

Petroleum Exploration & Development Offshore Ireland

Acreege Report at 31 October 2018

Petroleum Leases

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

Lease	Commencement Date	Block No. (p) = part block)	Area (km ²)	Participants (* = Operator)	% Interest
<u>Offshore Petroleum Lease No. 1: Kinsale/Ballycotton</u>	7 May 1970	48/20, 48/25, 49/16 & 49/21	1,033.91	PSE Kinsale Energy Limited	100%
<u>Corrib Petroleum Lease</u>	15 November 2001	18/20 (p) & 18/25 (p)	29.6694	*Shell E&P Ireland Limited Equinor Energy Ireland Limited Vermilion Energy Ireland Limited	45% 36.5% 18.5%
<u>Seven Heads Petroleum Lease</u>	13 November 2002	48/23 (p), 48/24 (p), 48/29 (p) & 48/30 (p)	168.5057	*PSE Seven Heads Limited Island Oil and Gas Plc Sunningdale Oils (Ireland) Limited	86.5% 12.5% 1%

(p) - part block * - operator

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 (km ²)	Participants (* = Operator)	% Interest
<u>Dunmore Lease 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 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%

(p) - part block * - operator

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. There are three types of licenses available, as follows:-

A **Standard Exploration Licence** is issued for a period of 6 years in respect of an area with water depths of up to 200 metres.

A **Deepwater Exploration Licence** is issued for a period of 9 years in respect of an area with water depths exceeding 200 metres.

A **Frontier Exploration Licence** is 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 Communications, Energy and Natural Resources as a ‘Frontier Area’. This licence type is valid for a period of not less than 12 years and comprises a maximum of 4 phases.

Licence	Licence Period	Block No. (p) = part block)	Area (km ²)	Participants (* = Operator)	% Interest
<u>1/04</u> Frontier	15 April 2004 – 14 April 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>2/04</u> Frontier	15 November 2004 – 14 March 2023	35/8 & 35/9	500.9704	*Capricorn Ireland Limited Chrysaor E&P Ireland Limited Providence Resources Plc Sosina Exploration Limited	38% 26% 32% 4%
<u>3/04</u> Frontier	15 November 2004- 15 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 Plc	50% 50%
<u>4/05</u> Standard	1 November 2005 – 31 October 2011 (lease undertaking under consideration)	49/17 (p), 49/22 (p) & 49/23 (p)	258.4936	*Island Expro Unlimited Company Valhalla Oil and Gas Limited St. Stephen's Energy Limited	65% 20% 15%
<u>5/05</u> Standard	1 November 2005 – 31 October 2011 (lease undertaking under consideration)	48/26 (p), 48/27 (p), 57/1 (p), 57/2	664.2061	*Island Expro Unlimited Company Valhalla Oil and Gas Limited St. Stephen's Energy Limited	62.5% 25% 12.5%
<u>1/06</u> Frontier	1 December 2006 – 30 November 2023	27/4(p), 27/5 (p) & 27/9 (p).	305.2562	Serica Energy Slyne BV	100%

(p) - part block * - operator

Petroleum Exploration Licences (continued)

Licence	Licence Period	Block No. (p) = part block	Area (km ²)	Participants (* = Operator)	% Interest
4/06 Frontier	1 December 2006 – 30 November 2022	27/17 (p), 27/18, 27/22 (p) & 27/23	741.4741	*Island Oil and Gas Plc Lundin Exploration BV	50% 50%
1/07 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%
2/07 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%
3/08 Frontier	12 March 2008 – 11 March 2021	61/9, 61/10 & 62/6	801.5919	*Island Oil and Gas Plc Supernova Ireland Resources BV	50% 50%
1/09 Frontier	21 July 2009 – 20 July 2027	5/17(p), 5/18, 5/22(p), 5/23(p), 5/27(p) & 5/28(p)	390.0463	Serica Energy Rockall BV	100%
1/11 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 Limited Lansdowne Celtic Sea Limited	80% 20%
2/11 Standard	18 August 2011 – 17 August 2020	32/25(p), 33/21(p)	171.3823	Providence Resources Plc	100%
1/13 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%
2/13 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%
3/13 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%
4/13 Frontier	1 December 2013 – 30 November 2030	11/10, 11/15, 12/1(p), 12/6 and 12/11(p)	925.0465	Serica Energy Rockall BV	100%

(p) - part block * - operator

*FEL 4/08 surrendered

Petroleum Exploration Licences (continued)

Licence	Licence Period	Block No. (p) = part block	Area (km ²)	Participants (* = Operator)	% Interest
5/13 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)	951.5563	*Woodside Energy (Ireland) Pty Limited Bluestack Energy Limited	90% 10%
2/14 Frontier	1 January 2014 – 31 December 2028	52/5(p), 52/10(p), 52/15(p), 53/1(p), 53/6(p) & 53/11(p)	872.0474	*Total E&P Ireland BV Providence Resources Plc Capricorn Ireland Ltd Sosina Exploration Limited	35% 28% 30% 7%
3/14 Frontier	1 March 2014 – 31 August 2030	35/23(p), 35/24(p) & 35/25(p)	474.8583	*Woodside Energy (Ireland) Pty Limited Petrel Resources plc	85% 15%
5/14 Frontier	1 March 2014 – 31 August 2030	34/19(p), 34/20(p), 34/24(p), 34/25(p), 35/16(p) & 35/21(p)	1,135.8951	*Woodside Energy (Ireland) Pty Limited AzEire Limited	60% 40%
6/14 Frontier	1 April 2014 – 31 March 2029	61/13(p), 61/14, 61/15, 61/18(p), 61/19(p), 61/20(p), 62/11(p) & 62/16(p)	1,203.9441	*Providence Resources Plc Sosina Exploration Limited	80% 20%
1/17 Frontier	1 July 2017 – 30 June 2032	54/3 and 54/8	522.5155	Europa Oil & Gas (Ireland East) Ltd	100%
1/18 Frontier	1 March 2018 – 28 February 2033	61/7(p), 61/8(p), 61/11, 61/12 & 61/13(p)	731.0954	Nexen Petroleum U.K. Limited	100%
2/18 Frontier	1 March 2018 – 28 February 2033	61/20(p), 61/22(p), 61/23(p), 61/24(p) & 61/25	874.3265	Nexen Petroleum U.K. Limited	100%
3/18 Frontier	1 March 2018 – 28 February 2033	43/27, 52/2, 52/3, 52/4, 52/9(p) & 52/10(p)	1300.6126	*Nexen Petroleum U.K. Limited ExxonMobil Exploration and Production Ireland (Offshore South) Limited	50% 50%
4/18 Frontier	1 March 2018 – 28 February 2033	60/13, 60/14, 60/15, 60/18(p), 60/19, 60/20 & 61/16(p)	1611.7667	Nexen Petroleum U.K. Limited	100%
5/18 Frontier	1 March 2018 – 28 February 2033	52/7, 52/8, 52/9(p), 52/12, 52/13, 52/14(p), 52/17(p) & 52/18 (p)	1557.3513	*ExxonMobil Exploration and Production Ireland (Offshore South) Limited Equinor Energy Ireland Limited Nexen Petroleum U.K. Limited	25% 50% 25%

Licence	Licence Period	Block No. (p) = part block	Area (km²)	Participants (* = Operator)	% Interest
6/18 Frontier	1 March 2018 – 28 February 2033	61/17, 61/18(p), 61/19(p), 61/22(p) & 61/23(p)	881.2274	*ExxonMobil Exploration and Production Ireland (Offshore South) Limited Equinor Energy Ireland Limited Nexen Petroleum U.K. Limited	25% 50% 25%
7/18 Frontier	1 March 2018 – 28 February 2033	53/27(p), 53/28(p), 53/29(p), 53/30(p), 61/2(p), 61/3, 61/4, 61/5(p), 61/7(p) & 61/8(p)	1597.2843	* Equinor Energy Ireland Limited ExxonMobil Exploration and Production Ireland (Offshore South) Limited	50% 50%
8/18 Frontier	1 March 2018 – 28 February 2033	53/26(p), 53/27(p), 60/4(p), 60/5, 60/8(p), 60/9(p), 60/10(p), 61/1, 61/2(p), 61/6(p) & 61/7(p)	1598.7622	* Equinor Energy Ireland Limited ExxonMobil Exploration and Production Ireland (Offshore South) Limited	50% 50%
9/18 Frontier	1 March 2018 – 28 February 2033	60/10(p), 61/6(p), 61/7(p) & 61/8(p)	473.1863	* Equinor Energy Ireland Limited ExxonMobil Exploration and Production Ireland (Offshore South) Limited	50% 50%
10/18 Frontier	1 March 2018 – 28 February 2033	52/27(p), 52/28(p), 52/29(p), 60/2, 60/3, 60/4(p), 60/7(p) & 60/8(p)	1597.722	* Equinor Energy Ireland Limited ExxonMobil Exploration and Production Ireland (Offshore South) Limited	50% 50%
11/18 Frontier	1 March 2018 – 28 February 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%
12/18 Frontier	1 August 2018 – 31 July 2018	53/29(p), 53/30(p), 54/21, 54/22, 54/26, 54/27 & 61/5(p)	1405.276	ENI Ireland B.V.	100%

(p) - part block

* - operator

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 (km ²)	Participants (* = Operator)	% Interest
16/15 Offshore	1 May 2016 – 30 April 2018 (extension under consideration)	55/9, 55/10, 55/14 and 55/15	1048.7154	Theseus Limited	100%
16/17 Offshore	1 July 2016 – 30 June 2018 (follow-on application received)	44/14(p), 44/15(p), 44/19, 44/20, 44/25, 45/21 and 45/26	1498.4821	AzEire Limited	100%
16/18 Offshore	1 July 2016 – 30 June 2018 (follow-on application received)	34/29, 34/30, 35/26, 43/4, 43/5 and 44/1	1528.441	Capricorn Ireland Ltd	100%
16/19 Offshore	1 July 2016 – 30 June 2018 (follow-on application received)	35/27(p), 43/10(p), 43/15(p), 44/2(p), 44/6, 44/7(p) and 44/11(p)	975.5783	*Capricorn Ireland Limited Europa Oil and Gas (Holdings) PLC	70% 30%
16/20 Offshore	1 July 2016 – 30 June 2019	18/14, 18/15, 18/19 and 18/20(p)	945.0947	Europa Oil and Gas (Inishkea) Limited	100%
16/22 Offshore	1 July 2016 – 30 June 2019	75/21, 75/26, 82/25 and 82/30	992.4618	Europa Oil and Gas (Holdings) PLC	100%
16/23 Offshore	1 July 2016 – 30 June 2019	19/7, 19/8(p), 19/11(p), 19/12(p), 19/16(p) and 19/17	959.7287	*Nexen Petroleum UK Limited Faroe Petroleum (U.K.) Limited	80% 20%
16/24 Offshore	1 July 2016 – 30 June 2018 (follow-on application received)	26/26, 26/27(p), 35/1 and 35/2(p)	663.988	Petrel Resources plc	100%
16/26 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%

(p) - part block * - operator

*LO 16/16 and 16/25 expired

*LO 16/21 surrendered

Option No	Option Period	Block Nos. (p) = part block	Area (km ²)	Participants (* = Operator)	% Interest
16/27 Offshore	1 July 2016 – 30 June 2018 (follow- on application received)	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	*Total E&P Ireland BV Providence Resources Plc Sosina Exploration Ltd	50% 40% 10%
16/28 Offshore	1 July 2016 – 30 June 2018 (follow- on application received)	44/22, 44/27, 44/28, 53/2, 53/3 and 53/8	1561.9983	Ratio Petroleum Limited	100%
16/30 Offshore	1 December 2016 - 30 November 2018	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%
16/31 Offshore	1 December 2016 - 30 November 2019	56/26(p), 56/27(p), 63/5 (p), 63/8(p), 63/9(p), 63/10(p), 63/13(p), 63/14 63/15(p), 63/14, 64/1 , 64/2(p) and 64/6(p)	1654.2923	AzEire Ltd	100%
16/32 Offshore	1 December 2016 - 30 November 2019	56/5(p), 56/10, 56/14, 56/15, 56/19, 56/20(p), 57/1(p) and 57/6(p)	1508.9519	AzEire Ltd	100%
17/1 Offshore	1 June 2017 - 30 November 2018	57/6(p), 57/7, 57/8(p), 57/9(p), 57/11 and 57/12(p)	1086.2318	Faroe Petroleum (UK) Limited	100%
17/2 Offshore	1 June 2017 - 30 November 2018	48/28(p), 48/29(p), 48/30(p), 49/26(p), 57/3(p), 57/4(p) and 57/5(p)	1035.7391	Faroe Petroleum (UK) Limited	100%

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
2/16	3	1 May 2016	Woodside Energy (Ireland) Pty Ltd
3/16	3	23 April 2016	Providence Resources Plc
4/16	3	1 May 2016	Polarcus MC Ltd
5/16	3	1 May 2016	CGG Services SA
6/16	3	1 July 2016	ExxonMobil Exploration and Production Ireland (Offshore South) Limited
7/16	2	1 July 2016 (extension under consideration)	Nexen Petroleum U.K. Limited
8/16	3	1 July 2016	TGS-NOPEC Geophysical Company ASA
9/16	3	1 July 2016	Equinor Energy Ireland Limited
10/16	3	1 July 2016	PGS Exploration (UK) Limited
11/16	3	1 November 2016	Europa Oil and Gas (Holdings) PLC
12/16	2	1 November 2016	ENI Ireland B.V.
13/16	2	1 November 2016	Predator Oil and Gas Ventures Limited
15/16	2	1 November 2016	AzEire Limited
16/16	2	1 December 2016	Ratio Petroleum Limited
17/16	2	1 December 2016	Petrel Resources plc
18/16	3	1 December 2016	Faroe Petroleum (U.K.) Limited
1/17	3	1 July 2017	Capricorn Ireland Limited
2/17	3	1 November 2017	Total E&P Ireland BV

Company Addresses

Antrim Exploration (Ireland) Limited, 192 Sloane Street, London, SW1X 9QX, United Kingdom

Atlantic Petroleum (Ireland) Limited, 2 Grand Canal Square, Dublin 2, D02 A342

AzEire Ltd, 192 Sloane Street, London, SW1X 9QX, United Kingdom

Bluestack Energy Limited, Glen Aulin, Lower Glenageary Road, Dun Laoghaire, A96 H6V4 ,Co. Dublin

Capricorn Ireland Limited, 50 Lothian Road, Edinburgh, EH3 9BY, Scotland

Chrysaor E&P Ireland Limited, 1st Floor, Fitzwilton House, Wilton Place, Dublin 2, D02 FX04

CGG Services SA 27 Avenue Carnot, 91300, Massy, France

Eni Ireland BV, World Trade Center, 17th floor, B-Tower, Strawinskylaan 1727, 1077 XX Amsterdam, The Netherlands

Europa Oil & Gas (Holdings) Plc, 6 Porter Street, London W1U 6DD, United Kingdom

Europa Oil & Gas (Inishkea) Limited, 6 Porter Street, London W1U 6DD, United Kingdom

Europa Oil & Gas (Ireland East) Limited, 6 Porter Street, London W1U 6DD, United Kingdom

Europa Oil & Gas (Ireland West) Limited, 6 Porter Street, London W1U 6DD, United Kingdom

Equinor Energy Ireland Limited, Regus House, Harcourt Centre, Harcourt Road, Dublin D02HW77

Exola Limited, Airfield House, Airfield Park, Donnybrook, Dublin 4, D04 CP49

ExxonMobil Exploration and Production Ireland (Offshore South) Limited, ExxonMobil House, c/o ExxonMobil International Ltd, Ermyn Way, Leatherhead, Surrey, KT22 8UX, United Kingdom

Faroe Petroleum (U.K.) Limited, 8 Waterloo Place, London, SW1Y 4BE

Island Assets Porcupine Limited, c/o San Leon Energy Plc. 3300 Lake Drive, City West Business Park, Dublin 24, D24 TD21

Island Expro Unlimited Company, c/o San Leon Energy Plc. 3300 Lake Drive, City West Business Park, Dublin 24, D24 TD21

Island Oil and Gas Plc, c/o San Leon Energy Plc. 3300 Lake Drive, City West Business Park, Dublin 24, D24 TD21

Island Rockall JV Limited, c/o San Leon Energy Plc. 3300 Lake Drive, City West Business Park, Dublin 24, D24 TD21

Lansdowne Celtic Sea Limited, 6 Northbrook Road, Dublin 6, D06 PH32

Lundin Exploration BV, Amaliastraat 3-5, 2514 JC, The Hague, The Netherlands

Nexen Petroleum UK Limited, Prospect House, 97, Oxford Street, Uxbridge, UB8 1LU, United Kingdom

Company Addresses (continued)

Marginal Field Development Company, Castlefield House Liverpool Road, Manchester M3 4SB, United Kingdom

Petrel Resources plc, 162 Clontarf Road, Dublin 3, D03 F6Y0

PGS Exploration (UK) Limited, 4 The Heights, Brooklands, Weybridge, Surrey KT13 ONY, England

Polarcus MC Ltd, c/o Walkers Corporate Limited, Cayman Corporate Centre, 27 Hospital Road, George Town, Grand Cayman, KY1-9008, Cayman Islands

Predator Oil and Gas Ventures Limited, 3rd Floor Standard Bank House, 47-49 La Motte Street, St. Helier, Jersey, JE2 4SZ

Providence Resources Plc, Airfield House, Airfield Park, Donnybrook, Dublin 4, D04 CP49

PSE Kinsale Energy Limited, Mahon Industrial Estate, Blackrock, Co. Cork, T12 PW92

PSE Seven Heads Limited, Mahon Industrial Estate, Blackrock, Co. Cork, T12 PW92

Ratio Petroleum Limited, 85 Yehuda Ha'Levi Street, Tel Aviv 65796, Israel

Repsol Exploracion Irlanda. S.A., C/ Mendez Alvaro 44 S/N, 28045 Madrid, Spain

Serica Energy Rockall BV, Weena 327, 3013 AL Rotterdam, Netherlands

Serica Energy Slyne BV, Weena 327, 3013 AL Rotterdam, Netherlands

Shell E&P Ireland Limited, Embassy House, Ballsbridge, Dublin 4, D04 H6Y0

Sosina Exploration Ltd, c/o Kerman & Co LLP, 200 Strand, London, WC2R 1DJ, United Kingdom

St. Stephen's Energy Limited, 70 Sir John Rogerson's Quay, Dublin 2, D02 R296

Sunningdale Oils (Ireland) Limited, Sandy Lodge, Sandy Lane, Kingswood, Surrey, KT20 6ND, England

Supernova Ireland Resources B.V., Marsstrat 33, 2132 HR Hoofddorp, The Netherlands

TGS-NOPEC Geophysical Company ASA, PO Box 154, N-1371 Asker, Norway

Theseus Limited, 2a Lord Street, Douglas, Isle of Man, IM99 1 HP

Total E&P Ireland BV, Bordewijklaan 18, 2591XR's Gravenhage, Netherlands

Valhalla Oil and Gas Limited, 2nd Floor, Church Gate, 9-11 Church Street West, Woking, Surrey, GU21 6DJ, United Kingdom

Company Addresses (continued)

Woodside Energy (Ireland) Pty Limited, 240 St Georges Terrace, Perth, Western Australia 6000

Valhalla Oil and Gas (Porcupine)Limited, Peachey & Co LLP, 95 Aldwych, London WC2B 4JF, United Kingdom

Vermilion Energy Ireland Limited, 70 Sir John Rogersons Quay, Dublin 2, D02 R296