

2009 01T 0732CP

IN THE SUPREME COURT OF NEWFOUNDLAND & LABRADOR
TRIAL DIVISION

BETWEEN:

GREG RICE **PLAINTIFF**

AND:

**ATLANTIC LOTTERY CORPORATION
INC. -SOCIÉTÉ DES LOTERIES DE
L'ATLANTIQUE** **DEFENDANT**

AND:

VLC, INC. **FIRST THIRD PARTY**

AND:

SPIELO MANUFACTURING ULC **SECOND THIRD PARTY**

AND:

HI-TECH GAMING.COM LTD. **THIRD THIRD PARTY**

AND:

IGT-CANADA INC. **FOURTH THIRD PARTY**

AND:

INTERNATIONAL GAME TECHNOLOGY **FIFTH THIRD PARTY**

AND:

**TECH LINK INTERNATIONAL
ENTERTAINMENT LIMITED** **SIXTH THIRD PARTY**

AND:

GTECH CORPORATION **SEVENTH THIRD PARTY**

**BROUGHT PURSUANT TO THE *CLASS ACTIONS ACT*
BEFORE THE HONOURABLE MR. JUSTICE WAYNE DYMOND,
CASE MANAGEMENT JUDGE**

AFFIDAVIT OF KEVIN HARRIGAN, PhD

SUMMARY OF CURRENT DOCUMENT	
Court File Number:	2009 01T 0732 CP
Date of Filing of Document:	July , 2011
Name of Filing Party or Person:	Plaintiffs
Application to which Document being filed relates:	Application of Plaintiffs for certification as a class action.
Statement of purpose in filing:	To support application.

CHES CROSBIE BARRISTERS
Solicitors for the Plaintiffs
169 Water Street, 4th Floor
St. John's, NL A1C 1B1
Attention: Chesley F. Crosbie, Q.C.

TABLE OF CONTENTS

	<u>Page</u>
Methodology	3
Problem Gambling Prevalence Rates for Gamblers in NL.....	4
Estimate of VLT Revenue derived from Problem Gamblers.....	6
Exhibit A: Estimate of VLT Revenue derived from Problem Gamblers.....	9

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BROUGHT PURSUANT TO THE *CLASS ACTIONS ACT*
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AFFIDAVIT OF KEVIN HARRIGAN, PhD

I, Kevin Harrigan, PhD, of the Town of Fergus, in the Province of Ontario, MAKE
OATH AND SAY:

1. I believe the facts and opinions stated herein to be true and correct and they are based on information and belief gained as a researcher, except where indicated to be based on personal knowledge.

2. I am a Research Associate Professor at the University of Waterloo. My main area of research is the design and programming of gambling games on Electronic Gaming Machines (EGMs) including slot machines and Video Lottery Terminals (VLTs).
3. I am the Head of the Gambling Research Team at the University of Waterloo.
<http://gamblingresearch.uwaterloo.ca/>
4. Each VLT in Newfoundland and Labrador (NL) contains multiple games and the player chooses what game to play. Each VLT normally contains several "line games" which are games that look and play like slot machine games. Each VLT normally contains other games, such as Video Poker, which are not line games.
5. I have been asked to include the following in this affidavit:
 - (a) Information regarding the prevalence of problem gambling in NL amongst gamblers who play VLT line games versus gamblers who play other gambling games.
 - (b) My estimate of the revenue from VLT line games that is derived from problem gamblers.
6. In preparing this affidavit I studied the following sources. All of these are available online. The online location of each is listed in the Exhibit A.
 - (a) A study of problem gambling prevalence rates in NL in 2005.¹
 - (b) A study of problem gambling prevalence rates in NL in 2009.²
 - (c) A published report showing the VLT revenue in NL for 2005.³
 - (d) A published report showing the VLT revenue in NL for 2009.⁴
 - (e) A report of the percentage of revenue derived from slot machine players in Ontario.⁵

Methodology

7. In the 2005 and 2009 prevalence studies^{1,2}, the prevalence of problem gambling was determined using the Problem Gambling Severity Index (PGSI) which is a statistically validated questionnaire that is widely used in problem gambling prevalence studies. In this affidavit I have assumed that these prevalence rates in the 2005 and 2009 studies^{1,2} are accurate.
8. The 2005 and 2009 NL problem gambling prevalence studies do not distinguish between VLT line games and other VLT games such as Video Poker. For 2005 and 2009 I estimated that the VLT players who play line games have the same problem gambling prevalence rates as the players who play other games on VLTs.
9. A survey of VLT players in NL could be conducted to determine the following regarding VLT "line games" only:
 - (a) ~~The ^{number of} ~~problem gambling prevalence rates~~ for players in NL who play VLT 'line games'.~~ ^{KH}
 - (b) The number of VLT 'line game' players in NL who are moderate-risk problem gamblers
 - (c) The number of VLT 'line game' players in NL who are problem gamblers.
10. In the 2005 and 2009 prevalence studies^{1,2}, the estimation of the player's financial losses was determined by asking each player questions about their losses in the last 12 months. These retrospective estimates of player losses are known to be inaccurate⁵. The total of these retrospective loss estimates does not approximate the annual VLT revenue. For this affidavit I have not used the retrospective estimates of gambling losses from the 2005 and 2009 NL prevalence studies.
11. I have used the VLT revenue earned by the province of NL in 2005³ and 2009⁴ as the player losses. This is revenue after prizes have been paid and before expenses are deducted.

12. The reported VLT revenue in 2005³ and 2009⁴ does not distinguish between VLT line games and other games on VLTs. I have visited various VLT venues in various jurisdictions, including NL, and it is my opinion that the vast majority of games being played on VLTs are line games. I have estimated that 80% of NL VLT games played are line games and that 80% of VLT revenue is derived from line games.
13. It is my opinion that Atlantic Lottery Corp. would have records to show the number of VLT line games played and VLT revenue generated from line games. I base this opinion on my general knowledge that jurisdictions chose which games to install or remove based partly on the game's popularity. To determine a games' popularity the jurisdiction would need to record data on how often each game is being played.
14. In the Ontario study of slot machine revenue derived from problem gamblers⁵, the "moderate-risk" problem gambler category was combined with the "problem gambling category". The authors combined the two categories because the respondents who scored in the moderate-risk category indicated problems with their gambling by answering 'yes' to questions such as "feeling guilty about gambling", "chasing losses", and "betting more than they can afford to lose". In this study I have shown the moderate-risk and problem gambling categories individually as well as combined.
15. A study of VLT players in NL could be conducted to determine the percentage of revenue from VLT 'line games' which is derived from problem gamblers. This study would have players use "diaries" over a period of time (perhaps a month) to record their gambling. The results from using diaries has been shown to produce fairly accurate player losses in that the total projected losses from the diaries roughly equals the income earned by the jurisdiction⁵.

Problem Gambling Prevalence Rates for Gamblers in NL

16. The 2005 NL prevalence study¹ showed that 9.7% of VLT players are at moderate-risk for problem gambling while 8.6% are problem gamblers. As shown here, these percentages for VLT players are higher than for any other form of legal gambling in NL:

	Game	Moderate	Problem	Total
(a)	VLTs	9.7%	8.6%	18.3%

(b)	Poker	8.2%	6.0%	14.2%
(c)	Bingo	7.0%	3.3%	10.3%
(d)	Nevada Tickets	4.3%	4.2%	8.5%
(e)	Scratch Ticket	4.7%	2.7%	7.4%
(f)	Raffle	2.5%	1.3%	3.8%
(g)	Lottery Tickets	2.8%	1.4%	3.2%
(h)	Overall	2.2%	1.2%	3.4%

17. The 2005 NL prevalence study¹ showed that VLTs were played preferentially by moderate-risk and problem gamblers. The percentage of gamblers in each problem gambling category who play VLTs is as follows:

- (i) 80.4% of problem gamblers
- (ii) 49.4% of moderate-risk gamblers
- (iii) 36.6% of at-risk gamblers
- (b) 9.5% of non-problem gamblers.

18. The 2009 NL prevalence study² showed that 10.4% of VLT players are at moderate-risk for problem gambling while 6.4% are problem gamblers. As shown here, these percentages for VLT players are higher than for any other form of legal gambling in NL:

	Game	Moderate	Problem	Total
(a)	VLTs	10.4%	6.4%	16.8%
(b)	Bingo	6.1%	2.2%	8.3%
(c)	Nevada Tickets	5.0%	2.4%	7.4%
(d)	Poker	5.0	2.0	7.0%
(e)	PlaySphere	6.9%	0%	6.9%
(f)	Scratch Ticket	3.4%	1.1%	4.5%
(g)	Raffle	2.3	0.9%	3.2%
(h)	Lottery Tickets	2.4%	0.7%	3.1%
(i)	Overall	1.7%	0.7%	2.4%

19. The 2009 NL prevalence study² showed that VLTs were played preferentially by moderate-risk and problem gamblers. The percentage of gamblers in each problem gambling category who play VLTs is as follows:

- (a) 71.9% of problem gamblers

- (b) 50.7% of moderate-risk gamblers
- (c) 30.6% of at-risk gamblers
- (d) 7.1% of non-problem gamblers.

Estimate of VLT Revenue derived from Problem Gamblers

20. Exhibit A shows the calculations for my low and high estimates of the amount of VLT revenue derived from moderate-risk and problem gamblers in NL. The following points refer to Exhibit A.
21. The adult population of NL is approximately 400,000.
22. The VLT revenue in NL in 2005 was \$123,000,000 million³ and in 2009 it was \$108,000,000 million⁴. This is the amount lost by VLT players.
23. Given my estimate that 80% of VLT revenue is from line games, the revenue from VLT line games is \$98,400,000 in 2005 and \$86,400,000 in 2009.
24. In 2005, 84% of the adult population had gambled in the past 12 months¹. In 2009, 77% of the adult population had gambled in the past 12 months². That is 336,000 gamblers in NL in 2005 and 308,000 gamblers in NL in 2009.
25. Of the gamblers, in 2005 11.4% had played VLTs¹ and in 2009 8.2% had played VLTs². That is 38,304 VLT players in 2005 and 25,256 VLT players in 2009.
26. Given my estimate that 80% of VLT players play line games, this is 30,643 VLT line game players in 2005 and 20,205 VLT line game players in 2009
27. Given my estimate that the problem gambling prevalence rates are the same for VLT line game players and VLT players who play other games, in 2005 there were 9.7% moderate risk (2,972 moderate-risk players) and 8.6% problem gamblers (2,635 problem gamblers) who play VLT line games, for a total combined of 18.3% (5,608 players). For 2009 this is 2,101 moderate risk gamblers and 1,293 problem gamblers who play VLT line games, for a combined total of 3,394.

28. I have created two estimates, low and high, of the VLT revenue derived from moderate-risk and problem gamblers for 2005 and 2009.
29. Moderate-risk and problem gamblers lose more money gambling than at-risk and non-problem gamblers. This has been shown in many jurisdictional problem gambling prevalence studies and these large financial losses for moderate-risk and problem gamblers are a major contributor to the gambler's problems. There are no studies of VLT players in NL which show the percentage of VLT revenue that is derived from moderate-risk and problem gamblers.
30. To create my "low" estimate of the percentage of VLT revenue derived from moderate-risk and problem gamblers, I assumed that all gamblers who play VLTs (last 12 months) lose exactly the same amount of money in the year. Thus I am using an extremely conservative low estimate of the VLT revenue derived from each moderate-risk gambler and problem gambler. The actual percentage of revenue derived from moderate-risk and problem gamblers is much higher but my assumption allows me to have a "floor" regarding the VLT revenue derived from moderate-risk and problem gamblers. In 2005, 18.3% of the players were moderate-risk and problem gamblers, and for my low estimate I assume that 18.3% of the VLT revenue from line games is derived from these players. In 2009, for the low estimate I assume that 16.8% of the VLT line game revenue is derived from moderate-risk and problem gamblers. This low estimate of the VLT revenue derived from problem gamblers is \$18,007,200 for 2005 and \$14,515,200 for 2009.
31. The percentage used for the high estimate is based on a study from Ontario⁵ which showed that 60% of slot machine revenue is derived from moderate-risk and problem gamblers. I have used 60% as the high estimate of VLT revenue in NL that is derived from moderate-risk and problem gamblers. This is \$59,040,000 for 2005 and \$51,840,000 for 2009.
32. Based on my research, I feel confident that the accurate amount of VLT line game revenue derived from problem players is between my low estimate and my high estimate.

DECLARED AND NOTARIZED
~~SWORN TO~~ before me at the City
of Waterloo, in the Regional
Municipality of Waterloo,
in the Province of Ontario, this 29th
day of July, 2011.

Brent J. Salmon

Brent J. Salmon,
A Notary Public in
and for the Province of
Ontario.

Kevin Harrigan

KEVIN HARRIGAN

This is Exhibit A referred to in the affidavit of Kevin Harrigan sworn before me, this 29th day of July, 2011.

[Signature]
 A COMMISSIONER FOR TAKING AFFIDAVITS

Exhibit A

Exhibit A: Estimate of VLT Revenue derived from Problem Gamblers

Newfoundland and Labrador	
Estimated VLT revenue from Moderate-risk & Problem Gamblers	
Adult Population (approx) ¹	400,000

	2005		2009		
Gross VLT Revenue (i.e. player losses) ^{3,4}	\$123,000,000		\$108,000,000		
Estimate of VLT revenue from "Line Games"	80.0%	\$98,400,000	80.0%	\$86,400,000	
# of Gamblers in NL (last 12 months) ^{1,2}	84.0%	336,000	77.0%	308,000	
Gamblers who play VLTs (last 12 months) ^{1,2}	11.4%	38,304	8.2%	25,256	
Estimate of % who play "line games"	80.0%	30,643	80.0%	20,205	
Line Game players: Moderate-Risk ^{1,2}	9.7%	2,972	10.4%	2,101	
Line Game players: Problem Gamblers ^{1,2}	8.6%	2,635	6.4%	1,293	
Line Game players: Moderate & Problem ^{1,2}	18.3%	5,608	16.8%	3,394	
Estimated "Line Games" revenue: Moderate-risk & problem gamblers					
	Low	18.3%	\$18,007,200	16.8%	\$14,515,200
	High	60.0%	\$59,040,000	60.0%	\$51,840,000

Sources:

2005 NL Problem Gamblers Prevalence Study (see pages 19, 34, 36):

http://www.health.gov.nl.ca/health/publications/gambling_report_nov21.pdf

2009 NL Problem Gamblers Prevalence Study (see pages 16, 18, 35, 37):

http://www.health.gov.nl.ca/health/publications/2009_gambling_study.pdf

2005 NL Revenue from VLTs (see Table 5):

http://www.cprg.ca/articles/Canadian_Gambling_Digest_2005_2006.pdf

2009 NL Revenue from VLTs (see Table 5):

http://www.cprg.ca/articles/Canadian_Gambling_Digest_2007_2008.pdf

Estimate of "High" value for EMG revenue from Problem Gamblers (page 42):

<https://www.uleth.ca/dspace/bitstream/handle/10133/380/?sequence=1>