



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	NORMAL

Area
BOF/OG SYSTEM
Machine Id
D - O.G. Fan Lube System # 7
Component
Tank Lube System
Fluid
PETRO CANADA HYDREX AW 100 (135 GAL)

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.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0782110	WC0772150	WC0756731
Sample Date		Client Info		24 Jan 2023	13 Dec 2022	26 Oct 2022
Machine Age	hrs	Client Info		0	0	0
Oil Age	hrs	Client Info		0	0	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		N/A	N/A	N/A
Filter Changed		Client Info		N/A	N/A	N/A
Sample Status				ABNORMAL	ABNORMAL	ABNORMAL

WEAR

All component wear rates are normal.

PQ		ASTM D8184*	>99999	0	0	0
Iron	ppm	ASTM D5185(m)	>20	<1	<1	<1
Chromium	ppm	ASTM D5185(m)	>20	0	0	0
Nickel	ppm	ASTM D5185(m)	>20	<1	0	0
Titanium	ppm	ASTM D5185(m)		0	0	0
Silver	ppm	ASTM D5185(m)		0	0	0
Aluminum	ppm	ASTM D5185(m)	>20	0	<1	0
Lead	ppm	ASTM D5185(m)	>20	<1	<1	1
Copper	ppm	ASTM D5185(m)	>20	<1	<1	<1
Tin	ppm	ASTM D5185(m)	>20	0	0	0
Vanadium	ppm	ASTM D5185(m)		0	0	0
White Metal	scalar	Visual*	NONE	NONE	NONE	NONE
Yellow Metal	scalar	Visual*	NONE	NONE	NONE	NONE

CONTAMINATION

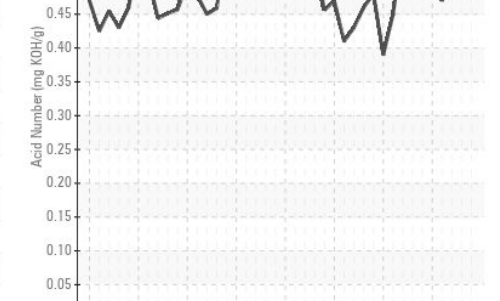
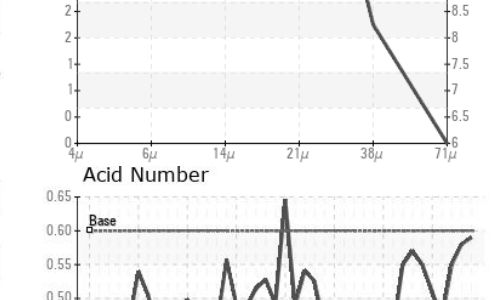
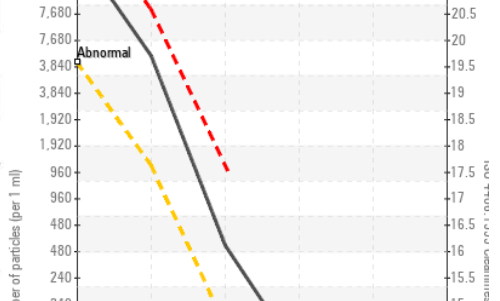
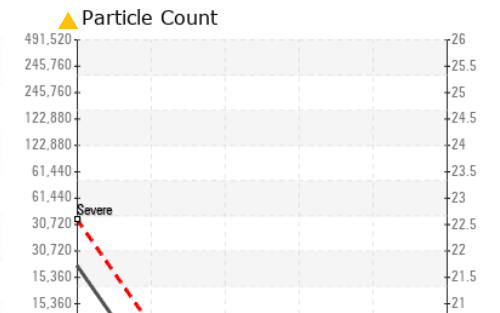
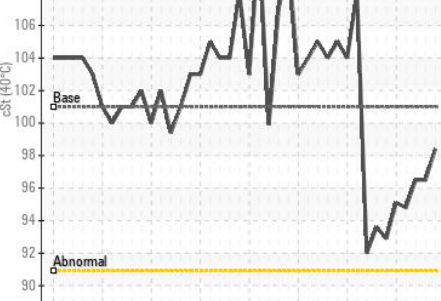
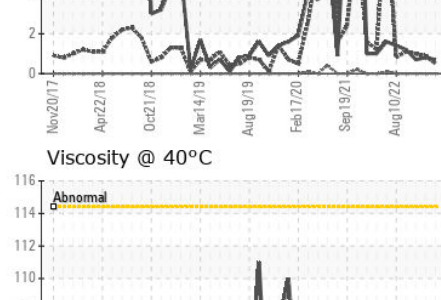
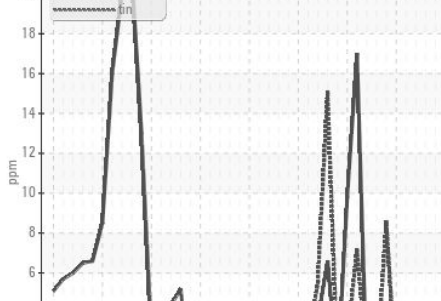
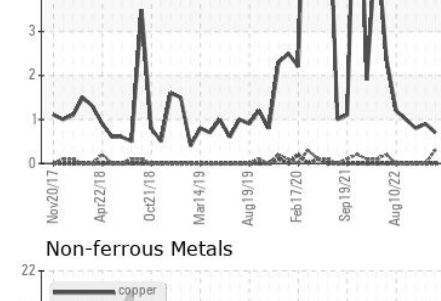
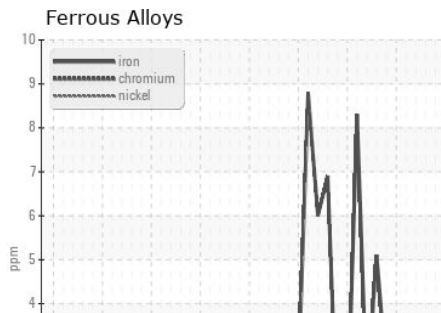
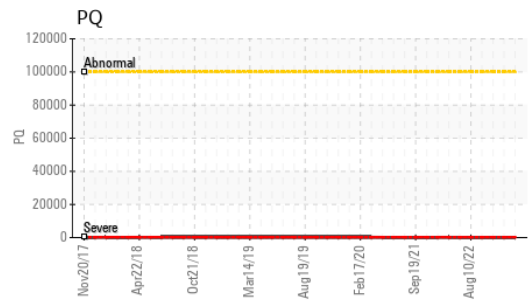
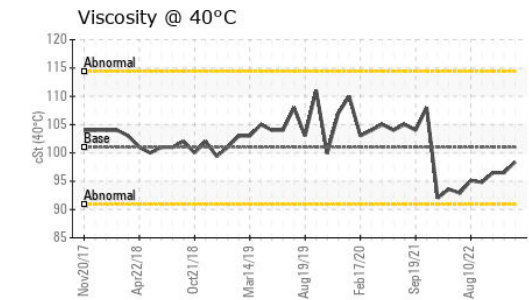
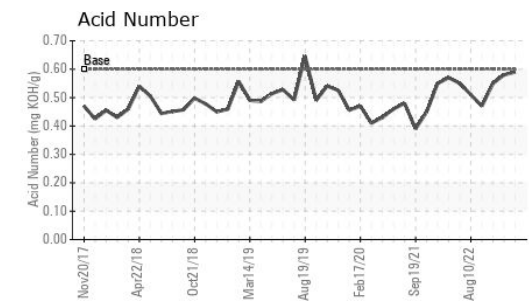
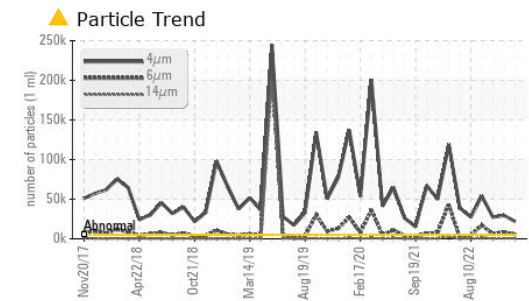
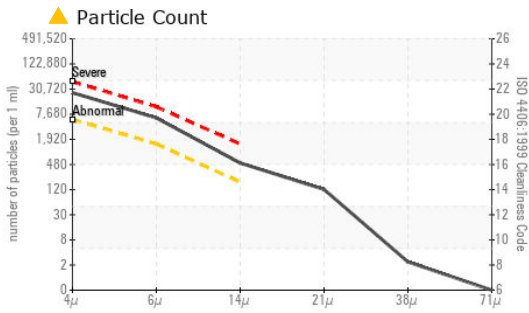
Oil Cleanliness are abnormally high. Particles >14µm are abnormally high. Particles >21µm are abnormally high. Particles >4µm are abnormally high. Particles >6µm are abnormally high.

Silicon	ppm	ASTM D5185(m)	>15	3	3	2
Potassium	ppm	ASTM D5185(m)	>20	<1	0	0
Water		WC Method	>5	NEG	NEG	NEG
Particles >4µm		ASTM D7647	>5000	▲ 21881	▲ 29583	▲ 27160
Particles >6µm		ASTM D7647	>1300	▲ 5457	▲ 8319	▲ 6220
Particles >14µm		ASTM D7647	>160	▲ 458	▲ 712	▲ 353
Particles >21µm		ASTM D7647	>40	▲ 107	▲ 177	▲ 83
Particles >38µm		ASTM D7647	>10	2	3	3
Particles >71µm		ASTM D7647	>3	0	0	0
Oil Cleanliness		ISO 4406 (c)	>19/17/14	▲ 22/20/16	▲ 22/20/17	▲ 22/20/16
Silt	scalar	Visual*	NONE	NONE	NONE	NONE
Debris	scalar	Visual*	NONE	VLITE	NONE	NONE
Sand/Dirt	scalar	Visual*	NONE	NONE	VLITE	NONE
Appearance	scalar	Visual*	NORML	NORML	NORML	NORML
Odor	scalar	Visual*	NORML	NORML	NORML	NORML
Emulsified Water	scalar	Visual*	>5	NEG	NEG	NEG

FLUID CONDITION

The AN level is acceptable for this fluid. The oil is still serviceable provided that the contaminant(s) can be reduced to acceptable levels.

Sodium	ppm	ASTM D5185(m)		0	0	0
Boron	ppm	ASTM D5185(m)	0	<1	<1	<1
Barium	ppm	ASTM D5185(m)	0	0	0	0
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	41	34	42
Phosphorus	ppm	ASTM D5185(m)	330	344	329	342
Zinc	ppm	ASTM D5185(m)	430	381	346	370
Sulfur	ppm	ASTM D5185(m)	760	2582	2445	2488
Acid Number (AN)	mg KOH/g	ASTM D974*	0.60	0.59	0.58	0.55
Visc @ 40°C	cSt	ASTM D7279(m)	101	98.4	96.5	96.5



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 **STELCO - BOSC - Basic Oxygen Slab Caster**
Sample No. : WC0782110 **Received** : 25 Jan 2023 2330 Regional Road #3, Door: BOSC8
Lab Number : 02535491 **Diagnosed** : 26 Jan 2023 NANTICOKE, ON
Unique Number : 5516490 **Diagnostician** : Bill Quesnel CA N0A 1L0
Test Package : IND 2 (Additional Tests: PQ, TAN Man) Contact: Tom Walden

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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