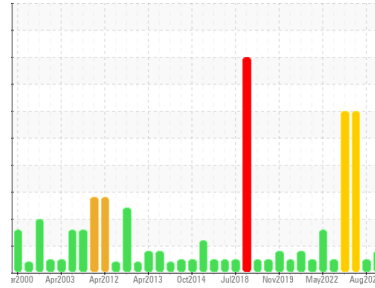




OIL ANALYSIS REPORT

Sample Rating Trend



WEAR



Area
PUMPHOUSE/CASTER SPRAY WATER PUMPS
 Machine Id
C - Caster Spray Water Turbine OB

Component
Lube System
 Fluid

PETRO CANADA HYDREX AW 100 (1 GAL)

DIAGNOSIS

Recommendation

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.

Wear

Copper ppm levels are abnormal. 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. The oil is no longer serviceable as a result of the abnormal and/or severe wear.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		WC0898662	WC0850122	WC0824405
Sample Date	Client Info		10 Jan 2024	16 Aug 2023	31 May 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	SEVERE

CONTAMINATION

	method	limit/base	current	history1	history2
Water	WC Method	>1	NEG	NEG	NEG

WEAR METALS

	method	limit/base	current	history1	history2
PQ	ASTM D8184*	>DFLT	0	0	0
Iron	ppm	ASTM D5185(m) >20	2	1	2
Chromium	ppm	ASTM D5185(m) >20	0	0	0
Nickel	ppm	ASTM D5185(m) >20	0	<1	<1
Titanium	ppm	ASTM D5185(m)	0	0	0
Silver	ppm	ASTM D5185(m)	0	<1	0
Aluminum	ppm	ASTM D5185(m) >20	<1	<1	0
Lead	ppm	ASTM D5185(m) >20	4	1	16
Copper	ppm	ASTM D5185(m) >20	▲ 36	13	139
Tin	ppm	ASTM D5185(m) >20	2	<1	8
Antimony	ppm	ASTM D5185(m)	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) 0	0	<1	0
Barium	ppm	ASTM D5185(m) 0	0	0	1
Molybdenum	ppm	ASTM D5185(m) 0	0	0	0
Manganese	ppm	ASTM D5185(m) 0	0	0	0
Magnesium	ppm	ASTM D5185(m) 0	<1	<1	<1
Calcium	ppm	ASTM D5185(m) 50	54	53	51
Phosphorus	ppm	ASTM D5185(m) 330	335	346	366
Zinc	ppm	ASTM D5185(m) 430	425	423	392
Sulfur	ppm	ASTM D5185(m) 760	2669	2498	2612
Lithium	ppm	ASTM D5185(m)	<1	<1	<1

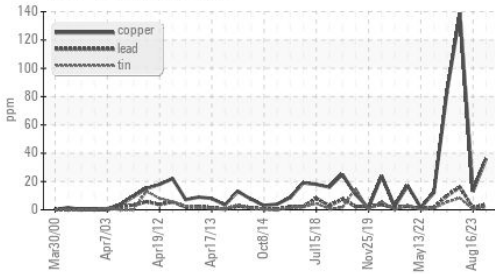
CONTAMINANTS

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

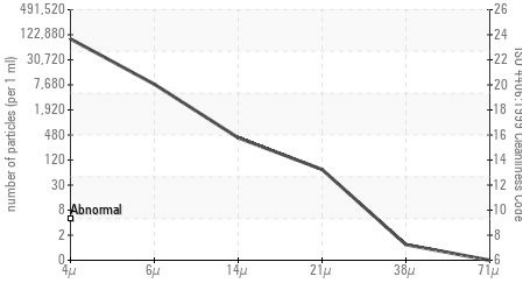


OIL ANALYSIS REPORT

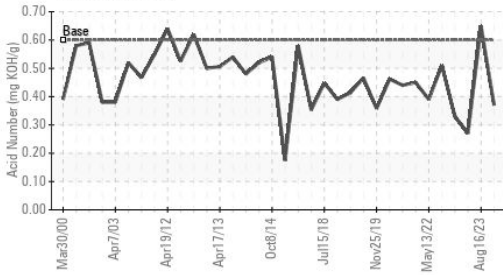
Non-ferrous Metals



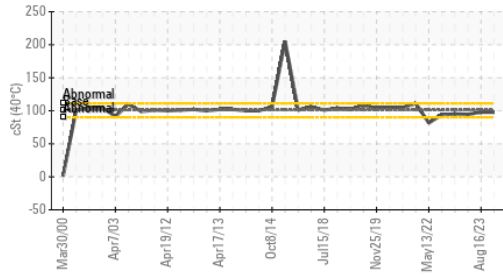
Particle Count



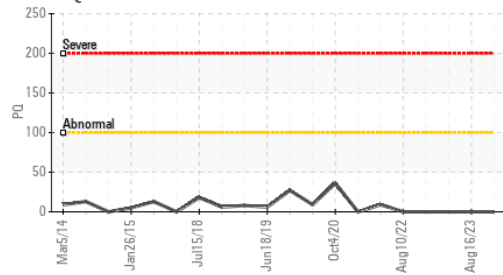
Acid Number



Viscosity @ 40°C



PQ



FLUID CLEANLINESS	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647		84420	49105	106150
Particles >6µm	ASTM D7647	>10240000	6932	5493	12512
Particles >14µm	ASTM D7647	>10240000	361	377	657
Particles >21µm	ASTM D7647	>25600000	63	102	108
Particles >38µm	ASTM D7647	>6400000	1	1	2
Particles >71µm	ASTM D7647	>1600000	0	0	0
Oil Cleanliness	ISO 4406 (c)	>--/30/30	24/20/16	23/20/16	24/21/17

FLUID DEGRADATION	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g ASTM D974*	0.60	0.37	0.65	0.27

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	NONE	NONE
Silt	scalar Visual*	NONE	NONE	NONE	NONE
Debris	scalar Visual*	NONE	NONE	VLITE	NONE
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	NEG
Free Water	scalar Visual*		NEG	NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt ASTM D7279(m)	101	97.8	97.8	94.6

SAMPLE IMAGES

Color



Bottom



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 **STELCO - BOSC - Basic Oxygen Slab Caster**
 Sample No. : WC0898662 **Received** : 10 Jan 2024 2330 Regional Road #3, Door: BOSC8
 Lab Number : **02608045** **Diagnosed** : 12 Jan 2024 NANTICOKE, ON
 Unique Number : 5709131 **Diagnostician** : Kevin Marson CA N0A 1L0
 Test Package : IND 2 (Additional Tests: PQ)

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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