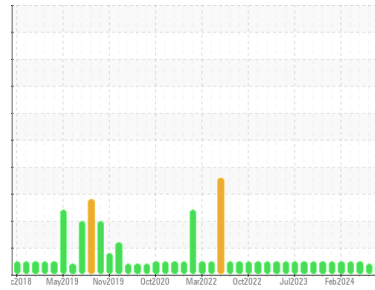




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Area

**BOF/OG SYSTEM**

Machine Id

**D - O.G. Motor Lube System # 7**

Component

**Tank Lube System**

Fluid

**PETRO CANADA HARMONY AW 68 (45 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 water content is negligible. The system and fluid cleanliness is acceptable.

### Fluid Condition

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		<b>WC0956532</b>	WC0947082	WC0934090
Sample Date	Client Info		<b>18 Jun 2024</b>	17 May 2024	15 Apr 2024
Machine Age	hrs	Client Info	<b>0</b>	0	0
Oil Age	hrs	Client Info	<b>0</b>	0	0
Oil Changed	Client Info		<b>N/A</b>	N/A	N/A
Sample Status			<b>NORMAL</b>	ABNORMAL	NORMAL

## WEAR METALS

	method	limit/base	current	history1	history2
PQ	ASTM D8184*	>DFLT	<b>0</b>	0	0
Iron	ppm	ASTM D5185(m) >20	<b>&lt;1</b>	0	0
Chromium	ppm	ASTM D5185(m) >20	<b>0</b>	0	0
Nickel	ppm	ASTM D5185(m) >20	<b>&lt;1</b>	0	0
Titanium	ppm	ASTM D5185(m)	<b>0</b>	0	0
Silver	ppm	ASTM D5185(m)	<b>5</b>	0	0
Aluminum	ppm	ASTM D5185(m) >20	<b>&lt;1</b>	0	0
Lead	ppm	ASTM D5185(m) >20	<b>0</b>	0	0
Copper	ppm	ASTM D5185(m) >20	<b>2</b>	1	<1
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)	<b>0</b>	0	0
Barium	ppm	ASTM D5185(m)	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185(m)	<b>0</b>	0	0
Manganese	ppm	ASTM D5185(m)	<b>0</b>	0	0
Magnesium	ppm	ASTM D5185(m) 110	<b>0</b>	<1	<1
Calcium	ppm	ASTM D5185(m) 60	<b>44</b>	39	2
Phosphorus	ppm	ASTM D5185(m) 330	<b>290</b>	264	93
Zinc	ppm	ASTM D5185(m) 390	<b>330</b>	294	15
Sulfur	ppm	ASTM D5185(m) 660	<b>3785</b>	4108	4348
Lithium	ppm	ASTM D5185(m)	<b>&lt;1</b>	<1	<1

## CONTAMINANTS

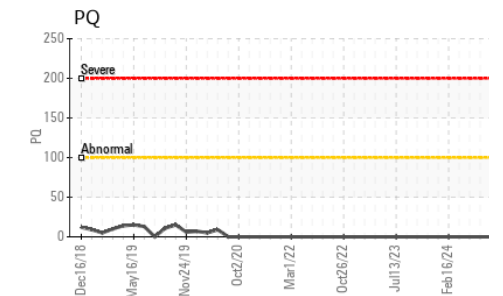
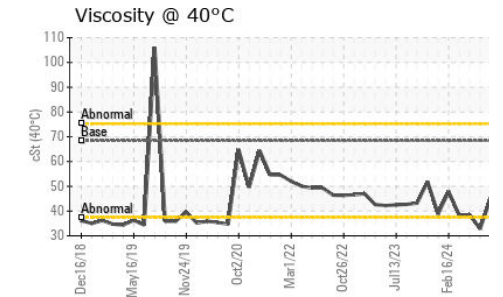
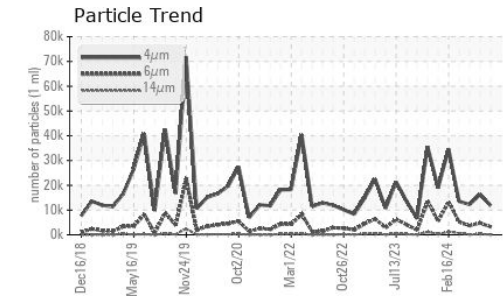
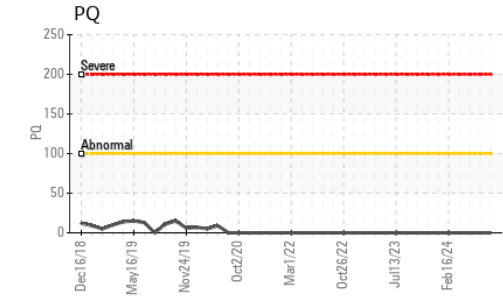
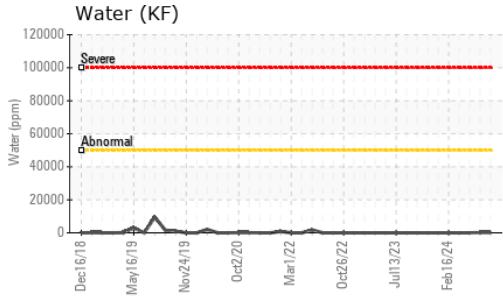
	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m) >15	<b>1</b>	0	0
Sodium	ppm	ASTM D5185(m)	<b>0</b>	0	<1
Potassium	ppm	ASTM D5185(m) >20	<b>0</b>	0	<1
Water	%	ASTM D6304* >5	<b>0.005</b>	0.010	---
ppm Water	ppm	ASTM D6304* >50000	<b>53</b>	102	---

## FLUID CLEANLINESS

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647		<b>11842</b>	16315	12239
Particles >6µm	ASTM D7647	>10240000	<b>3203</b>	4757	3712
Particles >14µm	ASTM D7647	>10240000	<b>138</b>	281	162
Particles >21µm	ASTM D7647	>2560000	<b>22</b>	57	22
Particles >38µm	ASTM D7647	>640000	<b>1</b>	2	1
Particles >71µm	ASTM D7647	>160000	<b>1</b>	1	0

Oil Cleanliness	ISO 4406 (c)	>--/30/30	<b>21/19/14</b>	21/19/15	21/19/15
-----------------	--------------	-----------	-----------------	----------	----------

# OIL ANALYSIS REPORT

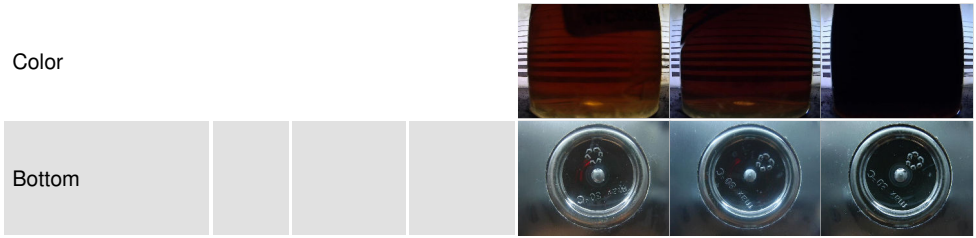


FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974*	0.28	<b>0.45</b>	0.43	0.16

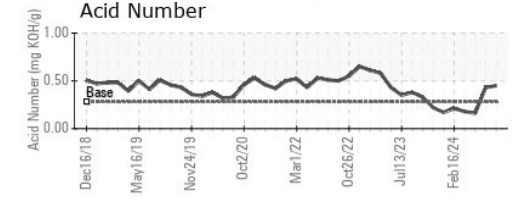
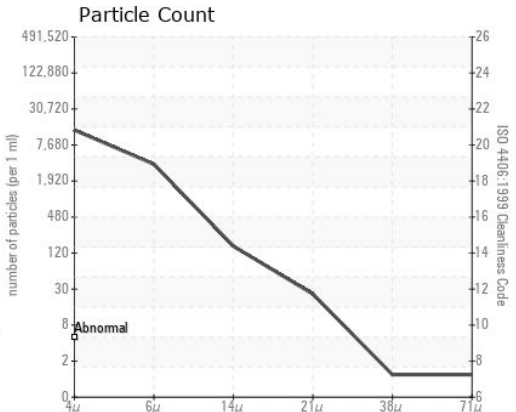
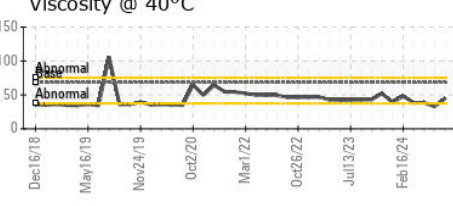
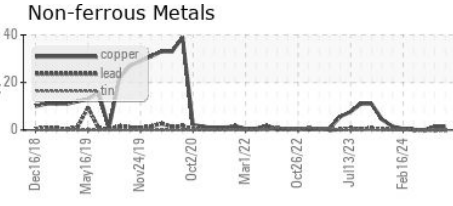
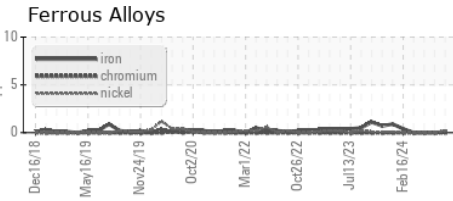
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE
Precipitate	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE
Silt	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	Visual*	NONE	<b>NONE</b>	NONE	VLITE
Sand/Dirt	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE
Appearance	scalar	Visual*	NORML	<b>WGOIL</b>	NORML	NORML
Odor	scalar	Visual*	NORML	<b>NORML</b>	NORML	NORML
Emulsified Water	scalar	Visual*	>5	<b>NEG</b>	.2%	NEG
Free Water	scalar	Visual*		<b>NEG</b>	NEG	NEG

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	68.4	<b>45.1</b>	▲ 32.8	38.5

### SAMPLE IMAGES



### GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : WC0956532  
**Lab Number** : 02642605  
**Unique Number** : 5800144  
**Test Package** : IND 2 ( Additional Tests: KF, PQ )  
**Received** : 18 Jun 2024  
**Tested** : 21 Jun 2024  
**Diagnosed** : 21 Jun 2024 - Kevin Marson

**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.