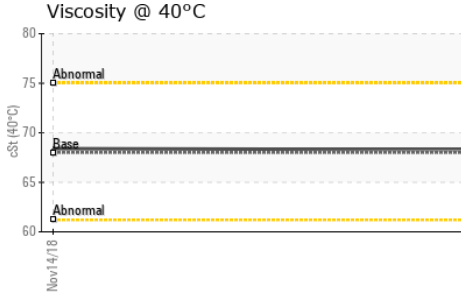
Particle Trend



Acid Number

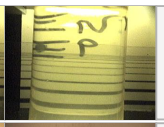
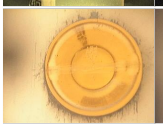


Viscosity @ 40°C



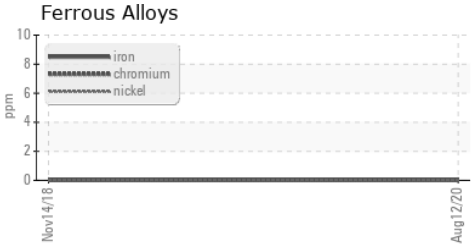
VISUAL		method	limit/base	current	history 1	history 2
White Metal	scalar	Visual*	NONE	**NONE**	NONE	---
Yellow Metal	scalar	Visual*	NONE	**NONE**	NONE	---
Precipitate	scalar	Visual*	NONE	**NONE**	NONE	---
Silt	scalar	Visual*	NONE	**NONE**	NONE	---
Debris	scalar	Visual*	NONE	**NONE**	VLITE	---
Sand/Dirt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

FLUID PROPERTIES		method	limit/base	current	history 1	history 2
Visc @ 40°C	cSt	ASTM D7279(m)	68.0	**68.3**	68.4	---

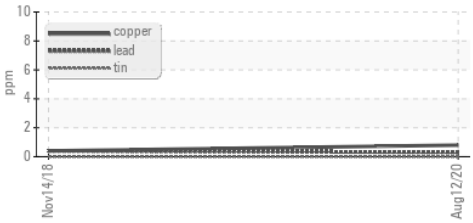
SAMPLE IMAGES	method	limit/base	current	history 1	history 2
Color					*no image*
Bottom					*no image*

GRAPHS

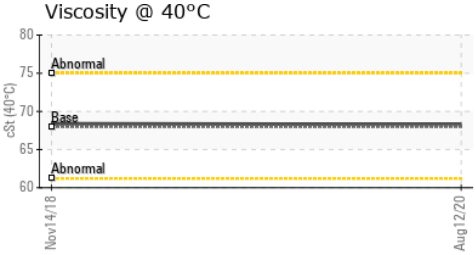
Ferrous Alloys



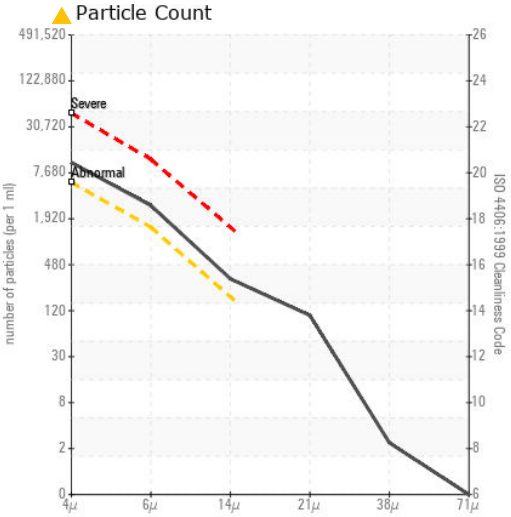
Non-ferrous Metals



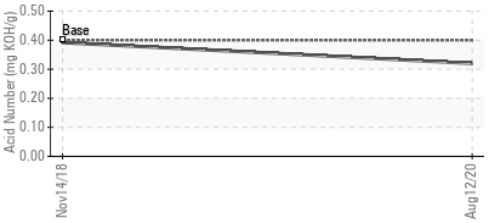
Viscosity @ 40°C



Particle Count



Acid Number



ISO 17025:2017 Accredited Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0373466
Lab Number : 02373506
Unique Number : 5096954
Test Package : IND 2

Received : 01 Sep 2020
Diagnosed : 02 Sep 2020
Diagnostician : Wes Davis

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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