

# NWT Oil and Gas Annual Report 2014



# Northwest Territories Oil and Gas Annual Report 2014

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I am pleased to present this report of oil and gas activities in the Northwest Territories for the year ending December 31, 2014.

2014 brought many changes to resource development in the Northwest Territories (NWT) - the biggest being the transfer of administrative responsibility for the territory's petroleum resources to the Government of the Northwest Territories on April 1, 2014. These interests are now administered by the Department of Industry, Tourism and Investment. The transition was as smooth as possible for all stakeholders, both those new to the process and those familiar with the territorial oil and gas sector. The rights issuance process that is currently underway is the first of its kind managed by the GNWT.

Fluctuations in the global marketplace have resulted in a significant slowdown in the pace of exploration in the NWT. Now is the opportunity to look forward to secure our resource development future. In support of that planning, a new Oil and Gas Strategy is being developed, which will look at the current state of the sector and identify projects and initiatives that need to be established to attract new investment to ensure a strong and diversified economy for the NWT.

David Ramsay  
Minister, Industry, Tourism and Investment  
May 2015

# NORTHWEST TERRITORIES OIL AND GAS PROGRAM SUMMARY

## OVERVIEW

In 2014, the oil and gas sector in the Northwest Territories underwent a significant transformation. On April 1, the Government of the Northwest Territories (GNWT) took a significant step forward in its evolution and took greater control of its resource development future when the devolution process was completed.

Devolution brought great change to some of the areas of responsibility in the NWT, but little change in terms of the administration and management of our petroleum resources. Many of the long-standing practices that had been followed by Aboriginal Affairs and Northern Development Canada have been continued by the GNWT and have helped to establish a solid foundation for the oil and gas regime in the NWT.

Although the responsibility for the management of NWT petroleum resources in the onshore areas (except federal areas) was transferred to the GNWT, the responsibility for administration of offshore resources remains with the Government of Canada.

The Government of the Northwest Territories assumed responsibility for oil and gas activities on April 1, 2014.

Change also came to the global market in the form of falling oil prices. Economic considerations became a key factor in how many interest holders decided to proceed with their projects.

The Central Mackenzie Valley continued to be the main focus of oil and gas projects in the NWT. Interest also remains relatively high in the future potential of the southern NWT regions, but many plans for the short-term have been pushed back in light of the falling prices for oil. The continued low prices for natural gas in North America resulted in many projects in the NWT being delayed.

Rights issuance processes, the method by which exploration licences are awarded, will continue in a manner similar to what has been done in the past, and 2014 saw the NWT initiate its first-ever Call Cycle process, completing a Call for Nominations in November 2014 and preparing for administering the first-ever Call for Bids process run by the GNWT.

Work also began on the establishment of the NWT Environmental Studies Research Fund (ESRF), another responsibility that moved to the GNWT. Originally established by the federal government in the 1980s, the ESRF is a research program that focused on environmental and social studies related to oil and gas exploration and development on Canada's frontier lands. The requirements for the establishment of a NWT equivalent are included in the Petroleum Resources Act (PRA), which came into force on April 1, 2014.

## DEVOLUTION

On April 1, 2014, the Government of Canada completed the transfer of responsibility for public land and rights in respect of water and resources to the GNWT.

Responsibility for the management of petroleum resources was vested with the Department of Industry, Tourism and Investment (ITI). A nine-person unit - the Petroleum Resources Division - was established in Inuvik to discharge those responsibilities.

Devolution also brought a new regulatory body for oil and gas activities to much of the NWT. The Minister of Industry, Tourism and Investment became the regulator of record for onshore areas of the NWT outside of the Inuvialuit Settlement Region and certain federal areas, where the National Energy Board (NEB) remains the regulator. An eight-person unit - the Office of the Regulator of Oil and Gas Operations (OROGO) - was established to support the Regulator to discharge those responsibilities.

## 2014 IN BRIEF

### *Rights Management*

Two Calls for Nominations in the Central Mackenzie Valley and the Mackenzie Delta/Arctic Islands closed on November 21, 2014. Two parcels were nominated in the Central Mackenzie Valley, and preparations began to launch a Call for Bids in this region. No parcels were nominated in the Mackenzie Delta/Arctic Islands area.

### *Operations*

There were no new wells drilled in the NWT between April 1 and December 31, 2014.

There was no seismic work conducted in the NWT between April 1 and December 31, 2014.

### *Production*

Oil Production:  
51,941 barrels

Natural gas production:  
936,634 cubic feet

(OROGO April 1-  
December 31, 2014)

According to the Northwest Territories Production Statistics report compiled by OROGO, the total aggregate oil production between April 1 and December 31, 2014 was 51,941 barrels. The total aggregate natural gas production in the NWT was 936,634 cubic feet between April 1 and December 31, 2014. These totals do not take into account production levels in the Norman Wells Proven Area, which remains the responsibility of the Government of Canada.

## ***Benefits***

In 2014, the GNWT revised existing guidelines for Benefits Plans to better reflect the particular needs of the territory and released Benefits Plan Guidelines for Northwest Territories Petroleum Lands. This guidance document provides prospective interest holders with all the information they need to develop a Benefits Plan for their exploration ventures. All Benefits Plans must be approved by the Minister of ITI and be in place before work authorizations are issued.

In 2014, two Benefits Plans were approved by the GNWT.

## ***Northwest Territories Environmental Studies Research Fund (NESRF)***

Devolution of responsibilities for oil and gas meant that the NWT was required to create its own Environmental Studies Research Fund (ESRF), a provision of the PRA. The fund is supported by levies applied to active oil and gas interests in the NWT. The ESRF is designed to support the study of the environmental impact on oil and gas exploration in the territory.

Much of the work in 2014 focused on the initial design and set-up of the fund, building upon the framework of the existing federal ESRF, administered by Natural Resources Canada.

## **OIL AND GAS RESOURCES**

A November 2014 resource assessment by the National Energy Board found estimates for natural gas in the NWT were 40 percent higher than previously thought, while oil was 11 percent less and natural gas liquids were estimated at 25 percent less than previously thought.

Long seen as one of the last areas of untapped petroleum resource potential in the world, estimates indicate that the circumpolar Arctic region could be home to as much as 37 percent of the globe's remaining oil and gas reserves, according to the United States Geological Survey. In the NWT, increased interest in potential oil reserves has been the key driver in the sector, as unconventional plays in the territory have shown considerable potential for high-quality tight oil and associated gas.

In November 2014, the NEB released its Assessment of Discovered Conventional Petroleum Resources in the Northwest Territories and Beaufort Sea, which compiled data for the discovered petroleum resources in the NWT mainland, Arctic Islands and Beaufort Sea in one report - the first of its kind ever compiled by the NEB.

Among its findings, the NEB found that natural gas estimates were 40 percent higher than previous assessment, but oil and natural gas liquids estimates were down 11 and 25 percent respectively. This assessment only examined discovered conventional resources, as the focus on unconventional (i.e. shales, tight sandstones and carbonates) resource potential in the NWT is still in the very early stages.

**Table 1: Discovered conventional resource volumes in the Northwest Territories**

<b>TYPE</b>	<b>NWT Onshore</b>	<b>Arctic Islands</b>	<b>TOTAL</b>
Natural Gas billion m <sup>3</sup> (trillion cubic feet)	213.8 (7.6)	75.2 (2.6)	289.0 (10.2)
Natural Gas Liquids million m <sup>3</sup>	8.3 (52.1)	0.0 (0.0)	8.3 (52.1)
Oil million m <sup>3</sup> (million barrels)	84.1 (529.4)	4.9 (31.0)	89.0 (560.4)

National Energy Board, Assessment of Discovered Conventional Petroleum Resources in the Northwest Territories and Beaufort Sea, November 2014

In addition to the NEB's most recent assessment of the NWT's discovered, marketable, conventional resource potential, the Northwest Territories Geological Survey (NTGS) also began its own assessment of the resource potential of the territory in cooperation with the NEB. This study is the first of its kind in many years and will provide the GNWT with a better understanding of resources by 2016.

## **OIL AND GAS MANAGEMENT**

### **RIGHTS ISSUANCE**

In general, the rights issuance process can take up to one year to complete. Much of the work surrounding the process is preparatory and organizational, with some timeline requirements legislatively mandated and others more common practice.

In general, the timeline is as follows:

- Consultation and Engagement 1-8 weeks
- Call for Nominations 6 weeks
- Call for Bids 120 days minimum
- Announcement of Results 1 day - 5 weeks
- Issuance 1 day up to 5 months

**TOTAL:** 7.5 months to 1 year



Although the length of some of the stages can vary, some are more critical to the overall success of the rights issuance process itself. The consultation and community engagement stage is a requirement of land claim agreements within the NWT. Some agreements have specific procedures for the manner in which the land claimants are to be consulted. Although there is no legislative requirement that consultations and/or notifications have to be done face-to-face, the practice in previous consultation phases has been to meet with Aboriginal land claim organizations in the areas being considered for offer with particular district land corporations in the affected communities.

Once the consultation has been completed, the process continues forward in the manner that is clearly outlined in the Petroleum Resources Act (sections 13-15), starting with the Call for Nominations.

Generally, the Call for Nominations stage remains open for approximately six weeks. The Call for Nomination is the key stage of the process and involves preparatory work required for the entire call cycle, including:

- Preparation of scenarios
- Coordination of logistical support (communications, geomatics, IT services, etc.)
- Review and publication of all call documents
- Preparation of communications related to the call cycle (bulletins, website content, media releases/backgrounders)

Once the Call for Nominations stage closes and if nominations have indeed been received, the Call for Bids stage invites companies to bid on specific parcels of land, with the bids assessed against one consideration: the dollar value of the work commitment during Period 1 of the issued Exploration Licence (presently five years). Legislative requirements also determine the length of stages of the Call Cycle, with the minimum length for a Call for Bids process being 120 days.

Once the Call for Bids stage has closed and the successful bidders have been identified (should there have been any bids submitted), the next stage of the process is the issuance of Exploration Licences. The issuance stage of the cycle has two components: the announcement of results and the actual issuance of the licence(s). Once the successful bidder(s) has/have been notified and the results of the Call for Bids process have been posted online, successful bidders have 15 working days to submit their work deposit and the required issuance fee. If no work deposit and no issuance fee are received within the required time frame, the bid is disqualified and the deposit is forfeited.

## **2014 CALL CYCLE**

In 2014, the GNWT administered its first rights issuance process for oil and gas exploration rights. Closely following the structure and process set out by the Government of Canada in previous years, the GNWT intends to manage rights issuance processes on an annual basis.

# Central Mackenzie Valley

The Call for Nominations closed on November 21, 2014 with two parcels nominated.

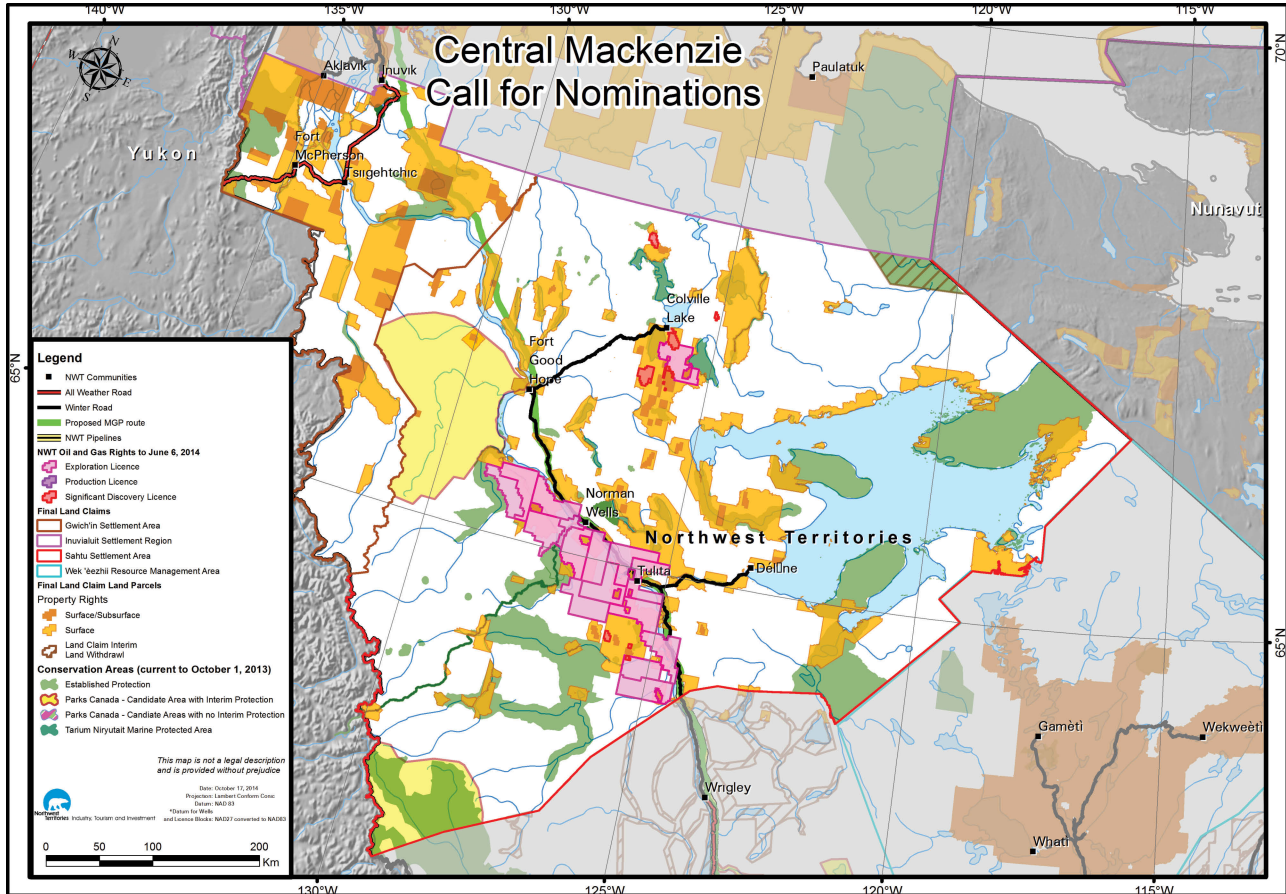


Figure 1: Central Mackenzie Valley.

## Mackenzie Delta / Arctic Islands

The Call for Nominations closed on November 21, 2014 with no nominations received.

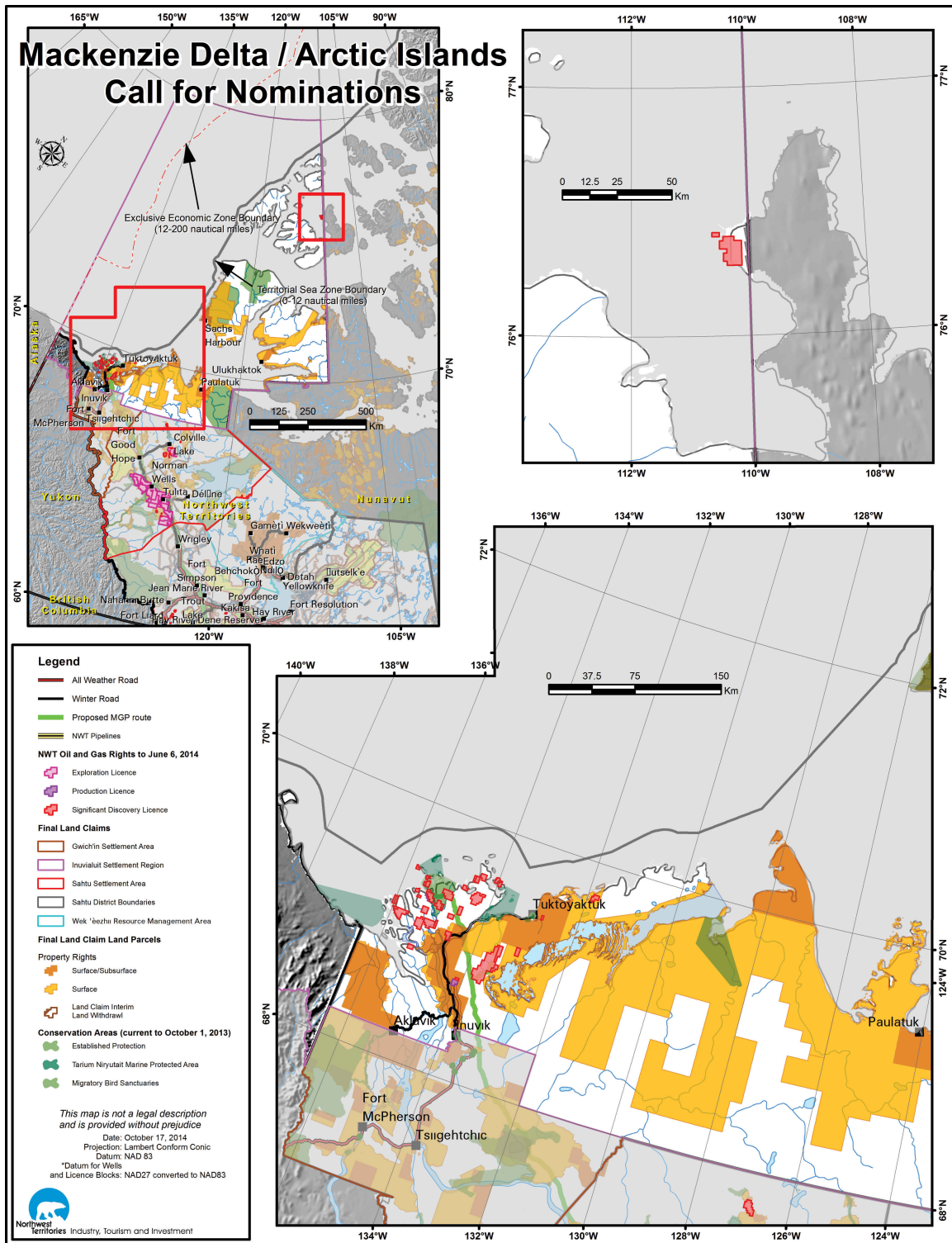


Figure 2: Mackenzie Delta / Arctic Islands.

**Table 2: Land Disposition as of December 31, 2014**

Region	Exploration Licence	Significant Discovery Licence	Production Licence	Petroleum Land Leases
Mackenzie Delta and Arctic Islands	0	38	2	0
Central Mackenzie Valley	15	11	0	0
Southern Northwest Territories	0	31	21	8

Region (hectares)	Exploration Licence	Significant Discovery Licence	Production Licence	Petroleum Land Leases
Arctic Islands	0	10,219	0	0
Mackenzie Delta	0	116,031	3,423	0
Central Mackenzie Valley	1,280,375	52,725	0	0
Southern Northwest Territories	0	65,729	32,842	21,107
TOTAL	1,280,375	244,704	36,265	21,107

These leases and licences were issued under former legislative regimes pursuant to Sections 99 and 101 of the Petroleum Resources Act.

### ***Issuance and Terminations***

Between April 1, 2014 and December 31, 2014, there were no interests issued or terminated.

### ***Exploration Licences***

Fifteen Exploration Licences were transferred to the GNWT by the Government of Canada on April 1, 2014. These licences are now managed by ITI through the Petroleum Resources Division.

### ***Oil and Gas Leases***

Eight Petroleum Land Leases were transferred to the GNWT by the Government of Canada on April 1, 2014. These leases were originally issued in 1971 for a 21-year term under the *Canada Oil and Gas Land Regulations*. The leases were renewed for an additional 21-year term in 1992 and again in 2013.

On April 1, 2014, the following licences were transferred to the GNWT:

- 15 Exploration Licences
- 81 Significant Discovery Licences
- 23 Production Licences
- 8 Petroleum Land Leases

The Petroleum Resources Division maintains a public registry of all petroleum interests and instruments registered under Part 8 of the *Petroleum Resources Act*. The registry stands as the official record of rights holders, and any transfers or changes of ownership are to be duly recorded. A monthly activity report is available at <http://www.iti.gov.nt.ca/infopage/oil-and-gas-monthly-registry-activities>.

**Table 3: Exploration Licences in the NWT**

Licence	Area (Hectares)	Representative <sup>1</sup>	Issue Date	End of Period 1 <sup>2</sup>	Expiry Date	Work Proposal Bid <sup>3</sup>
EL455	80,240	MGM Energy Corporation	5/1/2011	4/1/2014	4/1/2020	1,699,990
EL466B	82,100	MGM Energy Corporation	15/01/2011	9/5/2012	9/7/2016	5,487,626
EL467	87,948	Shell Canada Limited	20/12/2011	19/12/2016	19/12/2020	18,296,208
EL468	87,117	Shell Canada Limited	20/12/2011	19/12/2016	19/12/2020	18,098,660
EL469	26,533	Shell Canada Limited	20/12/2011	19/12/2016	19/12/2020	7,049,269
EL470	87,495	ConocoPhillips Canada Resources Limited	20/12/2011	19/12/2016	19/12/2020	66,712,035
EL471	88,848	Imperial Oil Resources Ventures Limited	20/12/2011	19/12/2016	19/12/2020	21,500,003
EL472	90,632	Imperial Oil Resources Ventures Limited	20/12/2011	19/12/2016	19/12/2020	21,500,003
EL473	82,643	MGM Energy Corporation	20/12/2011	19/12/2016	19/12/2020	1,512,122
EL474	86,602	MGM Energy Corporation	20/12/2011	19/12/2016	19/12/2020	1,502,503
EL475	85,288	MGM Energy Corporation	20/12/2011	19/12/2016	19/12/2020	2,021,213
EL486	69,649	Shell Canada Limited	18/12/2012	17/12/2017	17/12/2021	76,864,864
EL487	84,504	Shell Canada Limited	18/12/2012	17/12/2017	17/12/2021	15,276,444
EL494A	87,748	Husky Oil Operations Limited	29/08/2013	29/08/2016	28/08/2020	188,000,000
EL494B	87,034	Husky Oil Operations Limited	29/08/2013	29/08/2016	28/08/2020	188,000,000
EL495	65,994	International Frontier Resources	16/3/2014	15/03/2019	15/3/2023	1,200,000
TOTAL:	1,280,375					

<sup>1</sup> Current representative as of December 31, 2014

<sup>2</sup> This date is as per the terms and conditions of the original licence.

<sup>3</sup> All amounts rounded to the nearest dollar.

## ***Revenues from Administration of Interests***

Following the completion of a rights issuance process, successful bidders for Exploration Licences are required to post 25 percent of the Work Proposal Bid before the interest can be issued. Referred to as the Work Deposit, this amount is refundable as expenditures incurred through the Period 1 term of the licence. Approved expenditures are refunded to the interest holders at the prorated amount of 25 percent of the total amount of expenditures. Any work balance remaining at the end of Period 1 of an Exploration Licence is forfeited.

As of December 31, 2014, the GNWT held more than \$138 million in work deposits on Exploration Licences.

Provided an interest holder meets all terms and conditions set out in the Exploration Licence and is able to maintain the licence for an additional four years, they are then required to pay rental fees. As with Work Deposits in Period 1, rental fees are refundable as expenditures are incurred on a dollar- for-dollar basis.

Financial deposits held for Period 1 work as of December 31, 2014 totaled \$138,797,113.04.

**Table 4: Revenues from Administration of Interests**

	2011	2012	2013	2014
Non-refundable rentals (leases)	53,195	53,195	53,195	52,202
Fees	35,487	43,497	8,832	106
Forfeitures	25,784,658	1,631,597	50,000	0

### ***Fees***

There were no forfeitures between April 1 and December 31, 2014.

### ***Benefits***

A Benefits Plan is an employment plan for Canadians that also provides Canadian companies with opportunities to supply goods and services to the oil and gas industry. In the NWT, Benefits Plans provides training and employment opportunities for residents and new opportunities for northern businesses by ensuring economic spin-offs from work in the NWT stays within the territory.

Section 17 of the Oil and Gas Operations Act (OGOA) outlines all requirements of a Benefits Plan - and states that no approval for a proposed work plan can begin until the Minister has approved the Benefits Plan. The need for a Benefits Plan - as well as the need for ministerial approval - is also referenced in Section 20 of the PRA.

## EXPLORATION ACTIVITIES IN THE NORTHWEST TERRITORIES

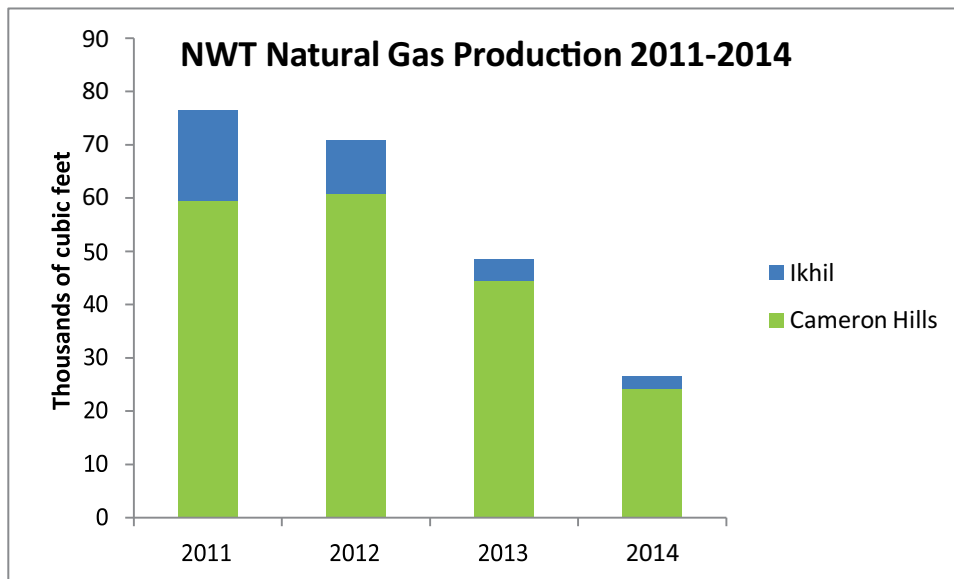
There was no new exploration drilling in the NWT, nor was there any development drilling for this same period. Additionally, there were no seismic programs conducted in the NWT during this period.

## PRODUCTION

Responsibility for two of the three fields currently producing oil and/or gas in the NWT was transferred to the GNWT under the Devolution Agreement. The Norman Wells Proven Area remains under the administration and management of the Government of Canada.

The Cameron Hills field and the Ikhil gas field, while both located in onshore regions of the NWT, are subject to regulation under two distinct bodies - Cameron Hills under OROGO and Ikhil under the NEB.

Production information in this report spans the period from April 1-December 31, 2014.

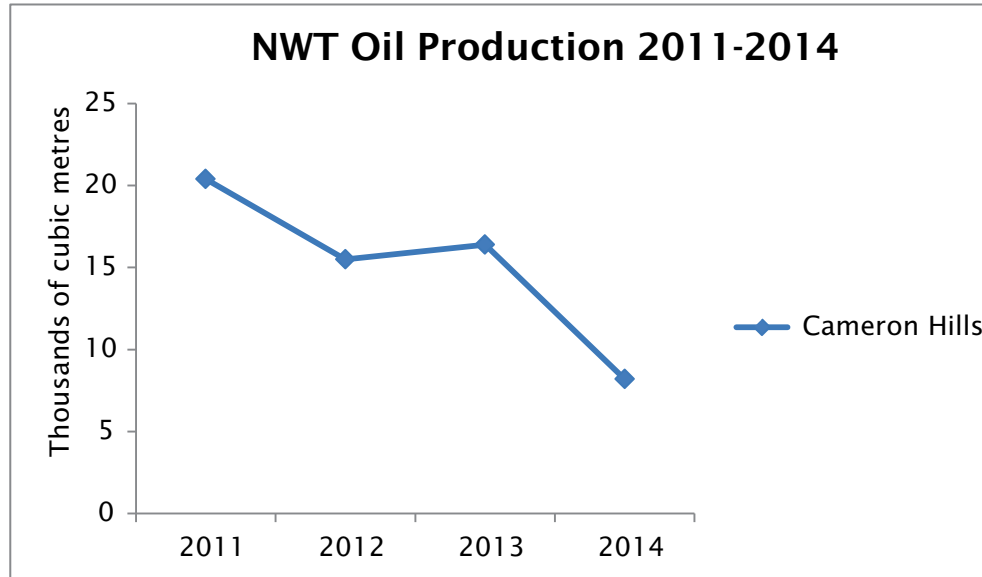


<sup>1</sup>2014 data courtesy OROGO

<sup>2</sup>2011-2013 data courtesy Aboriginal Affairs and Northern Development Canada (AANDC)

## Ikhil

Production levels at Ikhil J-35 well declined in 2014 as efforts to conserve reservoir pressure continued. Gas from this field is used as a back-up system for power generation in Inuvik.



<sup>1</sup>2014 data courtesy OROGO

<sup>2</sup>2011- 2013 Data courtesy AANDC

## Cameron Hills

Production levels at Cameron Hills continued to decline in 2014 as a result of shut-in wells and a natural decline in production volumes from existing wells.

**Table 5: NWT Production Volumes, 2011-2014**

	2011	2012	2013	2014 <sup>1</sup>
<b>Oil (thousands of cubic metres)</b>				
<b>Cameron Hills<sup>2</sup></b>	<b>20.4</b>	<b>15.5</b>	<b>16.4</b>	<b>8.2</b>
<b>Gas Production (millions of cubic metres)</b>				
<b>Ikhil<sup>3</sup></b>	<b>17</b>	<b>10</b>	<b>4</b>	<b>2.3</b>
<b>Cameron Hills</b>	<b>59.4</b>	<b>60.9</b>	<b>44.5</b>	<b>24.3</b>

<sup>1</sup>Data from April 1-December 31, 2014

<sup>2</sup> 2014 data from Office of the Regulator of Oil and Gas Operations, *Northwest Territories Production Statistics* Information for previous years from *Northern Oil and Gas Annual Report 2013* released by AANDC

<sup>3</sup>National Energy Board, *Frontier Production Statistics*



## **FURTHER INFORMATION**

### **PETROLEUM RESOURCES DIVISION**

Please visit our website at [www.nwtpetroleum.com](http://www.nwtpetroleum.com).

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Information on registration procedures and regulations, exploration, significant discovery and production licences, transfers and notices: Registrar, Oil and Gas Rights: Telephone (867) 777-7476 E-Mail: [anne-marie\\_jennings@gov.nt.ca](mailto:anne-marie_jennings@gov.nt.ca)

Information on Petroleum Resources Division maps and Geographic Information System (GIS) data: Telephone (867) 777-7483 E-mail: [stan\\_johnston@gov.nt.ca](mailto:stan_johnston@gov.nt.ca)

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