



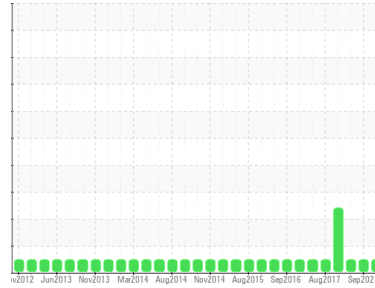
# OIL ANALYSIS REPORT

Sample Rating Trend

**NORMAL**



Machine Id  
**Port Ship Service Generator (S/N C6T00280)**  
 Component  
**Port Genset**  
 Fluid  
**CAT DIESEL ENGINE OIL 15W40 (18 LTR)**



## DIAGNOSIS

### Recommendation

Resample at the next service interval to monitor. No other corrective action is recommended at this time.

### Wear

All component wear rates are normal.

### Contamination

Light fuel dilution occurring. No other contaminants were detected in the oil.

### Fluid Condition

The condition of the oil is acceptable for the time in service.

## SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		<b>WC0754155</b>	WC0527807	WC0527803
Sample Date	Client Info		<b>24 Nov 2022</b>	07 Sep 2021	19 Dec 2020
Machine Age	hrs	Client Info	<b>27636</b>	23542	220000
Oil Age	hrs	Client Info	<b>136</b>	42	500
Oil Changed	Client Info		<b>Changed</b>	Changed	Changed
Sample Status			<b>NORMAL</b>	NORMAL	NORMAL

## CONTAMINATION

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

## WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m) >62	<b>4</b>	4	10
Chromium	ppm	ASTM D5185(m) >3	<b>0</b>	0	<1
Nickel	ppm	ASTM D5185(m) >2	<b>0</b>	<1	<1
Titanium	ppm	ASTM D5185(m)	<b>&lt;1</b>	0	0
Silver	ppm	ASTM D5185(m) >5	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185(m) >4	<b>1</b>	<1	1
Lead	ppm	ASTM D5185(m) >25	<b>&lt;1</b>	<1	<1
Copper	ppm	ASTM D5185(m) >274	<b>1</b>	2	5
Tin	ppm	ASTM D5185(m) >2	<b>0</b>	<1	0
Antimony	ppm	ASTM D5185(m)	<b>&lt;1</b>	<1	0
Vanadium	ppm	ASTM D5185(m)	<b>0</b>	0	<1
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>57</b>	55	42
Barium	ppm	ASTM D5185(m)	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185(m)	<b>44</b>	35	41
Manganese	ppm	ASTM D5185(m)	<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185(m)	<b>520</b>	548	540
Calcium	ppm	ASTM D5185(m)	<b>1803</b>	1587	1777
Phosphorus	ppm	ASTM D5185(m)	<b>1005</b>	988	943
Zinc	ppm	ASTM D5185(m) 1460	<b>1114</b>	1088	1210
Sulfur	ppm	ASTM D5185(m)	<b>2577</b>	2469	2547
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>3</b>	7	4
Sodium	ppm	ASTM D5185(m)	<b>3</b>	2	3
Potassium	ppm	ASTM D5185(m) >20	<b>&lt;1</b>	<1	<1
Fuel	%	ASTM D7593* >4.0	<b>1.8</b>	<1.0	<1.0

## INFRA-RED

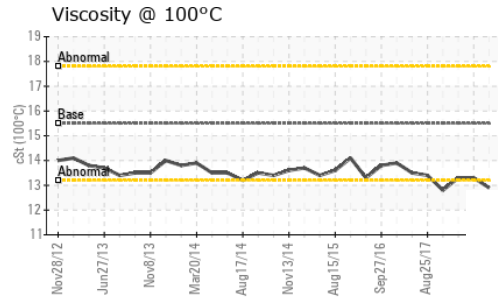
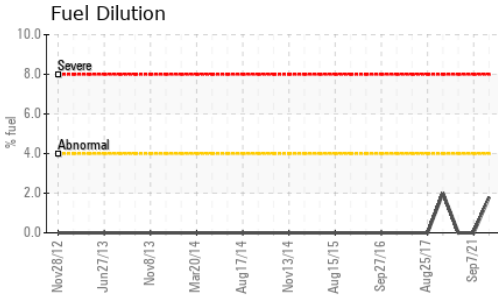
	method	limit/base	current	history1	history2
Soot %	%	ASTM D7844*	<b>0.6</b>	0	0.3
Nitration	Abs/cm	ASTM D7624* >20	<b>6.0</b>	5.0	7.6
Sulfation	Abs/.1mm	ASTM D7415* >30	<b>21.8</b>	21.9	23.6

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	ASTM D7414* >25	<b>20.0</b>	18.4	21.8



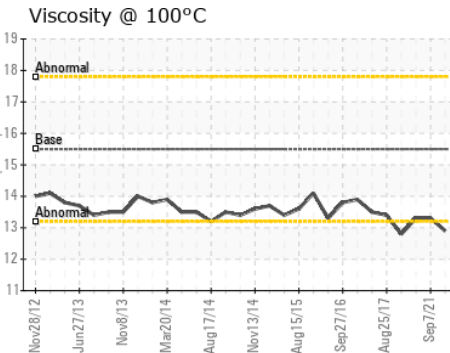
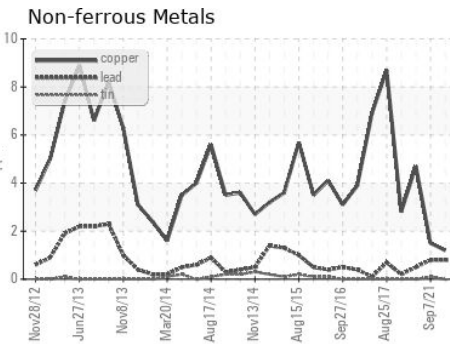
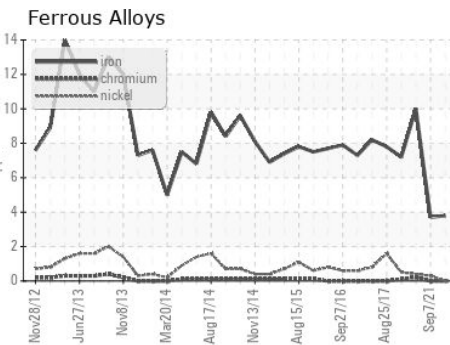
# OIL ANALYSIS REPORT



VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	NONE	NONE
Yellow Metal	scalar	Visual*	NONE	NONE	NONE
Precipitate	scalar	Visual*	NONE	NONE	NONE
Silt	scalar	Visual*	NONE	NONE	NONE
Debris	scalar	Visual*	NONE	NONE	NONE
Sand/Dirt	scalar	Visual*	NONE	NONE	NONE
Appearance	scalar	Visual*	NORML	NORML	NORML
Odor	scalar	Visual*	NORML	NORML	NORML
Emulsified Water	scalar	Visual*	>0.1	NEG	NEG
Free Water	scalar	Visual*		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D7279(m)	15.5	<b>12.9</b>	13.3

## GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : WC0754155  
**Lab Number** : **02526363**  
**Unique Number** : 5499361  
**Test Package** : MAR 1 ( Additional Tests: FuelDilution, PercentFuel )

**CANADIAN COAST GUARD**  
 CCGS Vladykov, P.O. Box 5667, 280 Southside Rd.  
 St. John's, NL  
 CA A1C 5X1  
 Contact: Geoff Stewart  
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 T: (709)772-4216  
 F: (709)772-3652

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.