PETROLEUM EXPLORATION AND DEVELOPMENT IN IRELAND

Report Covering Period 1 July 2020 – 31 December 2020

Report by the Minister for the Environment, Climate and Communications for the six months ended 31 December 2020, in accordance with Section 57 of the *Petroleum and Other Minerals Development Act, 1960*, and the said Section 57 as applied by the *Continental Shelf Act, 1968*.

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Note: Block numbers refer to blocks in the Williams Grid.

INTRODUCTION

This Report sets out:

- the particulars of all Authorisations granted by the Minister for the Environment, Climate and Communications that were current during the reporting period;
- the amount of money relating to petroleum exploration and development collected by the Minister during the reporting period, and
- other information relating to petroleum exploration and development in Ireland.

PART ONE PETROLEUM AUTHORISATIONS

PETROLEUM LEASES

A **Petroleum Lease** vests in the Lessee the exclusive right to produce petroleum from the leased areas.

Lease	Commencement Date	Block Numbers (p) = part block	Area (km²)	Participants (* = Operator)	% Interest
Offshore Petroleum Lease No. 1: Kinsale/Ballycotton	7 May 1970	48/20, 48/25, 49/16 & 49/21	1033.91	PSE Kinsale Energy Limited.	100%
<u>Corrib Petroleum</u> Lease	15 November 2001	18/20(p) & 18/25(p)	29.6694	Nephin Energy Limited Equinor Energy Ireland Limited Vermilion Energy Ireland Limited * Vermilion Exploration and Production Ireland Limited	43.5% 36.5% 18.5% 1.5%
<u>Seven Heads</u> <u>Petroleum Lease</u>	13 November 2002	48/23 (p), 48/24 (p) & 48/29 (p)	87.02	*PSE Seven Heads Limited Island Oil and Gas Limited	87.5% 12.5%
(p) part block * operation	tor	•	•	•	·

Lease Undertakings

A **Lease Undertaking** gives the Holder the right to a Petroleum Lease over that part of the area covered by the Undertaking.

Undertaking	Licence Period	Block No. ((p) = part block)	Area (km²)	Participants (* = Operator)	% Interest
<u>Dunmore Lease</u> <u>Undertaking</u>	1 March 2016 – 28 February 2018 (extension under consideration)	50/6(p) & 50/7(p)	15.1778	*Providence Resources PLC Atlantic Petroleum (Ireland) Limited Sosina Exploration Limited Marginal Field Development Co	65.25% 16.50% 8.25% 10%
<u>Helvick Lease</u> <u>Undertaking</u>	1 March 2016 – 28 February 2018 (extension under consideration)	49/9(p)	4.6317	*Providence Resources PLC Atlantic Petroleum (Ireland) Limited Sosina Exploration Limited Lansdowne Oil and Gas Limited Marginal Field Development Co	56.25% 16.50% 8.25% 9% 10%
<u>Old Head of</u> Kinsale Lease Undertaking	1 March 2019 - 28 Feb 2022	49/17, 49/22 & 49/23	40.1434	*Island Expro Limited Company Valhalla Oil and Gas Limited St. Stephen's Energy Limited	65% 20% 15%
<u>Schull</u> <u>Lease</u> <u>Undertaking</u>	1 March 2019 - 28 Feb 2022	57/1 & 57/2	23.9184	*Island Expro Limited Company Valhalla Oil and Gas Limited St. Stephen's Energy Limited	62.5% 25% 12.5%

(p) part block * operator

OFFSHORE PETROLEUM EXPLORATION LICENCES

A **Petroleum Exploration Licence** vests in the Holder the exclusive right of carrying out exploration for petroleum in a specific licensed offshore area.

<u>Nineteen</u> offshore Petroleum Exploration Licences were current during the reporting period. <u>Six</u> of these Licences were subject to the 1992 '*Licensing Terms for Offshore Oil and Gas Exploration and Development*'. <u>Thirteen</u> Licences were subject to the 2007 '*Licensing Terms for Offshore Oil and Gas Exploration, Production and Development*'.

A **Standard Exploration Licence** is issued for a period of six years in respect of an area with water depths of up to 200 metres and is subject to an annual rental fee for the first three years of \in 182 per km², increasing to \in 365 per km² thereafter.

A **Deepwater Exploration Licence** is issued for a period of nine years in respect of areas in which the water depth exceeds 200 metres and is subject to an annual rental fee for the first three years of €91 per km², increasing to €182 per km² for years 4 to 6 and €365 per km² for the remainder of the licence. There are no extant Deepwater Exploration Licences during the period.

A **Frontier Exploration Licence** may be issued in respect of an area with special difficulties related to physical environment, geology or technology – where such an area is specified and announced by the Minister for the Environment, Climate and Communications as a 'Frontier Area'. This Licence type is valid for a period of not less than twelve years and is comprised of a maximum of four phases. Annual rental during the first phase is €29 per km², €60 per km² during the second phase and €121 per km² for the remainder of the licence.

Licence	Licence Period	Block No. ((p) = part_block)	Area (km²)	Participants (* = Operator)	% Interest
<u>1/04</u> Frontier	15 April 2004 – 31 December 2020	26/27 (p), 26/28, 35/2 (p) & 35/3 (p)	622.0148	*Island Assets Porcupine Limited Valhalla Oil and Gas (Porcupine) Limited Supernova Ireland Resources B.V.	41.5% 38.5% 20%
<u>3/04</u> Frontier	15 November 2004 – 14 November 2025	44/18, 44/23, 44/24, 44/29, & 44/30	1,295.6387	*Eni Ireland BV Repsol Exploracion Irlanda SA Providence Resources Plc Sosina Exploration Limited	36.913% 33.557% 26.846% 2.684%
<u>3/05</u> Frontier	1 July 2005 – 30 June 2022	18/10, 19/1 & 19/6	715.8703	*Island Rockall JV Limited Island Oil & Gas Limited	50% 50%
4/06 Frontier	1 December 2006 – 30 November 2022 * operator	27/17 (p), 27/18, 27/22 (p) & 27/23	741.4741	*Island Oil and Gas Limited Lundin Exploration BV	50% 50%

The 1992 & 2007 Terms also provide for an application fee of €9,122 in each case.

Licence	Licence Period	Block No. ((p) = part block)	Area (km²)	Participants (* = Operator)	% Interest
<u>1/07</u> Standard	1 February 2007 – 30 June 2014 (extension under consideration)	41/25 (p), 42/21 (p), 41/30 (p), 42/26 (p), 50/5 (p) & 51/1 (p)	302.2209	Providence Resources Plc.	100%
<u>2/07</u> Standard	1 February 2007 – 31 January 2013 (Lease Undertaking under consideration)	50/11 (p)	65.3437	*Providence Resources Plc Atlantic Petroleum (Ireland) Limited Sosina Exploration Limited	72.50% 18.33% 9.17%
<u>3/08</u> Frontier	12 March 2008 – 31 December 2022	61/9, 61/10 & 62/6	801.5919	*Island Oil and Gas Limited Supernova Ireland Resources BV	50% 50%
<u>1/11</u> Standard	14 July 2011 – 13 July 2021	48/22(p), 48/23(p),48/24(p), 48/27(p), 48/28(p), 48/29(p) & 48/30(p)	613.9969	*Exola DAC Lansdowne Celtic Sea Limited	80% 20%
<u>1/13</u> Frontier	5 July 2013 – 4 July 2030	44/4(p), 44/5(p), 44/9(p), 44/10, 44/14(p), 44/15(p)	1051.7511	Antrim Exploration (Ireland) Limited	100%
<u>2/13</u> Frontier	5 July 2013 – 4 July 2028	43/9, 43/10(p), 43/14 & 43/15(p).	768.0209	Europa Oil and Gas (Ireland West) Limited	100%
<u>3/13</u> Frontier	5 July 2013 – 4 July 2028	54/1(p), 54/2, 54/6(p) & 54/7.	781.968	Europa Oil and Gas (Ireland East) Limited	100%
<u>5/13</u> Frontier	13 December 2013 – 12 December 2028	35/25(p), 35/30, 36/21(p), 36/26(p), 44/5(p) and 45/1(p)	712.3241	Woodside Energy (Ireland) Pty Limited	100%
<u>1/17</u> Frontier	1 July 2017 – 30 June 2032	54/3 and 54/8	522.5155	Europa Oil & Gas (Ireland East) Ltd	100%
<u>11/18</u> Frontier	1 April 2018 – 31 March 2033	54/11, 54/12, 54/13, 54/16, 54/17 & 54/18	1578.584	*Woodside Energy (Ireland) Pty Limited Petrel Resources plc	90% 10%
<u>12/18</u> Frontier	1 August 2018 – 31 July 2033	53/29(p), 53/30(p), 54/21, 54/22, 54/26, 54/27 & 61/5(p)	1405.276	Eni Ireland BV	100%
<u>1/19</u> Frontier	1 February 2019 – 31 January 2034	44/14(p), 44/15(p), 44/19, 44/20, 44/25, 45/21 and 45/26	1498.4821	AzEire Limited	100%
p) part block	* operator				

(p) part block *

* operator

Licence	Licence Period	Block No. ((p) = part_block)	Area (km²)	Participants (* = Operator)	% Interest
<u>2/19</u> Frontier	1 February 2019 – 31 January 2034	44/2(p), 44/3(p), 44/7(p), 44/8(p), 44/11(p), 44/12, 44/13(p), 44/16(p) and 44/17	1323.5121	*Providence Resources Plc Sosina Exploration Ltd	80% 20%
<u>3/19</u> Frontier	1 July 2019 – 30 June 2034	19/7, 19/8(p), 19/11(p), 19/12(p), 19/16(p) and 19/17	959.7287	*CNOOC Petroleum Europe Limited DNO North Sea (U.K.) Limited	80% 20%
<u>4/19</u> Frontier	1 August 2019 – 31 July 2034	18/14, 18/15, 18/19 and 18/20 (p)	945.0947	Europa Oil and Gas (Inishkea) Limited	100%

(p) part block * operator

*SEL 4/05 converted to Old Head of Kinsale Lease Undertaking with effect 1 March 2019 *SEL 5/05 converted to Schull Lease Undertaking with effect 1 March 2019 *SEL 2/11 licence expired with effect 17 August 2020

LICENSING OPTIONS

A Licensing Option gives the Holder the first right to an Exploration Licence over all or part of the area covered by the Option.

Option No	Option Period	Block Nos. ((p) = part_block)	Area (km²)	Participants (* = Operator)	% Interest
<u>16/26</u> Offshore	1 July 2016 – 30 June 2018 (follow-on application received)	18/24(p), 18/25(p), 18/29(p) and 18/30(p)	302.4861	*Predator Oil and Gas Ventures Limited Theseus Limited	50% 50%
16/30 Offshore	1 December 2016 - 30 November 2019 (follow-on application received)	49/13(p), 49/14(p), 49/15(p), 49/18(p), 49/19, 49/20 and 49/23(p)	799.4052	*Predator Oil and Gas Ventures Limited Theseus Limited	50% 50%

(p) part block operator

*LO 16/31 expired with effect 30 November 2019 – follow on application withdrawn *LO 16/32 expired with effect 30 November 2019 – follow on application withdrawn

PETROLEUM PROSPECTING LICENCES

A Petroleum Prospecting Licence is non-exclusive and confers on the Licensee the right to search for petroleum in any area where an Exploration Licence, Reserved Area Licence or Petroleum Lease is not in force.

Licence No.	No. of Years	Licence From	Licensee
1/19	3	23 April 2019	Providence Resources Plc
1/20	2	1 March 2020	Woodside Energy (Ireland) Pty

*PPL 1/17 expired with effect 1 July 2020 *PPL 2/19 relinquished with effect 22 August 2020 *PPL 3/19 relinquished with effect 8 October 2020

*PPL 4/19 expired with effect 1 July 2020

PART TWO MONEYS RECEIVED

During the six months ended 31 December 2020 the total amount of all moneys collected by the Minister either by way of rentals under or by virtue of any lease, licence or permit, sale of data, gas storage and application fees was €171,519. Details are as follows:

Rentals	Application fees	Assignments of interest	Sale of Data	Gas storage	Total
€166,959	€0	€4,560	€0	€0	€171,519

PART THREE OTHER INFORMATION

EXPLORATION/APPRAISAL WELLS drilled during the 6 months to 31 December 2020

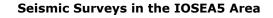
There were no exploration or appraisal wells spudded during the period 1 July 2020 to 31 December 2020.

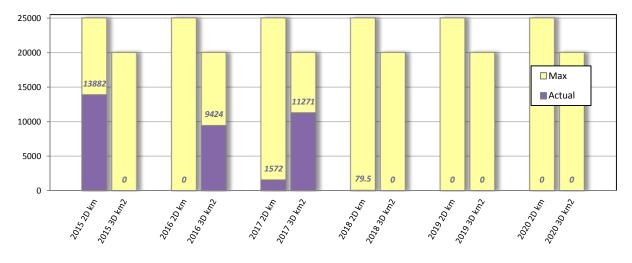
SEISMIC SURVEYS carried out or commenced in the 6 months to 31 December 2020

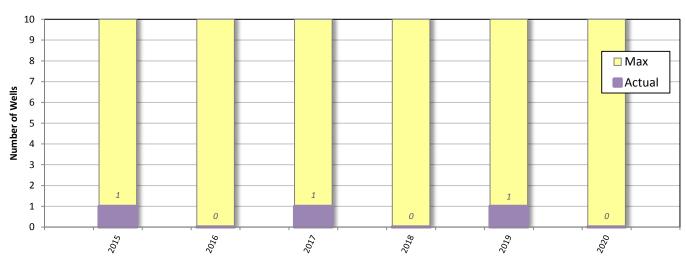
There were no seismic surveys offshore Ireland during the period 1 July 2020 to 31 December 2020.

Actual versus forecast levels of exploration activity – IOSEA5 area Exploration and Production activities (i.e. seismic surveying, exploration, appraisal and development / production drilling) forecast in the IOSEA5 area between 2015 and 2020 (from Table 2.1 of IOSEA5 Environmental Report)

	20	15	20)16	20)17	20)18	20	019	20)20
Type of activity	Min	Max										
2D seismic survey (km)	0	25000	0	25000	0	25000	0	25000	0	25000	0	25000
3D seismic survey (km ²)	0	20000	0	20000	0	20000	0	20000	0	20000	0	20000
Numbers of wells	0	10	0	10	0	10	0	10	0	10	0	10







Drilling in the IOSEA5 Area

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