

2018 - 2019 Annual Report

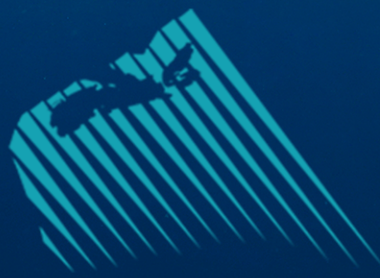
Leading Through
Efficient, Fair & Competent Regulation

CNSOPB



CANADA-NOVA SCOTIA
OFFSHORE PETROLEUM BOARD

CNSOPB



CANADA-NOVA SCOTIA
OFFSHORE PETROLEUM BOARD

Introduction

In a continuing effort to be more environmentally friendly, the Canada-Nova Scotia Offshore Petroleum Board Annual Report is produced digitally, with printed copies available upon request. Additional information on our team and what we do is available on our website at www.cnsopb.ns.ca.

The CNSOPB encourages the public to check our website and Twitter (@CNSOPB) regularly for the latest news and to stay up-to-date on the regulation of oil and gas activity in the Canada-Nova Scotia offshore area.

Should any of the links in this year's Annual Report fail to lead you to the correct page, please go to the main page of our website (www.cnsopb.ns.ca) and search by specific interest, or contact us directly.

Should you wish to request a printed copy of the 2018-2019 Annual Report, please submit your request to info@cnsopb.ns.ca, or by phone at 902-422-5588.

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Message from the Chair & Chief Executive Officer

Earning and maintaining our ‘licence to regulate’ is vitally important to us. We know that in order to do this we need to continuously demonstrate to all Nova Scotians and Canadians, to Indigenous communities, to fishing groups, and to other stakeholders that we proficiently regulate the full life cycle of offshore petroleum related activities, and that we do so in a manner that recognizes the safety of workers and the protection of the environment as paramount.

Over the past year, we’ve taken steps to further earn your trust. A key focus for us has been to continue building the understanding and awareness of Nova Scotians and Indigenous communities regarding what is happening in our offshore area, and how petroleum activities are regulated. To help achieve this, we held seven information and engagement sessions on different topics including:

- The role of the CNSOPB, which is to apply legislation and regulations put in place by the federal and provincial governments in line with public policy;
- The regulatory processes that we administer, including our activity authorization and approval processes;
- The Scotian Basin Exploration Drilling Project carried out by BP Canada; and,
- Oil spill preparedness and response plans, and exercises (including the availability of capping stacks and the potential use of dispersants).

We have published articles to help people better understand topics of a technical nature, including how reviews of seismic program authorization applications are conducted, and how the Environmental Assessment process is carried out under the *Accord Acts* legislation. These articles were shared on our website and through social media. Updates and facts were also regularly communicated through Twitter and shared through e-mail updates to Indigenous communities and key stakeholders.

As we look ahead to next year, our focus will be on ensuring that decommissioning and abandonment activities related to the Sable Offshore Energy Project and the Deep Panuke Offshore Gas Project are carried out in a manner that protects the safety of workers and the environment. We will also be ready, should any new exploration activity be proposed.

As Nova Scotians ourselves, and as the regulator of oil and gas activity in the Canada-Nova Scotia offshore area, we are committed to holding industry accountable for conducting petroleum activities safely and responsibly so that we can continue to earn our ‘licence to regulate’ from the public we serve.



Keith MacLeod, P. Eng., ICD.D
Chair of the Board



Stuart Pinks, P. Eng., ICD.D
Chief Executive Officer

1.0 Summary of Offshore Work & Activities

1.1 Authorization Process

No petroleum-related activity can take place in the Canada-Nova Scotia offshore area without a specific authorization from the CNSOPB. Operators undergo a rigorous process prior to the CNSOPB issuing any authorization, which includes submission of the following (as applicable, and among other items) for review and acceptance:

- Summary of Proposed Operations;
- Safety Plan;
- Certificate of Fitness;
- Project-Specific Environmental Assessment (includes opportunities for public input);
- Environmental Protection Plan;
- Emergency Response, Spill Response and Contingency Plans;
- Canada-Nova Scotia Benefits Plan;
- Financial Requirements; and,
- Declaration of Operator.

The CNSOPB requires that operators conduct audits and inspections of all vessels and installations (e.g. drilling units, production units, heavy lift vessels, supply and support vessels, etc.) to be used in any program prior to the granting of an authorization. In addition, the CNSOPB conducts its own independent audits and inspections as part of the authorization process.

1.2 Decommissioning and Abandonment

During the 2018/2019 fiscal year, both of the offshore gas production projects, the Sable Offshore Energy Project operated by ExxonMobil Canada Ltd. and the Deep Panuke Offshore Gas Project operated by Encana Corporation, ceased production and entered into the decommissioning and abandonment phase. The CNSOPB's activities in 2018 through to the end of 2020 will be focused on regulating decommissioning and abandonment operations. Given the non-routine nature of these activities, the CNSOPB will be exercising close oversight of the operators and their contractors throughout every step of the operations.

In preparation for regulating decommissioning and abandonment operations, the CNSOPB consulted with its peer network of international offshore regulators in jurisdictions like the United Kingdom, Norway and Australia to identify best practices that could be applicable for implementation in the Canada-Nova Scotia offshore area.

For authorization applications related to decommissioning and abandonment activity, the CNSOPB requires a large suite of plans and procedures to be submitted for review and acceptance, including a Decommissioning and Abandonment Plan that describes the activities to be conducted. The plugging and

abandonment of wells and the work to transition the offshore facilities to a state of ‘ready to remove’ will be authorized through amendments to existing Operations Authorizations – Production for each operator. The removal of the offshore facilities will be authorized through the issuance of an Operations Authorization – Removals to each operator.

1.3 Authorizations and Approvals

In the 2018/2019 fiscal year, the number of authorizations and approvals issued by the CNSOPB increased from previous years due to additional authorizations that were issued for decommissioning and abandonment activities, as well as the BP Canada Energy Group ULC drilling program.

Figure 1 provides a summary of work activity authorization applications that were submitted and approved between April 1, 2018 and March 31, 2019.

Figure 1: Authorizations and Approvals 2018-19

Continuing Authorizations 2018-19		
<u>Date Issued</u>	<u>Operator</u>	<u>Authorization</u>
February 28, 2017	ExxonMobil Canada Ltd.	Operations Authorization – Production (Effective February 28, 2017-February 28, 2020)
July 31, 2017	Encana Corporation	Operations Authorization – Production (Effective August 1, 2017-August 1, 2019)
Authorizations and Approvals Issued in 2018-19		
April 7, 2018	BP Canada Energy Group ULC	Operations Authorization – Drilling
April 11, 2018	BP Canada Energy Group ULC	Geotechnical/Geological/Engineering/Environmental Program Authorization; Deployment/retrieval of wave rider buoy and hydrophones
April 21, 2018	BP Canada Energy Group ULC	Well Approval: Approval to Drill a Well – Aspy D-11
June 15, 2018	Encana Corporation	Well Approval: Approval to Alter the Condition of a Well (conductor cutting/final abandonment of PI-1B)
June 15, 2018	Encana Corporation	Operations Authorization – Production; Amendment to cut the PI-1B conductor below seafloor to complete the abandonment of the well
July 4, 2018	ExxonMobil Canada Ltd.	Well Approval: Approval to Alter the Condition of a Well (plugging and abandonment of North Triumph 1)
July 4, 2018	ExxonMobil Canada Ltd.	Well Approval: Approval to Alter the Condition of a Well (plugging and abandonment of North Triumph 2)
July 16, 2018	ExxonMobil Canada Ltd.	Operations Authorization – Production; Amendment for the transition of all facilities to go from an operations mode to a ready to remove status as well as pigging and flushing of the interfield flowlines and export pipeline (additional explicit approvals required prior to commencing activity at each installation)

Authorizations and Approvals Issued in 2018-19 (Continued)		
<u>Date Issued</u>	<u>Operator</u>	<u>Authorization</u>
August 3, 2018	BP Canada Energy Group ULC	Well Approval: Approval to Drill a Well – Aspy D-11A (sidetrack well)
August 21, 2018	ExxonMobil Canada Ltd.	Well Approval: Approval to Alter the Condition of a Well (plugging and abandonment of Venture 1)
August 21, 2018	ExxonMobil Canada Ltd.	Well Approval: Approval to Alter the Condition of a Well (plugging and abandonment of Venture 4)
August 21, 2018	ExxonMobil Canada Ltd.	Well Approval: Approval to Alter the Condition of a Well (plugging and abandonment of Venture 5)
August 31, 2018	ExxonMobil Canada Ltd.	Well Approval: Approval to Alter the Condition of a Well (plugging and abandonment of Venture 6)
September 18, 2018	ExxonMobil Canada Ltd.	Well Approval: Approval to Alter the Condition of a Well (plugging and abandonment of Venture 7)
September 19, 2018	Encana Corporation	Operations Authorization – Production; Amendment for 2018 decommissioning activities
September 26, 2018	ExxonMobil Canada Ltd.	Well Approval: Approval to Alter the Condition of a Well (plugging and abandonment of Venture 3)
September 28, 2018	ExxonMobil Canada Ltd.	Operations Authorization – Production; Amendment to commence facility transition activities at Venture platform
October 25, 2018	ExxonMobil Canada Ltd.	Well Approval: Approval to Alter the Condition of a Well (plugging and abandonment of Venture 2)

1.4 Monitoring and Oversight

The CNSOPB has an effective monitoring and oversight program for the duration of a project that evaluates operator compliance with regulatory requirements while authorized petroleum-related work activities are being conducted. Operators are required to submit reports (daily, monthly, quarterly, and annually) detailing the status of their work programs, along with other documentation to demonstrate ongoing compliance with regulatory requirements. Additionally, CNSOPB Occupational Health and Safety Officers, Operational Safety Officers and Conservation Officers regularly visit offshore worksites to perform audits and inspections. A summary of these audits and inspections is updated quarterly on the CNSOPB website at: https://www.cnsopb.ns.ca/sites/default/files/pdfs/Audit_Summary_April_1_2018_March_31_2019.pdf.

Operators that are found to be out of compliance may face enforcement action, including, but not limited to: facilitated compliance; issuance of orders or directives; cancellation or suspension of authorizations or approvals; monetary penalties; or, prosecution through the courts.

1.5 Sable Offshore Energy Project (Operator: ExxonMobil Canada Ltd.)

On December 31, 2018, Cessation of Production occurred after 19 years of production. Within sight of Sable Island National Park Reserve, the Sable Offshore Energy Project safely produced gas for almost two decades without a significant impact on the environment, as demonstrated by the annual Environmental Effects Monitoring results.

Throughout the 2018-19 fiscal year, ExxonMobil Canada Ltd. (ExxonMobil) continued the decommissioning and abandonment of the project. The CNSOPB reviewed all application documentation to ensure activities would be conducted to the high safety, environmental and operational standards required by the regulations, and that there would be no waste of the petroleum resource. Well plug and abandonment activities continued with the Noble Regina Allen Jack-Up Rig. All wells at Thebaud and North Triumph have been plugged and work continues at Venture. In 2019, the drilling rig conducting this work, the Noble Regina Allen, will move to South Venture and then to Alma to complete the well plugging work and to support each facility in transitioning to a state of readiness for eventual removal. The flushing of interfield pipelines has begun and will continue in 2019, and will conclude with the flushing of the gas export pipeline.

In addition to regular workplace audits and inspections, CNSOPB staff met with ExxonMobil on a frequent basis to discuss associated safety incidents and regulatory requirements, to ensure that the commitments made in the previously approved Development Plan and Benefits Plan applications were upheld, and to identify and plan for the various regulatory interfaces and submissions that will be required on an ongoing basis to the end of decommissioning and abandonment.

During the year, there were two High Potential Near Miss/Dropped Object incidents for which the CNSOPB issued Incident Bulletins on its website. These can be found in the Incident Bulletins section of the CNSOPB website: <https://www.cnsopb.ns.ca/media/incident-bulletins>. Root causes were identified for both of these incidents, and corrective actions were implemented to prevent recurrence. Following the November 2018 incident, the CNSOPB also issued a Safety Bulletin to share learnings with the broader industry stakeholder group.

Throughout the 2018/2019 fiscal year, the CNSOPB increased its oversight of ExxonMobil Canada Ltd.'s operations, including more frequent offshore audits/inspections (some of which were unannounced), and focused meetings with ExxonMobil and CNSOPB senior management to discuss incident trends (e.g., dropped objects), safety issues, contractor oversight, leadership and human resources. ExxonMobil implemented a number of continuous improvement actions, which the CNSOPB will continue to monitor to the end of the decommissioning and abandonment program.

1.6 Deep Panuke Offshore Gas Project (Operator: Encana Corporation)

On May 7, 2018, Cessation of Production occurred. In 2018, preliminary decommissioning work took place at the Production Field Centre (PFC). Gas production systems were drained, cleaned and purged. All sour gas was removed from the facility. The wells and the gas export pipeline were isolated, while maintaining the ability to continually monitor them.

In 2019, facility decommissioning is continuing, and flowlines and the gas export pipeline will be cleaned and flushed. Encana Corporation has contracted the Noble Regina Allen to conduct the well plugging and abandonment work. CNSOPB staff continue to monitor all aspects of the project to ensure continued compliance with regulatory requirements.

1.7 Scotian Basin Exploration Drilling Project (Operator: BP Canada Energy Group ULC)

CNSOPB staff reviewed BP Canada Energy Group ULC's (BP Canada) applications and supporting documentation for an Operations Authorization for Drilling (OA-D), an Approval to Drill a Well (ADW) and a Geotechnical/Geological/Engineering/Environmental Program Authorization for the deployment and retrieval of a waverider buoy and hydrophones. These authorizations were all issued in April 2018, and BP Canada spudded the Aspy D-11 well on April 22, 2018. Drilling took place between April and November of 2018. CNSOPB staff conducted close oversight of the drilling program and numerous offshore audits/inspections took place.

On June 22, 2018, BP Canada reported an unauthorized discharge of approximately 136 cubic metres of synthetic-based drilling mud from the West Aquarius Drilling Unit. Operations were immediately suspended and an investigation launched.

It was determined that the cause of the incident was a loose connection in the mud booster line. BP Canada identified and implemented a number of responsive actions to prevent reoccurrence of this type of failure, as well as additional monitoring and testing that would be followed for the remainder of the project to allow drilling operations to resume safely. The CNSOPB verified that all such responsive steps and actions had been effectively implemented, and granted approval to BP Canada to recommence drilling operations on July 23, 2018.

This incident remains under review by the CNSOPB, and includes an assessment of the environmental effects of the batch discharge of drilling mud. An investigation report will be made public once the investigation has concluded. More information may be found in the Incident Bulletins section of the CNSOPB website: <https://www.cnsopb.ns.ca/media/incident-bulletins>.

On August 3, 2018, the CNSOPB issued an ADW for Aspy D-11A, given the necessity from an operational perspective to sidetrack the Aspy D-11 well. Drilling of the Aspy D-11A well was completed on November 7, 2018. After the well was plugged and abandoned, the drilling rig departed the well location on December 12, 2018. BP Canada has submitted some of its end of well reports, which are currently under review by the CNSOPB.

BP Canada is currently evaluating the data collected during its drilling program to determine next steps.

2.0 Health, Safety and Environmental Protection

2.1 Safety Performance

In 2018-19, there were over 1.8 million person hours worked under CNSOPB authority in the Canada-Nova Scotia offshore area. This was a significant increase in exposure hours from previous years with two added workplaces (the Noble Regina Allen and West Aquarius drilling rigs). There was an influx of new employees

(many of which were new to the offshore industry or the Canada-Nova Scotia offshore area), and a significant change in the level and type of activity performed by the employees (drilling and decommissioning work, which is more labour intensive and, in some cases, higher risk than steady state production). Four employees either required time off (two) or modified work duties (two) as a result of musculoskeletal injuries. These injuries occurred while doing manual lifting tasks, walking, descending stairs or conducting work from a ladder. These injuries were sustained during tasks where people can become complacent to the hazards. Periodic reminders by the operator to help employees recognize their physical and psychological limitations have been helpful to prevent recurrence of incidents, promote employee hazard reporting, and to promote the documentation/implementation of corrective actions.

CNSOPB Operational Safety Officers and Occupational Health and Safety Officers follow-up on all employee injuries and other incidents to ensure that root causes are identified and that necessary corrective actions have been taken to prevent recurrence. Disabling injury statistics and person hours are shown in **Figure 2**.

Figure 2: Disabling Injury* Statistics

Number of Disabling Injuries	2014-15	2015-16	2016-17	2017-18	2018-19
Installations	3	3	2	2	3
Vessels	0	0	0	0	1
Aviation	0	0	0	0	0
Personnel Transport	0	0	0	0	0
Total	3	3	2	2	4

Person Hours	2014-15	2015-16	2016-17	2017-18	2018-19
Installations	526,440	808,104	1,005,852	626,079	1,336,712
Vessels	735,992	397,791	427,464	278,503	452,087
Aviation	8,421	10,207	10,401	7,276	6,992
Personnel Transport	25,482	20,083	23,502	16,019	24,980
Total	1,296,335	1,236,185	1,467,219	927,877	1,820,771

Frequency Rate (Per 200,000 Person Hours)**	2014-15	2015-16	2016-17	2017-18	2018-19
Installations	1.14	0.74	0.40	0.63	0.45
Vessels	0	0	0	0	0.44
Aviation	0	0	0	0	0
Personnel Transport	0	0	0	0	0
Total	0.46	0.49	0.27	0.43	0.44

* The term "disabling injury" means an employment injury or an occupational disease that (a) prevents an employee from reporting for work or from effectively performing all the duties connected with the employee's regular work on any day subsequent to the day on which the disabling injury occurred, whether or not that subsequent day is a working day for that employee, (b) results in a loss by an employee of a body member or part thereof or in a complete loss of its usefulness, or (c) results in the permanent impairment of a body function of an employee.

** The frequency rate is calculated by dividing the number of disabling injuries by the number of person hours and multiplying by 200,000.

View our Quarterly Disabling Injury Statistics here: <https://www.cnsopb.ns.ca/health-safety/incident-reporting>.

2.2 Environmental Performance

Operators must report spills and unauthorized discharges that occur in the Canada-Nova Scotia offshore area. Each spill and/or unauthorized discharge is followed up by the CNSOPB, with an emphasis on prevention of recurrence. There were 17 spills and unauthorized discharges to the ocean during the 2018-19 fiscal year. These spills and unauthorized discharges are categorized in **Figures 3 and 4**.

CNSOPB staff conducts trends analysis of spill incidents on a regular basis. If a trend with a particular installation or piece of equipment is observed, the operator is notified and appropriate follow-up is conducted to ensure concerns are addressed. In the 2018/2019 fiscal year, installations new to the Canada-Nova Scotia offshore area were found to contribute to an increased number of accidental releases, and follow-up with operators ensured that corrective actions to prevent the recurrence of similar incidents were implemented.

Figure 3: Spills to the Sea (L=Litres)

Material	Less than 1L	1-10L	11-150L	Greater than 150L	Total
Hydraulic Oil	2	2	1		5
Hydrocarbon from Installation Equipment or Deck Drainage	3				3
Lubricating Oil		1			1
Total	5	3	1		9

Note: Does not include exceedances to authorized overboard discharge limits or gas releases.

Figure 4: Unauthorized Discharges to the Sea (L=Litres)

Material	Less than 1L	1-10L	11-150L	Greater than 150L	Total
Hydraulic Fluid	2	1			3
Drilling Mud				1 (136,000L)*	1
Deck Drainage	2				2
Mono-Ethylene Glycol (MEG)	1				1
Blowout Preventer (BOP) Fluid				1 (5,240L)**	1
Total	5	1		2	8

* The synthetic base fluid is the largest component of the drilling mud system, comprising 50-65% of the total fluid. The remaining components include a variety of additives designed to aid in the safe drilling of a well. For a comprehensive overview of the Drilling Mud Composition for BP Canada's Exploration Well, visit:

https://www.cnsopb.ns.ca/sites/default/files/pdfs/Drilling_Mud_Composition_for_BP_Well.pdf.

** The fluid consists of approximately 4,297L of water (82%), 157L of Erifon HD (3%), and 786L of Ethylene Glycol (15%).

View our Spills to the Sea and Unauthorized Discharge reports here:

<https://www.cnsopb.ns.ca/environment/incident-reporting>.

2.3 Environmental Effects Monitoring

The results of Environmental Effects Monitoring (EEM) programs are used to determine the effects of oil and gas activity to the natural environment. EEM programs are conducted throughout each year, and the program design changes yearly to reflect best practices and key learnings. EEM is required for all development projects, including decommissioning, and, occasionally, for certain exploration activities. To view the reports submitted during the 2018-19 fiscal year, please visit: www.cnsopb.ns.ca/environment/environmental-effects-monitoring.

The CNSOPB updated its summary report of the EEM results to date, up to 2018. To view a copy of this report, please visit: https://www.cnsopb.ns.ca/sites/default/files/pdfs/2018_Update_EEM_Summary.pdf.

2.4 Environmental Assessments

Strategic Environmental Assessments

Prior to issuing a Call for Bids within a given area, the CNSOPB conducts Strategic Environmental Assessments (SEAs) to identify specific environmental sensitivities, and to provide a preliminary assessment of potential mitigation measures that may be required, should exploration activity be proposed within the area in the future. The completion of a SEA provides early opportunities for input from Indigenous communities, interested stakeholders, and the general public in advance of the CNSOPB's consideration of the issuance of Exploration Licenses (ELs) within the study area. SEA reports are posted on the CNSOPB website so as to inform Indigenous communities, interested stakeholders, potential bidders and the general public.

In 2018, a report was prepared to update a portion of the Strategic Environmental Assessment for Offshore Petroleum Exploration Activities: Eastern Scotian Shelf – Middle and Sable Island Banks. It was specific to the Call for Bids NS18-3 released on December 10, 2018. This report focused on presenting new or updated environmental information within the study area that has become available since the original October 2012 publication of the SEA. In early 2019, preparation of a new SEA, the Middle Scotian Shelf and Slope Strategic Environmental Assessment, began.

The CNSOPB SEAs are reviewed and updated as appropriate. Typically, this is done at a minimum every five years.

To view the SEAs, related comments, and the SEA archive, please visit: <http://www.cnsopb.ns.ca/environmental-assessments/public-registry-sea>.

Project-Specific Environmental Assessments

For the BP Canada Scotian Basin Exploration Drilling Project, the CNSOPB acted as a Federal Authority and provided expert knowledge to the Environmental Assessment process led by the Canadian Environmental

Assessment Agency (the Agency). The CNSOPB relied on the Agency's process to fulfill its own Environmental Assessment requirements under the *Accord Acts*. Also, the CNSOPB entered into an information-sharing agreement with the Agency to facilitate efficient compliance monitoring and enforcement activities during the drilling program. The drilling program was completed in late 2018, but follow-up activities to the Environmental Assessment, such as end-of-well reporting, continued into 2019.

During the 2018-19 fiscal year, the CNSOPB was notified by Equinor Canada Ltd. (formally Statoil Canada Ltd.) that they were putting their Environmental Assessment for a seismic program on hold.

In 2018, Multiklient Invest AS (MKI) and TGS-NOPEC Geophysical Company ASA (TGS) submitted a Project Description to start an Environmental Assessment process for a seismic survey offshore Canada-Nova Scotia, but they subsequently notified the CNSOPB that they were putting the Environmental Assessment process on hold.

To view documents pertaining to the above EAs, and an archive of previously completed EAs, please visit: <http://www.cnsopb.ns.ca/environment/environmental-assessments>.

3.0 Rights Management

3.1 Call for Bids for Exploration Licences and Licensing Update

On March 21, 2018, the CNSOPB made six Fundamental Decisions pertaining to Call for Bids NS18-1 and Call for Bids NS18-2, and provided notice of these Fundamental Decisions to the Federal Minister of Natural Resources and the Provincial Minister of Energy and Mines. These Fundamental Decisions were suspended by the Federal Minister of Natural Resources and the Provincial Minister of Energy and Mines.

On May 22, 2018, the Federal Minister of Natural Resources and Provincial Minister of Energy provided notice that they had jointly set-aside the six Fundamental Decisions pertaining to the Call for Bids NS18-1 and Call for Bids NS18-2, in accordance with the *Accord Acts*. As such, Call for Bids NS18-1 and call for Bids NS18-2 were not issued. More information can be found here: <https://www.cnsopb.ns.ca/news/notice-decision-respecting-calls-bids-ns18-1-and-ns18-2>.

On November 1, 2018, the CNSOPB made three Fundamental Decisions pertaining to Call for Bids NS18-3. These Fundamental Decision were approved by the Federal Minister of Natural Resources and the Provincial Minister of Energy and Mines. Call for Bids NS18-3 was announced on December 10, 2018 and closes on May 8, 2019. This Call consists of two industry-nominated parcels, on the Scotian Shelf within the Sable Subbasin, in water depths up to 100 metres. A public comment period for Call for Bids NS18-3 closed on February 8, 2019. The written comments that were received and a summary report is available on the Call for Bids NS18-3 website at www.callforbids.ca.

On April 22, 2018, Exploration Licences (ELs) 2431, 2432, 2433, and 2434 were consolidated into EL 2434R, in accordance with the June 5, 2017 consolidation and amending agreement. On January 7, 2019, BP Canada surrendered 50 per cent of the lands of EL 2434R, and submitted a drilling deposit to extend Period 1 of EL 2434R by one year.

In 2018, the CNSOPB completed its review and approval of an application related to Shell Canada Limited’s allowable expenditures for ELs 2423, 2424, 2425, 2426, and 2429. The unrefunded work deposits, totaling \$60,387,704.40, were forfeited to the Receiver General for Canada in October 2018.

There were no changes to the number of Significant Discovery Licences or Production Licences during the past year.

Figure 5: Interests Offshore Nova Scotia

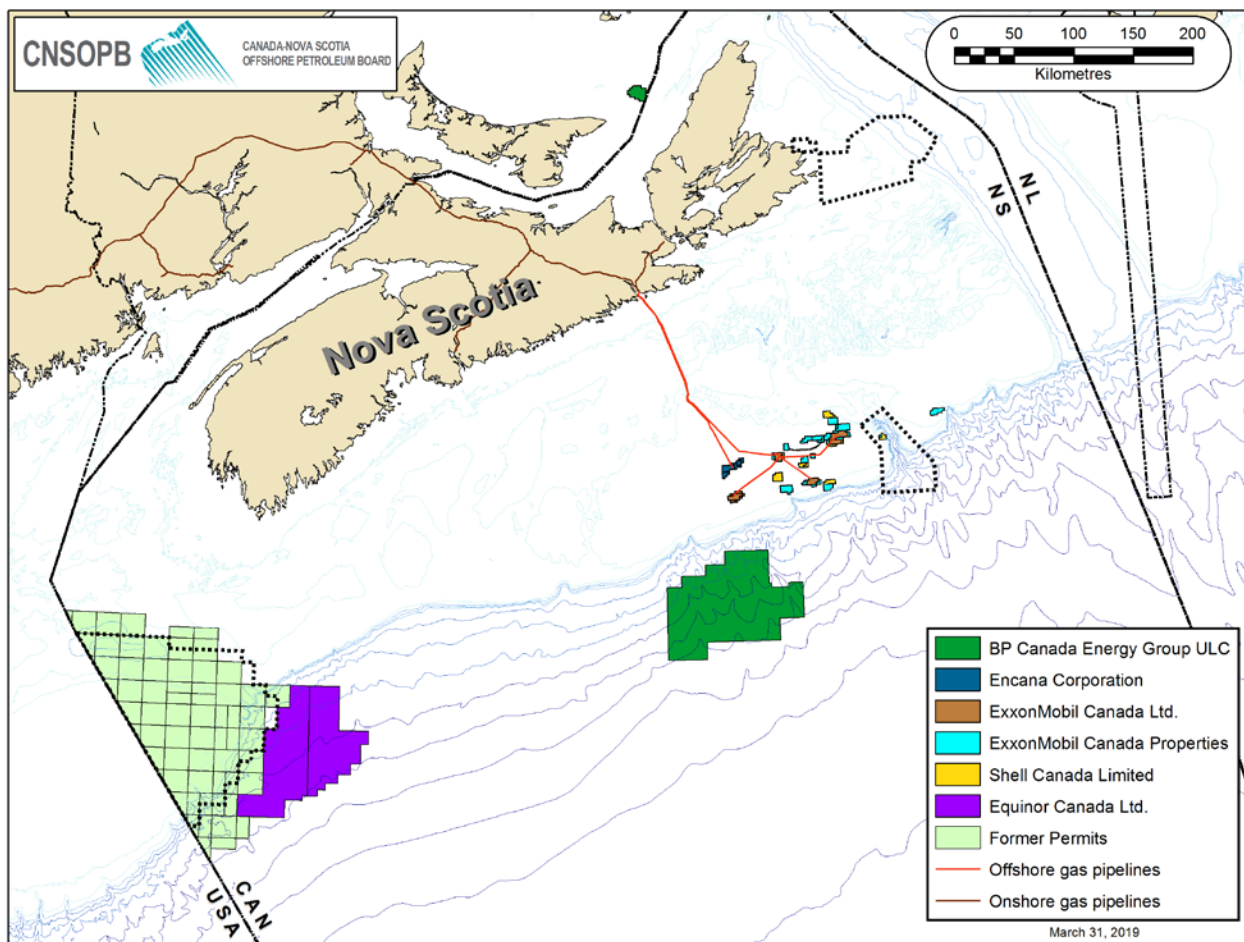


Figure 5 shows the current active ELs in the Canada-Nova Scotia offshore area as of March 31, 2019. Additional maps, tables and information specific to all active licences (Exploration Licences, Significant Discovery Licences and Production Licences) in the Canada-Nova Scotia offshore area can be found on the CNSOPB’s website at www.cnsopb.ns.ca/lands-management.

4.0 Resources

For additional production information, including monthly production data from producing projects, visit <http://www.cnsopb.ns.ca/offshore-activity/production-data>.

4.1 Sable Offshore Energy Project Production Information

During the reporting period, the Sable Offshore Energy Project's (SOEP) average production rate over the producing months was 2.0 E6m3/d (Million cubic metres per day) or 69.7 MMscf/d (Million standard cubic feet per day). Production from SOEP was permanently shut-in on December 31, 2018. The SOEP safely produced a total of 59.9 E9m3 (Billion cubic metres) or 2.12 Tcf (Trillion cubic feet) of gas over the lifespan of the entire project without a significant impact on the environment. Total yearly production for each SOEP field is shown in **Figure 6**. The average gas rate for each SOEP field is shown graphically in **Figure 7**. **Figure 8** is a table of SOEP's average gas rate by fiscal year.

Figure 6: SOEP Total Yearly Gas Production by Field to March 31, 2019

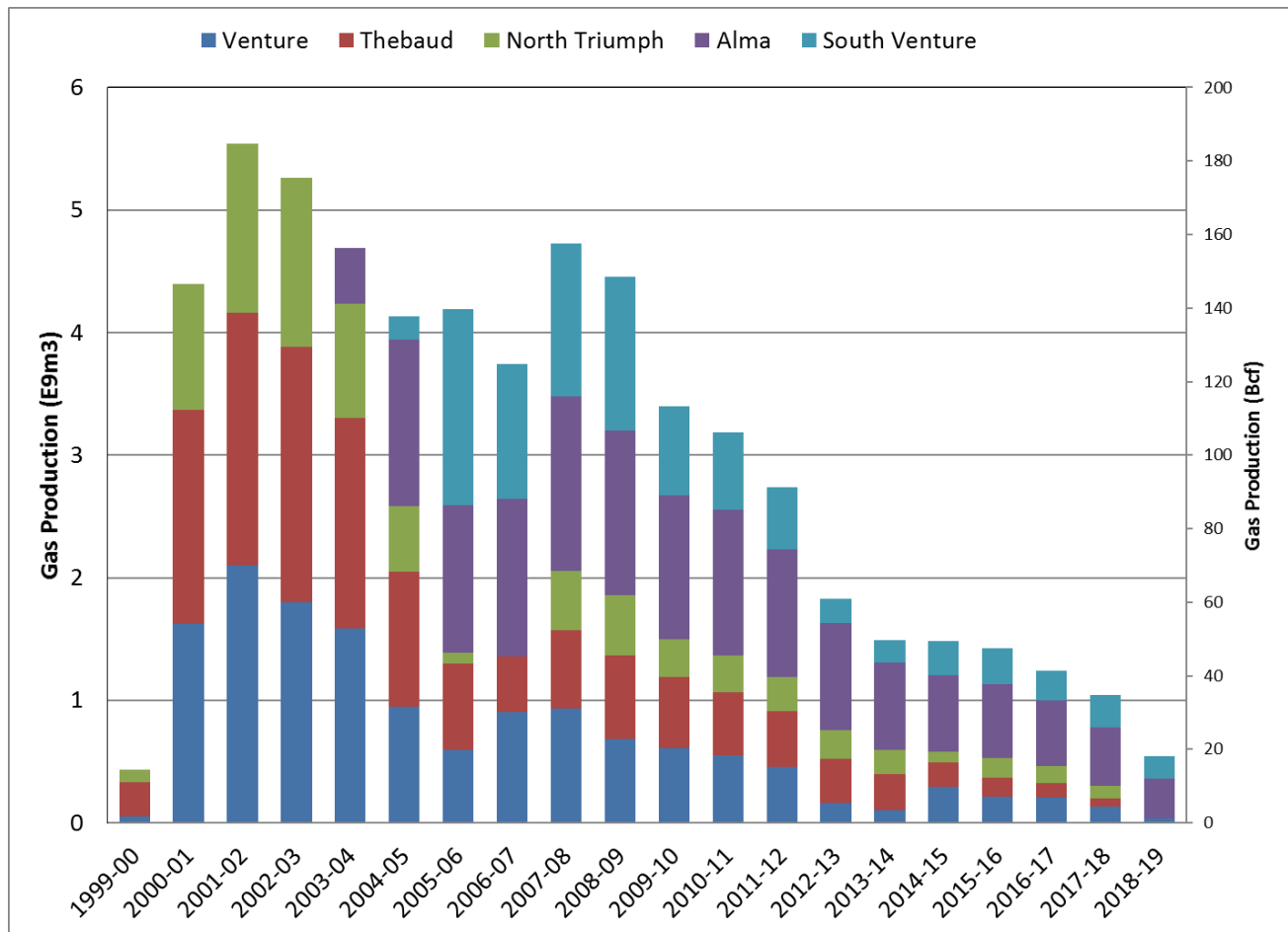


Figure 7: SOEP Average Gas Rate by Field to March 31, 2019

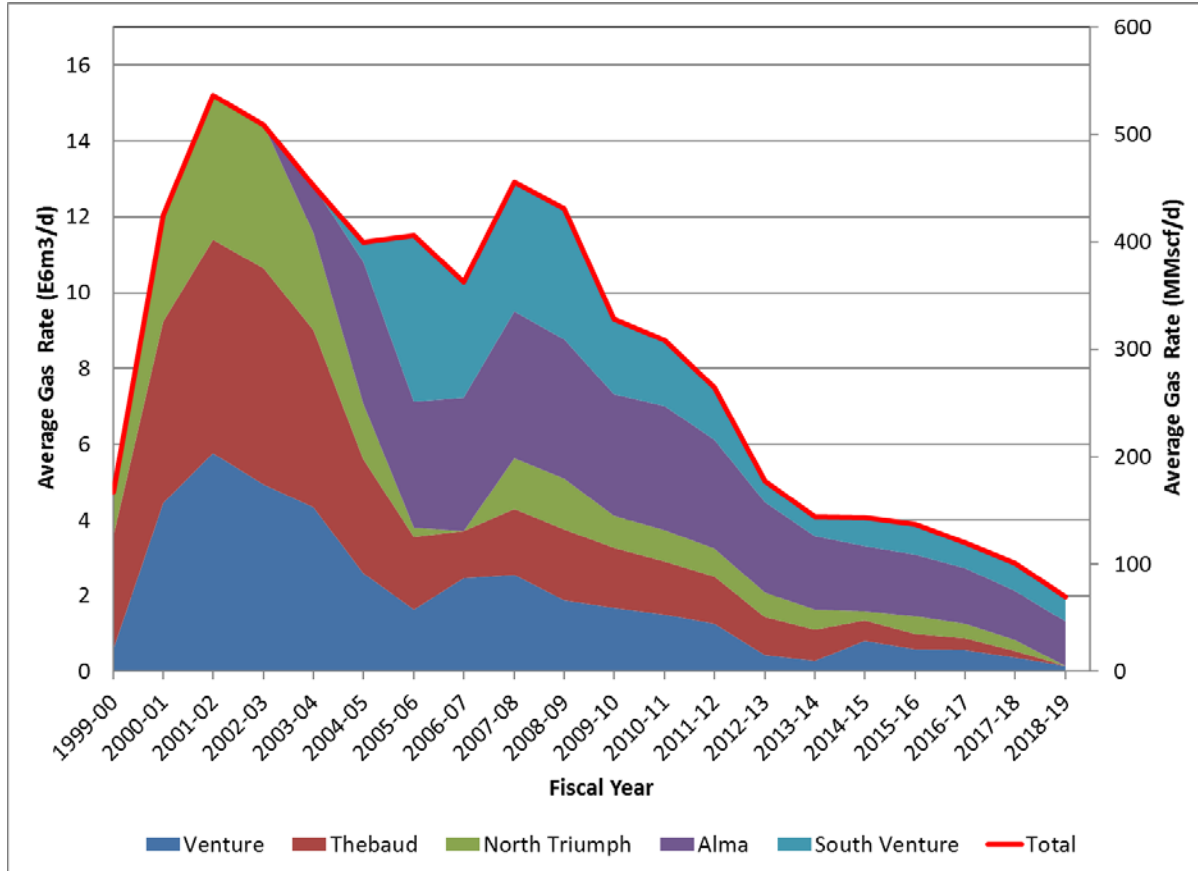


Figure 8: SOEP Average Gas Rate by Fiscal Year

Fiscal Year	(E6m3/d)	(MMcf/d)
1999-00	4.7	167
2000-01	12.0	425
2001-02	15.2	536
2002-03	14.4	509
2003-04	12.8	452
2004-05	11.3	400
2005-06	11.5	406
2006-07	10.3	362
2007-08	12.9	456
2008-09	12.2	431
2009-10	9.3	329
2010-11	8.7	308
2011-12	7.5	264
2012-13	5.0	177
2013-14	4.1	144
2014-15	4.1	144
2015-16	3.9	137
2016-17	3.4	120
2017-18	2.9	101
2018-19*	2.0	70

*Only the producing months in this year have been averaged.

4.2 Deep Panuke Offshore Gas Project Production Information

During the reporting period, Deep Panuke’s average production rate was 0.1 E6m3/d (Million cubic metres per day) or 4.7 MMscf/d (Million standard cubic feet per day). Production from the field was permanently shut-in on May 7, 2018. Deep Panuke safely produced a total of 4.2 E9m3 (Billion cubic metres) or 147.2 Bcf (Billion cubic feet) of gas over the lifespan of the entire project without a significant impact on the environment. Deep Panuke total monthly production by well, since first gas in August 2013, is shown in **Figure 9**. The average monthly gas rate for each well is shown in **Figure 10**. **Figure 11** is a table of Deep Panuke’s average gas rate by fiscal year.

Figure 9: Deep Panuke Total Monthly Gas Production by Well to March 31, 2019

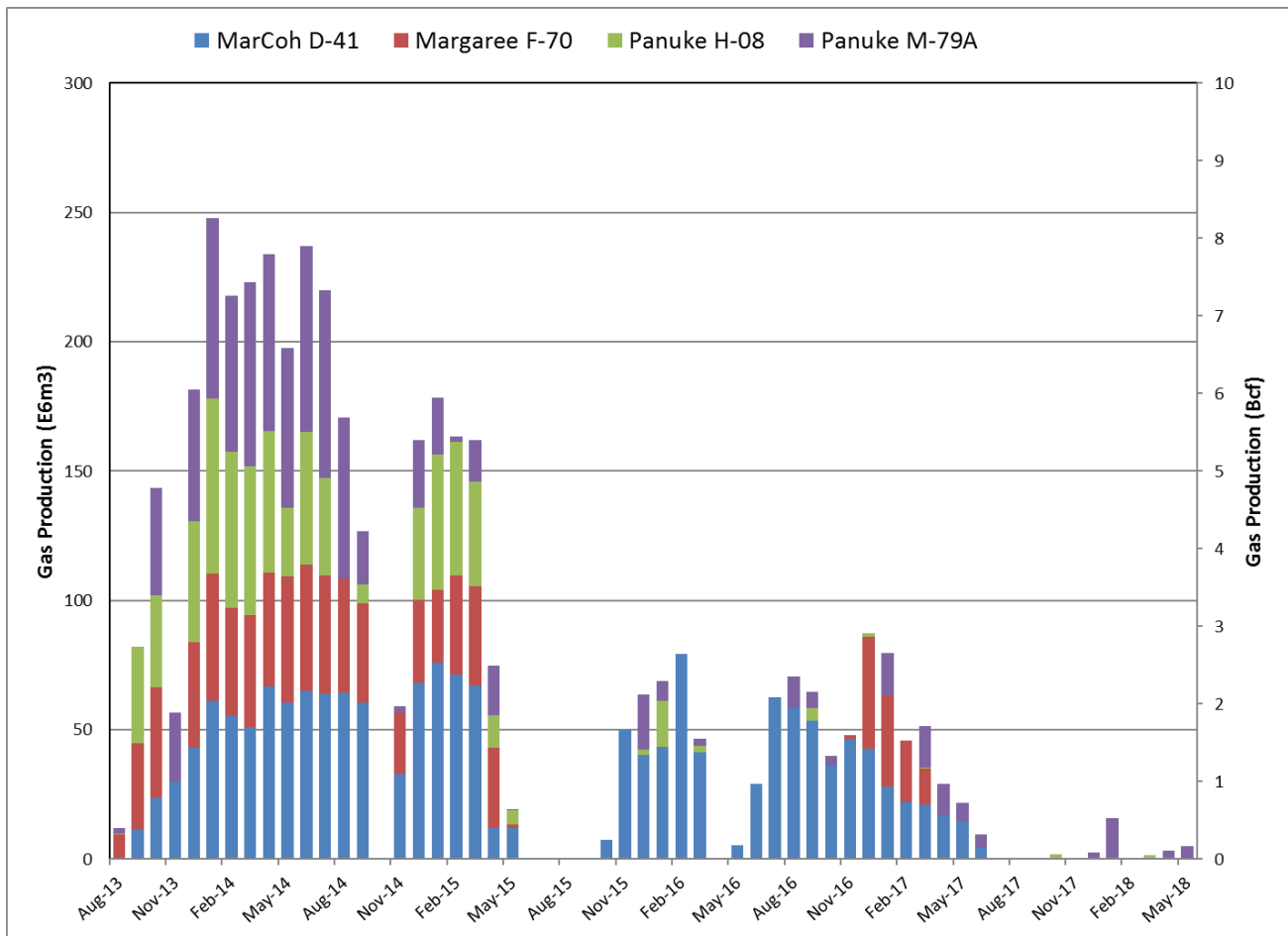


Figure 10: Deep Panuke Average Gas Rate by Well to March 31, 2019

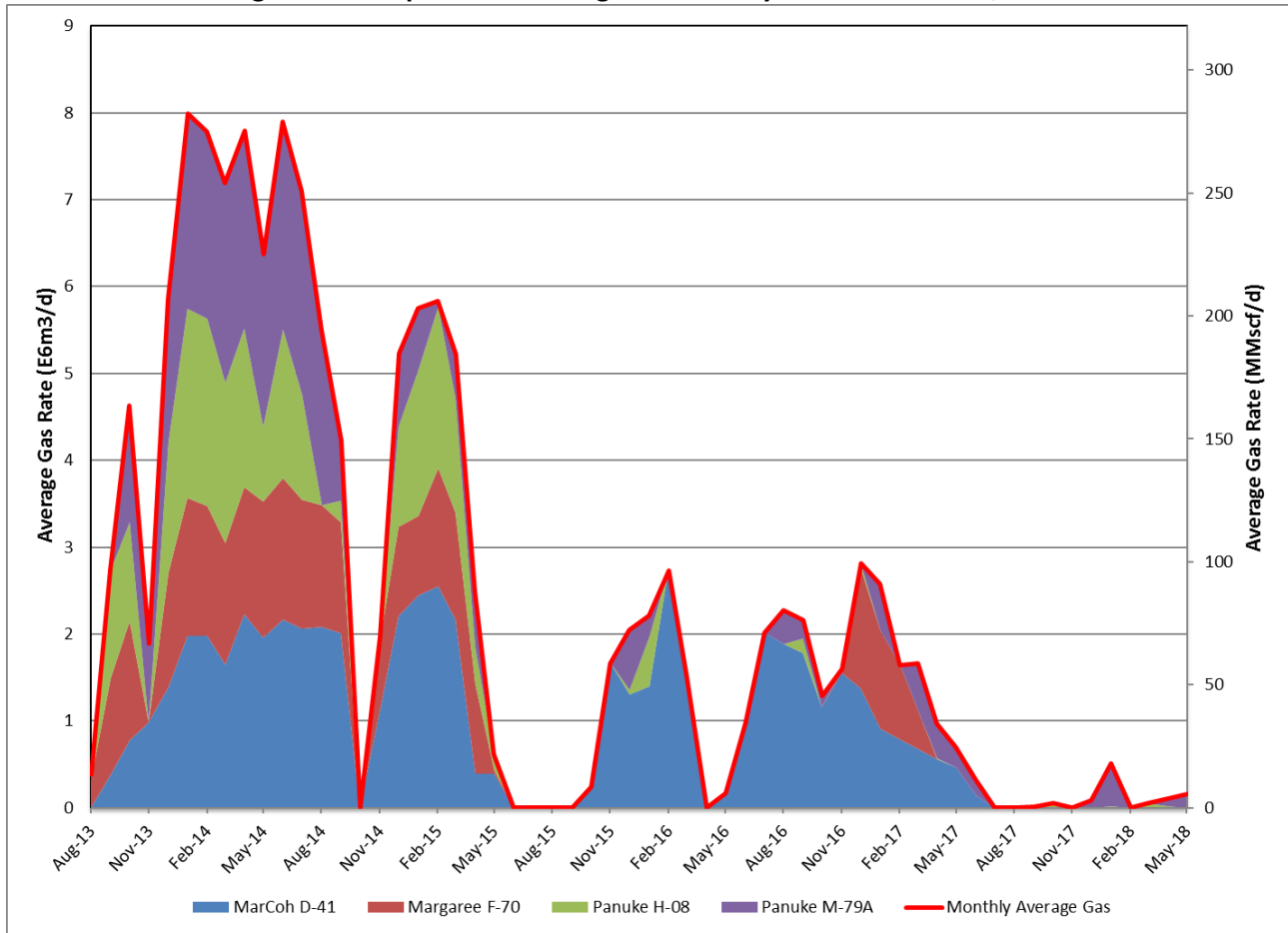


Figure 11: Deep Panuke Average Gas Rate by Fiscal Year*

Fiscal Year	(E6m3/d)	(MMcf/d)
2013-2014	4.8	168
2014-2015	5.7	200
2015-2016	1.7	59
2016-2017	1.7	61
2017-2018	0.3	11
2018-2019	0.1	5

*Only the producing months in each year have been averaged

4.3 Geoscience Publications

During the year, CNSOPB Resources staff completed a regional geoscience study of the central LaHave platform in the Canada-Nova Scotia offshore area ([https://www.cnsopb.ns.ca/sites/default/files/pdfs/Deptuck and Altheim 2018 Rift basins of the central LaHave Platform.pdf](https://www.cnsopb.ns.ca/sites/default/files/pdfs/Deptuck%20and%20Altheim%202018%20Rift%20basins%20of%20the%20central%20LaHave%20Platform.pdf)). This study describes the geology of the 10 separate rift basins that underlie the central Scotian Shelf and Slope. This study also documents, for the first time, a potential pre-rift succession that underlies a portion of the central LaHave platform.

5.0 Industrial Benefits

For more information on Canada-Nova Scotia benefits, including benefits plans and annual benefits reports filed by producing operators, please visit: www.cnsopb.ns.ca/can-ns-benefits/benefits-plans.

5.1 Sable Offshore Energy Project

ExxonMobil Canada Ltd., the operator of the Sable Offshore Energy Project (SOEP), is required to file an annual benefits report with the CNSOPB. As stated in the report submitted to the CNSOPB for the period ending December 31, 2018, the SOEP has spent \$3.1 billion in Nova Scotia to date, \$1.4 billion has been spent in the rest of Canada, with overall Canadian spending totaling \$4.5 billion. Cumulatively, Nova Scotia person hours amounted to 26.2 million, while the rest of Canada totaled 4.1 million person hours.

5.2 Deep Panuke Offshore Gas Project

Encana Corporation, the operator of the Deep Panuke Offshore Gas Project, is required to file an annual benefits report with the CNSOPB. According to the report submitted to the CNSOPB for the period ending December 31, 2018, cumulative Nova Scotian person hours amounted to 7.5 million, while the rest of Canada totaled 1.3 million person hours.

5.3 Exploration Programs

The CNSOPB monitored benefits activity related to exploration programs carried out by Shell Canada and BP Canada for compliance with legislative requirements and benefits plan commitments.

6.0 Financial Statements

The 2018-19 audited Financial Statements, prepared by Levy Casey Carter MacLean, follow.

CANADA-NOVA SCOTIA OFFSHORE PETROLEUM BOARD

FINANCIAL STATEMENTS

MARCH 31, 2019

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STATEMENT OF MANAGEMENT'S RESPONSIBILITY

The accompanying financial statements are the responsibility of the management of the Canada-Nova Scotia Offshore Petroleum Board and have been prepared in compliance with legislation and generally accepted accounting principles established by the Public Sector Accounting Board of the Chartered Professional Accountants of Canada. Management is also responsible for the notes and schedules to the financial statements, and for ensuring this information is consistent, where appropriate, with the information contained in the financial statements.

Management is also responsible for implementing and maintaining a system of internal controls to provide reasonable assurance that reliable financial information is produced.

The Audit, Evaluation and Human Resources Committee is responsible for ensuring that management fulfills its responsibilities for financial reporting and internal control and exercises these responsibilities through regular meetings with them. The Committee met with management and its external auditors to review a draft of the financial statements and to discuss any significant financial reporting or internal control matters prior to approval of the financial statements.

The external auditors, Levy Casey Carter MacLean Chartered Professional Accountants, conducted an independent examination, in accordance with Canadian generally accepted auditing standards, and expressed their opinion on the financial statements. The external auditors have full and free access to the financial management of the Board and meet when required.

On behalf of management of the Canada-Nova Scotia Offshore Petroleum Board:



Stuart Pinks
Chief Executive Officer

May 13, 2019



Christine Bonnell-Eisnor
Director, Regulatory
Affairs & Finance

INDEPENDENT AUDITORS' REPORT

TO THE MEMBERS OF CANADA-NOVA SCOTIA OFFSHORE PETROLEUM BOARD:

Opinion

We have audited the financial statements of the Canada-Nova Scotia Offshore Petroleum Board (the "Board"), which comprise the statement of financial position as at March 31, 2019, statement of operations and accumulated operating surplus, remeasurement gains (losses), changes in net debt and cash flows for the year then ended, and notes to the financial statements, including a summary of significant accounting policies.

In our opinion, the accompanying financial statements present fairly, in all material respects, the financial position of the Canada-Nova Scotia Offshore Petroleum Board as at March 31, 2019, and the results of its operations and its cash flows for the year then ended in accordance with Canadian public sector accounting standards.

Basis for Opinion

We conducted our audit in accordance with Canadian generally accepted auditing standards. Our responsibilities under those standards are further described in the *Auditor's Responsibilities for the Audit of the Financial Statements* section of our report. We are independent of the Board in accordance with the ethical requirements that are relevant to our audits of the financial statements in Canada, and we have fulfilled our other ethical responsibilities in accordance with these requirements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Responsibilities of Management and Those Charged with Governance for the Financial Statements

Management is responsible for the preparation and fair presentation of these financial statements in accordance with Canadian public sector accounting standards, and for such internal control as management determines is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing these financial statements, management is responsible for assessing the Board's ability to continue as a going concern, disclosing, as applicable, matters related to a going concern and using the going concern basis of accounting unless management either intends to liquidate the Board or to cease operations, or has no realistic alternative but to do so.

Those charged with governance are responsible for overseeing the Board's financial reporting process.

Auditor's Responsibilities for the Audit of the Financial Statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with Canadian generally accepted auditing standards will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

**Levy
Casey
Carter
MacLean**
Chartered Professional
Accountants

Stuart S. MacLean Inc.
J.E. Melvin Inc.
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INDEPENDENT AUDITORS' REPORT (CONTINUED)

Auditor's Responsibilities for the Audit of the Financial Statements (Continued)

As part of an audit in accordance with Canadian generally accepted auditing standards, we exercise professional judgement and maintain professional skepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Board's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.
- Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Board's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our independent auditor's report to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our independent auditor's report. However, future events or conditions may cause the Board to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the financial statements, including the disclosures, and whether the financial statements represent the underlying transactions and events in a manner that achieves fair presentation.

We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.



Halifax, Nova Scotia
May 13, 2019

**Chartered Professional Accountants
Licensed Public Accountants**

CANADA-NOVA SCOTIA OFFSHORE PETROLEUM BOARD

STATEMENT OF FINANCIAL POSITION
MARCH 31, 2019

	<u>2019</u>	<u>2018</u>
FINANCIAL ASSETS		
Cash and cash equivalents	\$ 3,563,025	\$ 4,117,390
Receivables	103,379	270,725
Investments (note 2(j)) (note 3)	<u>2,879,538</u>	<u>2,809,358</u>
	<u>6,545,942</u>	<u>7,197,473</u>
LIABILITIES		
Payables and accruals	860,808	1,206,836
Payable to governments (note 4)	2,071,523	2,755,162
Supplementary employee retirement plan obligation (note 5)	998,122	922,208
Post-retirement health and retiring allowance obligation (note 6)	<u>1,664,710</u>	<u>1,550,754</u>
	<u>5,595,163</u>	<u>6,434,960</u>
Net financial assets	<u>950,779</u>	<u>762,513</u>
NON-FINANCIAL ASSETS		
Prepaid expenses	335,553	365,200
Tangible capital assets (page 17)	<u>66,897</u>	<u>92,900</u>
	<u>402,450</u>	<u>458,100</u>
Accumulated surplus	\$ <u>1,353,229</u>	\$ <u>1,220,613</u>
Accumulated surplus is comprised of:		
Accumulated operating surplus (page 5)	\$ 1,338,240	\$ 1,241,387
Accumulated remeasurement gains (losses) (page 6)	<u>14,989</u>	<u>(20,774)</u>
	\$ <u>1,353,229</u>	\$ <u>1,220,613</u>

Commitments (note 9)

Approved by the Board



Chair



Board member

CANADA-NOVA SCOTIA OFFSHORE PETROLEUM BOARD

STATEMENT OF OPERATIONS AND ACCUMULATED OPERATING SURPLUS YEAR ENDED MARCH 31, 2019

	(Note 11) <u>Budget</u>	<u>2019</u>	<u>2018</u>
Revenue			
Government grants			
Government of Canada	\$ 4,305,000	\$ 4,305,000	\$ 4,355,000
Government of Nova Scotia	4,305,000	4,305,000	4,355,000
Government of Canada - Translation services	-	50,909	-
Costs recovered from industry	8,610,000	8,087,501	8,052,252
Interest and other	-	52,039	33,441
Interest on overdue balances	<u>-</u>	<u>12,239</u>	<u>13,742</u>
	<u>17,220,000</u>	<u>16,812,688</u>	<u>16,809,435</u>
Less:			
Costs recoveries refunded to government (page 18)	8,610,000	8,087,502	8,052,252
Interest remitted to government	<u>-</u>	<u>12,239</u>	<u>13,742</u>
	<u>8,610,000</u>	<u>8,099,741</u>	<u>8,065,994</u>
Net revenue	8,610,000	8,712,947	8,743,441
Expenses			
Regulation of petroleum activities (page 18)	<u>8,610,000</u>	<u>8,118,795</u>	<u>8,012,105</u>
Operating surplus before other revenue (expenses)	-	594,152	731,336
Amortization of tangible capital assets	-	(49,024)	(273,747)
Net investment income (note 7)	<u>-</u>	<u>61,078</u>	<u>59,862</u>
	<u>-</u>	<u>12,054</u>	<u>(213,885)</u>
Operating surplus	-	606,206	517,451
Accumulated operating surplus, beginning of year	-	1,241,387	725,818
Repayment to Government of Canada - prior year surplus	-	(212,138)	(941)
Repayment to Government of Nova Scotia - prior year surplus	<u>-</u>	<u>(297,215)</u>	<u>(941)</u>
Accumulated operating surplus, end of year	<u>\$ -</u>	<u>\$ 1,338,240</u>	<u>\$ 1,241,387</u>

CANADA-NOVA SCOTIA OFFSHORE PETROLEUM BOARD

**STATEMENT OF REMEASUREMENT GAINS (LOSSES)
YEAR ENDED MARCH 31, 2019**

	<u>2019</u>	<u>2018</u>
Accumulated remeasurement gains (losses), beginning of the year	\$ (20,774)	\$ 41,964
Unrealized gain (loss) arising during the year on investments	<u>35,763</u>	<u>(62,738)</u>
Accumulated remeasurement gains (losses), end of year	<u>\$ 14,989</u>	<u>\$ (20,774)</u>

CANADA-NOVA SCOTIA OFFSHORE PETROLEUM BOARD

STATEMENT OF CHANGES IN NET ASSETS YEAR ENDED MARCH 31, 2019

	(Note 11) <u>Budget</u>	<u>2019</u>	<u>2018</u>
Operating surplus	\$ -	\$ 606,206	\$ 517,451
Repayment to Government of Canada	-	(212,138)	(941)
Repayment to Government of Nova Scotia	-	(297,215)	(941)
	<u>-</u>	<u>96,853</u>	<u>515,569</u>
Change in tangible capital assets			
Acquisition of tangible capital assets (page 17)	(55,000)	(23,020)	(44,636)
Amortization of tangible capital assets (page 17)	-	49,024	273,747
Increase (decrease) in tangible capital assets	<u>(55,000)</u>	<u>26,004</u>	<u>229,111</u>
Change in other non-financial assets			
Use (acquisition) of prepaid expense	-	29,646	(167,335)
Net remeasurement loss (page 6)	-	35,763	(62,738)
Increase (decrease) in net financial assets	(55,000)	188,266	514,607
Net financial assets, beginning of the year	<u>762,513</u>	<u>762,513</u>	<u>247,906</u>
Net financial assets, end of the year	<u>\$ 707,513</u>	<u>\$ 950,779</u>	<u>\$ 762,513</u>

CANADA-NOVA SCOTIA OFFSHORE PETROLEUM BOARD

STATEMENT OF CASH FLOWS YEAR ENDED MARCH 31, 2019

	<u>2019</u>	<u>2018</u>
Operating Activities		
Operating surplus	\$ 606,206	\$ 517,451
Amortization of tangible capital assets	49,024	273,747
Loss on disposal of investments	6,598	1,540
Repayment to Government of Canada	(212,138)	(941)
Repayment to Government of Nova Scotia	(297,215)	(941)
Increase in supplementary employee retirement plan obligation	75,914	90,031
Increase (decrease) in post-retirement health and retiring allowance obligation	<u>113,956</u>	<u>(255,874)</u>
	342,345	625,013
Net change in non-cash working capital balances related to operations (note 8)	<u>(832,676)</u>	<u>423,000</u>
	<u>(490,331)</u>	<u>1,048,013</u>
Investing Activities		
Increase in accrued interest on investments	(1,757)	(1,422)
Purchase of investments	(402,072)	(754,681)
Proceeds on disposal of investments	<u>366,590</u>	<u>452,794</u>
	<u>(37,239)</u>	<u>(303,309)</u>
Capital Activities		
Purchase of Computer equipment	(19,980)	(44,636)
Equipment	<u>(3,040)</u>	<u>-</u>
	<u>(23,020)</u>	<u>(44,636)</u>
Increase (decrease) in cash and cash equivalents during year	(550,590)	700,068
Cash and cash equivalents, beginning of year	<u>4,125,803</u>	<u>3,425,735</u>
Cash and cash equivalents, end of year	\$ <u>3,575,213</u>	\$ <u>4,125,803</u>
Represented by:		
Cash	\$ 3,563,025	\$ 4,117,390
Investment cash	<u>12,188</u>	<u>8,413</u>
	\$ <u>3,575,213</u>	\$ <u>4,125,803</u>

CANADA-NOVA SCOTIA OFFSHORE PETROLEUM BOARD

NOTES TO FINANCIAL STATEMENTS MARCH 31, 2019

1. Purpose of organization

The Canada-Nova Scotia Offshore Petroleum Board was formed to administer the relevant provisions of the Canada-Nova Scotia Offshore Petroleum Resources Accord Implementation Acts as enacted by the Parliament of Canada and the Legislature of Nova Scotia. The Board is funded primarily by grants from the Federal and Provincial Governments in equal contributions. The Board also collects and remits to the Governments cost recovery charges assessed against industry from regulatory reviews, up to a maximum of 100% of the Board's approved budget. The Board is a non-profit organization and is, therefore, exempt from income tax under Section 149 of the Income Tax Act.

2. Significant accounting policies

(a) Basis of presentation

These financial statements have been prepared by management in accordance with the Public Sector Accounting Board (PSAB) of the Chartered Professional Accountants of Canada (CPA Canada) and reflect the following significant accounting policies.

(b) Cash and cash equivalents

Cash and cash equivalents include cash on hand, balances with banks and cash held within the investment portfolio.

(c) Non-financial assets

Non-financial assets are not available to discharge existing liabilities and are held for use in the provision of services. They have useful lives extending beyond the current year and are not intended for sale in the ordinary course of operations. The change in non-financial assets during the year, together with the operating surplus or deficit and the net remeasurement gains or losses, provides the change in net financial assets or net debt for the year.

(d) Tangible capital assets

Tangible capital assets are recorded at cost which includes all costs directly attributable to the acquisition, construction, development, installation or betterment of the tangible capital asset. The Board capitalizes assets with a value greater than \$2,500 and a useful life greater than one year. Amortization is recorded using the straight-line method over four years for furniture, fixtures and equipment and over three years for computer equipment and software. Leasehold improvements are amortized over the life of the lease.

(e) Impairment of long-lived assets

Tangible capital assets are tested for recoverability whenever events or changes in circumstances indicate that their carrying amount may not be recoverable. An impairment loss is recognized when the asset no longer contributes to the Board's ability to provide services resulting from its use and eventual disposition. The impairment loss is measured as the amount by which the carrying amount of the long-lived asset exceeds its fair value.

CANADA-NOVA SCOTIA OFFSHORE PETROLEUM BOARD

NOTES TO FINANCIAL STATEMENTS MARCH 31, 2019

2. Significant accounting policies (continued)

(f) Use of estimates

Uncertainty in the determination of the amount at which an item is recorded in the financial statements is known as measurement uncertainty. Such uncertainty exists when there could be a material difference between the recognized amount and another reasonably possible amount, as there is whenever estimates are used. The preparation of the financial statements in conformity with Canadian public sector accounting standards, requires management to make estimates and assumptions that affect the reporting amounts of assets and liabilities, and disclosure of contingent assets and liabilities, at the date of the financial statements and the reported amounts of revenues and expenses during the period. The supplementary employee retirement plan obligation and the post-retirement health and retiring allowance obligation are items requiring the use of significant estimates because actual results may differ significantly from the various assumptions about plan members and economic conditions in the marketplace.

Estimates are based upon the best information available at the time of preparation of the financial statements and are reviewed annually to reflect new information as it becomes available. Measurement uncertainty exists in these financial statements and actual results could differ from these estimates.

(g) Revenue recognition

Revenues are recorded on the accrual basis. Revenues are recognized in the period in which the transactions or events occurred that gave rise to the revenues. Government transfers are recognized when the transfer is authorized and eligibility criteria are met except, when and to the extent, stipulations by the transferor gives rise to an obligation that meets the definition of a liability. Stipulations by the transferor may require that the funds only be used for providing specific services or the acquisition of tangible capital assets. For transfers with stipulations an equivalent amount of revenue is recognized as the liability is settled.

Cost recoveries from industry are recognized when invoiced which are based upon estimated costs and units of Board time for the fiscal year, as per the Cost Recovery Guidelines. Cost recoveries are adjusted at the end of each fiscal year based upon the actual full cost of providing regulatory services, as defined in the Cost Recovery Guidelines.

Investment income is recorded as earned.

(h) Supplementary employee retirement plan obligation

The projected unit credit method prorated on services has been used to determine the accrued benefit obligation and current service cost. The objective under this method is to expense each participant's benefits under the plan as they would accrue, taking into consideration future salary increases and the plan's benefit allocation formula.

Obligations are attributed to the period beginning on the employee's date of joining the plan and ending on the earlier of the date of termination, death or retirement.

(i) Post-retirement health and retiring allowance obligation

Employees of the Board participate in the Province of Nova Scotia Pensioners Extended Health Plan upon retirement. This plan provides health care coverage to age 65. Employees are also eligible for one week of salary for each year of pensionable service, to a maximum of 26 weeks for Board staff who retire upon becoming eligible for retirement. These retirement benefits are recorded on an accrual basis based on an actuary's estimate.

CANADA-NOVA SCOTIA OFFSHORE PETROLEUM BOARD

NOTES TO FINANCIAL STATEMENTS MARCH 31, 2019

2. Significant accounting policies (continued)

(i) Post-retirement health and retiring allowance obligation (continued)

Effective June 30, 2015, employees are no longer eligible to earn and accrue a retirement allowance. In 2018, those Employees who were employed by the CNSOPB prior to this date, were offered a one-time option to receive a service payout in place of the retirement allowance. Employees who did not choose this option have been advised in writing of their accrued entitlement, which will be payable to them on their retirement date so long as they are eligible to retire and are entitled to receive benefits from the Public Service Superannuation Plan.

(j) Investments

The Board has designated its investment portfolio to fund the Board's obligations for supplementary employee retirement plans and post-retirement health and retiring allowances.

(k) Financial instruments

All financial instruments are measured using either the amortized cost method or the fair value method. Financial instruments included in the amortized cost category are recorded at either cost or amortized cost using the effective interest rate method. Transaction costs are included in the initial cost of financial instruments recognized using the cost method. Financial instruments included in the fair value category are initially recorded at fair value with each subsequent change in fair value recognized in the statement of remeasurement gains and losses until such time that the financial instrument is derecognized. When the financial instrument is derecognized the accumulated remeasurement gain or loss is reversed and recognized on the statement of operations. Transaction costs associated with financial instruments in the fair value category are expensed when incurred.

Accounts receivable, payables and accruals, payable to governments, supplementary employee retirement plan obligation and post-retirement health and retiring allowance obligations are recorded using the cost method. Cash and investments are recorded using the fair value method utilizing quoted prices in active markets to determine the fair value.

3. Investments

	<u>2019</u>	<u>2018</u>
Investments, at cost	\$ 2,826,471	\$ 2,797,587
Accrued investment income	25,889	24,132
Unrealized gain (losses) on investments	14,990	(20,774)
Investment cash	<u>12,188</u>	<u>8,413</u>
Investments, at fair market value	<u>\$ 2,879,538</u>	<u>\$ 2,809,358</u>

CANADA-NOVA SCOTIA OFFSHORE PETROLEUM BOARD

NOTES TO FINANCIAL STATEMENTS
MARCH 31, 2019

4. Payable to governments

	<u>2019</u>	<u>2018</u>
Federal government - cost recovery funds	\$ 1,023,716	\$ 1,377,581
Federal government - unused translation services grant	24,091	-
Provincial government - cost recovery funds	<u>1,023,716</u>	<u>1,377,581</u>
	<u>\$ 2,071,523</u>	<u>\$ 2,755,162</u>

5. Pension obligations

(a) Supplementary employee retirement plan (SERP)

The Board Supplementary Employee Retirement Plan provides benefits to its employees who are members of the Public Service Superannuation Plan (PSSP). Employees are eligible for membership in this plan once their pensionable earnings have reached a level such that their benefits under the PSSP are limited by the maximum pension limits under the Income Tax Act.

The Board measures its accrued benefit obligations and the fair value of plan assets for accounting purposes as at March 31 of each year. An actuarial valuation of the retirement plan for funding purposes was completed as of June 30, 2017 and was extrapolated to March 31, 2019. An updated actuarial valuation is completed at least every three years.

The Board has adopted the recommendations of Section 3250 of the Public Sector Accounting Standards Handbook. The following is required for disclosure purposes:

	<u>2019</u>	<u>2018</u>
<u>Components of Supplementary Employee Retirement Plan Cost</u>		
Current service cost	\$ 34,894	\$ 33,003
Interest cost	37,076	35,561
Amortization of net actuarial losses	<u>32,415</u>	<u>49,698</u>
Supplementary Employee Retirement Plan Cost	<u>\$ 104,385</u>	<u>\$ 118,262</u>
 <u>Weighted-Average Assumptions for Expense</u>		
Discount rate	<u>4.10 %</u>	<u>4.10 %</u>
Rate of compensation increase	<u>2.25 %</u>	<u>2.25 %</u>
 <u>Weighted-Average Assumptions for Disclosure</u>		
Discount rate	<u>4.10 %</u>	<u>4.10 %</u>
Rate of compensation increase	<u>2.25 %</u>	<u>2.25 %</u>

CANADA-NOVA SCOTIA OFFSHORE PETROLEUM BOARD

NOTES TO FINANCIAL STATEMENTS MARCH 31, 2019

5. Pension obligations (continued)

Change in Accrued Benefit Obligation

Accrued benefit obligation at the end of the prior year	\$ 1,029,533	\$ 956,134
Current service cost	34,894	33,003
Interest cost	37,076	35,561
Benefits paid	(28,471)	(28,231)
Actuarial loss	<u>24,212</u>	<u>33,066</u>

Accrued benefit obligation at the end of the year **\$ 1,097,244** **\$ 1,029,533**

Reconciliation of Funded Status to Accrued Benefit Liability

Benefit obligation at end of year	\$ 1,097,244	\$ 1,029,533
Unamortized net actuarial loss	<u>(99,122)</u>	<u>(107,325)</u>

Accrued benefit liability **\$ 998,122** **\$ 922,208**

(b) Multiemployer defined benefit pension plan

The Board contributes to a pension plan under the Public Service Superannuation Act administered by the Public Service Superannuation Plan Trustee Inc. The Board matches employees' contributions calculated as follows: 8.4% (2018 - 8.4%) on that part of their salary that is equal to or less than the "Year's Maximum Pensionable Earnings" (YMPE) under the Canada Pension Plan and 10.9% (2018 - 10.9%) on the part of their salary that is in excess of the YMPE. The Board has recognized contributions of \$407,641 in 2019 (2018 - \$398,440). There is no further liability with respect to past service at March 31, 2019.

6. Post-retirement health and retiring allowance obligation

The Board provides other retirement benefits to its employees by participating in the Province of Nova Scotia's post-retirement health insurance program and also provides retiring allowance benefits to those employees who retire from the Board. Both benefits are funded on a pay-as-you-go basis. The Board funds on a cash basis as contributions are made.

An actuarial valuation of the retirement plan for funding purposes was completed as of March 31, 2019. The valuation was based on a number of assumptions about future events, such as inflation rates, interest rates, medical inflation rates, wage and salary increases, and employee turnover and mortality. The assumptions used reflect the Board's best estimates.

CANADA-NOVA SCOTIA OFFSHORE PETROLEUM BOARD

NOTES TO FINANCIAL STATEMENTS
MARCH 31, 2019

6. Post-retirement health and retiring allowance obligation (continued)

	<u>2019</u>	<u>2018</u>
<u>Components of Post-Retirement Health and Retiring Allowance Cost</u>		
Current service cost (employer portion)	\$ 68,929	\$ 58,369
Interest cost	55,359	67,356
Actuarial loss	391	6,932
Settlement loss	-	158,382
Recognition of unamortized net actuarial losses	<u>-</u>	<u>5,641</u>
Post-Retirement Health and Retiring Allowance Cost	<u>\$ 124,679</u>	<u>\$ 296,680</u>
<u>Weighted-Average Assumptions for Expense</u>		
Discount rate	<u>4.10</u> %	<u>4.10</u> %
Rate of compensation increase	<u>2.25</u> %	<u>2.25</u> %
Initial weighted average health care trend rate	<u>6.67</u> %	<u>6.83</u> %
Ultimate weighted average health care trend rate	<u>4.50</u> %	<u>4.50</u> %
Year ultimate rate reached	<u>2030</u>	<u>2030</u>
<u>Weighted-Average Assumptions for Disclosure</u>		
Discount rate	<u>3.59</u> %	<u>3.59</u> %
Rate of compensation increase	<u>2.25</u> %	<u>2.25</u> %
Initial weighted average health care trend rate	<u>6.50</u> %	<u>6.50</u> %
Ultimate weighted average health care trend rate	<u>4.50</u> %	<u>4.50</u> %
Year ultimate rate reached	<u>2030</u>	<u>2030</u>
<u>Change in Accrued Benefit Obligation</u>		
Accrued benefit obligation at the end of the prior year	\$ 1,512,916	\$ 1,857,194
Current service cost (employer portion)	68,929	58,369
Interest cost	55,359	67,356
Impact of settlement	-	158,382
Benefits to be settled	-	(410,816)
Benefits paid	(10,723)	(141,738)
Actuarial loss (gain)	<u>50,553</u>	<u>(75,831)</u>
Accrued benefit obligation at the end of the year	<u>\$ 1,677,034</u>	<u>\$ 1,512,916</u>
<u>Reconciliation of Funded Status to Accrued Benefit Liability</u>		
Benefit obligation at the end of year	\$ 1,677,034	\$ 1,512,916
Unamortized net actuarial loss (gain)	<u>(12,324)</u>	<u>37,838</u>
Accrued benefit liability	<u>\$ 1,664,710</u>	<u>\$ 1,550,754</u>

CANADA-NOVA SCOTIA OFFSHORE PETROLEUM BOARD

NOTES TO FINANCIAL STATEMENTS MARCH 31, 2019

7. Net investment income

	<u>2019</u>	<u>2018</u>
Investment income	\$ 84,338	\$ 77,057
Loss on disposal of investments	(6,598)	(1,540)
Portfolio management fees	<u>(16,662)</u>	<u>(15,655)</u>
	<u>\$ 61,078</u>	<u>\$ 59,862</u>

8. Net change in non-cash working capital balances related to operations

	<u>2019</u>	<u>2018</u>
Increase (decrease) in cash from changes in:		
Receivables	\$ 167,344	\$ (152,604)
Prepaid expenses	29,646	(167,335)
Payables and accruals	(346,027)	250,210
Payable to governments	<u>(683,639)</u>	<u>492,729</u>
	<u>\$ (832,676)</u>	<u>\$ 423,000</u>

9. Commitments

The Board has entered into various lease agreements for premises and equipment. The approximate minimum payments required over the next five fiscal years are as follows:

2020	\$ 354,658
2021	\$ 348,724
2022	\$ 356,863
2023	\$ 357,988
2024	\$ 122,811

10. Financial instruments

The following are the significant risks that the Board is exposed to through its financial instruments:

(a) Credit risk

Credit risk is the risk that one party to a financial instrument will cause a financial loss for the other party by failing to discharge an obligation. The carrying amount of financial assets represents the maximum credit exposure. The Board's main credit risks relate to its accounts receivable. In order to reduce its credit risk, the Board has adopted credit policies which include the analysis of the financial position of its regulated entities and the regular review of their credit limits. The Board does not have a significant exposure to any individual regulated entity or counterpart. Management reviews accounts receivable on a case by case basis to determine if an allowance is necessary to reflect an impairment in collectability.

CANADA-NOVA SCOTIA OFFSHORE PETROLEUM BOARD

NOTES TO FINANCIAL STATEMENTS MARCH 31, 2019

10. Financial instruments (continued)

(b) Interest rate risk

Interest rate risk is the risk that the fair value or future cash flows of a financial instrument will fluctuate because of changes in market interest rates. The Board has investments in guaranteed investment certificates, debentures, bonds, mid and medium term notes and high-interest savings accounts which bear interest at fixed rates ranging between 1.95% and 5.04%. Consequently, the Board's exposure to interest rate risk on these investments is minimal.

(c) Market rate risk

Market risk is the risk that the fair value or future cash flows of a financial instrument will fluctuate because of changes in market prices. The debentures, bonds and mid and medium term notes held in the Board's investment portfolio expose the Board to market risk as such investments are subject to price changes in the open market.

(d) Liquidity risk

Liquidity risk is the risk that the Board will encounter difficulty in meeting its obligations associated with its financial liabilities as they become due. The Board's ability to meet its obligations depends on the receipt of funds whether in the form of revenue or advances.

11. Budget information

The budget figures presented are for comparison purposes and are unaudited. Amortization was not contemplated in the development of the budget and, as such, has not been included.

CANADA-NOVA SCOTIA OFFSHORE PETROLEUM BOARD

SCHEDULE OF TANGIBLE CAPITAL ASSETS
YEAR ENDED MARCH 31, 2019

COST

	<u>Opening</u>	<u>Additions</u>	Write Downs/ <u>Disposals</u>	<u>Closing</u>
Leasehold improvements	\$ 78,061	\$ -	\$ -	\$ 78,061
Furniture and fixtures	453,564	-	-	453,564
Computer equipment	647,652	19,980	8,281	659,351
Computer software	625,539	-	74,987	550,552
Equipment	<u>198,430</u>	<u>3,040</u>	<u>-</u>	<u>201,470</u>
	<u>\$ 2,003,246</u>	<u>\$ 23,020</u>	<u>\$ 83,268</u>	<u>\$ 1,942,998</u>

ACCUMULATED AMORTIZATION

	<u>Opening</u>	<u>Amortization</u>	Write Downs/ <u>Disposals</u>	<u>Closing</u>
Leasehold improvements	\$ 66,358	\$ 11,703	\$ -	\$ 78,061
Furniture and fixtures	451,489	1,342	-	452,831
Computer equipment	578,676	27,053	8,281	597,448
Computer software	619,192	4,747	74,987	548,952
Equipment	<u>194,630</u>	<u>4,179</u>	<u>-</u>	<u>198,809</u>
	<u>\$ 1,910,345</u>	<u>\$ 49,024</u>	<u>\$ 83,268</u>	<u>\$ 1,876,101</u>

NET BOOK VALUE

	<u>2019</u>	<u>2018</u>
Leasehold improvements	\$ -	\$ 11,703
Furniture and fixtures	733	2,075
Computer equipment	61,903	68,976
Computer software	1,600	6,347
Equipment	<u>2,661</u>	<u>3,799</u>
	<u>\$ 66,897</u>	<u>\$ 92,900</u>

CANADA-NOVA SCOTIA OFFSHORE PETROLEUM BOARD

SCHEDULE OF EXPENSES YEAR ENDED MARCH 31, 2019

	(Note 11) <u>Budget</u>	<u>2019</u>	<u>2018</u>
Cost recoveries refunded to government			
Government of Canada	\$ 4,305,000	\$ 4,043,751	\$ 4,026,126
Government of Nova Scotia	<u>4,305,000</u>	<u>4,043,751</u>	<u>4,026,126</u>
Total cost recoveries refunded to government	<u>\$ 8,610,000</u>	<u>\$ 8,087,502</u>	<u>\$ 8,052,252</u>
Regulation of petroleum activities			
Personnel and Board members	\$ 5,585,000	\$ 5,360,093	\$ 5,358,338
General office and support	1,290,000	1,105,301	951,013
Office and laboratory premise costs	700,000	698,555	693,937
Consulting and legal	775,000	705,782	643,497
Supplementary employee retirement plan cost	108,000	104,385	118,717
Post-retirement health and retiring allowance cost	142,000	124,679	211,603
Diving certification & standards development	<u>10,000</u>	<u>20,000</u>	<u>35,000</u>
Total regulation of petroleum activities	<u>\$ 8,610,000</u>	<u>\$ 8,118,795</u>	<u>\$ 8,012,105</u>