

From: David Ritchie
Energy & Climate Change Directorate
07 Oct 2015

First Minister
Deputy First Minister

EXPLORATORY BOREHOLES

Purpose

To provide advice on exploratory borehole drilling.

Background

1. On 28 January 2015, Mr Ewing announced a moratorium on onshore unconventional oil and gas developments. MSPs, industry and NGOs have since called for clarification on whether exploratory boreholes drilled using standard conventional techniques are included in the moratorium. The text of the outstanding PQs on boreholes is provided in **Annex A**.

Exploratory boreholes

Context

2. Boreholes are drilled regularly in Scotland and for a variety of purposes, other than onshore oil & gas exploration and extraction. For example, this can include:

- shallow drilling for site investigation and construction e.g. motorways;
- mineral exploration, including sand and gravel;
- drilling for water and water abstraction; and
- monitoring purposes.

3. While the British Geological Survey (BGS) does not collate annual figures for the number of boreholes drilled, it has roughly estimated that around 5,000 boreholes are drilled per year in Scotland. SEPA has also indicated that it has authorised 23 CAR licences since April 2013 which would involve boreholes drilled to a depth greater than 200m.

4. In the context of unconventional oil and gas, exploratory borehole drilling does not involve hydraulic fracturing or the extraction of petroleum. Exploratory borehole drilling is a scientific exercise that allows developers to take sample rock cuttings (core samples) for analysis.

5. There is no evidence to indicate that the process of drilling deep boreholes for exploratory analysis using standard techniques will present any greater environmental or public health risks than other boreholes.

6. Boreholes for unconventional oil & gas exploration will however involve more intensive working than other boreholes, including 24 hour drilling over a 60 day period to a depth likely to exceed 1000 metres. The UK Onshore Operators Group estimate that the process could take up to 4 months.

7. Prospective oil and gas exploratory boreholes could only be drilled within the PEDL areas, maps of the PEDL areas provided in **Annex C**.

Industry Perspective

8. Industry has argued that it believes it important that they and the Scottish Government understand the extent of the potential resource, and that this is in line with an evidence-based approach. Some opponents argue that permitting boreholes is a sign that the Scottish Government ultimately intends to consent to unconventional oil and gas developments.

9. [redacted]

10. Based on this timetable, seismic surveys could take place in late 2015/early 2016, however, drilling of boreholes is unlikely to commence until late 2016/early 2017.

Boreholes as part of an evidence led-approach

11. As part of an evidence-led approach, the rationale for permitting exploratory boreholes using conventional drilling techniques is that:

- borehole drilling is a relatively common, low risk activity;
- tested regulatory controls are in place in SEPA and Health and Safety Executive;
- information obtained is an important part of the evidence-base that will support an informed debate of the issues and opportunities presented by this industry;
- the planning system can ensure that all impacts are properly considered and that appropriate site monitoring takes place.

12. A policy on boreholes which permits exploratory boreholes would be required to reflect these principles. A mechanism to delivering this could be that any permitted boreholes would have research and geoscience as its key driver, and that it is delivered in collaboration with an independent research body (such as the British Geological society) and academic institution, and is for the purposes of furthering the evidence-base on unconventional oil and gas.

13. The BGS is a public sector organisation responsible for advising governments on all aspects of geoscience as well as providing impartial geological advice to industry, academia and the public. Current UK legislation ensures that information obtained from boreholes is made available to the British Geological Survey and how such information is handled.

14. Industry have previously indicated that there would be the potential to undertake their geoscience work in collaboration with organisation such as the British Geological Society and Herriot-Watt University. However, industry will need to be confident that a collaborative approach does not compromise their own commercial priorities.

Announcement and Handling

15. **Annex B** sets out the process for clarifying the Scottish Government's policy position on boreholes, which includes updating planning procedures for boreholes.

16. We would propose that the announcement is delivered via the outstanding written PQs on boreholes. These would be answered at the same time announcement on the unconventional oil and gas consultation and evidence gather work – currently planned for Thursday morning (8 Oct). Draft answers to the PQs will be provided in due course.

Recommendation

17. Ministers are asked to note the content of this minute, and confirm they are content with:
- i. **the policy on boreholes outlined in para 11 and 12;**
 - ii. **parliamentary handling of the announcement (para 15 and 16);**
 - iii. **holding further discussions with industry stakeholders to clarify their position.**

Copy List:	For Action	For Comments	For Information		
			Portfolio Interest	Constit Interest	General Awareness
Cabinet Secretary for Social Justice, Communities and Pensioners' Rights			X		
Cabinet Secretary for Rural Affairs, Food and Environment			X		
Minister for Business, Energy and Tourism			X		
Minister for Environment, Climate Change and Land Reform			X		

Permanent Secretary DG Enterprise, Environment & Innovation Mary McAllan Sarah Davidson Bridget Campbell [redacted] John Ireland George Burgess [redacted] John McNairney [redacted] [redacted] [redacted] [redacted] [redacted] Liz Lloyd Colin McAllister [redacted] [redacted] [redacted] [redacted]

PQS ON EXPLORATORY BOREHOLES

S4W-24473 – Lewis Macdonald

further to the statement by Fergus Ewing on 28 January 2015 (Official Report, c.17), whether the moratorium on the granting of planning consents for unconventional oil and gas developments will prohibit the drilling of conventional boreholes for (a) environmental baseline assessments, (b) exploratory flow-back testing and (c) the appraisal of commercial feasibility in relation to potential unconventional oil and gas developments.

S4W-26767 – Angus MacDonald

To ask the Scottish Government whether its moratorium on hydraulic fracturing includes test drilling for shale gas in central Scotland.

PROCESS FOR CLARIFYING POSITION ON EXPLORATORY BOREHOLES

Permitting boreholes would require a change to the planning Direction that gave effect to the moratorium to clarify that boreholes drilled solely for the purpose of core sampling are excluded from the moratorium. The Direction issued to bring into effect a moratorium on Underground Coal Gasification would be drafted to be consistent with this revised Direction.

Applications for these forms of exploratory boreholes would continue to be determined by local planning authorities on their merits and in accordance with the development plan. Planning applications would only be approved if impacts on local communities and the environment were considered acceptable. Such impacts would likely include amenity, traffic, noise and dust. Communities may raise wider and more emotive concerns linked to health and pollution.

Planning Guidance would need to be updated, in consultation with BGS and others, to set out Ministerial expectations on how legislation governing boreholes can effectively contribute to the evidence gathering process. This would include setting out guidance on ensuring that:

- a) the developer is working in collaboration with a scientific research body and/or an academic institution; and**
- b) are in place to make the information obtained from drilling a borehole publicly available;**

There are further changes that could be made to planning procedures (e.g. through updated planning guidance or amending statutory procedures) to ensure that borehole applications are subject to enhanced public scrutiny and that proposals satisfactorily address all the likely impacts on local communities and the environment.

These updates to Planning guidance will take a number of months to progress. In answering the PQs on boreholes, Minister would set the policy framework in which this work would take place.

The Direction to SEPA that supported the moratorium requires applications for all activities in connection with unconventional oil and gas to be referred to Ministers for determination: this would include exploratory boreholes. **A revised or further direction to SEPA would be required** to clarify that boreholes drilled solely for the purpose of core sampling do not have to be referred to Ministers. SEPA would then determine any applications in line with boreholes drilled for other purposes, although it would be possible for Ministers to call in individual applications as they see fit. Unlike planning, where Ministerial policy is a material consideration, any CAR application by SEPA (and, for that matter, any called-in application determined by Ministers) is determined according to the procedures and criteria set down in the CAR regulations.

A Direction issued to SEPA to support a moratorium on UCG would adopt the same position on boreholes as a revised Direction on unconventional oil and gas.

PEDL AREA MAPS AND INFORMATION

There are five PEDL areas in Scotland: 133 (Ineos); 158 (IGas Energy PLC); 162 (Ineos/Reach Coal Seam Gas Ltd partnership); 163 (IGas); and 159 (IGas).

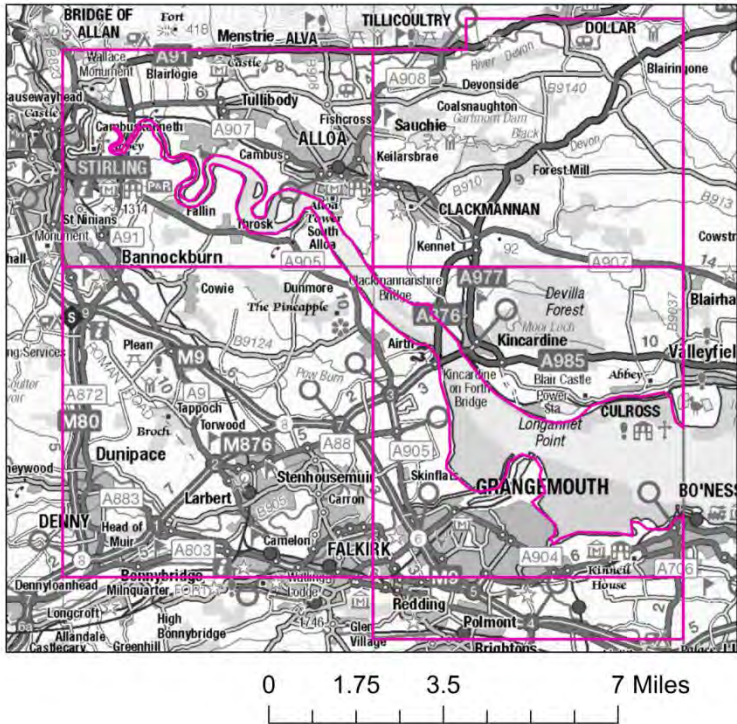
The map below shows the geographic coverage of the PEDL areas in Scotland.

FIGURE 1: PEDL AREAS IN SCOTLAND

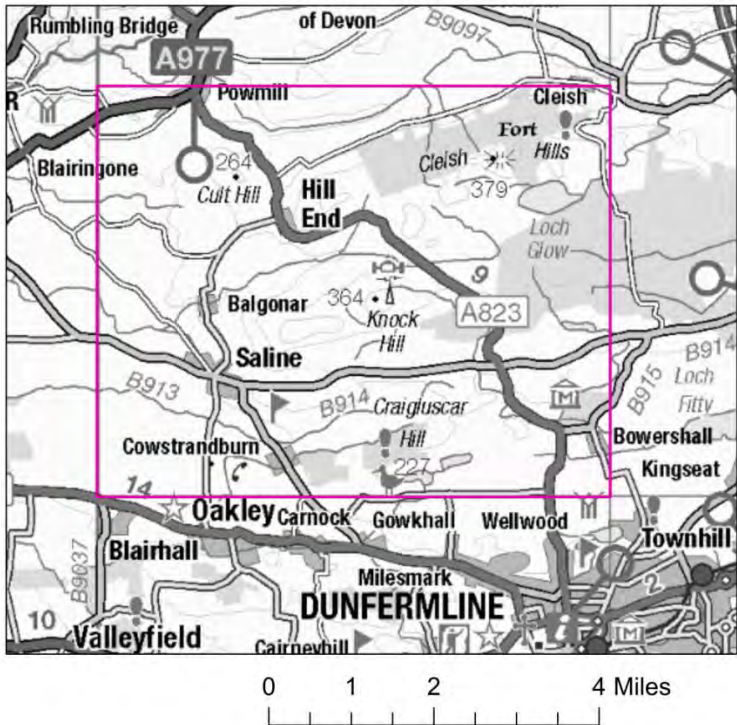


The following map extracts show the geographic coverage of the five PEDL areas in Scotland. PEDL areas 162 and 158 are split over two maps due to the size of the area covered.

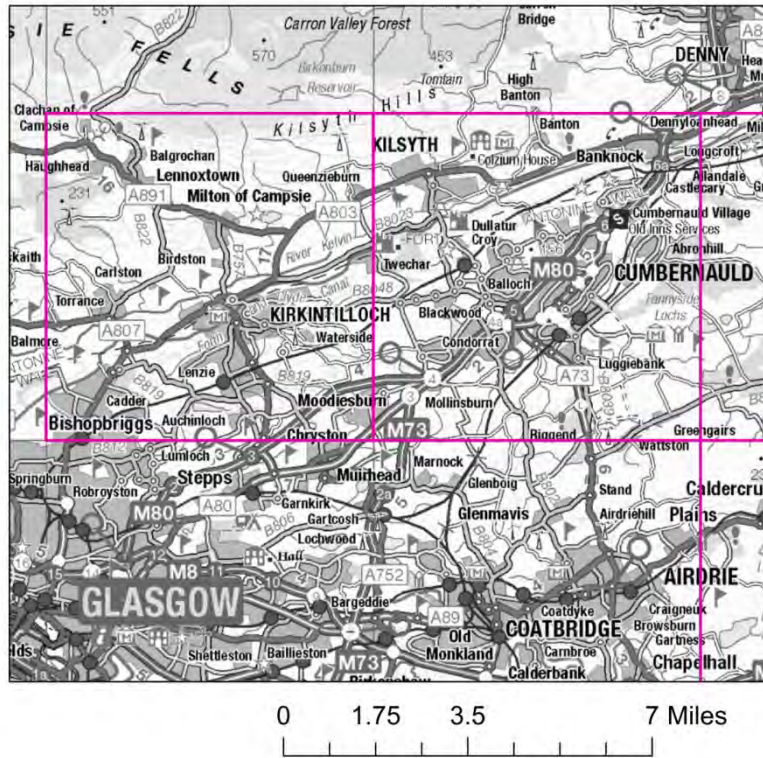
PEDL 133



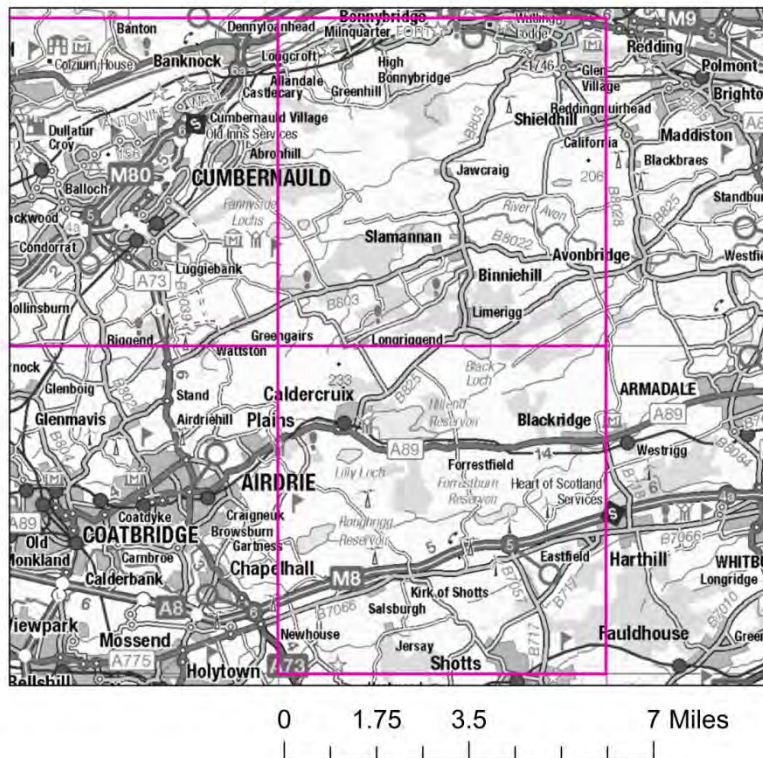
PEDL 163



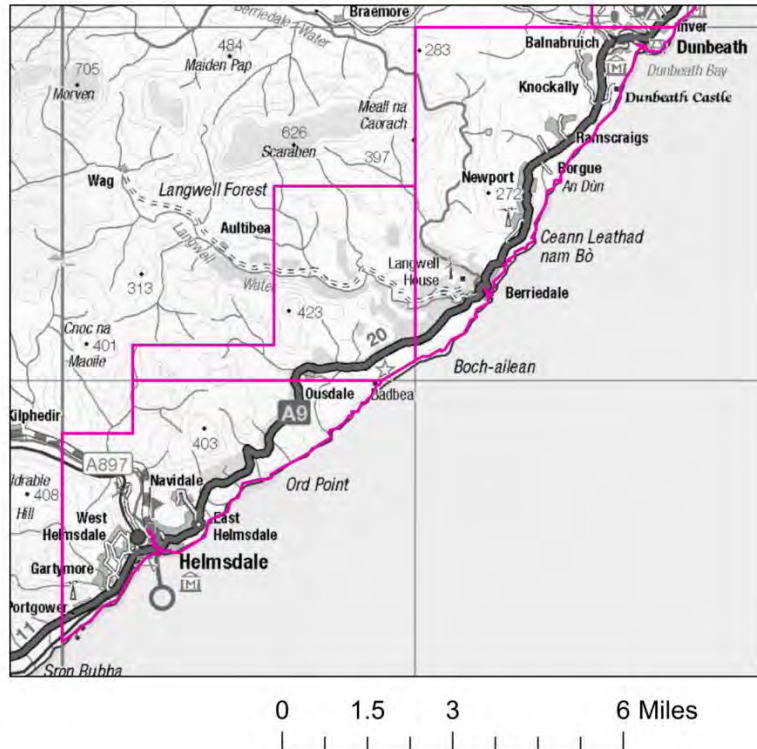
PEDL 162 (a)



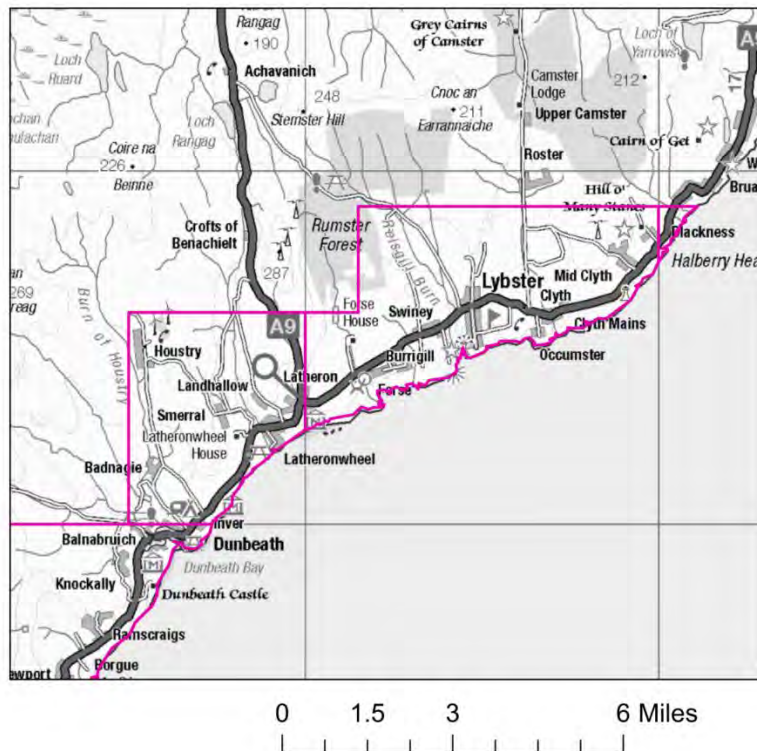
PEDL 162 (b)



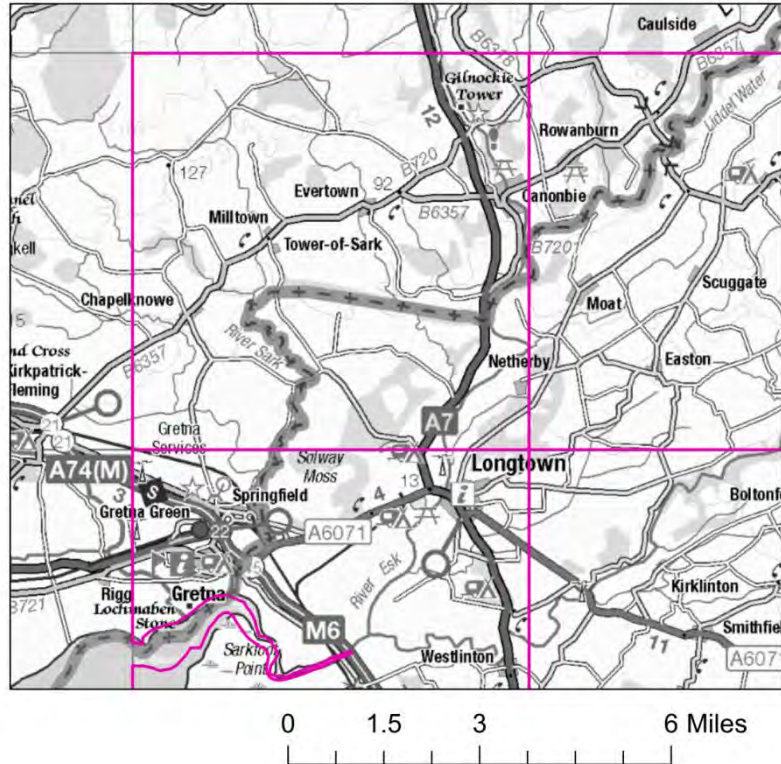
PEDL 158 (a)



PEDL 158 (b)



PEDL 159



19 September 2017
[redacted]/[redacted]

To: Minister for Business, Innovation and Energy

UNCONVENTIONAL OIL AND GAS: PUBLICATION OF THE TALKING “FRACKING” CONSULTATION INDEPENDENT ANALYSIS

Purpose: to inform the Minister that officials have received the draft final analysis report of responses to the Unconventional Oil and Gas (UOG) public consultation from the independent contractors; and to invite the Minister to note officials’ intention to formally sign-off the report in order to allow for its publication.

Priority: Routine

Background

1. The Scottish Government is taking a cautious and evidence-led approach to UOG. The moratorium on onshore UOG extraction (including fracking) in Scotland has allowed for informed decision-making and meaningful public participation on this issue.
 2. The consultation, Talking “Fracking”, ran from 31 January to 31 May, and received more than 60,000 responses, including a number of campaign responses.
 3. In view of the Scottish Government’s commitment to impartially review the consultation responses, independent social policy research analysts Griesbach and Associates were contracted through a Scottish Government framework agreement to undertake an independent analysis of the consultation responses. Griesbach have experience of working on a number of high-profile consultations, including the 2017 consultation on a draft Referendum bill.
 4. The analysis contract was awarded following Scottish Government procurement guidelines, and was subject to confirmation that there were no conflicts of interest present in carrying out the work. Advice outlining the scope of the analysis was sent to Ministers by [redacted] on 15 February 2017.
 5. The draft final report was delivered to officials on 11 September. The analysts submitted an interim consultation report on 07 August; observations on the consultation set out in advice to Cabinet on 29 August were based on this interim report.
 6. It is anticipated that publication of the analysis report, along with a catalogue of responses, will be co-ordinated with the Parliamentary handling of the announcement of the Scottish Government’s preferred position on UOG. This is expected to take place in early October. This is in line with the commitment made by the Minister on 30 March to analyse and publish the consultation responses prior to presenting a recommendation on UOG to Parliament. Advice on the statement and handling will be provided separately.
- ### **Consultation Analysis Overview**
7. The consultation received **60,535 responses** considered valid by the consultants, and therefore included in the analysis. Of these responses, **52,110 (86%)** were standard campaign responses or petitions; and **8,425 (14%)** took the form of substantive responses.

8. Among the respondents who submitted substantive responses and a postal address, **88% were from Scotland**. Of those Scottish respondents who provided a postcode, **66% lived in areas identified as potentially having significant reserves of shale or coal bed methane**.
9. The **overwhelming majority of respondents were opposed to fracking** or the development of a UOG industry in Scotland. Fewer than 5% of those who submitted substantive responses (and **fewer than 1% of respondents overall**) expressed a different view on this issue.
10. Of the standard and petition responses, **31,033 (51% of total responses)** were from petition signatories; and **21,077 (35%)** were responses based on a standard text provided by a campaign organiser. In all standard and petition responses, **the respondents explicitly called for UOG to be banned in Scotland**.
11. Of the substantive responses, **8,239 were from individuals**, and **186 were from organisations or groups**. With few exceptions, the **majority of substantive respondents expressed views that were opposed to UOG**, including near-unanimous opposition from community councils, third-sector organisations, political parties, and community groups. A majority of private sector organisations and academic and research bodies, as well as some public sector groups, “*expressed strong reservations or serious concerns*” about UOG development in Scotland.
12. Across all consultation questions, those opposed to fracking repeatedly emphasised the potential for significant, long-lasting negative impacts on communities, health, environment and climate; expressed scepticism about the ability of regulation to mitigate negative impacts; and were unconvinced about the value of any economic benefit and the contribution of unconventional oil and gas to Scotland’s energy mix.
13. A **small number of alternative views** were received, largely from organisational respondents in specific sectors, including the oil and gas and petrochemical industries; membership or trade organisations; public sector and regulatory bodies; and individuals. The respondents were either supportive of a UOG industry developing in Scotland, or did not feel it was possible to come to a view on the available evidence.
14. Across all consultation questions, those in favour of a UOG industry emphasised the benefits for the economy, for communities, for the climate, and for Scotland’s energy supply; thought that the positive impacts outweighed the risks and that the risks associated with unconventional oil and gas extraction were no greater than the risks associated with any other industry; and argued that the development of a strong and robust regulatory framework could mitigate any adverse impacts.
15. The final report adopts a neutral approach to presenting its findings. Equal space is allocated to the description of trends in responses from those in support of and opposed to UOG.

RECOMMENDATIONS

You are asked to note that:

- officials received the draft final UOG consultation analysis report from independent analysts Griesbach and Associates on 11 September;
- preparations are being made to publish this report, along with a catalogue of responses, following formal sign-off from officials. The publication of the report will be co-ordinated with the Parliamentary handling of the announcement of the Scottish Government’s preferred position on UOG, which is expected to take place in early October.

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			Portfolio Interest	Constit Interest	General Awareness
First Minister					X
Deputy First Minister					X
Cabinet Secretary for Economy, Jobs and Fair Work					X
Cabinet Secretary for Health and Sport					X
Cabinet Secretary for Environment, Climate Change and Land Reform					X
Cabinet Secretary for Communities, Social Security and Equalities					X
Cabinet Secretary for the Rural Economy and Connectivity					X
Minister for Public Health and Sport					X
Minister for Local Government and Housing					X
Minister for Further Education, Higher Education and Science					X

Permanent Secretary
DG Economy
DG Communities
Chief Scientific Adviser
Chief Scientific Adviser for Rural Affairs, Food and the Environment
Chris Stark
Kenneth Hogg
Bridget Campbell
David Ritchie
[redacted]
[redacted]
[redacted]
Simon Fuller
John McNairney
Katriona Carmichael
[redacted]
[redacted]
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[redacted]
[redacted]
[redacted]
Kate Higgins
David Miller
Liz Lloyd
[redacted]
[redacted]
Jeanette Campbell
Comms Economy