

# Return to Player Settings Audit – Q3 Cascades Casino Langley

**Audit Services**

November 21, 2017

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## Transmittal Letter

December 18, 2017

Garth Pieper  
Director, Operations  
2940 Virtual Way  
Vancouver, BC V5M 0A6

Dear Mr. Pieper,

**Re: Return to Player (RTP) Audit – Cascades Casino Langley**

Attached is Audit Services' audit report on the RTP testing which occurred at Cascades Casino Langley on November 21, 2017. The scope of our audit focused specifically on the RTP settings at Cascades Casino Langley for a selected sample of slot machines.

During the course of our work conducted at Cascades Casino Langley, we noted that all 100 slot machines tested had their RTP settings set correctly. In total, Cascades Casino Langley has 943 slot machines.

We would like to thank management and staff of Cascades Casino Langley for their cooperation and assistance during this audit.

Sincerely,



Gurmit Aujla, CPA, CA, CIA, CRISC, CRMA  
Director, Internal Audit

cc: Kevin Sweeney, Director Security, Privacy and Compliance  
Tom Maryschak, Senior Manager Casino Operations  
Brett Lawrence, Regional Manager  
Donald MacLeod, Manager, Business Operations

## Introduction

RTP Slot Management audit was included in Audit Services' approved audit plan for fiscal 2017-2018. These audits are to ensure the settings are set correctly based on information provided by the Casino and Community Gaming Product Team. RTP is the term the gaming industry uses to describe the percentage of all the wagered money a slot machine will pay back to players over time.

## Statement of Objectives

Audit Services' objective through this engagement was to test the RTP settings at Cascades Casino Langley on randomly selected slot machines. The machines' current RTP settings were compared to the master data information looking for any discrepancies.

## Statement of Scope

This audit is one component of several RTP audits scheduled to occur each fiscal quarter. The scope of these engagements includes the review of slot machine settings at various casinos and CGCs in the province for the period April 1, 2017 to March 31, 2018.

## Statement of Methodology

Our methodology and approach included:

- Tested RTPs of randomly selected slot machines
- Confirmed/matched the RTP from slot machines to Master Data; rCasino database and/or Probability Accounting Reports (PAR) sheets (a PAR sheet details how a particular slot machine is programmed)
- Interviews & inquiries
- Identified process weaknesses, risks and controls

## Statement of Audit Standards

We conducted our audit in accordance with professional standards issued by the Institute of Internal Auditors. Those standards require that we plan and perform the audit to afford a reasonable basis for our judgments and conclusions regarding the organization, program, activity or function under audit. An audit also includes assessments of applicable internal controls and compliance with requirements of laws, rules and regulations when necessary to satisfy the audit objectives. We believe that our audit provides a reasonable basis for our conclusions.

## Personnel Changes in Key Control Areas

BCLC's Audit Committee has requested that Audit Services include information about personnel changes and vacancies to key control areas during audit engagements. Personnel changes and vacancies can impact the control environment, control effectiveness, and loss of knowledge. At Cascades Casino Langley, the BCLC staffing component consists of a Manager Business Operations, one Senior Technician and eight Technicians. We confirmed with the Manager Business Operations that they were one staff short for a month; a new Technician is scheduled to start on December 10, 2017. No issues were noted.

## Conclusion

Audit Services found no RTP exceptions in the 100 machines tested on November 21, 2017.

## Acknowledgements

We wish to thank management and staff for their participation, assistance and cooperation during this audit. Audit Services was given full access to all resources and information required to complete this audit.

# Return to Player Settings Audit – Q3 Chances Squamish

**Audit Services**

November 27, 2017

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## Transmittal Letter

December 18, 2017

Garth Pieper  
Director, Operations  
2940 Virtual Way  
Vancouver, BC V5M 0A6

Dear Mr. Pieper,

**Re: Return to Player (RTP) Audit – Chances Squamish**

Attached is Audit Services' audit report on the RTP testing which occurred at Chances Squamish on November 27, 2017. The scope of our audit focused specifically on the RTP settings at Chances Squamish for a selected sample of slot machines.

During the course of our work conducted at Chances Squamish, we noted that all 46 slot machines tested had their RTP settings set correctly. In total, Chances Squamish has 92 slot machines.

We would like to thank management and staff of Chances Squamish for their cooperation and assistance during this audit.

Sincerely,



Gurmit Aujla, CPA, CA, CIA, CRISC, CRMA  
Director, Internal Audit

cc: Kevin Sweeney, Director Security, Privacy and Compliance  
Tom Maryschak, Senior Manager Casino Operations  
Brett Lawrence, Regional Manager, Casino & Community Gaming



## Introduction

RTP Slot Management audit was included in Audit Services' approved audit plan for fiscal 2017-2018. These audits are to ensure the settings are set correctly based on information provided by the Casino and Community Gaming Product Team. RTP is the term the gaming industry uses to describe the percentage of all the wagered money a slot machine will pay back to players over time.

## Statement of Objectives

Audit Services' objective through this engagement was to test the RTP settings at Chances Squamish on randomly selected slot machines. The machines' current RTP settings were compared to the master data information looking for any discrepancies.

## Statement of Scope

This audit is one component of several RTP audits scheduled to occur each fiscal quarter. The scope of these engagements includes the review of slot machine settings at various casinos and CGCs in the province for the period April 1, 2017 to March 31, 2018.

## Statement of Methodology

Our methodology and approach included:

- Tested RTPs of randomly selected slot machines
- Confirmed/matched the RTP from slot machines to Master Data; rCasino database and/or Probability Accounting Reports (PAR) sheets (a PAR sheet details how a particular slot machine is programmed)
- Interviews & inquiries
- Identified process weaknesses, risks and controls

## Statement of Audit Standards

We conducted our audit in accordance with professional standards issued by the Institute of Internal Auditors. Those standards require that we plan and perform the audit to afford a reasonable basis for our judgments and conclusions regarding the organization, program, activity or function under audit. An audit also includes assessments of applicable internal controls and compliance with requirements of laws, rules and regulations when necessary to satisfy the audit objectives. We believe that our audit provides a reasonable basis for our conclusions.

## Personnel Changes in Key Control Areas

BCLC's Audit Committee has requested that Audit Services include information about personnel changes and vacancies to key control areas during audit engagements. Personnel changes and vacancies can impact the control environment, control effectiveness, and loss of knowledge. At Chances Squamish, the BCLC staffing component consists of a Manager of Business Operations and one Senior Technician. We noted during this audit, that the BCLC staff at Chances Squamish has a minimal staff turnover rate.

## Conclusion

Audit Services found no RTP exceptions in the 46 machines tested on November 27, 2017.

## Acknowledgements

We wish to thank management and staff for their participation, assistance and cooperation during this audit. Audit Services was given full access to all resources and information required to complete this audit.

# GMS Player Data

## Audit Services

September 15, 2017

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## Transmittal Letter

December 12, 2017

Garth Pieper  
Director, Operations, Casino & Community Gaming  
2940 Virtual Way  
Vancouver, BC V5M 0A6

Dear Mr. Pieper,

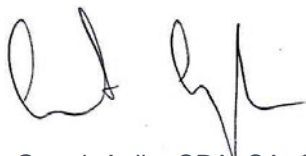
**Re: GMS Player Data Review**

Attached is Audit Services' report on Gaming Management System (GMS) Player Data review. The review work was performed during the second quarter of FY2018.

In this report, we have highlighted some strategic improvement opportunities and provided recommendations to further strengthen the key controls over player data that resides in GMS. As a result of this engagement and discussions with management, it has been agreed that further audit work should be performed to understand the Player Data control and risk environment at the Service Provider locations.

We would like to thank management and staff who assisted us during this review for their cooperation and support.

Sincerely,



Gurmit Aujla, CPA, CA, CIA, CRISC, CRMA  
Director, Internal Audit

cc: Kevin Sweeney, Director Security, Privacy and Compliance  
Brad Desmarais, VP Casino and Community Gaming

## Introduction

BCLC's Audit Committee requested Audit Services review the control environment surrounding the GMS application. Audit Services developed a multi-phased approach to audit or review several integrated components of the GMS platform. In Q2, we performed an assessment to evaluate the controls and risks concerning the privacy of player data stored in GMS.

## Statement of Objectives

The objectives for this engagement were to document and assess how player data is stored and handled in GMS, specifically related to the following aspects:

- Where and how player data is stored, accessed and used
- Type of player data accessed
- Who has access to player data
- Risks associated with the player data accessed
- Controls in place to protect player data

## Statement of Scope

The scope of this engagement was limited to player data which resides within GMS. The flow of player data outside the GMS system into other corporate systems and into Service Providers' system was not included in the scope of this engagement.

## Statement of Methodology

Our methodology and approach included:

- Interviews, discussions and inquiries with key BCLC employees performing duties within GMS and Casino Systems or individuals with supporting roles for these applications.
- Prepared a flow chart demonstrating the process flows, pinpoint the key controls, and highlight the risk points
- Provided recommendation to address and mitigate risks

## Statement of Audit Standards

We conducted our audit in accordance with professional standards issued by the Institute of Internal Auditors. Those standards require that we plan and perform the audit to afford a reasonable basis for our judgments and conclusions regarding the organization, program, activity or function under audit. An audit also includes assessments of applicable internal controls and compliance with requirements of laws, rules and regulations when necessary to satisfy the audit objectives. We believe that our audit provides a reasonable basis for our conclusions.

## Conclusion

Based on our assessment, Audit Services noted the following three areas that could be improved to strengthen controls to protect the privacy of player data.

1. We noted a large number of Service Providers' staff members have access to player data in GMS. Access to GMS by non-BCLC employees poses an inherent risk to BCLC. Audit Services recommends additional engagements be performed on the Casino Service Providers to better understand their privacy control environment.
2. Access rights to player data in GMS, especially access by Service Provider staff, should be reviewed and tested on a periodic basis to verify that changes in roles/responsibilities/employment have been updated and user permissions are limited to a minimum privilege required basis.
3. Six out of the seven privacy assessments concerning player data in GMS were on individual applications in this system. Additionally, the only privacy assessment on the entire GMS was performed in 2011 when the system was first piloted in one Casino. Audit Services sees an opportunity to conduct a full system assessment now that all locations and modules are operational.

The above results and recommendation were presented to management in Casino and Privacy divisions. Management agreed with these findings and recommendation, and has worked with Audit Services to identify additional engagements surrounding the Casino Service Provider privacy control environment. At present, the following engagements have been confirmed for the future:

1. In Q4, Audit Services will perform a review of the two casinos' employee access to player data in GMS. Planning for this engagement has started.
2. Information Privacy Services team will perform a privacy assessment on the entire GMS system. Planning of this initiative has also begun.

The results of these engagement will be communicated to the Management upon their conclusion.

## Acknowledgements

We wish to thank management and staff for their participation, assistance and cooperation during this audit. Audit Services was given full access to all resources and information required to complete this audit.