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Technical Reports
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Report

ETS No.:	194	Copy:	Transport Canada (fax 772-0210)
Date:	1 May 2008	Attn:	Mr. Peter Johnson
Client:	St. John's Dockyard Ltd., 475 Water St., St. John's, Nfld., A1E 6B5	Date Rcv'd:	25 April 2008
		Assisted by:	S. Hall / M. Granter
Attn:	Mr. Richard Eddy (fax 758-6825)	Inspected by:	Fred O'Keefe (Jr.), B.Sc., C.E.T. CAN/CGSB 48.9712 & ASNT TC-1A RT(Gen.& A/S),UT,MT,PT,ET level III. C.W.B. W178.2 Visual level III.
P.O. No.	KM 447569		
Project:	C.C.G.S. Terry Fox		
Testing Required:	Ultrasonic Inspections	Signed:	Fred O'Keefe N.D.E. Supervisor

Remarks

As directed by Mr. Richard Eddy of Newdock and Mr. Ron Collier, Chief Engineer, ultrasonic thickness readings were obtained on the above noted vessel's hull, support structure and decks. Readings are shown in mm's on the attached tables, and original thicknesses were obtained from the vessel's shell expansion drawing No's.07-00-01.

Equipment Used

Krautkramer DMS 2 digital thickness gauge (S/N 00MMRRF).
Krautkramer TC560 probe (S/N 00M581).
Various calibration blocks & 0.100 to 0.500 " steel step wedge.
Ultragel couplant.

ETS No.: Date: 1 May 2008
Client: Newdock
Project: C.C.G.Terry Fox
Testing Required: Ultrasonic Inspection

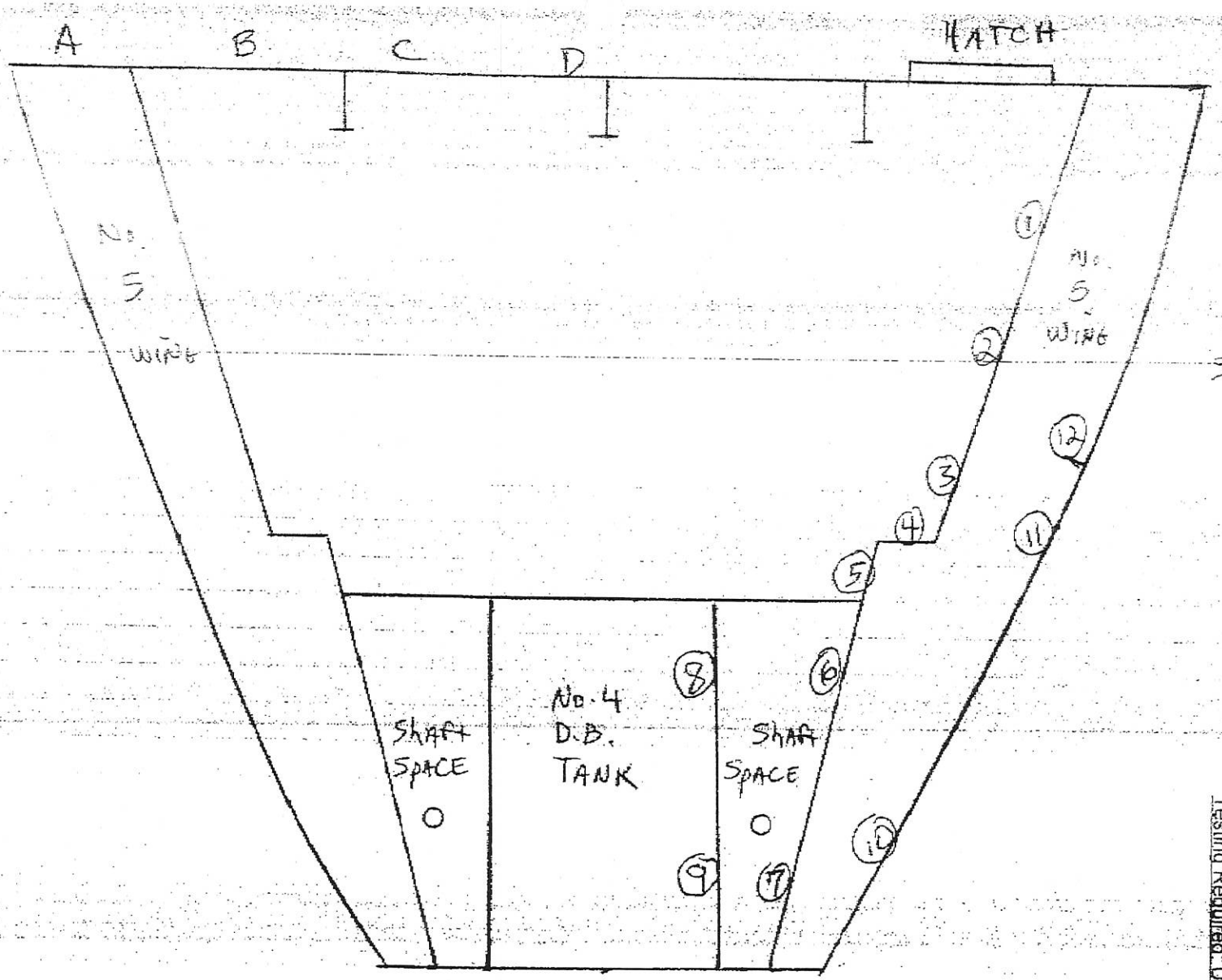
Frame 40 Thickness Readings (in mm)

Element Group:		Tank / Hold / Space No.:								
Structural Element	Plate No.	Draw. Ref.	Orig Thk mm	Gauged		Diminution				Comments
				Port	Stbd	Port		Stbd		
				mm	mm	mm	%	mm	%	
Keel	156	0	25.0	24.9	23.4	0.1	0.4%	1.6	6.4%	
Strake A	154A		25.0	25.0	24.9	0.0	0.0%	0.1	0.4%	
Strake B	102		25.0	24.8	35.0	0.2	0.8%	-10.0	-40.0	
Strake C	104		35.0	35.0	34.9	0.0	0.0%	0.1	0.3%	
Strake D	105		35.0	33.4	35.0	1.6	4.6%	0.0	0.0%	
Strake E	106		35.0	35.0	34.8	0.0	0.0%	0.2	0.6%	
Strake F	114		25.0	24.3	24.8	0.7	2.8%	0.2	0.8%	
Strake G	115		35.0	35.0	35.2	0.0	0.0%	-0.2	-0.6%	
Strake H	117		43.0	38.8	38.0	4.2	9.8%	5.0	11.6	
Strake I	121		38.0	37.7	38.2	0.3	0.8%	-0.2	-0.5%	
Strake J	122		38.0	38.0	37.7	0.0	0.0%	0.3	0.8%	
Strake K	123		38.0	37.9	38.0	0.1	0.3%	0.0	0.0%	
Strake L	124		38.0	37.8	38.1	0.2	0.5%	-0.1	-0.3%	
Strake M	125		38.0	38.5	38.0	-0.5	-1.3%	0.0	0.0%	
Main Deck Hatch Coaming			9.0	9.1	9.2	-0.1	-1.1%	-0.2	-2.2%	
Main Deck Hatch			9.0	9.3	9.3	-0.3	-3.3%	-0.3	-3.3%	
Main Deck A			19.0	19.0	18.9	0.0	0.0%	0.1	0.5%	
Main Deck B			9.0	8.6	8.9	0.4	4.4%	0.1	1.1%	
Main Deck C			9.0	9.2	9.3	-0.2	-2.2%	-0.3	-3.3%	
Main Deck D			9.0	8.5	8.8	0.5	5.6%	0.2	2.2%	
Port Shaft Space Tank Top			19.0	18.9	18.9	0.1	0.5%	0.1	0.5%	
No. 4 D.B. Tank Top			19.0	18.7	19.0	0.3	1.6%	0.0	0.0%	
Star. Shaft Space Tank Top			19.0	18.9	18.9	0.1	0.5%	0.1	0.5%	

ETS No.: , Date: 1 May 2008
Client: Newdock
Project: C.C.G Terry Fox
Testing Required: Ultrasonic inspection

Frame 40 Thickness Readings (in mm)

Element Group:		Tank / Hold / Space No.:							
Structural Element	Plate No.	Draw. Ref.	Orig Thk. mm	Gauged		Diminution			
				Port	Stbd	Port		Stbd	
				mm	mm	mm	%	mm	%
No. 5 Wing Tank Long Blkd 1			7.0	6.8	6.9	0.2	2.9%	0.1	1.4%
No. 5 Wing Tank Long Blkd 2			7.0	6.9	6.9	0.1	1.4%	0.1	1.4%
No. 5 Wing Tank Long Blkd 3			7.0	6.7	6.7	0.3	4.3%	0.3	4.3%
No. 5 Tank Top 4			8.0	7.9	7.6	0.1	1.3%	0.4	5.0%
No. 5 Wing Tank Long Blkd 5			8.0	7.9	7.8	0.1	1.3%	0.2	2.5%
Shaft Space Long Blkd 6			8.0	7.9	8.2	0.1	1.3%	-0.2	-2.5%
Shaft Space Long Blkd 7			13.0	12.6	13.0	0.4	3.1%	0.0	0.0%
No. 4 D.B. Long Blkd 8			8.0	7.9	8.0	0.1	1.3%	0.0	0.0%
No. 4 D.B. Long Blkd 9			13.0	12.5	12.7	0.5	3.8%	0.3	2.3%
No. 5 Wing Tank Frame 10	Web		13.0	13.0	12.9	0.0	0.0%	0.1	0.8%
No. 5 Wing Tank Frame 10	Flange		19.0	19.0	18.9	0.0	0.0%	0.1	0.5%
No. 5 Wing Tank Frame 11	Web		19.0	19.7	19.9	-0.7	-3.7%	-0.9	-4.7%
No. 5 Wing Tank Frame 11	Flange		19.0	18.9	18.3	0.1	0.5%	0.7	3.7%
No. 5 Wing Tank Long Stiffner			19.0	19.1	19.2	-0.1	-0.5%	-0.2	-1.1%
Shaft Space Top Frames	Web		12.0	11.8	11.5	0.2	1.7%	0.5	4.2%
Shaft Space Top Frames	Flange		16.0	15.8	15.9	0.2	1.3%	0.1	0.6%
Shaft Space Bottom Frames	Web		13.0	12.9	12.9	0.1	0.8%	0.1	0.8%
Shaft Space Bottom Frames	Flange		19.0	18.5	18.9	0.5	2.6%	0.1	0.5%
No. 4 D.B.Top Frames	Web		8.0	8.1	7.9	-0.1	-1.3%	0.1	1.3%
No. 4 D.B.Top Frames	Flange		12.0	12.2	12.2	-0.2	-1.7%	-0.2	-1.7%
No. 4 D.B.Bottom Frames	Web		13.0	12.7	12.7	0.3	2.3%	0.3	2.3%
No. 4 D.B.Bottom Frames	Flange		19.0	18.3	18.5	0.7	3.7%	0.5	2.6%



FRAME 40 SECTION

ETS No.: 194 Date: 1 May 2008
Client: Newdock
Project: C.C.G. Terry Fox
Testing Required: Ultrasonic Inspection

ETS No: , Date: 1 May 2008
Client: Newdock.
Project: C.C.G.Terry Fox
Testing Required: Ultrasonic Inspection

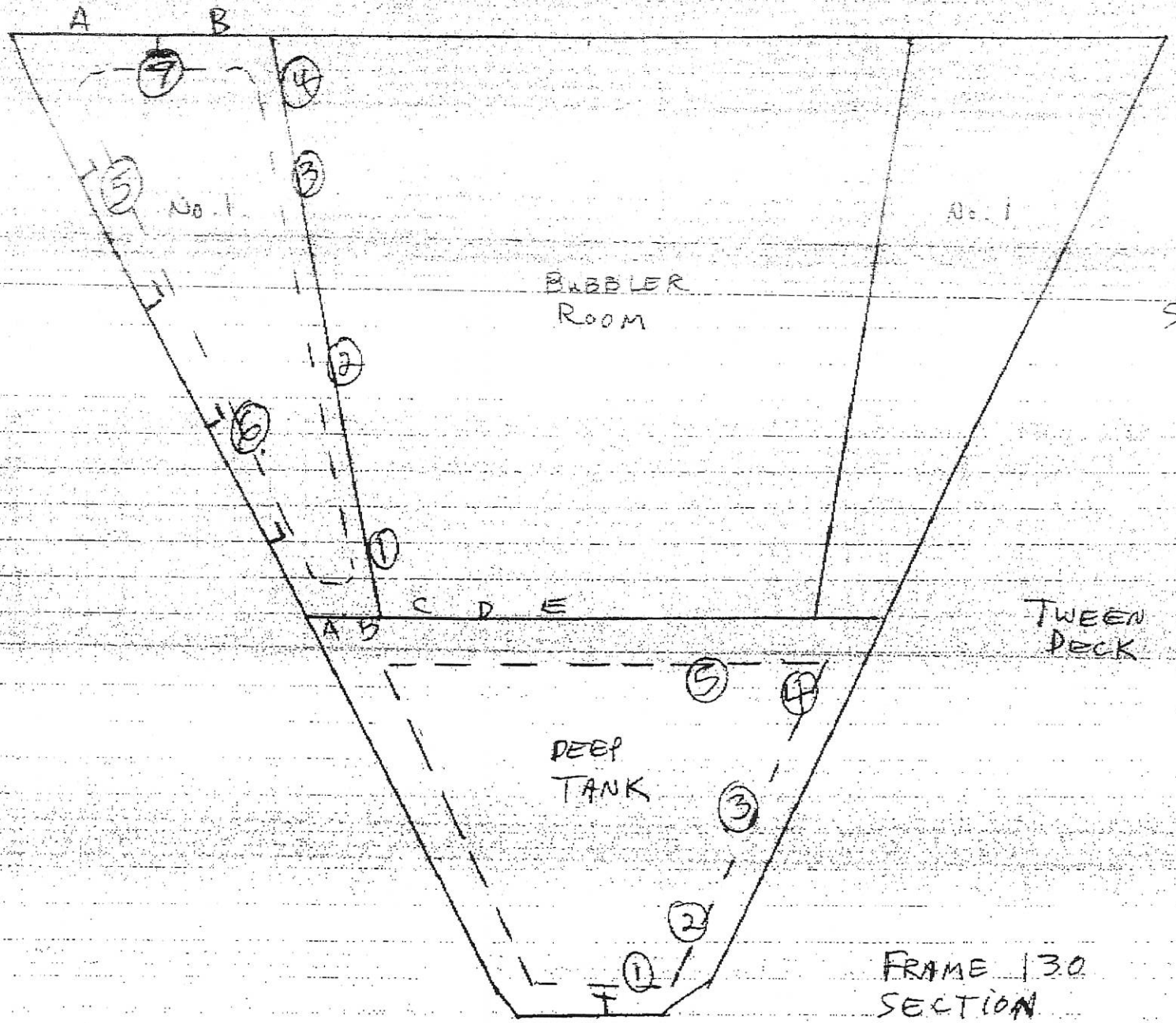
Frame 130 Thickness Readings (in mm)

Element Group:		Tank / Hold / Space No.:								
Structural Element	Plate No	Draw Ref.	Orig Thk. mm	Gauged		Diminution				Comments
				Port	Stbd	Port		Stbd		
				mm	mm	mm	%	mm	%	
Keel	54	0	41.0	41.2	41.4	-0.2	-0.5%	-0.4	-1.0%	
Strake A	54A		41.0	41.1	41.1	-0.1	-0.2%	-0.1	-0.2%	
Keel	50		30.0	29.8	29.5	0.2	0.7%	0.5	1.7%	
Strake B	51		30.0	30.1	30.3	-0.1	-0.3%	-0.3	-1.0%	
Strake C	53		41.0	41.2	41.0	-0.2	-0.5%	0.0	0.0%	
Strake D	57		41.0	41.6	40.1	-0.6	-1.5%	0.9	2.2%	
Strake E	58		41.0	39.8	40.4	1.2	2.9%	0.6	1.5%	
Strake F	66		41.0	40.8	41.3	0.2	0.5%	-0.3	-0.7%	
Strake G	80		23.0	23.4	23.0	-0.4	-1.7%	0.0	0.0%	
Strake H	84		9.0	9.0	9.1	0.0	0.0%	-0.1	-1.1%	
Main Deck A			12.0	12.3	12.1	-0.3	-2.5%	-0.1	-0.8%	
Main Deck B			8.0	8.1	8.1	-0.1	-1.3%	-0.1	-1.3%	
Tween Deck A			20.0	20.2	20.8	-0.2	-1.0%	-0.8	-4.0%	
Tween Deck B			7.0	7.2	7.0	-0.2	-2.9%	0.0	0.0%	
Tween Deck C			7.0	6.8	6.5	0.2	2.9%	0.5	7.1%	
Tween Deck D			7.0	6.6	7.0	0.4	5.7%	0.0	0.0%	
Tween Deck E			7.0	6.8	6.9	0.2	2.9%	0.1	1.4%	
Main Deck Long. Stiffner 1			13.0	13.1	13.1	-0.1	-0.8%	-0.1	-0.8%	
Main Deck Long. Stiffner 2			13.0	13.0	13.0	0.0	0.0%	0.0	0.0%	
Main Deck Long. Frame	Web		8.0	7.9	7.9	0.1	1.3%	0.1	1.3%	
Main Deck Long. Frame	Flange		8.0	7.9	7.9	0.1	1.3%	0.1	1.3%	
No.1 Wing Tank Long.			7.0	7.0	7.1	0.0	0.0%	-0.1	-1.4%	1
No.1 Wing Tank Long. Blkd			7.0	7.0	7.0	0.0	0.0%	0.0	0.0%	

ETS No.: Date: 4 April 2008
ETS No.: 194, Date: 1 May 2008
Client: Newdock,
Project: C.C.G.Terry Fox
Testing Required: Ultrasonic Inspection

Frame 130 Thickness Readings (in mm)

Element Group:		Tank / Hold / Space No.:				Transverse Section Frame No.:				
Structural Element	Frame No.	Draw Ref.	Orig Thk. mm	Gauged		Diminution				Comments
				Port	Stbd	Port		Stbd		
				mm	mm	mm	%	mm	%	
No.1 Wing Tank Long. Blkd 3			7.0	6.9	7.2	0.1	1.4%	-0.2	-2.9	
No.1 Wing Tank Long. Blkd 4			7.0	7.5	7.1	-0.5	-7.1%	-0.1	-1.4	
No.1 Wing Tank Blkd 1 Frame	Web		8.0	7.9	8.1	0.1	1.3%	-0.1	-1.3	
No.1 Wing Tank Blkd 1 Frame	Flange		10.0	9.6	9.5	0.4	4.0%	0.5	5.0%	
No.1 Wing Tank Blkd 2 Frame	Web		8.0	8.0	8.1	0.0	0.0%	-0.1	-1.3	
No.1 Wing Tank Blkd 2 Frame	Flange		10.0	9.5	9.7	0.5	5.0%	0.3	3.0%	
No.1 Wing Tank Blkd 3 Frame	Web		8.0	8.0	8.2	0.0	0.0%	-0.2	-2.5	
No.1 Wing Tank Blkd 3 Frame	Flange		10.0	9.5	9.7	0.5	5.0%	0.3	3.0%	
No.1 Wing Tank Long. Stiffner 5			21.0	21.3	21.7	-0.3	0.0	??		
No.1 Wing Tank Long. Stiffner 6			21.0	21.0	21.6	0.0	0.0%	-0.6	-2.9	
No.1 Wing Top Long. Beam 7			8.0	7.9	7.9	0.1	1.3%	0.1	1.3%	
Deep Tank Framing 1	Flange		19.0	19.0	19.0	0.0	0.0%	0.0	0.0%	
Deep Tank Framing 1	Web		23.0	22.0	22.1	1.0	4.3%	0.9	3.9%	
Deep Tank Framing 2	Flange		19.0	19.0	22.5	0.0	0.0%	-3.5	-18.4	
Deep Tank Framing 2	Web		23.0	22.0	19.0	1.0	4.3%	4.0	17.4	
Deep Tank Framing 3	Flange		19.0	18.8	19.3	0.2	1.1%	-0.3	-1.6	
Deep Tank Framing 3	Web		23.0	22.2	22.3	0.8	3.5%	0.7	3.0%	
Deep Tank Framing 4	Flange		19.0	18.8	17.9	0.2	1.1%	1.1	5.8%	
Deep Tank Framing 4	Web		22.0	22.4	22.3	-0.4	-1.8%	-0.3	-1.4	
Deep Tank Framing 5	Flange		13.0	12.0	12.2	1.0	7.7%	0.8	6.2%	
Deep Tank Framing 5	Web		8.0	7.7	7.9	0.3	3.8%	0.1	1.3%	



ETS No.: 194 Date: 1 May 2008.
Client: Newdpock
Project: C.C.G. Terry Fox
Testing Required: Ultrasonic Inspection

ETS No.: 194, Date: 1 May 2008
Client: Newdock.
Project: C.C.G.Terry Fox
Testing Required: Ultrasonic Inspection **Wind & Water Line Thickness Readings (in mm)**

Element Group:		Tank / Hold / Space No.:				Wind & Water Line				
Structural Element	Element Frame No.	Draw Ref.	Orig Thk. mm	Gauged		Diminution				Comments
				Port	Stbd	Port		Starboard		
				mm	mm	mm	%	mm	%	
Nose Hull Plate	92		54.0	53.1	53.7	0.9	1.7%	0.3	0.6%	
Hull Plate	72		41.0	41.0	41.3	0.0	0.0%	-0.3	-0.7%	
Hull Plate	69		41.0	41.9	40.5	-0.9	-2.2%	0.5	1.2%	
Hull Plate	64		41.0	41.0	41.0	0.0	0.0%	0.0	0.0%	
Hull Plate	62		41.0	41.6	40.7	-0.6	-1.5%	0.3	0.7%	
Hull Plate	67		41.0	39.9	41.0	1.1	2.7%	0.0	0.0%	
Hull Plate	66		38.0	40.0	41.1	-2.0	-5.3%	-3.1	-8.2%	
Hull Plate	23		38.0	37.9	37.8	0.1	0.3%	0.2	0.5%	
Hull Plate	4		38.0	37.7	37.9	0.3	0.8%	0.1	0.3%	
Hull Plate	14		38.0	38.0	38.0	0.0	0.0%	0.0	0.0%	
Hull Plate	124		38.0	38.2	37.6	-0.2	-0.5%	0.4	1.1%	
Hull Plate	129		35.0	38.4	38.0	-3.4	-9.7%	-3.0	-8.6	
Hull Plate	130		35.0	38.1	36.8	-3.1	-8.9%	-1.8	-5.1	
Hull Plate	131		35.0	34.8	35.7	0.2	0.6%	-0.7	-2.0%	
Hull Plate	136		35.0	33.8	35.0	1.2	3.4%	0.0	0.0%	
Hull Plate	136A		35.0	34.9	34.5	0.1	0.3%	0.5	1.4%	
Hull Plate	136B		35.0	34.6	35.1	0.4	1.1%	-0.1	-0.3%	
Hull Plate	142		46.0	45.1	45.5	0.9	2.0%	0.5	1.1%	
Hull Plate	143		46.0	45.7	45.0	0.3	0.7%	1.0	2.2%	