Relinquishment Report: Part-Relinquishment of Seaward Licence P1368 (Relinquishment of Sub-Area P1368 South)

HUR-COR-OGA-REP-0006-0

October 2022

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Amendment Record

Revision	Date	Description	Author	Checked	Approved
A0	09/09/22	Draft issued for comment	SR	DW/MC	DW/MC
A1	22/09/22	Draft issued for JV comment	SR	EW	EW
0	03/10/22	Final version for NSTA submission	SR	DW	DW

Notes

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1 Licence Information

Licence	Seaward Production Licence P1368
Licence Type	Frontier
Licensing Round	23rd Offshore Licensing Round
Award Date	22nd December 2005
Location	West of Shetland
Licence Event Type	Relinquishment (P1368 South sub-area)
ISP Reference Number	2022-ISP-LE-0036
Regulator Reference	LAA/2022/49/1
Licensee Reference	P1368S_LIN_RELIN_MAY_2022
Original Licence Blocks	202/4, 202/5, 204/30, 205/21a, 205/22, 205/23, 205/24, 205/26b, 205/28
Current Licence Blocks	P1368C: 205/21a, 205/22a, 205/26b P1368S: 205/26b
Fields/Discoveries made on Licence (Discovery Well)	Lancaster Field (205/21a- 4), Whirlwind Discovery (205/21a-5), Lincoln Discovery (205/26b- 14)
Company group name	Hurricane Energy Plc (Operator); registered number 05245689
Original Licensees	Hurricane Exploration Plc (Operator, 50% interest) Sunshine Oil Plc (50% interest)
Current licensees	P1368 Central: Hurricane GLA Ltd (100% interest); registered number 10656211 P1368 South: Hurricane GWA Ltd (50% interest); registered number 10656130 P1368 South: Spirit Energy Resources Ltd (50% interest); registered number 02855151
Original Firm Commitments	Shoot 450km of 2D seismic data Acquire 600km^2 of 3D seismic data Reprocess 400km of 2D seismic data
Original Drill-or-Drop Commitments	Drill one well to a depth of 1100m TVDSS or to the pre-Jurassic, whichever is the shallower
Revised Firm Commitments	Shoot 1520km of 2D seismic data Acquire 600km^2 of 3D seismic data
Third Term Commitments	Production to have commenced from Lancaster by end December 2017 (later revised to 31st December 2019). An original Lincoln commitment well to be drilled by end December 2017 (later revised to 31st December 2019). By no later than 22nd December 2021, commence drilling a well in the Lancaster Field (the “Lancaster Well”). Requirement

	later removed upon relinquishment of the parts of the P1368 Central sub-area located outside of the determined Lancaster field area, following Hurricane's revised interpretation of the OWC. By no later than 31st December 2020 (later deferred to 30th June 2022), commence drilling a second commitment well on Lincoln to 2200m TVDSS or the OWC depth, whichever is shallower (superseded by the relinquishment decision). An FDPA to be agreed no later than 22nd December 2022 (superseded by removal of the requirement to drill the "Lancaster Well").
Remaining Licence Prospectivity	Fractured Lewisian Basement, Mesozoic Sediments

2 Licence Synopsis

2.1 Licence Status

Licence P1368 is currently in its Third Term and this relinquishment report specifically pertains to the voluntary surrender of the P1368 South sub-area which was created when the licence was divided into four parts in October 2015. P1368 South is located entirely within block 205/26b and includes most of the Lincoln Discovery (as per Field Determination (FD) No. 604) and part of the Warwick Deep prospect. Licence P1368 South is operated by Hurricane GWA Ltd (50% interest) with the remaining equity held by Spirit Energy Resources Ltd (50% interest).

The most recent Deed of Variation for Licence P1368 was issued on 16th December 2019. This set out certain new conditions for the licence, including the requirement to either drill a second commitment well on Lincoln (to assist in delineating the discovery) or surrender the P1368 South sub-area. The well was originally required to be spudded by 31st December 2020, however this deadline was later extended to 30th June 2022. Ultimately the Licensees elected not to drill the well and surrendered P1368 South in order to comply with the Licence conditions.

2.2 Licence Summary

The main activity on the P1368 licence (in chronological order) is as follows:

1. 23rd Seaward Round 2005: Joint Bidding Application by Hurricane Exploration (50%) and Sunshine Oil (50%) for an area of interest which included blocks 202/4, 202/5, 204/30, 205/21a, 205/22, 205/23, 205/24, 205/26b and 205/28.
2. 22nd December 2005: Commencement of the Initial Term for P1368 (Hurricane Exploration 50%, Sunshine Oil 50%).
3. 28th February 2006: Date of signature of the P1368 Licence awarded to Hurricane Exploration 50% and Sunshine Oil 50%. Figure 10-1 shows the original Licence areas awarded.
4. 21st December 2007: End of Initial Term and mandatory 75% relinquishment of the Licence at the start of the Second Term. Figure 10-2 shows the area retained into the Second Term.
5. 12th June 2008: Hurricane Exploration acquired Sunshine Oil (resulting in Hurricane being the sole Licensee).
6. 21st December 2011: End of Second Term and relinquishment of 50% of remaining Licence area at the start of the Third Term. Figure 10-3 shows the area retained into the Third Term.
7. 4th December 2013: Extension of the Third Term to 21st December 2019, dependent on both the existence of an Early Production System (EPS) on the Lancaster Field and the fulfilment

of a well on Lincoln (the original Lincoln commitment well) by end December 2017. The EPS was required to prevent expiry of the Licence at end December 2017 whereas the drilling of the Lincoln well was a condition to retaining any non-producing parts of the Licence beyond end December 2017.

8. 22nd September 2015: Licence conditions revised to allow production to commence from the Lancaster Field by latest 31st December 2019 and the Lincoln well to be drilled by latest 31st December 2019 which, if both fulfilled, would facilitate consideration of further extensions to the non-producing areas on P1368.
9. 21st October 2015: Subdivision of the Licence into the P1368 North, P1368 Central, P1368 South and P1368 Southwest sub-areas. Figure 10-4 displays the subdivision of the Licence into the four sub-areas.
10. 3rd September 2018: Spirit Energy WOS Ltd acquired 50% equity in the P1368 South sub-area as part of the Greater Warwick Area (GWA) farm-in.
11. 16th December 2019: A new Deed of Variation was issued extending the Third Term to 21st December 2024 and setting out the following revised Licence terms:
    a) Commence drilling a Lancaster well to further delineate the extent of the field no later than 22nd December 2021 or give notice in writing to surrender any part/s of the Lancaster sub-area outside of the existing consented field development area.
    b) In respect of the development of the Lancaster sub-area, apply for consent pursuant to clause 14(1) of the Licence, including provision of an agreed FDPA and revised field determination, no later than 22nd December 2022 or give notice in writing to surrender any part/s outside of the existing consented field development area.
    c) No later than one month following any decision by the OGA to re-determine the Lancaster Field, give notice in writing to surrender any part/s of the Lancaster sub-area outside of the revised consented field development area.
    d) Commence drilling a second commitment well on Lincoln by no later than 31st December 2020 to further delineate the extent of the discovery, the total depth of which would be drilled to the oil-water contact (as demonstrated by the acquired well data) or 2,200m TVDSS, whichever is the shallower, or give notice in writing to surrender the Lincoln sub-area.
    e) In respect of the development of the Lincoln sub-area, apply for consent pursuant to clause 14(1) of the Licence, including provision of an agreed FDP, no later than 22nd September 2024 or give notice in writing to surrender the Lincoln sub-area.
    f) Plug and seal Whirlwind well 205/21a- 5 no later than 31st December 2021.
12. 21st December 2019: Relinquishment of sub-areas P1368 North and P1368 Southwest, involving the full surrender of block 204/30a and partial surrender of blocks 205/21a and 205/22a. Figure 10-5 shows the area retained by P1368 Central and P1368 South.
13. 20th May 2020: Permission was granted to extend the deadline for the second commitment well on Lincoln such that drilling must commence no later than 30th June 2022 in order to retain the Lincoln sub-area.
14. 28th October 2020: Relinquishment of part of the P1368 Central sub-area, involving the partial surrender of blocks 205/21a and 205/22a, and thereby removing the obligation to drill a further well on Lancaster. Figure 10-6 shows the area retained on P1368 Central and P1368 South.

2.3 Prospectivity

Hurricane's interest in the Licensed Area follows previous exploration work conducted in the mid-1970s and 1990s that confirmed a working petroleum system but wasn't considered to have found an adequate amount of effective reservoir. However, Hurricane believed the area to have good potential

and, at the time of submitting its bidding application for the 23rd Seaward Licensing Round, had identified two significant prospects and a number of leads (see Figure 10-7).

The first prospect identified was a basement play - at the time termed a “Sheared Basement Play” - located on the Rona Ridge, which had an associated risked recoverable resource estimate of 585 MMbbls. The second prospect identified was described as an Upper Jurassic reverse fault trap with stratigraphic upside. This prospect was mainly located within blocks 205/23 and 205/24 and had an associated risked recoverable resource estimate of 252 MMbbls. In addition to the defined prospects were four leads, all of which were Triassic- and Jurassic-age plays associated with low-side reverse fault traps. Lead #1 was a Triassic reverse fault trap located just south of the Strathmore Field, which at the time was thought to represent a possible extension to the field. Leads #2, #3 and #4 were all interpreted to be Jurassic reverse fault traps, and were located in blocks 202/04, 202/04 and 202/05, and 205/28 respectively.

3 Work Programme Summary

All Licence commitments for the Initial Term of Licence P1368, as detailed in section 2.2, have been fulfilled.

3.1 Seismic

Hurricane obtained 1,413 km^2 of the PGS MegaSurvey 3D dataset which covered much of the original Licensed Area. A further 1,520 km of long offset 2D data was acquired by TGS on behalf of Hurricane. It was not considered necessary to reprocess the existing 2D data and it was agreed with the then Department of Energy & Climate Change that the additional data collected over and above the acquisition commitment would be an acceptable substitute for the reprocessing commitment made on the Licence application. The original 2D reprocessing commitment was therefore waived.

980 km^2 of the PGS MegaSurvey was subsequently reprocessed in 2018-19 through a Kirchhoff PreSTM (Pre-Stack Time Migration) and PreSDM (Pre-Stack Depth Migration) sequence by Shearwater. The main objectives of the reprocessing project were to improve the structure and fault imaging at the top Basement surface, and to remove as much of the pervasive multiple energy which existed throughout the seismic image as practicable. These objectives were achieved to a satisfactory level; the signal to noise ratio increased noticeably, the resolution of major structural features was improved at reservoir level, and much of the multiple energy was removed throughout the section. A significant uplift is seen when compared to the legacy seismic image (see Figure 10-8).

3.2 Wells

In 2006, Hurricane drilled the 205/24- 1 (Wellington) well which satisfied the original drill or drop commitment on the Licence. Hurricane has since drilled another ten wells on the Licence as follows:

- **205/24- 1** was drilled in 2006 on the Wellington prospect with Hurricane Exploration Plc acting as Operator (50% interest) and Sunshine Oil Plc as a partner (50% interest). The well targeted a 3-way dip, fault-bounded closure on the southern flank of the Rona Ridge, where the primary reservoir target was the Upper Jurassic Rona Member. The well reached a TD of 1235m MD in Triassic-aged sandstone, but only trace oil shows were encountered and the well was plugged and abandoned.
- **205/21a- 4** was drilled in 2009 on the Lancaster prospect; a large 4-way dip closure at basement level located at the crest of the Rona Ridge. The well was operated by Hurricane Exploration Plc on a 100% basis and the primary reservoir target was the fractured Lewisian

Basement. Oil shows were seen in both the Basement and the overlying Lower Cretaceous Commodore Formation, and when the well was tested it flowed light oil (at 38° API) from the fractured basement reservoir at a maximum rate of 1,367 bopd. Following testing, the well was suspended with a view to drilling a sidetrack.

- **205/21a- 4Z** was drilled in 2010 as a sidetrack to well 205/21a- 4 and was also operated by Hurricane Exploration on a 100% basis. The purpose of the sidetrack was to determine the deliverability of the fractured basement reservoir and further evaluate the fracture system. As with the motherbore, oil was encountered in both the Lewisian Basement and overlying Commodore Formation. This well was also tested and flowed light oil from the fractured basement reservoir at a maximum rate of 2,885 bopd.
- **205/21a- 5** was drilled on the Whirlwind prospect in 2010. Whirlwind is a large 4-way dip closure at Basement level, located to the north of Lancaster in a deeper structural setting. Oil was encountered both in the thick Lower Cretaceous Valhall Formation overlying the Basement and within the fractured basement reservoir itself. Following drilling, the well was suspended for future re-entry and in 2011 a drill stem test (DST) was undertaken which flowed light oil/condensate to surface from the open hole section. The well was subsequently suspended with abandonment phase 1 (AB1) status and permanently abandoned in 2020.
- **205/21a- 6** was originally designed as a horizontal appraisal well for the Lancaster Field. The well was drilled in 2014 with Hurricane Energy Plc acting as Operator on a 100% basis. Oil was encountered in both the Basement and overlying Lower Cretaceous Victory Formation, and an open hole DST was conducted over the Basement interval, achieving ESP flow rates of 9,800 bopd and 5,300 bopd when under natural flow. Well 205/21a- 6 is currently producing on the Lancaster Field having been online since first oil in May 2019.
- **205/21a- 7** was drilled on the Lancaster Field in 2016. The operations were conducted by Hurricane Energy Plc on a 100% basis with Petrofac Facilities Management Ltd (PFML) acting as the Well Operator. As with well 205/21a- 6, oil was encountered in both the Basement and overlying Victory Formation. During testing, stable flow rates of 10,930 bopd and 6,300 bopd were achieved when using an ESP and under natural flow respectively. Following the test, the well was subsequently sidetracked to drill 205/21a- 7Z.
- **205/21a- 7Z** was also drilled on the Lancaster Field in 2016 by Hurricane Energy Plc (100% basis), with PFML acting as the Well Operator. The well penetrated over 1km of Lewisian Basement at a slight sub-horizontal trajectory and during testing achieved stable flow rates of 15,375 bopd and 6,520 bopd under ESP and natural flow respectively. 205/21a- 7Z was put on production in May 2019, but experienced higher than expected water cut and was shut-in for the last time (notwithstanding short test periods of up to nine days) in August 2020.
- **205/26b- 12** was drilled on the Lincoln prospect in 2016 by Hurricane Energy Plc (100% basis), with PFML acting as the Well Operator. Lincoln lies on the Rona Ridge to the southwest of Lancaster and is the main segment of an overall 4-way dip closure that includes both Lincoln and the Warwick Deep prospect. During drilling oil shows were observed and mud gas levels were elevated throughout much of the Basement section, but no test was carried out and the well was plugged and abandoned after completion of the logging.
- **205/26b- 13** was the first well drilled by a joint venture (JV) between Hurricane GWA Ltd and Spirit Energy Resources Ltd; both of whom had a 50% interest. The well was the initial borehole drilled in the 2019 Greater Warwick Area appraisal campaign - all of which used PFML as the well operator - and targeted the Warwick Deep prospect; a downthrown fault block located to the northwest of Lincoln. The surface location of 205/26b- 13 was positioned in the Licensed Area of P1368 South, while the toe of the horizontal section was planned to enter Licence P2294 in order to satisfy the license's drill-or-drop constraint. However,

following difficulties encountered when running the 9 5/8" casing, a decision was made to plug back and sidetrack, and the operation transferred to well 205/26b- 13Z.

- **205/26b- 13Z** was drilled to complete well 205/26b- 13 following the decision to sidetrack and, as such, the original well and data acquisition objectives were left unchanged. The 205/26b- 13Z sidetrack kicked off at a depth of 1,521m MD, resulting in most of the 12 ¼" section of 205/26b- 13 being redrilled. Upon entering the Basement reservoir only weak shows were observed and mud gas levels remained low over most of the reservoir section. A test was conducted which only produced water at low rates and the well was plugged and abandoned.
- **205/26b- 14** was the second well drilled in the 2019 Greater Warwick Area appraisal campaign. As opposed to well 205/26b- 12 which had a sub-vertical trajectory, 205/26b- 14 was drilled horizontally through the Lewisian Basement to assess the potential deliverability of the reservoir. When tested, the well flowed 41.5° API oil at stable rates of 9,900 bopd and 5,140 bopd under ESP and natural flow respectively, but the JV was unable to obtain permission to use it as a producer. Following the test, the well was suspended in order to obtain interference data using the memory gauges left downhole and was permanently abandoned in 2021.

4 Database

A map of the seismic data utilised for prospect evaluation on Licence P1368 is shown in Figure 10-9. The locations of the wells listed in Section 3.2 are shown in Figure 10-10.

5 Prospectivity Update

Hurricane's main objective when applying for Licence P1368 was to evaluate the hydrocarbon potential of the fractured Lewisian Basement. For the Basement reservoir itself, all the prospectivity identified within the original Licensed Area (found in the Lancaster, Whirlwind, Lincoln, Warwick and Halifax prospects) has now been explored and evaluated. This has also allowed Hurricane to assess the prospectivity of much of the associated Mesozoic reservoir, which is often found onlapping the Basement highs. Further Mesozoic potential was identified within the Wellington prospect, which was drilled by Hurricane with well 205/24- 1 in 2006, and in the Triassic sands of the Strathmore oil discovery which was considered uneconomical for development. Several other Jurassic-age leads were identified early in the licence period but have since been discounted.

As mentioned in Section 2.2, Licence P1368 is currently in its Third Term. The P1368 North and P1368 Southwest sub-areas were relinquished in late 2019, leaving sub-areas P1368 Central and P1368 South – the latter of which is the subject of this relinquishment report. P1368 North and P1368 Southwest contain the Whirlwind and Strathmore discoveries, whose prospectivity was described in the previous P1368 Relinquishment Report written by Hurricane in 2019. P1368 Central contains the producing Lancaster Field and remains as one of Hurricane's assets, while most of Warwick and Halifax became incorporated into licenses P2294 and P2308 respectively. The prospectivity of the P1368 South sub-area – which includes most of the Lincoln discovery and part of the Warwick Deep prospect – is summarised below.

5.1 Lincoln

Lincoln is the largest (with area of c. 20 km^2) segment of an overall 4-way dip closure that includes both Lincoln and the Warwick Deep prospect, and which is located along the Rona Ridge to the southwest of Lancaster and the Brynhild Fault Zone (see Figure 10-11). Most of the Lincoln discovery (as per Field Determination (FD) No. 604) is located within sub-area P1368 South, with the remaining part being within Licence P2294.

Prior to Hurricane's involvement, Lincoln had only been drilled once by well 205/26- 1 which was drilled by Arco in 1975. 205/26- 1, which penetrated the flank of the structure below the free water level (FWL), is located 3.3km south-southeast of well 205/26b- 12. The well encountered a thin (c. 22m TVT), poor quality interval of Upper Jurassic Rona Sandstone lying above the Basement and penetrated around 39m of fractured basement reservoir. Despite being below what is interpreted to be the FWL, oil shows were observed in both the Lower Cretaceous Valhall Limestone and Rona Sandstone, while geochemistry later conducted by Hurricane on Basement core chips revealed additional remnants of oil.

As described in Section 3.2, Hurricane has drilled two wells on Lincoln. The first, well 205/26b- 12, was drilled to a depth of 2,546.5m MD (-2325.1m TVDSS) and only encountered potential reservoir in the fractured Lewisian Basement. The presence of hydrocarbons was demonstrated by multiple sources (including through shows, sidewall core and drill cuttings geochemistry, and mud gas measurements), but as the well was not flowed to surface it was not classed as a discovery. If hydrocarbons were found to be present, one of the main objectives of 205/26b- 12 was to establish the depths of any fluid contacts encountered. However, no contact could be confidently located with any of the log, core or drilling measurements acquired; partly a result of the formation pressure tester logging run having to be abandoned due to well control concerns.

The second well drilled by Hurricane on Lincoln was 205/26b- 14. This was drilled to a depth of 2,857.2m MD (-1,781.0m TVDSS) and penetrated a true horizontal length of 692m of Basement reservoir (see Figure 10-12). As with well 205/26b- 12, the only potential reservoir encountered by 205/26b- 14 was within the fractured Lewisian Basement. On testing, the well produced dry oil and demonstrated that commercial flow rates could be achieved from the Lincoln structure. No formation pressure test data was acquired, but integration of the DST pressure data with the known oil gradient and Lancaster aquifer pressure data provided a reference case FWL of -1,846m TVDSS, which is c. 516m deeper than in Lancaster. The different FWLs observed between Lincoln and Lancaster are consistent with the interpreted structural spill. Analysis of the long-term pressure data from well 205/26b- 14 demonstrates that Lincoln and Lancaster are in communication, but the mechanism for this is not well understood.

5.2 Warwick Deep

The Warwick Deep prospect is the smaller (with area of c. 10 km^2) segment of an overall 4-way dip closure that includes Lincoln, and which spills via a structural saddle up to Lancaster (see Figure 10-11). Warwick Deep is effectively a downthrown fault block located to the northwest of Lincoln; however, recent seismic mapping indicates that there is no fault closure between the two structures, and they are currently understood to share the same oil water contact (OWC). Most of the Warwick Deep prospect lies within Licence P2294 but, as it is thought to be part of the same accumulation as Lincoln, it is included in this prospectivity summary.

Prior to Hurricane taking on Licence P1368, no wells had been drilled in Warwick Deep and the structure was first drilled in 2019 by wells 205/26b- 13 and 205/26b- 13Z. Neither borehole encountered likely reservoir in the Mesozoic sediments overlying the Basement while only well 205/26b- 13Z penetrated a meaningful distance into the fractured basement reservoir, reaching a

depth of 3,046.8m MD (-1,964.6m TVDSS). Weak indications of hydrocarbons were seen in the Basement and some of the limestone beds within the overlying Kyrre Formation but, as demonstrated by the results of the well test (which only produced water at low flow rates), the horizontal section of 205/26b- 13Z appears to be located below the OWC (see Figure 10-12). The well was therefore neither able to confirm Warwick Deep as a discovery or assess the potential deliverability of the fractured basement reservoir at this location.

5.3 Remaining Prospectivity

The remaining prospectivity within the P1368 South sub-area lies within the same Lincoln-Warwick Deep structure already discussed but relates to potential clastic reservoir within the shallower Mesozoic-age stratigraphy. The seismic clearly shows both Upper Jurassic and Early Cretaceous sequences present within the overall 4-way dipping structure above the established Basement reservoir FWL (see Figure 10-12 and Figure 10-13). The key geological risk considered for this prospectivity relates to the presence of reservoir quality rock within the mapped sequences.

The existing wells did not encounter reservoir in either the down dip or crestal locations in which they were drilled, however considerable work has been undertaken to better understand the geological scenarios that inform where reservoir could be preserved on structure. This work has included regional seismic mapping, structural restoration studies and gross depositional environment mapping. The estimated prospective resources split by stratigraphy are reported in section 7.

6 Further Technical Work Undertaken

Table 6.1 lists the key pieces of technical work undertaken on Licence P1368 and the prospectivity it applies to.

Project	Prospect	Company
Regional geochemistry study	Mesozoic & Basement prospectivity	GHGeochem Ltd (lab work) APT Ltd (lab work) IGI Ltd (interpretation)
Interpretation of released gravity and magnetic data	Mesozoic & Basement prospectivity	ARKeX Ltd
3D seismic reprocessing (PreSTM & PreSDM)	Mesozoic & Basement prospectivity	Shearwater Ltd
Extensive analogue field review	Mesozoic & Basement prospectivity	Hurricane Energy
Interpretation of log, sidewall core and cuttings datasets	Mesozoic & Basement prospectivity	Hurricane Energy & various external contractors
Seismic attribute & coherency analysis	Basement prospectivity	Hurricane Energy
Development review including depth conversions, static modelling in Petrel, and dynamic modelling in Eclipse	Strathmore	Equipoise Solutions Ltd/ERC Ltd

Permeability and development review of the Strathmore Discovery, including a report, Petrel model and Eclipse simulation	Strathmore	Senergy Ltd
Core description and sedimentology report for wells 204/30a-2, 204/30a-3 and 205/6a-3	Strathmore	Leppard Sedimentology Ltd
PETREL static model build of the Greater Warwick Area	Mesozoic & Basement prospectivity	Hurricane Energy
tNavigator dynamic simulation model build of the Greater Warwick Area	Mesozoic & Basement prospectivity	Hurricane Energy
Seismic diffraction imaging project	Basement prospectivity	PetroTrace Ltd
Rock physics and seismic inversion project	Mesozoic prospectivity	Ikon Science Ltd
2D & 3D structural restoration project	Mesozoic & Basement prospectivity	Needham Geoscience Ltd
Stratigraphy framework review	Mesozoic prospectivity	Skolithos Ltd
GWA Mesozoic cuttings QEMSCAN analysis	Mesozoic prospectivity	Rocktype Ltd
High resolution biostratigraphy project	Mesozoic prospectivity	PetroStrat Ltd
Rona Ridge geochemical and basin modelling study	Mesozoic & Basement prospectivity	IGI Ltd
Seismic data conditioning and dip/azimuth analysis	Mesozoic & Basement prospectivity	Geoteric Ltd
Low frequency dispersion analysis	Basement prospectivity	G&G Research Ltd
Pre-stack seismic conditioning and AVO analysis	Mesozoic prospectivity	SharpReflections Ltd
Rona Ridge structural evolution and regional context study	Mesozoic & Basement prospectivity	GEUS
Greater Warwick Area and Lancaster Field: PVT modelling for field development	Mesozoic & Basement prospectivity	Petrophase Ltd

Table 6.1: Summary of technical work undertaken on Licence P1368.

7 Resource and Risk Summary

The Operator's assessment of prospective resources for the whole Lincoln-Warwick Deep structure (irrespective of licence boundaries) is shown in Table 7.1. The prospective resources are assigned to the Mesozoic reservoir intervals only. For completeness, the contingent recoverable resources assigned to the Basement reservoir are also displayed.

Resource & Risk Summary								
Prospect / Lead / Discovery	P / L / D	Resource Classification	Stratigraphic Level	Unrisked Recoverable Resources Oil (MMbbls)			Geological Chance of Success	Risked Mean (MMbbls)
				P90	P50	P10		
Lincoln-Warwick	L	Prospective	Lower Cretaceous	15	49	115	22%	13
Lincoln-Warwick	L	Prospective	Upper Jurassic	35	104	207	45%	53
Lincoln-Warwick	D	Contingent	Lewisian Basement	6	25	102	100%	49

Table 7.1: Estimated recoverable resources for the remaining undrilled Mesozoic leads associated with the Lincoln-Warwick Deep structure. The contingent recoverable resources assigned to the Basement reservoir are also shown.

The prospective and contingent recoverable resources assigned by the Operator to the parts of Lincoln-Warwick Deep located within the Licensed Area for P1368 South are shown in Table 7.2.

Resource & Risk Summary								
Prospect / Lead / Discovery	P / L / D	Resource Classification	Stratigraphic Level	Unrisked Recoverable Resources Oil (MMbbls)			Geological Chance of Success	Risked Mean (MMbbls)
				P90	P50	P10		
Lincoln-Warwick	L	Prospective	Lower Cretaceous	9	31	73	22%	8
Lincoln-Warwick	L	Prospective	Upper Jurassic	23	66	132	45%	34
Lincoln-Warwick	D	Contingent	Lewisian Basement	4	16	65	100%	31

Table 7.2: Estimated recoverable resources for the remaining undrilled Mesozoic leads associated with the parts of Lincoln-Warwick Deep located within P1368 South. The contingent recoverable resources assigned to the Basement reservoir within the Licence are also shown.

8 Conclusions

Despite the potential of the Basement reservoir and identified Mesozoic prospectivity within the Licensed Area of P1368 South, further appraisal and development investment to reach an economic development within acceptable risk and licence timing was not feasible and the licensees therefore elected to surrender the sub-area.

9 Clearance

Hurricane Energy confirms that the NSTA is free to publish this Report and that all third party ownership rights (on any contained data and/or interpretations) have been considered and appropriately cleared for publication purposes.

10 Maps and Figures

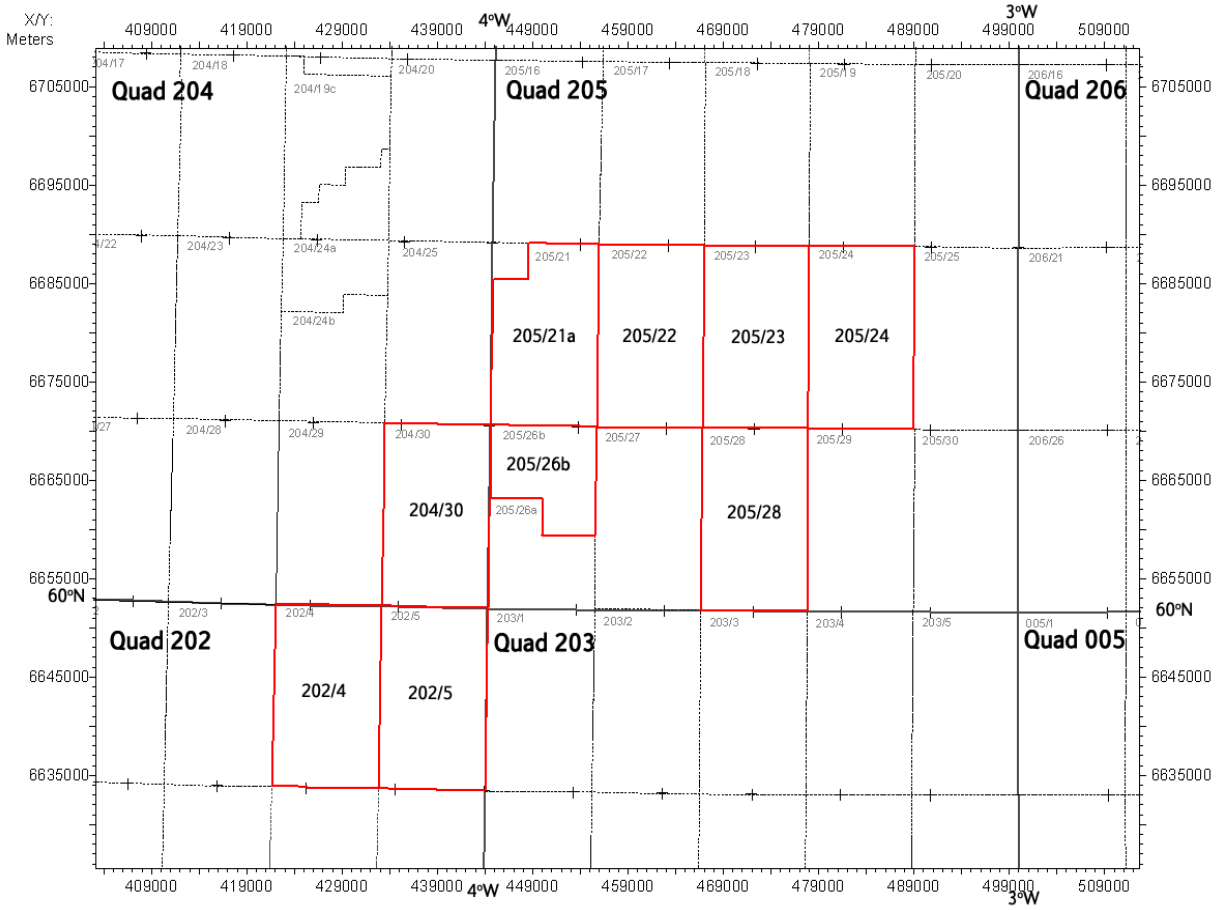

Figure 10-1: Blocks operated by Hurricane during the Initial Term of Licence P1368. Projection ED50 Zone 30N.

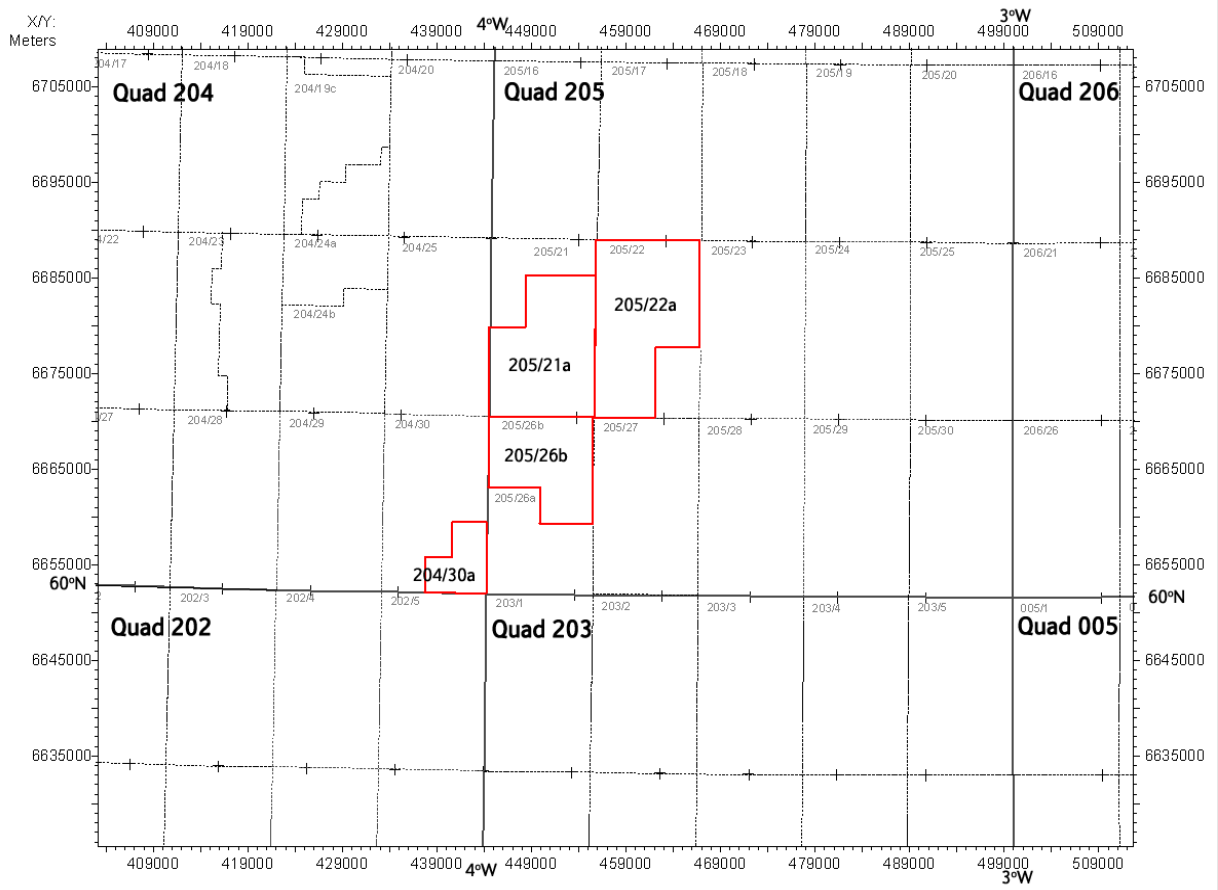

Figure 10-2: Blocks operated by Hurricane during the Second Term of Licence P1368. Projection ED50 Zone 30N.

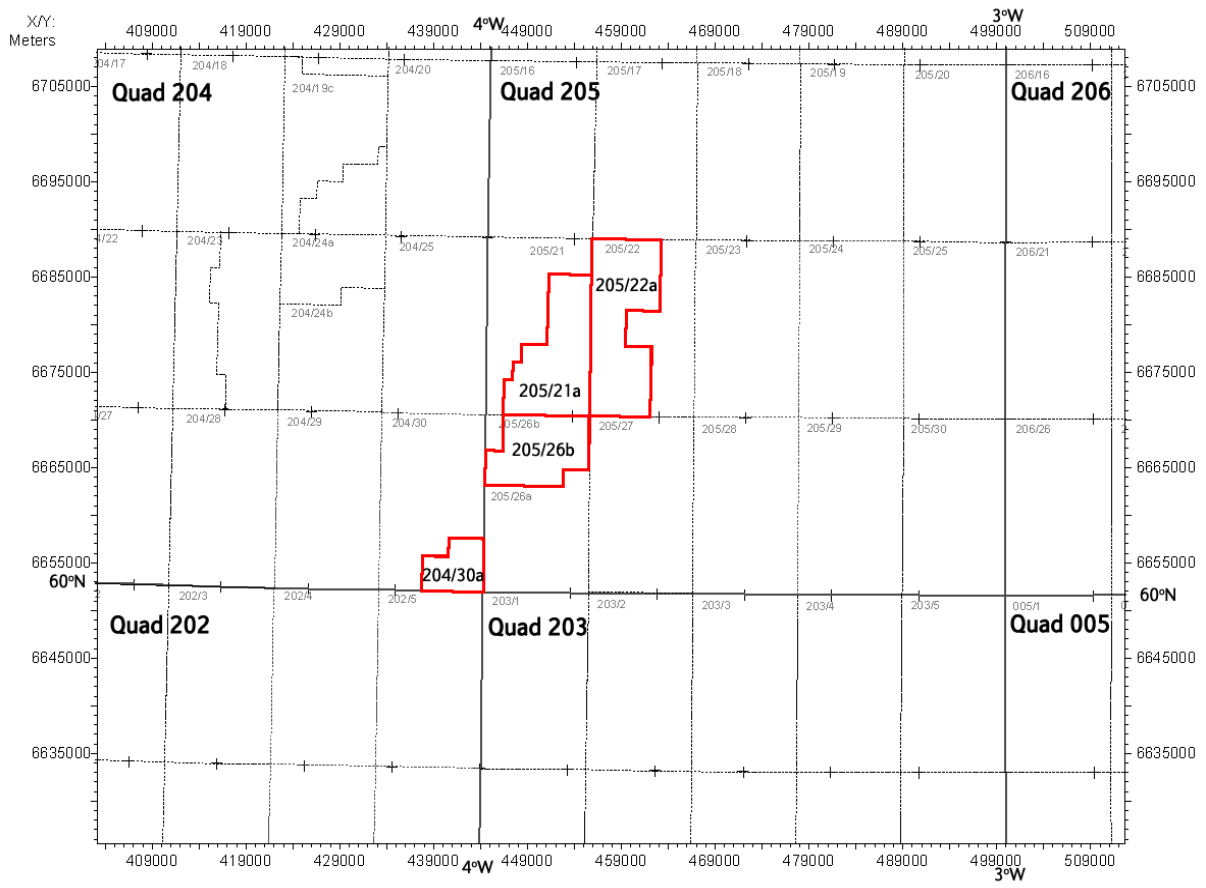

Figure 10-3: Blocks operated by Hurricane during the Third Term of Licence P1368. Projection ED50 Zone 30N.

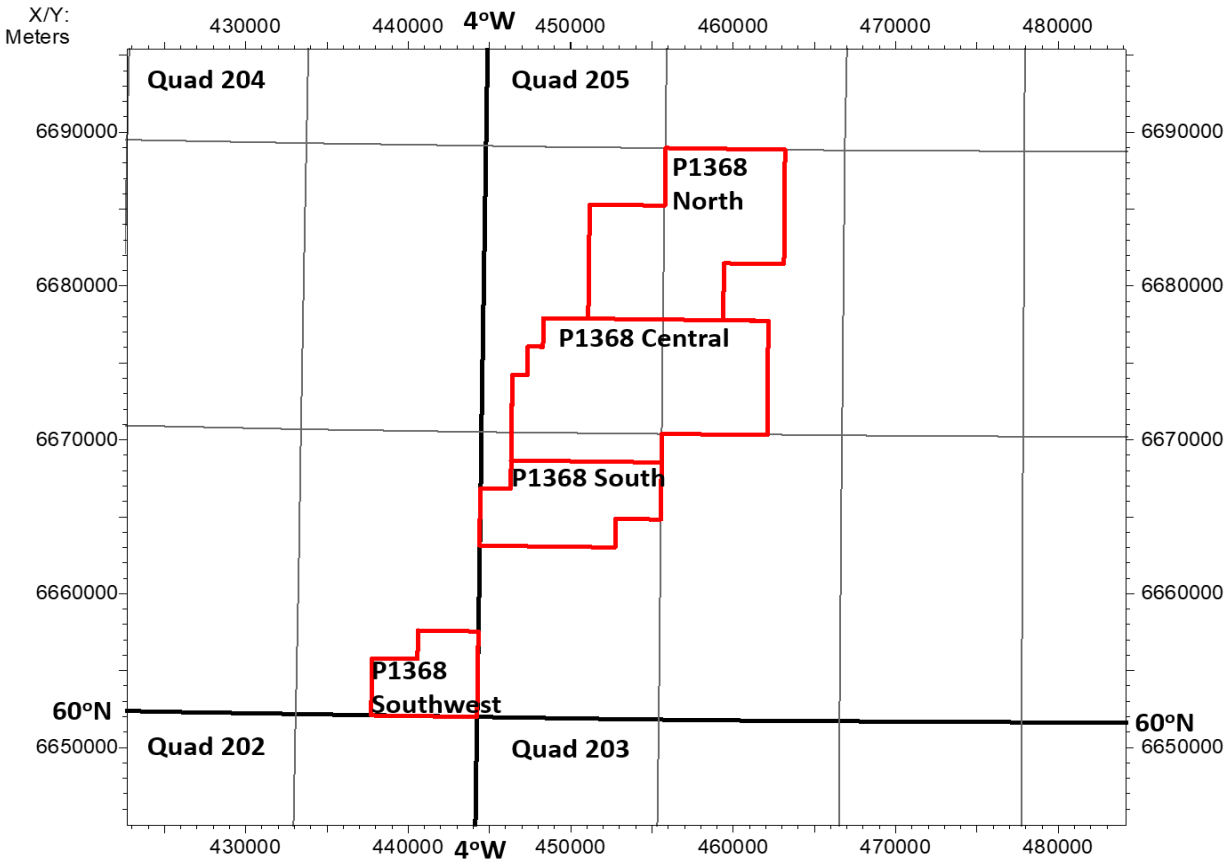

Figure 10-4: Licence sub-area creation during the Third Term. Projection ED50 Zone 30N.

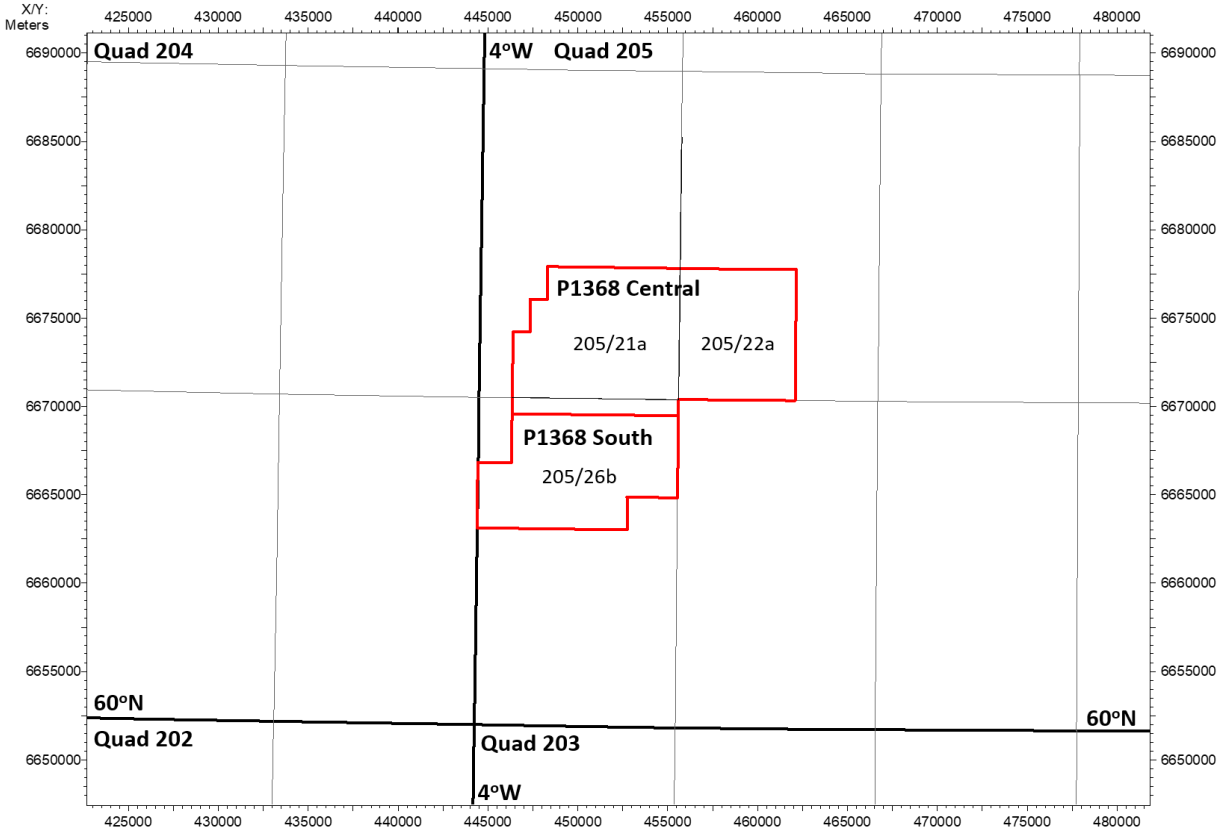

Figure 10-5: Blocks operated by Hurricane during the Third Term of Licence P1368, following relinquishment of sub-areas P1368 North and P1368 Southwest. Projection ED50 Zone 30N.

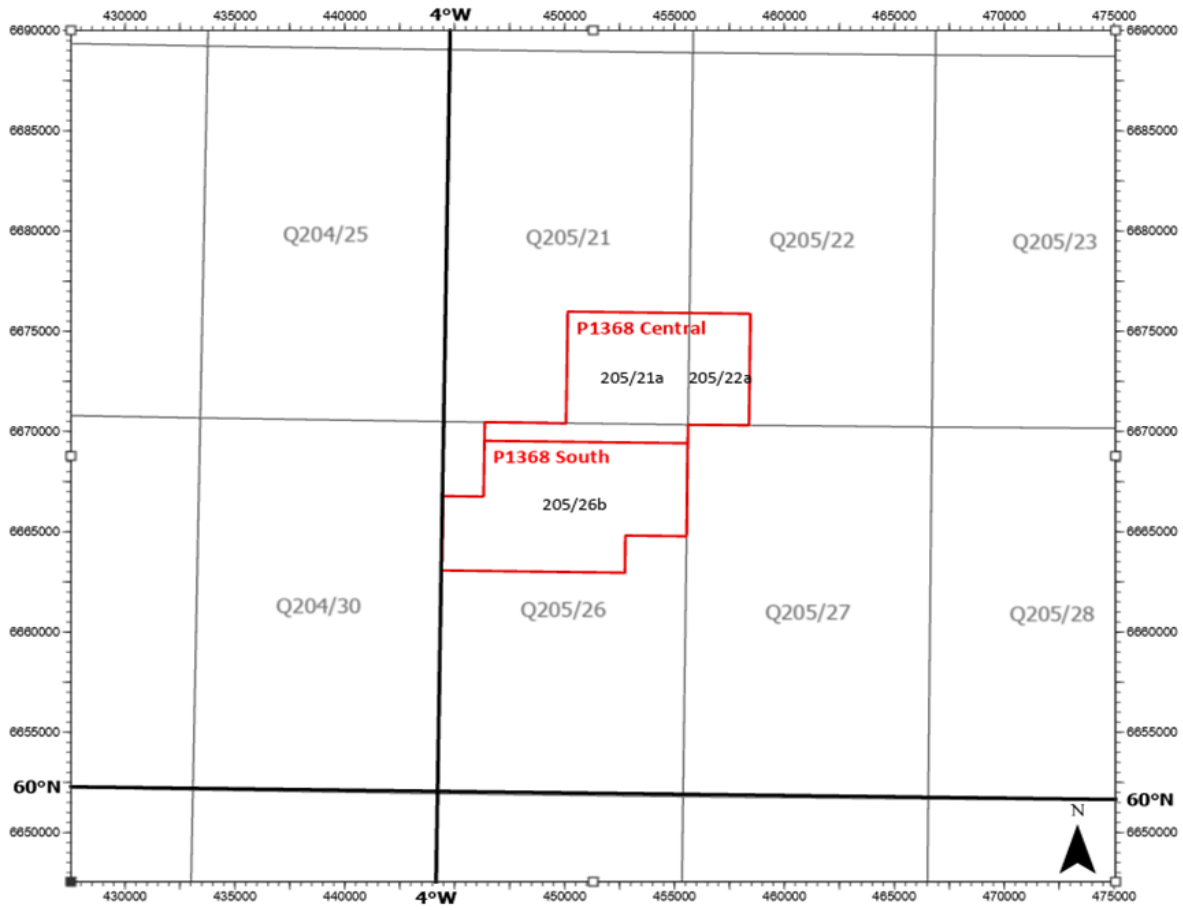

Figure 10-6: Current P1368 Licence boundaries, following the relinquishment of part of sub-area P1368 Central. Projection ED50 Zone 30N.

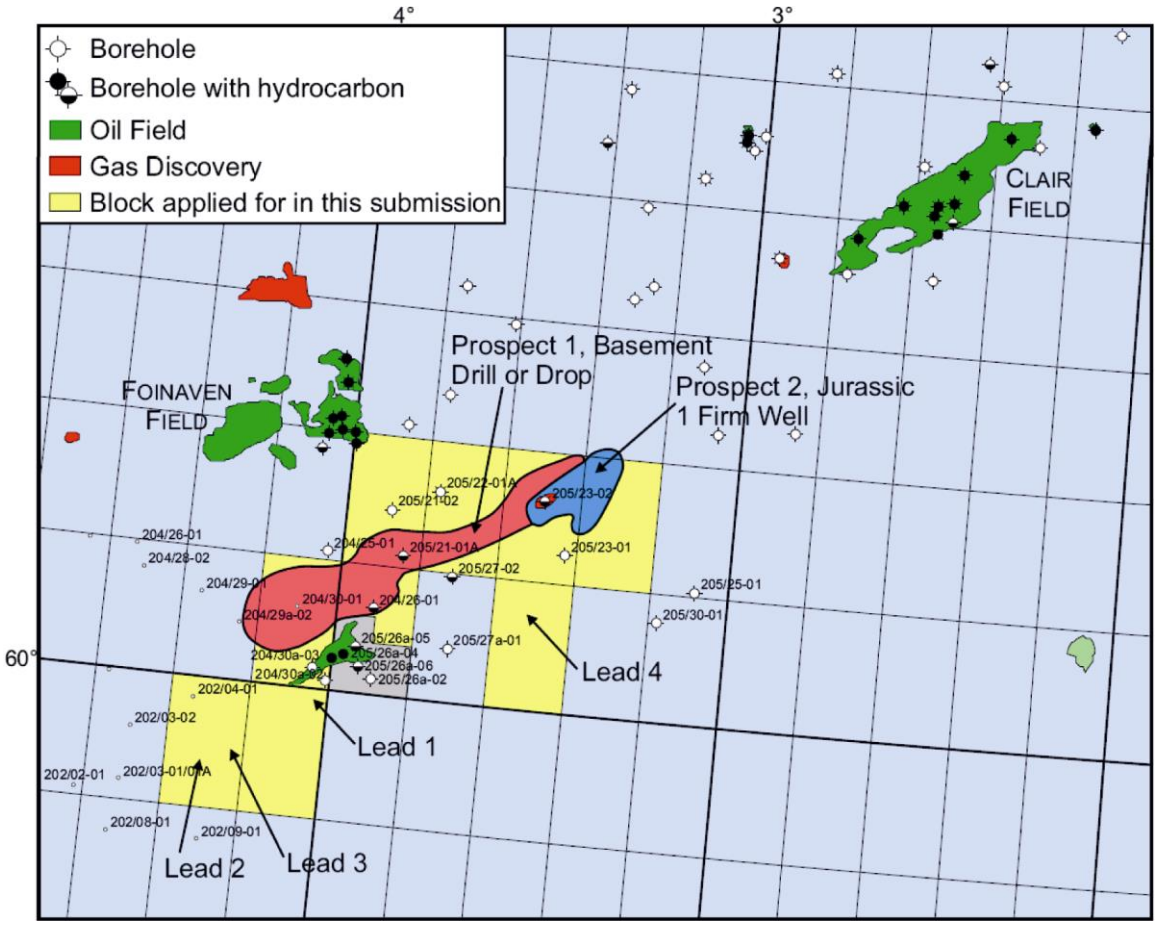

Figure 10-7: Map showing the blocks applied for by Hurricane in the 23rd Seaward Licensing Round, detailing the individual prospects/leads and proposed operational activity.

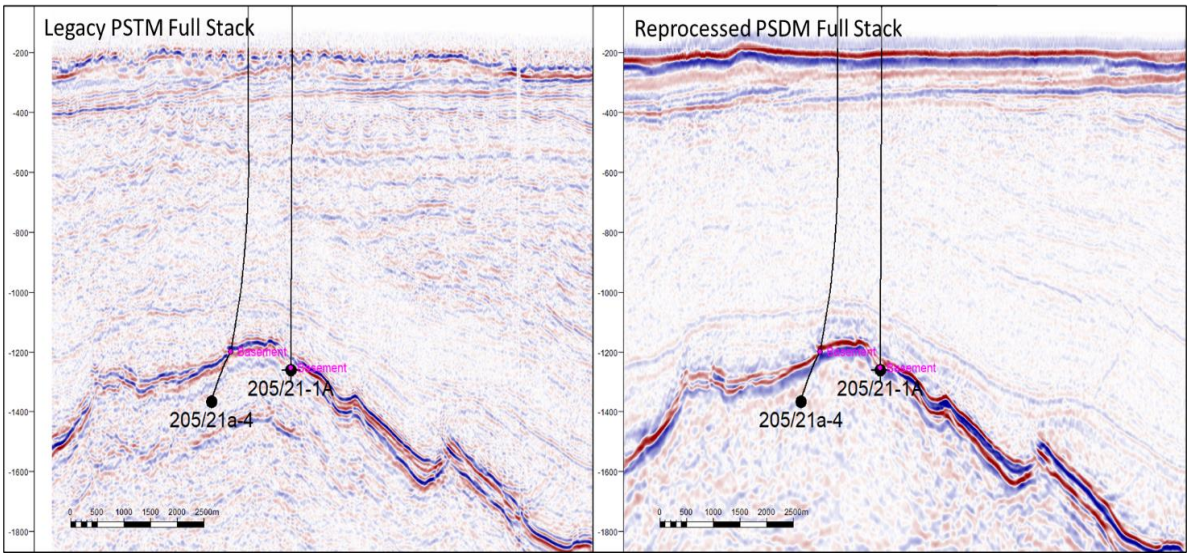

Figure 10-8: Comparison of the legacy PGS MegaSurvey data with the 2018-19 reprocessed 3D seismic data.

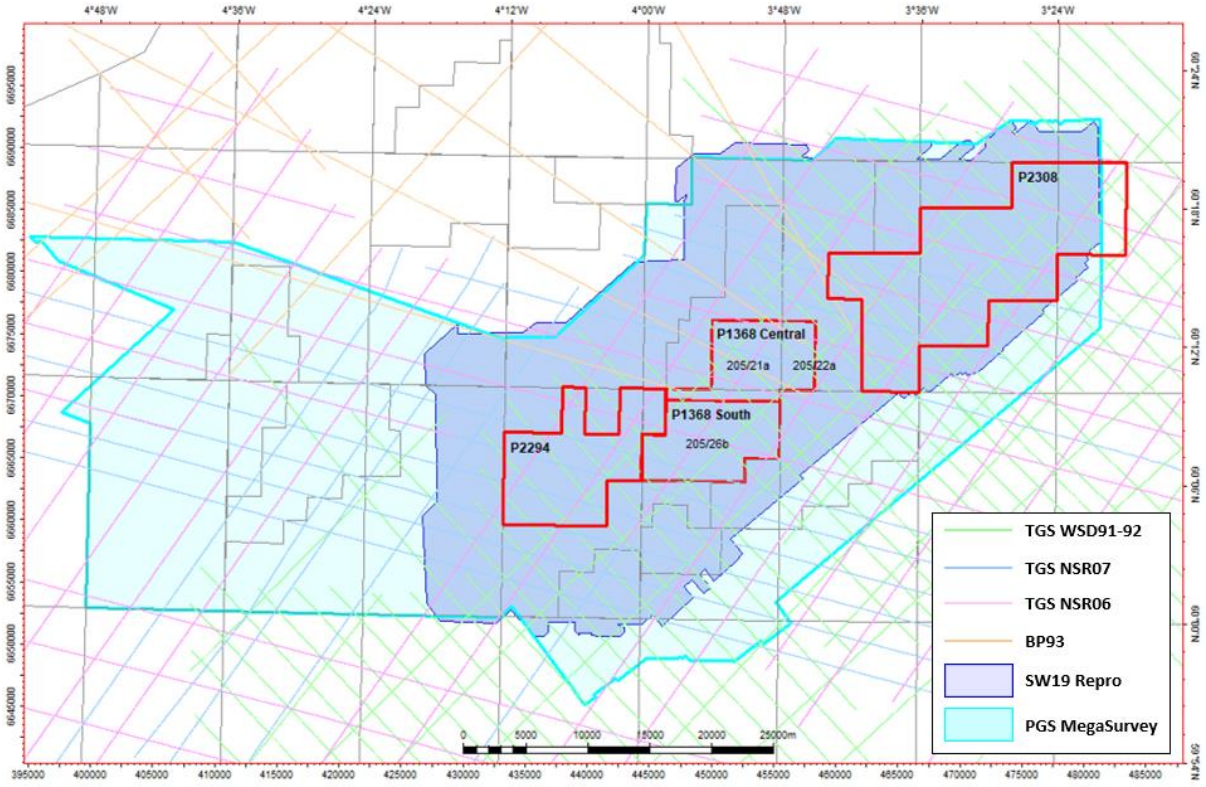

Figure 10-9: Base maps for the 2D and 3D seismic datasets used to evaluate P1368 and the surrounding Licences, with current Licence boundaries overlain. Projection ED50 Zone 30N.

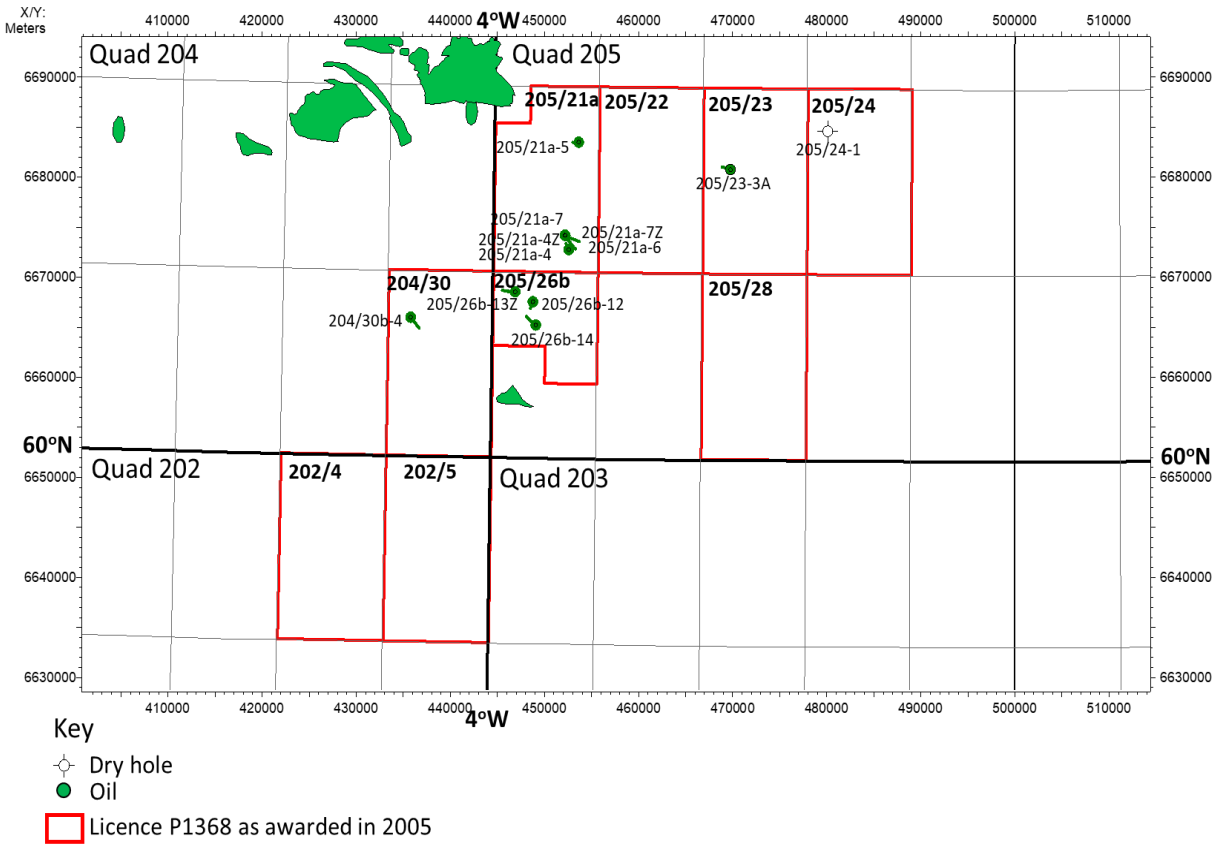

Figure 10-10: Well location map within the original Licensed Area for P1368. Projection ED50 Zone 30N.

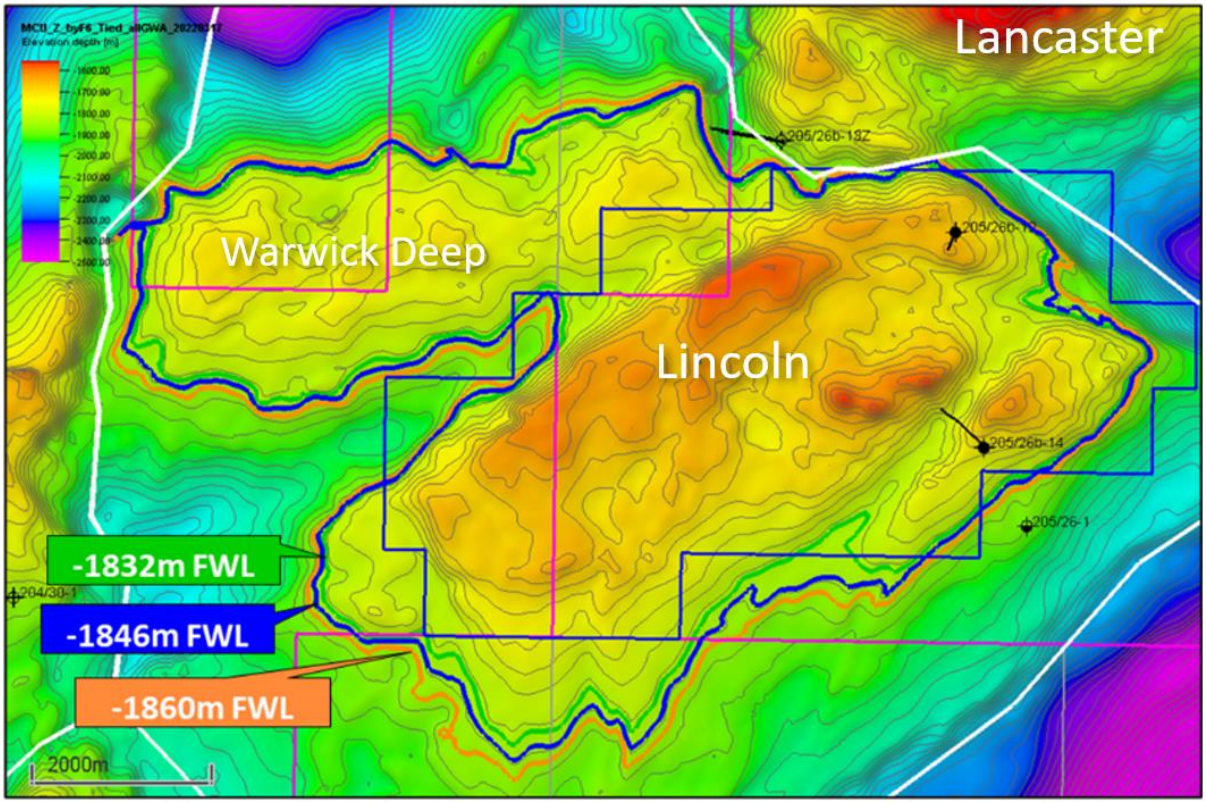

Figure 10-11: Depth structure map of the base regional seal across Lincoln and Warwick Deep, showing the P90, P50 and P10 case FWLs.

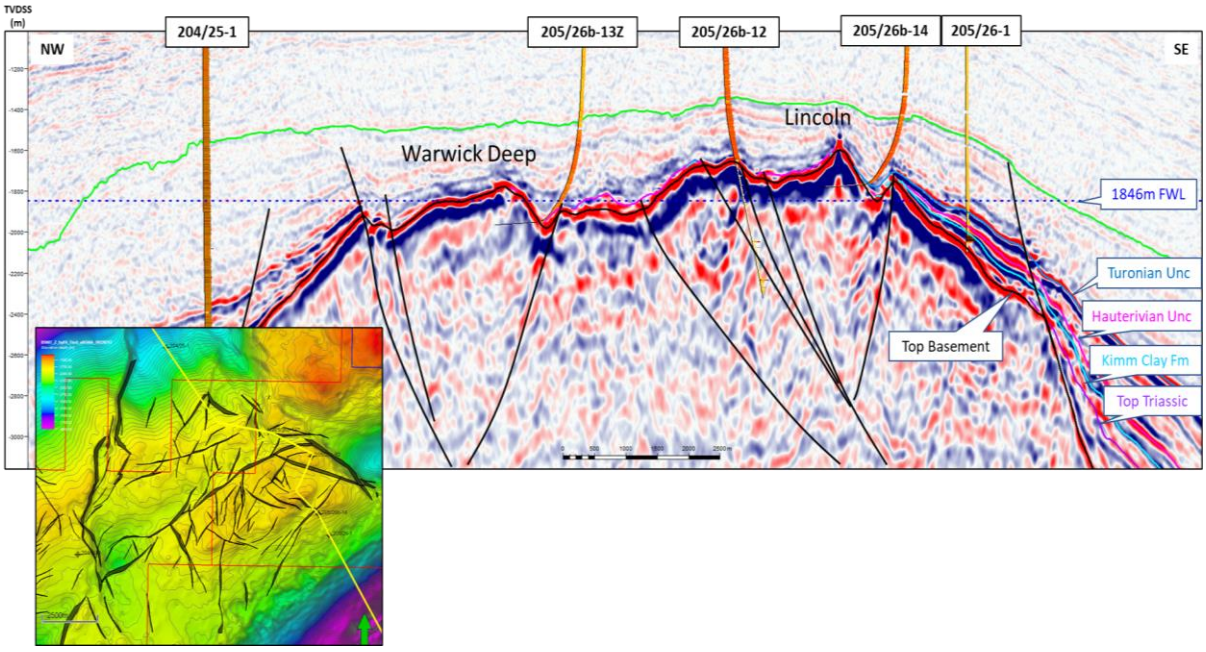

Figure 10-12: NW to SE depth-converted seismic profile across Lincoln-Warwick Deep, showing the location of wells 204/25- 1, 205/26b- 13Z, 205/26b- 12, 205/26b- 14 and 205/26- 1 with respect to the reference case FWL. Line of section is shown in the Top Basement depth map.

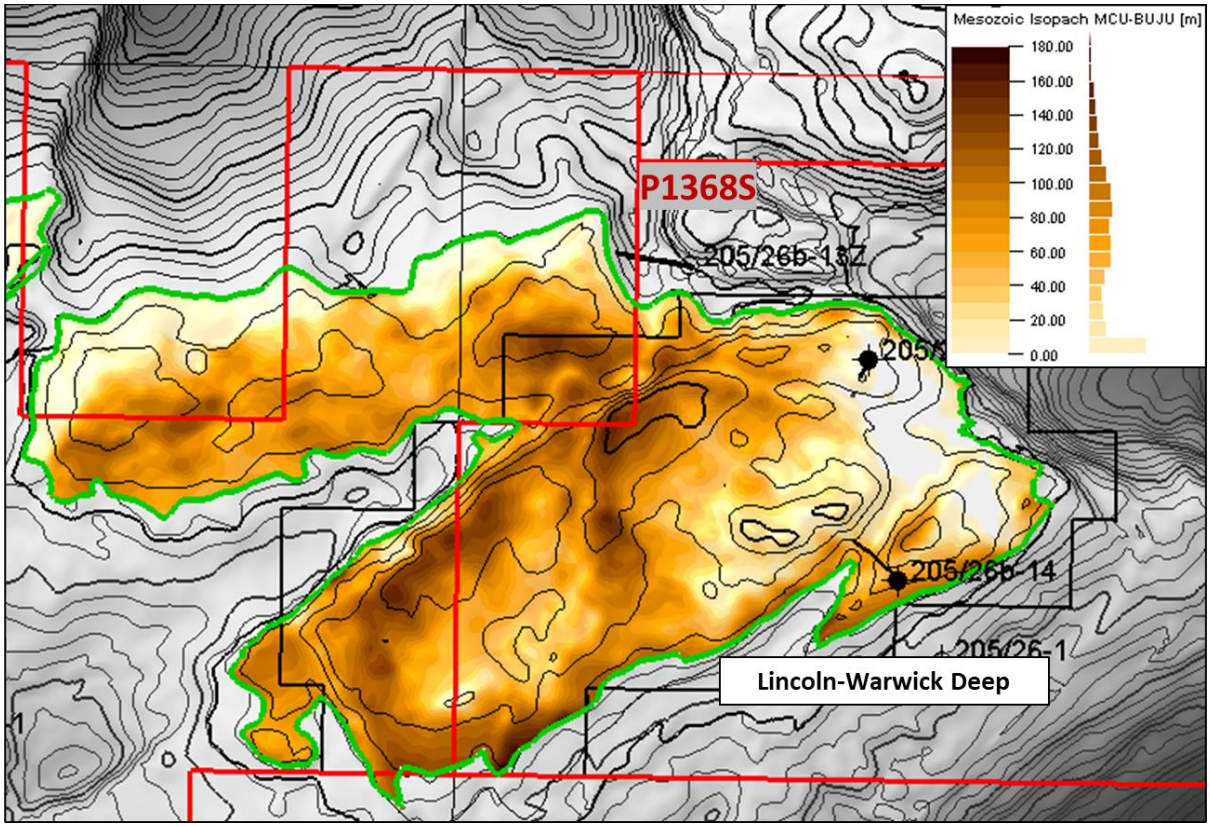

Figure 10-13: Mesozoic prospective thickness within closure at Lincoln-Warwick Deep.