

2016-17
ANNUAL REPORT



June 27, 2017

The Honourable James Carr, P.C., M.P. Minister of Natural Resources Government of Canada

The Honourable Siobhan Coady, MHA
Minister of Natural Resources
Deputy Government House Leader
Government of Newfoundland and Labrador

The Honourable Perry Trimper, MHA
Minister of Service Newfoundland and Labrador
Government of Newfoundland and Labrador

Dear Ministers:

Pursuant to Section 29 of the legislation implementing the *Atlantic Accord*, I am pleased to present the Annual Report, together with the financial statements, of the Canada-Newfoundland and Labrador Offshore Petroleum Board for the fiscal year ending March 31, 2017.

Respectfully submitted,

**Scott Tessier** 

**Chair and Chief Executive Officer** 

## **BOARD MEMBERS**



**Scott Tessier**Chair and Chief Executive Officer



**Ed Williams** Vice-Chair



**Lidija Cicnjak-Chubbs** Member



**Cynthia Hickman** Member

## **MANAGEMENT**

**Paul Alexander, P. Eng., PMP**Director of Safety and Chief Safety Officer

**Michael Baker, CHRP**Director of Administration and Industrial Benefits

**David G. Burley**Director of Environmental Affairs

**John Crocker**Manager of Regulatory Affairs

**Susan Gover, B. Comm. (Hons), LL.B.** General Counsel

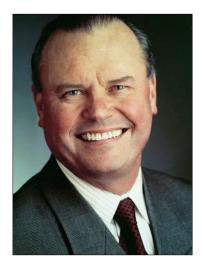
**Sean Kelly, M.A., APR, FCPRS** Manager of Public Relations

**John Kennedy, P. Eng, CRSP**Director of Operations

**Jeff O'Keefe, P. Eng., P. Geo**Director of Resource Management and Chief
Conservation Officer

**Craig Rowe, M.Sc., P. Geo**Director of Exploration and Information Resources

## **IN MEMORIAM**



**EDWIN M. DROVER APRIL 13, 1946 – MARCH 16, 2017** 

The C-NLOPB mourns the passing of Ed Drover, who served on our Board from January 2009 until his resignation in February, 2017.

Originally from Upper Island Cove, Ed was a teacher and principal before moving into financial services in the late 1960s. He was also an entrepreneur with interests in commercial real estate and rental properties, as well as recreational and tourism development.

Ed's commitment to his community was clearly evident in the significant contributions he made to numerous worthwhile organizations. He served on many boards including the Eastern Health Board of Trustees, Health Care Foundation, Evergreen Environmental, Research Advisory Group of Canada, Waterford Hospital Foundation, St. Clare's Mercy Hospital Foundation, Canadian National Institute for the Blind, Community Services Council, Newfoundland Power, National Capital Commission and the Atlantic Canada Opportunities Agency. He was also a Commander with the Military and Hospitaller Order of Saint Lazarus of Jerusalem, Grand Priory of Canada.

For over 39 years, he was a committed and dedicated Rotarian with the Rotary Club of St. John's North West. A Paul Harris Fellow, he was instrumental in starting a number of important initiatives including Rotary Manor, Rotary Music Festival and Food for the Needy.

Ed's passion for his province and country were quickly evident to all who had the pleasure to know him. During his years with our board, he made many significant and lasting contributions to our organization, always keeping the public interest first and foremost.

We extend our condolences to his family and many friends.

# **TABLE OF CONTENTS**

LIST OF ABBREVIATIONS	
LIST OF UNITS	
INTRODUCTION	7
MESSAGE FROM THE CHAIR AND CHIEF EXECUTIVE OFFICER	8
SAFETY OF OFFSHORE WORKERS	9
PROTECTION OF THE ENVIRONMENT	12
OFFSHORE OPERATIONS	
RIGHTS MANAGEMENT	
MANAGEMENT OF RESOURCES	22
INDUSTRIAL BENEFITS ADMINISTRATION	26
REGULATORY AFFAIRS	30
PUBLIC AFFAIRS	32
INFORMATION AND DATA MANAGEMENT	33
APPENDIX: FINANCIAL STATEMENTS	34

Photo Credits: C-NLOPB, ExxonMobil Canada Properties & Greg Locke

ISBN: 978-1-927098-73-8

## LIST OF ABBREVIATIONS

ACW (Approval to Alter the Condition of a Well)

**ADW** (Approval to Drill a Well)

**CA** (Certifying Authority)

**CCO** (Chief Conservation Officer)

**CEAA** (Canadian Environmental Assessment Act)

**C-NLOPB** (Canada-Newfoundland and Labrador Offshore Petroleum Board)

**CNSOPB** (Canada-Nova Scotia Offshore Petroleum Board)

**CSEM** (Controlled-Source Electromagnetic Survey)

**CSO** (Chief Safety Officer)

**CSRC** (Core Storage and Research Centre)

**CT** (Computerized Tomography)

**DVPA** (Diving Program Authorization)

**EA** (Environmental Assessment)

**E&T** (Education and Training)

**EEM** (Environmental Effects Monitoring)

**EIS** (Environmental Impact Statement)

**EL** (Exploration Licence)

EMGS (Electromagnetic Geoservices Canada, Inc.)

**EN** (Eastern Newfoundland)

**EOR** (Enhanced Oil Recovery)

EPP (Environmental Protection Plan)

**ESRF** (Environmental Studies Research Fund)

**FORRI** (Frontier Offshore Regulatory Renewal Initiative)

FPSO (Floating, Production, Storage and Offloading)

**GBS** (Gravity Based Structure)

**GPA** (Geophysical Program Authorization)

**HMDC** (Hibernia Management and Development Company)

IRF (International Regulators Forum)

JDA (Jeanne d'Arc)

**LN** (Labrador North)

LR-AIS (Lloyd's Register Asset Integrity Services)

LS (Labrador South)

MG3 (MG3 (Survey) UK Limited)

MKI AS (Multi-Klient Invest AS)

MICP (Mercury Injection Capillary Pressure)

MODU (Mobile Offshore Drilling Unit)

**MOU** (Memorandum of Understanding)

**NEBA** (Net Environmental Benefits Analysis)

**NEN** (North Eastern Newfoundland)

NOIA (Newfoundland and Labrador Oil and Gas Industries Association)

**OA** (Operations Authorization)

Offshore Area (Canada-Newfoundland and Labrador Offshore Area)

**OHS** (Occupational Healthy and Safety)

**OL** (Operating Licence)

**OLS** (Offshore Loading System)

PL (Production Licence)

**R&D** (Research and Development)

**SDL** (Significant Discovery Licence)

**SEA** (Strategic Environmental Assessment)

SEN (South Eastern Newfoundland)
SN (Southern Newfoundland)
TQSP (Training and Qualifications Standard Practice)
XRD (X-Ray Diffraction)
XRF (X-Ray Fluorescence)

## **LIST OF UNITS**

bbl (Barrel)Bscf (Billion Standard Cubic Feet)CMP (Common Midpoint Kilometres)KM (Kilometres)MMbbls (Million Barrels)



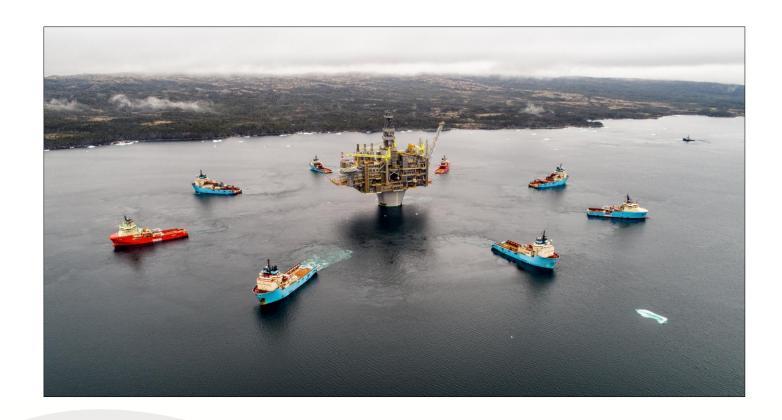
## INTRODUCTION

The Canada-Newfoundland and Labrador Offshore Petroleum Board (C-NLOPB) is the independent regulatory agency created in 1986 under the *Atlantic Accord Implementation Acts* with a mandate that includes offshore safety, environmental protection, resource management and industrial benefits. With more than 30 years experience, the C-NLOPB is a respected world-class offshore regulator that has served as an effective means of joint management as per the *Atlantic Accord* and the Royal Commission on the Ocean Ranger Marine Disaster. Safety and environmental protection are paramount in all Board decisions.

The C-NLOPB has 83 permanent staff and its budget for 2016-17 was \$17,670,000. The Board's main office is located at 140 Water Street, St. John's, and its Core Storage and Research Centre is located at 30-32 Duffy Place, St. John's.

The Annual Report of the C-NLOPB highlights our accomplishments and activities for the fiscal year 2016-17. The report is aligned with our strategic plan and business plan and includes audited financial statements.

For more information about the activities of the C-NLOPB and offshore Operators, please visit our website at <a href="https://www.cnlopb.ca">www.cnlopb.ca</a>, view our videos on YouTube, follow us on Twitter @CNLOPB, phone us at 709-778-1400 or email us at <a href="mailto:information@cnlopb.ca">information@cnlopb.ca</a>.



## MESSAGE FROM THE CHAIR AND CHIEF EXECUTIVE OFFICER



I am proud to report on the accomplishments of the C-NLOPB for the past fiscal year. To begin, I would like to thank our dedicated staff for their service to the public and tireless work to provide world class regulatory oversight across all areas of our mandate.

Despite the global downturn in oil prices and industry activity, the C-NLOPB had another busy year, with approximately 500 regulatory review, licencing, auditing and authorization activities. The Canada-Newfoundland and Labrador Offshore Area saw several geoscientific programs in various stages. Operators conducted safe and environmentally responsible drilling programs in the Jeanne d'Arc and Flemish Pass basins, and production from four producing fields remained relatively steady.

At the same time, preparations for authorization of the tow to field of the new Hebron

Platform were in full swing by the end of the fiscal year. The Board also issued six calls for nominations and two new calls for bids under our scheduled land tenure system. We closed two calls for bids (Eastern Newfoundland Region and Jeanne d'Arc Region) with a total of \$757,989,794 in work commitments.

Regulating through an industry downturn requires enhanced oversight, particularly in the areas of safety, environmental protection and industrial benefits. The C-NLOPB has been unwavering in our expectation that Operators reduce risks to levels that are as low as reasonably practicable, place the highest priority on worker safety and environmental protection and also continue to meet all of their other obligations and commitments under the *Atlantic Accord* regulatory regime.

The C-NLOPB continued its proactive engagement with our Canadian and international counterparts, sharing lessons and best practices. We have provided continued technical advice and support to governments in their work towards regulatory modernization, the federal government's review of environmental assessment processes and in governments' action against climate change.

The C-NLOPB recognizes the importance of transparency, accountability and engagement in maintaining public trust and confidence. We have taken measures to make more information accessible to the public in a timely manner. We have actively engaged with stakeholders to discuss shared priorities and we are partners with the Nunatsiavut Government in an update of the Labrador Shelf Offshore Area Strategic Environmental Assessment.

I would like to thank all partners and stakeholders for their cooperation and support, along with my fellow board members: our Vice-Chair Ed Williams, Lidija Cicnjak-Chubbs and Cynthia Hickman. I would also like to thank Con Sullivan, whose term ended in 2016 and whose many contributions to the C-NLOPB are highly valued.

Finally, on February 24, 2017, Board member Ed Drover resigned due to health reasons. Sadly, Ed succumbed to illness a short time later after a long and courageous fight. I miss him immeasurably and will never forget his contribution to our Board, along with his collegiality and friendship.

**Scott Tessier** 

**Chair and Chief Executive Officer** 

## SAFETY OF OFFSHORE WORKERS

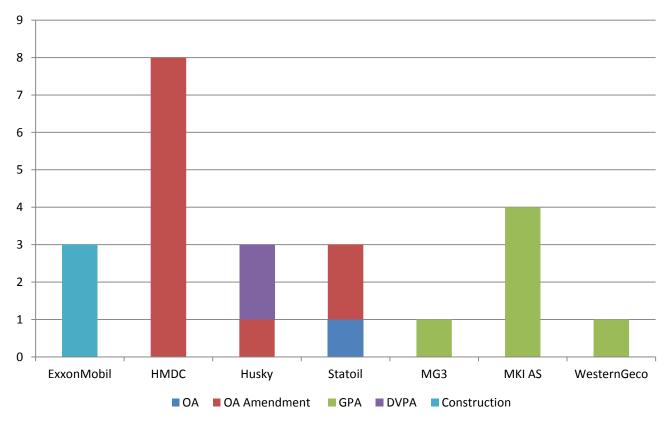
#### **SAFETY ASSESSMENTS**

Prior to being issued an Operations Authorization (OA) in relation to any petroleum related activity in the Canada-Newfoundland and Labrador Offshore Area (Offshore Area), an Operator must submit information to the C-NLOPB to demonstrate that the Operator has taken all reasonable and practicable steps to achieve the required level of safety for the proposed work. In 2016-17, the C-NLOPB's Safety Department conducted 23 safety assessments as shown in Figure 1.

The C-NLOPB conducts systematic and comprehensive safety assessments of the Operator's application, which include the review of safety plans and other safety-related information submitted in support of the application. Audits and inspections may also be conducted prior to and/or after issuing an authorization.

Figure 1: Safety Assessments completed in 2016-2017





OA (OPERATING AUTHORIZATION)

**GPA** (GEOPHYSICAL PROGRAM AUTHORIZATION)

**DVPA** (DIVING PROGRAM AUTHORIZATION)

HMDC (HIBERNIA MANAGEMENT AND DEVELOPMENT COMPANY) MG3 (MG3 (SURVEY) UK LIMITED) MKI AS (MULTI-KLIENT INVEST AS)

## **COMPLIANCE AND ENFORCEMENT**

Safety Officers carry out investigations, issue orders, investigate work refusals and conduct safety inspections, safety audits, pre-approval safety audits and other oversight activities. During 2016-17, the C-NLOPB completed 24 audits, inspections and oversight activities listed in Table 1.

Table 1: Audits, Inspections and Oversight activities completed in 2016-2017

OPERATOR	INSTALLATION/VESSEL	AUDIT/INSPECTION/OVERSIGHT
Atlantic Towing Ltd.	M/V Atlantic Eagle	Observed Standby Vessel Trials
Atlantic Towing Ltd.	M/V Atlantic Kestrel	Observed Standby Vessel Trials
ExxonMobil Canada	M/V Seven Waves	Pre-Approval Audit
ExxonMobil Canada	Hebron Platform	Pre-Approval Audit
HMDC	Mobile Offshore Drilling Unit (MODU) West Aquarius	Inspection
HMDC	Hibernia Platform	Inspection
HMDC	MODU West Aquarius	Hazard Identification and Risk Assessment Audit
HMDC	Hibernia Platform	Hazard Identification and Risk Assessment Audit
Husky Energy	MODU Henry Goodrich	Pre-Approval Audit
Husky Energy	SeaRose Floating, Production, Storage & Offloading (FPSO)	Inspection
Husky Energy	MODU Henry Goodrich	Inspection
Husky Energy	SeaRose FPSO	Hazard Identification and Risk Assessment Audit
Maersk	M/V Maersk Cutter	Observed Standby Vessel Trials
Maersk	M/V Maersk Dispatcher	Observed Standby Vessel Trials
Maersk	M/V Maersk Norsemen	Observed Standby Vessel Trials
MG3	RV Coriolis II	Pre-Approval Audit
MKI AS	M/V Sanco Spirit	Pre-Approval Audit
MKI AS	M/V Atlantic Explorer	Pre-Approval Audit
MKI AS	M/V Ramform Sterling	Pre-Approval Audit
Statoil Canada	MODU West Hercules	Inspection
Suncor Energy	Terra Nova FPSO	Observed Asset Integrity Services Survey
Suncor Energy	Terra Nova FPSO	Inspection
Suncor Energy	Terra Nova FPSO	Hazard Identification and Risk Assessment Audit
WesternGeco	M/V Amazon Conqueror	Pre-Approval Audit

#### **MONITORING**

Following authorization of an Operator's work activity, the Safety Department conducts monitoring activities that include the review of Operators' daily reports, incident reports, complaints, the installation's Workplace Committee meeting minutes and training exemptions or equivalencies submitted against the *Atlantic Canada Offshore Petroleum Industry: Training and Qualifications of Personnel Standard Practice (TQSP)*.

The Operator is required to report and investigate all incidents as described in the C-NLOPB *Incident Reporting* and *Investigation Guidelines*. During 2016-17, the Safety Department reviewed 211 safety related incident reports from Operators.

During the reporting period 4,899,162 hours were worked in the Offshore Area. There were 20 incidents that resulted in a reportable injury or illness, which translates to a reportable injury frequency rate of 4.08 per million hours worked.

During 2016-17, the C-NLOPB processed ten health and safety complaints. Safety Officers reviewed the circumstances surrounding each complaint and has recommended or will recommend actions to be taken as necessary.

#### **SAFETY FORUMS**

In 2016-17, the C-NLOPB held two safety forums with industry participation. The purpose of the safety forum is to provide an opportunity for offshore industry stakeholders to exchange information so that safety issues can be proactively identified and addressed, to highlight areas of particular concern and to assist the C-NLOPB in setting goals. The forums are typically held twice per calendar year.

The topics discussed during the Spring 2016 forum included risk tolerance, risk management and risk reduction. Offshore helicopter safety was the topic during the Fall 2016 forum.

## INTERNATIONAL REGULATORS FORUM

The C-NLOPB participated in meetings of the International Regulators' Forum (IRF) held in Auckland, New Zealand. The IRF is a group of regulators from 10 countries whose mandate is health and safety in the offshore upstream oil and gas industry. It exists to drive forward improvements in health and safety in the sector through collaboration on joint programmes and information sharing. Members from nine countries attended and discussed the activities of three IRF Working Groups: Performance Measures, Asset Integrity and Safety Culture. Other topics of discussion included challenges facing small regulators, standards, research and technology, training, safety equipment failure reporting and decommissioning.

IRF members also shared their experience regulating through an industry downturn and the efforts being made to enhance oversight, particularly in the areas of safety. The C-NLOPB has been unwavering in our expectation that Operators reduce risks to levels that are as low as reasonably practicable, place the highest priority on worker safety and environmental protection, and continue to meet all of their obligations and commitments under the *Atlantic Accord* regulatory regime, including industrial benefits.

Further information about the IRF can be obtained from its website: <a href="http://www.irfoffshoresafety.com">http://www.irfoffshoresafety.com</a>.

## PROTECTION OF THE ENVIRONMENT

#### **ENVIRONMENTAL PROTECTION PLANS**

The Environmental Protection Plan (EPP) is an Operator's plan describing the responsibilities, expectations and methodologies for environmental protection associated with an authorized work or activity. When Operators amend their EPPs they provide the C-NLOPB with an opportunity to review and comment on the plans before they are implemented. During the 2016-17 reporting period, eight EPPs were amended for the following fields or installations:

Table 2: Amended Environmental Protection Plans for 2016-2017

OPERATOR	FIELD/INSTALLATION/VESSEL	COMMENTS
HMDC	Hibernia Field	Hibernia Operational Plan (EPP) testing of cement system
HMDC	Hibernia South Extension	West Aquarius Environmental Protection Plan for release of 3 L Monoethylene Glycol/Methanol
HMDC	Hibernia South Extension	West Aquarius Environmental Protection Plan for discharge of 15 m <sup>3</sup> cement with additives
Husky Energy	MODU Henry Goodrich	Entire Report
Husky Energy	SeaRose FPSO	Entire Report
Husky Energy	SeaRose FPSO	Planned Discharges – Installation & Maintenance of Subsea Systems
Suncor Energy	Terra Nova FPSO	Entire Report

#### STRATEGIC ENVIRONMENTAL ASSESSMENT

During the reporting period, the C-NLOPB commenced planning for an update to the August 2008 Labrador Shelf Offshore Area Strategic Environmental Assessment (SEA). A Working Group, co-chaired by the C-NLOPB and the Nunatsiavut Government, consists of members of federal and provincial government agencies, fishing interest groups, Indigenous organizations, academia, and non-governmental organizations. This Working Group will assist in the technical development of the scope and content of the SEA Update.

#### **ENVIRONMENTAL ASSESSMENT**

The C-NLOPB assesses the potential environmental effects of petroleum related work or activity proposed for the Offshore Area. Documents relating to all completed and active assessments may be found on the C-NLOPB website.

During 2016-17, the C-NLOPB completed Environmental Assessments (EAs) for three projects in accordance with the *Accord Acts* as shown in Table 3.

Table 3: Completed Environmental Assessments during 2016-2017

OPERATOR	PROGRAM	LOCATION
CGG Services (Canada) Inc.	4D, 3D and 2D Seismic	Eastern and Southeastern
		Newfoundland
ExxonMobil Canada	Geophysical, Geochemical,	Eastern Newfoundland
	Environmental and Geotechnical	
Seitel Canada Ltd.	4D, 3D and 2D Seismic	Labrador Shelf, Eastern and
		Southern Newfoundland

There were six EAs active as of March 31, 2017 as shown in Table 4.

Table 4: Active Environmental Assessments as of March 31, 2017

OPERATOR	PROGRAM	LOCATION
BSE Corp. and SPE Ltd.	Exploratory Drilling	Western Newfoundland
Corridor Resources Inc.	Exploratory Drilling	Western Newfoundland
EMGS Canada Inc.	Controlled Source Electromagnetic	Western Newfoundland
	Survey	
MKI AS	4D, 3D and 2D Seismic	Labrador Shelf, Eastern and Southern
		Newfoundland
Nexen Energy ULC	Geophysical, Geochemical,	Eastern Newfoundland
	Environmental and Geotechnical	
Polarcus UK Ltd.	4D, 3D and 2D Seismic	Eastern Newfoundland

The following table outlines the status of amended, or EAs undergoing amendment, during the 2016-17 fiscal year.

Table 5: Environmental Assessments amended or undergoing amendment during 2016-2017

OPERATOR	PROGRAM	LOCATION	STATUS
EMGS Canada Inc.	Controlled Source	Eastern	Ongoing
	Electromagnetic	Newfoundland	
GXT Canada Ltd.	GrandSPAN Marine 2D Seismic,	Eastern and Southern	Amended
	Gravity and Magnetic	Newfoundland	
GXT Canada Ltd.	2D Seismic, Gravity and Magnetic	Labrador Shelf	Ongoing
	Survey		
Husky Energy	Drill Centre Construction,	Eastern	Amended
	Installation and Operation	Newfoundland	
MKI AS	Northeast Newfoundland Slope	Eastern	Amended
		Newfoundland	
MKI AS	Southern Grand Banks Seismic	Southern	Amended
		Newfoundland	
Statoil Canada	Jeanne d'Arc and North	Eastern	Amended
	Ridge/Flemish Pass Basin	Newfoundland	
	Geophysical		
StatoilHydro Canada	Exploration/Appraisal/Delineation	Eastern	Ongoing
E&P Inc.	Drilling	Newfoundland	

During 2016-17, the C-NLOPB participated as a Federal Authority in three Environmental Impact Statements (EIS) triggered by the *Canadian Environmental Assessment Act, 2012 (CEAA, 2012)* that were initiated during the reporting period. All three were still in progress at year-end.

Table 6: Environmental Impact Statements for 2016-2017

OPERATOR	PROJECT	LOCATION
ExxonMobil Canada	Exploration Drilling	Eastern Newfoundland – Flemish
		Pass Region and Jeanne d'Arc
		Basin
Husky Energy	Exploration Drilling	Eastern Newfoundland – Jeanne
		d'Arc Basin
Statoil Canada	Flemish Pass Exploration Drilling	Eastern Newfoundland – Flemish
		Pass

#### CANADIAN ENVIRONMENTAL ASSESSMENT REVIEW

The Minister of Environment and Climate Change Canada established an Expert Panel to review federal EA processes associated with the *CEAA*, *2012*. The C-NLOPB participated in a workshop hosted by the EA Review Panel in Ottawa on November 2, 2016. The Board submitted a presentation to the Panel outlining the Board's position with respect to *CEAA* EAs, EAs conducted under the *Atlantic Accord Acts*, SEAs and Responsible Authority designation. The presentation is available on the EA Panel website <a href="http://eareview-examenee.ca/">http://eareview-examenee.ca/</a>

#### COMPLIANCE AND ENFORCEMENT

Operators must report all pollution incidents to the C-NLOPB for all offshore installations, including petroleum spills, unauthorized and/or unplanned discharges, releases and problems with effluent quality. The C-NLOPB reviews these reports and investigates as required.

Of the three petroleum spills reported in 2016-17, all were less than one litre. A summary of spill information for 2016-17 is provided in Table 7.

Table 7: Summary of Spill Information for 2016-2017

COMPONENT	LITRES	PERCENTAGE OF ANNUAL TOTAL	NUMBER OF INCIDENTS
Synthetic Based Mud	0	0	0
Crude Oil	0	0	0
Hydraulic and Lubricating Oil	0.306	100	3
Other Petroleum	0	0	0

At year end, the matter related to a spill of petroleum at or near the Hibernia offloading system remained before the Courts. It is alleged that HMDC did cause a spill of crude in the Offshore Area in 2013. The matter was referred to the prosecutor after an investigation by C-NLOPB officers. A not guilty plea has been entered by HMDC.

In July 2016, the C-NLOPB issued a Notice of Non-Conformance to MKI AS in respect of the absence of its chase/picket vessel during the conduct of its Northeast Newfoundland Slope 2D Seismic Survey Program. Subsequently, the C-NLOPB has developed a risk-based approach to absences of chase/picket vessels that will be implemented for subsequent programs.

During the reporting period, Environmental Compliance Officers conducted three environmental audits. A summary of the audit activity is shown in Table 8.

Table 8: Environmental Audits conducted in 2016-2017

OPERATOR	FIELD OR INSTALLATION	PURPOSE OF AUDIT
HMDC	Hibernia Field	Audit of third party contractor
HMDC	Hibernia South Extension Hibernia Platform and MODU West Aquarius	Oversight by HMDC for authorized releases
Husky Energy	SeaRose FPSO	Regulated Discharges

#### **ENVIRONMENTAL EFFECTS MONITORING**

Environmental Effects Monitoring (EEM) is used to determine the effects of ongoing industrial activity on the natural environment. In the Offshore Area, EEM has been undertaken for development drilling and production operations because of the greater variety and volume of their regulated discharges, such as produced water and the length of time they operate in the Offshore Area. EEM surveys are initiated during the first full year of offshore development drilling and are executed annually for at least two additional years, becoming biennial thereafter. The C-NLOPB and federal and provincial environment and fisheries departments review the design of each EEM program and the detailed reports from each survey.

During the reporting period the EEM review of HMDC and Suncor Energy were ongoing and the review of Husky Energy's EEM Report for 2014 was completed. The C-NLOPB, in association with external departments, reviewed and approved a request by Suncor Energy to execute their EEM survey triennially. The Hebron project draft EEM Plan, provided by ExxonMobil, is currently undergoing review.

Completed EEM reports are available in hard copy from the C-NLOPB, with more recent reports available on the C-NLOPB website.

## **ENVIRONMENTAL STUDIES RESEARCH FUND**

The Environmental Studies Research Fund (ESRF) is a national research program which sponsors environmental and social studies. It is designed to assist in the decision-making process related to oil and gas exploration and development on Canada's frontier lands.

Funding is provided through levies on frontier lands paid by interest holders. The ESRF is directed by a joint government/industry/public Management Board of which the C-NLOPB is a member.

The following research projects relating to the Offshore Area were completed during the reporting period (all reports are in publication):

- Baseline Surveys for Seabirds on the Labrador Sea;
- Development, Validation and Implementation of an Operational Ocean Forecasting System for the Grand Banks and Orphan Basin for Daily Operational Delivery at the Canadian Meteorological Centre;
- Mid-Labrador Marine Megafauna and Acoustic Surveys on the Labrador Coast; and
- Simulation of the Fate and Detectability of Dead Seabirds.

The following research projects were ongoing at the end of the reporting period:

- Acoustic Modelling and Monitoring on Canada's East Coast;
- Assessing the Quality of Marine Mammal Detection using Three Complimentary Methods;
- Assessment of the Potential Risks of Seismic Surveys to Affect Snow Crab Resources;
- Effect of Platform Discharges on Juvenile Fish in the Field; and
- Realistic Oil Spill and Mitigation Exposure Scenario Effects on Commercially Harvested Species.

Further information on the ESRF is available at www.esrfunds.org.

#### INTERNATIONAL OFFSHORE PETROLEUM ENVIRONMENTAL REGULATORS

The C-NLOPB is a founding member of the International Offshore Petroleum Environmental Regulators (IOPER), a collaborative group of national regulators whose focus is to drive improvements to environmental performance in the global offshore petroleum and exploration industry.

During the reporting period, IOPER advanced discussions on key issues facing regulators and made good progress on a number of key priority issues at its 2016 annual general meeting in Dublin, Ireland. In addition to providing updates and discussing emerging issues in their jurisdictions, IOPER members refined the IOPER work program, which currently focuses on five key priority issue areas:

- Environment Performance Indicators;
- Regulating Oil Spill Preparedness and Response;
- Public Consultation and Decision Making;
- Environmental Impact Research Collaboration Opportunities; and
- Enforcement Tool Research.

Further information is available at www.ioper.org.



## **OFFSHORE OPERATIONS**

#### **WELL OPERATIONS**

Regulatory oversight of industry's well operations is an important function of the C-NLOPB. The C-NLOPB may issue an Approval to Drill a Well (ADW) or an Approval to Alter the Condition of a Well (ACW). The latter may be issued when an Operator re-enters a well to perform any subsequent well operation, including a well intervention, workover operation or the completion, re-completion, suspension or abandonment of a well. In the case of well termination operations, these activities are also assessed to verify that the completion or plugging and abandonment (or suspension) operations comply with regulatory requirements, particularly in relation to the dual well barrier envelope requirement.

During 2016-17, Statoil concluded an 18 month deepwater drilling campaign. Special oversight measures were implemented by the C-NLOPB on a total of four wells drilled in this campaign during the reporting period.

Also during this fiscal year, the C-NLOPB undertook an effort to have quarterly reporting completed on the "health status" of all development wells within the Offshore Area. This was done so that staff could be satisfied that Operators were maintaining well integrity to the highest standards. Table 9 outlines the well operations oversight activity for this past fiscal year.

Table 9: Well Operations Oversight activity for 2016-2017

ACTIVITY	NUMBER COMPLETED
ADWs	1
ACWs	2
Well Operations Monitored	1
Development Wells – Integrity Monitoring	13
OA Operational Safety Assessments	
Operational Audits/Inspections	
Wells Subject to Special Oversight	
Well Termination Notifications	2

## INTERNATIONAL AND REGIONAL COLLABORATION

The C-NLOPB's Well Operations Engineers continued to exercise a lead role in liaising with external groups such as the Wells Working Group for the North Sea Offshore Authorities Forum and also with members of the IRF to share best regulatory practices in the area of well operations. Attendance at key well control conferences and exhibitions also provided the opportunity to stay abreast of key technological developments and state-of-the-art well control training, practices and procedures.

The Well Operations Engineers have been engaged with the Canada-Nova Scotia Offshore Petroleum Board (CNSOPB) and local Operators to assess and recommend revisions to the Well Control training expectations detailed in the *Training and Qualifications Standard Practice* (*TQSP*) so as to modernize and enhance training expectations.

C-NLOPB staff has also undertaken a collaborative effort with the CNSOPB to prepare an update to the *Drilling and Production Guidelines*. The purpose of this update is to continue to address gaps from lessons we learned from the *Deepwater Horizon* incident and other key industry learnings related to well operations. At year end this update was undergoing public consultation and is targeted for issuance in 2017.

## **CERTIFICATION OVERSIGHT**

The C-NLOPB's Certification Engineers assessed six proposed Scopes of Work for Certifying Authorities (CAs) which described the verification activities that CAs would conduct in order to issue and maintain Certificates of Fitness for prescribed installations operating in the Offshore Area. These were assessed for compliance with the regulations and then presented to the Chief Safety Officer (CSO) for approval, as required by the legislation. As part of the ongoing oversight of certification activities, Certification Engineers also received periodic CA reports, held 37 oversight meetings with the CAs and attended select CA offshore surveys. Installations monitored for CA activities are reported in Table 10.

Table 10: Installations monitored for Certifying Authorities' activities in 2016-2017

INSTALLATION NAME	INSTALLATION TYPE	CERTIFYING AUTHORITY
DSV Wellservicer	Diving	Det Norske Veritas – Germanischer Lloyd
Hebron Platform	Production	Det Norske Veritas – Germanischer Lloyd
MODU Henry Goodrich	Drilling	Det Norske Veritas – Germanischer Lloyd
Hibernia Platform	Production	Lloyd's Register North America Inc
MV North Sea Giant	Diving	Det Norske Veritas – Germanischer Lloyd
SeaRose FPSO	Production	Det Norske Veritas – Germanischer Lloyd
Terra Nova FPSO	Production	Lloyd's Register North America Inc
MODU Transocean Barents	Drilling	Det Norske Veritas – Germanischer Lloyd
MODU West Aquarius	Drilling	Det Norske Veritas – Germanischer Lloyd
MODU West Hercules	Drilling	Det Norske Veritas – Germanischer Lloyd

## TERRA NOVA FPSO ASSET INTEGRITY REVIEW

During 2016-17, the C-NLOPB contracted Lloyd's Register Asset Integrity Services (LR-AIS) to conduct a special verification to assess; the integrity of the *Terra Nova FPSO*, the effectiveness of the Operator's maintenance management system in maintaining the asset and the Operator's compliance with regulations, codes, standards and requirements. The LR-AIS team conducted an onshore document review and offshore verification of 13 Safety Environment Critical systems. A total of 51 integrity issues were identified and while the majority of these have been addressed by the Operator, the C-NLOPB continues to monitor Suncor Energy's management of the items that remain open.

#### **HEBRON INSTALLATION CERTIFYING AUTHORITY TRANSITION**

The C-NLOPB was presented with the first occurrence of a change of CA for an installation during 2016-17. C-NLOPB Certification Engineers have been engaged with the Operator, as well as both the outgoing and incoming CAs, to ensure that a comprehensive transition plan is in place. This is necessary for the Operator and incoming CA to ensure there are no certification gaps resulting from this change in CA. This process has included review and approval of the Scope of Work for both CAs with a focus on clarity that there is a comprehensive transition program for the incoming CA and a clearly defined transition point, as there can only be one active CA and associated Certificate of Fitness for an installation at any one time.

## SUBSTITUTIONS, EQUIVALENCIES OR EXEMPTIONS

The CSO and/or the Chief Conservation Officer (CCO) may authorize the use of equipment, methods, measures or standards in lieu of any required by regulations, or grant an exemption from any regulatory requirement, if satisfied that it would provide a level of safety, protection of the environment and resource conservation greater than, or equivalent to, that provided by compliance with regulations. A regulatory query process is in place to evaluate and render decisions in respect of applications for regulatory equivalencies, substitutions or exemptions. Table 11 outlines the Regulatory Query activity for this past fiscal year.

**Table 11: Regulatory Query activity for 2016-2017** 

STATUS	NUMBER OF EQUIVALENCIES, SUBSTITUTIONS
	OR EXEMPTIONS
Applications Received in 2016-17	152
Approved	147
Not Required	6
Rejected	1
Under Consideration at Year-End	53
Withdrawn by Applicant	6

Note: Applications processed and under consideration may include carryover from the previous year

## RIGHTS MANAGEMENT

#### **CALLS FOR NOMINATIONS**

Pursuant to the Scheduled Land Tenure System, the C-NLOPB issued the following Calls for Nominations in 2016-17:

Table 12: Calls for Nominations, 2016-2017

CALL FOR NOMINATIONS	ISSUANCE DATE	CLOSING DATE
NL16-CFN01 (Areas of Interest)	January 25, 2016	April 27, 2016
NL16-CFN02 (Areas of Interest)	January 25, 2016	April 27, 2016
NL16-CFN03 (Parcels)	January 25, 2016	March 16, 2016
NL16-CFN04 (Areas of Interest)	September 1, 2016	November 30, 2016
NL16-CFN05 (Parcels)	September 1, 2016	October 27, 2016
NL17-CFN01 (Areas of Interest)	February 2, 2017	April 26, 2017*

<sup>\*</sup> Once these nominations close, the C-NLOPB will review the nominations and post sectors in the successful regions from which a call for bids (Parcels) will ultimately be issued (pending Board and Ministerial approval), during the scheduled land rights issuance cycle and land tenure timing cycle.

#### **CALLS FOR BIDS**

Pursuant to the Scheduled Land Tenure System, the C-NLOPB issued the following Calls for Bids in 2016-17:

Table 13: Calls for Bids, 2016-2017

CALL FOR BIDS	PARCELS OFFERED	PARCELS AWARDED	CLOSING DATE	SUCCESSFUL BID (WORK EXPENDITURE COMMITMENTS)
NL16-CFB01 (Eastern	13	6	November 9, 2016	\$513,972,018
Newfoundland)				
NL16-CFB02 (Jeanne d'Arc) as	3	2	November 9, 2016	\$244,017,776
Amended				
NL16-CFB03 (Labrador South	10	-	November 8, 2017*	-
Region)				
NL17-CFB01 (Jeanne d'Arc)	3	-	November 8, 2017	-

<sup>\*</sup> or 120 days after the completion of the Labrador SEA Update

## **STATUS OF LICENCES**

The C-NLOPB issues land rights in the form of exploration licences (ELs), significant discovery licences (SDLs) and production licences (PLs). Eight ELs were issued in the 2016-17 fiscal year from the Calls for Bids licencing rounds and one new licence issued in exchange for a licence surrender. Overall, six ELs were surrendered, one EL expired and two ELs were cancelled in the 2016-17 fiscal year.

As of March 31, 2016, there were 29 ELs, 55 SDLs and 11 PLs in the Offshore Area. In January 2017, Period I was extended for ELs 1120 and 1121.

## SIGNIFICANT DISCOVERY LICENCES

During the reporting year, the Chair appointed technical committees to review significant and commercial discovery applications and amendments in accordance with the *Accord Acts* and guidelines.

#### **OPERATING LICENCES**

Any person wishing to undertake any petroleum related work or activity in the Offshore Area must obtain an Operating Licence (OL). Table 14 shows the 20 OLs issued by the C-NLOPB during the 2016-17 fiscal year.

Table 14: Operating Licences issued during Fiscal Year 2016-2017

OPERATING LICENCE	OPERATOR
OL 1601	Electromagnetic Geoservices Canada Inc.
OL 1602	ExxonMobil Canada Ltd.
OL 1603	ExxonMobil Canada Ltd., as Managing Partner for ExxonMobil Canada Properties
OL 1604	Statoil Canada Ltd.
OL 1605	Husky Oil Operations Limited
OL 1606	Schlumberger Canada Limited, as Managing Partner of WesternGeco Canada
OL 1607	Hibernia Management and Development Company Ltd.
OL 1608	GX Technology Canada Ltd.
OL 1609	Imperial Oil Resources Limited
OL 1610	Imperial Oil Resources Ventures Limited
OL 1611	Chevron Canada Limited
OL 1612	Chevron Canada Limited, as Managing Partner for Chevron Canada Resources
OL 1613	Ptarmgian Energy Inc.
OL 1614	Suncor Energy Inc.
OL 1615	Shell Canada Limited
OL 1616	Shoal Point Energy Ltd.
OL 1617	Black Spruce Exploration Corp.
OL 1618	Multi Klient Invest AS
OL 1619	Corridor Resources Inc.
OL 1620	MG3 (Survey) UK Ltd.

## **FUNDS COLLECTED**

Under the *Accord Acts*, the C-NLOPB is responsible for the collection of certain fees, forfeitures and rentals. In 2016-17, \$28,265,535 was collected and remitted to the Receiver General for Canada (see Table 15). Since its inception, the C-NLOPB has collected \$287,037,460.77 on behalf of the Crown.

Table 15: Funds collected on behalf of the Receiver General for Canada for Fiscal Year 2016-2017

FEES, FORFEITURES AND RENTALS	AMOUNT COLLECTED
Rentals	\$1,993,310.00
Forfeitures (Security Deposits)	\$24,250,000.00
Operating Licences	\$350.00
Registry Fees	\$21,775.00
Access to Information Requests	\$100.00
Forfeitures (Drilling Deposits)	\$2,000,000.00
Total	\$28,265,535.00

## **MANAGEMENT OF RESOURCES**

## **CORE STORAGE AND RESEARCH**

The C-NLOPB's Core Storage and Research Centre (CSRC) archives core, cuttings, fluid samples, petrographic slides, biostratigraphic slides, and other geological material derived from wells drilled in the Offshore Area. The CSRC provides public access to materials once the legislated privilege period has expired. The CSRC facility has recently added a third core viewing room to increase availability for clients to access well materials.

#### GEOSCIENTIFIC PROGRAMS

Through the CSRC, the C-NLOPB offers various samples for geological studies to enhance the knowledge of offshore basins of Newfoundland and Labrador. A total of 22 geological programs without fieldwork, covering various land tenure regions were authorized during 2016-17. Studies conducted included petrographic, biostratigraphic, geochemical and fluid inclusion, with the Jeanne d'Arc and Eastern Newfoundland regions being the most frequently studied.

Table 16: Geological programs without fieldwork authorized during 2016-2017

COMPANY	STUDY TYPE	REGION
Applied Petroleum Technology	Geochemical	All Regions
(UK) Ltd		
Beicip-Franlab	Geochemical	SEN, JDA, EN, LS,LN, SN
Core Laboratories	Regional Geological Study	All Regions
ExxonMobil Canada	Geochemical	JDA, EN
ExxonMobil Canada	Petrographic	JDA, EN
ExxonMobil Canada	Biostratigraphic	JDA, EN
ExxonMobil Canada	Petrographic and Geochemical	EN
ExxonMobil Canada	XRD, MICP and Petrographic	JDA, EN
ExxonMobil Canada	Petrographic	NEN, EN, JDA, SEN, SN
Fluid Inclusion Technologies	Fluid Inclusion	JDA, EN
Geological Survey of Canada	Lithological and Paleoenvironmental	LS
Memorial University of	CT Scanner	JDA
Newfoundland and Labrador		
Memorial University of	Petrographic	JDA
Newfoundland and Labrador		
Nalcor Energy	Biostratigraphic	LS
Nalcor Energy	Fluid Inclusion	EN
Nalcor Energy	Fluid Inclusion	LS
Nalcor Energy	Geochemical	EN
Nexen CNOOC	Petrographic	JDA, EN
RockWash	Digital Imaging and XRF	JDA, EN
Statoil Canada	Petrographic and Petrophysical	EN
Statoil Canada	Geochemical	EN
Statoil Canada	Paleoenvironmental and Mineralogical	EN

The C-NLOPB reviewed and authorized six applications for geophysical programs with fieldwork in the Offshore Area in 2016-17. These programs included 2D and 3D seismic, gravity surveys and geochemical sampling/seabed coring.

Table 17: Geoscientific programs with fieldwork authorized during 2016-2017

OPERATOR	PROGRAM	REGION	SEISMIC CMP	OTHER KM	GRAVITY/MAGNETIC
			KM		KM
MG3 Survey	Geochemical Survey	LS, NEN, EN	N/A	3776.9km	N/A
				(103 cores)	
MKI AS	2D Seismic & Gravity	EN	17220.9	N/A	17220.9
MKI AS	2D Seismic & Gravity	SN, SEN	16570.5	N/A	16570.5
MKI AS	2D Seismic & Gravity	LS, NEN	7087.7	N/A	7087.7
MKI AS	3D Seismic Survey	EN	1908.1	N/A	N/A
WesternGeco	3D Seismic Survey	EN	10890.1	N/A	N/A

Note: Other Km includes data such as sidescan sonar, multibeam, bathymetry and oil slick sampling/seabed coring.

#### Key for Tables 16 and 17

CMP = Common Midpoint Kilometres	LS = Labrador South	SEN = South Eastern Newfoundland
CT= Computerized Tomography	MICP= Mercury Injection Capillary Pressure	SN = Southern Newfoundland
EN = Eastern Newfoundland	MKI = Multi Klient Invest AS	XRD= X-Ray Diffraction
JDA = Jeanne d'Arc	NEN = North Eastern Newfoundland	XRF= X-Ray Fluorescence
LN = Labrador North		



## **PRODUCTION ACTIVITIES**

As part of the C-NLOPB's mandate, Resource Management provides oversight of Operator production activities for consistency with maximum recovery, good oilfield practice, production accounting and approved plans. The C-NLOPB's resource management staff provides daily monitoring and reviews monthly production data to ensure Operators are following all approved plans.

#### **HIBERNIA**

Total oil production at the Hibernia Field for 2016-17 was 52.59 million barrels (MMbbls) with a daily average of 144,089 barrels (bbls). A major milestone was achieved on December 21, 2016 when the Hibernia Platform produced its one billionth barrel of oil. The C-NLOPB estimates oil reserves at the Hibernia Field to be 1,644 MMbbls.

Table 18: Hibernia Field production statistics for 2016-2017

		2016-17	CUMULATIVE TO MARCH 31, 2017
Production			
Oil	MMbbls	52.59	1015.41
Gas	Bscf	99.24	1643.11
Water	Vater MMbbls		545.49
Gas Disposition			
Flared	Bscf	2.38	93.08
Fuel	Bscf	5.55	102.50
Injected	Bscf	91.15	1447.37
Lift	Bscf	2.21	2.21
Water Injected	MMbbls	84.46	1476.58

#### **TERRA NOVA**

Total oil production at the Terra Nova Field for 2016-17 was 12.49 MMbbls, with a daily average of 34,207 bbls. The C-NLOPB estimates oil reserves and resources at the Terra Nova Field to be 506 MMbbls.

Table 19: Terra Nova Field production statistics for 2016-2017

Table 13: Terra Nova Field production statistics for 2010 2017				
		2016-17	<b>CUMULATIVE TO</b>	
			MARCH 31, 2017	
Production				
Oil	MMbbls	12.49	394.77	
Gas	Bscf	55.23	681.28	
Water	MMbbls	32.98	303.68	
Gas Disposition				
Flared	Bscf	1.63	58.37	
Fuel	Bscf	5.05	62.62	
Injected	Bscf	48.55	560.29	
Lift	Bscf	13.26	107.28	
Water Injected	MMbbls	51.46	683.25	

#### WHITE ROSE

Total oil production at the White Rose Field for 2016-17 was 11.19 MMbbls with a daily average of 30,653 bbls. The C-NLOPB estimates oil reserves and resources at the White Rose Field to be 404 MMbbls.

Table 20: White Rose Field production statistics for 2016-2017

		2016-17	CUMULATIVE TO MARCH 31, 2017
Production		•	
Oil	MMbbls	11.19	226.45
Gas	Bscf	23.99	225.43
Water	MMbbls	11.57	131.41
Gas Disposition			
Flared	Bscf	1.84	34.46
Fuel	Bscf	3.71	32.91
Injected	Bscf	18.45	158.06
Lift	Bscf	13.32	91.66
Water Injected	MMbbls	35.87	493.22

#### **NORTH AMETHYST**

Total oil production at the North Amethyst Field for 2016-17 was 3.44 MMbbls, with a daily average rate of 9,434 bbls. The C-NLOPB estimates oil reserves and resources at the North Amethyst Field to be 75 MMbbls.

Table 21: North Amethyst Field production statistics for 2016-2017

		2016-17	CUMULATIVE TO MARCH 31, 2017
Production		•	
Oil	MMbbls	3.44	47.23
Gas	Bscf	2.82	34.99
Water	MMbbls	8.72	56.71
Gas Disposition			
Flared	Bscf	0.20	3.49
Fuel	Bscf	0.43	6.29
Injected	Bscf	2.18	25.20
Lift	Bscf	7.85	36.76
		_	
Water Injected	MMbbls	12.25	127.98

Note: North Amethyst gas injection goes into White Rose Field.

### **HEBRON**

The Hebron Asset, discovered in 1981, consists of three fields; Hebron, Ben Nevis and West Ben Nevis. These undeveloped fields are located north of the Terra Nova Field. A Development Plan was filed with the C-NLOPB during 2011-12 and was approved in April 2012. First oil is expected from the Hebron Asset in 2017. Total reserves for the Hebron Asset are estimated at 707 MMbbls.

## INDUSTRIAL BENEFITS ADMINISTRATION

#### BENEFITS PLANS

In 2016-17, the offshore exploration and production activities of the Hibernia, Terra Nova, White Rose and North Amethyst projects continued to be monitored for compliance with the approved benefits plan provisions in relation to contracting and employment, supply of goods and services, diversity, research and development (R&D) and education and training (E&T). Staff also continued to monitor contracting, procurement and employment associated with the construction phase of the Hebron project.

Specifically, staff reviewed and assessed benefits plans and supplementary benefits information for various offshore activities including:

- Electromagnetic Geoservices Canada, Inc. (EMGS) Controlled-Source Electromagnetic Survey (CSEM);
- ExxonMobil 2016-2025 exploration activities;
- Hebron Offshore Loading System (OLS) Base Installation;
- Hebron OLS Pipeline Installation;
- Statoil 2016-2021 exploration activities;
- Husky Energy Saturation Diving Campaign;
- Husky Energy MODU Henry Goodrich authorization;
- Husky Energy Air Dive Campaign;
- MG3 Multi-beam Echo Sounder Survey and Shallow Seabed Coring;
- MKI 2D Seismic Geophysical Programs;
- Statoil Wellhead Retrieval Program; and
- WesternGeco Seismic Survey Program.

In addition, Industrial Benefits staff also review complaints from persons and companies regarding Operator employment and procurement practices. Due to sustained low oil prices, activities at both the Operator and contractor levels triggered many complaints. Nine comprehensive reviews were conducted in these areas in 2016-17, along with multiple others of lesser scope.

### **EXPENDITURE AND EMPLOYMENT DATA**

During the 2016 calendar year, Operators reported expenditures of \$4.8 billion related to work in the Offshore Area. Since 1966, cumulative expenditures total \$56.1 billion.

As of December 31, 2016, there were 7,608 Newfoundland and Labrador and other Canadian residents working in direct support of petroleum-related activity in the Offshore Area.

During 2016, \$444.7 million was spent on exploration programs generating approximately 3,898 person-months of employment. Ongoing production activities accounted for expenditures of \$1.6 billion in 2016, of which approximately 52 percent of annual expenditures occurred in Newfoundland and Labrador and a further 24 percent in the rest of Canada.

The following tables summarize the participation of Newfoundland and Labrador residents and other Canadians in the production phase at Hibernia, Terra Nova, White Rose/North Amethyst and the construction phase of the Hebron project.

#### HIBERNIA MANAGEMENT AND DEVELOPMENT COMPANY LTD.

HMDC reported expenditures of \$1.1 billion for the 2016-17 fiscal year, with 76 percent Canadian content including 53 percent Newfoundland and Labrador content.

As of March 31, 2017, total direct employment in the province in support of the Hibernia project was 1,804 persons. Of this amount, 87 percent of the workers was Newfoundland and Labrador residents at the time of hire, and nine percent was other Canadian residents.

Table 22: Hibernia Employment (as of March 31, 2017)

LOCATION	RESIDENCY			
	NEWFOUNDLAND	OTHER	NON-	TOTAL
	AND LABRADOR	CANADIANS	CANADIANS	
Onshore Operations	583	97	32	712
Offshore Operations	992	68	32	1,092
Total	1,575	165	64	1,804

## **TERRA NOVA**

Suncor Energy reported expenditures of \$287 million for the fiscal year 2016-17, with 73 percent Canadian content including 56 percent Newfoundland and Labrador content.

As of March 31, 2017, total direct employment in support of the Terra Nova project was 725 persons. At the time of hire, 93 percent of this total was Newfoundland and Labrador residents and five percent was other Canadian residents.

Table 23: Terra Nova Employment (as of March 31, 2017)

LOCATION	RESIDENCY			
	NEWFOUNDLAND	OTHER	NON-	TOTAL
	AND LABRADOR	CANADIANS	CANADIANS	
<b>Onshore Operations</b>	403	24	15	442
Offshore Operations	269	13	1	283
Total	672	37	16	725

## WHITE ROSE/NORTH AMETHYST

Husky Energy reported expenditures of \$425 million for the fiscal year 2016-17, with 84 percent Canadian content including 64 percent Newfoundland and Labrador content.

As of March 31, 2017, total direct employment in support of the White Rose/North Amethyst projects was 1,575 persons. At the time of hire, 83 percent of this total was Newfoundland and Labrador residents and eight percent was other Canadian residents.

Table 24: White Rose/North Amethyst Employment (as of March 31, 2017)

LOCATION	RESIDENCY			
	NEWFOUNDLAND	OTHER	NON-	TOTAL
	AND LABRADOR	CANADIANS	CANADIANS	
<b>Onshore Operations</b>	808	65	143	1,016
Offshore Operations	493	58	8	559
Total	1,301	123	151	1,575

#### **HEBRON**

Of the expenditures reported by ExxonMobil during the fiscal year of 2016-17, total Canadian content was 62 percent, including 57 percent Newfoundland and Labrador content. As of March 31, 2017, total direct employment in support of the Hebron project was 3,263 persons. At the time of hire, 91 percent of this total was Newfoundland and Labrador residents and three percent were other Canadian residents.

**Table 25: Hebron Employment** (as of March 31, 2017)

LOCATION	RESIDENCY			
	NEWFOUNDLAND	OTHER	NON-	TOTAL
	AND LABRADOR	CANADIANS	CANADIANS	
Newfoundland &	2,978	82	169	3,229
Labrador				
Other Canada	-	8	-	8
Outside Canada	1	2	23	26
Total	2,979	92	192	3,263

## RESEARCH AND DEVELOPMENT, EDUCATION AND TRAINING

The C-NLOPB continued to monitor Operator's obligations to carry out R&D and E&T in the province. The total number of R&D/E&T applications approved throughout 2016-17 was 33. These applications account for approximately \$32 million in potential R&D/E&T funding. Areas of interest related to submitted applications include:

- Health and Safety;
- Environmental studies;
- Enhanced Oil Recovery (EOR);
- Ice Management;
- FPSO & Gravity Based Structure (GBS) improvements; and
- Educational initiatives.

Expenditures for the 2015 calendar year were reviewed in 2016 to determine eligibility under the C-NLOPB's guidelines. Based on a review of work expenditure reports, it was determined that approximately \$62 million was spent on eligible R&D and E&T, bringing the total to approximately \$463 million since the C-NLOPB's guidelines came into effect on April 1, 2004. A breakdown of expenditures for the 2015 calendar year can be found on the C-NLOPB's website. Updates to these expenditures will be posted on an annual basis.



## **REGULATORY AFFAIRS**

## **REGULATORY INITIATIVES**

During the reporting period, C-NLOPB staff participated in the following government-led regulatory initiatives:

- Frontier Offshore Regulatory Renewal Initiative (FORRI) Framework Regulations;
- Occupational Health and Safety (OHS) Regulations;
- Methane Regulations;
- Spill Treating Agent Regulations; and
- Net Environmental Benefits Analysis (NEBA) Guidelines.

During the reporting period the provincial department of Natural Resources and the C-NLOPB developed a Memorandum of Understanding (MOU) in respect of cross jurisdictional drilling programs. It is anticipated this MOU will be signed early in the next fiscal year.

Pursuant to Section 26.1 of the *Accord Acts*, the C-NLOPB is required to establish an audit and evaluation committee and to conduct internal audits. During 2016-17, the C-NLOPB undertook a risk profile exercise to identify, update and assess the key risks within its area of operations and a risk-based audit plan was developed. Grant Thornton was selected as the C-NLOPB's internal audit service provider and the inaugural internal audit is scheduled to be completed in early 2017-18.

The Canada-Newfoundland and Labrador Offshore Petroleum Cost Recovery Regulations came into force on April 1, 2016, and allow the government to recover costs associated with regulating offshore oil and gas activity from industry. In conjunction with the CNSOPB, the C-NLOPB issued new Cost Recovery Guidelines and implemented the new Regulations to recover costs from industry and return the funds to both governments throughout 2016-17. As a result, the governments recovered 100 percent of the C-NLOPB's costs from industry.

#### **AUTHORIZATIONS**

During 2016-17, C-NLOPB staff coordinated the issuance of 12 Authorizations which are captured in Table 26. C-NLOPB staff also issued 10 amendments to Authorizations, mainly covering the addition of support vessels to existing Authorizations.

Table 26: Authorizations issued by the C-NLOPB 2016-2017

OPERATOR	AUTHORIZATION TYPE	INSTALLATION/VESSEL
HMDC	OA (Renewal) - Extension	MODU West Aquarius
Husky Energy	OA	MODU Henry Goodrich
Husky Energy	DVPA	North Sea Giant/Seahunter
Husky Energy	DVPA	DSV Wellservicer
Hebron	OA (Construction)	Audacia/Calamity Jane
Hebron	OA (Construction)	Seven Waves
MG3	Geological/Geotechnical/Environmental Authorization	M/V Coriolis II
WesternGeco	GPA (Flemish Pass)	M/V Amazon Conqueror
MKI AS	GPA (Northeast NL Slope)	M/V Sanco Spirit
MKI AS	GPA (Labrador)	M/V Sanco Spirit
MKI AS	GPA (Southern Grand Banks)	M/V Atlantic Explorer
MKI AS	GPA (Northeast NL Slope)	M/V Ramform Sterling

Table 27: Regulatory Review, Licencing, Auditing and Approval Activities for 2016-2017

Applications for Regulatory Equivalency 264 Approval to Alter the Condition of a Well 21 Approval to Drill a Well 14 Benefits Plans Approvals (new or amended) 11 Commingled Production Approval 0 Diving Program Authorization 2 Environmental Assessments (new, amended or updated) 17 Environmental Audits and Inspections 3 Exploration Licences (new or amended) 9 Field Data Acquisition Program Approval 0 Flow System Application Approval 0 Flow System Application Approval 0 Flow System (Metering) Audits/Witness 8 Formation Flow Test Program Approval 0 Gas Flaring Approvals 3 Geological Programs (without fieldwork) 22 Geological Programs (with fieldwork) 22 Geological Programs (with fieldwork) 5 Geophysical Operations Authorization (with fieldwork) 5 Geophysical Program Authorization (without fieldwork) 0 Geotechnical Program Authorization (without fieldwork) 15 Operating Licences 20 Pooling Designation 1 Production Licences (new or amended) 15 Operating Licences 22 Fafety Audits/Inspections 24 Significant Discovery Licences (new or amended) 0 Strategic Environmental Assessments 0 Work Refusals Received 0 Offshore Worker Complaints Reviewed 10 Well Termination Notifications 23	ACTIVITY	NUMBER
Approval to Drill a Well 14 Benefits Plans Approvals (new or amended) 11 Commingled Production Approval 0 Diving Program Authorization 2 Environmental Assessments (new, amended or updated) 17 Environmental Assessments (new or amended or updated) 9 Field Data Acquisition Program Approval 12 Flow System Application Approval 10 Flow System Application Approval 10 Formation Flow Test Program Approval 10 Gas Flaring Approvals 13 Geological Programs (without fieldwork) 12 Geological Programs (without fieldwork) 12 Geophysical Operations Authorization (with fieldwork) 15 Geophysical Operations Authorization (without fieldwork) 10 Geotechnical Program Authorization (without fieldwork) 15 Geophysical Operations Authorization (without fieldwork) 15 Geophysical Program Authorization (without fieldwork) 15 Geotechnical Program Authorization (new or amended) 15 Operating Licences 12 Operating Licences (new or amended) 15 Operating Licences (new or amended) 10 Safety Assessments 12 Safety Audits/Inspections 12 Significant Discovery Licences (new or amended) 10 Offshore Worker Complaints Reviewed 10 Offshore Worker Complaints Reviewed 10	Applications for Regulatory Equivalency	264
Benefits Plans Approvals (new or amended)  Commingled Production Approval  Diving Program Authorization  Environmental Assessments (new, amended or updated)  Environmental Audits and Inspections  Exploration Licences (new or amended)  Field Data Acquisition Program Approval  Flow System Application Approval  Flow System Application Approval  Flow System (Metering) Audits/Witness  Formation Flow Test Program Approval  Gas Flaring Approvals  Geological Programs (without fieldwork)  Geological Programs (with fieldwork)  Geophysical Operations Authorization (with fieldwork)  Geophysical Operations Authorization (without fieldwork)  Geotechnical Program Authorization (without fieldwork)  Geotechnical Program Authorization  Notices of Non-Compliance  Operating Licences  Pooling Designation  Production Licences (new or amended)  Safety Assessments  22  Safety Audits/Inspections  Strategic Environmental Assessments  Other Worker Complaints Reviewed  Offshore Worker Complaints Reviewed	Approval to Alter the Condition of a Well	21
Commingled Production Approval 0 Diving Program Authorization 2 Environmental Assessments (new, amended or updated) 17 Environmental Audits and Inspections 3 Exploration Licences (new or amended) 9 Field Data Acquisition Program Approval 2 Flow System Application Approval 0 Flow System Application Approval 0 Flow System (Metering) Audits/Witness 8 Formation Flow Test Program Approval 0 Gas Flaring Approvals 3 Geological Programs (without fieldwork) 22 Geological Programs (without fieldwork) 1 Geophysical Operations Authorization (with fieldwork) 5 Geophysical Operations Authorization (without fieldwork) 0 Geotechnical Program Authorization (without fieldwork) 0 Geotechnical Program Authorization (without fieldwork) 15 Operating Licences 2 Pooling Designation 1 Production Licences (new or amended) 15 Safety Assessments 22 Safety Audits/Inspections 24 Significant Discovery Licences (new or amended) 0 Strategic Environmental Assessments 0 Work Refusals Received 10 Offshore Worker Complaints Reviewed 10	Approval to Drill a Well	14
Environmental Assessments (new, amended or updated)  Environmental Assessments (new, amended or updated)  Environmental Audits and Inspections  Exploration Licences (new or amended)  Field Data Acquisition Program Approval  Flow System Application Approval  Flow System (Metering) Audits/Witness  Formation Flow Test Program Approval  Gas Flaring Approvals  Geological Programs (without fieldwork)  Geophysical Operations Authorization (with fieldwork)  Geophysical Operations Authorization (with fieldwork)  Geotechnical Program Authorization (without fieldwork)  Geotechnical Program Authorization  Notices of Non-Compliance  Operations Authorization (new or amended)  Operating Licences  Pooling Designation  Production Licences (new or amended)  Safety Assessments  22  Safety Audits/Inspections  Significant Discovery Licences (new or amended)  Otfshore Worker Complaints Reviewed  Offshore Worker Complaints Reviewed	Benefits Plans Approvals (new or amended)	11
Environmental Assessments (new, amended or updated)  Environmental Audits and Inspections  Exploration Licences (new or amended)  Field Data Acquisition Program Approval  Flow System Application Approval  Flow System (Metering) Audits/Witness  Formation Flow Test Program Approval  Gas Flaring Approvals  Geological Programs (without fieldwork)  Geological Programs (with fieldwork)  Geophysical Operations Authorization (with fieldwork)  Geophysical Operations Authorization (without fieldwork)  Geotechnical Program Authorization (without fieldwork)  Geotechnical Program Authorization  Notices of Non-Compliance  Operating Licences  Pooling Designation  Production Licences (new or amended)  Safety Assessments  22  Safety Audits/Inspections  Significant Discovery Licences (new or amended)  Otfshore Worker Complaints Reviewed	Commingled Production Approval	0
Environmental Audits and Inspections  Exploration Licences (new or amended)  Field Data Acquisition Program Approval  Flow System Application Approval  Flow System (Metering) Audits/Witness  Formation Flow Test Program Approval  Gas Flaring Approvals  Geological Programs (without fieldwork)  Geological Programs (with fieldwork)  Geophysical Operations Authorization (with fieldwork)  Geophysical Program Authorization (without fieldwork)  Geotechnical Program Authorization  Notices of Non-Compliance  Operating Licences  Pooling Designation  1 Production Licences (new or amended)  Safety Assessments  22  Safety Audits/Inspections  Significant Discovery Licences (new or amended)  Otfshore Worker Complaints Reviewed  Offshore Worker Complaints Reviewed	Diving Program Authorization	2
Exploration Licences (new or amended) Field Data Acquisition Program Approval 2 Flow System Application Approval 0 Flow System (Metering) Audits/Witness 8 Formation Flow Test Program Approval 0 Gas Flaring Approvals 3 Geological Programs (without fieldwork) 22 Geological Programs (with fieldwork) 3 Geophysical Operations Authorization (with fieldwork) 3 Geophysical Program Authorization (without fieldwork) 3 Geotechnical Program Authorization (without fieldwork) 3 Operations Authorization (new or amended) 15 Operating Licences 10 Pooling Designation 11 Production Licences (new or amended) 3 Safety Assessments 2 Safety Audits/Inspections 3 Significant Discovery Licences (new or amended) 3 Otrategic Environmental Assessments 0 Offshore Worker Complaints Reviewed 10	Environmental Assessments (new, amended or updated)	17
Field Data Acquisition Program Approval  Flow System Application Approval  Flow System (Metering) Audits/Witness  Formation Flow Test Program Approval  Gas Flaring Approvals  Geological Programs (without fieldwork)  Geological Programs (with fieldwork)  Geophysical Operations Authorization (with fieldwork)  Geophysical Program Authorization (without fieldwork)  Geotechnical Program Authorization (without fieldwork)  Ogeotechnical Program Authorization  Notices of Non-Compliance  3 Operations Authorization (new or amended)  15 Operating Licences  Pooling Designation  1 Production Licences (new or amended)  Safety Assessments  22 Safety Audits/Inspections  Significant Discovery Licences (new or amended)  Otfshore Worker Complaints Reviewed  10 Offshore Worker Complaints Reviewed	Environmental Audits and Inspections	3
Flow System Application Approval  Flow System (Metering) Audits/Witness  Formation Flow Test Program Approval  Gas Flaring Approvals  Geological Programs (without fieldwork)  Geological Programs (with fieldwork)  Geophysical Operations Authorization (with fieldwork)  Geophysical Program Authorization (without fieldwork)  Geophysical Program Authorization (without fieldwork)  Geotechnical Program Authorization  Notices of Non-Compliance  3  Operations Authorization (new or amended)  15  Operating Licences  Pooling Designation  1  Production Licences (new or amended)  Safety Assessments  22  Safety Audits/Inspections  24  Significant Discovery Licences (new or amended)  Otfshore Worker Complaints Reviewed  10  Offshore Worker Complaints Reviewed	Exploration Licences (new or amended)	9
Flow System (Metering) Audits/Witness  Formation Flow Test Program Approval  Gas Flaring Approvals  Geological Programs (without fieldwork)  Geological Programs (with fieldwork)  Geophysical Operations Authorization (with fieldwork)  Geophysical Program Authorization (without fieldwork)  Geotechnical Program Authorization (without fieldwork)  Operations Authorization (new or amended)  Operations Authorization (new or amended)  Operating Licences  Pooling Designation  1  Production Licences (new or amended)  Safety Assessments  22  Safety Audits/Inspections  24  Significant Discovery Licences (new or amended)  Otrategic Environmental Assessments  OWORK Refusals Received  Offshore Worker Complaints Reviewed	Field Data Acquisition Program Approval	2
Formation Flow Test Program Approval 0  Gas Flaring Approvals 3  Geological Programs (without fieldwork) 22  Geological Programs (with fieldwork) 11  Geophysical Operations Authorization (with fieldwork) 5  Geophysical Program Authorization (without fieldwork) 00  Geotechnical Program Authorization (without fieldwork) 00  Notices of Non-Compliance 33  Operations Authorization (new or amended) 15  Operating Licences 20  Pooling Designation 11  Production Licences (new or amended) 00  Safety Assessments 22  Safety Audits/Inspections 24  Significant Discovery Licences (new or amended) 00  Strategic Environmental Assessments 00  Work Refusals Received 00  Offshore Worker Complaints Reviewed 110	Flow System Application Approval	0
Gas Flaring Approvals Geological Programs (without fieldwork) Geological Programs (with fieldwork) 1 Geophysical Operations Authorization (with fieldwork) 5 Geophysical Program Authorization (without fieldwork) 0 Geotechnical Program Authorization (without fieldwork) 0 Notices of Non-Compliance 3 Operations Authorization (new or amended) 15 Operating Licences 20 Pooling Designation 1 Production Licences (new or amended) 0 Safety Assessments 22 Safety Audits/Inspections 24 Significant Discovery Licences (new or amended) 0 Strategic Environmental Assessments 0 Work Refusals Received 0 Offshore Worker Complaints Reviewed	Flow System (Metering) Audits/Witness	8
Geological Programs (without fieldwork) 22 Geological Programs (with fieldwork) 1 Geophysical Operations Authorization (with fieldwork) 5 Geophysical Program Authorization (without fieldwork) 0 Geotechnical Program Authorization (without fieldwork) 0 Notices of Non-Compliance 3 Operations Authorization (new or amended) 15 Operating Licences 20 Pooling Designation 1 Production Licences (new or amended) 0 Safety Assessments 22 Safety Audits/Inspections 24 Significant Discovery Licences (new or amended) 0 Strategic Environmental Assessments 0 Work Refusals Received 0 Offshore Worker Complaints Reviewed 110	Formation Flow Test Program Approval	0
Geological Programs (with fieldwork)  Geophysical Operations Authorization (with fieldwork)  Geophysical Program Authorization (without fieldwork)  Geotechnical Program Authorization  Notices of Non-Compliance  Operations Authorization (new or amended)  Operating Licences  Pooling Designation  Production Licences (new or amended)  Safety Assessments  Safety Audits/Inspections  Significant Discovery Licences (new or amended)  Otrategic Environmental Assessments  Offshore Worker Complaints Reviewed	Gas Flaring Approvals	3
Geophysical Operations Authorization (with fieldwork)  Geophysical Program Authorization (without fieldwork)  Geotechnical Program Authorization  Notices of Non-Compliance  3  Operations Authorization (new or amended)  15  Operating Licences  Pooling Designation  1  Production Licences (new or amended)  Safety Assessments  22  Safety Audits/Inspections  Significant Discovery Licences (new or amended)  Otrategic Environmental Assessments  Otrategic Environmental Assessments  Offshore Worker Complaints Reviewed	Geological Programs (without fieldwork)	22
Geophysical Program Authorization (without fieldwork)0Geotechnical Program Authorization0Notices of Non-Compliance3Operations Authorization (new or amended)15Operating Licences20Pooling Designation1Production Licences (new or amended)0Safety Assessments22Safety Audits/Inspections24Significant Discovery Licences (new or amended)0Strategic Environmental Assessments0Work Refusals Received0Offshore Worker Complaints Reviewed10	Geological Programs (with fieldwork)	1
Geotechnical Program Authorization 0  Notices of Non-Compliance 3  Operations Authorization (new or amended) 15  Operating Licences 20  Pooling Designation 1  Production Licences (new or amended) 0  Safety Assessments 22  Safety Audits/Inspections 24  Significant Discovery Licences (new or amended) 0  Strategic Environmental Assessments 0  Work Refusals Received 0  Offshore Worker Complaints Reviewed 110	Geophysical Operations Authorization (with fieldwork)	5
Notices of Non-Compliance 3  Operations Authorization (new or amended) 15  Operating Licences 20  Pooling Designation 1  Production Licences (new or amended) 0  Safety Assessments 22  Safety Audits/Inspections 24  Significant Discovery Licences (new or amended) 0  Strategic Environmental Assessments 0  Work Refusals Received 0  Offshore Worker Complaints Reviewed 110	Geophysical Program Authorization (without fieldwork)	0
Operations Authorization (new or amended)  Operating Licences  Pooling Designation  Production Licences (new or amended)  Safety Assessments  Safety Audits/Inspections  Significant Discovery Licences (new or amended)  Otrategic Environmental Assessments  Otrategic Environmental Assessments  Offshore Worker Complaints Reviewed	Geotechnical Program Authorization	0
Operating Licences 20 Pooling Designation 1 Production Licences (new or amended) 0 Safety Assessments 22 Safety Audits/Inspections 24 Significant Discovery Licences (new or amended) 0 Strategic Environmental Assessments 0 Work Refusals Received 0 Offshore Worker Complaints Reviewed 10	Notices of Non-Compliance	3
Pooling Designation 1  Production Licences (new or amended) 0  Safety Assessments 22  Safety Audits/Inspections 24  Significant Discovery Licences (new or amended) 0  Strategic Environmental Assessments 0  Work Refusals Received 0  Offshore Worker Complaints Reviewed 10	Operations Authorization (new or amended)	15
Production Licences (new or amended)  Safety Assessments  22  Safety Audits/Inspections  Significant Discovery Licences (new or amended)  Strategic Environmental Assessments  Work Refusals Received  Offshore Worker Complaints Reviewed  10	Operating Licences	20
Safety Assessments 22 Safety Audits/Inspections 24 Significant Discovery Licences (new or amended) 0 Strategic Environmental Assessments 0 Work Refusals Received 0 Offshore Worker Complaints Reviewed 10	Pooling Designation	1
Safety Audits/Inspections 24 Significant Discovery Licences (new or amended) 0 Strategic Environmental Assessments 0 Work Refusals Received 0 Offshore Worker Complaints Reviewed 10	Production Licences (new or amended)	0
Significant Discovery Licences (new or amended)  Strategic Environmental Assessments  0  Work Refusals Received  0  Offshore Worker Complaints Reviewed  10	Safety Assessments	22
Strategic Environmental Assessments  Work Refusals Received  Offshore Worker Complaints Reviewed  10	Safety Audits/Inspections	24
Work Refusals Received 0 Offshore Worker Complaints Reviewed 10	Significant Discovery Licences (new or amended)	0
Offshore Worker Complaints Reviewed 10	Strategic Environmental Assessments	0
	Work Refusals Received	0
Well Termination Notifications 23	Offshore Worker Complaints Reviewed	10
	Well Termination Notifications	23

## **PUBLIC AFFAIRS**

#### SPEAKING ENGAGEMENTS

As part of the C-NLOPB's public outreach initiatives, C-NLOPB staff gave presentations at a number of events, including:

- Annual Newfoundland Oil and Gas Industries Association (NOIA) Conference;
- Newfoundland and Labrador Environmental Industry Association's Newleef Conference;
- Annual Arctic Oil and Gas Symposium;
- Arctic Technology Conference;
- Luncheon for the Rotary Club of St. John's Northwest;
- Seismic Workshop organized by One Ocean;
- Northern Exposure Conference;
- Husky Energy's Diversity Forum;
- Geoscience Day (as part of Oil and Gas Week); and
- Student Society of Petroleum Engineers event.

C-NLOPB staff also hosted students from Mobil Central High School and O'Donel High School at the CSRC during Oil and Gas Week. Students received presentations from staff and a tour of the facility.

A copy of C-NLOPB presentations and speaking notes are available on the C-NLOPB's website.

#### **PUBLIC CONSULTATIONS**

The C-NLOPB consults stakeholders on a wide variety of matters including EAs, development plans, development plan amendments and draft guidelines. In 2016-17 the C-NLOPB conducted consultations on the following:

- Revisions to Drilling and Production Guidelines
- Draft Guidelines Respecting Financial Requirements and draft Administrative Monetary Penalty Guidelines
- Draft Joint Cost Recovery Guidelines
- Draft revised Canada-Newfoundland and Labrador Benefits Plan Guidelines
- Draft Atlantic Canada Standby Vessel Guidelines
- Eastern Newfoundland and Labrador Offshore Area SEA Update
- Hebron Development Plan Application
- Western Newfoundland and Labrador Offshore Area SEA Update
- White Rose Development Plan Amendment Application (South White Rose Extension Tie-Back Project)
- White Rose Extension Development Plan Amendment

#### **C-NLOPB BLOG**

The C-NLOPB introduced a new blog page on its website. Members of the public are invited to visit this page where C-NLOPB staff members share their thoughts on matters of interest.

#### **C-NLOPB YOUTUBE CHANNEL**

The C-NLOPB also has a YouTube channel available and is planning on adding several more videos during 2017-18.

## INFORMATION AND DATA MANAGEMENT

The C-NLOPB receives and disseminates information relevant to work authorized in the Offshore Area. Requests for this information are received and processed in the C-NLOPB Information Resources Centre. Any information which has passed the statutory privilege period may be requested either in person or by emailing <a href="mailto:information@cnlopb.ca">information@cnlopb.ca</a>.

During 2016-17, the C-NLOPB received 378 requests for information from external parties. These requests were primarily related to access to non-privileged offshore petroleum technical data provided to the C-NLOPB by Operators. These did not require formal applications under the *Access to Information Act*. The C-NLOPB received 20 formal requests and seven formal consultation requests under the *Access to Information Act* during 2016-17. As required by the *Access to Information Act*, a separate annual report on the C-NLOPB's administration of the *Act* during 2016-17 will be tabled in Parliament in 2017.

Table 27: Requests under the Access to Information Act for 2016-2017

INFORMAL REQUESTS	
Informal requests received during reporting period	1
FORMAL REQUESTS	
Formal requests were received during reporting period from	
Media	2
Academia	0
Business (private sector)	17
Organization	0
Public	1
Decline to Identify	0
Total	20
REQUESTS CLOSED DURING REPORTING PERIOD	
Requests where all records disclosed	4
Requests where partial records disclosed	15
Requests where no records existed	1
Requests where all records were exempted	2
Total	22
Requests brought forward to next reporting period	1
CONSULTATIONS	
Consultations received during reporting period	7
Number of pages reviewed	114
COMPLAINTS	
Complaints registered	13
COURT ACTION	
Requests where Federal Court review initiated	5

# **APPENDIX: FINANCIAL STATEMENTS**

Financial Statements of

# CANADA - NEWFOUNDLAND AND LABRADOR OFFSHORE PETROLEUM BOARD.

Year ended March 31, 2017

# Statement of Responsibility

The accompanying financial statements are the responsibility of the management of the Canada-Newfoundland and Labrador Offshore Petroleum Board (the "Board") and have been prepared in compliance with legislation, and in accordance with generally accepted accounting principles established by the Public Sector Accounting Board of The Canadian Institute of Chartered Professional Accountants of Canada (CPA Canada).

In carrying out its responsibilities, management maintains appropriate systems of internal and administrative controls designed to provide reasonable assurance that transactions are executed in accordance with proper authorization, that assets are properly accounted for and safeguarded, and that financial information produced is relevant and reliable.

The Audit 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 their approval of the finalized financial statements.

KPMG LLP as the Board's appointed external auditors, have audited the financial statements. The auditor's report is addressed to the Directors of the Board and appears on the following page. Their opinion is based upon an examination conducted in accordance with Canadian generally accepted auditing standards, performing such tests and other procedures as they consider necessary to obtain reasonable assurance that the financial statements are free of material misstatement and present fairly the financial position and results of the Board in accordance with Canadian public sector accounting standards.

Salt Vi.		E. Sickin	
So were to	Chair	c man	Directo



KPMG LLP
Toronto Dominion Place
140 Water St, Suite 1001
St John's NI A1C 6H6

Telephone (709) 733-5000 Fax (709) 733-5050 www.kpmg.ca

# INDEPENDENT AUDITORS' REPORT

To the Directors of Canada- Newfoundland and Labrador Offshore Petroleum Board

We have audited the accompanying financial statements of Canada - Newfoundland and Labrador Offshore Petroleum Board, which comprise the statement of financial position as at March 31, 2017, the statements of operations, changes in accumulated surplus, net debt and cash flows for the year then ended, and notes, comprising a summary of significant accounting policies and other explanatory information.

Management's Responsibility 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.

Auditors' Responsibility

Our responsibility is to express an opinion on these financial statements based on our audit. We conducted our audit in accordance with Canadian generally accepted auditing standards. Those standards require that we comply with ethical requirements and plan and perform an audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on our judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, we consider internal control relevant to the entity's preparation and fair presentation of the financial statements 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 entity's internal control. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

### Opinion

In our opinion, the financial statements present fairly, in all material respects, the financial position of Canada - Newfoundland and Labrador Offshore Petroleum Board as at March 31, 2017, and its results of operations and the changes in its accumulated surplus and net debt and its cash flows for the year then ended in accordance with Canadian public sector accounting standards.

Emphasis of Matter

Without modifying our opinion, we draw attention to Note 2 to the financial statements which indicates that the comparative information presented as at for the year ended March 31, 2016 has been restated. The financial statements of Canada-Newfoundland and Labrador Offshore Petroleum Board as at and for the year ended March 31, 2016 were audited by another auditor who expressed an unqualified opinion on those statements. As part of our audit of the financial statements as at and for the year ended March 31, 2017, we audited the restatement described in Note 2 to the financial statements that was applied to restate the comparative information presented as at and for the year ended March 31, 2016. In our opinion, the restatement is appropriate and has been properly applied.

**Chartered Professional Accountants** 

KPMG LLP

May 30, 2017

St. John's, Canada

Statement of Financial Position March 31, 2017 with comparative information for 2016

	2017	201
		(as restated
Financial assets		
Cash and cash equivalents  Receivables	9,590,431 1,772,801	\$ 6,957,36 3,752,76
	11,363,232	10,710,13
Liabilities		
Payables and accruals (note 3)	6,269,594	6,775,99
Accrued employee future benefit obligation (note 4)	7,940,800	7,018,20
	14,210,394	13,794,19
Net debt \$	(2,847,162)	\$ (3,084,060
Non-financial assets		
Prepaids \$	591,296	\$ 828,19
Tangible capital assets (schedule 1)	2,774,519	2,831,12
	3,365,815	3,659,31
Commitments (note 6)		
Contingencies (note 7)		
Accumulated surplus \$	518,653	\$ 575,25

See accompanying notes to the financial statements.

On behalf of the Board

Chair

Chair

Director

Statement of Operations Year ended March 31, 2017 with comparative information for 2016

		Actual	Budget	Actual
		2017	2017	2016
				(as restated)
Davissia				
Revenue:				
Operating grants: Government of Canada	\$	8,694,964	\$ 8,835,000	\$ 8,577,820
Government of Carlada  Government of Newfoundland and	Ф	0,094,904	φ 0,035,000	φ 0,377,020
Labrador		8,694,964	8,835,000	8,577,820
Labrador		17,389,928	17,670,000	17,155,640
Add:		17,309,920	17,670,000	17,100,040
Costs recovered from industry		17,389,928	17,670,000	12,866,730
Interest and other		29,132	25,116	118,892
Therest and other		17,419,060	17,695,116	12,985,622
Less:		17,419,000	17,093,110	12,905,022
Cost recoveries refunded to governments		(17,389,928)	(17,670,000)	(12,866,730)
		(11,000,020)	(11,010,000)	(12,000,100)
Net revenue		17,419,060	17,695,116	17,274,532
Notrovollad		11,110,000	11,000,110	,2,002
Expenses (schedule 2)				
Board and executive office		2,223,506	1,935,437	2,135,920
Environmental affairs		873,747	909,006	915,801
Exploration		2,073,832	2,212,526	1,534,899
Legal, regulatory affairs and public affairs		1,004,761	1,052,510	1,494,305
Operations		1,169,699	1,221,265	1,234,883
Resource management		2,445,563	2,474,323	2,380,676
Safety		2,450,740	3,001,794	2,832,597
Administration and industrial benefits		5,233,812	4,800,455	5,150,529
		17,475,660	17,607,316	17,679,610
Annual (deficit) surplus	\$	(56,600)	\$ 87,800	\$ (405,078)

See accompanying notes to the financial statements.

Statement of Changes in Accumulated Surplus Year ended March 31, 2017 with comparative information for 2016

	Actual	Budget		Actual
	2017	2017		2016
			(	as restated)
Accumulated surplus, beginning of year	\$ 1,141,007	\$ 575,253	\$	1,531,985
Restatement (note 2)	(565,754)	-		(551,654)
Accumulated surplus, beginning of year as				
restated	575,253	-		980,331
Annual (deficit) surplus	(56,600)	87,800		(405,078)
Accumulated surplus, end of year	\$ 518,653	\$ 663,053	\$	575,253

See accompanying notes to financial statements.

Statement of Net Debt Year ended March 31, 2017 with comparative information for 2016

	Actual 2017	(;	Actual 2016 as restated)
Annual deficit Acquisition of tangible capital assets Amortization of tangible capital assets Decrease (decrease) in prepaids	\$ (56,600) (493,673) 550,274 236,897	\$	(405,078) (234,616) 625,594 (361,343)
Decrease (increase) in net debt	236,898		(375,443)
Net debt, beginning of year	(3,084,060)		(2,708,617)
Net debt, end of year	\$ (2,847,162)	\$	(3,084,060)

See accompanying notes to financial statements.

Statement of Cash Flows Year ended March 31, 2017 with comparative information for 2016

		2017	2016 (as restated)
Cash provided by (used in):			
Operating activities:			
Annual deficit	\$	(56,600)	\$ (405,078)
Amortization of tangible capital assets	·	550,274	625,594
		493,674	220,516
Change in non-cash items:			
Accrued employee future benefit obligation		922,600	335,600
Receivables		1,979,967	(43,418)
Prepaids		236,897	(362,343)
Payables and accruals		(506,399)	(3,115,189)
Deferred revenue		-	(30,000)
Operating transactions		3,126,739	(2,994,834)
Capital activity:			
Cash used to acquire tangible capital assets		(493,673)	(234,616)
Increase (decrease) in cash and cash equivalents		2,633,066	(3,229,450)
Cash and cash equivalents, beginning of year		6,957,365	10,186,815
Cash and cash equivalents, end of year	\$	9,590,431	\$ 6,957,365

Notes to the financial statements Year ended March 31, 2017

The Canada-Newfoundland & Labrador Offshore Petroleum Board (the Board) was formed in 1985 to administer the relevant provisions of the *Canada-Newfoundland Atlantic Accord Implementation Acts* as enacted by the Parliament of Canada and the Legislature of Newfoundland and Labrador.

# 1. Significant accounting policies:

The financial statements have been prepared in accordance with Canadian generally accepted accounting principles as recommended by the Public Sector Accounting Board (PSAB) of the Chartered Professional Accountants and reflect the following significant accounting policies.

### a) Use of estimates:

In preparing the Board's financial statements in conformity with Canadian public sector accounting standards, management are required to make estimates and assumptions that affect the reported 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. Items requiring the use of significant estimates include the useful life of tangible capital assets, estimated accrued severance, rates of amortization, and impairment of assets.

Estimates are based on 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. Actual results could differ from these estimates.

### b) Revenue recognition:

Operating grants are recognized when approved, less amounts repayable for expenses not incurred.

Costs recovered from industry are recognized in the period in which the expenses are incurred and when collection is reasonable assured.

Interest and other revenues are recognized as earned and when collection is reasonably assured.

### c) Cash and cash equivalents:

Cash and cash equivalents include cash on hand and balances with banks.

# d) 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 generally 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 annual surplus (deficit), provides the change in net debt for the year.

Notes to the financial statements Year ended March 31, 2017

# 1. Significant accounting policies (continued):

### e) Tangible capital assets:

Tangible capital assets are recorded at cost. Depreciation is provided annually at rates calculated to write off the assets over their estimated useful life as follows, except in the year of acquisition when one half of the rate is used.

Buildings	4%	declining balance
Leasehold improvements	5 years	straight line
Furniture and fixtures	4 years	straight line
Data management system	3 years	straight line
Computer software	1 year	straight line
Computer equipment	3 years	straight line

### f) Impairment of tangible capital assets:

Tangible capital assets are reviewed for impairment upon the occurrence of events or changes in circumstances indicating that the value of the assets may not be recoverable, as measured by comparing their net book value to the estimated undiscounted cash flows generated by their use. Impaired assets are recorded at fair value, determined principally using discounted future cash flows expected from their use and eventual disposition.

### g) Capital grants:

Federal and provincial grants received for annual capital expenditures are recognized as revenue in the year in which they are received.

# h) Employee future benefits:

The Board contributes 100% of the premiums for medical and dental benefits, and 50% for life for retired employees. These retirement benefits are recorded on an accrual basis based on an actuary's estimate. Actuarial gains and losses are amortized on a straight-line basis over the average remaining service period of the active members expected to receive benefits under the plan (13 years).

### i) Retiring allowance:

The Board also provides a retirement allowance benefit for eligible employees. This benefit accrues over the estimated service life of the employees and is expensed according to actuarial estimates and assumptions.

Notes to the financial statements Year ended March 31, 2017

# 1. Significant accounting policies (continued):

### i) Financial instruments:

The Board considers any contract creating a financial asset, liability or equity instrument as a financial instrument, except in certain limited circumstances. The Board accounts for the following as financial instruments:

- cash and cash equivalents;
- · receivables; and
- payables and accruals.

A financial asset or liability is recognized when the Board becomes party to contractual provisions of the instrument.

The Board initially measures its financial assets and financial liabilities at fair value adjusted by, in the case of a financial instrument that will not be measured subsequently at fair value, the amount of transaction costs directly attributable to the instrument.

The Board subsequently measures its financial assets and financial liabilities at cost or amortized cost. Changes in fair value are recognized in annual surplus.

Financial assets measured at cost include cash and cash equivalents, and receivables. Financial liabilities measured at cost include payables and accruals.

The Board removes financial liabilities, or a portion of, when the obligation is discharged, cancelled, or expires.

Financial assets measured at cost are tested for impairment when there are indicators of impairment. Previously recognized impairment losses are reversed to the extent of the improvement provided the asset is not carried at an amount, at the date of the reversal, greater than the amount that would have been the carrying amount had no impairment loss been recognized previously. The amounts of any write-downs or reversals are recognized in net annual surplus.

Notes to the financial statements Year ended March 31, 2017

### 2. Restatement:

During the year, the Board identified a correction in the previous recording of accrued retiring allowances. The Board historically accrued retiring allowance for employees as they reached entitlement. As retiring allowance benefits accumulate the obligation should be accrued as the employees render the service that gives rise to the benefits.

	As previously reported	Impact of correction of an error	As restated
Accrued employee future benefit obligation Accounts payable and accrued liabilities Board and executive office Accumulated surplus, March 31, 2015	\$ 6,237,900 6,990,539 2,121,820 1,531,985	\$ 780,300 (214,546) 14,100 (551,654)	\$ 7,018,200 6,775,993 2,135,920 980,331

# 3. Payables and accruals:

	2017	2016
Trade Government of Canada Government of Newfoundland and Labrador	\$ 1,854,028 2,207,783 2,207,783	\$ 2,755,449 2,010,272 2,010,272
	\$ 6,269,594	\$ 6,775,993

# 4. Accrued employee future benefit obligation:

Group life and group health plans:

The Board provides for coverage under the group life and group health plans upon retirement from active service for its employees.

The following information for these plans is based upon an actuarial valuation completed as at March 31, 2017.

	2017	2016
Reconciliation of funded status Unamortized net actuarial loss	\$ 7,519,900 (420,600)	\$ 7,502,200 (1,264,300)
Accrued benefit liability	\$ 7,099,300	\$ 6,237,900

Notes to the financial statements Year ended March 31, 2017

# 4. Accrued employee future benefit obligation (continued):

	2017	2016
Net benefit expense Current service cost Amortization of actuarial gain (loss) Interest cost	\$ 627,000 98,300 226,500	\$ 395,200 (98,500) 116,900
	\$ 951,800	\$ 413,600

# Retiring allowance:

The board provides a retiring allowance to employees upon death or retirement. The allowance is equal to one weeks pay for each year of employment with the Board, to a maximum of 20 week's pay. Employees must have a minimum of five year's employment with the Board to qualify under this policy.

	2017	(a	2016 as restated)
Accrued benefit liability	\$ 841,500	\$	780,300
	2017	(a	2016 as restated)
Net benefit expense: Current service cost Amortization of actuarial gain (loss)	\$ 93,300 (2,000)	\$	96,100
Interest cost	24,100		20,000
	\$ 115,400	\$	116,100

Significant actuarial assumptions used in calculating the accrued benefit liability and expense for the employee future benefit and the retiring allowance is as follows:

2017	2016
3.0%	2.8%
2.0%	2.0%
4.5%	4.5%
4.5%	4.5%
	3.0% 2.0% 4.5%

Notes to the financial statements Year ended March 31, 2017

# 5. Defined benefit public service pension plan:

The Board participates in the Government of Newfoundland and Labrador's defined benefit Public Service Pension Plan ("the Plan"). The assets of the Plan are held separately from those of the Board in an independently administered fund. Plan participation is mandatory for all full-time employees with greater than 3 calendar months of continuous employment.

Effective on January 1, 2015, pension plan changes came into effect that required increase to contribution rates, and changes to pension eligibility. Plan members must now have a minimum of 10 years of pensionable service (with a 5 year transition under the old rules) to obtain a pension benefit. Normal retirement age under the Plan is 65 however early retirement options are available.

Members of the Plan are required to make contributions toward the funding of their pension benefits as follows:

- (i) 10.75% of earnings up to the Year's Basic Exemption, the portion of earnings upon which no CPP contributions are required;
- (ii) 8.95% of earnings in excess of the Year's Basic Exemption up to and including the Year's Maximum Pensionable Earnings ("YMPE"); and
- (iii) 11.85% of earnings in excess of the YMPE.

Pensions paid under the Plan are indexed annually. Indexing is applied at the rate of 60% of the increase in the Consumer Price Index (CPI), with the increase in the CPI capped at 2%.

Employees who retire after January 1, 2015 shall have their pensions indexed only on the service credited before January 1, 2015. Indexing applies to benefits of pensioners who have attained age 65 prior to October 1 of each year.

For future service, pensions will be calculated by using the best 6 years of average pensionable earnings. For past service, pensions will be calculated by using the higher of: the frozen best 5 years of average pensionable earnings (calculated up to the effective date (January 1, 2015)), or the best 6 years average for all past and future service.

Employer contributions paid and expensed by the Board during the year totaled \$1,002,146 (2016 - \$946,294). Additional information about the plan surplus or deficit is not available.

# 6. Commitments:

The Board is committed under terms of a premises lease to make the following minimum annual lease payments:

March 31, 2018	\$ 1,241,308
March 31, 2019	1,241,308
March 31, 2020	1,241,308
March 31, 2021	103,442

Notes to the financial statements Year ended March 31, 2017

# 7. Contingencies:

Claims have been initiated against the Board for unspecified compensatory damages and costs. The outcome of these claims are not determinable at this time, consequently no amount has been reflected in the financial statements.

### 8. Financial instruments risks and concentrations:

The Board is exposed to various risks through its financial instruments. The following analysis provides a measure of the Board's risk exposure and concentrations at March 31, 2017.

### Liquidity risk

Liquidity risk is the risk that an entity will encounter difficulty in meeting obligations associated with financial liabilities. The Board is exposed to this risk mainly in respect of its payables and accruals in the amount of \$6,269,594 (2016 - \$6,990,539), which have a maturity of not later than one year. The Board reduces its exposure to liquidity risk by monitoring its cash flows and ensuring that it has sufficient cash available to meet its obligations and liabilities. In the opinion of management the liquidity risk exposure to the Board is low.

### Credit risk

Credit risk is the risk of loss associated with a counterparty's inability to fulfill its payment obligations. The Board's credit risk is attributable to receivables in the amount of \$1,772,801 (2016 - \$3,752,768). Management believes that the credit risk concentration with respect to financial instruments included in receivables is remote.

The Board does not believe there is exposure to interest rate risk or foreign currency risk.

# 9. Related party transactions:

The Board is jointly controlled due to ability to appoint board members by the federal Government of Canada and the provincial Government of Newfoundland and Labrador. During the year, the Board had the following transactions with these governments:

# Operating grant:

Government of Canada	\$ 8,694,964
Government of Newfoundland and Labrador	8,694,964
Cost recoveries refunded to Government of Canada	(8,694,964)
Cost recoveries refunded to Government of Newfoundland and Labrador	(8,694,964)

### 10. Comparative figures

The comparative figures have been reclassified, where applicable, to conform with the presentation used in the current year. The changes do not affect prior year earnings.

Schedule 1 - Tangible Capital Assets Year ended March 31, 2017

		Land and parking lot		Buildings	imp	Leasehold Buildings improvements		Furniture and fixtures	mai	Data management system		Computer	Ψ Ψ	Computer	2017		2016
Cost, beginning of year Additions during the year Disposals during the year	<del>∨</del>	258,297 - -	<del>∨</del>	258,297 \$ 3,317,089 - -	↔	377,415	↔	997,040 73,285 (1,578)	<del>⇔</del>	\$ 1,108,298 \$ - -	↔	1,008,712 265,538 -	↔	2,454,829 \$ 154,850 (10,816)	9,521,680 493,673 (12,394)	↔	9,567,427 234,616 (280,363)
Cost, end of year	s	258,297	\$	\$ 3,317,089	↔	377,415	· \$	1,068,747	↔	1,108,298	↔	1,274,250	<del>∨</del>	2,598,863 \$	10,002,959	\$	9,521,680
Accumulated amortization, beginning of year	↔	I	↔	\$ 1,291,235	↔	377,415	↔	879,900	₩	\$ 1,108,298	↔	991,969	₩	2,041,743 \$	6,690,560	<del>\( \text{\sigma} \)</del>	6,345,329
Amortization Reversals of accumulated		I		81,034		I		67,207		I		141,140		260,893	550,274		625,594
depreciation relating to disposals		1		I		I		(1,578)		I		I		(10,816)	(12,394)		(280,363)
Accumulated amortization, end of year	\$	1	↔	\$ 1,372,269	↔	377,415 \$	↔	945,529	, ↔	1,108,298 \$	↔	1,133,109	8	2,291,820 \$	7,228,440	₩	6,690,560
Net book value of tangible capital assets	↔	258,297	<del>s</del>	258,297 \$ 1,944,820	↔	1	↔	123,218	↔	1	↔	141,141 \$	↔	307,043 \$	2,774,519 \$ 2,831,120	₩	2,831,120

Schedule 2 - Expenses Year ended March 31, 2017

		2017		2016
			(;	as restated)
Board and executive office:				
Consultants fees	\$	289,524	\$	729,343
Miscellaneous	•	6,660	*	6,217
Training and conferences		55,331		113,640
Travel		32,018		39,196
Wages and benefits		1,839,973		1,247,524
		2,223,506		2,135,920
Environmental affairs:				
Miscellaneous		2,612		2,131
Training and conferences		13,822		17,081
Travel		6,103		10,341
Wages and benefits		851,211		886,248
		873,747		915,801
Exploration:				
Miscellaneous		5,327		3,807
Training and conferences		49,230		75,280
Travel		3,774		4,544
Wages and benefits		2,015,502		1,451,268
		2,073,832		1,534,899
Legal, regulatory affairs and public affairs:				
Miscellaneous		3,923		3,431
Training and conferences		7,471		25,994
Travel		7,279		19,269
Wages and benefits		986,088		1,445,611
Operations		1,004,761		1,494,305
Operations: Miscellaneous		2,913		3,766
Training and conferences		40,753		58,333
Travel		26,304		11,657
Wages and benefits		1,099,729		1,161,127
vages and benefits		1,169,699		1,234,883
Resource management:		1,100,000		1,204,000
Miscellaneous		7,006		5,254
Training and conferences		111,268		132,243
Travel		1,145		4,297
Wages and benefits		2,326,144		2,238,882
		2,445,563		2,380,676

Schedule of Expenses (continued) Year ended March 31, 2017

	2017	2016
		(as restated)
Safety:		
Consultants fees	\$ 199,344	\$ 763,971
Miscellaneous	7,505	5,126
Training and conferences	129,561	153,320
Travel	28,271	16,008
Wages and benefits	2,086,059	1,894,172
	2,450,740	2,832,597
Administration and industrial benefits:		
Amortization of tangible capital assets	550,274	625,594
Computer support and maintenance	956,917	940,310
General office maintenance	499,602	561,879
Rent	1,452,784	1,300,369
Training and conferences	5,293	11,289
Travel	_	2,539
Wages and benefits	1,768,942	1,708,549
	5,233,812	5,150,529
	\$ 17,475,660	\$ 17,679,610



Fifth Floor, TD Place

140 Water Street St. John's, NL Canada A1C 6H6

**t:** 709–778–1400 **f:** 709–778–1473

**Core Storage and Research Centre** 

30-32 Duffy Place St. John's, NL Canada A1B 4M5

**t:** 709–778–1500

