

Petroleum Operations Notice 9

Information and Sample requirements for current and former holders of Offshore UKCS Exploration and Production licences

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1. Scope and purpose of this document

1.1 Purpose of PON 9

The purpose of Petroleum Operations Notice (PON) 9 is to set out the NSTA's specific requirements and Licensees' obligations with respect to the retention and reporting of information and physical samples, as set out in the Petroleum Act 1998 (the Petroleum Act) and the relevant model clauses (the model clauses) contained in the seaward petroleum licences granted thereunder.

It also describes how the NSTA will disclose (i.e. publish or release) licence information under the terms of the model clauses.

Detailed guidance regarding the retention, reporting, and disclosure of information and samples under the Energy Act 2016 ('2016 Act'), the Retention Regulations and the Disclosure Regulations has been published by the NSTA.¹

1.2 Terminology

Previous versions of this document have referred to "licence data" and "records". Henceforth, this document will refer to "information" and "samples" to align with the language used in the 2016 Act. Likewise, previous versions of this document have referred to "release" or "publication". Henceforth it will refer to "disclosure".

All capitalised terms (and, for ease, a number of other terms such as 'licence' and 'licensee') are defined in section 8 of this guidance. The Retention Regulations and the Disclosure Regulations are together referred to as the '**2018 Regulations**', and the 2018 Regulations and the 2016 Act are together referred to as '**the Act and Regulations**'.

1.3 Scope of PON 9

Following the introduction of the 2016 Act, the NSTA consulted on proposed regulations for the retention and disclosure of information and samples in 2017 and the resultant Retention Regulations and Disclosure Regulations came into effect respectively in May and August 2018. However, for certain information and samples the provisions of and requirements under the licence will still have effect. PON 9 is intended to provide guidance where these licence requirements still apply.

The NSTA is not bound by this guidance and where it departs from this guidance it will explain why. This guidance is not a substitute for any regulation or law and is not legal advice.

This guidance will be kept under review and may be revised as appropriate in the light of further experience and developing law and practice, and any change to the NSTA's powers and responsibilities. If the NSTA changes this guidance in a material way, it will publish a revised document.

2. Licences and the Energy Act 2016

The NSTA's powers in relation to the retention, reporting and disclosure of information and samples under a licence apply alongside those set out in the Act and Regulations. To ensure all these powers are used clearly and consistently, and so that licensees may be certain regarding compliance with both regimes, the NSTA has determined that it will apply its powers in general, as follows:

- Where information and samples were created or acquired on licences that determined before 14th May 2018², i.e. on licences that have been fully surrendered or on licensed areas that have been surrendered before that date, only the powers under the licence will be used to require the retention and reporting of and to disclose information and samples;
- Where both the licence powers and the Act and Regulations apply, the NSTA will generally use the Act and Regulations provided that:
 - Where the licence grants the NSTA powers of disclosure that are not available to it under the Disclosure Regulations, the NSTA's powers under the licence will be used.

In all cases, the NSTA will be clear when requesting information and samples, whether it is doing so under the 2016 Act, by issuing a notice under section 34 (s.34) of the 2016 Act, or under the licence, and therefore what regime applies for the purposes of disclosure. Guidance on reporting and disclosure under the 2016 Act is available in the NSTA's Reporting and Disclosure of Information and Samples Guidance³ ('Reporting and Disclosure Guidance').

2.1 Transition to the 2016 Act

It is the NSTA's intention to move towards exclusive use of powers under the Act and Regulations where practical, and in particular for the retention, reporting, and disclosure of petroleum related information and samples arising from ongoing licence activities.

It is likely that the volume of new information reported and disclosed under licences will diminish now that we are beyond 2021, as the relevant licence confidentiality periods expire. However, as the NSTA wishes to apply only one regulatory regime per wellbore, further wellbore maintenance work, oilfield decommissioning, work on the energy transition and ultimately licence determination is likely to still result in occasional requirements for information to be reported and disclosed under licence terms.

The process of transitioning from reporting under the licence to the Act and Regulations for the most common types of information and samples is set out below.

² The Retention Regulations came into force on 14 May 2018

³ North Sea Transition Authority: Reporting and disclosure of Information and Samples Guidance - 2021 - Publications -News &
br/>publications (www.nstauthority.co.uk)

2.2 Geophysical information

In the case of proprietary geophysical information, the Act and Regulations will be applied where the end of the calendar year in which the information is created or acquired occurs after the Disclosure Regulations have commenced. This means that information arising from proprietary geophysical surveys where acquisition completed prior to 2018 will be requested and disclosed under the terms of the licence, while information from all such surveys where acquisition completed in 2018 onwards will be requested and disclosed under the Act and Regulations. Reprocessed proprietary geophysical information will be disclosed under licence terms only if reprocessing occurred prior to 2018.

The NSTA has published supplemental guidance on the reporting and disclosure of certain geological survey information created or acquired under exploration licences.

2.3 Production information

The NSTA has issued several annual reporting notices under s.34, therefore reporting and disclosure of consolidated monthly production information, via the Petroleum Production Reporting System (PPRS), is now carried out under the Act and Regulations and no longer under the provisions of the applicable licence.

More detailed production information can be disclosed under the Disclosure Regulations as set out in the Reporting and Disclosure Guidance. For fields that ceased production permanently before the Disclosure Regulations came into effect, the NSTA will continue to request and disclose detailed (i.e. daily data by well) production information under the applicable licence, on a case by case basis.

2.4 Well and sample information

The NSTA intends that wellbores that have a regulatory completion date prior to 2018 will be governed only by the licence terms. All wellbores with a regulatory completion date in 2018 and thereafter will fall in scope of the Act and Regulations. The NSTA will only apply one regulatory regime to any given wellbore so that there is certainty regarding the confidentiality period after which well information may be disclosed. For example, any information arising from wellbore activity performed in 2018 or thereafter on a wellbore that was drilled and completed before 2018 will be retained, reported, and disclosed in accordance with the licence terms, not the Act and Regulations.

2.5 Other licence information

Both the licence and the Act and Regulations grant the NSTA powers to require the retention and reporting of, and to disclose a wide variety of other licence information, in particular once the relevant licence is determined (either in part or in full).

The NSTA will require and disclose such other licence information under the 2016 Act and Disclosure Regulations for all licence determinations occurring after 13 August 2018, when the Disclosure Regulations came into effect. For licence determinations before this date, the NSTA will request and disclose other licence information under the applicable licence, on a case by case basis.

Figure 1: Wellbore disclosure flowchart



3. Retention of information and samples

3.1 Licensees' obligation to retain licence information

Under the terms of a licence, licensees are obliged to hold accurate records in order to preserve all information about the geology of the licensed area. Similar obligations are placed on licensees by the Retention Regulations.

Under the licence, licensees must retain information and samples in an **accurate**, **useable**, **accessible and reproducible form**. The obligation to retain information and samples survives the determination of the licence, except where it is explicitly discharged through implementation of an Information and Samples Plan (ISP)⁴, or in one of the other manners set out below. The costs of such storage and maintenance of information and samples in an accurate and useable form is the licensee's responsibility.

Where the licence was determined (in whole or in part, i.e. it has expired, been revoked or there has been a surrender of rights in relation to all or part of the area in respect of which the licence was granted) before 14 May 2018, information and samples must still be retained under the terms of the licence.

Obligations, to retain and report information and samples to the NSTA, are borne jointly and severally by all companies who are the holder of a licence and not by the operator of that licence alone. The NSTA acknowledges that often the operator may carry out retention and/or reporting obligations on behalf of all licensees for a licence in fulfilling the licensees' duties under this PON. This will normally be acceptable, however, any information and samples created or acquired on behalf of a single licensee or subset of licensees (i.e. not the whole licence group) will also need to be reported if requested under the licence.

The NSTA reserves the right to require any individual licensee company to fulfil its licence obligations independently, but recognises that in situations where an approved assignment of licence interest has taken place, or an agreed ISP has been executed, a previous licensee may no longer hold or have entitlement to the information in question.

Although the licence terms (see Appendix E) require that records are kept in the UK, it may be acceptable to keep records anywhere where they can be easily and quickly provided to the NSTA.

3.1.1 Relief of retention obligations

The obligation to retain information and samples survives the determination or expiry of the licence and is, in effect, an obligation that exists in perpetuity. However, the Retention Regulations provide for the relief of the obligation to retain once information and samples are reported to the NSTA, and the NSTA recognises that, once reported (and providing the NSTA's reporting requirements have been followed) it would also be desirable for licensees to be similarly relieved of their obligation under the licence. Accordingly (and as has previously been the case) the NSTA normally intends to give relief from the licence retention obligations in the following circumstances:

3.1.2 Reporting to the NSTA

Where any information has been reported to the NSTA (for instance via the NDR⁵, the UK Energy Portal or the wider NSTA digital platform) by licensees in the **required** form and manner (or information is deemed reported by its transfer into the NDR during its establishment), the licensee will generally be relieved of its licence obligation to retain such information. For information on the required form and manner for reporting information to the NDR please see <u>https://www.nstauthority.</u> <u>co.uk/data-centre/national-data-repositoryndr/reporting-and-disclosure-of-information/</u>

This also applies where the information and samples have been deposited in the NDR in the execution of an agreed Information and Samples Plan.

3.2 Licence surrender or transfer of licence interest to another party

Where a licence interest has been surrendered or assigned, the licensee must submit to the NSTA for its approval, an ISP that describes how the relevant information and samples will be adequately safeguarded and (where appropriate) effectively transferred to the subsequent licensee. The ISP may also make provision (if the NSTA agrees) for the destruction of information no longer considered to be of value (for example, if a seismic survey has been overshot by a more recent, higher fidelity survey).

3.3 Arrangements for samples

Samples are intrinsically finite in nature and retention obligations only apply to the licensee-retained portion of any sample. Under the terms of the licence, a licensee is required to retain, for a period of 5 years (from the regulatory completion date of the wellbore) well cores and cuttings. Details of reporting requirements for various samples are given in Appendix C.

However, at any time after 5 years, Licensees may give the NSTA at least 6 months' notification (in writing) of their intent to dispose of core and cuttings samples. The NSTA may request that the sample (or some of the sample) is sent to the BGS Core Store (who hold samples on the NSTA's behalf). If no such request is made within the 6-month period then the Licensee is free to dispose of the samples as it sees fit. Please note however that the NSTA will require any information derived from the samples (for instance core analysis reports) in question to be provided to the NDR.

However, the NSTA and other stakeholders (including the Geological Society of London, the Petroleum Exploration Society of Great Britain (PESGB) and Offshore Energies UK) strongly encourage Licensees to first offer this surplus material (and cores in particular) to one or more of the organisations listed in Appendix F). The retention arrangements for fluid samples are as follows:

- Oil samples: licensees may give the NSTA 6 months' notice of their intent to dispose of the samples at any time after completion of their analyses. At any time during this 6-month period, the NSTA may request the Licensee to submit a one litre sample to the NSTA (or a nominated agent of the NSTA). If no such request is received within the 6-month period then the Licensee is free to dispose of the samples as it sees fit.
- Licensees taking samples might consider taking a dead (i.e. unpressurised) oil sample at the time of gathering the samples. This will reduce the high cost of transferring the sample from pressurised cylinders, if required to provide a sample to the NSTA (or a nominated agent of the NSTA).
- Gas samples: Gas samples (such as from wireline formation testers) may be disposed of 5 working days after notification to the NSTA of the results of tests and analyses that have been performed on the sample, unless the NSTA responds within that period requesting further analysis or the retention of the sample.

All notifications regarding the above can be made by email to the NSTA's Data Services and Compliance inbox (email ISC@nstauthority.co.uk).

3.4 What is to be retained

A Licensee must retain information and samples pertaining to a licence according to the requirements of the Model Clauses and/ or the Retention Regulations as applicable. Where both apply, although the licence places a general requirement on licensees to retain information and samples, the NSTA will normally accept that if a licensee complies with the Retention Regulations, the licensee will also be considered to have complied fully with retention requirements in respect of such information or sample under the licence.

The NSTA has issued supporting guidance describing the information and samples that a licensee must retain under the Retention Regulations.

New licences do not inherit the information and/or samples or obligations from previous licences that governed the same geographical area. Any obligations are set out in the particular licence and do not attach to the area.

3.5 The NSTA's policy on information acquisition in wells

The NSTA expects that operators will acquire all necessary information and samples to carry out safe and efficient well operations, to properly evaluate the subsurface and to document and record the engineering activities that take place on a well or wellbore.

The NSTA therefore does not specify a minimum information and sample acquisition programme, although it reserves the right to enforce changes or enhancements to a planned programme through the well consents process.

4. Reporting of information and samples

4.1 Licensees' obligation to provide information and samples

Under the terms of the licence, licensees are required to provide information and samples to the NSTA.

This includes:

- a) Wellbore information. This includes header information normally submitted via Well **Operations Notification System (WONS)** and information such as log data and reports, acquired or created throughout the entire well lifecycle. For the purposes of the NSTA strategy the NSTA now wishes all information for a particular wellbore to be reported; not just the "basic set" of wellbore information reported in the past. Examples include: joined well logs and items such as completion reports, abandonment reports, cement bond logs, workover reports and other types of engineering report. Please see Appendix B for a full listing of reportable wellbore information. The NSTA is likely to request various types of previously unreported legacy wellbore information is support of its energy transition activities.
- b) Well samples. These include bagged cuttings, slabbed cores and other sample types. Sample types not routinely collected in the past may be requested from operators at licence determination or when disposal notices are issued.
- c) Survey header information and various types of geophysical information.

- d) Production data. Monthly production data consolidated by field must be provided on a routine basis (via the PPRS) under the requirements of the 2016 Act. The NSTA will also require more detailed production data to be reported (i.e. daily production data by well) following CoP.
- e) Any other information required under the licence not in the above categories.

4.2 Seismic survey header information

Licensees are required to complete an NSTA survey close-out report within 12 weeks of completion of acquisition of all seismic surveys (including baseline 4D surveys). Header information for surveys prior to 2018 (and therefore in the scope of this document) should therefore already have been provided. For more details of the survey close-out report process please see Appendix D.

However, any missing or supplemental header information from surveys conducted prior to 2018 will be requested under the terms of the licence.

If such information is requested, licensees should quote (if applicable) the NSTA Survey Consent Number or the MAT/SAT reference number for Portal consents given via PETS in all correspondence regarding the seismic survey. It should also be included in IOGP 'P' Format Headers (as an H2600 ancillary information record).⁶

⁶ Please see section 3 of the Reporting and Disclosure Guidance North Sea Transition Authority: Reporting and disclosure of Information and Samples Guidance - 2021 - Publications -News &
br/>publications (www.nstauthority.co.uk)

4.3 Other geophysical surveys

Licensees are required to complete an NSTA survey close-out report (available on request from <u>ISC@nstauthority.co.uk</u>) for all other types of geophysical survey, including CSEM and gravity and magnetic surveys.

There is no current requirement to submit navigation data with the close out report. Licensees are reminded however that data for these surveys, if not reported, must in any case be retained in perpetuity in accordance with their licence terms and conditions. Where information ownership has been transferred through a commercial arrangement (as may be the case for certain data libraries) the NSTA will request the current owner of the data.

4.4 Site surveys

The NSTA collects metadata for site surveys through the NSTA survey close-out report (available from ISC@nstauthority.co.uk). The geological survey closeout report requires that a map of the survey area plus boundary co-ordinates is supplied by the 'Current Survey Owner'. BGS, who manage site survey data for MEDIN, also send out a survey header form which must be completed by the 'Current Survey Admin'. Digital, high resolution, multi-channel seismic acquired as part of a site survey (whether on a production or exploration licence) should be retained and reported on request on the same basis as other proprietary seismic surveys. Information from other site survey activities, such as single channel sub-bottom profiling (i.e. using chirper, pinger or boomer energy sources) or sidescan sonar should only be reported in response to a request under licence terms.

Site surveys reports, if related to the drilling of a well, should be routinely reported as set out in Table 2 of the well section in Appendix D (Other site survey reports should be reported if requested under licence terms).

4.5 Updating well and seismic survey header information

Updates to well header information must be performed through WONS. The updates are then transferred systematically to the NDR, and to other relevant NSTA systems. If a required update cannot be made through WONS, the NSTA Information Management team should be contacted for assistance at: <u>WONS@nstauthority.co.uk</u>.

Seismic survey header information is maintained by the NSTA. Licensees should make any required updates directly using the NSTA survey close out available from <u>ISC@nstauthority.co.uk</u> Guidance in making these updates may be obtained from the same e-mail address.

4.6 Well information to be submitted directly to the NSTA via the NDR

The types of well information that must be reported, and the form and manner in which that reporting should take place, are set out in Appendix B. Well information created or otherwise obtained from any part of the wellbore lifecycle (including after the regulatory completion date) must be provided to the NDR as soon as possible but no later than six months after it is created or obtained by the licensee. Information and samples newly created or acquired for wellbores that have previously been disclosed under the terms of the licence will also be disclosed under the terms of the licence. For instance, a workover or abandonment report for a production well that had reports and logs disclosed 4 years after its regulatory completion date may be disclosed immediately it is reported to the NSTA. Any licensee wishing to make representation about the immediate disclosure of information in this category should contact the NSTA at <u>ISC@nstauthority.co.uk</u>.

4.7 Well samples

Geological samples obtained from a wellbore must be reported to the BGS, who curate petroleum-related samples on behalf of the NSTA, at the National Geological Repository (NGR). In practice therefore, reporting of samples will be direct to the BGS.

Slabbed cores and washed and dried drill cuttings should be routinely reported for wells in the scope of the licence. However, the NSTA may request other types of sample under the licence terms including:

- core plugs
- sidewall cores
- micro-palaeontological microscope slides and preparations
- thin sections prepared from core, micropalaeontological or other samples

- polished sections prepared from core, micro-palaeontological or other samples
- grain mounts taken from core, micropalaeontological or other samples.

As wellbores completed in 2018 or later are governed by the Act, and Regulations, reporting of samples under the licence will increasingly only be required either following receipt of a disposal notice from the licensee or in response to a specific request from the NSTA.

The types of sample that must be reported, and the form and manner in which they are to be reported (including how they are to be packaged for transport) are detailed in Appendix C.

At the present time, fluid and formation water samples will only be requested exceptionally, in association with a specific request. Retention and disposal of fluid samples is covered by section 3.3.

4.8 Geophysical surveys

Seismic data, together with associated navigation data, velocity data, observers' logs, acquisition and seismic processing reports) should be reported as described in Appendix D. Other geophysical data, for example acquired during gravity, magnetic or other "remote sensing" surveys, should also be reported as described in Appendix D. Data, documents and reports should be loaded directly to the NDR through selfservice workflows by the licensee. Data **can** be reported on physical media, subject to the form and manner requirements set out in Appendix D. Licensees should note however that reporting on physical media is chargeable by the NDR service provider and all costs are to be met by the reporting organisation.

4.8.1 Seismic post stack, field and pre-stack data

Whilst seismic field and pre-stack data from proprietary surveys is to be routinely reported under the provisions of the 2016 Act for surveys acquired after 1st January 2018, this is not presently the case for proprietary surveys acquired (or created by reprocessing) prior to that date.

4.8.2 Non-routine data requirements

The NSTA will consider, on a case by case basis, whether to require proprietary seismic data from these surveys to be reported to it, via the NDR, under the terms of the licence. However, licensees that choose to provide any type of geophysical data and supporting documents to the NDR in order to discharge their retention obligations may do so at any time, subject to meeting the NDR form and manner requirements. The requirements for these datasets are detailed in Appendix D.

The NSTA retains the right under the licence and, for current licensees, under the 2016 Act to request other information and samples required to perform its business functions. For instance, information about the geology and subsurface (such as reservoir and multiwell studies, geological and reservoir models) that has not routinely been requested under licence powers. Likewise, the NSTA may request daily well production data for fields that have permanently ceased production prior to 2018.

The NSTA may in future request this information on a case by case basis for determined licences. When requested, it should be supplied within 4 weeks, or as otherwise specified within the relevant reporting request. Examples include:

- daily production data from individual wellbores for fields that have permanently ceased production;
- other specified licence information created or acquired by a licensee in relation to the licence area, such as multi well studies, reservoir simulation models and geological models.

4.9 Commercial seismic data

Commercial seismic datasets i.e. those arising from geophysical surveys where the acquired data is owned by holders of exploration licences and other than by or on behalf of a production licensee (sometimes referred to as speculative or multiclient data) are not required to be routinely reported under the licence. The NSTA may request any legacy commercial datasets as and when required.

The NSTA has published supplemental guidance on the reporting and disclosure of geophysical information of this nature under licences and under the 2016 Act and the Disclosure Regulations.

5. Disclosure of information and samples

5.1 The NSTA's right to disclose licence information

Under the terms of the licence, the NSTA has a right to disclose information and samples that it has received after the expiry of a specified period of confidentiality. Certain summary information may be disclosed immediately after receipt by the NSTA. Other information must be kept protected for a period of months or years before disclosure is permitted. Some information can be disclosed immediately after licence determination.

The prescribed confidentiality periods under production licences are generally:

- 4 years for licences awarded in licensing rounds 1 to 19 inclusive; and
- 3 years (or earlier if the licence is determined) for licences awarded in subsequent licensing rounds.

Therefore, as of 31st December 2021 all wellbores and proprietary surveys in the scope of this guidance should now be considered disclosed.

The NSTA is not required to disclose any information and may elect not to do so for its own reasons (for example, in support of the NSTA Strategy, or in relation to matters of national security). Licensees may also make representation to the NSTA against disclosure, by writing to the NSTA against disclosure, by writing to the NSTA at <u>ISC@nstauthority.co.uk</u>. Representation in response to a request from the NSTA should therefore generally be made **before** the information is reported. The applicable confidentiality period for information obtained by the NSTA depends on the power used by the NSTA to obtain it, and (for information obtained under a licence) the licence under which the information was created or acquired.

5.2 How to obtain disclosed licence information

Information disclosed by the NSTA will generally be available to download from the NDR (or elsewhere on the Digital Energy Platform) where practical, or to order (for a fee to cover media, handling and delivery) where necessary, or where preferred.

In the case of samples, these are made available for inspection by the BGS at their inspection facilities.

5.3 Wellbore data collection and disclosure

Reporting and disclosure of well data will be carried out through the NDR.

Please see Appendix B below.

5.4 Seismic data disclosure

Disclosure of proprietary seismic data will be made via the NDR. All volumes (together with any associated documentation) if not already present in the NDR may be requested by the NSTA on a case by case basis and made available in the NDR (field data is made available on physical media).

Disclosure of commercial seismic data is the subject of separate supplemental guidance.

6. Communication between the NSTA and licensees

6.1 Information and samples coordinators

Up-to-date contact information is essential for efficient communication with licensees, and the NSTA requires companies to proactively provide it. Under section 35 of the 2016 Act, holders of current licences have a statutory obligation to appoint an 'Information and Samples Coordinator' (ISC), and to notify the NSTA of that person's name and contact details.

For more information on ISC's please refer to the Information and Samples Coordinator Guidance⁷.

6.2 PON 9 coordinators

While the information and samples requirements of the 2016 Act apply only to current licences, the terms of the licence itself remain applicable, whether the licence is extant or determined. Accordingly, the NSTA requires licensees to provide a point of contact to coordinate compliance on information and samples requirements applicable after the licence has come to an end. This function may be undertaken by an ISC if the company is required to have one under the 2016 Act (i.e. remains a licensee in extant licences). Otherwise the organisation should appoint a 'PON 9 Coordinator' to engage with the NSTA on all PON 9 compliance matters, including (but not limited to):

- Compliance with well and seismic survey naming standards;
- Correct well and seismic survey ownership and/or reporting responsibility within the NDR;
- Confirmation of completeness of information submission to the NSTA; and
- Future PON 9 consultation and review.

6.3 How to nominate a PON 9 coordinator

Functional contact details (a generic email and company postal addresses, direct company telephone number) for the nominated PON 9 Coordinator must be sent to the NSTA by email to <u>ISC@nstauthority.co.uk</u>.

The licensee must advise the NSTA directly and promptly of any subsequent changes in the identity or contact details of the PON 9 coordinator (and/or ISC). The NSTA's policy on dealing with personal information and its privacy policy is available on the NSTA's website.

The PON 9 Coordinator may also act as the ISC for the licensee, if the licence is extant, and the same person may act as PON9 Coordinator/ISC for multiple licences held within a company group, if desired, to enable efficient and effective dialogue on all information and samples matters.

7. Relief from obligations

7.1 Transfer of obligations for licence data

The transfer of licence interests to a new licensee requires the NSTA's consent and this is conditional on an assignment being executed in a form approved by the NSTA. This form (a deed of assignment or appropriate wording as set out in the LOGIC Execution Deed) ensures that all obligations and liabilities are legally transferred, including in respect of data ownership.

Additionally, under section 31 of the 2016 Act the NSTA now requires an Information and Samples Plan (ISP) in relation to certain licence events, including a transfer of rights under a licence. An ISP may provide for either the continued retention of information and samples by the licensee or its storage. Guidance on ISPs is available on the NSTA website⁸.

A new licensee is responsible for data provision upon completion of the transfer of the licence interest and should therefore ensure that all well and geophysical records, other licence information records and physical samples are accounted for when an asset is transferred.

Licensees who acquire wells and surveys through the transfer of rights in a licence (or via a change of control) should advise the NSTA as follows:

- Wellbores: inform
 <u>WONS@nstauthority.co.uk</u>
- Surveys: inform ISC@nstauthority.co.uk

The NSTA will confirm these transfers with the transferor's ISC or PON 9 Coordinator before the ownership change is updated in WONS or the NDR. The change of ownership should be notified to the NSTA at ISC@nstauthority. co.uk as soon as the transfer becomes effective.

7.2 Hardcopy seismic

Where seismic sections for 2D surveys have been reported to the BGS (acting on the NSTA's behalf), the licensee is relieved of its licence obligations to retain these sections. The existence of a single hardcopy section, for a particular 2D line in the BGS collection, in one of the approved processed versions at an approved vertical and horizontal scale (as specified in NDR Standard 17 available from the NSTA at ISC@nstauthority.co.uk), will be sufficient to relieve the licensee of its licence obligation to retain all processed versions and scales that it holds for that line.

Where a seismic section for a particular 2D survey/line (or part-line) does not exist in the BGS collection, the licensee which is the current survey owner for the 2D survey to which the line (or part-line) belongs, may (if it wishes) create a scanned image in the prescribed form (as specified in NDR Standard 17 available from ISC@nstauthority. co.uk) of a qualifying processed and scale version (refer to NDR Standard 17) and submit this image to the NDR.

8. Definition of terms used in this document

Term	Description/Definition		
2016 Act	Energy Act 2016		
2018 Regulations	Retention Regulations and Disclosure Regulations		
Act and Regulations	2016 Act and 2018 Regulations		
BEIS	Department for Business Energy and Industrial Strategy		
Commercial seismic	Information relating to a geophysical survey carried out by or on behalf of the holder of an exploration licence, sometimes referred to as 'speculative' or 'multiclient' seismic.		
Disclosure Regulations	The North Sea Transition Authority (Offshore Petroleum) (Disclosure of Protected Material after Specified Period) Regulations 2018		
Exploration licence	An offshore licence which confers on the holder of that licence the right to search for petroleum.		
Information and Samples Coordinator or ISC	As defined in Section 35 of the Energy Act 2016		
Information and Samples Plan or ISP	As defined in Section 35 of the Energy Act 2016		
IOGP	International Association of Oil and Gas Producers. The IOGP Surveying and Positioning Committee completed a revision of P formats and the P1/11, P2/11 and P6/11 formats were published at the end of 2012. The IOGP are also custodians of legacy positioning formats, including UKOOA P1/90, UKOOA P6/98 and UKOOA P7/2000 which are referred to later in this document.		
Licence	An exploration licence or a production licence		
Licensee	A person who holds a licence		
MEDIN	The Marine Environmental Data and Information Network, co-sponsored by BEIS. MEDIN collects marine data including site surveys.		

Term	Description/Definition
NDR	The NSTA's National Data Repository, to which well, survey, and other information may be reported in fulfilment of a licensee's reporting obligations, and from which licensees, the NSTA, and the general public may obtain that information, either by specific entitlement, by right as the regulator, or once publicly disclosed.
NDR Survey Header	Header information for a geophysical survey reported to the NSTA comprising of the survey identifier and other information about the survey derived from the close out process.
NSTA	The North Sea Transition Authority
PETS	BEIS's Portal Environmental Tracking System (part of the BEIS Energy Portal). This is BEIS's system for tracking environmental reporting and issuing permits to work.
PON 9 coordinator	Nominated by a licensee to co-ordinate that company's compliance with the requirements of PON 9. See also ISC.
Production licence	A licence to search and bore for, and get, petroleum.
Proprietary seismic	Information relating to a geophysical survey carried out by or on behalf of the holder of a production licence.
Regulatory completion date	See note 7 to Appendix B
Reporting and Disclosure Guidance	The NSTA's Reporting and disclosure of Information and Samples Guidance which can be found here: <u>https://www.nstauthority.co.uk/regulatory-framework/guidance/</u>
Retention Regulations	The North Sea Transition Authority (Offshore Petroleum) (Retention of Information and Samples) Regulations 2018
s.34	Section 34 of the Energy Act 2016
Samples	A specific class of licence data including well and seabed cores, cuttings, fluid and gas samples.
SATS	Subsidiary Application made under BEIS's Portal Environmental Tracking System (PETS) for e.g. geological surveys.
Slabbed core	A continuous vertical section comprising at least the width of the core that will allow standard poro-perm plugs to be taken.
WONS	Well Operations Notification System (WONS), accessed via the NSTA Energy Portal, is an application that supports a digital well consenting process. It also allows operators to notify the NSTA of operations on wells and for the NSTA to issue official well numbers. (Also used to supply updated well header info.)

Appendix A: Address details for information submission

This section provides all shipping addresses needed for submission of licence data.

A.1 Shipments to the NSTA/BGS

Cores and cuttings

National Geological Repository

British Geological Survey Environmental Science Centre Nicker Hill Keyworth Nottingham NG12 5GG

Tel. 0115 936 3228/3413

Email: kwcorestore@bgs.ac.uk

A.2 Shipments to NDR

Seismic data

UK National Data Repository c/o Moveout Data Seismic Services Ltd The Stable Block Lockwood Park Brewery Drive Huddersfield HD4 6EN

The NSTA and its agents have no obligation to receive any shipments where advanced notice of their delivery has not been provided.

Advanced notification of any shipments of media should be raised to support@ndr-uk.co.uk

Appendix B: Reporting of well information

To align with its requirements under the Energy Act (and for the benefit of the NSTA Strategy the NSTA intends that information relating to the entire well lifecycle should also be reported). This includes data as follows:

Well life cycle phase	Туре	Remarks	Reported by
Pre drill	Authority for expenditure, partner consents, etc	Documentation to be reported. A summary in the Operator's End of Well Report would be adequate.	Within 4 weeks of a request from the NSTA
Pre drill	Geological/well proposals Providing basic details of well location, seismic structure, basic well evaluation, mud programme and well evaluation plan. May otherwise be included in geological and/or drilling programme.		Information arising from well activity taking place after the drilling phase or subsequent work on information and
Pre drill	Geological programme	Describing the full structural geological setting, cross sections, stratigraphic column, well evaluation programme – (including coring, logging (wireline/LWD/MWD), mud logging etc.), pore pressure and temperature profiles and other information from geological models, etc. Basic details of contractors, the well operator, and equity partners must also be reported. Alternatively, this may be included in drilling programme.	samples created or acquired from the wellbore, should be reported no later than 6 months after it is created.
Pre drill	Drilling/operations programme	Describing the planned design of the well/wellbore such as drill bit diameters, casing types, shoe depths, kick-off points, deviation, plug depths etc. May be combined with the geological programme, above. For non-drilling operations, a similar level of appropriate information for the type of activity is required.	
Pre drill	Site survey	Report on rig site conditions, shallow gas, other hazards, bathymetry for the proposed well. Information arising from 2D shallow seismic surveys must be reported as specified in the geophysics section.	
Pre drill	Rig positioning report (for mobile unit)	Documents the actual siting of the rig.	

Well life cycle phase	Туре	Remarks	Reported by	
Drilling Operations	Daily (operations) reports	May be reported as separate reports, or included in contractor daily operations reports. Full reports must be reported in addition to any summary included in the end of well report.	Within 4 weeks of a request from the NSTA	
Drilling Operations	Definitive deviation survey	The final, definitive deviation survey as approved by the well operator on behalf of the other licensees, including the finalised deviation survey data used as a positional reference for all the other data that requires positional referencing, and associated reports (including the deviation survey end of well report).	activity taking place after the drilling phase or subsequent work on information and samples created or acquired from the wellbore, should be reported no later than 6	
Drilling Operations	Casing/cementing end of well report	Details of casing and cementing operations during the drilling operations phase. Full reports must be reported in addition to any summary in the operator's end of well report.	months after it is created.	
Drilling Operations	Mud contractor end of well report	Full reports must be reported in addition to any summary in the operator's end of well report.		
Drilling Operations	LWD/MWD end of well reportFull reports must be reported in addition to any summary in the operator's end of well report.			
Drilling Operations	Perations Well Examiner Reports Audit report to verify that drilling and other well operations have been carried out in accordance with all plans and safety criteria.			
Completion Operations	Impletion Operations Completions and Workovers Programme Reports detailing plans for Completions and Workovers before the operations take place.			
Completion Operations	Completion and Workover Operations Reports	Reports detailing Completions and Workovers after the operations have taken place. Details of well stimulation, fracking (Hydrofrac) and production engineering.		
Data Collection and Interpretation	Mud logging end of well report	Report typically includes expected prognosis, drilling dynamics data, lithology and provisional formation tops, and includes associated logs (formation evaluation, ditch gas, temperature, pressure evaluation, etc.).		
Data Collection and Interpretation	Core operations report	Report from the coring contractor. Alternatively, may be included in the Operator's End of Well Report (Conventional or Rotary cut core only).		
Data Collection and Interpretation	Sidewall Core Reports	All reports on acquisition, analysis and interpretation of sidewall Core.		

Well life cycle phase	Туре	Remarks
Data Collection and Interpretation	Biostratigraphy, palynology, and palaeontology reports	Typically provided by the contractor. Includes reports on palaeontological and palynological analysis activities, interpretations and conclusions. Will include zones, species listings and range charts, and includes report from wellsite services, where available.
Data Collection and Interpretation	Geochemistry report	Typically provided by the contractor. Includes details of methodology, results, and interpretations.
Data Collection and Interpretation	Conventional core analysis report and core photos	Typically provided by the contractor. Details of conventional core analysis activity and results. Includes lithological descriptions, porosity, permeability, saturations, matrix densities, and core photos, typically referenced using driller's depths.
Data Collection and Interpretation	Special core analysis (SCAL) report	Special core analysis performed on preserved samples, including relative permeability data, capillary pressure test data, any other contractor derived data and results.
Data Collection and Interpretation	Sedimentology, petrography, and petrology	Reports detailing rock properties determined by logging and/ or facies descriptions of core.
Well Testing	Pressure, volume, temperature (PVT) and other fluid analysis	Details of measurement of phase behaviour and pressure/ volume / temperature of reservoir fluids, as typically performed on samples from wireline well testing e.g. MDT, or drill stem testing. e.g. MDT, RFT, Flowing and Shut-in Bottom Hole Pressure Surveys. Pressure data during production and injection operations if recorded, and including reference depth information where available (TVD, MD, etc.). Frac Pressure Data (via Leak Off tests). Characterisation of all fluids (water and hydrocarbons) within the hydrocarbon leg and if recorded within the aquifer leg. Chromatographic data if recorded.
Data Collection and Interpretation	Other bespoke contractor reports (engineering, geological, geophysical, petrophysical)	Other specialist reports provided by various contractors, e.g. Rock Properties (strength, compressibility, stress studies) chemostratigraphy, goniometry on cores, etc.
Data Collection and Interpretation	Other bespoke contractor reports (engineering, geological, geophysical, petrophysical)	Other specialist reports provided by various contractors, e.g. chemostratigraphy, goniometry on cores, etc.
Data Collection and Interpretation	Open hole wireline	Images and digital data arising from all logs run (includes gamma ray, sonic, density and neutron logs). All logs recorded using wireline, slickline, TLC pipe conveyed or coiled tubing tool conveyance methods.
Data Collection and Interpretation	Core data curves	Including core gamma ray. Typically referenced to driller's depths, and used to adjust cores to log depths on the composite log.

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Reported by

Within 4 weeks of a request from the NSTA

Information arising from well activity taking place after the drilling phase or subsequent work on information and samples created or acquired from the wellbore, should be reported no later than 6 months after it is created.

Well life cycle phase	cle phase Type Remarks		Reported by	
Data Collection and Interpretation	Cased hole and tubing wireline	Images and digital data arising from all logs run (includes cement bond logs, perforation logs and slickline logs).	Within 4 weeks of a request from the NSTA	
Data Collection and Interpretation	Well test/formation test logs	Logs arising from formation testing tools (e.g. PLT, RFT, TDT, MDT etc.). May include details of samples collected.	Information arising from well activity taking place after the	
Data Collection and Interpretation	Composite well logs	Image log with full well header information, showing all primary wellbore measurements, including: formation tops, chronostratigraphy, lithostratigraphy, lithologies, selected log curves, DST intervals (with summary results), cored intervals (depth shifted), sidewall cores, formation tester results, background gas, hydrocarbon shows, casing/liner depths, deviation data, measured 2 way times to formation tops.	drilling phase or subsequent work on information and samples created or acquired from the wellbore, should be reported no later than 6 months after it is created.	
Data Collection and Interpretation	Joined well logs	Joined set of digital log curves spliced together over full depth range of wellbore. Typically used for correlation purposes it will be the most accurate and complete record of the main log measurements such as sonic, density, neutron and resistivity. Information on the processing of well logs, including a full audit trail, must also be reported.		
Data Collection and Interpretation	Computer processed interpretations (CPI)/petrophysical data log	Spliced, environmentally corrected log curves for use in petrophysical interpretation. Will normally be specialist curves not normally included in a standard composite log. Associated audit trails should also be reported.		
Data Collection and Interpretation	Borehole seismic data	Includes reports, logs and digital data obtained as part of VSP profile, offset VSP, Velocity survey etc. All sonic/velocity and two-way time (TWT) logs including calibrated sonic and density logs and any derived calculations. Synthetic seismograms.		
Data Collection and Interpretation	Computer processed interpretations (CPI)/petrophysical data log	Spliced, environmentally corrected log curves for use in petrophysical interpretation. Will normally be specialist curves not normally included in a standard composite log. Associated audit trails should also be reported.		
Data Collection and Interpretation	Borehole seismic data	Includes reports, logs and digital data obtained as part of VSP profile, offset VSP, Velocity survey etc. All sonic/velocity and two-way time (TWT) logs including calibrated sonic and density logs and any derived calculations. Synthetic seismograms. Data acquired by Distributed Acoustic Sensing techniques for Vertical Seismic Profiling purposes only. Where used for 4D surveillance, baseline and final DAS datasets only should be reported. Interim datasets are not required.		

Well life cycle phase	Туре	Remarks	Reported by	
Data Collection and Interpretation	LWD/MWD log data	Data and measurements collected while drilling.	Within 4 weeks of a request from the NSTA	
Data Collection and Interpretation	Dipmeter and borehole imaging data	Includes dipmeter logs, borehole televiewer images, etc.	Information arising from well activity taking place after the	
Data Collection and Interpretation	Wellsite lithology log	As provided by the wellsite geologist.	drilling phase or subsequent work on information and samples created or acquired	
Data Collection and Interpretation	Wellsite core logs	Core descriptions as provided by the wellsite geologist.	from the wellbore, should be reported no later than 6 months after it is created.	
Data Collection and Interpretation	Operator's drilling end of well report	Also known as the drilling report, end of well report or Drilling well History. Includes summaries of all contractor activities, and is generated at the end of each well lifecycle activity. Multiple reports may exist for a single well / wellbore. Typically includes: LWD/MWD/mud/mud logging/casing/ cementing/ surveys/etc. plus final well schematic, lessons learned, cementing, mud logging summary, QC reports, well examiner certificate, and barrier pressure test/leak off test summary.		
Data Collection and Interpretation	Operator's geological end of well reports	Includes final formation tops, stratigraphy, logging summary, coring summary, core depth shifts (driller to logger) where relevant. Samples collected, and fluid descriptions. Perforated intervals. Studies conducted. Formation pressures and gradients from formation pressure logs. May contain petrophysical interpretation with audit trail. For some wells there may be a Well Summary Report containing an executive summary of all aspects of well operations and results. This is not a substitute for detailed geological and operational reporting.		
Data Collection and Interpretation	Operator's petrophysical end of well report	Petrophysical interpretation with audit trail if not included as part of the geological end of well report.		
Data Collection and Interpretation	Operator's petrophysical end of well report	Petrophysical interpretation with audit trail if not included as part of the geological end of well report.		
Data Collection and Interpretation	Perforation and reperforation reports and logs	Report on perforating and perforated or reperforated intervals.		
Abandonment Operations	Well Abandonment Programme	Reports detailing plans for well abandonment/decommissioning operations (before the operations take place).		
Abandonment Operations	Well Abandonment HSE Notification	Notification of well abandonment/decommissioning operations to HSE.		
Abandonment Operations	Daily Well Abandonment operations reports	Well abandonment/decommissioning daily operations reports.		

Well life cycle phase	Туре	Remarks	Reported by	
Abandonment Operations	Well Abandonment/Decommissioning End of Job Reports	ports Reports detailing well abandonment/decommissioning operations after the operations have taken place. Includes details of pressure tests on all barriers put in place as part of the well abandonment process and details of stratigraphy for all flowing formations encountered.		
Abandonment Operations	Well Abandonment/Decommissioning Cementing Reports	Reports detailing cementing operations as part of well abandonment/decommissioning. Includes cement evaluation, pressure tests and weight tests on casing cement and isolation plugs.	drilling phase or subsequent work on information and samples created or acquired from the wellbore, should be reported no later than 6	
Abandonment Operations Abandonment/Decommissioning Logs W		Well logs generated in well abandonment/decommissioning operations including cement evaluation tools and casing imaging tools (e.g. pulsed eddy current).	months after it is created.	
Abandonment Operations	Well schematic	The final (or most current) well schematic for the well as included in the drilling programme (as-is and planned) and in the end of well report, as submitted to WONS. Includes details for all plugs, barriers, casing strings and shoes against MD and TVDSS where available. Final Abandonment (AB3) schematic showing casing cut depths relative to the Mudline.	t	
Abandonment Operations	Seabed clearance certificate	A seabed clearance certificate may be applicable to more than one well. Normally included in the end of well report or abandonment report and also provided to WONS.		

Notes

- 1. All documents are expected to be in machine readable digital format.
- 2. All documents and data are to be submitted online to the NDR. Submission on physical media is not permitted, except by prior arrangement.
- 3. Documents submitted in PDF/A format must contain machine readable text, rather than scanned images of text.
- 4. Where a series of wellbores are drilled in quick succession from the same surface location they must be reported within 6 months of the regulatory completion date of the last wellbore before the rig permanently leaves location.
- 5. For a list of C-tags please see https://www.nstauthority.co.uk/data-centre/national-data-repository-ndr/ reporting-and-disclosure-of-information/
- 6. For well log curve joining standard please see NDR standard 5 (NDRS-5) please contact ISC@nstauthority.co.uk
- 7. Regulatory Completion Date is defined as the date a wellbore, having reached its target, (or final total measured depth) is first left in of one of the following mechanical states following drilling:

- and setting of tubing and packers is finished and the wellbore is ready to flow, or;
- 9. Permanently Abandoned (Abandoned Phase 3 AB3) the date that the well (i.e. including all connected wellbores), on completion of operations, is left in such a condition that the open hole is plugged and sealed such that it may not be re-entered (in general this will involve the cutting and retrieval of casing strings, removal of all drilling mud and similar fluids, permanent sealing of the wellhead and removal of the well origin with no components remaining at surface) or;
- 10. Suspended (Abandoned Phase 1 AB1, Abandoned Phase 2 AB2, or Plugged) the date that the wellbore is either abandoned downhole or temporarily plugged so that it may be re-entered at a later Regulatory Completion Date with the Licensee through the consenting process;
- 11. In the case of a series of sidetrack wellbores drilled in succession the regulatory completion date for a the contrary.
- 12. For full details of acceptable form and manner requirements for reporting please see https:// information/

8. Completed for Production (Completed – Shut in, or Completed – Operating) – the date that perforation

date. If the well is suspended before the target has been reached, the NSTA will agree the appropriate

parent well will be taken as the kick-off date of the subsequent sidetrack unless the NSTA is notified to

www.nstauthority.co.uk/data-centre/national-data-repository-ndr/reporting-and-disclosure-of-

Appendix C: Reporting of samples

Туре	Description	Form and manner comments	Remarks	Reported
Conventional cores	Slabbed core	A complete longitudinal section comprising at least one quarter of the core from exploration wells and one half of the core from development wells. If the core diameter is less than 7.6 cm (3 inches) the NSTA collection at the NGR should also receive at least one half of the core from exploration wells. Please see figure 2 - explanatory diagram and note on core boxes below.	The National Geological Repository British Geological Survey Keyworth Nottingham NG12 5GG	Routinely of comple date") as therefore scope of l
	Resinated core	Thin resinated slab to facilitate description.	As above	Not routin
	Core plugs	Generally 1-2" long plugs for poroperm analysis.		i. may be
	Plug trims	Trimmed sections used for biostratigraphy etc.		determina in an infor
	SCA/preserved samples (full core width)	SCALS – waxed, flasked in brine or Oil Based Mud (OBM) etc.		ii. NSTA w may be is
Drill cuttings	Washed and dried	Minimum 100g to be reported where collected from each sample.	As above	Routinely of comple washed a been repo
	Unwashed samples	Bagged samples		Not routin
	Geochemical samples	Tinned unwashed cuttings, with bactericide added, normally stored inverted.		i. may be determina in an infor
				ii. NSTA w may be is

d by

reported no later than 6 months from the date etion of the wellbore (the "regulatory completion recorded in WONS. NB Slabbed core should already have been reported for wellbores in the PON 9.

nely reported but:

required to be reported on licence ation (full or partial) as agreed with the NSTA rmation & samples plan (ISP) or;

will request on a case by case basis (requests sued in response to a disposal notice).

reported no later than 6 months after the date etion of the wellbore as recorded in WONS. NB and dried cuttings should therefore already have orted for wellbores in the scope of PON 9.

nely reported but:

required to be reported on licence ation (full or partial) as agreed with the NSTA rmation & samples plan (ISP) or;

vill request on a case by case basis (requests sued in response to a disposal notice).

Appendix C: Reporting of samples (continued)

Туре	Description	Form and manner comments	Remarks	Reported	
SidewallSidewall corescores(percussion)		Cores taken from side of borehole normally by (explosive) wireline tool.	As above	As above	
	Sidewall cores (rotary)	Cores taken from side of borehole normally by rotary drilled, wireline tool (can be used for poroperm analysis).			
Thin sections and grain mounts	Micro-palaeontology and palynological slides and preparations All those prepared As			As above	
	Thin sections	Petrographic thin sections			
	Polished sections	Petrographic polished sections			
	Grain mounts	Resin mounted grains for used for further analysis			
Fluid samples	Oil samples	Non-pressurised. No more than 1 litre	As above	As above	
(DST/MD etc.)	Formation water samples (including from aquifers encountered, as well as from hydrocarbon- bearing formations)	No more than 1 litre			
	Gas samples				



Figure 2: Explanatory diagram of main core cuts



Metadata for submitted samples

The metadata for every box of samples submitted to the National Geological Repository must be included in a summary spreadsheet, an example of which is given below. All boxes in an individual delivery from a single source wellbore should be included in one spreadsheet. Boxes should be grouped by sample type/set code and then arranged in ascending box number order. Boxes from several wellbores may be included in the same spreadsheet, provided that they will be delivered together. Spreadsheets should be emailed in advance to <u>kwcorestore@bgs.ac.uk</u> and copied to <u>ISC@nstauthority.co.uk</u> with notification of estimated delivery time.

Figure 3: Sample metadata

Further examples of sample template spreadsheets may be requested from ISC@nstauthority. co.uk

Copies of any core photographs, referenced to the driller's depth should also be submitted with the above accompanying metadata (see also Well Information in Appendix B above).

Box No.	Licence	Top Dept	h Base Depth	Units	Core Run no	. Material Type Code/Name	e Set Code/Numbe	r Source Well Name	Comments
1	P1632	13040	13043	Imperial	1	1/2 Core		13/25- 1	
2	P1632	13043	13046	Imperial	2	1/2 Core		13/25- 1	
3	P1632	13046	13049	Imperial	3	1/2 Core		13/25-1	
4	P1632	13049	13052	Imperial	4	1/2 Core		13/25- 1	
5	P1632	13052	13055	Imperial	5	1/2 Core		13/25- 1	
1	P473	2933	3180	Metric		WSCT	D3	49/21g- 11	92-104g 10m Intervals
2	P473	3180	3410	Metric		WSCT	D3	49/21b- 11	92-104g 10m Intervals
3	P473	3410	3670	Metric		WSCT	D3	49/21g- 11	92-104g 10m Intervals
4	P473	3670	3910	Metric		WSCT	D3	49/21g- 11	92-104g 10m Intervals
5	P473	3910	4046	Metric		WSCT	D3	49/21b- 11	92-104g 10m Intervals
6	P1632	5280	7440	Imperial		WSCT	В	9/02b-A4	55-74g 30ft Intervals
7	P1632	7440	9912	Imperial		WSCT	В	9/02b-A4	55-74g 30ft Intervals
8	P1632	9912	13091	Imperial		WSCT	В	9/02b-A4	55-74g 30ft Intervals

Packaging instructions and core box specification

Conventional cores shall be delivered in solid, rigid boxes made from 1.8mm thick acid free card, kraft lined both sides, with heavy duty corrosion resistant staples. Boxes must have separate full depth lids; tray and sleeve construction is not acceptable.

The following sizes (millimetres) are allowable:

- 1000 x 100 x 100
- 1000 x 75 x 75
- 1000 x 100 x 50
- 1000 x 120 x 60

All boxes shall be indelibly and clearly marked with the following information (printed selfadhesive labels are acceptable):

- Box number (numbered sequentially downwards from the top)
- Top depth
- Base depth
- Units (Imperial or Metric)
- Core run number (if applicable)
- Material type code or name (WSCT = washed cuttings)
- Set code (if applicable i.e. the set of cuttings being supplied)
- NSTA wellbore name

Twin runs in a single box are acceptable if separated by a cardboard divider. Any empty spaces should be packed with "Plastazote Foam" or card blocks and crumpled acidfree tissue should be added over the core to ensure no movement occurs during transportation.

All boxes should be labelled on the visible end, and the core, samples or cuttings within should "young" away (i.e. get shallower) from the viewer. Boxes should be numbered from the top of the well downwards.

In the case of cuttings, the routinely reported washed and dried set are often dispatched from an offshore location where damp conditions render card construction impractical. In this situation, box construction using 4.5 mm thick corrugated plastic or polypropylene fluted board (such as "Correx") is acceptable.

All cuttings, whether washed and dried (sent routinely) or unwashed (sent at disposal or as an ISP request) should be sent in good quality leak proof bags or high-density polythene containers All bags should be clearly and indelibly labelled with a permanent pen appropriate to the material of the bag and placed in depth sequence within the box.

Sample boxes may be plastic wrapped for ease of shipping. Transmittals should be placed in sealed waterproof document wallets.

The cost of any resubmission or re-boxing of samples required due to failure to comply with these instructions, shall be borne by the relevant person. **Any boxes that exceed the standard dimensions by more than 5mm in any direction will be automatically rejected. It should also be noted that BGS offer a sample repackaging service. Please contact** <u>kwcorestore@bgs.ac.uk</u> for details.

Appendix D: Reporting of geophysical information

Туре	Remarks	Report category	Reported by
Recorded trace data	Including auxillary channels and source signature, where available		Proprietary surveys:
Group formed or final field produced	Where partial processing has occurred during acquisition. Including de-ghosted data		Commercial surveys:
Nav-seis merge data	Source/receiver navigation data assigned to CMP positions		-
Pre-stack time migrated data	Raw and final PSTM gathers		-
Pre-stack depth migrated data	Raw and final PSDM gathers		-
Stacking and migration velocities	As used in depth migration processing		

Final migrated stack	The final migrated stack after full pre-stack processing	Proprietary surveys:
Final migrated stack after full pre-stack and post stack processing	Includes angle and offset stacks	Commercial surveys:
All other post stack depth migrated volumes	Includes post stack time migrated volumes if created	
Post stack time migrated volumes	If created as part of a PSDM project	

NSTA will request on a case by case basis

NSTA will request on a case by case basis

NSTA will request on a case by case basis

NSTA will request on a case by case basis

Appendix D: Reporting of geophysical information (continued)

Туре	Remarks	Report category	Reported by
Processed navigation and bathymetric/ topographic data			Proprietary surveys:
Projected and geographic coordinate reference systems for processed data			Commercial surveys Other: NSTA will reque
	Reports detailing the acquisition and quality checking of seismic surveys, including weekly reports and the final deliverables or outputs from surveys. These include shot point base maps and maps showing the full fold of coverage	Acquisition report	Proprietary surveys: (if not already reported document)
Field tape listings		Field QC output listing	Commercial surveys
Observers logs		Observers logs	-
Source logs		Source logs	
Processing reports	Information on processing system and sequence, final products, input data etc.	Processing reports	
Navigation reports		Navigation reports	
Navigation QC reports		Navigation QC reports	

NSTA will request on a case by case basis

NSTA will request on a case by case basis

est on a case by case basis

No later than 6 months after processing in accordance with previous versions of this

NSTA will request on a case by case basis

Appendix D: Reporting of geophysical information (continued)

Туре	Remarks	Report category	Reported by
Digital raw data	Acquisition, processing and interpretation. Including information on land gravity tie points, information on reference systems and normal gravity formulas used. Information on geoid models used, if sealevel heights are derived from GPS. Information on bathymetry used if Bouguer anomalies are computed	N/A	 Proprietary surveys: (if not already reported document) Commercial surveys
Reports			
Processed line and grid data	Data should include latitude, longitude (WGS84), free-air anomaly, gravity (if available), height above sea-level and/or height above ellipsoid, and Bouguer anomaly (if computed)		
Free-air gravity anomaly maps			
Maps			
Acquisition, processing and interpretation reports			
Digital raw data			
Processed line and grid data			
Residual magnetic intensity map			
Electromagnetic		N/A	

Notes

1. For information on the form and manner for reporting geophysical data (and also labeling instructions for media) please see https://www.nstauthority.co.uk/data-centre/national-data-repository-ndr/ https://www.nstauthority.co.uk/data-centre/national-data-repository-ndr/ https://www.nstauthority.co.uk/data-centre/national-data-repository-ndr/

No later than 6 months after processing I in accordance with previous versions of this

NSTA will request on a case by case basis

Licensee to keep samples

Clause 31¹⁰

- (1) As far as reasonably practicable the Licensee shall correctly label and preserve for reference for a period of five years samples of the sea bed and of the strata encountered in any Well and samples of any Petroleum or water discovered in any Well in the Licensed Area.
- (2) The Licensee shall not dispose of any sample after the expiry of the said period of five years unless –
- (a) they have at least six months before the date of the disposal given notice in writing to the Minister of his/ her intention to dispose of the same; and
- (b) the Minister or any person authorised by him/ her has not within the said period of six months informed the Licensee in writing that he/she wishes the sample to be delivered to him/her.

(3) The Minister or any person authorised by him/ her shall be entitled at any time—

- (a) to inform the Licensee in writing that he/ she wishes the whole or any part of any sample preserved by the Licensee to be delivered to him/her; or
- (b) to inspect and analyse any sample preserved by the Licensee.
- (4) The Licensee shall forthwith comply with any request for the delivery of the whole or any part of any sample which is made in accordance with the preceding provisions of this clause.

Reports to be treated as confidential

Clause 32

All records, returns, plans, maps, samples, accounts and information (in this clause referred to as "the specified data") which the Licensee is or may from time to time be required to furnish under the provisions of this licence shall be supplied at the expense of the Licensee and shall not (except with the consent in writing of the Licensee which shall not be unreasonably withheld) be disclosed to any person not in the service or employment of the Crown—

Provided that -

- (a) the Minister shall be entitled at any time to make use of any of the specified data for the purpose of preparing and publishing such returns and reports as may be required of the Minister by law;
- b) the Minister shall be entitled at any time to furnish any of the specified data to the Natural Environment Research Council and to any other body of a like nature as may from time to time be carrying on activities of a substantially similar kind to the geological activities at present carried on by the said Council;
- (c) the Minister, the said Council and any such other body shall be entitled at any time to prepare and publish reports and surveys of a general nature using information derived from any of the specified data;

- (d) the Minister, the said Council and any other such body shall be entitled to publish any of the specified data of a geological, scientific or technical kind either—
 - (i) after the expiration of the period of three years beginning with the date when the data were due to be supplied to the Minister in accordance with clause 29 or 30 of this licence, or if earlier, the date when the Minister received those data;
 - (ii) after the licence ceases to have effect, whether because of its determination, revocation or the effluxion of time; or
 - (iii) after the expiration of such longer period as the Minister may determine after considering any representations made to him/her by the Licensee about the publication of data in pursuance of this sub-paragraph.

Appendix F: Donation of surplus samples

Licensees are strongly encouraged to consider alternatives to disposal, and where possible to offer sample materials which are not required either by the NSTA or the BGS to one or more of the organisations suggested below. The NSTA will make arrangements in the future to post details of surplus samples online to notify subscribers of their availability.

There are many benefits to donating sample materials; while the material may no longer be of economic use to licensees, it has great potential to others in Geoscience, including education, science communication and science, technology, engineering and mathematics (STEM) outreach. The availability of practical materials can be highly beneficial to the teaching of STEM subjects and enhances the impact and effectiveness of science communication to non-experts. Awareness of the importance of science communication and public engagement is growing, both within the public sphere and government (House of Commons Science Communication and Engagement Report 2017). Donation may provide an opportunity to improve public perception of both the licensee and the wider oil and gas industry. In turn, this may lead to improvements in the uptake of STEM related subjects and maintain the geoscience workforce for industry.

While all matters relating to sample disposal remain at the discretion of the holder, if donation is the preferred option, the holder may wish to consider meeting the costs of transporting the sample to the chosen organisation and/ or providing other help with redistribution or activities involving the donated material.

Organisations are listed in alphabetical order

Earth Science Education Forum for England and Wales (ESEFEW) https://www.bgs.ac.uk/esef/home.htm Contact: ESEFEW@gmail.com

About: The aim of the Earth Science Education Forum for England and Wales is to promote earth science in education at all levels, with links to all relevant organisations in pursuit of this.

Earth Science Education Unit (ESEU) https://www.earthscienceeducation.com/

Contact: eseu@earthscienceeducation.com

About: The Earth Science Education Unit (ESEU) is a national provider of CPD in Earth science to UK teachers, through workshops, teacher meetings and teacher education institutions and organisations.

Earth Sciences Teachers' Association (ESTA)

https://earthscience.org.uk/

Contact: contact@esta-uk.net

About: The aim of the Earth Science Teachers' Association (ESTA) is to advance geoscience education and support teachers by encouraging and developing the teaching of Earth Sciences at all levels. ESTA will be able to provide a network to all the Earth Science teachers in the UK.

The Geologists Association (GA) https://geologistsassociation.org.uk/ **Contact:**

sarah@geologistsassociation.org.uk

About: The Geologist Association actively promoted the study of geology to all, with membership open to both amateur and professional geologists. The association provides lectures, conference, field trips, educational outreach and research grants.

Geological Curators' Group (GCG) https://www.geocurator.org/

Contact: chair@geocurator.org

About: The Geological Curators' Group (GCG) is a specialist group of The Geological Society of London and is dedicated to better care, maintenance and furthering the use of geological collections worldwide. Can provide a network to all the museum curators and academics within the UK.

North Sea Core https://www.northseacore.co.uk

Contact: northseacore@gmail.com

About: North Sea Core is an initiative set up in response to the release of core material by oil and gas companies, through the relinquishment, abandonment and decommissioning of fields in the North Sea. Can provide a global platform to making the core available to the wider geological community for education, science outreach and use in personal and professional collections.

Rockwatch

https://www.rockwatch.org.uk/ Contact: hello@rockwatch.org.uk

About: Rockwatch is a nationwide club for young geologists and their families, with events ranging from field trips, residential trips and museum events. It is the junior arm of the Geologists Association with their own governance.

Scottish Earth Science Education Forum https://earthscienceeducationscotland. wordpress.com/

Contact: projects@sesef.co.uk

About: The Scottish Earth Science Education Forum (SESEF) is an association of educators and scientists established to promote the development and understanding of Geoscience in Scottish schools and colleges.

University Geoscience UK https://www.geolsoc.org.uk/ UniversityGeoscienceUK

About: University Geoscience UK is the association of Geoscience Departments/ Schools within the Universities of the UK. The association is hosted by the Geological Society of London and promotes a platform for discussion and the exchange of information. Can provide a network to all the Geoscience universities in the UK.



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