

Ontario Oil, Gas and Salt Resources Trust

(Ontario Oil, Gas and Salt Resources Library)



ONTARIO PETROLEUM INSTITUTE



ONTARIO OIL, GAS & SALT RESOURCES LIBRARY

ONTARIO OIL & NATURAL GAS

2014 Annual Report

June 2015



Ontario Petroleum Institute Inc.

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June 30, 2015

Hon. Bill Mauro
Ministry of Natural Resources and Forestry
Suite 6630, 6th Floor, Whitney Block
99 Wellesley Street West
Toronto, Ontario M7A 1W3

Dear Minister Mauro,

Re: Ontario Oil, Gas and Salt Resources Trust - 2014 Annual Report

The Ontario Oil Gas and Salt Resources Corporation is pleased to provide you with the Ontario Oil, Gas and Salt Resources Trust (Trust) 2014 Annual Report.

The Corporation is an entity established by the Ontario Petroleum Institute, the industry association that represents the oil and natural gas, hydrocarbon storage and salt solution mining industries in Ontario. The Corporation is the “Original Trustee” to a Trust Agreement signed with the Government of Ontario on February 16, 1998.

The Trust’s main function is the management of the Ontario Oil, Gas and Salt Resources Library which is an important resource centre offering its members and the public the most up-to-date geological information for the exploration and development of oil and natural gas.

As well, the Library is an integral part of the Ontario Petroleum Institute’s efforts to help reverse Ontario’s declining oil and natural gas production that has occurred in recent years. Together the Institute and the Library actively promote Ontario as a profitable exploration and development opportunity throughout North America.

Oil has flowed from wells in Ontario for 157 years, and natural gas since 1889. Presently, about 120 companies and individuals, with the support of geologists, engineers, drilling contractors, oilfield services, and a range of professional consulting services, produce oil and natural gas and provide significant natural gas storage in Southwestern Ontario.

The Ontario Oil, Gas and Salt Resources Corporation, the Ontario Oil, Gas and Salt Resources Trust Advisory Committee, and the dedicated team at the Ontario Oil, Gas and Salt Resources Library are committed to providing professional, cost-effective services to meet the requests of clients from Ontario, across Canada, and internationally.

Sincerely,

Frank Kuri
President, Ontario Oil, Gas and Salt Resources Corporation



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Ontario Oil, Gas and Salt Resources Trust

MISSION AND OBJECTIVES

MISSION

The Ontario Oil, Gas and Salt Resources Trust is a non-profit organization established by the Ontario Oil, Gas and Salt Resources Act to provide information management relating to oil, natural gas and salt resources, and fund research, surveys, and laboratory facilities and operations relating to oil or natural gas exploration, drilling or production, the storage of oil, natural gas and other hydrocarbons in geological formations, and the disposal of oil field fluid in geological formations.

OBJECTIVES

The Ontario Oil, Gas and Salt Resources Trust's mandate is to maintain and improve access to existing data, and to develop programs to improve client access to information, develop new data products, and to generate new revenue to sustain operations.

The Ontario Oil, Gas and Salt Resources Trust manages the Ontario Oil, Gas and Salt Resources Library, a resource centre for oil and natural gas exploration, salt solution mining, and subsurface storage and fluid disposal in Ontario.

The Ontario Oil, Gas and Salt Resources Library provides services to companies and individuals involved in oil and natural gas exploration, drilling or production, the storage of hydrocarbons in geological formations, the disposal of oil field fluid in geological formations, and solution mining, as well as to the general public, universities, government ministries and agencies, companies providing geotechnical, geothermal and groundwater services, and other clients. Services are provided on a cost recovery basis.

The Ontario Oil, Gas and Salt Resources Library provides its clients in these resource industries with the data they need to conduct their business in the most orderly, safe and efficient way possible. It also provides public access to this data at reasonable cost.

1.0 Introduction

The Ontario Oil, Gas and Salt Resources Trust (Trust) 2014 Annual Report was prepared to fulfill the mandate of the “Trust Agreement” between the Province of Ontario and the Ontario Oil, Gas and Salt Resources Corporation (Corporation), an entity established by the Ontario Petroleum Institute (OPI).

2.0 Executive Summary

The 2014 Annual Report identifies both the long-term strategy and short-term action plans undertaken by the Trust in operating the Ontario Oil, Gas and Salt Resources Library (Library) as a resource centre for the Ontario oil and natural gas, hydrocarbon storage, and salt solution mining industries.

The Library strives to be a self-sustaining organization that generates the majority of its revenues from the Ontario oil and natural gas industry. Despite declining revenues from reduced exploration and development activity in recent years, the Library has recovered from running operating deficits in 2011 and 2012 to reporting surpluses in 2013 and 2014. This is due largely to the management of expenses as well as ongoing project support from the Ontario Ministry of Natural Resources and Forestry (MNRF).

In 2014, the Library continued to promote its expertise and services to achieve financial sustainability. The Library works closely with the MNRF to plan and execute projects that provide both financial benefit to the Library as well as data and products that contribute to the progressive development of Ontario’s natural resources.

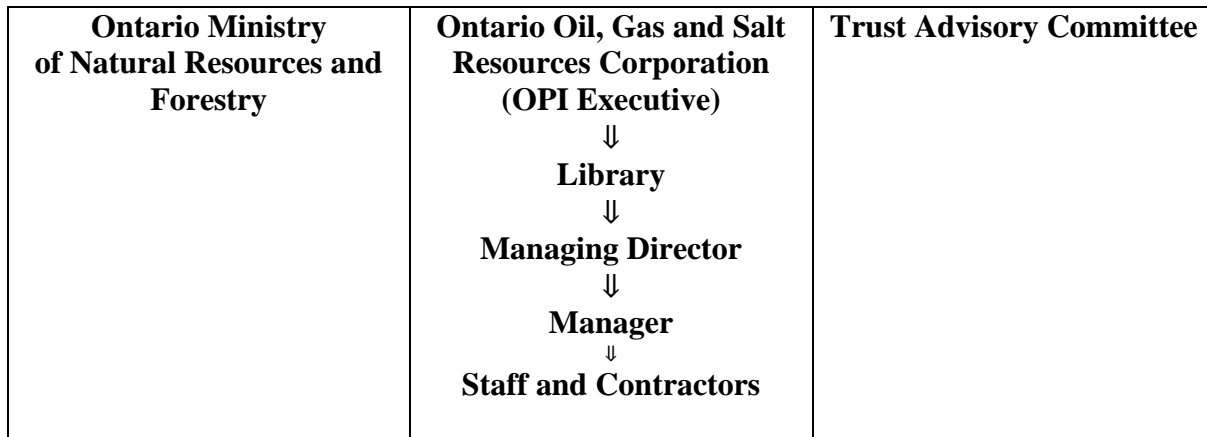
A proposal submitted to the MNRF requesting changes to the annual well license fee assessment in Ontario Regulation 245/97 was approved by the Government of Ontario and took effect in January of 2015.

3.0 The Ontario Oil, Gas and Salt Resources Trust

The Trust was formed by the Ontario Ministry of Natural Resources and Forestry pursuant to amendments made to the Oil, Gas and Salt Resources Act in 1997. A Trust Agreement, dated February 16, 1998, was signed with the “Original Trustee”, the Corporation, an entity established by the OPI. Responsibilities for operation of the Library were transferred to the Corporation. The OPI is the sole shareholder of the Corporation. The Executive of the OPI are the officers of the Corporation and the Managing Director of the Trust is the Executive Director of OPI.

Requirements for a Trust Advisory Committee (TAC) exist within the Act and the Trust Agreement. The TAC is comprised of four representatives from the oil and natural gas exploration and production industry and one representative from each of the natural gas storage, hydrocarbon cavern storage, and salt solution mining industries. A representative from the MNRF sits on the committee as a non-voting member. The TAC members are appointed by the Corporation. The TAC meets regularly to advise on Trust policy, operations and budget.

3.1 The Structure of the Trust Agreement:



3.2 Ontario Oil, Gas and Salt Resources Corporation

Officers (Ontario Petroleum Institute Executive)

Frank Kuri, President

Dale Holland, First Vice-President

Dave Bond, Second Vice-President

Jack Norman, Treasurer

Gray Taylor, Secretary

3.3 Ontario Oil, Gas and Salt Resources Trust Advisory Committee

Land: Dale Norman, Elexco Ltd.
Production: Ian Colquhoun, Ian Colquhoun Consulting
Andre Czychun, Manfred Resources
Salt: Bill Cocchio, Windsor Salt
Natural Gas Storage: Shelie Cascadden, Union Gas
Cavern Storage: Dean Edwardson, Sarnia-Lambton Environmental Association
Consulting: Mike Dorland, Consulting Geologist
Government: Terry Carter, MNRF (non-voting member)

3.4 Ontario Oil, Gas and Salt Resources Library

Hugh Moran, Managing Director
Jordan Clark, Manager
Nicole Ramesar-Fortner, Data and Operations Administrator

4.0 Industry Summary

Ontario's petroleum and salt solution mining industries includes the following activities:

- (i) oil exploration and production;
- (ii) natural gas exploration and production;
- (iii) natural gas underground storage;
- (iv) salt solution mining; and
- (v) hydrocarbon underground storage associated with the petroleum refining and petrochemical manufacturing industry.

These activities provide Ontario consumers with the following:

- (i) storage of natural gas imported to Ontario from sources in Saskatchewan, Alberta, British Columbia and the northeastern United States by pipeline and held in reserve to supplement times of peak demand. This becomes very important with the switch from coal to natural gas generation of electricity;
- (i) table salt and industrial salt – Ontario is a net exporter of salt produced from salt solution mining;
- (ii) underground storage caverns of product necessary for Ontario's petrochemical and refining industry;
- (iii) a small percentage of Ontario's demand for oil and related products; and
- (iv) a small percentage of Ontario's demand for natural gas

An estimate of the oil and gas industry's contribution to the Ontario economy includes:

- (i) approximately 1,000 plus people directly employed in exploration, production, storage and salt solution mining in Ontario;
- (ii) industry assets = \$650 million;
- (iii) personal total taxable income of \$55 million;
- (iv) services and goods purchased by the industry totaling \$90 million;
- (v) lease payments and royalties paid to land owners and the crown totaling \$10.4 million; and
- (vi) municipal taxes exceeding \$4 million per year.

The value of hydrocarbon production and storage in Ontario in 2014 included:

- (i) 1,221 wells producing 68,212 m³ (429,039 barrels) of oil valued at \$42.3 million
- (ii) 1,211 wells producing 159,392 thousand m³ (5.6 Bcf) of natural gas valued at \$31.7 million
- (iii) 6,900 million m³ (244 Bcf) of natural gas storage capacity - estimated value \$1 billion
- (iv) 3.5 million m³ of liquid hydrocarbon storage capacity – estimated valued \$2 billion

The annual value of the Ontario oil and natural gas production and storage sector is \$4 billion.

5.0 Ontario Oil, Gas and Salt Resources Library – A Resource Centre

5.1 Resources

The Ontario Oil, Gas and Salt Resources Library can trace its origin to the late 1800's, when the Geological Survey of Canada solicited voluntary submissions of drill cuttings and core from oil and natural gas wells drilled in Ontario and other parts of the country. This informal collection evolved into the establishment of a core and drill cuttings sample processing, storage and study facility in Ottawa. In 1950, a similar facility was established in Calgary and all Western Canada drill cuttings samples were transferred to Calgary. In 1971, the Ontario cores and drill cuttings samples were shipped to the new Petroleum Resource Laboratory in London, Ontario. Before the Oil, Gas and Salt Resources Trust Agreement the lab was operated by the Ontario Ministry of Natural Resources and Forestry.

The Library houses resources and data available for study including: (i) drill cuttings samples from over 13,100 wells; (ii) cores from over 1,027 wells; (iii) file information on approximately 27,000 wells including geophysical logs, formations tops, well history and construction; (iv) oil/gas/water zones, initial completion results; (v) core analyses, (vi) oil/natural gas/water analyses; and (vii) an extensive collection of reference books, periodicals and reprints on the subsurface geology of oil, gas, salt and subsurface storage resources of Ontario.

The project to digitize all hard-copy petroleum well records remained as a first priority in 2014, accounting for over 125,000 scanned pages of original well completion, well plugging and other technical reports on file. The original paper archive can now be viewed online as scanned images. This digitization project is now completed.

The Ontario Petroleum Data System (OPDS) data entry project is complete with a total count of approximately 27,000 wells on record. The second phase “Data Integrity” project has further enhanced data accuracy and remains as an ongoing effort.

A pools and pipelines update was completed in 2014, summing up total cumulative production numbers for all pools producing natural gas and crude oil in Ontario. A geographical component of this project produced a new map layer of updated pool boundaries. A final report was published as the Oil and Gas Pools and Pipelines Map of Southern Ontario.

5.2 Services

The Library is visited by industry participants that need to view data files relating to wells drilled in Ontario (e.g., well cards, production information, plugging information, etc.), core and drill cuttings samples for wells drilled in Ontario, maps of well locations, and open file reports on the industry. Clients can review materials in the Library, and take copies of the data files for studying outside of the Library. An ArcGIS workstation is available for client use and is equipped with the MNRF proprietary PetroGIS software for performing spatial queries on the digital petroleum well database and with Surfer 8© digital gridding and contouring software for subsurface geological mapping. The Library also provides a drill cuttings sample processing service and a core slabbing service.

In addition, the Library operates a dynamic website (www.ogsrlibrary.com) which contains summaries of reference materials and a growing list of regularly updated reports that include drilling activity and newly issued well licenses. Member access includes individual well history with available records of geology, laboratory analyses, geophysical logs, production, plugging and stimulation.

Basic digital petroleum well identification and location data for all counties in Ontario is posted to the Library website for complimentary downloading. A set of enhanced and value-added subsurface data for all counties is available for purchase. The Library staff utilizes this digital data for plotting specialized maps which combine different data types including well locations, bedrock geology, bedrock topography, oil and gas pools, and digital elevation models for Ontario as well as incorporating results from data queries and filters.

The production module for the Library's well database now incorporates 70,000 scanned production forms. These forms are posted on the website and can be viewed at no charge by the public. This module also contains digitized monthly production data for all wells completed between 1992 and 2014. The Library has over 7.5 million rows of digital production data available for query and for download by individual and corporate members.

5.3 Ongoing Initiatives

5.3.1 Digitization of Hard-copy Petroleum Well Records

The project to scan original source documents is already proving its worth as the industry responds positively to thousands of records being instantly available online. This project was sponsored by MNRF and was completed in the second quarter of 2014.

5.3.2 Digital Archiving of Geophysical Logs

A major undertaking in 2012 was the digital log archiving which produced 20,000 geophysical log scans from paper records becoming an additional online resource. This project continued into its second phase during 2014 incorporating depth registration for each image captured. The project results are being used in the marketing of Ontario at industry meetings and events.

5.3.4 Seismic Surveys and Shot Lines

Following industry feedback, in 2014, the Library approached a majority of companies that own seismic surveys in Ontario and proposed a one point data exchange for those interested in exploration. The objective of this venture was to encourage investment in the Ontario oil and natural gas industry. All seismic shot lines were verified using historical records and a digital compilation was produced.

5.3.4 Log Digitizing

The federal Targeted Geoscience Initiative (TGI) provided initial funds to obtain hardware and software to scan and digitize hard-copy geophysical well logs. Staff have been trained in digital acquisition, and can digitize logs upon client request. A fee is charged for this work.

There is a continuous review of current digital data pricing. To date, 20,000 geophysical well logs have been scanned and catalogued as TIFF files and 4,700 well logs have been digitized as LAS files.

5.3.5 Digital Data Access

The Library will continue to work, in partnership with the MNRF, to build, maintain and market a digital database of geological and engineering information from wells drilled in Ontario. The Library will be the exclusive data vendor for information on Ontario oil, natural gas, salt solution mining and hydrocarbon storage wells based on the Data Resale Agreement with MNRF.

Current Activity:

- MNRF maintains an operational database of wells drilled into bedrock in Ontario within the Ontario Petroleum Data System (OPDS). All well information, with the exception of production records are entered into this database. Sale of value-added subsurface data from OPDS by the Library began in 2003 and is ongoing. Data include geological formation tops, logging records, and oil/natural gas/water interval records.
- A data sharing agreement has been signed between the MNRF Information Access Section and the Ontario Oil, Gas and Salt Resources Corporation. The agreement allows corporate members of the Library to use MNRF Digital Base Maps.
- The Library is updating geographic co-ordinates for a number of wells, populating the metadata record for well location accuracy, and performing quality assurance checks and corrections for oil, gas, and water interval records in OPDS.
- Well production history is one of the most sought after items by Library users. The Library has produced a digital dataset of well production history and has posted the data on its website for use by members. This project was funded in part by the MNRF.

6.0 Marketing

In 2014 the Trust marketed the Library as a resource centre with an emphasis on business development through the promotion of the Library's client services.

These activities generated sources of non-fixed revenue for the Library from three strategic areas:

- **Data sales**
- **Projects**
- **Membership**

6.1 Business Development

The Library's business development activity targeted additional project work, sales of information and data, and new memberships. The efforts were focused on the geographical markets of Ontario, Alberta, and the mid-western and northeastern USA.

In Ontario, potential new members are usually the current operators of oil, natural gas, salt solution mining, natural gas storage, oil field fluid disposal or petroleum product storage wells, or a consultant providing services to these operators. Outside of Ontario, potential clients are resource exploration companies considering new jurisdictions for investment or activity.

The Library continues to look for opportunities to sell data and information to current and potential clients. Various sectors of the economy doing subsurface work such as geothermal and water well drilling that have regulatory and environmental compliance requirements may benefit from resources offered by the Library.

Potential project work opportunities normally come from the MNR and existing member companies and individuals.

The primary market for Library membership incorporates oil and natural gas, hydrocarbon storage and salt/ solution mining companies that are regulated by the MNR. Of the 120 companies that are currently assessed well license fees 30 are Library members. In 2014, the Library targeted companies that operate wells licensed under the Ontario Oil, Gas and Salt Resources Act but do not have a Library membership.

Other membership potential exists within any sector that performs subsurface work in Ontario. This includes government ministries and agencies, companies providing geotechnical, geothermal and groundwater services, and academic and institutional researchers.

6.2 Promotion

The Library's promotional activity in 2014 focused on exhibiting at conferences to obtain exposure to key sectors that represent revenue opportunities for membership, projects and data sales.

Conferences attended in 2014:

- North American Prospect Expo
- Pennsylvania Oil and Gas Association Conference and Trade Show
- Calgary Dealmakers Prospect Expo
- American Association of Petroleum Geologists
- Ontario Groundwater Association
- Ontario Geothermal Association

These conferences offered opportunities for the Library to partner with other organizations including the OPI and MNR in order to maximize its exposure.

***7.0 2014 Ontario Oil, Gas and Salt Resources Trust Financial Statement
(See Appendix I)***

7.1 Revenue

The Trust's revenue is derived mostly from fixed income in the form of well license fees, and non-fixed income from memberships, data sales and projects.

The fixed revenue from well license fees is the largest of these sources and is collected annually through Ontario Regulation 245/97 which obligates producers to submit a yearly production-based payment assessed by the MNRF. Revenues from these fees were slightly lower in fiscal 2014.

Non-fixed revenue from memberships exhibited a marginal increase. Data sales were much stronger while project revenue decreased ending the year slightly under the budget projection.

The Trust's overall income decreased by 10% in 2014.

7.2 Expenses

The Library's expenses rose by just over 8% in 2014 with contract wages, promotion and travel, and rent having the highest year-over-year change.

The Library experienced higher costs necessitated to complete project work, for improvements to the parking lot, and for enhanced marketing efforts in conjunction with the OPI to promote Ontario oil and natural gas exploration potential throughout North America.

Full details are in the 2014 Ontario Oil, Gas and Salt Resources Trust Financial Statements in the attached Appendix I.

8.0 A Sustainable Future

The Ontario Oil, Gas and Salt Resources Trust has successfully supported the oil and natural gas, hydrocarbon storage, and salt solution mining industries in and outside of Ontario. It is a self-funded organization with a connection to government. Not unlike a crown corporation, it is an excellent example of how the marketplace and public are well served.

On the revenue side well license fees remained unchanged for 2014. The Fee Schedule Proposal submitted in the fall of 2012 received approval from the Government of Ontario and took effect on January 1, 2015. The increase in well license fees will have a significant effect on the Library's revenue in 2015.

The Trust's expenses have remained relatively stable since 2011, fluctuating either up or down approximately 10%.

The increase in revenue expected in 2015 coupled with the contingency reserve the Trust has built up to ensure that it has operational stability are strong indicators of a sustainable future for the Library.

9.0 Priorities 2014

The Ontario Oil, Gas and Salt Resources Trust set our four priorities in its 2014 Business Plan:

- (1) Develop initiatives to secure long-term financial stability for the Ontario Oil, Gas and Salt Resources Trust for the operation of the Ontario Oil, Gas and Salt Resources Library.
- (2) Marketing activity to increase membership, project contracts, and client services rendered.
- (3) Provide the most up-to-date data available and develop a broad selection of products to offer members and clients.
- (4) Provide members and clients with ease of access – onsite and online – to the store of information housed in the Library.

Regarding priority (1), the approval by the Government of Ontario to raise the well license fees assessed by the Library will provide the Trust with stable, long-term income.

With respect to priority (2), the Library's profile has been enhanced substantially by its involvement with the Ontario Petroleum Institute while promoting Ontario as a profitable exploration and development opportunity throughout North America.

On numbers (3) and (4), the Library, enhanced by digitization and the ease of access available now through the internet, is established as the primary source for products, services and support for organizations and individuals with interests in Ontario oil and natural gas exploration and production, hydrocarbon storage and salt solution mining.



Ontario Oil, Gas and Salt Resources Trust
(Ontario Oil, Gas and Salt Resources Library)

