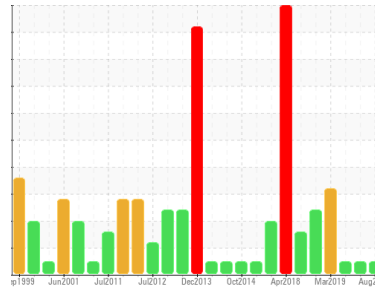




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



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

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable.

Fluid Condition

The viscosity of the oil is higher than normal, possibly indicating the addition of a heavier grade of oil. 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		WC0850116	WC0824397	WC0363149
Sample Date	Client Info		16 Aug 2023	31 May 2023	18 Jun 2019
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			NORMAL	NORMAL	NORMAL

WEAR METALS

	method	limit/base	current	history1	history2
PQ	ASTM D8184*	>DFLT	0	0	19
Iron	ppm	ASTM D5185(m)	>20	2	2
Chromium	ppm	ASTM D5185(m)	>20	0	0
Nickel	ppm	ASTM D5185(m)	>20	<1	0
Titanium	ppm	ASTM D5185(m)		0	<1
Silver	ppm	ASTM D5185(m)		1	0
Aluminum	ppm	ASTM D5185(m)	>20	<1	0
Lead	ppm	ASTM D5185(m)	>20	2	2
Copper	ppm	ASTM D5185(m)	>20	2	1
Tin	ppm	ASTM D5185(m)	>20	0	0
Antimony	ppm	ASTM D5185(m)		0	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	history1	history2
Boron	ppm	ASTM D5185(m)	0	<1	<1
Barium	ppm	ASTM D5185(m)	0	<1	<1
Molybdenum	ppm	ASTM D5185(m)	0	0	0
Manganese	ppm	ASTM D5185(m)	0	<1	<1
Magnesium	ppm	ASTM D5185(m)	0	<1	<1
Calcium	ppm	ASTM D5185(m)	50	40	41
Phosphorus	ppm	ASTM D5185(m)	330	341	357
Zinc	ppm	ASTM D5185(m)	430	337	331
Sulfur	ppm	ASTM D5185(m)	760	3485	3526
Lithium	ppm	ASTM D5185(m)		<1	<1

CONTAMINANTS

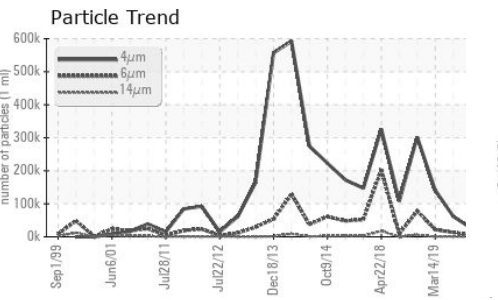
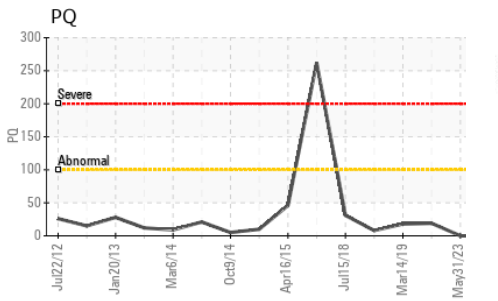
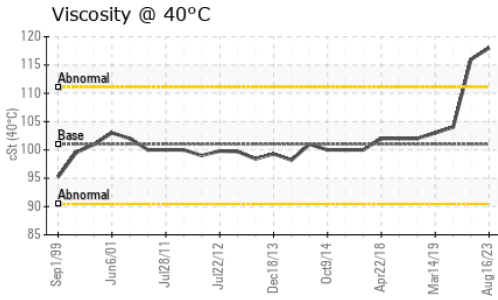
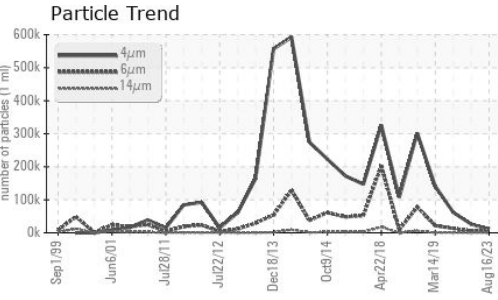
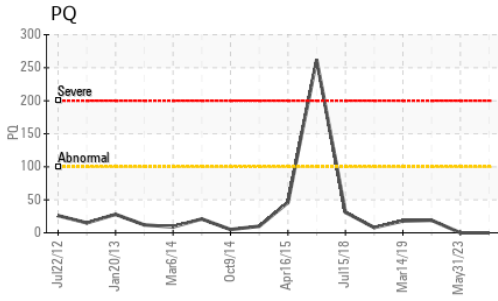
	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>15	2	2
Sodium	ppm	ASTM D5185(m)		<1	<1
Potassium	ppm	ASTM D5185(m)	>20	<1	<1

FLUID CLEANLINESS

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647		10722	26080	62220
Particles >6µm	ASTM D7647	>10240000	3190	5480	13254
Particles >14µm	ASTM D7647	>10240000	279	251	1078
Particles >21µm	ASTM D7647	>25600000	69	49	342
Particles >38µm	ASTM D7647	>6400000	2	1	15
Particles >71µm	ASTM D7647	>1600000	1	0	3
Oil Cleanliness	ISO 4406 (c)	>--/30/30	21/19/15	22/20/15	23/21/17



OIL ANALYSIS REPORT

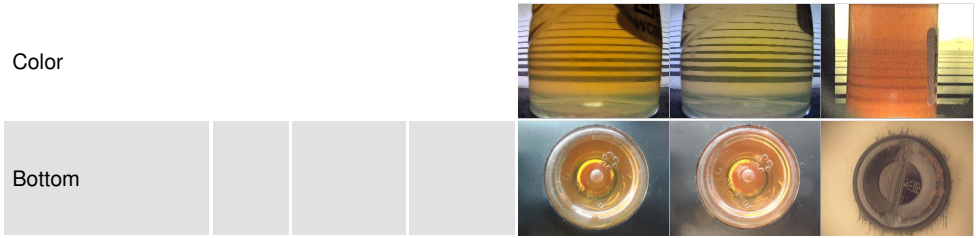


FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974*	0.60	0.50	0.46	0.391

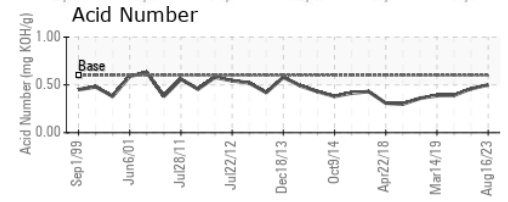
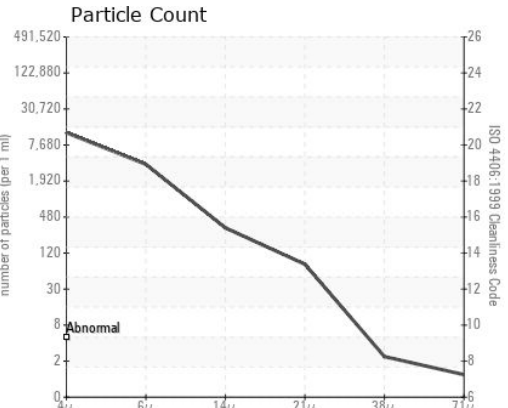
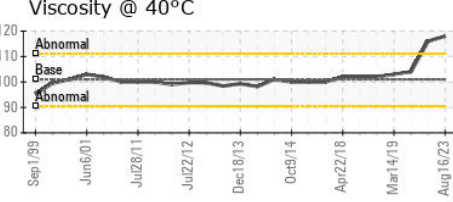
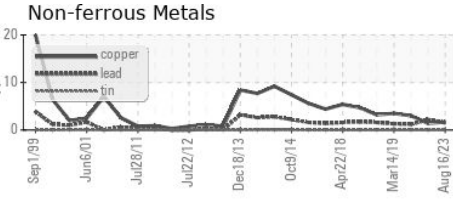
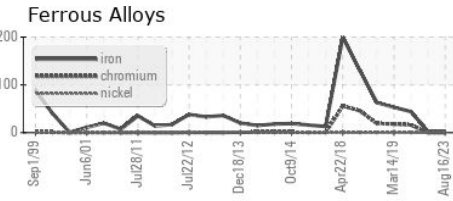
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	NONE	NONE	NONE
Yellow Metal	scalar	Visual*	NONE	NONE	NONE	NONE
Precipitate	scalar	Visual*	NONE	NONE	NONE	NONE
Silt	scalar	Visual*	NONE	NONE	NONE	NONE
Debris	scalar	Visual*	NONE	VLITE	NONE	VLITE
Sand/Dirt	scalar	Visual*	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	118	116	104

SAMPLE IMAGES		method	limit/base	current	history1	history2
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GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0850116
Lab Number : 02576257
Unique Number : 5629317
Test Package : IND 2 (Additional Tests: PQ, TAN Man)

Received : 16 Aug 2023
Diagnosed : 17 Aug 2023
Diagnostician : Kevin Marson

WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 **STELCO - BOSC - Basic Oxygen Slab Caster**
 2330 Regional Road #3, Door: BOSC8
 NANTICOKE, ON
 CA N0A 1L0
 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.