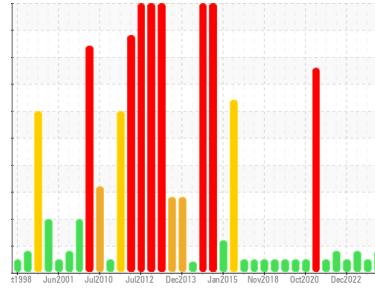




PROBLEM SUMMARY

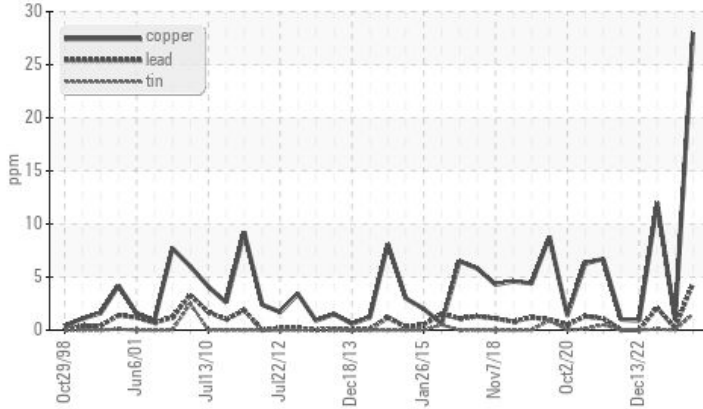
Area
PUMPHOUSE/CASTER SPRAY WATER PUMPS
 Machine Id
C - Caster Spray Water Electric Pump IB
 Component
Lube System
 Fluid
PETRO CANADA HYDREX AW 100 (1 GAL)

Sample Rating Trend



COMPONENT CONDITION SUMMARY

▲ Non-ferrous Metals



RECOMMENDATION

We recommend an early resample to monitor this condition.

PROBLEMATIC TEST RESULTS

Sample Status			ABNORMAL	NORMAL	ABNORMAL
Copper	ppm	ASTM D5185(m)	>20	▲ 28	1
					12

Customer Id: LEWBOSC
 Sample No.: WC0850118
 Lab Number: 02576259
 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
Resample	---	---	?	We recommend an early resample to monitor this condition.

HISTORICAL DIAGNOSIS

31 May 2023 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



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 water content is negligible. 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.

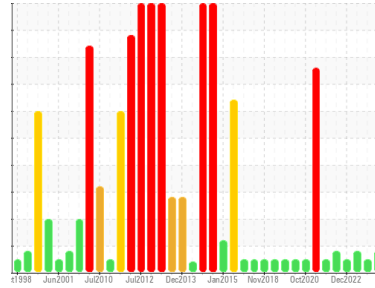
view report





OIL ANALYSIS REPORT

Sample Rating Trend



WEAR



Area
PUMPHOUSE/CASTER SPRAY WATER PUMPS
 Machine Id
C - Caster Spray Water Electric Pump IB

Component
Lube System
 Fluid

PETRO CANADA HYDREX AW 100 (1 GAL)

DIAGNOSIS

Recommendation

We recommend an early resample to monitor this condition.

Wear

Copper ppm levels are abnormal. A sharp increase in the copper level is noted. Oil cooler core leaching or motor piston wear is indicated.

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.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		WC0850118	WC0824401	WC0785664
Sample Date	Client Info		16 Aug 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			ABNORMAL	NORMAL	ABNORMAL

WEAR METALS

	method	limit/base	current	history1	history2
PQ	ASTM D8184*	>DFLT	0	0	6
Iron	ppm	ASTM D5185(m)	>20	29	5
Chromium	ppm	ASTM D5185(m)	>20	<1	0
Nickel	ppm	ASTM D5185(m)	>20	<1	0
Titanium	ppm	ASTM D5185(m)	>20	0	0
Silver	ppm	ASTM D5185(m)	>20	<1	0
Aluminum	ppm	ASTM D5185(m)	>20	<1	<1
Lead	ppm	ASTM D5185(m)	>20	4	<1
Copper	ppm	ASTM D5185(m)	>20	28	1
Tin	ppm	ASTM D5185(m)	>20	2	0
Antimony	ppm	ASTM D5185(m)	>20	0	0
Vanadium	ppm	ASTM D5185(m)	>20	0	0
Beryllium	ppm	ASTM D5185(m)	>20	0	0
Cadmium	ppm	ASTM D5185(m)	>20	0	0

ADDITIVES

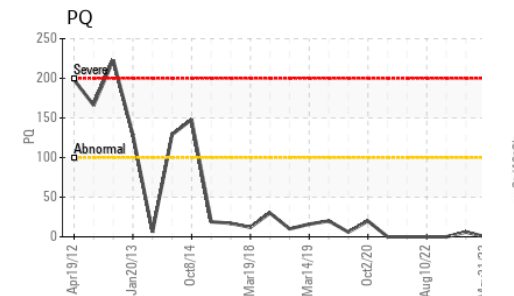
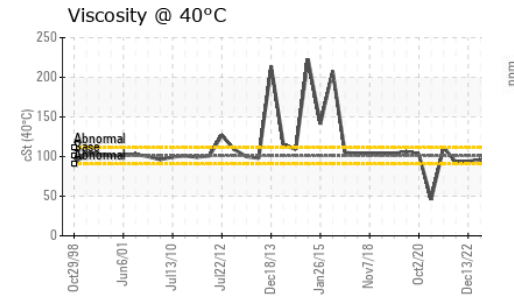
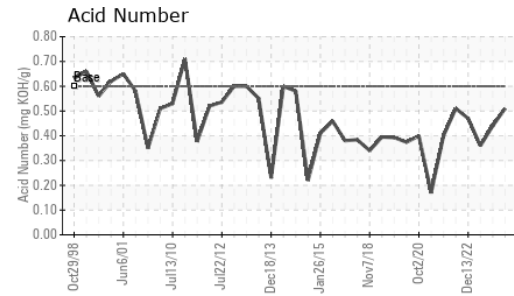
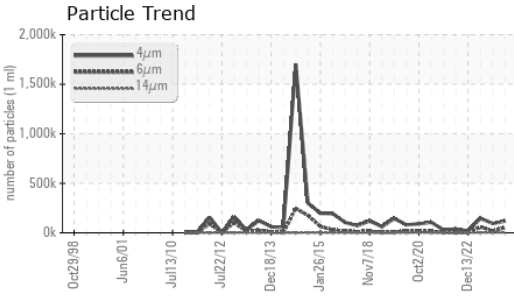
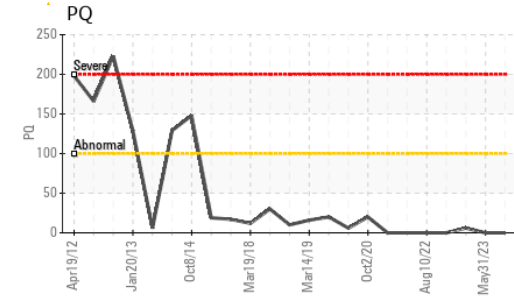
	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)	0	<1	1
Barium	ppm	ASTM D5185(m)	0	0	7
Molybdenum	ppm	ASTM D5185(m)	0	0	2
Manganese	ppm	ASTM D5185(m)	0	<1	0
Magnesium	ppm	ASTM D5185(m)	0	<1	8
Calcium	ppm	ASTM D5185(m)	50	48	72
Phosphorus	ppm	ASTM D5185(m)	330	344	360
Zinc	ppm	ASTM D5185(m)	430	396	413
Sulfur	ppm	ASTM D5185(m)	760	2454	2470
Lithium	ppm	ASTM D5185(m)	>20	<1	<1

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>15	3	5
Sodium	ppm	ASTM D5185(m)	>20	4	<1
Potassium	ppm	ASTM D5185(m)	>20	<1	<1

FLUID CLEANLINESS

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647		118169	93860	146377
Particles >6µm	ASTM D7647	>10240000	52474	19696	57057
Particles >14µm	ASTM D7647	>10240000	2374	1310	2309
Particles >21µm	ASTM D7647	>25600000	460	315	532
Particles >38µm	ASTM D7647	>6400000	9	4	15
Particles >71µm	ASTM D7647	>1600000	1	0	0
Oil Cleanliness	ISO 4406 (c)	>--/30/30	24/23/18	24/21/18	24/23/18

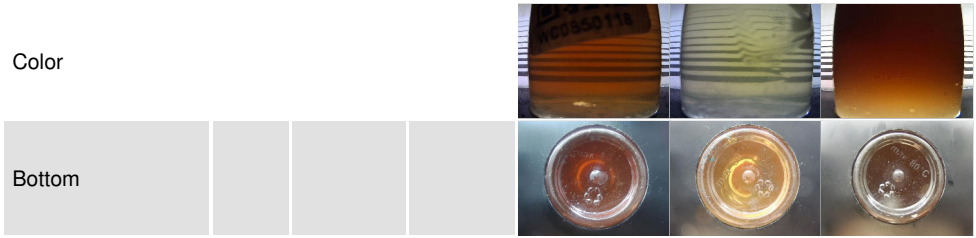


FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974*	0.60	0.51	0.44	0.36

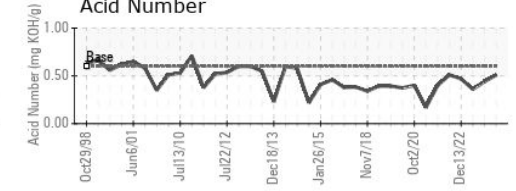
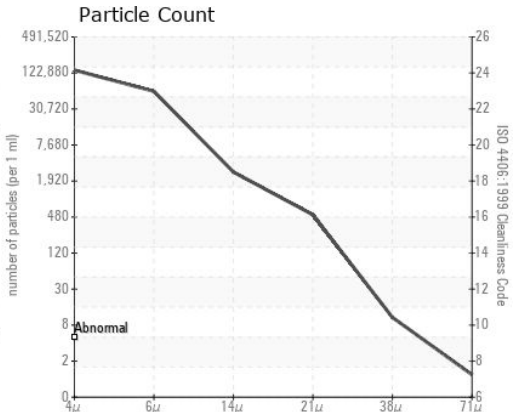
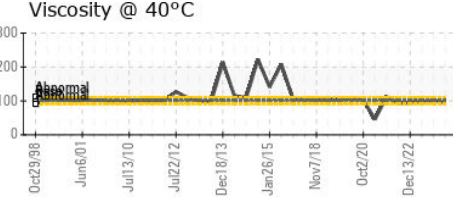
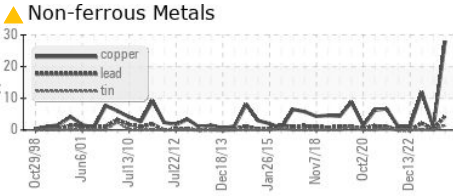
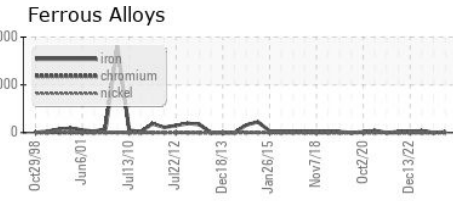
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	NONE	NONE	NONE
Yellow Metal	scalar	Visual*	NONE	VLITE	NONE	NONE
Precipitate	scalar	Visual*	NONE	NONE	NONE	NONE
Silt	scalar	Visual*	NONE	NONE	NONE	NONE
Debris	scalar	Visual*	NONE	VLITE	VLITE	VLITE
Sand/Dirt	scalar	Visual*	NONE	NONE	NONE	NONE
Appearance	scalar	Visual*	NORML	NORML	NORML	NORML
Odor	scalar	Visual*	NORML	NORML	NORML	NORML
Emulsified Water	scalar	Visual*	>1	NEG	NEG	.2%
Free Water	scalar	Visual*		NEG	NEG	NEG

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	101	94.1	102	95.6

SAMPLE IMAGES



GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 **STELCO - BOSC - Basic Oxygen Slab Caster**
Sample No. : WC0850118 **Received** : 16 Aug 2023 2330 Regional Road #3, Door: BOSC8
Lab Number : 02576259 **Diagnosed** : 17 Aug 2023 NANTICOKE, ON
Unique Number : 5629319 **Diagnostician** : Kevin Marson CA N0A 1L0
Test Package : IND 2 (Additional Tests: PQ, TAN Man)
 Contact: Tom Walden
 Thomas.Walden@stelco.com
 T: (519)587-4541
 F: (519)587-7702

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.