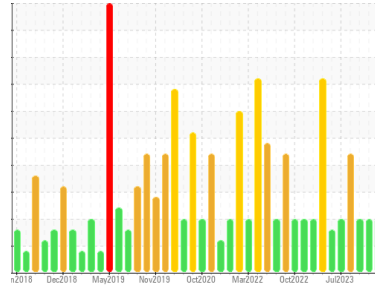




# OIL ANALYSIS REPORT

Sample Rating Trend



ISO



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)**

## DIAGNOSIS

### 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.

### Wear

All component wear rates are normal.

### Contamination

There is a moderate amount of particulates (2 to 100 microns in size) present in the oil.

### 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.

## SAMPLE INFORMATION

method	limit/base	current	history1	history2
Sample Number	Client Info	<b>WC0901981</b>	WC0890382	WC0871202
Sample Date	Client Info	<b>22 Jan 2024</b>	14 Dec 2023	16 Oct 2023
Machine Age	hrs	<b>0</b>	0	0
Oil Age	hrs	<b>0</b>	0	0
Oil Changed	Client Info	<b>N/A</b>	N/A	N/A
Sample Status		<b>ABNORMAL</b>	ABNORMAL	ABNORMAL

## CONTAMINATION

method	limit/base	current	history1	history2
Water	WC Method >5	<b>NEG</b>	NEG	NEG

## WEAR METALS

method	limit/base	current	history1	history2
PQ	ASTM D8184* >99999	<b>0</b>	0	0
Iron	ppm ASTM D5185(m) >20	<b>&lt;1</b>	<1	<1
Chromium	ppm ASTM D5185(m) >20	<b>0</b>	0	0
Nickel	ppm ASTM D5185(m) >20	<b>&lt;1</b>	<1	<1
Titanium	ppm ASTM D5185(m)	<b>0</b>	0	0
Silver	ppm ASTM D5185(m)	<b>0</b>	<1	<1
Aluminum	ppm ASTM D5185(m) >20	<b>&lt;1</b>	0	0
Lead	ppm ASTM D5185(m) >20	<b>&lt;1</b>	1	2
Copper	ppm ASTM D5185(m) >20	<b>2</b>	3	6
Tin	ppm ASTM D5185(m) >20	<b>0</b>	0	0
Antimony	ppm ASTM D5185(m)	<b>0</b>	0	0
Vanadium	ppm ASTM D5185(m)	<b>0</b>	0	0
Beryllium	ppm ASTM D5185(m)	<b>0</b>	0	0
Cadmium	ppm ASTM D5185(m)	<b>0</b>	0	0

## ADDITIVES

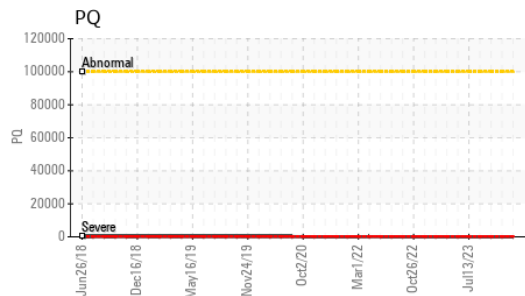
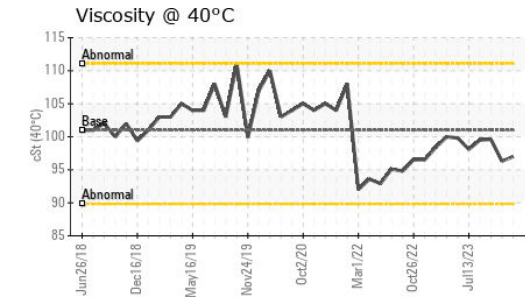
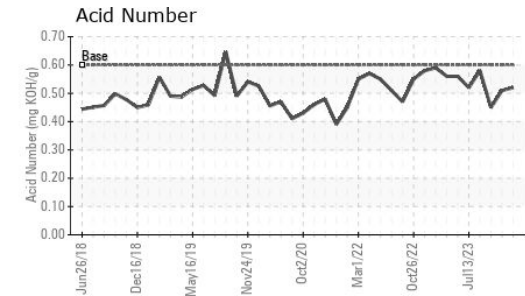
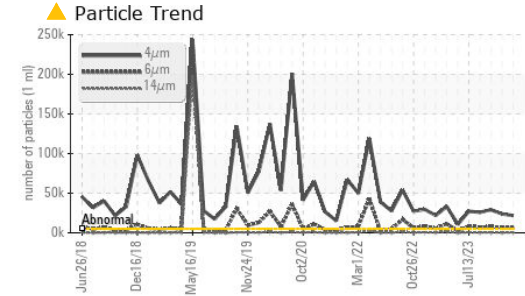
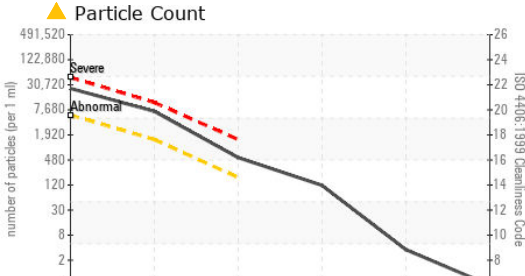
method	limit/base	current	history1	history2
Boron	ppm ASTM D5185(m) 0	<b>0</b>	<1	<1
Barium	ppm ASTM D5185(m) 0	<b>0</b>	<1	<1
Molybdenum	ppm ASTM D5185(m) 0	<b>0</b>	0	0
Manganese	ppm ASTM D5185(m) 0	<b>0</b>	0	0
Magnesium	ppm ASTM D5185(m) 0	<b>&lt;1</b>	0	<1
Calcium	ppm ASTM D5185(m) 50	<b>41</b>	38	30
Phosphorus	ppm ASTM D5185(m) 330	<b>316</b>	306	274
Zinc	ppm ASTM D5185(m) 430	<b>365</b>	357	301
Sulfur	ppm ASTM D5185(m) 760	<b>2839</b>	2470	2880
Lithium	ppm ASTM D5185(m)	<b>&lt;1</b>	<1	<1

## CONTAMINANTS

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



# OIL ANALYSIS REPORT



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 **STELCO - BOSC - Basic Oxygen Slab Caster**  
**Sample No.** : WC0901981 **Received** : 23 Jan 2024 2330 Regional Road #3, Door: BOSC8  
**Lab Number** : 02610734 **Diagnosed** : 25 Jan 2024 NANTICOKE, ON  
**Unique Number** : 5711820 **Diagnostician** : Kevin Marson CA N0A 1L0  
**Test Package** : IND 2 ( Additional Tests: PQ )  
 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.

FLUID CLEANLINESS	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>5000	▲ 21788	▲ 23770	▲ 29160
Particles >6µm	ASTM D7647	>1300	▲ 6148	▲ 6329	▲ 7646
Particles >14µm	ASTM D7647	>160	▲ 481	▲ 356	▲ 502
Particles >21µm	ASTM D7647	>40	▲ 104	▲ 63	▲ 109
Particles >38µm	ASTM D7647	>10	3	2	6
Particles >71µm	ASTM D7647	>3	0	1	2
Oil Cleanliness	ISO 4406 (c)	>19/17/14	▲ 22/20/16	▲ 22/20/16	▲ 22/20/16

FLUID DEGRADATION	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g ASTM D974*	0.60	0.52	0.51	0.45

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	VLITE
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*	>5	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	97.0	96.3	99.6

SAMPLE IMAGES	method	limit/base	current	history1	history2
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