

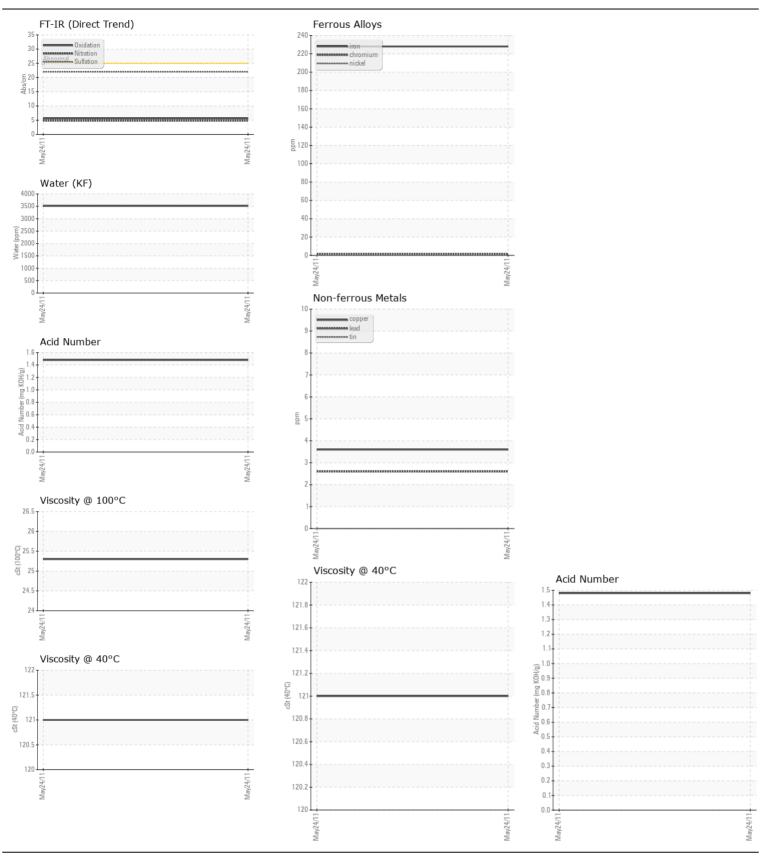
WEAR CONTAMINATION **FLUID CONDITION**

NORMAL ABNORMAL ATTENTION

Main Deck

ARVA Crane Slewing Motor Starboard Oil

RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
We advise that you check for the source of water entry. The oil change at the time of sampling has been noted. We recommend an early resample to monitor this condition.	Sample Number		Client Info		WC62004199		
	Sample Date		Client Info		24 May 2011		
	Machine Age	hrs	Client Info		843		
	Oil Age	hrs	Client Info		0		
	Filter Age	hrs	Client Info		0		
	Oil Changed		Client Info		Changed		
	Filter Changed		Client Info		N/A		
	Sample Status				ABNORMAL		
VEAR	Iron	ppm	ASTM D5185(m)		228		
	Chromium	ppm	ASTM D5185(m)		2		
All component wear rates are normal.	Nickel	ppm	ASTM D5185(m)		<1		
	Titanium	ppm	ASTM D5185(m)		0		
	Silver	ppm	ASTM D5185(m)		<1		
	Aluminum	ppm	ASTM D5185(m)		0		
	Lead	ppm	ASTM D5185(m)		3		
	Copper	ppm	ASTM D5185(m)		4		
	Tin	ppm	ASTM D5185(m)		0		
	Vanadium	ppm	ASTM D5185(m)		0		
	White Metal	scalar	Visual*	NONE	VLITE		
	Yellow Metal	scalar	Visual*	NONE	NONE		
	0		40714 0 - 4074		_		
CONTAMINATION	Silicon	ppm	ASTM D5185(m)		5		
There is a moderate concentration of water present in the oil.	Potassium	ppm	ASTM D5185(m)		1		
	Water	%	ASTM D6304*		<u> </u>		
	ppm Water	ppm	ASTM D6304*		4 3514.9		
	Soot %	%	ASTM D7844*		0		
	Nitration	Abs/cm	ASTM D7624*		4.8		
	Sulfation	Abs/.1mm	ASTM D7415*		22.0		
	Silt	scalar	Visual*	NONE	NONE		
	Debris	scalar	Visual*	NONE	VLITE		
	Sand/Dirt	scalar	Visual*	NONE	NONE		
	Appearance	scalar	Visual*	NORML	NORML		
	Odor	scalar	Visual*	NORML	NORML		
	Emulsified Water	scalar	Visual*		<u> </u>		
LUID CONDITION	Sodium	ppm	ASTM D5185(m)		0		
ESID SONDITION	Boron	ppm	ASTM D5185(m)		79		
The oil is no longer serviceable due to the presence of contaminants.	Barium	ppm	ASTM D5185(m)		0		
	Molybdenum	ppm	ASTM D5185(m)		<1		
	Manganese	ppm	ASTM D5185(m)		4		
	Magnesium	ppm	ASTM D5185(m)		1		
	Calcium	ppm	ASTM D5185(m)		17		
	Phosphorus	ppm	ASTM D5185(m)		884		
	Zinc	ppm	ASTM D5185(m)		0		
	Sulfur	ppm	ASTM D5185(m)		19147		
	Oxidation	Abs/.1mm	ASTM D3163(III) ASTM D7414*		5.6		
	Acid Number (AN)				1.48		
	Visc @ 40°C	cSt	ASTM D974 ASTM D7279(m)		1.46		
	Visc @ 40 C	cSt	ASTM D7279(III) ASTM D7279(m)		25.3		
	VISC @ 100°C	W	40 IN D12/3(II)		25.3		





CALA ISO 17025:2017 Accredited Laboratory

Laboratory Sample No.

: WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 Lab Number : 01690677

: WC62004199

Tested Unique Number : 3331947 Diagnosed Test Package: MAR 2 (Additional Tests: FT-IR, KF, KV100, VI)

Received : 17 Jun 2011 : 20 Jun 2011

: 20 Jun 2011 - Kevin Marson

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 T:

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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