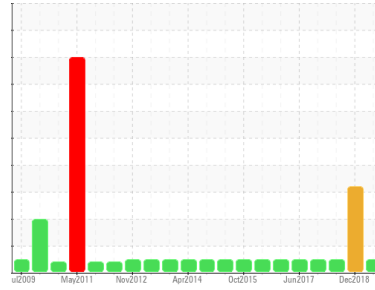




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Area

Boat Deck

Machine Id

G5-83211 Barge Davit Winch

Component

Gearbox

Fluid

PETRO CANADA ENDURATEX EP 68 (20 LTR)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

There is no indication of any contamination in the oil.

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		WC0432922	WC62007731	WC62007388
Sample Date	Client Info		15 Feb 2020	25 Dec 2018	22 May 2018
Machine Age	mths	Client Info	0	0	0
Oil Age	mths	Client Info	6	104	97
Oil Changed	Client Info		Not Chngd	N/A	Not Chngd
Sample Status			NORMAL	ABNORMAL	NORMAL

CONTAMINATION

	method	limit/base	current	history1	history2
Water	WC Method	>0.2	NEG	NEG	NEG

WEAR METALS

	method	limit/base	current	history1	history2
PQ	ASTM D8184*		6	120	5
Iron	ppm	ASTM D5185(m) >150	2	96	18
Chromium	ppm	ASTM D5185(m)	0	0	0
Nickel	ppm	ASTM D5185(m)	0	<1	0
Titanium	ppm	ASTM D5185(m)	0	0	0
Silver	ppm	ASTM D5185(m)	0	0	<1
Aluminum	ppm	ASTM D5185(m) >5	0	1	0
Lead	ppm	ASTM D5185(m) >65	<1	6	2
Copper	ppm	ASTM D5185(m) >80	4	45	22
Tin	ppm	ASTM D5185(m) >8	<1	4	1
Antimony	ppm	ASTM D5185(m)	<1	0	<1
Vanadium	ppm	ASTM D5185(m)	0	<1	0
Beryllium	ppm	ASTM D5185(m)	0	0	0
Cadmium	ppm	ASTM D5185(m)	0	<1	0

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m) 69	75	26	21
Barium	ppm	ASTM D5185(m) 1	<1	<1	0
Molybdenum	ppm	ASTM D5185(m) 1	0	0	<1
Manganese	ppm	ASTM D5185(m) 1	<1	3	<1
Magnesium	ppm	ASTM D5185(m) 1	<1	1	0
Calcium	ppm	ASTM D5185(m) 1	1	5	2
Phosphorus	ppm	ASTM D5185(m) 246	286	263	243
Zinc	ppm	ASTM D5185(m) 1	3	7	2
Sulfur	ppm	ASTM D5185(m) 3670	4760	4807	4268
Lithium	ppm	ASTM D5185(m)	<1	1	<1

CONTAMINANTS

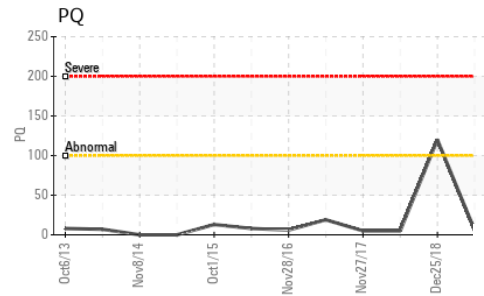
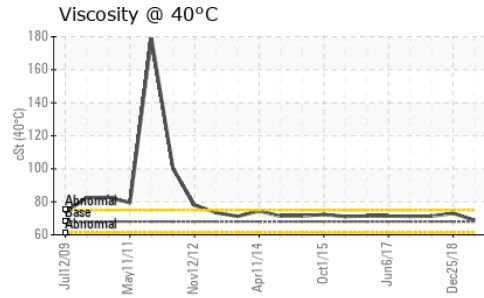
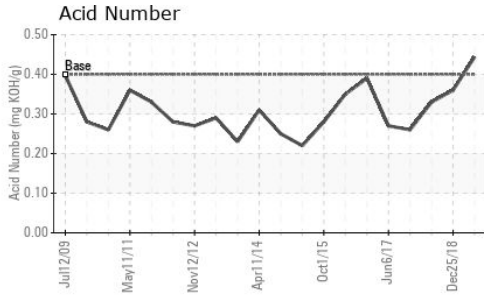
	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m) >20	5	▲ 29	9
Sodium	ppm	ASTM D5185(m)	0	1	<1
Potassium	ppm	ASTM D5185(m) >20	<1	<1	0

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974* 0.4	0.444	0.36	0.33



OIL ANALYSIS REPORT



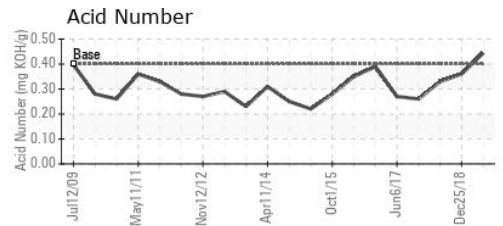
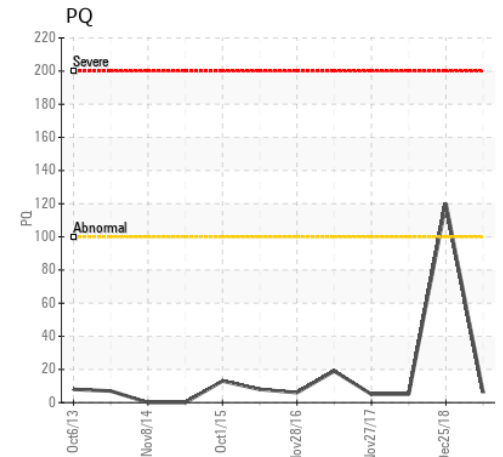
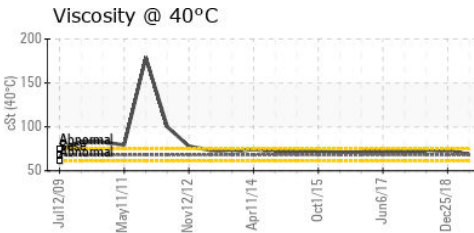
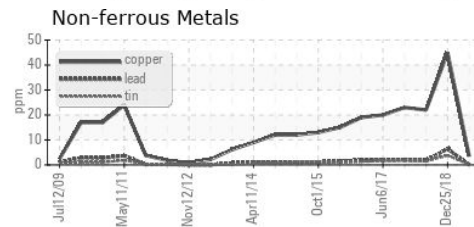
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	NONE	NONE
Yellow Metal	scalar	Visual*	NONE	NONE	NONE
Precipitate	scalar	Visual*	NONE	NONE	NONE
Silt	scalar	Visual*	NONE	NONE	LTMOD
Debris	scalar	Visual*	NONE	NONE	LTMOD
Sand/Dirt	scalar	Visual*	NONE	NONE	NONE
Appearance	scalar	Visual*	NORML	NORML	NORML
Odor	scalar	Visual*	NORML	NORML	NORML
Emulsified Water	scalar	Visual*	>0.2	NEG	▲ .2%
Free Water	scalar	Visual*		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	68.0	68.7	73.1

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. : WC0432922 **Received** : 27 Feb 2020
Lab Number : 02340535 **Tested** : 27 Feb 2020
Unique Number : 5007954 **Diagnosed** : 27 Feb 2020 - Wes Davis
Test Package : MAR 2 (Additional Tests: TAN Man)

CANADIAN COAST GUARD
 CCGS GRIFFON, PO BOX 1000, 401 KING ST.W
 Prescott, ON
 CA K6V 5T3
 Contact: Laurie Bosley
 Laurie.Bosley@dfo-mpo.gc.ca

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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