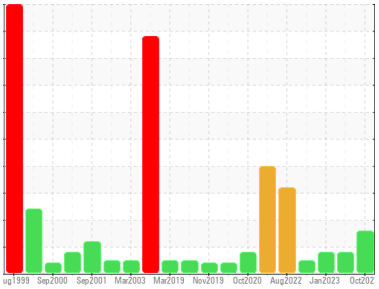
PROBLEM SUMMARY

Sample Rating Trend

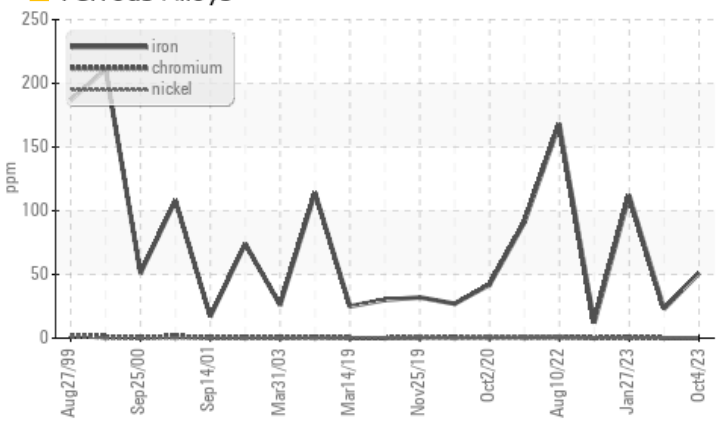


WEAR

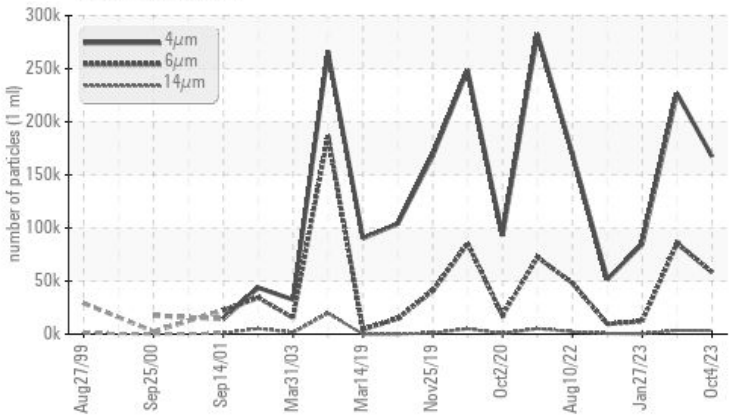
Area
PUMPHOUSE/SECW PUMPS
Machine Id
C - SECW 2 Electric Pump OB
Component
Lube System
Fluid
PETRO CANADA HYDREX AW 100 (1 GAL)

COMPONENT CONDITION SUMMARY

Ferrous Alloys



Particle Trend



RECOMMENDATION

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

PROBLEMATIC TEST RESULTS

Sample Status				ATTENTION	ABNORMAL	ABNORMAL
Iron	ppm	ASTM D5185(m)	>20	▲ **51**	23	▲ 112
Particles >6µm		ASTM D7647	>40000	▲ **58428**	▲ 85529	12061
Oil Cleanliness		ISO 4406 (c)	>--/22/20	▲ **25/23/19**	▲ 25/24/19	24/21/16

Customer Id: LEWBOSC
Sample No.: WC0866317
Lab Number: 02586761
Test Package: IND 2

To manage this report scan the QR code

To discuss the diagnosis or test data:
Kevin Marson +1 (289)291-4644 x4644
Kevin.Marson@wearcheck.com

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 Fluid	---	---	?	We recommend that you drain the oil from the component if this has not already been done.
Change Filter	---	---	?	We recommend you service the filters on this component.
Resample	---	---	?	We recommend an early resample to monitor this condition.

HISTORICAL DIAGNOSIS

31 May 2023 Diag: Bill Quesnel

ISO

We recommend you service the filters on this component. We recommend an early resample to monitor this condition.All component wear rates are normal. There is a moderate amount of silt (particulates < 14 microns in size) present in the oil. The water content is negligible. The system cleanliness is above the acceptable limit for the target ISO 4406 cleanliness code. The AN level is acceptable for this fluid. The oil is still serviceable provided that the contaminant(s) can be reduced to acceptable levels.

view report

27 Jan 2023 Diag: Kevin Marson

WEAR

We recommend that you drain the oil from the component if this has not already been done. We recommend an early resample to monitor this condition.Iron ppm levels are abnormal. The low ferrous density (PQ) index indicates the wear metal levels are due to corrosion. 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 oil is no longer serviceable as a result of the abnormal and/or severe wear.

view report

13 Dec 2022 Diag: Kevin Marson

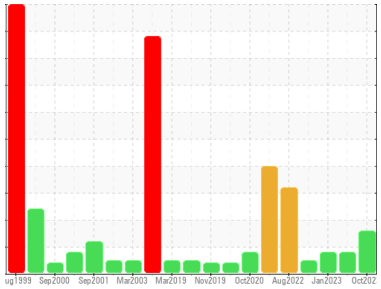
NORMAL

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



WEAR

Area
PUMPHOUSE/SECW PUMPS
Machine Id
C - SECW 2 Electric Pump OB
Component
Lube System
Fluid
PETRO CANADA HYDREX AW 100 (1 GAL)

DIAGNOSIS

Recommendation

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

Wear

Iron ppm levels are noted. The low ferrous density (PQ) index indicates the wear metal levels are due to corrosion. All other 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 INFORMATION		method	limit/base	current	history1	history2
Sample Number		Client Info		**WC0866317**	WC0824451	WC0785692
Sample Date		Client Info		**04 Oct 2023**	31 May 2023	27 Jan 2023
Machine Age	hrs	Client Info		**0**	0	0
Oil Age	hrs	Client Info		**0**	0	0
Oil Changed		Client Info		**N/A**	N/A	N/A
Sample Status				**ATTENTION**	ABNORMAL	ABNORMAL

WEAR METALS		method	limit/base	current	history1	history2
PQ		ASTM D8184*	>DFLT	**5**	0	12
Iron	ppm	ASTM D5185(m)	>20	▲ **51**	23	▲ 112
Chromium	ppm	ASTM D5185(m)	>20	**0**	0	<1
Nickel	ppm	ASTM D5185(m)	>20	**<1**	<1	<1
Titanium	ppm	ASTM D5185(m)		**0**	0	0
Silver	ppm	ASTM D5185(m)		**<1**	0	0
Aluminum	ppm	ASTM D5185(m)	>20	**<1**	<1	<1
Lead	ppm	ASTM D5185(m)	>20	**<1**	<1	1
Copper	ppm	ASTM D5185(m)	>20	**6**	1	8
Tin	ppm	ASTM D5185(m)	>20	**0**	0	0
Antimony	ppm	ASTM D5185(m)		**0**	0	0
Vanadium	ppm	ASTM D5185(m)		**0**	0	0
Beryllium	ppm	ASTM D5185(m)		**0**	0	0
Cadmium	ppm	ASTM D5185(m)		**0**	0	0

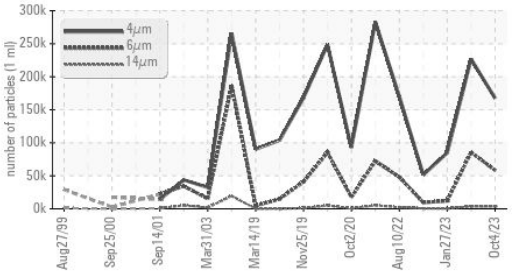
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)	0	**<1**	<1	<1
Barium	ppm	ASTM D5185(m)	0	**1**	2	1
Molybdenum	ppm	ASTM D5185(m)	0	**0**	0	0
Manganese	ppm	ASTM D5185(m)	0	**<1**	<1	1
Magnesium	ppm	ASTM D5185(m)	0	**<1**	<1	0
Calcium	ppm	ASTM D5185(m)	50	**38**	41	35
Phosphorus	ppm	ASTM D5185(m)	330	**304**	354	353
Zinc	ppm	ASTM D5185(m)	430	**317**	345	373
Sulfur	ppm	ASTM D5185(m)	760	**3249**	3263	2429
Lithium	ppm	ASTM D5185(m)		**<1**	<1	<1

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>15	**3**	2	4
Sodium	ppm	ASTM D5185(m)		**<1**	<1	<1
Potassium	ppm	ASTM D5185(m)	>20	**0**	<1	<1

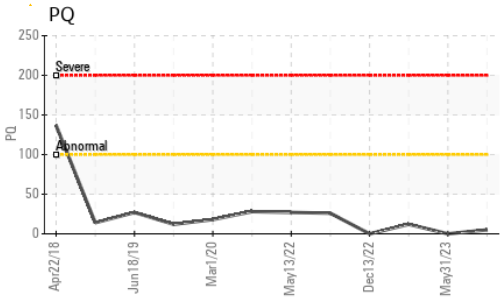
FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647		**167370**	226658	84744
Particles >6µm		ASTM D7647	>40000	▲ **58428**	▲ 85529	12061
Particles >14µm		ASTM D7647	>10000	**3391**	3551	325
Particles >21µm		ASTM D7647	>2500	**620**	503	59
Particles >38µm		ASTM D7647	>640	**13**	6	1
Particles >71µm		ASTM D7647	>160	**1**	0	0
Oil Cleanliness		ISO 4406 (c)	>--/22/20	▲ **25/23/19**	▲ 25/24/19	24/21/16

OIL ANALYSIS REPORT

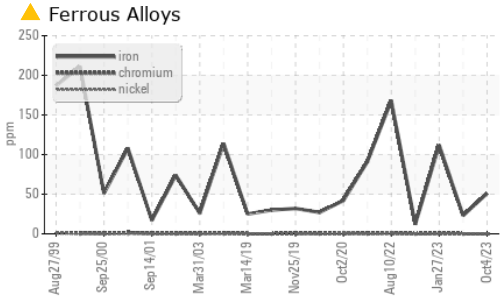
Particle Trend



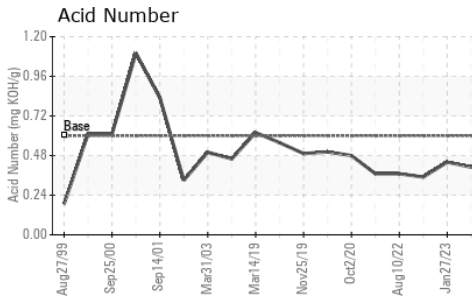
PQ



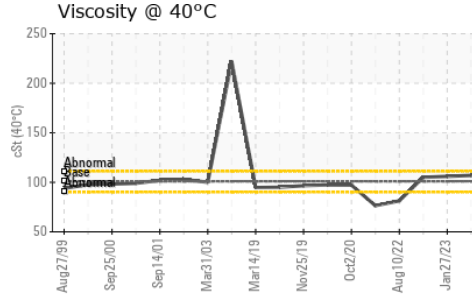
Ferrous Alloys



Acid Number



Viscosity @ 40°C

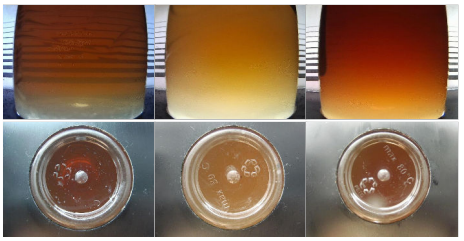


FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974*	0.60	**0.42**	0.41	0.44

VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	**NONE**	NONE	NONE
Yellow Metal	scalar	Visual*	NONE	**NONE**	NONE	NONE
Precipitate	scalar	Visual*	NONE	**NONE**	VLITE	NONE
Silt	scalar	Visual*	NONE	**NONE**	NONE	NONE
Debris	scalar	Visual*	NONE	**NONE**	VLITE	NONE
Sand/Dirt	scalar	Visual*	NONE	**VLITE**	NONE	NONE
Appearance	scalar	Visual*	NORML	**NORML**	NORML	NORML
Odor	scalar	Visual*	NORML	**NORML**	NORML	NORML
Emulsified Water	scalar	Visual*	>5	**NEG**	.2%	NEG
Free Water	scalar	Visual*		**NEG**	NEG	NEG

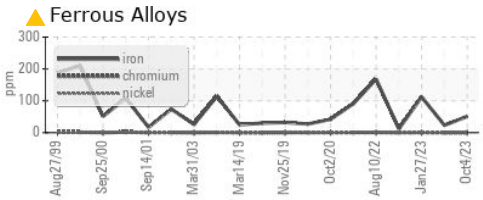
FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	101	**109**	107	106

SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					

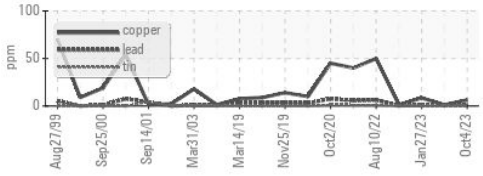


GRAPHS

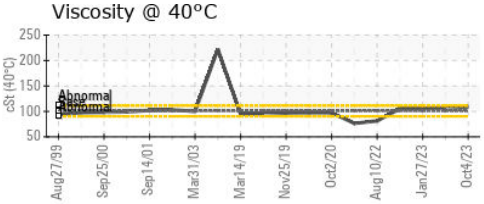
Ferrous Alloys



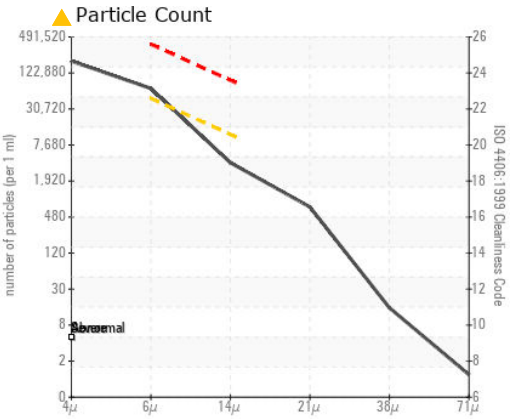
Non-ferrous Metals



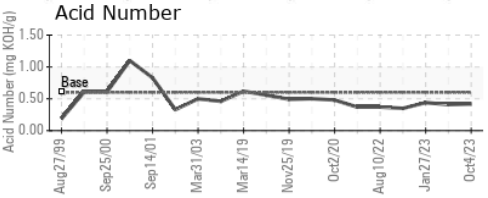
Viscosity @ 40°C



Particle Count



Acid Number



ISO 17025:2017 Accredited Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 **STELCO - BOSC - Basic Oxygen Slab Caster**
Sample No. : WC0866317 **Received** : 04 Oct 2023 2330 Regional Road #3, Door: BOSC8
Lab Number : 02586761 **Diagnosed** : 05 Oct 2023 NANTICOKE, ON
Unique Number : 5655827 **Diagnostician** : Kevin Marson CA N0A 1L0
Test Package : IND 2 (Additional Tests: PQ) Contact: Tom Walden

To discuss this sample report, contact Customer Service at 1-800-268-2131. Thomas.Walden@stelco.com
Test denoted (*) outside scope of accreditation, (m) method modified, (e) tested at external lab. T: (519)587-4541
Validity of results and interpretation are based on the sample and information as supplied. F: (519)587-7702