

2014/15

Liability Management Rating Summary



For general information about the Commission,
please visit www.bcogc.ca or phone 250-794-5200.

About the

BC Oil and Gas Commission

The BC Oil and Gas Commission (Commission) is the provincial regulatory agency with responsibilities for regulating oil and gas activities in British Columbia, including exploration, development, pipeline transportation and reclamation.

The Commission's core services include reviewing and assessing applications for industry activity, consulting with First Nations, cooperating with partner agencies, and ensuring industry complies with provincial legislation and all regulatory requirements.

The public interest is protected by ensuring public safety, respecting those affected by oil and gas activities, conserving the environment, and ensuring equitable participation in production.

Mission

We regulate oil and gas activities for the benefit of British Columbians. We achieve this by:

- Protecting public safety,
- Respecting those affected by oil and gas activities,
- Conserving the environment, and
- Supporting resource development.

Through the active engagement of our stakeholders and partners, we provide fair and timely decisions within our regulatory framework.

We support opportunities for employee growth, recognize individual and group contributions, demonstrate accountability at all levels, and instill pride and confidence in our organization.

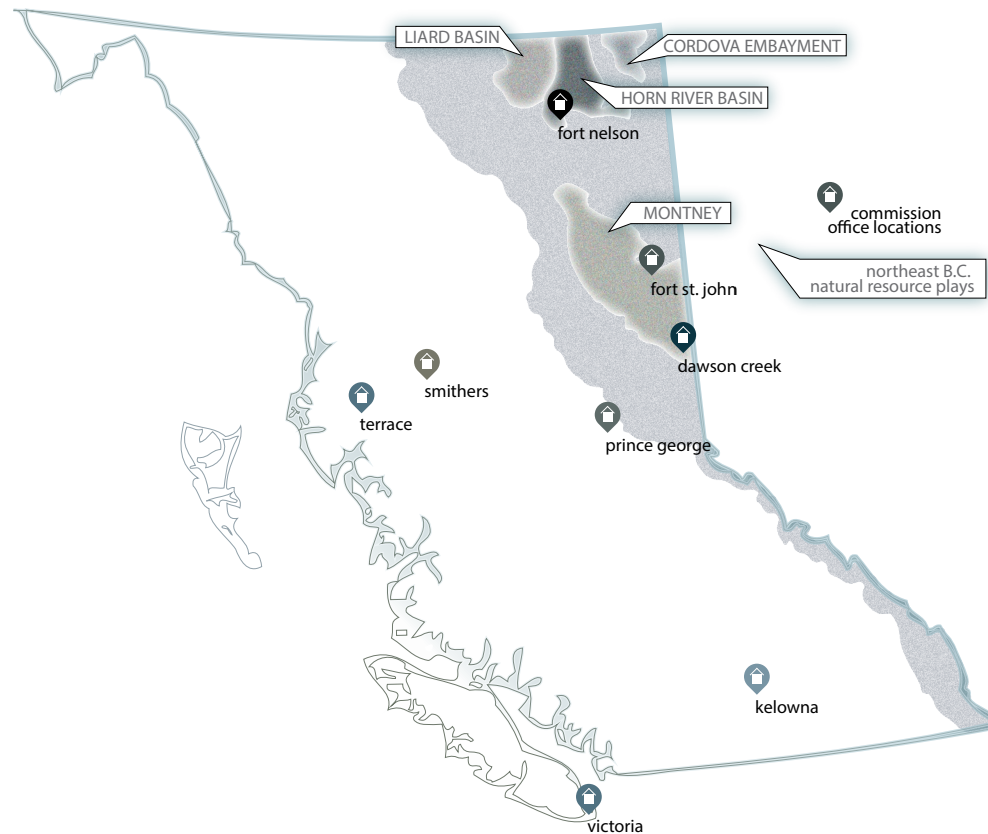
We serve with a passion for excellence.

Vision

To provide oil and gas regulatory excellence for British Columbia's changing energy future.

Values

- Respectful
- Accountable
- Effective
- Efficient
- Responsive
- Transparent



2014/15 Liability Management Rating Summary

About this Summary

Decommissioning and restoration of oil and gas sites in British Columbia is regulated by the Commission. Permit holders are required to properly deactivate and abandon wells, facilities and pipelines, and restore disturbances to meet regulatory closure. The purpose of the Liability Management Rating (LMR) program is to ensure permit holders carry the financial risk of their operation through to regulatory closure by identifying those whose deemed liabilities exceed deemed assets (a LMR below 1.0) and to require security for the risk inherent in the calculation.

The objectives for the LMR program are as follows:

1. To protect the Orphan Site Reclamation Fund (OSRF), and ultimately the Crown, from bearing the costs associated with abandonment and reclamation activities.
2. To ensure adequate security is provided by permit holders to address the risk that oil and gas sites will not be adequately abandoned and reclaimed.
3. Provide incentive for industry to actively manage liability obligations.

The LMR is the calculated ratio of estimated operational assets and security deposit to estimated decommissioning liabilities for permit holders.

The LMR equation is as follows:

$$\text{LMR} = \frac{\text{Deemed Assets} + \text{Security Deposit}}{\text{Deemed Liabilities}}$$

Additional information can be found at: <http://www.bcogc.ca/industry-zone/liability-management-rating-program>.

This report outlines the measurement of key indicators that are used to determine the amount of permit holder liability the Commission is exposed to, and how the risk exposure changes over time. The metrics are used to evaluate whether the goal of reducing liability exposure to the Orphan Fund is being accomplished.

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Background

The authority to collect security falls under Section 30 of the Oil and Gas Activities Act. A permit holder's LMR is used to determine the amount of required security. Following the release of the LMR program, a deemed asset calculation was developed to determine the estimated value of a permit holder's production, processing and disposal infrastructure, and a liability model was developed to estimate abandonment and reclamation costs.

If a permit holder's deemed asset is not sufficient to cover their deemed liability (a LMR below 1.0), security is required. At the time of the program launch for producers, disposers and processors (non-producers), each permit holder identified with a LMR below 1.0 was granted an opportunity to pay security in installments.

During normal program operation, LMR reviews are conducted monthly for all permit holders, as well as during asset transfer processes. This allows the Commission to increase security deposits should

a permit holder's LMR decrease as a result of a divestment, or a drop in production, disposal, or throughput. Deposits can be returned to permit holders who no longer have assets in B.C. (by regulation), or if they have made a request for a return due to an adequate LMR.

Updates/changes to the LMR program during 2014/15:

Over the course of the year, updates or changes to the LMR program may be implemented. These may cause significant increases or decreases in program measures reported herein and are not always directly indicative of changing trends and activity of permit holder's operations.

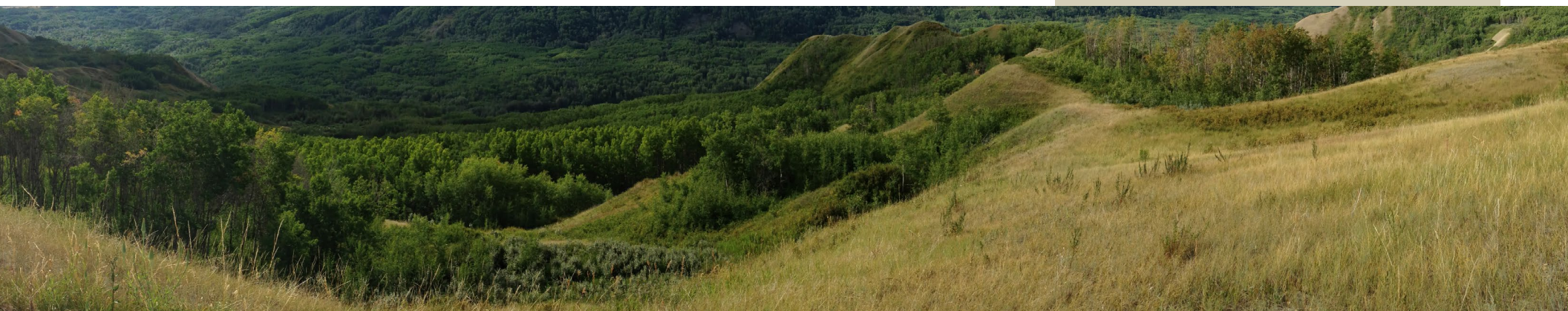
November 2014 - updates were made to the calculation parameters used to determine production assets with updated economic data.

LMR PERMIT HOLDER CATEGORIES

Producers - Permit holders whose operations and deemed assets are primarily in the form of gas and/or oil production.

Disposers - Permit holders whose operations and deemed assets are primarily in the form of downhole oil and gas waste disposal.

Processors - Permit holders whose operations and deemed assets are primarily in the form of processing raw gas into marketable gas.



Permit Holder LMRs

The Commission measures the mean (average) and median (central point) LMR of all B.C. producers, disposers, and processors to spot trends in the overall ability of the industry to meet its closure obligations. Identifying trends that may be indicative of lower industry financial health can inform the Commission of when program changes may be needed.

The following figures illustrate the mean and median LMR for permit holders with time in each business category.

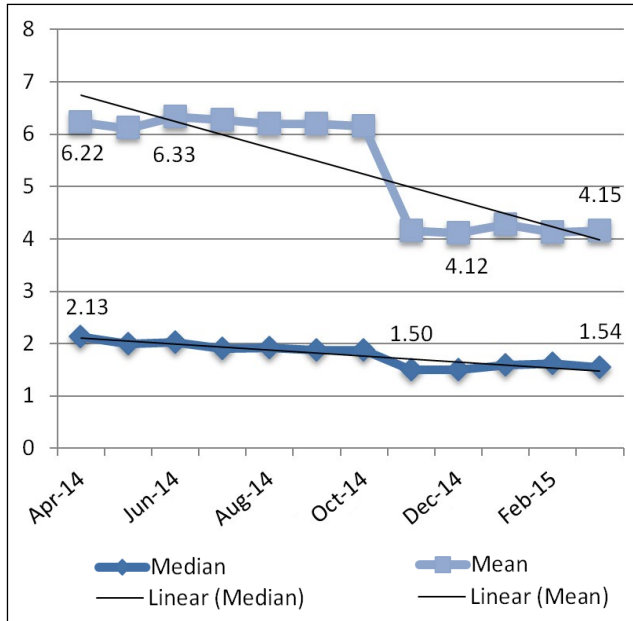


Figure 1 - Mean and Median of Producers

Most evident in Figure 1 is the significant drop in the mean, and to a lesser extent the median, in November. This is largely due to the update of the production asset calculation parameters. Outside of the November dip, the trend appears to be on an overall slight incline in the later months as the LMR program saw more producers secure their liability and a number of successful mergers and acquisitions between junior operators. While a number of operators with large LMRs push the mean up, the median data indicates the greatest proportion of operators are well below the industry average.

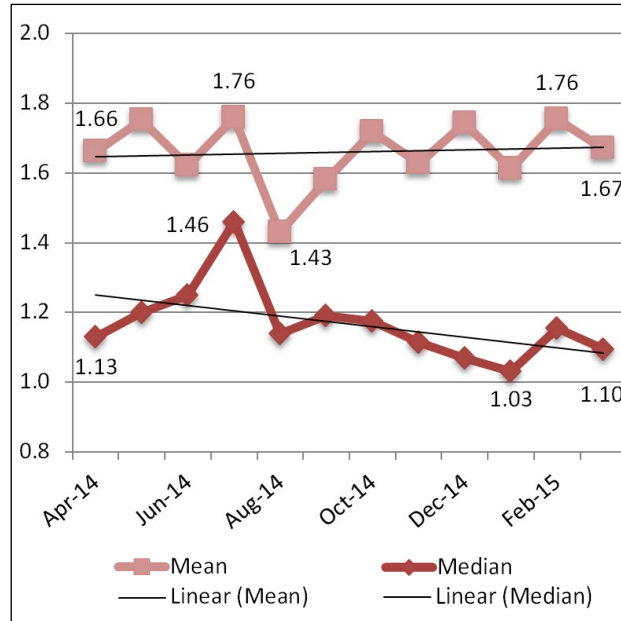


Figure 2 - Mean and Median of Disposers

With a small data set like disposers (Figure 2), the addition of a single data point can result in a notable dip (or peak) in the mean and median. Such was the case in August when a new disposal company with significant unsecured liability (LMR of 0.00) began operating in B.C. This significantly skewed the data until their liability was secured the following month. A number of the companies who were pushing the mean up at the beginning of the year saw their LMRs slowly dropping as the year progressed; this was offset by the continued submission of security by those on an installment schedule, resulting in a relatively stable mean for the year. The median however, while acceptable, had a declining trend. The addition of a new data point is the reason for the significant change in median from July to August, identified in the graph by the sharp decline.

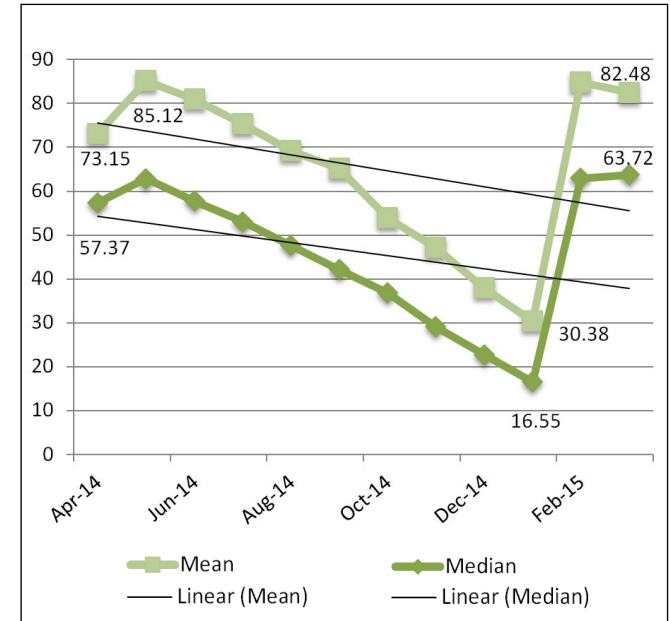


Figure 3 - Mean and Median of Processors

As is the case with disposers, processors (Figure 3) are a very small data set where minimal changes in the data significantly affect the mean and median. While seven of nine processors are significantly above 1.0, the overall trend showed a steady decline that started in June and reached its lowest point in January. Throughput declines were responsible for the gradual decline for the majority of the year. While the mean and median are unlikely to fall close to an LMR of 1.0, the LMR program may continue to observe fluctuating measures as a result of seasonal operational variations.

At-Risk Permit Holders

Permit holders are identified as a potential financial risk (at-risk) if the total of their deemed assets and security deposit are less than deemed liabilities. The following figure illustrates the proportion of B.C. permit holders that were found to be at-risk with time.

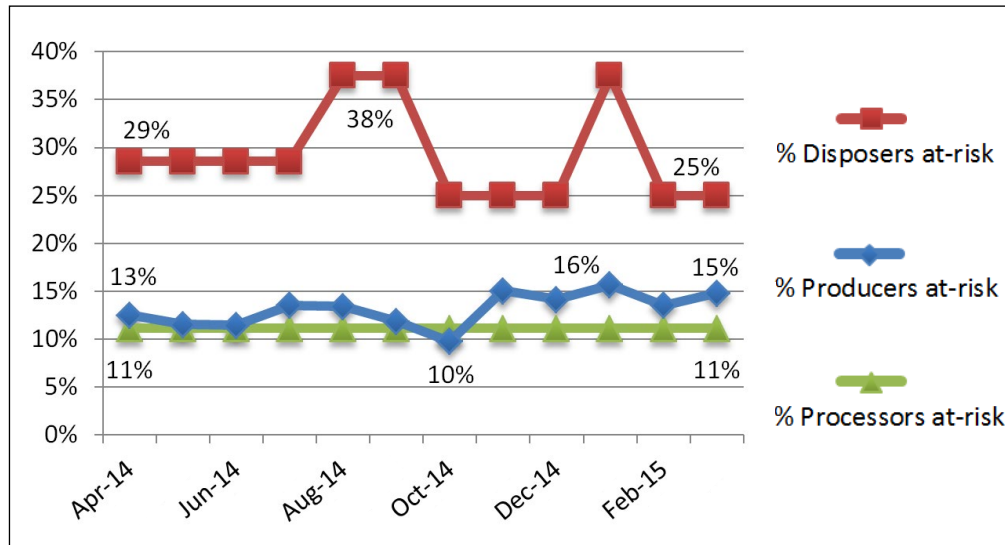


Figure 4 - Percentage of Permit Holders Below Threshold

The number of at-risk permit holders in the LMR program remained relatively stable during 2014/15, indicating that the number of permit holders with potential financial risk in their operations is contained, but not improving significantly. Both disposer and processor categories still have permit holders submitting security in installments. This allowance will be permitted until mid-2015, and until then, a number of non-producers are considered at-risk. As new permit holders enter B.C., the LMR program often sees temporary peaks in the percentage of those at-risk as they work to secure their liability; this is evident for disposers in the figure above.

At-risk producers made some gains early in the year, but with the update to asset calculation parameters in November, the percentage rose by five per cent as the update impacted a large number of permit holders, causing six permit holders to fall below an LMR of 1.0.

Note: 1. This target measures the proportion of at-risk permit holders rather than the total number of at-risk permit holders since the total permit holder count changes over time (e.g. a reduction in the count will raise the target percentage).



Reclamation process.



Unsecured Liability

The LMR framework focuses on at-risk permit holders when requesting security. Unsecured liability refers to the amount of deemed liability calculated as exceeding deemed assets that are not covered by a security deposit.

Security deposit requirements fluctuate over time as the number of at-risk permit holders changes (e.g. corporate reorganization or production changes). This past year's overall reduction in unsecured liability was due to a combination of the collection of security deposits and corporate reorganizations.

Figure 5 reflects the total amount of estimated liability held by at-risk producers still requiring security payment at that time. During the 2014/15 fiscal year, producers saw their total unsecured liability fluctuate by \$10 million but ended the year at \$6.6 million; \$1 million less than where it started at \$7.6 million. The significant fluctuation in November was again due to the updates to the asset calculation parameters, but was secured within the month by security deposits from the impacted permit holders. A substantial divestment in February temporarily resulted in a large increase to unsecured liability, but it was reversed when completed the following month and the contributing permit holder's portfolios had no unsecured liability remaining.

2014/15 was the first full year non-producers were included in the LMR program. With an initial unsecured liability of \$3.9 million at program induction, total non-producer unsecured liability has seen a significant

decrease. Non-producers ended 2014/15 fiscal with \$560,000.00 in unsecured liability, less than 15 per cent of the starting amount remaining. With more stability in asset ownership this decrease is due to the collection

of security deposits and an increase in calculated operational assets. There were some divestments seen by disposers in 2014/15, but it had little impact on program metrics.

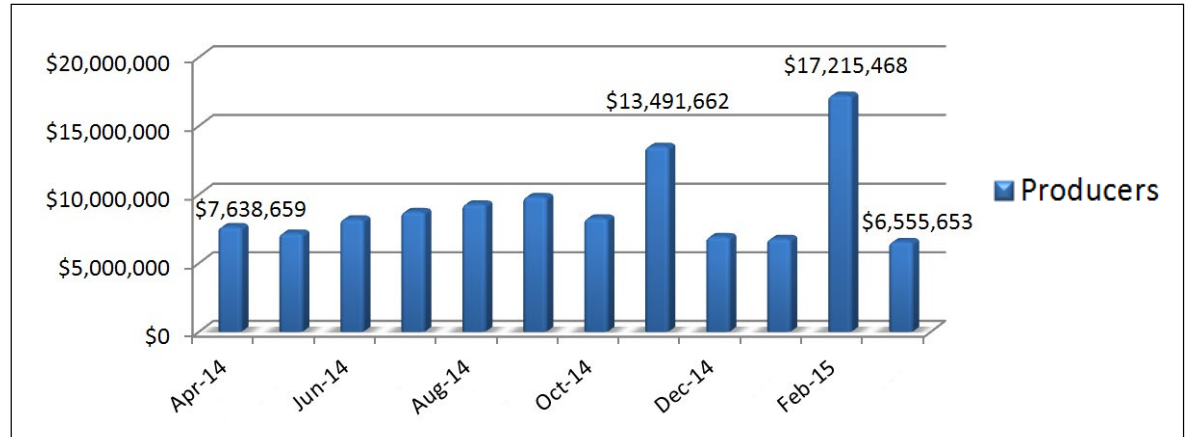


Figure 5 - Total Unsecured Liability by Month (Producers)

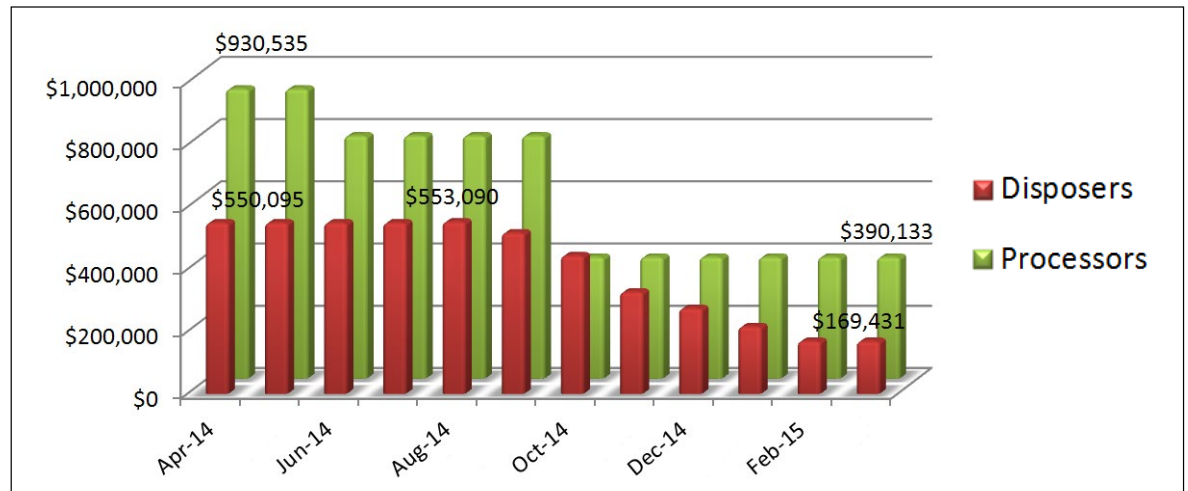


Figure 6 - Total Unsecured Liability by Month (Disposers and Processors)

High Risk Permit Holders

The LMR program works with all willing permit holders to reduce their unsecured liability through the submission of security deposits, divestment advice, or liability reduction through asset retirement. Permit holders that have not complied with security deposit requirements are deemed deficient under Section 30 and enter a compliance and enforcement framework.

During the 2014/15 fiscal year, 10 high-risk permit holders were deemed non-compliant and an additional two were identified as potential orphans. Of these, one high-risk permit holder and one potential orphan were orphaned before fiscal year-end. The Asset Integrity and Retirement branch monitors high-risk and non-compliant permit holders and actively seeks solutions to retire the asset. Requests for specific details related to high-risk permit holders can be directed to the Commission.

Security Deposits

During the 2014/15 fiscal year the LMR program took in an additional \$10 million in security deposits. Five million dollars was due solely to the parameter

update affecting producers in November, an additional \$1 million was submitted from non-producers on an installment schedule, and the remaining \$4 million was received from operators on custom payment schedules. Operator preference for security submission remains in cash format. Over 56 per cent of security held is

cash over letters of credit. The majority of permit holders holding security >\$1 million submit as non-cash, but with 87 per cent of permit holders holding <\$1 million in security, the preference remains firmly with cash submissions.

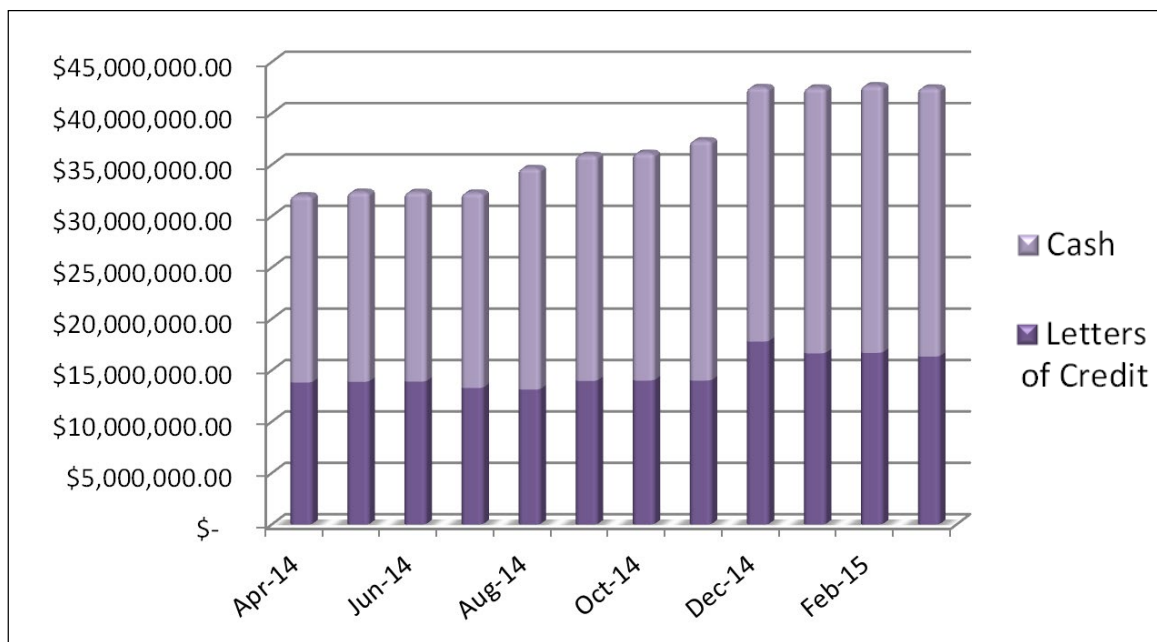


Figure 7 - Total Security Deposits Held



Closure

Fiscal 2014/15 saw some success within the LMR program as both producer and non-producer total unsecured liability decreased. In general, those on an installment or custom schedule continued to submit security as required.

With an increase of >\$10 million in security held this past year, the program is experiencing success in obtaining security and containing the liability. The program saw a slight decrease in producer unsecured liability, but no significant decrease in the percentage of at-risk permit holders in any category.

Over the next year as market conditions continue to challenge operators, the program expects to see an increase in the number of at-risk producers and unsecured liability. As a result of diminishing equity, the program may experience an increase in the number of permit holders unable to comply with security requirements, deeming them high-risk. Should this happen, the LMR program is committed to working directly with permit holders to establish individual plans to satisfy the Commission's security requirements while working within a company's constraints. In addition,

each November the program expects to see a spike in the number of at-risk producers and unsecured liability as the annual calculation parameter update occurs.

The LMR program will continue to focus on further reducing non-producer risk through active engagement and efficient communication, which is expected to continue to decrease to the point of elimination of unsecured liability as non-producers remain compliant within the payment requirements.



For more information on the Commission's LMR program, OSRF or enquiries regarding this document, please contact Mike Janzen at Mike.Janzen@bcogc.ca.