APPENDIX 9.1: 2013 PLANNING STATEMENT

Planning Application for the Balcombe-2z Exploration Hydrocarbon Well Testing

Site Location: Lower Stumble Hydrocarbon Exploration Site, Off London Road, Near Balcombe, Haywards Heath, West Sussex RH17 6JH.

Contents

1.0 Introduction

This Planning Statement has been prepared to support a planning application by Cuadrilla Balcombe Limited (the "Applicant") to West Sussex County Council to undertake a temporary hydrocarbon testing project on an existing exploration well drilled into the Lower Stumble underground rock situated on the Balcombe Estate.

Temporary planning permission is sought to flow test and monitor the existing exploration lateral borehole at the Lower Stumble Exploration Site, London Road, Balcombe, Haywards Heath, West Sussex, RH17 6JH, including site security fencing, enclosed testing flare and other testing equipment, ancillary facilities and site restoration.

Having analysed all of the data gathered from its recently drilled vertical and horizontal exploration well at the Lower Stumble site Cuadrilla has concluded that the underground limestone rock layer which it proposes to test ("Micrite") is (i) hydrocarbon bearing and (ii) has a significant level of natural fracturing. As such, the proposed flow testing operations do not include hydraulic fracturing and for the avoidance of doubt Cuadrilla can confirm that it will not be proposing to hydraulically fracture this well in the future.

This planning application builds upon a previous application for an exploratory drilling project on the Balcombe Estate, which was submitted and received consent in 2010 (ref WSCC/027/10/BA). Drilling works associated with this application took place over the period July – September 2013. Prior to this, the site had also been subject to exploration in the 1980s.

1.1 The Applicant

The Applicant has its Head Office at Cuadrilla House, Stowe Court, Stowe Street, Lichfield, Staffordshire, WS13 6AQ and conducts all its United Kingdom exploration and production operations from that office. The Applicant is engaged in the exploration for and production of hydrocarbons. It holds exploration and development licences granted by the Department of Energy and Climate Change (DECC) covering areas of onshore United Kingdom. These licences give the applicant the right to search for subsurface hydrocarbons by physical means within the licence boundaries.

1.2 Structure of the Planning Statement

The purpose of this Planning Statement is to inform the application by Cuadrilla Balcombe Limited to undertake a temporary hydrocarbon testing project at an existing drilling site on the Balcombe Estate. The Statement is structured as follows:

Chapter 2 describes the application site and its context. It also includes a planning history of the site.

Chapter 3 describes the planning application, including the three stages of development.

Chapter 4 provides an appraisal of the impacts and benefits associated with the proposals.

Chapter 5 considers the development proposals against relevant planning policy, government guidance and other material planning considerations.

Chapter 6 concludes the statement.

1.2.1 Application Plans and Documents

The following forms, documents and drawings have also been submitted as part of this planning application:

Planning Application forms, certificates and notices

Figures

1. Redline Boundary Plan (Figure 01)
2. Site Location Plan (Figure 02)

3. Area Plan, including vehicle routes (Figure 03)

Drawings

- CRL - 002 Testing Site Layout Plan (1:500)
- 62087/001 Drilling Site Contours (1:500 and 1:2,500)

Supportive Documents

- Geological Summary, Log and Cross Section (Appendix A)
- Testing Operations and Transport Loads (Appendix B)
- Ecological Appraisal and Bat Survey (Appendix C)
- Noise Impact Appraisal (Appendix D)
- Drainage Strategy, including Flood Risk Assessment (Appendix E)
- Site Restoration Plan (Appendix F)
- Supporting Photographs (Appendix G)
- Air Dispersion Report (Appendix H)

The material submitted in support of this planning application complies with the national information requirements, as outlined in articles 6 and 10 of the Town and Country Planning (Development Management Procedure) (England) Order (2010). Regard has also been had to West Sussex County Council's Local List for the Validation of Planning Applications, 2013.

Environmental Impact Assessment

The 2010 planning application (ref WSCC/027/10/BA) was accompanied by a screening opinion from West Sussex County Council which confirmed that the temporary permission to drill an exploratory well for hydrocarbons and test any discovered zones did not require an Environmental Impact Assessment (EIA). This application seeks temporary permission to flow test and monitor the well previously drilled under the 2010 planning permission. The site fencing, access and borehole have all been implemented in accordance with the approved scheme and are still in place pending the flow testing and monitoring of the borehole. Our conclusion is that the proposal would not constitute EIA development due to the characteristics and short term nature of the development and consequently limited potential impacts of the proposed scheme. WSCC routinely undertake screening opinions on planning applications submitted to them prior to decision notices being issued and have confirmed that they will undertake such a review early in the process following receipt of this application. The Applicant will respond promptly to any clarifications sought by WSCC on this aspect should they arise.

2.0 The Application Site

2.1 The Site

The proposed development site (the "site") is shown edged red on the Site area red line plan (Figure 01) submitted with this application. It comprises a surface exploration site together with the site access roadway and (subsurface) lateral drill section. The surface exploration site, together with the site access roadway and lateral drill section, extends to 0.73 hectares.

Figures 02 & 03 show the site within the context of the local area. The site was last used in September 2013 as an exploration well site, and is located within an area of general forestry use which is currently managed by the landowner, The Balcombe Estate. The site comprises a flat, rectangular area of hard standing with the borehole to its centre with fencing around the edge of the hard standing. The site is accessed by an existing track from the B2036 which in turn runs through the trees to a gated access in the northeast corner. A further security fence was erected from the gated access to the site compound along the edges of the access track to the main road in July 2013 and was removed prior to the end of September 2013. The requirements for further temporary security fencing are discussed in paragraph 3.4.

The surface site lies 380m from the nearest residential property - Kemp's Farm, which is located northwest of the site, and 800m south of the outer limits of the village of Balcombe.

The choice of location for proposed development has been informed by earlier exploration activities, including the drilling of the exploration well. It is also governed by the formation of the Lower Stumble area subsurface structure, based on current geological and seismic data mapping. The existing exploratory horizontal well has been drilled from Ordnance Survey National Grid Reference E531022 – N129238 (site centre). A number of other factors also make the site suitable:

- Level ground;
- Good existing highway access point off the London Road (B2036);
- Distance from residential properties, to minimise noise and visual intrusion; and
- No immediate sites of special interest, nature conservation or known archaeology.

2.2 Access

Entry into the surface exploration site is from the existing access to Lower Stumble Wood and the Balcombe Estate's forestry and farming activities from London Road (B2036), to the west of the site.

There are no public rights of way affected by the proposed development. The closest public footpath is approximately 0.5 kilometres northwest of the site, off the B2036, and the Sussex Ouse Valley Way lies approximately 1.3 kilometres south of the site.

2.3 Utilities

There are no utility services that would be affected by the proposed development.

2.4 Ecology and Biodiversity

There are no statutory or local nature conservation sites within or close to the site. The nearest sites of Nature Conservation Importance identified at a county level are at least 0.6km from the site. The proposal site itself is not designated for nature conservation. The area around the site does however contain Ancient Woodlands, specifically Lower Stumble and Lower Beenham Woods.

2.5 Landscape

The site is located within the High Weald Area of Outstanding Natural Beauty.

2.6 Heritage and Archaeology

There are no known archaeological remains within the site. Kemps House – a Grade II* listed building is located approximately 385m to the north of the site within a cluster of similar buildings. The application site is well screened to this cluster of buildings by Lower Stumble Wood such that there would be not detrimental impact on the setting of these buildings.

2.7 Geological Summary of the Lower Stumble Prospect

The Lower Stumble prospect is located on an east-west tending anticlinal structure of Alpine origin in the centre of the Weald Basin, southeast of Crawley and 5km northwest of Hayward's Heath near the village of Balcombe in West Sussex.

The anticline is one of a number of small scale structures in the central Weald and has a length of about 4km and wavelength of 2km. The anticline lies to the north, on the down thrown side of a major east-west striking fault (Borde Hill Fault) which forms the northern boundary of the Cuckfield Horst. There are a number of smaller faults mapped at surface level but these converge with the Borde Hill Fault at depth such that the structure at deeper structural levels is relatively simple

Balcombe-2 is located at the same Site as the Balcombe-1 exploration well drilled by Conoco in 1986. The original objectives of Balcombe-1 were the Portland sandstone, Ashdown Sands and Kimmeridge Clays. A number of oil and gas shows were recorded in the Balcombe 1 exploration well but none proved to be economic at the time.

The target formation for the Balcombe-2z exploration well is the Middle Kimmeridge Micrite at approximately 2500 ft below the surface. Cuadrilla drilled, cored, and logged the middle Kimmeridge Micrite in the Balcombe 2 vertical exploration well. Because the initial core and log results from Balcombe 2 proved promising, the drilling of Balcombe 2z, a horizontal exploration well within the Micrite, was executed (the works were authorised by the 2010 planning permission referred to in Section 1 above). Hydrocarbon shows and good hole conditions were encountered within the horizontal drilling of the Micrite. The horizontal drilling stayed solely within the Micrite formation and no significant faults or structures were encountered. A simplified geological log and cross section of the Balcombe 2z borehole can be found at Figure AO1, Appendix A.

This application is for testing and monitoring of the exploration well Balcombe 2z.

2.8 Petroleum Licences

The proposals to which this planning application relates fall within the area licenced for exploration under Petroleum Licence PEDL 244 (the "Licenced Area") and the terms applicable thereto. The Licenced Area covers an approximate area of 154 sq km within West Sussex, between Horsham and Haywards Heath. The Petroleum Licence, PEDL 244, allows for petroleum development and production to take place.

The Applicant is a licensee of PEDL 244 and as Operator will manage all exploration, appraisal and any development.

2.9 Site Planning History

Table 2.1 summarises the recent planning history of the site. The existing hard standing was constructed in 1986 in connection with a planning permission to undertake an exploratory drilling exercise. In 1987 planning permission was granted for the retention of the borehole site for forestry products storage in connection to wider activities on the Balcombe Estate. The site continued to be used as a forestry storage area for the Balcombe Estate prior to July 2013, when further drilling was undertaken following consent for an exploratory borehole in 2010.

Table 2.1 Site Planning History

Date	Ref	Description	Outcome
July 2013	WSCC/063/13/BA	Amendment of condition 3 of WSCC/027/10/BA to vary the type of flare used during the testing process	Withdrawn
July 2013	WSCC/061/13/BA	Amendment of condition 2 of WSCC/027/10/BA to allow additional time to complete the drilling and testing programme and restore the site	Withdrawn
January 2010	WSCC/027/10/BA	To upgrade existing stoned platform and drill an exploratory borehole for oil and gas exploration	Granted
1987	BA/38/87	Retention of existing borehole site for forestry products storage and improvements to existing access	Granted
1986	BA/10/86	Construction of hard standing in association with exploratory drilling exercise	Granted

3.0 The Proposed Development

3.1 Timeline

The applicant is seeking temporary permission to flow test the existing borehole - the detail of which follows. The whole phase of this flow testing will take place within a 6 month timeframe. The applicant seeks to start the flow testing within 3 years of the date of the permission and to confirm, the operations – including site restoration - would be completed within 6 months of the start of site works related to the flow testing.

It is suggested that the wording of any conditions relating to implementation of this proposal follow that established with the 2010 planning consent. Following this principle, the applicant would therefore be required to notify the County Council in writing at least 7 days before start of works on site related to the flow testing. Similarly a condition restricting the flow testing to 6 months would follow the same principle, giving a defined end to these operations. The site is clear of all equipment and plant and the lead in time for obtaining the specialist plant is not straight forward and depends on its use elsewhere in the UK on other contracts. If acceptable to WSCC the applicant therefore seeks the flexibility to start the flow testing within the 3 year period; to notify WSCC at least 7 days before commencement of the development and to complete the temporary flow testing works within the 6 month timeframe.

3.2 Overview of Hydrocarbon Extraction

There are three phases of onshore hydrocarbon extraction: exploration, appraisal and production – as outlined in the July 2013 DCLG Planning practice guidance for onshore oil and gas. The **exploratory phase** seeks to acquire geological data to establish whether a commercially significant volume of hydrocarbons are present. It may involve seismic surveys, exploratory drilling and, flow testing. This application relates to temporary permission to flow test and monitor the existing borehole only,

The **appraisal phase** takes place following exploration when the existence of a potentially commercial accumulation of oil or gas has been proved, but the Operator needs further information about the extent of the deposit and its production characteristics to establish whether it can be economically exploited.

The **production phase** normally involves drilling a number of wells. Associated equipment such as pipelines, processing facilities and temporary storage facilities are likely to be required. When production ceases, facilities are dismantled and the sites restored to their former use or an appropriate new use.

The proposals contained in this planning application form part of the exploratory and appraisal phases as defined in the DCLG, and are described in more detail in the following sections.

3.3 Proposal Overview

The Applicant, who is the Operator of Petroleum Licence PEDL 244, wishes to carry out a temporary hydrocarbon testing project on a current exploration well (Balcombe 2z) from an existing hard-standing area situated on the Balcombe Estate. Data collected during the drilling of Balcombe 2 and Balcombe 2z indicated the possibility of a significant hydrocarbon accumulation. The timescale of the proposed development would be a short duration involving an acid wash and flow-test of Balcombe-2z in order to confirm the previous discovery. It would not include any further drilling; well stem testing or hydraulic fracturing of the exploratory bore. The Applicant, as Operator of the development, would complete all operations, including the analysis of any test results and site restoration within 6 months from the start of operations. The proposals set out in this application also include the restoration of the site during an appropriate dry season/period of the year following completion of the well testing operations. Further details of the proposed temporary exploration well testing operations are set out in Appendix B.

These activities build on previous drilling work undertaken on the site between July and September 2013 which was consented in 2010 (see Section 2.9). The proposed exploration test would normally be carried out during the drilling process with the rig still on site. However, due to extenuating circumstances beyond the

control of the applicant this operation was not completed during the drilling phase with the rig removed from site and therefore this temporary operation now needs to be carried out. This short duration testing operation is part of the exploration stage as it will determine whether the hydrocarbons detected during drilling have the potential to warrant extending the Lower Stumble drilling operations onto a longer-term flow testing or drilling appraisal phase. This information will not however be obtained until this short test has been undertaken. Following completion of the proposed temporary hydrocarbon testing, any further appraisal testing would be the subject of further planning application(s).

The proposed development comprises 3 stages:

Stage 1 - The main operation of the testing works would take three to five weeks to complete followed by a shut in period of 60 days.

Stage 2 - Following the exploration testing of the exploration well (Stage 1) the subsurface well construction would be permanently sealed, with the drilling cellar and the impermeable membrane removed. It is anticipated that this "Plugging and Abandonment" procedure would take 4-8 weeks to complete.

Stage 3 – Upon completion of the exploration testing programme – including completion of the plugging and abandonment phase - the surface site would be cleared of all equipment over a period of approximately 3 days and restored to its former hard-standing status and the site fencing removed. A Site Restoration Plan has been submitted in support of this application (Appendix F).

Table 3.3 – Stages of hydrocarbon well testing

Activity	Description
Stage 1	
Mobilisation/ Equipment set up	Prepare well for flow testing. Clean the lateral well bore with hydrochloric acid (<10 %) by pumping through a wash nozzle on the end of coiled tubing. It is anticipated that it will take less than 1 week and approximately 54 HGV movements to install the necessary equipment.
Flow Test	It is anticipated that it will take 2-3 days to clean the well and initiate flow of oil and gas through a nitrogen lift. Produced water, spent acid, and suspension fluid will be removed from the site. It is anticipated to take 2-3 days to install the beam pump and begin pumping the well. Hydrocarbon flow will last up to 7 days. It is estimated that it will take 2 weeks and 70 HGV movements for this operation.
Pressure monitoring	It is anticipated that it will take 2-3 days to remove the pump and install pressure gauges in the well. The well will be shut in and secured for an estimated 60 days. It is estimated that it will take approximately 9 weeks and 10 HGV movements for this operation.
Following the completion of stage 1, the results of the testing will be analysed before proceeding onto stage 2.	
Stage 2	
Sealing well (Pugging & Abandoning)	The well will be sealed and abandoned and the well head removed. It is anticipated that it will take approximately 4 weeks and 36 HGV movements to complete this operation.
Stage 3	
Demobilisation and dress site	It is anticipated it will take 4 days to demobilise the equipment and restore well pad to its 2012 condition. It is estimated it will take 42 HGV movements to complete this operation.

These development phases are described in more detail in Sections 3.4 – 3.7.

3.4 Site Access

Entry into the surface exploration site would be from the existing access to Lower Stumble Wood and the Balcombe Estate's forestry and farming activities from London Road (B2036), to the west of the site. Given that this access has previously been used for hydrocarbon exploration and the temporary nature of the development proposed, it is not considered necessary at this stage to improve the access further. The access track and hard surfaced existing bell mouth will be kept clear of debris during all site operations and approved highway signage will remain in situ throughout the testing and restoration phases. All heavy goods vehicles associated with the proposed development will access the site via Junction 10a of the M23 motorway and not from the south via Cuckfield. The estimated transport loads and timing for the proposed testing operations can be found in Appendix B.

A further security fence was erected from the gated access to the site compound along the edges of the access track to the main road in July 2013 and was removed prior to the end of September 2013. This temporary security fencing was required to ensure the safe passage of vehicles, equipment and staff to and from the site due to the numbers of protestors. It is anticipated that similar fencing along the same access track will be required for the duration of the flow testing operation hereby applied for. In light of the highway safety issues raised by the visiting numbers of interested parties to the site in the summer of 2013, WSCC Highways have undertaken a series of works to ensure the free flow of traffic along the B2036 – namely, warning signs/matrix signs on the B2036 north and south of the site and a designated compound for protestors opposite the site entrance. Cuadrilla and its appointed contractors will liaise closely with WSCC and other agencies to ensure the free flow of traffic along this road. Due to the proactive safety work already undertaken by WSCC on the nearby highway network, it is not clear whether further security fencing from the compound gate along the access track to the B2036 will be required and if so, to what extent. For these reasons Cuadrilla suggests that the details of the temporary site security fencing be conditioned, should WSCC be minded to approve the application, to allow the detail of this aspect of the development to be informed by the consultation process.

3.5 Stage 1 – Exploration Well Testing Operations

The impermeable membrane installed for the drilling operations undertaken between July-September 2013 has been retained and would be used for the testing process. It seals the exploration well testing area and would prevent any accidental spillage and rainwater from entering the underlying soils, groundwater and local watercourses. All exploration well testing operations would be undertaken from the exploration borehole which has already been drilled vertically within the central part of the site and laterally, as indicated in the redline boundary shown on the Redline Boundary Plan Figure 01.

The surface site is already fenced with a 14 feet (4.3m) high security fence (see Photograph 03, Appendix G). A supplemental heras type security fence to assist in maintaining security during the testing operations would also be erected before work commences.

The assembly of the equipment for the site would be undertaken during 07.30 to 18.30 hours Monday to Friday, 08.00 to 13.00 Saturdays. These hours of working meet with West Sussex County Council Guidelines for Noise Control.

The main components of the testing equipment are the coiled tubing unit, acid pump, water and oil tanks, separator, service rig, beam pump, nitrogen pump and nitrogen tanks and manifolding. Once the testing equipment has been fully assembled the wellbore preparation and flow initiation operations would be undertaken over a period of 4-6 days on a daytime only basis. The operations would involve an acid wash through coiled tubing, a nitrogen lift to initiate the flow and remove the spent acid from the well and the installation of the beam pump (known as a 'nodding donkey' – see Photograph 04 in Appendix G) or equivalent, with a small generator set also required for provision of site power.

This would be followed by the flow testing operation which will take up to 7 days. The beam pump will pump fluids from the well to the tanks. It should be noted that the only night time activities would be the exploration well flowing operations including pumping thus avoiding any noise from general activities or vehicular movements. After the flow testing the well will be shut in for pressure monitoring for approximately 60 days.

All activities connected with the testing operations would be undertaken within the fenced exploration well compound. This would include on-site water and oil storage tanks, flow testing equipment, an enclosed natural gas flare, fuel tanks, storage of other equipment, staff living accommodation, mess facilities, site offices and vehicle turning and parking areas (see drawing CRL-002 Testing Site Layout Plan). Details of the operation are shown in Appendix B,

The enclosed flare, which is 13.7m in height, is an essential part of the testing equipment and is necessary to burn off any associated gas produced during the 7 day flow testing of the exploration well. The flare will be operated in accordance with the Environmental Permit and waste management plan (see Section 4.5). The enclosed flare is shown as Photograph 02 at Appendix G and details relating to emissions associated with the flare are examined in the Air Dispersion Report (Appendix H).

During the proposed exploration well testing, there would be no drilling or hydraulic fracturing.

3.6 Stage 2 – Sealing Well (Plugging and Abandoning)

Following the exploratory well testing operations, the well will be sealed and secured. These activities, known as Plugging and Abandoning, will be conducted in accordance with procedures agreed with the Health & Safety Executive and the Department of Energy and Climate Change.

The steel casings would be cut off c. 1.5 metres below ground level and a steel plate welded to the remaining casing stub. The well head and well cellar would be removed and the cellar filled in. The temporary impermeable membrane would be removed.

Any remaining wastes on the surface would be removed to an Environment Agency licenced waste disposal facility. Any sub-surface waste would be managed by the granted Environment Agency Mining Waste permit.

3.7 Stage 3 – Demobilisation/Site Restoration

Following the sealing of the well, all equipment, mud, oil and water tanks, and site fencing would be removed from the site. The site would be restored as close as possible to its former hard standing condition in accordance with best practice and with the requirements of the environmental permit(s). Further details of the proposed site restoration can be found in the Site Restoration Plan (Appendix F).

4.0 Impacts and Benefits

4.1 Baseline Studies and Site Condition Awareness

Prior to commencing drilling operations in July 2013, the Applicant employed Ground Gas Solutions to complete a site condition report and undertake air quality, ground and surface water condition monitoring. This continued throughout the drilling phase and will continue throughout the proposed well testing phase.

The Applicant completed dual testing with the Environment Agency on air quality and ground and surface water during the drilling phase and it is anticipated that the Applicant and the Environment Agency will continue this during the well testing phase.

4.2 Landscape and Visual Impact

The location of the surface site is several hundred metres from the nearest residential property located at Kemp's Farm, 380m to the northwest of the site. The site is well screened by the surrounding woodland and localised landscape features. The proposed development is not expected to be prominent within the locality although the testing rig and enclosed testing flare may be visible from some nearby residential properties. However, given the temporary nature of the development, it is not anticipated to cause any unacceptable visual impact.

Whilst the site is located within the High Weald AONB, it makes use of an existing site which has already been subject to drilling activities, both recently and during the 1980s. The impacts on the AONB are further expected to be limited given the temporary nature of the development proposed (6 months). Following cessation of all exploration activities, the site would be restored back to forestry land uses.

Figure 4 below shows the typical dimensions and layout of the work-over rig. Due to the specialist nature of this equipment and the long lead in times for booking, the exact dimensions cannot be specified at this stage. Should WSCC require details of the work-over rig before commencement of operations the applicant would be happy to provide these, however the dimensions would not exceed the parameters detailed in figure 4.

Using the maximum dimensions detailed in figure 4, a series of wirelines have been created in figures 6 and 7. The photographs were taken from viewpoints agreed with WSCC planners and accurately plotted onto OS datasets – the viewpoints are detailed on figure 5. The position and dimensions of the work-over rig correlate to the template in figure 4 and again have been accurately plotted on to the dataset and photographs – figures 6 and 7. The purpose of these wirelines is to identify the exact location of the work-over rig in the setting of the site and surrounds. It is important to note that we have drawn attention to the rig by highlighting it in red and setting it in front of the trees and vegetation – these are not rendered photomontages. The actual visual impact will be far less as the rig would be set behind the trees and vegetation and would be a less obtrusive colour. Further the column depicts the maximum height of 22m above the ground level of the site and maximum width of the boom arm. The wirelines in figures 6 and 7 show the exact location and height of the work–over rig, as requested by WSCC.

The work-over rig has a smaller footprint and is 10m lower than the drilling rig previously used, with the boom only being fully extended when required. The work-over rig would be set up in the first week of stage 1 and then used for the flow test and the set up for the pressure testing phase. After the initial period in stage 1 and during the 60 day shut down period the work-over rig would remain on site with the boom lowered. The work-over rig will only be moved back over the borehole and the boom fully extended after the results of stage 1 have been analysed prior to commencement of any stage 2 works. The work-over rig would be used to remove the well head and seal the well for the 4 weeks of stage 2.

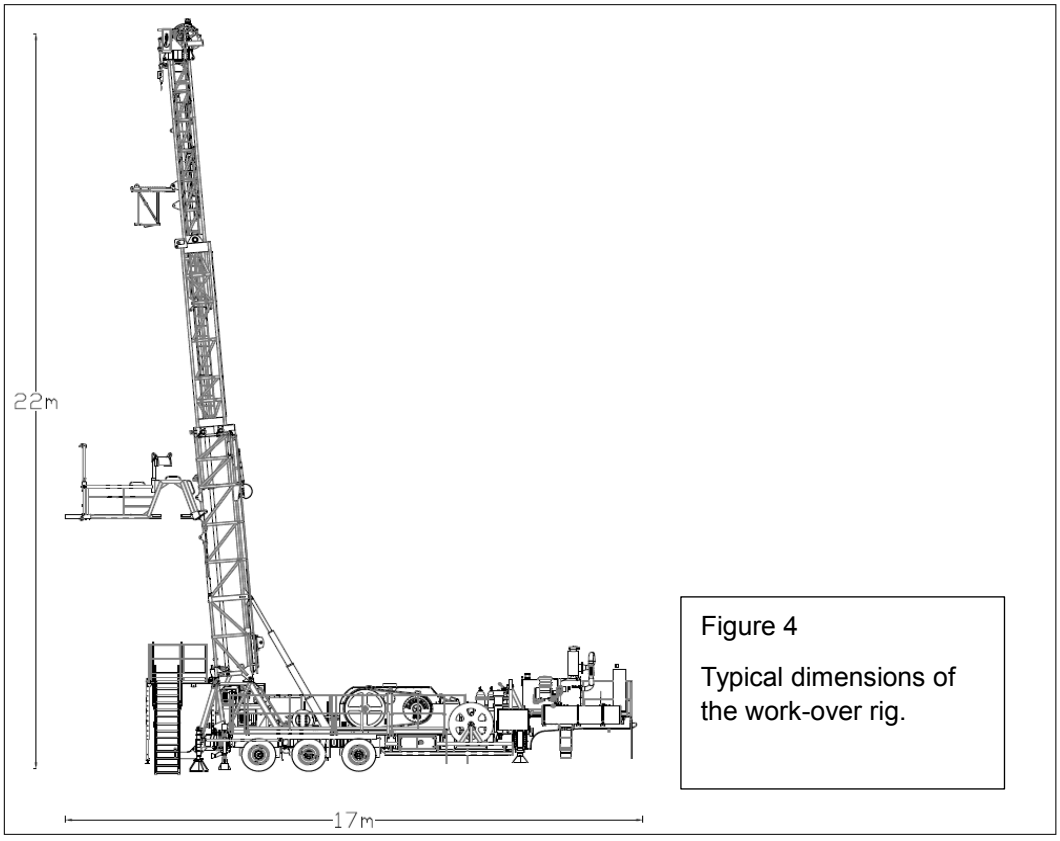


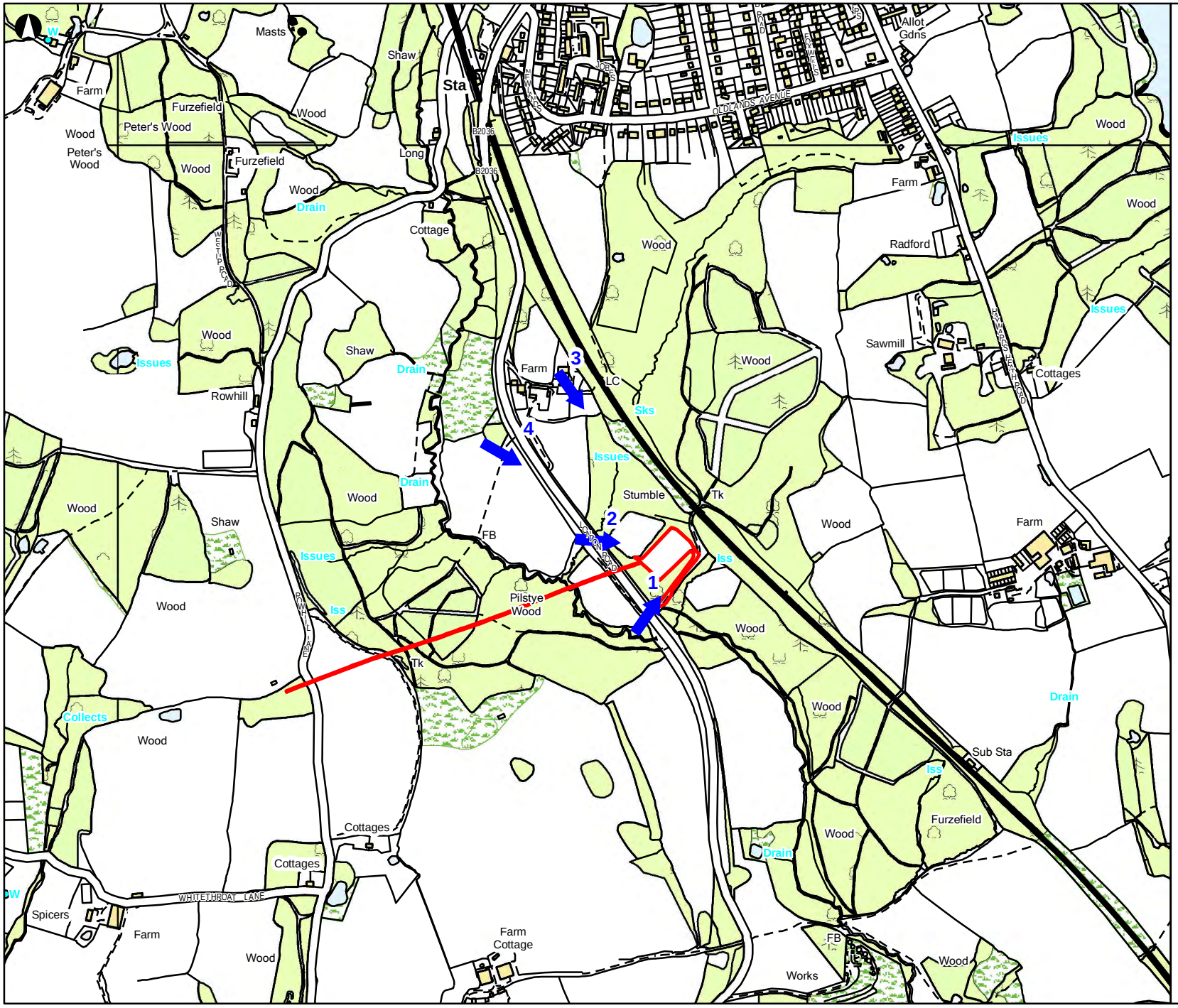
Figure 4

Typical dimensions of the work-over rig.

Any lighting on site will be kept to a minimum and directed in a way which minimises spillage beyond the site and shall be kept to the minimum luminace level required to achieve safe working operations. The work regime associated with this proposal is not intense. The proposal does not include any drilling and there is a shut down period of 60 days towards the end of stage 1 where no activity other than daily monitoring of gauges is undertaken.

In terms of both landscape character and visual amenity, the proposed temporary development brings about changes that are within the 'capacity' of the current situation and therefore the site lends itself well to the proposed development. The work-over rig would be used for a small amount of time within the temporary period applied for and not be readily visible from outside of the site due to the mature screen of trees and vegetation.

A4



Legend

Viewpoints

Site Boundary

Issue	Date	By	Chkd	Appd
1.0	20/01/14	DE	TS	NG

Metres
0 120 240 480

ARUP
The Arup Campus,
Blythe Gate, Blythe Valley Park
Solihull, West Midlands
B908AE
Tel +44 (0)121 213 3000
Fax +44 (0)121 213 3001
www.arup.com

Client
Cuadrilla Balcombe ltd

Job Title
Lower Stubmble, Balcombe
- Planning application for temporary permission to flow test the existing exploration well.

1:10,000 -
Photo Viewpoint Locations

Scale at A4
1:10,000

Job No	Drawing Status
230382-61	FINAL

Drawing No	Issue
005	1.0

Viewpoint 1 - From B2036 London Road opposite the site entrance looking east

Viewpoint 2 - From the B2036 London Road verge adjacent to the Christmas tree plantation looking southeast

Viewpoint

Viewpoint 01 -
Date: 13th January 2014
OS Co-ords: 530985, 129127
Distance to rig: 122m
Elevation: 55m AOD

Viewpoint 02 -
Date: 13th January 2014
OS Co-ords: 530892, 129264
Distance to rig: 133m
Elevation: 59m AOD

Note:

Viewpoint 01:
The 22m high rig (shown in red) is indicated in the trees and views of the upper sections from this location are likely to be heavily filtered by intervening vegetation.

Viewpoint 02:
Views of the rig from this location will be filtered by intervening vegetation with the lower sections obscured by trees and the site fencing

Field of view:	**76 degrees**
Lens length:	**50mm**
Viewing distance:	**300mm @A3**

Planning Application:
Temporary permission to flow test and monitor the existing lateral borehole at Lower Stumble

Issue: 1	**Date: 15/01/14**

ARUP

Viewpoint Photographs
Lower Stumble Exploration Site, London Road, Balcombe

Job No: 230382-01

D: JB	C: IL	A: NG

Cuadrilla Balcombe Ltd

Figure:6

Viewpoint 3 - From the garden of Kemps Farm looking south

Viewpoint 4 - From the PRoW 100m southwest of Kemps Farm looking southeast across the B2036 London Road

Viewpoint

Viewpoint 03 -

Date:	13th January 2014
OS Co-ords:	530842, 129544
Distance to rig:	351m
Elevation:	80m AOD

Viewpoint 04 -

Date:	13th January 2014
OS Co-ords:	530714, 129426
Distance to rig:	359m
Elevation:	68m AOD

Note:

Viewpoint 03:
The location of the rig is indicated in the trees but views from this location are likely to be heavily filtered by intervening vegetation.

Viewpoint 04:
The hedgerow in the foreground of the view along the London Road will screen the bottom section of the rig and the upper extents are likely to be heavily filtered by intervening mature trees and vegetation

Field of view:	**76 degrees**
Lens length:	**50mm**
Viewing distance:	**300mm @A3**

Planning Application:
Temporary permission to flow test and monitor the existing lateral borehole at Lower Stumble

Issue: 1	**Date: 15/01/14**

ARUP

Viewpoint Photographs
Lower Stumble Exploration Site, London Road, Balcombe

Job No: 230382-01

D: JB	C: IL	A: NG

Cuadrilla Balcombe Ltd

Figure:7

4.3 Access and Highways

The location of the site is adjacent to a purpose built access road which links to the nearby B2036 (London Road).

Access to the site for the exploration well testing equipment would be from the M23 motorway junction 10A and along the B2036 London Road. Journeys to and from the site would avoid the peak traffic flow periods except in the case of emergency. Access to the site for operatives travelling in light vehicles would depend on the location of their accommodation and may come from the north or south along the B2036 London Road.

The HGV movements are detailed in paragraph 3.2 above. For the majority of the time – 60 days at the end of stage 1 – there will be no HGV movements as monitoring of the flow and the associated gauges is undertaken. As outlined in Section 3.3, it is considered that the existing site access could accommodate the proposed development without any further improvements. It is also expected that the level of traffic generated by the development would be unlikely to have a significant impact on the local highway network.

4.4 Noise

Oilfield experience shows that exploration well testing and flaring is a relatively low noise activity that is generally not audible in the immediate locality of the site. The actual noise disturbance generated in testing a hydrocarbon discovery is a fraction of that generated by the exploration well drilling operation, and for shorter periods of time. The majority of testing and flaring operations are carried out during daylight hours with any night time operations limited to site activities, thereby avoiding any out-of-hours vehicular movements. Any noise associated with the testing and flaring is therefore expected to be minimal.

The location of the site is several hundred metres from the nearest residential property and site testing activities are not expected to lead to noise nuisance. This application is accompanied by a Noise Impact Appraisal (Appendix D) which outlines predicted specific noise levels from exploration well testing operations at the nearest residential location(s) to the exploration site, between the exploration site and the nearest house position.

The Noise Impact Appraisal predicts that the pre-test operations (use of a small work-over rig to clean out and prepare the borehole for subsequent testing and a small generator set) would typically produce an L_{AEQ} (1 hour) contribution of 37dB (A) at the nearest (most sensitive) residential position, which is lower than the daytime limit and unlikely to lead to any significant effects.

The testing operations would involve coiled tubing and acid wash operations, the nitrogen lift and the installation and operation of the beam pump (nodding donkey) or equivalent, with a small, acoustically enclosed generator set required for provision of site power. The coiled tubing, acid wash and nitrogen operations are performed during daytime hours. Other equipment such as tanks and separators would provide low noise emissions and are therefore not considered. Noise produced by flaring is variable, being dependent upon gas flow rates, and can vary between barely perceptible to a more significant level. Noise emission from the flare can be controlled by throttling back the flow during sensitive nigh time periods.

The overall site power requirements will provided by a small generator. The exact specification – including power data - of the work-over rig can only be confirmed when the order for this specialist equipment is made, which will be post planning decision. The power generator brought onto site for the operations will be a modern silenced canopied generator and will be from the range detailed below in table 4.4. The power requirements for the generator are far less than those for the 2013 drill. The modern generators to be used for this proposal will have class leading noise attenuation; will have fully bunded internal fuel tanks and optimised engine emissions that exceed current environmental legislation.

Sound power data for the beam pump (nodding donkey) or equivalent has been taken from noise tests conducted at an operating exploration well site where this equipment is continuously operated. The sound power for the site power generator is indicative of a small enclosed generator set.

The Noise Impact Appraisal predicts that the testing operations would typically produce a L_{AEQ} (1 hour) contribution of 31dB (A) at the nearest residential position, and that the overall effect of these operations is not expected to be significant.

A continuous noise monitoring survey will be undertaken at Kemps Farm – the nearest residential receptor position, throughout the pre-test and testing operations, in order to verify that the defined noise limits are being met on a continuous basis. Should noise limits be exceeded, additional noise mitigation would be implemented to reduce noise to the acceptable levels.

GHP2 Canopied generators											
	60 kVA		125 kVA		175 kVA		200 kVA		320 kVA		350 kVA
	50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	50Hz
Prime Rated Power (PRP) kW	50.5	57.1	99.6	105	148	169	160.6	186	255	276	TBC
Length (m)	3.2		3.37		4.2		4.16		4.6		4.6
Width (m)	1.2		1.2		1.2		1.2		1.2		1.5
Height (m)	1.95		2.17		2.27		2.53		2.36		2.56
Weight (kg) without Fuel	2830		3250		5060		4700		6300		6235
Weight (kg) with Fuel	3816		4210		6000		5644		7150		7167
Fuel consumption / hr 100% load	13.1	16.7	26.2	32	40	47	42.1	48.8	69	71	62
Running hours between fuel fills 100% load	85	66	43	35	28	23.6	26.3	22.7	16	14	16.1
Gross Fuel Tank Capacity (l)	1110		1130		1110		1200		1096		1096
Sound pressure at 1m (dBA)	65	80	66	83	67.5	TBC	71.9	74.5	69	TBC	72.2

Table 4.4 – Typical specifications for silenced canopy generators

4.5 Waste Management

During the exploratory testing operations there are seven sources of waste which require disposal from the site:

- Return water from the exploration well which would be collected in sealed storage tanks and managed by the Mining Waste Permit and the Radioactive Substances Regulations Permit;

- Mud and cement which is used in the plugging and abandonment of the exploration well would be collected in mud tanks and managed by the Mining Waste Permit;
- Sanitary waste which would be collected in a sealed cess tank;
- Site drainage which would be collected in the water suction sump;
- General waste-paper, timber, scrap-metal which would be collected in skips;
- Flared gas which would be managed as part of the Mining Waste Permit; and
- Vented nitrogen from the nitrogen lift which would be managed as part of the Mining Waste Permit.

All waste materials, including wastewater and fluids (subject to prior analysis if required), from the exploration well testing operations would be removed by licensed operators and disposed of at authorised waste treatment facilities that are permitted to accept and treat the waste. Foul sewage would be collected in portable site toilet facilities and these would be emptied periodically with disposal to an approved location. Any contaminated surface water collected in the lined ditching during drilling would not be released into the local watercourses or local drainage system, but would be disposed of at an approved location (see Drainage Strategy, Appendix E).

The operation is covered by two Environment Agency permits to manage extractive waste streams and waste which contain Naturally Occurring Radioactive Material (NORM). Both of these permits have already been issued to the Applicant by the Environment Agency.

4.6 Site Lighting

During testing operations the exploration site must be illuminated during hours of darkness, for safety reasons and to permit safe operations. All site lighting would be low-level, facing inward and downward on the site. Such lighting would not be intrusive to local residents and wildlife, nor would it be distracting to the drivers of vehicles on any nearby roads.

The lights would be completely sealed for safety resistance to a naked flame and spark proof.

As discussed in 4.2 the visual impact of any lighting will be minimal. Should WSCC require conditions relating to submission of a lighting scheme showing the type of light appliance, the height and position of fitting, illumination levels and light spillage then the applicant would be content to have these details approved in writing by WSCC, following submission of the detailed scheme, prior to commencement of operations.

4.7 Flood Risk

The development site is located in a defence protected Flood Zone 1, which is the lowest risk flood zone with a less than 1 in 1000 annual probability of river flooding in any year. All land uses – including the proposed exploration, are appropriate in this zone. The site area is less than 1ha. The proposed testing works are not capable of increasing off site flood risk. Impacts on surface water and groundwater are minimal and are more of a risk to the safe operation of the site than off site concerns. Further details can be found in the Drainage Strategy, Appendix E.

4.8 Surface and Groundwater Management

The site is not situated in a Source Protection Zone and there are no potable water abstraction points within the application boundary or its immediate vicinity. There are two surface watercourses within 100m of the site, located in the Lower Stumble and Lower Beanham woodland respectively.

The testing site is already underlain with an impermeable membrane to provide containment for any spilled liquid and surface water runoff. The oil, produced water and spent hydrochloric acid (less than 10% solution and used to clean the lateral borehole at the beginning of the flow testing) would be stored in separate

containers which would be located within the area of the impermeable membrane. No surface water from the site would be permitted to enter peripheral surface watercourses or discharge directly into local sewers. Surface water runoff from the exploration pad would instead be directed into a cellar and disposed of off-site via a suction tanker to a waste water treatment works.

Groundwater would be protected from the contents of the well during exploration operations by a combination of a steel casing and cement sheaths and other mechanical isolation devices installed as part of the well construction process.

The risk of any adverse impact from the well testing process on groundwater and local watercourses is highly unlikely. Further details can be found in the Drainage Strategy, Appendix E.

In accordance with the Environmental Permitting (England and Wales) Regulations 2010 the Environment Agency granted a permit to Cuadrilla Balcombe Limited to operate a mining waste operation at Lower Stumble, Balcombe on the 24/07/13 – Permit Number: EPR/AB3307XD.

The permit has a series of conditions relating to management, operation and monitoring. Condition 3 relates to emission to water, air or land and states: "There shall be no point source emissions to water, air or land from the sources and emission points listed in schedule 3 table S3.1." Table S3.1 relate specifically to emissions from the gas flare. The decision document to the permit explains how the EA considered the application. The decision document makes several references to spent Hydrochloric Acid (HCl) and potential impact on ground water.

I confirm that during the first phase of the flow testing approximately 20 cubic metres of diluted HCl will be circulated through the well. The HCl would be mixed with water - brought on to the site in tankers - at a maximum of 10% of the mix. The diluted HCl would be used to remove any residual drilling mud debris and surrounding rock to become salty water (calcium carbonate, calcium chloride and water). The salty water would return to the surface and then be stored in suitable containers pending transfer from the site. On page 9 of the decision document the EA state: "We have assessed the method of construction of the borehole and the proposed additives as part of our groundwater risk assessment and we are satisfied that the methods used are appropriate and will ensure that groundwater is protected." Furthermore Cuadrilla has monitored groundwater prior and during the drilling and will continue to monitor through the flow testing and post operations. In addition the EA will carry out monitoring of the surface and groundwater at the same locations as Cuadrillla to confirm the monitoring results.

In summary the EA and Health and Safety Executive (HSE) have assessed in detail the site, the proposal and any potential impact on surface and groundwater and concluded the methods are safe.

4.9 Drainage and Pollution Control

The proposed site is located where there is no existing drainage or flooding problems. However, the provision of any header drains, if required, would ensure that the natural drainage of the land would not be impeded (see Drainage Strategy, Appendix E).

Pollution control would be afforded by the impermeable membrane bunds, which would prevent liquids from penetrating into the soils and groundwater beneath the site or flowing from the site onto adjoining land and watercourses. In addition, spill kits, designed for all materials and substances used on site, will be held on site to deal with any emergencies that could arise from the flow testing operations. The Applicant also has a site specific Pollution Prevention Plan (audited by the Environment Agency) for the unlikely event of a major spillage. A specialist environmental clean-up company is also available on call, should they be required as part of the Applicant's crisis management procedures. Any site staff would receive training and be made aware of their responsibilities. The Drainage Strategy (Appendix E) also proposes environmental site management and drainage arrangements which would ensure that no potentially significant environmental effects would be likely to arise from the proposed development.

4.10 Land Quality

Soils samples were taken at the site prior to any development works taking place. The key component of this exercise was to ensure that once all exploration operations have been completed the site can be returned to its former condition. Similarly, the land quality at the site will be monitored during the proposed site operations to inform the final site restoration..

4.11 Land Stability

Ground and weight bearing tests were also undertaken early this year and confirmed the suitability of the land for the overall operation including the flow testing and monitoring that form the basis of this temporary application.

4.12 Ecology and Nature Conservation

An Ecological Appraisal was undertaken in 2010, which was updated in April 2013 and September 2013 (Appendix C). There are no statutory or locally designated sites within or adjacent to the site, and no protected species were found during the ecological surveys. The site is however close to Ancient Woodlands. Given the nature of the site which is covered in hard standing and has already been used for drilling activities, the Ecological Appraisal concludes that there are unlikely to be any significant actual or potential adverse ecological impacts.

Bat activity surveys were also undertaken in September 2013 (Appendix C), which found that there are no roosts that would be directly affected by the proposals, although bats were seen to be using the tree lines around the site boundary for foraging and commuting. The survey makes several recommendations regarding site lighting to reduce light spillage, which would be fully implemented and maintained as part of an Environmental Management and Monitoring Plan for the proposed development.

4.13 Heritage Archaeology

The Applicant consulted an independent archaeologist to ascertain if there was any need for an archaeological study at this site. Due to the nature of the proposed works - i.e. restricted to the existing site, the archaeologist considered that an archaeological investigation was not necessary.

The site is 385m away from Kemps House, which is a Grade II* listed building. Impacts on the setting of this building are however expected to be limited given the intervening woodland, local landscape features and temporary nature of the proposed development.

4.14 Air Quality

The Applicant has employed Ground Gas Solutions to undertake air quality monitoring prior to, during and after the proposed well testing operations. The parameters include: nitrogen dioxide; sulphur dioxide; hydrogen sulphide; methane; Volatile Organic Compounds and Benzene, Toluene, Ethylbenzene, and Xylenes (BTEX). A report will be issued to the Environment Agency as part of the Mining Waste Directive permit condition. The applicant will liaise closely with the EA on the method and content of the report and will ensure that the recommendations of the report and the requirements of the condition are fully complied with during the operations.

4.15 Emissions from Flaring

As part of the application for the Mining Waste Permit, an assessment of emissions from flaring was carried out and reported by Atkins Limited (Appendix H). The report concludes that the modelled emissions of oxides of nitrogen and carbon monoxide from any natural gas recovered with the oil and burnt at the proposed natural gas flare at Lower Stumble would not affect the achievement of the relevant short-term air quality

strategy objectives for human health during the well testing period. The enclosed flare (see photograph 02, Appendix G) would only be used during the exploration well flow testing over a short duration of 7 days.

The modelled emissions of oxides of nitrogen and carbon monoxide from the proposed natural gas flare at Balcombe will not affect the achievement of the air quality objectives for human health during well testing. This assessment is based on a number of conservative assumptions: the flare operates continuously for seven days at the upper bound of anticipated operation,(10,000 m_3/day); use of a five year meteorological data set from Gatwick, thus ensuring that the least favourable conditions have been modelled; and, the interpretation of the modelled oxides of nitrogen concentrations in terms of the resultant increments to ambient nitrogen dioxide concentrations using the highly conservative AQMAU recommendations regarding conversion rates.
The conclusions of the report are robust as a result of the safety factors built into the assessment listed above.

4.16 Odour and Dust

Odour and Dust emissions associated with this type of development are minimal. The two phases of the development that might cause dust and/ or odour are:

a. **Exploration well testing -** As the well testing is primarily below the surface and all fluid brought to the surface is stored in sealed tanks, there is little chance of any dust from the testing operation. During flow testing, any natural gas associated with the exploration testing would be burnt and flared, thereby reducing the risk of possible odour.

b. **Restoration –** The restoration will cause limited dust due to minimal stone/concrete movement.

4.17 Benefits of the Proposed Development

The proposed development involves the investigation of the subsurface geological succession of the Lower Stumble Structure through hydrocarbon flow testing of an existing exploration well. Such an investigation would provide a useful evaluation of the nation's mineral wealth, whether or not the tests prove the viability of any production.

Locally, the benefits of such a short term single well hydrocarbon exploration project are relatively small, although additional money would be brought into the area as a result of the proposed development for such purposes as land leasing, onsite building works, use of local contractors, suppliers and services, and the accommodation of the personnel involved in the onsite operations.

5.0 Planning Policy and Guidance

5.1 Introduction

This section of the Planning Statement considers the proposed development against the main development plan policies which are relevant to this application. It also assesses the proposals against emerging plans, guidance and other material considerations.

Section 38 (6) of the Planning and Compulsory Purchase Act (2004) states *that "If regard is to be had to the development plan for the purpose of any determination to be made under the planning Acts the determination must be made in accordance with the plan unless material considerations indicate otherwise".*

The National Planning Policy Framework (NPPF), March 2012

The National Planning Policy Framework (NPPF) is the key policy driver in consideration of planning decisions; it sets out the Government's planning policies for England and how these are expected to be applied.

The Development plan comprises:

West Sussex Minerals Local Plan, 2003

Under the Planning and Compulsory Purchase Act 2004, the policies of the adopted West Sussex Minerals Local Plan were due to expire on 27 September 2007 unless the Government decided that they should be saved for a longer period; 9 of the 64 policies were not saved beyond September 2007. The saved policies continue to form part of the statutory 'development plan' and provide the local policy framework for development control decisions until they are replaced by new documents to be prepared as part of the Minerals and Waste Development Framework.

The aims of the West Sussex Minerals Local Plan 2003 are:

- to set out the County Council's vision, objectives and strategy for mineral land-use planning in West Sussex;
- to provide a detailed policy framework for determining mineral planning applications; and
- to set out the existing sites and commitments and new site allocations for minerals development.

Mid Sussex Local Plan, 2004

The Mid Sussex Local Plan was adopted on May 27th 2004 and is part of the development plan for Mid Sussex. The Plan sets out policies and specific proposals for the development and use of land to guide planning decisions. In September 2007 the Government Office for the South East (GOSE) confirmed that the majority of policies within the adopted Mid Sussex Local Plan have been saved.

Section 5.2 considers the development proposals against the adopted development plan. There is only one policy in the West Sussex Minerals Plan specific to hydrocarbon exploration. Policies relating to minerals and development in general as set out within the NPPF, the Minerals Local Plan and the Mid Sussex adopted Local Plan are also relevant to the determination of this application.

There are also several other policy and technical guidance documents, reports and emerging plans that are relevant material considerations, including:

- Technical Guidance to the NPPF – Minerals Policy – March 2012

- Government Statements, including the Budget Report - March 2013 and Secretary of State for Energy's Speech – September 2013
- Planning Practice Guidance for Onshore Oil and Gas – July 2013.
- West Sussex Structure Plan 2001-2016
- Mid Sussex Development Plan, 2013
- Mid Sussex Sustainable Communities Strategy, 2008-2018
- West Sussex Sustainable Communities Strategy 2008-2020
- West Sussex Environment Strategy, 2008
- Strategy for the West Sussex Landscape, October 2005

These documents and plans are considered further in Section 5.3.

5.2 Assessment against the Development Plan (and NPPF)

5.2.1 Sustainable Development

NPPF

At the heart of the National Planning Policy Framework is a presumption in favour of sustainable development (para 11-14), *"which should be seen as a golden thread running through both plan-making and decision taking" (para14).*

Paragraph 14 clarifies that:

"For decision taking this means:

- *approving development proposals that accord with the development plan without delay; and*
- *where the development plan is silent, or relevant policies are out-of-date, granting permission unless:*
- *any adverse impacts of doing so would significantly and demonstrably outweigh the benefits, when assessed against the policies in this Framework as a whole; or*
- *specific policies in this Framework indicate development should be restricted."*

In support of the presumption in favour of sustainable development, paragraph 17 of the NPPF establishes "12 principles" of the planning system. These include that the planning system should:

"proactively drive and support sustainable economic development to deliver the homes, business and industrial units, infrastructure and thriving local places that the country needs. Every effort should be made objectively to identify and then meet the housing, business and other development needs of an area, and respond positively to wider opportunities for growth."

Under the section on Building a Strong, Competitive Economy, paragraphs 18 and 19 of the NPPF confirm that:

"The Government is committed to securing economic growth in order to create jobs and prosperity, building on the country's inherent strengths, and to meeting the twin challenges of global competition and of a low carbon future.

The Government is committed to ensuring that the planning system does everything it can to support sustainable economic growth…… Significant weight should be placed on the need to support economic growth through the planning system."

Paragraph 28 is concerned with supporting a prosperous rural economy and states that planning policies should support economic growth in rural areas in order to create jobs and prosperity by taking a positive approach to sustainable new development.

Mid Sussex Local Plan

Policy G1 states that development will not be permitted where it will:

a) cause irretrievable or irreplaceable loss of significant natural, created or social assets;

b) cause unacceptable environmental damage;

c) cause unacceptable disturbance or nuisance; and

d) be inefficient in its use of resources, including water and energy.

Policy G3 also requires that the necessary infrastructure either exists or can be provided to support the proposed development.

Policy Application and Review

There are no specific policies relating to the proposed development or the Lower Stumble development site within the relevant development plan. Where the development plan is silent, the NPPF directs that planning permission should be granted unless potential adverse impacts demonstrably outweigh the benefits. Given the scale of the proposal and the use of a site that has already been subject to similar operations, there are unlikely to be any significant adverse effects associated with the proposals. In contrast, the potential benefits of the proposal associated with ascertaining the area's potential to contribute towards the Government's identified national need for new energy sources and infrastructure to meet national demand are significant. Furthermore, the proposals align with other national and local aspirations for sustainable development relating to encouraging economic development and opportunities for growth and employment by exploring the potential for new development opportunities within the energy industry.

5.2.2 Minerals Planning

NPPF

Paragraph 142 recognises the importance of minerals in providing the infrastructure and energy that the country needs. It also recognises that given their finite nature, it is important that to make best use of them to secure their long term conservation. When preparing development plans and determining applications, planning authorities are directed to:

- Give weight to the benefits of mineral extraction, including the economy;
- Ensure that there are no unacceptable impacts on the natural and historic environment, human health or aviation safety;
- Ensure that unavoidable noise, dust and particle emissions are controlled, mitigated or removed;
- Provide for restoration and aftercare at the earliest opportunity; and
- Clearly distinguish between the three phases of development (exploration, appraisal and production) and address constraints on production and processing within areas that are licensed for oil and gas exploration or production.

West Sussex Minerals Plan

Policy 1 states that mineral workings will be permitted only where:

a) working practices which cause least environmental impact will be followed; and

b) opportunities to conserve and enhance the environment are incorporated in proposals to reclaim the land to a standard appropriate to the agreed after use.

Policy 27 states that permission for hydrocarbon exploration will normally be granted subject to compliance with the following issues:

a) impact on other countryside resources;

b) site access and routing of heavy vehicles;

c) means of protecting nearby residents and amenities from the effects of operations;

d) safeguarding of public rights of way; and

e) safeguarding of water supplies and the water environment.

Policy 20 stipulates that planning permission will only be granted where proposals for reclamation would be practicable and appropriate for the location, and that reclamation would be completed at the earliest opportunity. Policy 21 encourages reclamation proposals offering opportunities for habitat creation, new or improved fisheries, recreation provision, landscape enhancement or improved resource provision in appropriate locations. Policy 22 further states that planning applications for mineral working will only be approved where they incorporate either detailed proposals for reclamation, or the principles of reclamation requiring the submission and agreement of more detailed programmes at a later date.

Policy 51 requires applicants to include a satisfactory working scheme in their planning applications to show how working within the site is intended to progress and to show how reclamation will follow behind excavation. Policy 52 also requires details of the siting and appearance of buildings, machinery and plant together with proposals for their removal when no longer required in connection with the development.

Policy Application and Review

In accordance with the NPPF and West Sussex Mineral Plan policies, the impacts of this proposal have been considered and are unlikely to give rise to any unacceptable impacts on the natural environment, local community or other local countryside resources, as illustrated in Section 4. This is largely as a consequence of the scale of the proposals and the use of a site that has already been subject to drilling activity. There are also several other characteristics of the site which make it suitable and will help to minimize impacts, including:

- Remoteness from residential properties;
- No public rights of way;
- Limited ecological or heritage value; and
- Existing site access and routing of HGVs to site which avoids the village of Cuckfield to the south.

The local water environment will also be safeguarded through surface water management measures that will contain all surface water runoff within the site and prevent it from entering local watercourses. Further details of the Drainage Strategy can be found in Appendix E.

The proposals make provision for the restoration of the site following completion of the testing. Site fencing would be dismantled and the site restored to its former hard standing condition. A full Site Restoration Plan is provided in Appendix F which describes how the site will be returned to forestry usage once all activity on the site ceases; as explained in Section 3.7 there is a possibility that further appraisal activities may be undertaken, although these would be subject to a further planning application.

In accordance with Minerals Policy 52, drawing CRL-002 Testing Site Layout Plan and the supporting photographs contained in Appendix G, provide details of the siting and appearance of buildings, machinery and plant.

5.2.3 Transport and Access

NPPF

Paragraph 22 requires all new developments generating significant amounts of movement to be accompanied by a Transport Assessment. Amongst other things, these should take into account whether safe and suitable access to the site can be achieved. When determining applications, development should only be refused where its residual cumulative impacts are likely to be severe.

West Sussex Minerals Plan

Policy 47 takes account of the number, type and routing of vehicles generated from a mineral working proposal. Permission will be refused if the highway network is inadequate and any significant harm cannot be overcome. Policy 48 requires highway access to meet satisfactory standards; provision must also be made within sites for vehicle turning, manoeuvring, loading and, where appropriate, wheel cleaning.

Mid Sussex Local Plan

Policy T3 states that proposals for development that would give rise to significant movements of freight within the villages or on roads not designed to accommodate HGVs will not be permitted.

Policy Application and Review

This application is not accompanied by a Transport Assessment since the likely traffic movements associated with it are not expected to be significant and will, where possible, avoid peak traffic flow periods. The site benefits from good highway access and visibility from the B2036, and HGVs will be routed so that they access the site from the north, thereby avoiding the village of Cuckfield to the south. The existing site access is considered to meet the needs of the development and no further works to the highway are proposed. As illustrated on drawing CR002 Testing Site Layout Plan, there is sufficient space within the site for vehicle turning, manoeuvring and loading. As the development is unlikely to generate significant levels of dust, no wheel cleaning facilities are proposed.

5.2.4 Water resources and flood risk

NPPF

Under the section on 'Meeting the challenge of climate change, flooding and coastal change', paragraph 100 states that *"inappropriate development in areas at risk of flooding should be avoided by directing development away from areas at high risk, but where development is necessary, making it safe without increasing flood risk elsewhere."* Paragraph 103 states that when determining planning applications, Local Planning Authorities should only consider development in areas at risk of flooding where they have been appropriately informed by a site-specific flood risk assessments and if applicable, the exception test.

West Sussex Minerals Plan

Policy 16 requires appropriate measures for safeguarding the water environment during working; it also encourages the prudent use of recycling water within mineral workings.

Policy 17 states that mineral working will not be permitted where:

a) Within floodplains where reclamation resulting in the raising of existing levels and/or where the stockpiling of materials would be likely to obstruct flow within the floodplain; or

b) In locations where a risk could be posed to the structural integrity of any sea, tidal or fluvial defence or to the channel of any watercourse or its banks; or

c) Where it is considered the diversion of land drainage and surface water flows could result in a detrimental effect due to additional flows being directed to a public sewerage system or any other drainage system; Unless any harm can be satisfactorily mitigated.

Policy 56 seeks to protect the quality of surface and groundwater supplies by ensuring that there are no adverse impacts on the water table which could cause environmental damage, flooding or adversely affect water resources. Policy 58 ensures that appropriate conditions are imposed on planning permissions to ensure that drainage and discharge of water is efficiently and properly controlled. Policy 59 states that conditions will be imposed on planning permissions to ensure that the drainage and discharge of water is efficiently and properly controlled within the site.

Mid Sussex Local Plan

Policy CS13 states that planning permission will not be granted for development unless the site can be adequately drained. Developers will be required, where necessary, to provide facilities to control the rate of surface water run-off from development sites or, subject to there being no detriment to the natural habitat, carry out improvements to the receiving watercourses. Proposals for the design and long term maintenance of any engineering works (e.g. balancing ponds) must be submitted to and approved by the Local Planning Authority.

Policy CS15 stipulates that planning permission will not be granted for development in areas at risk of flooding or for land raising within river floodplains unless environmentally acceptable flood mitigation measures to protect the floodplain can be provided by the developer to compensate for the impact of the development.

Policy CS16 protects watercourses from adverse impacts, stating that development will not be permitted if it would have an adverse impact on the quality or nature conservation value of rivers, underground or surface water features, or lead to a reduction in ground water levels of flows in water courses.

Policy Application and Review

The development site is located in a defence protected Flood Zone 1, which is the lowest risk flood zone with a less than 1 in 1000 annual probability of river flooding in any year. All land uses – including the proposed exploration, are appropriate in this zone.

The testing site is already underlain with an impermeable membrane which would contain any spilled liquid or surface water runoff. The oil, produced water and spent hydrochloric acid would be stored in separate containers which would be located within the area of the impermeable membrane. All surface water runoff from the exploration pad would be stored in a cellar and disposed of off-site via a suction tanker to a waste water treatment works. There would be no discharge into local watercourses or the local sewer network.

Groundwater would be protected from the contents of the well during exploration operations by a combination of a steel casing and cement sheaths and other mechanical isolation devices installed as part of the well construction process. The full Drainage Strategy can be found in Appendix E.

5.2.5 Ecology and biodiversity

NPPF

Paragraph 109 requires the planning system to contribute to conserving and enhancing the natural and local environment by protecting and enhancing valued landscapes, geological conservation interests and soils; recognising the wider benefits and ecosystem service and minimising impacts on biodiversity. Paragraph 118 directs local planning authorities to conserve and enhance biodiversity by avoiding significant harm from new development. Where that harm cannot be avoided, it should be mitigated or, as a last resort planning permission should be refused. Planning permission should also be refused for development resulting in the loss or deterioration of irreplaceable habitats, including Ancient Woodland and the loss of aged or veteran trees found outside Ancient Woodland, unless the need for, and benefits of, the development in that location clearly outweigh the loss. Wildlife sites – including Sites of Special Scientific Interest, Special Protection Areas, Special Areas of Conservation and Ramsar sites are also afforded special protection from development.

West Sussex Minerals Plan

Policy 10 states that proposals that may irreversibly damage statutorily designated sites will only be granted if the damage can be prevented or the need for the mineral outweighs the environmental objections in relation to the designation(s).

Policy 53 requires applications to incorporate satisfactory measures for the retention, protection and maintenance of existing trees, hedgerows and shrubs. Provision of soil bunds and planting is required where necessary to screen workings and to contribute to final reclamation schemes.

Mid Sussex Local Plan

Policy C5 protects Sites of Special Scientific Interest, Sites of Nature Conservation Importance, Local Nature Reserves, Ancient Woodlands and other sites or areas identified as being of nature conservation or geological importance, including wildlife corridors, from development. Applications affecting these will be subject to rigorous examination, and only permitted where the proposal minimises the potential impact on features of nature conservation importance. The weight to be attached to nature conservation interests will reflect the relative significance of designations.

Policy C6 states that development resulting in the loss of woodlands, hedgerows and trees which are important in the landscape, or as natural habitats, or historically, will be resisted.

Policy Application and Review

The development site is not subject to any statutory or local nature conservation designations, and recent bat activity surveys did not find any roosts that would be directly affected by the proposals. The updated Ecological Appraisal submitted in support of this application (Appendix C) concluded that there will be no adverse significant ecological effects resulting from site operations. The Appraisal also includes recommendations relating to site maintenance and lighting which would ensure that any possible effects on local wildlife in the vicinity of the site are kept to a minimum.

As all activities would be confined to the existing drilling site and no alterations are proposed to the access road, it is not anticipated that there would be any adverse effects on surrounding Ancient Woodland.

5.2.6 Landscape and Visual Impact

NPPF

Paragraph 109 requires the planning system to contribute to conserving and enhancing the natural and local environment by protecting and enhancing valued landscapes, geological conservation interests and soils.

West Sussex Minerals Plan

Policy 12 states that some mineral working may be accommodated within Areas of Outstanding Natural Beauty, but mineral workings that may irrevocably damage the intrinsic qualities of these areas will be refused. Highest standards are required to mitigate the impact of working and promote rapid reclamation, unless it is demonstrated that rapid reclamation is not practicable. Mineral applications will be subject to rigorous examination which will include an assessment of:

a) The need for the development and the impact of refusing it on the local economy;

b) Whether alternative supplies can be made available at a reasonable cost and the scope for meeting the need in another way;

c) Any detrimental effect of the proposals on the environments and landscape and the extent to which that should be moderated; and

d) In the case of extensions to existing workings, the extent to which the proposal would achieve an enhancement to the local landscape.

Mid Sussex Local Plan

Policy C1 states that outside built up areas, development will be restricted to certain types of development, including (in appropriate cases) proposals for minerals or the disposal of waste.

Within the District's Areas of Outstanding Natural Beauty, Policy C4 states that the aim is to conserve and enhance natural beauty. Development will not be permitted unless:

a) It is reasonable necessary for the purposes of agriculture or some other use which has to be located in the countryside;

b) It is essential for local social and/ or economic needs; or

c) It can be demonstrated that the development would be in the national interest and that no suitable sites are available elsewhere.

Where development is proposed within an AONB, particular attention will be given to the siting, scale, design, external materials and screening of new buildings to ensure that they enhance and do not detract from the visual quality and essential characteristics of the area.

Policy Application and Review

The site is located in the High Weald AONB. However, it makes use of an existing site which has already been subject to drilling activities, both recently and since the 1980s. The site is also well screened by existing forest and local landscape features. The impacts on the AONB and local landscape are further expected to be limited given the temporary nature of the development proposed (6 months).

The site is also adjacent to Ancient Woodland and Gill streams, both of which are identified as being features of significance to the landscape. Potential impacts on these features will however be minimized through appropriate drainage strategy and pollution control measures. A Site Restoration Plan has also been

included with the application (Appendix F) which proposes to restore the site to former forestry uses once all activity has ceased.

5.2.7 Pollution

NPPF

Paragraph 120 prevents unacceptable risks from pollution and land instability by ensuring that new development is appropriate for its location. It articulates that the effects of pollution on health, the natural environment or general amenity, and the potential sensitivity of the area or proposed development to adverse effects from pollution should be considered.

Paragraph 123 requires planning policies and decisions relating to new development to avoid giving rise to significant adverse noise impacts on health and quality of life. Where there are adverse noise impacts, these should be mitigated.

Paragraph 124 is concerned with Air Quality Management Areas and cumulative impacts on air quality from individual sites in local areas.

Paragraph 125 encourages the use of good design to limit the impact of light pollution from artificial light on local amenity, intrinsically dark landscapes and nature conservation.

West Sussex Minerals Plan

Policy 60 states that conditions will be imposed requiring that acceptable maximum levels of noise are not exceeded and appropriate monitoring sites are identified on site boundaries and/ or appropriate locations outside the site.

Policy 61 ensures that conditions will be imposed where appropriate to suppress dust levels.

Policy 62 states that conditions will be imposed to control artificial lighting of sites in the interests of local amenity.

Mid Sussex Local Plan

Policy CS22 states that development will only be permitted which does not cause unacceptable levels of pollution to land, air or water in terms of noise, dust, fumes, vibration, light or heat.

Policy Application and Review

Noise

The Noise Impact Appraisal submitted in support of this application concludes that the overall effect of the proposed development would not be significant. Assembly of the testing equipment would be undertaken during 07.30 to 18.30 hours Monday to Friday, 08.00 to 13.00 Saturdays, in compliance with West Sussex County Council Guidelines for Noise Control. Once the testing equipment has been fully assembled, the exploration well flow testing operations would be undertaken on a 24 hour basis, which is usual practice for this kind of exploratory process. Night time activities would however be restricted to exploration well flowing operations thus avoiding any noise from general activities or vehicular movements.

Continuous noise monitoring would be undertaken throughout the pre-test and testing operations to ensure that the defined noise limits are being met on a continuous basis. Should noise limits be exceeded, additional noise mitigation would be implemented to reduce noise to the acceptable levels. Further details can be found in the Noise Impact Appraisal (Appendix D).

Lighting

The proposals include some site lighting, both at night and during seasonal daytime hours of darkness. This is necessary for site safety reasons and to ensure safe operations. Site lighting will however be low level, facing inwards and downwards within the site. This will ensure that there are no adverse impacts on nearby residents, local road safety or wildlife in the vicinity of the site.

Pollution and land quality

Potential pollution arising from site operations will be controlled using impermeable membrane bunds which will prevent any liquids from penetrating into the soils or groundwater beneath, or nearby land and watercourses. Spill kits will also be kept on site to deal with any emergencies that might arise from testing operations. The applicant has a site specific Pollution Prevention Plan which has been audited by the Environment Agency. Land quality will also be monitored during and after the proposed site operations.

Air quality

An assessment of emissions from flaring has been included with this application (see Appendix H). This assessment found that the modelled emissions of oxides of nitrogen and carbon monoxide from any natural gas recovered with the oil and burnt at the natural gas flare on site will not affect the achievement of the relevant short term air quality strategy objectives for human health during well testing. Air quality will also be monitored prior to, during and post well testing operations. The proposed site activities are not expected to give rise to any significant dust or odour.

5.2.8 Land Quality and Stability

NPPF

To prevent unacceptable risks from pollution and land instability paragraph 120 instructs planning authorities to ensure that a new development is appropriate for its location. Where a site is affected by contamination or land stability issues, responsibility for securing a safe development rests with the developer and/ or landowner.

Mid Sussex Local Plan

With regards to contaminated land, Policy CS20 states that planning permission will only be granted where the Local Planning Authority, in consultation with the appropriate agencies, considers that a proposal will not have any unacceptable effects in terms of the environment or human health.

Policy CS21 states that development of an area of known or suspected land instability will only be permitted where it can be demonstrated that the site can be developed and used safely without adding to the instability of the site or adjoining land. Any necessary stabilisation measures must be environmentally acceptable.

Policy Application and Review

The development site is not known to be contaminated, nor are there any issues relating to land stability. As outlined in Sections 4.5 and 4.9, suitable measures would be put in place to manage waste appropriately and prevent pollution. Ground condition monitoring has already been undertaken as part of previous drilling activities, and will continue during the well testing phase.

5.2.9 Socioeconomic

NPPF

Paragraph 28 of the NPPF encourages local authorities to support the sustainable growth and expansion of all types of business and enterprise in rural areas and promote the development and diversification of agricultural and other land-based rural businesses. Paragraph 144 also directs authorities to give weight to the benefits of the mineral extraction, including to the economy. However, local authorities are also required to ensure that there are no adverse impacts on human health.

West Sussex Minerals Plan

Policy 19 states that in considering applications for mineral extraction, attention will be given to the effect upon residential and other amenity, and measures to mitigate the impact. Policy 63 ensures that where appropriate, conditions controlling hours of working will be imposed on planning permissions to safeguard residential amenity.

Policy Application and Review

Although temporary and short term, the proposals have some potential to bring economic benefit to the local area, both through generation of new employment opportunities, use of local contractors, suppliers and services, land leasing, onsite building works and local accommodation for site workers. If the testing were to prove successful, there is the potential for significant long term economic benefits associated with further use of the site, both on a local and national scale.

Potential impacts on the local community – particularly those residents living in closest proximity to the site, are expected to be minimal. The development is not expected to generate significant levels of noise, lighting, pollution or traffic disturbance. Suitable mitigation measures and monitoring procedures will be put in place minimise and oversee noise and pollution levels throughout development operations.

5.3 Other Material Considerations

5.3.1 National Guidance and Government Statements

Technical Guidance to the NPPF, March 2012

The following paragraphs of the Technical Guidance to the National Planning Policy Framework on Minerals Policy are relevant.

Communities

Paragraph 20 expects minerals planning authorities to ensure that proposals do not have an unacceptable adverse effect on the environment or human health. Residents living close to mineral working may be exposed to environmental effects which should be taken into account in conditions attached to a grant of planning permission.

Pollution

Paragraphs 23-27 are concerned with controlling, mitigating or removing dust emissions from mineral workings.

Paragraphs 28- 31 are concerned with controlling, mitigating or removing at source noise emissions associated with mineral extraction.

Restoration and aftercare

Paragraph 33 explains that restoration and aftercare can be carried out at the earliest opportunity, through provisions of a landscape strategy, restoration conditions and aftercare schemes where appropriate. Paragraph 42 states that it is usually appropriate to impose a detailed set of conditions at the time of granting planning permission for short-term workings.

Policy Application and Review

Potential impacts on the local community – particularly those residents living in closest proximity to the site, are expected to be minimal. The development is not expected to generate significant levels of noise, lighting

or traffic disturbance. Suitable monitoring procedures will also be put in place to oversee noise and pollution levels throughout the development operations. A Site Restoration Plan has been included in Appendix F.

5.3.2 Planning Practice Guidance for Onshore Oil and Gas – July 2013

DCLG published planning practice guidance for onshore oil and gas in July 2013. The guidance should be read alongside the NPPF and other planning guidance. The guidance draws upon the NPPF, illustrating the Government's support of hydrocarbons as an energy source and recognising the economic benefits hydrocarbons.

Paragraph 6 recognises that planning for the supply of minerals has a number of special characteristics not present in other forms of development, including:

- *minerals can only be worked (i.e. extracted) where they naturally occur, so location options for the economically viable and environmentally acceptable extraction of minerals may be limited.*
- *working is a temporary use of land, although it often takes place over a long period of time;*
- *working may have adverse and positive environmental effects, but most adverse effects can be mitigated;*
- *since extraction of minerals is a continuous process of development, there is a requirement for routine monitoring, and if necessary, enforcement to secure compliance with conditions that are necessary to mitigate impacts of mineral working operations; and*
- *following working, surface land should be restored to make it suitable for beneficial after-use."*

Paragraphs 9 to 20 set out the principal phases of onshore hydrocarbon extraction. Three phases are identified: exploration, testing (appraisal) and production. Paragraph 10 explains that planning permission is required for each phase of hydrocarbon extraction.

Paragraph 21 describes how Mineral Planning Authorities (MPAs) should plan for hydrocarbon extraction and encourages them to make appropriate provision for hydrocarbons in local mineral plans. However, there is no need to create mineral safeguarding areas specifically for the extraction of hydrocarbons given the depth of the resource, the ability to utilise directional drilling and the small surface area requirements of well pads (para 25).

Paragraph 29 describes the relationship between planning and other regulatory regimes. It emphasises that the focus of the planning system should be on whether the development itself is an acceptable use of the land, and the impacts of those uses, rather than any control processes, health and safety issues or emissions themselves where these are subject to approval under other regimes.

Paragraphs 31 and 32 describe the hydrocarbon issues that mineral planning authorities can leave to other regulatory regimes.

Paragraph 33-37 is concerned with pre-application engagement and identifies means by which the prospective operator can engage with the planning authority and other interested parties. This should be tailored to the phase of hydrocarbon extraction and associated issues that need to be addressed.

Paragraph 49-50 describe what constitutes an application for an exploratory well and paragraph 51 encourages applications for exploratory drilling to cover as much of the exploratory activity as possible to avoid further planning applications.

In relation to cumulative effects of hydrocarbon extraction, paragraph 56 and 57 clarify that each application should be considered on its own merits, although regard should be had to the possible cumulative effects arising from any existing or approved phases of hydrocarbon extraction.

Paragraphs 58-59 emphasise that applications for the exploratory phase of hydrocarbon extraction should be considered on their own merits, rather than taking into account hypothetical future activities for which consent has not yet been sought.

Paragraphs 67-68 are concerned with minimising the impact of development upon properties and the local environment in close proximity to mineral workings and mitigating environmental effects of mineral extraction.

Paragraphs 69-70 are concerned with separation distances or buffer zones for hydrocarbon extraction. Paragraph 70 confirms that there is no standard distance for proposals for hydrocarbon extraction and that any separation distance should be effective, properly justified but reasonable taking into account a number of considerations as listed in paragraph 70.

Advice is also provided for the aftercare and restoration of hydrocarbon extraction sites at paragraphs 73-78. Paragraph 73 specifies that responsibility of the sites lies with the operator and, in the case of default, with the landowner. Paragraph 74 lists potential land uses once minerals extraction and restoration and aftercare is complete, which can include: creation of new habitats and biodiversity; use for agriculture; forestry, and; recreational activities. Paragraph 75 requires the applicant to submit proposals for restoration and aftercare as part of the planning application.

Policy Application and Review

Table 5.1 lists the environmental issues that should be addressed in connection to hydrocarbon extraction and how these have been addressed in relation to the proposed development. It demonstrates that there are unlikely to be any significant adverse effects arising from the development. Consequently, impacts on local residential amenity are also expected to be minimal.

Table 5.1 Environmental Issue and Response

Issue	Response
Noise associated with the operation	No significant adverse impacts anticipated; noise monitoring to be undertaken during operations
Dust	Operations are only expected to generate minimal levels of dust; no mitigation necessary.
Air quality	Modelled emissions are not expected to affect achievement of human health objectives. Air quality will be monitored prior to, during and post well testing operations.
Lighting	Site lighting is necessary to ensure the safety of operations; impacts will be minimised though use of low level, inward and downward facing design.
Visual intrusion into the local setting and the wider landscape caused by the placement of any building or structure within the application site area. Impact on the Landscape character.	Existing woodland and local landscape features will effectively screen the site. Use of an existing drill site will also reduce additional impact on the landscape. Proposed operations and their impact on the landscape will be temporary and suitable measures to protect features of local landscape value will be adopted (e.g. pollution control).
Archaeological and heritage features	There are no archaeological or heritage features within or in close proximity to the site.

Traffic	Likely traffic movements associated with it are not expected to be significant and will, where possible, avoid peak traffic flow periods. The site benefits from good highway access and visibility from the B2036, and HGVs will be routed so that they access the site from the north, thereby avoiding the village of Cuckfield to the south. The existing site access is considered to meet the needs of the development and no further works to the highway are proposed.
Risk of contamination to land	Suitable drainage and pollution control measures – including an impermeable membrane will be put in place, as detailed in Section 4.
Soil resources	Soil samples have been taken and land quality will be monitored during and after proposed site operations.
The impact on best and most versatile agricultural land	n/a
Flood risk	The site is located within flood zone 1, which is a low risk flood zone. A Flood Risk Assessment and Drainage Strategy are provided in Appendix E.
Land stability/subsidence	No existing issues following a series of pre-commencement surveys Ground monitoring will be undertaken throughout testing operations.
Internationally, nationally or locally designated wildlife sites, protected habitats and species, and ecological networks	There are no statutory or local nature conservation designations within the site and the proposed development is not expected to have any significant adverse ecological impacts. An Ecological Appraisal is included at Appendix C.
Nationally protected geological and geomorphological sites and features	n/a
Site restoration and aftercare	A Site Restoration Plan which details proposals to return the site to its former forestry use is included at Appendix F.

The applicant has been in consultation with other relevant regulatory bodies (e.g. the Environment Agency) as necessary in relation to this application, required permits and the testing operations proposed.

5.3.3 Local Policy, Guidance and Strategy

Although the **West Sussex Structure Plan 2001-2016** no longer forms part of the development plan, it remains West Sussex County Council's strategic policy statement on development into the future. Principles of relevance to this application include:

- Supporting development in the countryside to meet local rural needs and maintain it as a place of varied and productive social and economic activity;
- Protecting the natural beauty of the County's AONBs;
- Protecting the wide range of habitats, species and geology in West Sussex;
- Protecting the quality of air, soil and water; and

- Protecting mineral resources and ensuring that their extraction can be sustained as long as is necessary, subject to environmental safeguards.

Policy ERA6 relates specifically to minerals, and stipulates that proposals for the exploration and production of oil and gas should not be permitted unless there are required to meet identified needs and any impact on the environment is acceptable.

Mid Sussex District Council submitted its **District Plan** and accompanying documents to the Secretary of State on 24th July 2013. The District Plan is now subject to an independent examination by the Planning Inspectorate. The following strategic objectives contained within the Plan are of particular relevance to this application:

- To protect valued landscapes for their visual, historical and biodiversity qualities.
- To support a strong and diverse rural economy in the villages and the countryside.

In line with the NPPF, the District Plan adopts a presumption in favour of sustainable development. Policy DP1 states that planning applications in accordance with the development plan will be approved without delay unless material considerations indicate otherwise; where there are no relevant policies then permission will be granted unless material considerations indicate otherwise.

With regards to development in the countryside, policy DP9 states that it will be permitted where it is necessary for the purpose of a use that has to be located in the countryside,

Policy DP13 relates to the High Weald AONB, stating that development will only be permitted where it conserves and enhances natural beauty and has regard to the High Weald AONB Management Plan, in particular:

- The identified landscape features of components of natural beauty and their setting;
- The traditional interaction of people with nature, and appropriate land management;
- Character and local distinctiveness, sense of place and setting of the AONB;
- An emphasis on small scale proposals that are sustainable located and designed; and
- Proposals which support the economics and social wellbeing of the AONB.

Policy DP27 addresses noise, air and light pollution. It aims to protect the environment from unacceptable levels of noise, light and air pollution. Development must be designed, located and controlled to minimize the impact of noise on health and quality of life, neighbouring properties and the surrounding area. Where it is expected to generate significant levels of noise it must incorporate appropriate noise attenuation measures. With regards to light pollution, the applicant is expected to demonstrate good design that includes fittings to restrict emissions from a development.

Policy DP36 aims to protect biodiversity by ensuring that development protects existing biodiversity so that there is no net loss of biodiversity; unavoidable loss must be offset through ecological enhancements. Development is also expected to minimize fragmentation and maximize opportunities to enhance or restore ecological corridors.

With regards to flood risk, Policy DP41 requires development to avoid areas that are at risk from flooding. Where feasible, SUDS should be incorporated into a development and surface water managed according to the hierarchy of infiltration, attenuation and discharge into watercourses before discharge into sewers.

The **Mid Sussex Sustainable Communities Strategy** sets out the agreed priorities of the agencies, organisations and communities of Mid Sussex for the next 10 years. Amongst other things, the Strategy recognises the potential impacts of climate change, which is likely to affect resource consumption and result in changes in the natural environment. As a consequence, the Strategy acknowledges that the challenges

raised by 'Peak Oil' and the decline in fossil fuels will need to be addressed. In response, communities will need to become more sustainable and resilient to deal with factors outside their control.

The Mid Sussex Sustainable Communities Strategy is aligned with the **West Sussex Sustainable Communities Strategy** 2008-2020. Amongst the core themes of the Strategy, it recognises that the implications of possible future uses of the rural landscape will need to be carefully considered. A more mixed use pattern of land use is expected where different land uses exist alongside each other. A consistent planning approach is also required which allows greater flexibility in relation to diversification to support local communities.

West Sussex Environment Strategy, 2008

The West Sussex Environment Strategy was developed in 2008. It provides a framework for achieving a clean, healthy, and biologically diverse environment for the county, which is managed holistically and innovatively in the face of a wide range of pressures, including the challenges presented by a changing climate.

With regards to the District's mineral reserves, the Strategy recognises that the extraction of minerals can have significant implications for the environment and local communities, particularly because they can only be worked where they naturally occur. Environmental impacts of extraction and subsequent transportation include disturbance to local habitats and species, pressure on the landscape and countryside character from land take, nuisance impacts on local communities such as noise and dust, as well as road safety issues.

However, the Strategy recognises that the District's mineral sites are of importance for a wide variety of wildlife during the active, extraction phase and after extraction has finished. Mineral extraction can also uncover important geological exposures and archaeological features and be valuable amenity and recreation resources. As a consequence, the positive and negative impacts of minerals warrant careful management. A key challenge that mineral extraction in West Sussex faces is balancing the local, regional and national need for minerals with the environmental costs to the county as a whole. As a consequence, the Strategy aims to manage the extraction of minerals so that it has a minimal impact on the local environment and communities.

Strategy for the West Sussex Landscape, October 2005

The Strategy for the West Sussex Landscape aims to protect and enhance the landscape of West Sussex as an asset for future generations. As part of its vision and objectives, it aims to:

- Accommodate change in ways that reinforce and resource character;
- Achieve continuous landscape renewal and recreation as part and parcel of land use activities;
- Conserve, enhance and extend the diversity of wildlife within the County; and
- Conserve and enhance semi-natural habitats including securing the future of woodlands, hedgerows and trees as distinctive landscape features.

The Strategy also sets out guidelines for commercial and industrial development, which include:

- Ensure new land uses and development relate well to and retain key existing landscape features;
- Locate buildings and associated infrastructure to avoid loss of views on and off the site;
- Retain key landscape features such as woodland and hedgerow;
- Ensure that the design of buildings and structures is of high quality and in keeping with the character of the landscape;
- Position buildings to minimise landscape impact;
- Ensure that site entrances fit within the landscape; and

- Minimise the impact of lighting.

Policy Application and Response

The proposals align with many of West Sussex's Structure Plan and the draft District Plan objectives and policy principles; the site has the potential to contribute to the economic activity whilst the nature of the development and the characteristics of the site mean that there are unlikely to be significant adverse impacts on the local community and environment, including the value and character of the High Weald AONB. As recognised by the West Sussex Communities Strategy, there is a need to address energy security and the likely changes to the UK energy mix; this proposal will contribute to a better understanding of the future energy sources.

6.0 Summary and Conclusions

The proposals for further exploration and testing at the Lower Stumble exploration well site are an important aspect of gaining a better understanding of the scale of hydrocarbon resources in West Sussex and their associated potential to contribute to the increasing demand for energy in the UK and the corresponding need to establish new domestic energy supplies. The proposals will also continue to make a contribution to local economic prosperity through local employment opportunities and the use of local businesses to supply the day to day needs of the site exploratory operations. The exploration well has already been drilled, including a lateral section, and this planning application seeks consent to undertake temporary flow testing of the exploration well (specifically excluding any further drilling or hydraulic fracturing).

Government policy supports the principle of exploration and recovery of hydrocarbon reserves where possible and where environmental issues can be satisfactorily dealt with. Potential impacts on the natural environment, landscape and local communities associated with the proposed development have been considered. The majority of impacts are likely to be temporary, small scale and confined to the immediate vicinity of the site. A comprehensive package of mitigation measures, monitoring and controls are proposed to minimise the impact of the exploratory operations on the local environment and community. In the long term, the site will be remediated and returned to its former forestry use and subject to a suitable scheme of aftercare.

The proposals have been reviewed against relevant development plan and other material considerations. There are no development plan policies relating specifically to the exploration of hydrocarbons at the Lower Stumble site. Where the development plan is silent, the NPPF directs that planning permission should be granted unless the adverse impacts of doing so would significantly outweigh the benefits when assessed against relevant policies. As stated above, the possible impacts arising from the development are likely to be minimal and can be satisfactorily mitigated and controlled. In contrast, the development proposals have the potential to bring about significant benefit, both to the local economy and at the national level for new energy infrastructure to be brought forward as soon as possible.