



Specialist Environmental Consultancy for
Air Quality, Odour & Environmental Noise



**Environmental Noise
Assessment for Proposed
Coalbed Methane
Appraisal Borehole at
Borras Road, by Wrexham**

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Record of changes

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1	23 rd October 2013	For internal review
2	25 th October 2013	For client review
3	8 th November 2013	Amended following feedback from Wrexham Council

Executive Summary

Dart Energy Ltd proposes to make application for planning permission to Wrexham County Borough Council to establish a temporary appraisal borehole on land at Borrass Road, by Wrexham. The aim of the appraisal borehole drilling is to determine the characteristics of the coals and their gas content in order to assess their potential for commercial methane extraction.

Dart Energy has instructed The Airshed Ltd to conduct a noise impact assessment for the proposal and advise on appropriate mitigation measures where necessary.

The application involves temporary drilling operations which are relatively short in duration and this activity is most akin to noise from a construction site. Such temporary operations are usually assessed in accordance with BS 5228 : 2009 (Code of practice for noise and vibration control on construction and open sites) to take account of their temporary nature and practical considerations.

The main potential for adverse impacts from the temporary drilling operations at the appraisal borehole site is sleep disturbance, as the drilling site will operate 24 hours per day.

The main criterion to assess impacts from the temporary drilling operations is based on the World Health Organisation (WHO) sleep disturbance level outside dwellings, 45 dB LA_{eq} 8 hour.

There are a number of isolated dwellings within 500m of the proposed temporary appraisal borehole including Common Wood Farm, Daisy Bank, Well Cottage, Longfield Cottage and Longfield Barn. All other dwellings are >500m from the proposed temporary installation.

Noise from the proposed operations has been predicted in accordance with ISO 9613-2 as implemented by SoundPlan 7.2. Noise levels are based on measurements obtained at similar operations elsewhere. The main noise source is from the drill engine (111 dB L_{WA}). The drill engine and associated plant are relatively close to the ground and can be screened using perimeter bunds. The rig also has a top drive to push the drill which varies in height depending on the stage of drilling. The top drive is less noisy (107 dB L_{WA}), but is more difficult to screen because of the height at which it sometimes operates.

Noise from the temporary drilling operations at the proposed appraisal borehole is likely to comply with the WHO night-time sleep disturbance criterion of 45 dB LA_{eq} 8 hour at all dwellings subject to the satisfactory implementation of the mitigation measures outlined in Section 6.

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Acronyms

BS	British Standard
CBM	Coalbed Methane
dB	decibels – the logarithmic scale used to measure noise
dBA	A weighted dB – measured levels adjusted for the effect on human hearing
EHO	Environmental Health Officer
EIA	Environmental Impact Assessment (a series of organised activities – a process)
EP	Environmental Permitting Regulations
EPA	Environmental Protection Act 1990
ES	Environmental Statement (a document or documents)
ISO	International Standards Organisation
$LA_{eq\ T}$	The equivalent (eq) A weighted (A) average noise level (L) over a given period of time (T)
$LA_{90\ T}$	The A weighted (A) noise level (L) exceeded over 90% ($_{90}$) of a given period of time (T)
L_{WA}	Sound Power Level – a convenient unit of noise measurement independent of distance
m/s	metres per second
TAN	Technical Advice Note
WCBC	Wrexham County Borough Council
WHO	World Health Organisation

GLOSSARY

Acoustic studies make use of terminology that is specific to this type of assessment. The terminology employed in the report is discussed in this section.

dB

Noise is defined as unwanted sound. The range of audible sound is from 0 dB to 140 dB. The frequency response of the ear is usually taken to be about 18 Hz (number of oscillations per second) to 18000 Hz. The ear does not respond equally to different frequencies at the same level. It is more sensitive in the mid-frequency range than the lower and higher frequencies and because of this, the low and high frequency components of a sound are reduced in importance by applying a weighting (filtering) circuit to the noise measuring instrument. The weighting which is most widely used and which correlates best with subjective response to noise is the dB(A) weighting. This is an internationally accepted standard for noise measurements.

Loudness

For variable noise sources such as traffic, a difference of 3 dB(A) is just perceptible by most people. In addition, a doubling of traffic flow will increase the overall noise by 3 dB(A). The "loudness" of a noise is a purely subjective parameter but it is generally accepted that an increase/decrease of 10 dB(A) corresponds to a doubling/halving in perceived loudness. Road traffic noise changes as flow varies during the day and will also fluctuate within shorter time periods as vehicles pass the reception point.

Free Field

Free field measurements are taken at least 3.5m from any building or other hard reflecting surface. Noise standards within the UK are normally specified as external free field limits for ease of enforcement e.g. to avoid the necessity of gaining access to people's houses late at night. Noise standards at sensitive receptors can be expressed as the noise level measured or predicted inside a habitable room as in the case of the World Health Organisation sleep disturbance criteria; or as an external level where it is considered important to protect the amenity of the garden. Some noise standards are specified as façade levels as in the case of road traffic noise.

Statistical Level, L_N

The most commonly used statistical levels are the LA_{10} and LA_{90} .

The LA_{10} is a statistical sound level, being the dBA level exceeded for 10% of a given time. For example, if the hourly LA_{10} is 70 then during that hour the noise level was greater than 70dBA for 6 minutes (10%) and less than or equal to 70dBA for the remaining 54 minutes.

LA_{90} is the level exceeded for 90% of the time, which corresponds to the "quieter" periods. The LA_{90} is defined in *BS4142: 1990 Rating Industrial Noise Affecting Mixed Residential and Industrial Areas*, as the background noise level.

LA_{eq}

The LA_{eq} is used to describe ambient noise. The Noise Advisory Council Guide to the measurement and prediction of the Equivalent Continuous sound level, defined the LA_{eq} as follows:

The equivalent continuous noise level, LA_{eq} , is the level of notional steady sound which, at a given position and over a defined period of time would have the same A-weighted acoustic energy as the fluctuating noise.

A-Weighted

The "A" in LA_{eq} (or LA_{90}) refers to the A-weighted sound pressure level of the noise in decibels. Weighting is a filter contained in the sound level meter which is designed to produce the relative response of the human ear to sound at different frequencies.

1.0 INTRODUCTION

- 1.1. Dart Energy Ltd, 1st Floor West, Laurel House, Laurelhill Business Park, Polmaise Road, Stirling FK7 9JQ propose to conduct temporary drilling operations at land off Borrass Road, Wrexham. The location of the proposed appraisal borehole is shown in Figure 1.
- 1.2. The aim of the appraisal borehole drilling is to determine the characteristics of the coals and their gas content in order to assess their potential for commercial methane extraction. The drilling of the proposed appraisal borehole includes the initial site preparation and the operation of a drilling rig and support services. The overall duration of appraisal testing operations (from starting site construction to completion, is typically less than 30 days.
- 1.3. Dart Energy has instructed The Airshed Ltd to conduct a noise impact assessment for the proposal and to advise on appropriate mitigation measures where necessary. This report is intended to address local authority and other regulatory agency concerns about the environmental noise impacts from the proposed development.
- 1.4. This assessment considers the impacts from short-term, temporary noise associated with the drilling of the appraisal borehole.
- 1.5. The drilling of the proposed appraisal borehole is relatively short in duration and this activity is most akin to noise from a construction site. Historically in the UK such temporary operations are usually subject to less onerous requirements, which take account of their temporary nature and practical considerations.
- 1.6. The drilling of the proposed appraisal borehole will include initial site preparation followed by the main drilling operations. The initial site preparation will take place during normal daytime hours. This includes the installation of the drill conductor and surface casing which normally takes about 1 day to complete. There is limited potential for significant loss of amenity from these preliminary operations because these works are conducted during the daytime.
- 1.7. The main noise source from the proposed appraisal borehole is the drill rig, which includes noise from: the engine compartment, located within an insulated housing; the engine exhaust, which is fitted with a silencer; and the top drive, located at the top of the rig and used to drive the drill. Due to the nature of the operations it is not practicable to interrupt drilling at night, so that night-time impacts during appraisal borehole drilling are likely to be the main cause of concern.

Potential Adverse Effects

- 1.8. There are a number of isolated dwellings around the proposed borehole including: Daisy Bank, Borrass House, Borrass Head, Five Oaks, Plas Bostock, and Common Wood Farm. The nearest dwellings are listed in

Table 1.1 below. The locations of sensitive receptors considered in the assessment are shown in Figure 1.

Table 1.1 Noise Sensitive Receptors

No	Location	OS x	OS y	AOD (receptor)	Exposed Elevation	Distance (m)
1	1 Borrás Hall Court	337175	352671	64.4	E	833
2	1 Longfield Barn	337840	353412	30.1	W	463
3	2 Common Wood Farm	337811	353574	29.3	W	440
4	Ash Brook	338173	352901	29.5	N	979
5	Baker's Corner	337849	353705	29.3	W	519
8	Borrás Head	336716	353250	72.7	NE	704
9	Borrás House	336693	353462	69.7	NE	689
10	Borrás Lodge	336669	353497	70.4	NE	713
11	Daisy Bank	336962	353651	52.0	SE	455
12	Fairholme	336571	353410	73.7	SE	814
13	Five Oaks	337228	352716	60.7	E	778
14	Hinter End	336676	353476	70.0	NE	706
15	Hoseley Bank Farm	336795	353949	62.6	S	753
16	Long Byre	336665	353480	70.9	NE	718
17	Longfield Barn	337869	353441	29.7	W	488
18	Longfield Cottage	337868	353480	28.5	W	485
19	Plas Bostock	337995	352754	32.9	N	948
20	Plum Tree Farm	338204	352907	29.5	N	1000
21	Springfield	337832	353687	29.6	S	496
22	The Parks	337175	354020	35.0	SE	580
23	Well Cottage	337780	353716	30.1	W	464
25	Westfield	337893	353550	28.4	W	516

N.B. Distance is from the receptor to the top drive. Receptor height is 1.5m above local ground level.

- 1.9. The temporary borehole drilling site will operate 24 hours per day so that night-time noise (between 23:00 and 07:00 hours) is likely to be the main cause of concern.

Scope of Assessment

- 1.10. This report assesses the noise impact from the noise from temporary appraisal borehole operations.
- 1.11. Noise levels from the temporary appraisal borehole drilling operations are based on measurements at similar operations elsewhere.
- 1.12. Relevant noise standards are discussed in Section 2. Baseline conditions are discussed in Section 3. The noise prediction methodology is outlined in Section 4. The results from the prediction exercise are presented in Section 5. Mitigation measures are proposed in Section 6. The overall significance of the noise from the project is considered in Section 7.

2.0 ENVIRONMENTAL NOISE CRITERIA

Environmental Impact Assessment

- 2.1. The methodology used for this assessment has been determined by legislation, guidance and standards relating to assessment of environmental noise.

Technical Advice Note TAN 11

- 2.2. TAN 11¹ Planning and Noise provides technical advice to local authorities in Wales on the use of their planning powers to minimise the adverse impact of noise. TAN 11 includes guidance on the assessment of noise from noise sources, mainly when considering new housing. According to TAN 11 noise from transport related sources is generally not a material consideration where the Noise Exposure Category is less than 55 dB LA_{eq} (07:00 – 23:00) or less than 45 dB LA_{eq} (23:00 - 07:00).
- 2.3. TAN 11 refers to BS 4142:1997 as a method for assessing noise from industrial and commercial developments. BS 4142² describes methods for determining noise from factories, industrial premises or fixed installations. This assessment is based on the assumption that it would be inappropriate to use BS 4142 to assess this limited temporary operation. TAN 11 refers to the use of BS 5228 when assessing noise from construction sites.

Environmental Noise and Statutory Nuisance

- 2.4. The *Environmental Protection Act 1990* (EPA 1990) imposes a duty on local authorities to periodically survey environmental noise levels and to investigate noise complaints. The Act requires local authorities to serve notice when noise nuisance exists. Under this regime the investigation and response to noise complaints is the responsibility of Wrexham County Borough Council (WCBC). The Act requires that any construction operations adopt the best practicable means to prevent or minimise nuisance. The Council has a duty to investigate all noise complaints. Where the Council is of the opinion that noise is a nuisance, it has a statutory duty to take further enforcement action.

BS 4142:1997

- 2.5. The British Standard *Method for rating industrial noise affecting mixed residential and industrial areas* describes methods for determining noise from factories, industrial premises or fixed installations. This includes means of estimating noise from tonal, intermittent and impulsive noise. BS 4142:1997 relies on the LA_{eq} as the means of measuring the noise from specific activities. The noise is rated according to its character, where appropriate, known as the rated noise LA_r.

¹ Planning Guidance Wales Technical Advice Note October 2007 - Noise

² BSI 1997. Method for rating industrial noise affecting mixed residential and industrial areas BS 4142:1997

- 2.6. According to the introductory Scope within BS 4142 the Standard should apply to “noise levels from factories, or industrial premises, or fixed installations, or sources of an industrial nature in commercial premises;” It therefore may be unreasonable to apply the BS 4142 method to the short-term appraisal borehole drilling operations, because BS 4142 is intended to protect the residential amenity of people living near permanent or long-term installations. The proposed drilling operations are short-term in nature and have more in common with construction site operations. It is therefore more appropriate to assess these operations in terms of the British Standard BS 5228:2009.

BS 5228:2009

- 2.7. Noise impacts from construction and open sites may be predicted using BS 5228 : 2009³. BS 5228 provides base data for noise emissions from a variety of plant and operations and a methodology for the prediction of noise levels at receptors. The annoyance from construction site noise is likely to depend on a number of factors such as site location, existing ambient noise levels, and duration of operations. As with all aspects of noise, the time of day and duration of the event are significant, as is the extent to which noise from the activity exceeds the existing background (LA_{90}) or ambient noise levels (LA_{eq}).
- 2.8. The current version of the Standard includes an assessment framework for assessing the significance of impacts, where night-time levels < 45 dB LA_{eq} (23:00 – 07:00) are deemed to be insignificant. BS 5228 acknowledges that stricter standards should apply to some forms of construction operations where these are likely to last for more than six months.

World Health Organisation Guidelines for Community Noise

- 2.9. The World Health Organisation (WHO) has published Guidelines for Community Noise, the outcome of a WHO expert task force meeting in April 1999.⁴ The WHO Guidelines advise that noise impacts within dwellings include annoyance, speech interference and sleep disturbance. WHO considers that for bedrooms, the critical effect is sleep disturbance. Guideline values for bedrooms are 30 dBA for continuous noise and 45 dB LA_{max} for single sound events. The available evidence suggests that sleep disturbance effects do not occur below these levels.
- 2.10. In 2009, WHO updated the Guidance for night-time standards, proposing an external noise level of 40 dB LA_{night} . This is intended as a long-term target level to prevent sleep disturbance and promote conditions for restorative sleep.⁵ This noise level is intended to apply over the entire night-time period, typically construed as 23:00 – 07:00 hours as averaged over a year. Assessing compliance with this criterion needs to take account of the frequency the receptor is likely to be downwind of the

³ British Standards Institute 2009. BS 5228 Code of practice for noise and vibration control on construction and open sites – Part 1: Noise

⁴ World Health Organisation Geneva 1999. Guidelines for Community Noise.

⁵ WHO 2009. Night noise guidelines for Europe

source. This criterion is therefore of limited relevance to the proposed temporary operations.

- 2.11. The main WHO criterion at night to prevent sleep disturbance remains the noise level inside bedrooms. The external guideline of 45 dB LA_{eq} night-time is therefore still relevant when assessing potential sleep disturbance impacts, particularly from the short-term appraisal borehole operations. The 40 dB LA_{night} standard should be regarded as a long-term target noise level to protect human health and does not apply to short-term temporary operations.

Table 2.1 - Environmental Noise Assessment Criteria

Predicted Noise Level	Justification
55 dB LA _{eq} 1 hour	WHO criteria propose a daytime limit at houses and outdoor living areas to protect amenity.
45 dB LA _{eq} 1 hour	WHO night-time noise criterion for outside dwellings. This is the approach suggested for assessing construction operations in BS 5228:2009.
60 dB LA _{max}	In addition to the average noise level, WHO criteria propose a night-time limit for short-term peak noise at the façade of houses to prevent sleep disturbance.
30 dB LA _{eq} 1 hour	WHO Critical noise level to prevent sleep disturbance inside bedrooms.
45 dB LA _{max}	WHO Critical noise level to prevent sleep disturbance inside bedrooms.

Summary of Noise Assessment Criteria

- 2.12. The criteria set out in Table 2.1 have been used to assess noise from the construction operations i.e. the appraisal borehole drilling operations.

Consultation with Local Authority

- 2.13. A draft version (Version 2) of this report was submitted to the local authority for comment. Details of the consultation are attached in Appendix 2. The local authority has confirmed that *“Implementation of the noise mitigation measures detailed in Section 6 of the report should ensure that unacceptable levels of noise disturbance are not caused to noise sensitive residential properties.”*

3.0 BACKGROUND NOISE LEVELS

Baseline Noise

- 3.1 No baseline noise survey has been conducted for this project. The main concern from this temporary construction operation is the requirement to prevent sleep disturbance, which is assessed against WHO absolute levels, rather than the pre-existing background noise.

Justification for Approach

- 4.1. In many circumstances the most effective way to determine environmental noise from a process is by direct measurement under suitable operational and weather conditions at the nearest sensitive receptors. Clearly this approach can not be used for the temporary borehole drilling operations since they are not yet operational. The assessment is therefore based on predicted noise levels using source estimates based on typical noise levels for similar plant.
- 4.2. The noise levels for the temporary borehole drilling operations are based on measurements conducted at similar operations elsewhere.
- 4.3. The assessment is intended to identify the potential adverse significance of noise from the proposed operations at the nearest sensitive receptors and to help inform the level of noise mitigation required to protect local amenity. The assessment identifies the relative significance of different process elements and can be used to inform the selection of drill rig, the layout of the proposed plant and the requirement for additional acoustic measures.

Noise Prediction Methods

- 4.4. The noise prediction technique adopted in this study is based on the procedure set out in ISO 9613⁶. ISO 9613 specifies an engineering method for calculating the attenuation of sound to predict noise levels at a distance from a variety of sources. The method predicts the equivalent continuous A –weighted sound pressure level (LA_{eq}) under meteorological conditions favourable to propagation from sources of known sound emission.
- 4.5. This prediction technique is considered to be appropriate in practice for modelling a great variety of noise sources and environments. ISO 9613 may be applied to the prediction of noise from railways, roads, industry and many other ground-based sources. This prediction technique is considered to be appropriate for modelling noise from the temporary drilling operations at the proposed appraisal borehole site.
- 4.6. The model includes for geometrical divergence, atmospheric absorption, ground effects, reflection from surfaces, and screening by obstacles. The model allows for the use of correction factors for ground cover. For hard surfaces such as tarmac or concrete within the process boundary the correction is applied simply as 3 dB for all frequencies and distances. Where the ground cover is soft, such as grass, woodland, or other less reflective material, an empirical relationship between ground attenuation and frequency and distance may be used. The ground cover around the

⁶ ISO 9613:1996 (E) Acoustics – Attenuation of sound during propagation outdoors Part 1: Calculation of the absorption of sound by the atmosphere; and Part 2 : General method of calculation.

proposed installation is predominantly soft landscaping. Soft ground has been assumed throughout the assessment, across the entire domain.

- 4.7. These predictions assume downwind meteorological conditions which are favourable for noise propagation from the source to a receiver, where the predicted noise level is seldom exceeded. The estimated accuracy using this method is ± 3 dBA. The estimate of error in the Standard is based on situations where there are no effects of attenuation due to screening. The potential significance of model errors is discussed in paragraph 5.9.
- 4.8. The locations of noise sources were obtained from drawings provided by Dart Energy Ltd. Dimensions were obtained using a GIS interface and AutoCad.
- 4.9. The detail of surrounding site receptors and ground conditions was obtained from a site centred O.S. map at scale 1:1250, and OS Landform Profile ground heights. [See Figure 2] Variations in local ground height have been taken into account. The noise model assumes that the ground level within the development site is temporarily levelled to 36m AOD. A digital model of the ground and receptor buildings has been constructed using these plans as a map base. The model layout is shown in Figures 3.1 and 3.2.

Noise Sources Considered – Temporary Appraisal Borehole

- 4.10. The inventory of plant to be used on the borehole site during temporary drilling operations is summarised in Table 4.1 below. The predicted noise levels are based on the average 1 hour noise level during operations. The results from the operational surveys indicate that noise from other operations e.g. generators and compressors is insignificant compared to the noise from the drill rig, but these have been included for the sake of completeness.

Table 4.1 – Noise from Drilling Operations on Borehole Site

Activity	Average	Sound Power Level dB L_{WA}
Drill Rig Engine	1 hour	111
Top Drive	1 hour	107
Settling Tank Motor	1 hour	101
Sifter	1 hour	99
Compressor	1 hour	85
Generator	1 hour	85
Mud Pump	1 hour	103

5.0

MODEL RESULTS

Temporary Drilling Operations

- 5.1. Several design iterations have been conducted for this assessment to consider the options for rig type, site layout and perimeter screening. The results from these iterations (Scenarios 1 – 3) have not been reported, to help simplify the communication of results. The results from these provisional options which included different rig orientation and acoustic barriers indicate that some rigs e.g. Schramm TDX 200 would result in unacceptably high noise levels at the nearest dwellings, even with additional noise mitigation measures.
- 5.2. The results from the proposed design layout (Scenario 4) are based on the HH 102 drill rig. The predicted noise levels are summarised in Table 5.1 below. The detailed noise predictions are presented in Appendix 1. The predicted noise levels are also plotted in contours in Figure 4.
- 5.3. The assessed noise levels are based on the predicted worst case 1 hour average noise level. This indicates that noise from temporary drilling operations at the proposed appraisal borehole site is likely to comply with the WHO night-time sleep disturbance criterion of 45 dB LA_{eq 1 hour} at all dwellings.

Table 5.1 – Summary of Most Affected Dwellings – Temporary Drilling – HH102

No.	Receptor	OS x	OS y	AOD ((m)	Exposed Facade	dB(A)
2	1 Longfield Barn	337840	353412	30.1	W	43
3	2 Common Wood Farm	337811	353574	29.3	W	43
8	Borras Head	336716	353250	72.7	NE	38
9	Borras House	336693	353462	69.7	NE	39
10	Borras Lodge	336669	353497	70.4	NE	39
11	Daisy Bank	336962	353651	52.0	SE	43
13	Five Oaks	337228	352716	60.7	E	37
14	Hinter End	336676	353476	70.0	NE	38
16	Long Byre	336665	353480	70.9	NE	38
17	Longfield Barn	337869	353441	29.7	W	37
18	Longfield Cottage	337868	353480	28.5	W	38
19	Plas Bostock	337995	352754	32.9	N	36
21	Springfield	337832	353687	29.6	S	42
22	The Parks	337175	354020	35.0	SE	40
24	Well Cottage	337787	353710	30.1	S	43
25	Westfield	337893	353550	28.4	W	42

N.B. Units = dB LA_{eq 1 hour} *free field* at 1.5m above ground level

- 5.4. The worst affected dwellings are at Common Wood Farm, Daisy Bank, Longfield Barn and Well Cottage where the worst case predicted noise is 43 dB LA_{eq 1 hour}. The predicted noise level at Springfield and Westfield is 42 dB LA_{eq 1 hour}. Noise at all other receptor locations is < 40 dB LA_{eq 1}

hour. Based on this assessment, noise from temporary drill operations is unlikely to exceed the WHO night-time sleep disturbance criterion.

- 5.5. Shorter term operations i.e. the worst case $LA_{r, 5 \text{ minutes}}$ may exceed the predicted 1 hour average, by ~2 dBA, but these shorter term noise levels have not been used in the assessment, taking account of the fact that the WHO night-time criterion is based on an 8 hour average and that it is probably inappropriate to apply BS 4142:1997 methodology to temporary drilling operations that are more akin to construction operations. This approach is consistent with the Guidance in BS 5228:2009.
- 5.6. This Scenario assumes the erection of a 3.0m high acoustic screen on the north and west sides and a 4.0m high acoustic screen on the east and south sides of the appraisal borehole site. These acoustic screens are required to reduce noise from near ground based sources within the compound. In practice this measure is usually effective in reducing noise from the drill engine and ancillary plant to an acceptable level.
- 5.7. The erection of these acoustic screens means that the main residual noise at the nearest sensitive receptor is from the top drive which is located well above ground level. The acoustic screens do not affect top drive noise. The receptors are sufficiently distant from the top drive so that further mitigation measures are unlikely to be required.
- 5.8. The results from this assessment indicate that the selection of appropriate drill rig equipment and the erection of the perimeter acoustic screens should reduce noise to below the WHO night-time criterion at all sensitive receptors.

Uncertainty

- 5.9. Prediction errors within ISO 9613 are ± 3 dB. Source estimates may be subject to an uncertainty of ± 2 dB. The model predictions are based on a widely validated prediction algorithm, a detailed design layout and recent surveys conducted at similar operations under a wide range of circumstances.

Temporary Drilling Operations

6.1. The following measures shall be adopted at the borehole site to minimise noise from temporary drilling operations. These are summarised in Table 6.1:

- i. The orientation of the drill rig so that noisy operations associated with fitting drill casings are located as far away from sensitive receptors as is practicable or are screened by an acoustic barrier;
- ii. The erection of a 4.0m high acoustic screen at the east and south sides of the site boundary of the compound to reduce any potential impacts from near ground based activities; and
- iii. The erection of a 3.0m high acoustic screen at the north and west sides of the site boundary of the compound to reduce any potential impacts from near ground based activities.

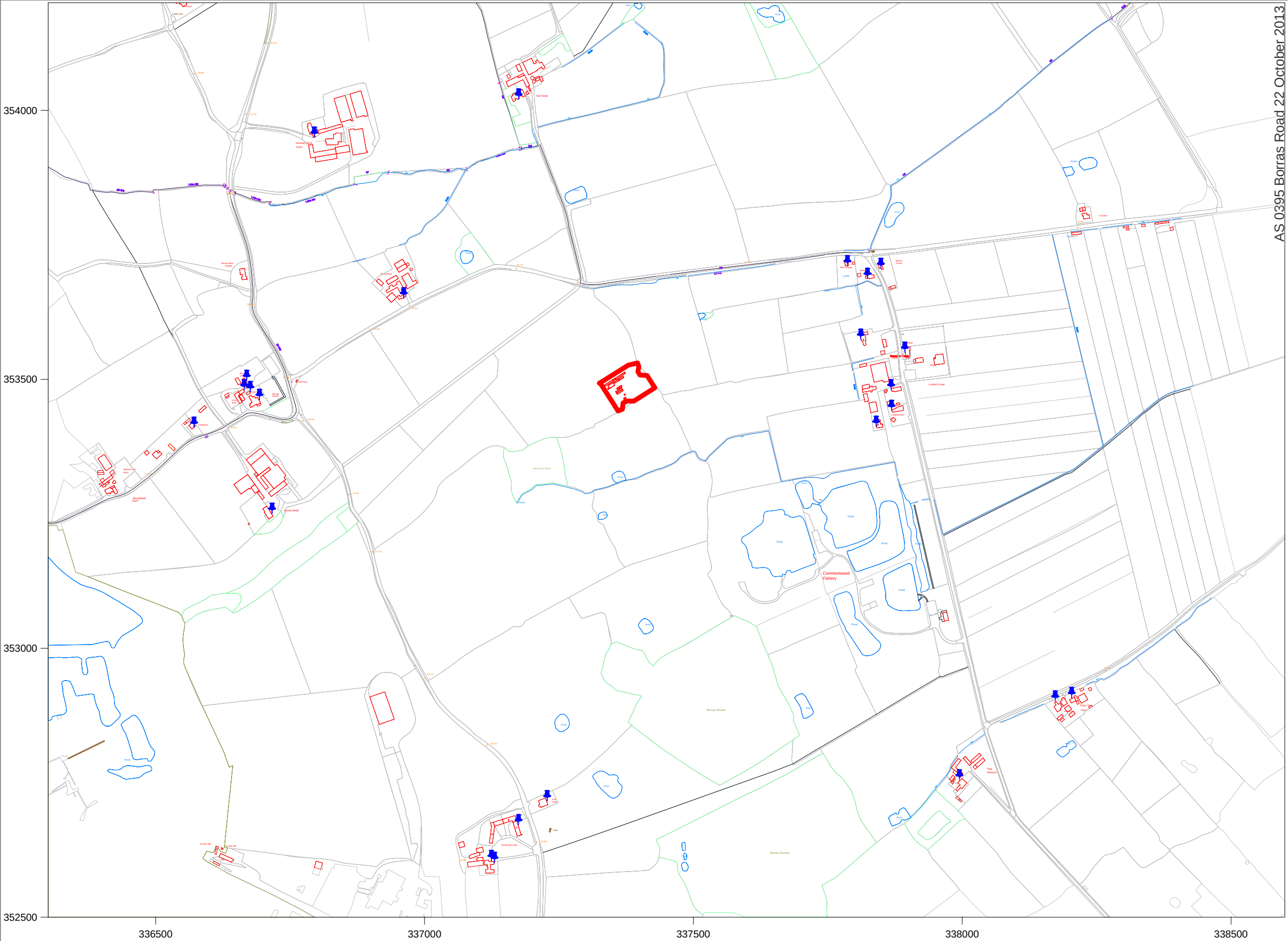
Table 6.1 - Proposed Noise Mitigation – Temporary Drilling Operations

Issue	Mitigation
Surface Casing	These operations shall be restricted to between the hours of 07:00 – 19:00.
Generators	Super-silenced generators shall be used on site with a plated sound power level <90 dB L_{WA} .
Mobile Plant Noise	Night-time movements shall not be permitted except in case of emergency. Night-time movements shall be minimised where practicable. Audible vehicle reversing alarms shall not be used at night.
Bunds and Barriers	Screening bunds, acoustic barriers and site offices shall be laid out so as to minimise off-site noise propagation.
Noise Management	Dart Energy shall develop a noise management plan for the site which shall include provisions for monitoring, complaints and review. Any monitoring and testing shall be conducted in accordance with appropriate methods and Standards.

7.0

SIGNIFICANCE OF RESIDUAL EFFECTS

- 7.1. Noise from the temporary drilling operations at the proposed appraisal borehole site is likely to comply with the WHO night-time sleep disturbance criterion of 45 dB $LA_{eq, 1 \text{ hour}}$ at all dwellings subject to the satisfactory implementation of the mitigation measures outlined in Section 6.
- 7.2. Noise from the temporary drilling operations is predicted to be 43dB $LA_{eq, 1 \text{ hour}}$ at 4 of the closest noise sensitive residential properties. This may therefore exceed, the 2009 updated WHO guideline for external night noise guideline $L_{night, outside} = 40 \text{ dB}$. The aim of this criterion is to prevent long-term health effects and is therefore normally calculated as noise exposure over year. The $L_{night, outside}$ guideline is therefore of limited relevance to the proposed temporary operations.



AS 0395 Borras Road 22 October 2013



Site Location

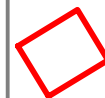
-  indicative location of temporary appraisal well site
-  receptor considered in study area

Figure 1



Topography

receptor
considered in study area

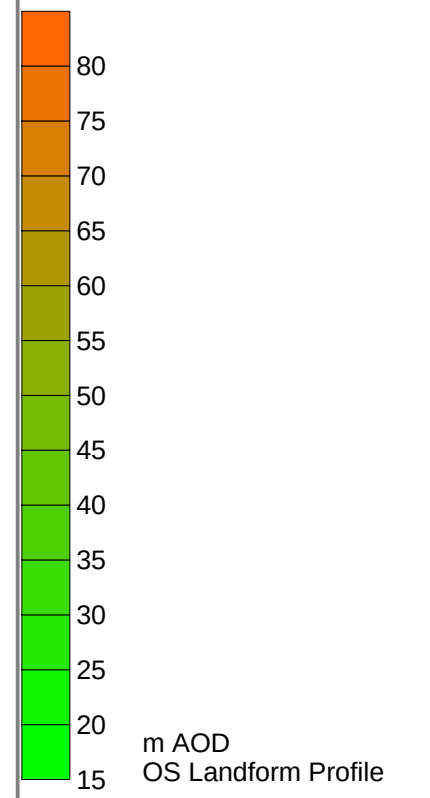
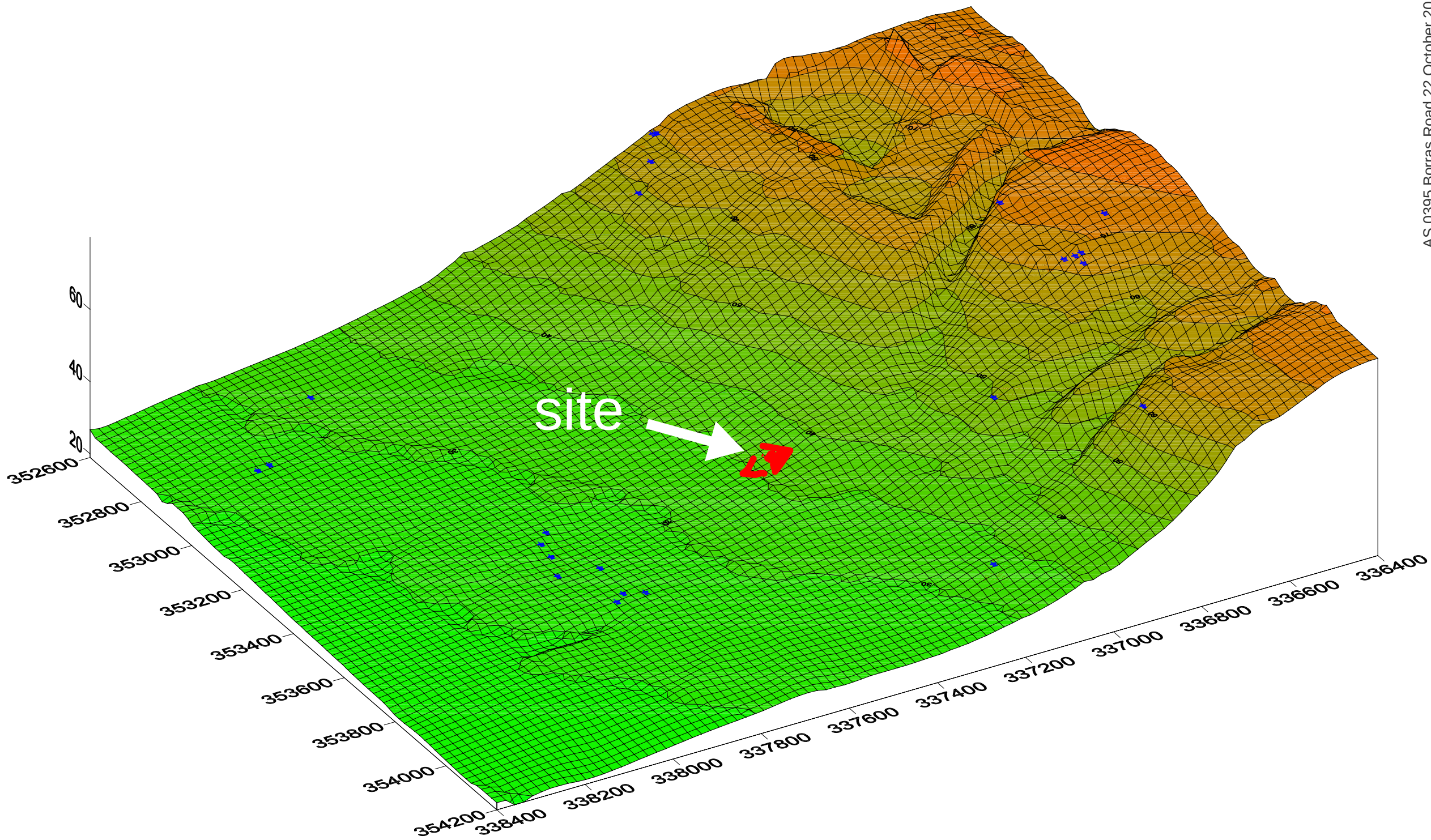


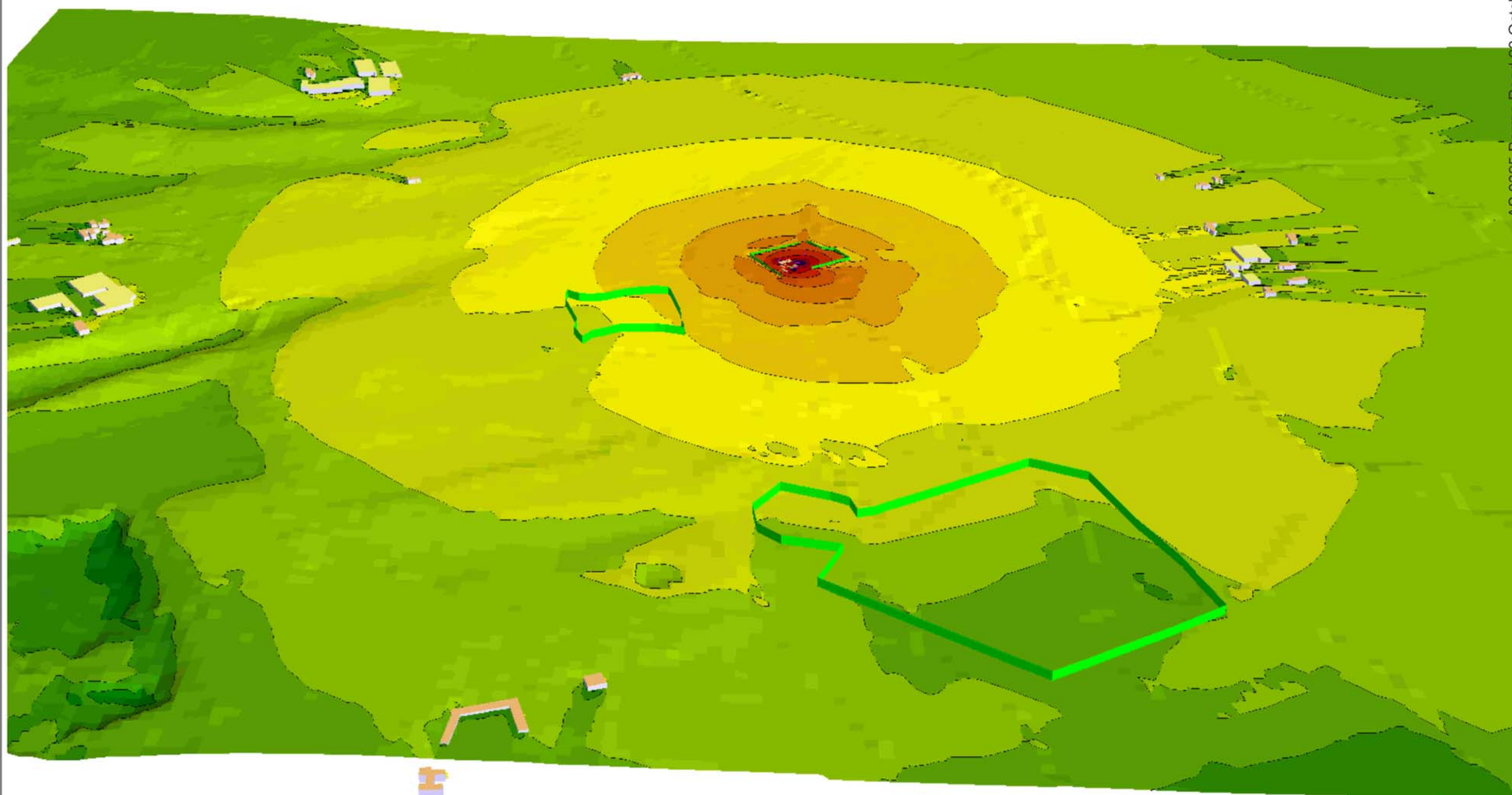
Figure 2



AS 0395 Borrass Road 22 October 2013

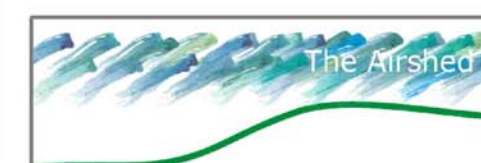


Model Layout



AS 0395 Borras Road 23 October 2013

Figure 3.1



Model Layout

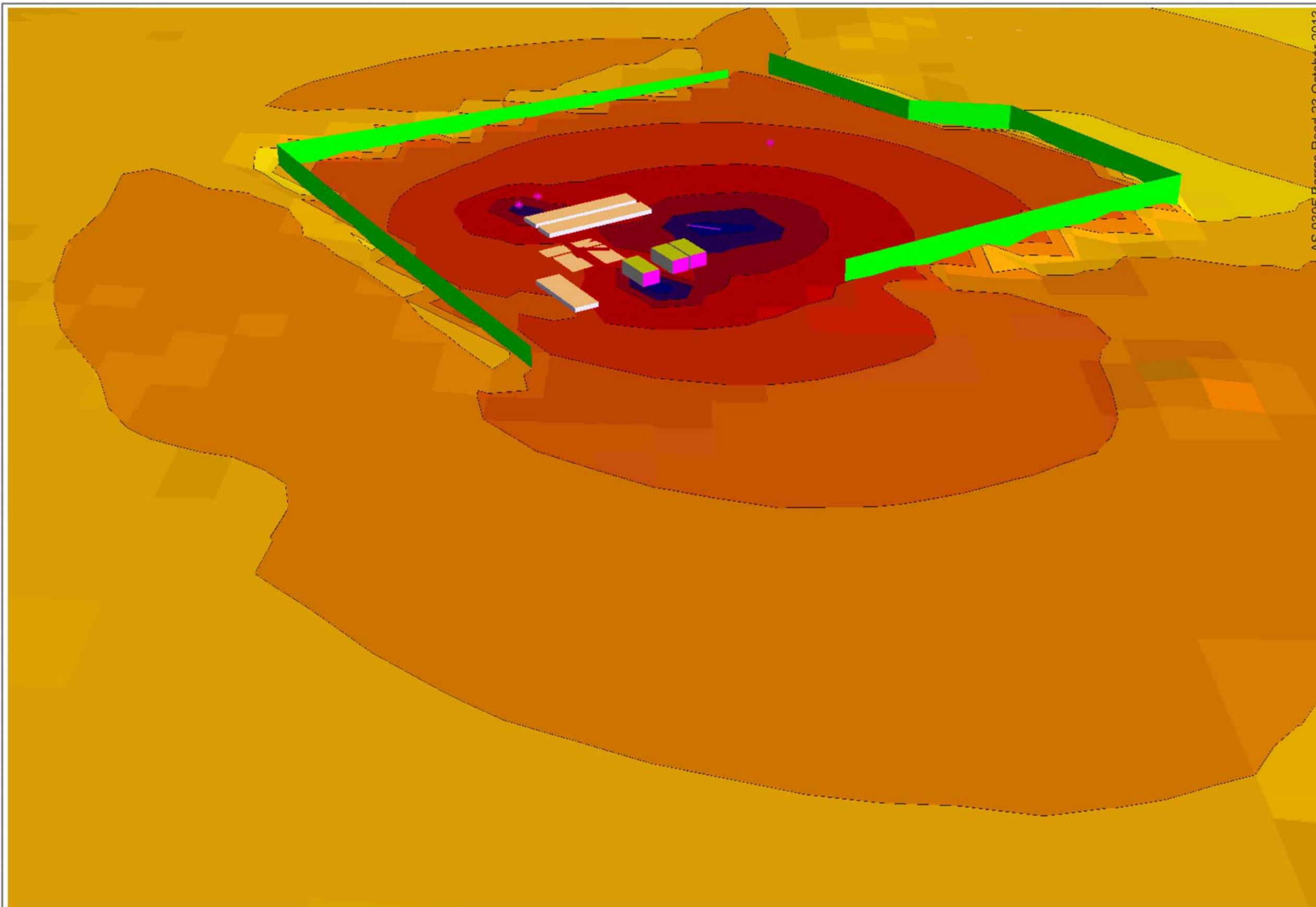
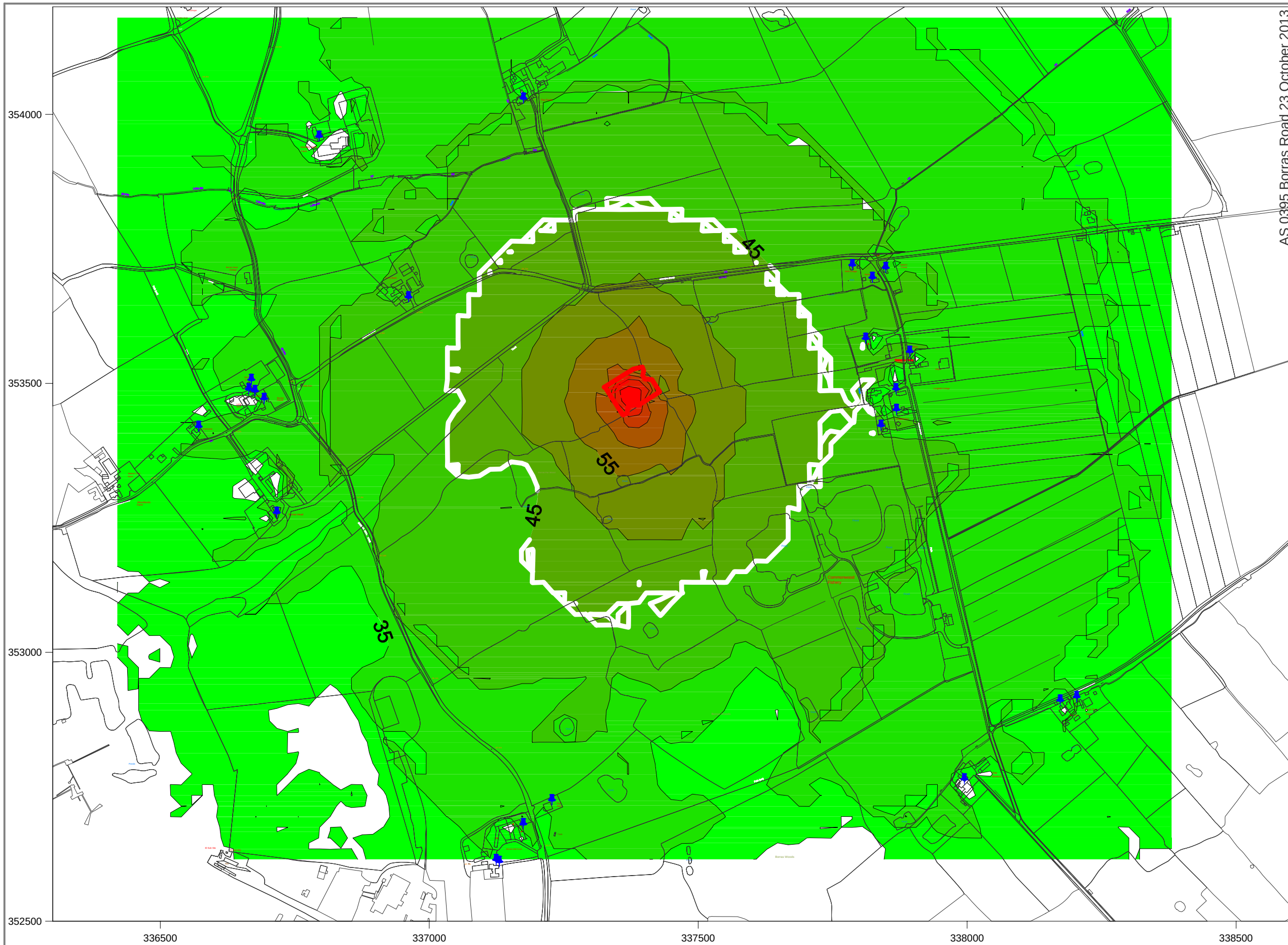


Figure 3.2





Predicted Noise

Scenario 4
Temporary Appraisal Well
Drilling Operations
noise model includes:
Top drive and main engine
HH102 and
ancilliary plant
includes 3 - 4m high acoustic barriers

ISO 9613-2
soft ground across domain (1.0)
grid resolution 5m intervals
noise levels 1.5m above ground
units = dB LAeq 1 hour
benchmark 45 dB LAeq 1 hour

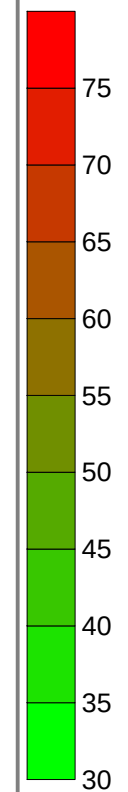


Figure 4



APPENDIX 1 - Noise Model Inputs and Outputs

AS 0395 Borrass Road

Run Info

Scenario 4

Project description

Project title: AS 0395 Borrass Road
Project No.: AS 0395
Engineer: Steve Fraser
Customer: Dart Energy UK Ltd

Description:
noise impact assessment for proposed exploratory borehole

Run description

Calculation: Single Point Sound
Title: Scenario 4
Group:
Run file: RunFile.runx
Result number: 6
Local Calculation (ThreadCount=2)
Calculation start: 23/10/2013 14:40:43
Calculation end: 23/10/2013 14:41:00
Calculation time: 00:10:500 [m:s:ms]
No. of points: 23
No. of calculated points: 23
Kernel version: 02/10/2013 (RKernel7.dll)

Run parameters

Reflection order 1
Maximal reflection distance to receiver 200 m
Maximal reflection distance to source 50 m
Search radius 5000 m
Weighting: dB(A)
Tolerance: 0.001 dB

Standards:
Industry: ISO 9613-2 : 1996
Air absorption: ISO 9613
Using alternative method according to chapter 7.3.2: No
Limitation of screening loss:
single/multiple 20.0 dB /25.0 dB
Calculation with side screening: Yes
Use Eqn (Abar=Dz-Max(Agr,0)) instead of Eqn (12) (Abar=Dz-Agr) for insertion loss
Environment:
Air pressure 1013.3 mbar
rel. Humidity 70.0 %

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AS 0395 Borrass Road

Run Info

Scenario 4

Temperature 10.0 °C
 Meteo. Corr. C0(7-19h)[dB]=0.0; C0(19-23h)[dB]=0.0; C0(23-7h)[dB]=0.0;
 VDI-Parameters for diffraction: C2=20.0
 Dissection parameters:
 Distance to diameter factor 8
 Minimal Distance [m] 1 m
 Max. Difference GND+Diffraction 1.0 dB
 Max. No. of Iterations 4
 Attenuation
 Foliage: ISO 9613-2
 Built up area: ISO 9613-2
 Industrial site: ISO 9613-2

 Assessment: Airshed
 Reflection of "own" facade is suppressed

Geometry data

Scenario 4.sit 23/10/2013 14:40:34
 - contains:
 calculation area.geo 23/10/2013 14:40:24
 ground conditions.geo 23/10/2013 12:13:50
 HH 102 rig.geo 23/10/2013 10:29:50
 longer 4m barrier at eastern boundary.geo 23/10/2013 10:26:14
 os base.geo 22/10/2013 10:59:52
 receptors.geo 23/10/2013 14:40:34
 woodland.geo 22/10/2013 12:13:24
 RDGM0001.dgm 23/10/2013 12:11:28

AS 0395 Borrass Road

Assessed receiver levels

Scenario 4

2

RNo	Name	Floor	X m	Y m	Z m	Dir	Ld dB(A)	Le dB(A)	Ln dB(A)	
1	1 Borrass Hall Court	GF	337174.90	352671.12	64.44	E	35.2	35.2	35.2	
2	1 Longfield Barn	GF F 1	337839.99	353411.86	30.07 32.87	W	42.8 44.4	42.8 44.4	42.8 44.4	
3	2 Common Wood Farm	GF F 1	337811.23	353573.60	29.28 32.08	W	43.2 44.5	43.2 44.5	43.2 44.5	
4	Ash Brook	GF	338173.06	352901.06	29.50	N	34.3	34.3	34.3	
5	Baker's Corner	GF F 1	337848.64	353705.32	29.26 32.06	W	35.2 39.1	35.2 39.1	35.2 39.1	
8	Borrass Head	GF F 1	336716.49	353250.06	72.67 75.47	NE	38.3 39.3	38.3 39.3	38.3 39.3	
9	Borrass House	GF F 1	336692.93	353461.78	69.71 72.51	NE	39.1 39.7	39.1 39.7	39.1 39.7	
10	Borrass Lodge	GF F 1	336669.25	353497.19	70.42 73.22	NE	38.7 39.3	38.7 39.3	38.7 39.3	
11	Daisy Bank	GF F 1	336961.58	353650.67	52.04 54.84	SE	43.2 43.8	43.2 43.8	43.2 43.8	
12	Fairholme	GF F 1	336571.25	353410.00	73.69 76.49	SE	34.8 36.2	34.8 36.2	34.8 36.2	
13	Five Oaks	GF F 1	337228.03	352715.66	60.72 63.52	E	36.8 39.3	36.8 39.3	36.8 39.3	
14	Hinter End	GF F 1	336675.96	353476.35	70.03 72.83	NE	38.2 39.3	38.2 39.3	38.2 39.3	
15	Hoseley Bank Farm	GF F 1	336795.11	353949.41	62.56 65.36	S	32.7 35.6	32.7 35.6	32.7 35.6	
16	Long Byre	GF F 1	336664.52	353479.73	70.92 73.72	NE	38.0 39.1	38.0 39.1	38.0 39.1	
17	Longfield Barn	GF	337868.64	353441.44	29.71	W	37.2	37.2	37.2	
18	Longfield Cottage	GF F 1	337867.62	353479.88	28.50 31.30	W	37.7 40.3	37.7 40.3	37.7 40.3	
19	Plas Bostock	GF F 1	337994.87	352754.47	32.92 35.72	N	36.2 37.9	36.2 37.9	36.2 37.9	
20	Plum Tree Farm	GF F 1	338203.63	352907.49	29.45 32.25	N	34.6 36.3	34.6 36.3	34.6 36.3	
21	Springfield	GF F 1	337832.19	353686.89	29.60 32.40	S	42.0 43.2	42.0 43.2	42.0 43.2	
22	The Parks	GF F 1	337175.08	354020.19	34.96 37.76	SE	39.5 41.2	39.5 41.2	39.5 41.2	
23	Well Cottage	GF F 1	337780.36	353716.38	30.09 32.89	W	42.4 43.9	42.4 43.9	42.4 43.9	
24	Well Cottage	GF F 1	337786.58	353710.28	30.09 32.89	S	42.5 43.9	42.5 43.9	42.5 43.9	

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AS 0395 Borrass Road
Assessed receiver levels
Scenario 4

2

RNo	Name	Floor	X m	Y m	Z m	Dir	Ld dB(A)	Le dB(A)	Ln dB(A)	
25	Westfield	GF F 1	337893.34	353549.51	28.40 31.20	W	41.6 43.1	41.6 43.1	41.6 43.1	

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	Airshed Ltd East Linton East Lothian EH40 3DB UNITED KINGDOM	2
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AS 0395 Borrass Road
Octave spectra of the sources in dB(A) - Scenario 4

3

Source	SrcType	X	Y	Z	I or S	Lw	Lw'	LwM	63 Hz	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz	
		m	m	m	m,m²	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	
HH102 top drive	Point	337382.1	353478.2	46.00		107.0	107.0		87.0	90.3	98.5	100.	102.	100.	91.6	82.5	
HH 102 rig engine	Line	337376.8	353474.6	37.50	9.20	111.0	101.4		91.0	94.3	102.	104.	106.	104.	95.6	86.5	
Motor on Sifter at Settling tank	Point	337354.7	353479.1	38.50		101.0	101.0		79.3	79.9	86.1	93.8	99.0	90.4	84.1	83.3	
Sifter at settlement tanks	Point	337356.7	353480.4	39.00		99.0	99.0		86.9	91.2	90.0	92.3	92.5	89.9	86.5	83.4	
compressor	Area	337374.2	353464.7	37.50	5.98	85.1	77.3		65.4	75.5	79.2	82.5	72.2	67.2	60.1	57.9	
generator	Area	337372.4	353463.4	37.50	5.98	85.1	77.3		65.4	75.5	79.2	82.5	72.2	67.2	60.1	57.9	
mud pump east vent	Area	337369.4	353460.3	37.50	5.98	103.4	95.6		78.7	87.5	98.8	97.9	95.5	94.6	88.7	84.9	

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AS 0395 Borrass Road

Mean propagation Leq - Scenario 4

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Source	SrcType	Lw	Lw'	I or S	KI	KT	Ko	time slice	s	Li	R'w	Ls	Adiv	Agr	Abar	Aatm	Amis	ADI	dLref	dLw	ZR	Cmet	Lr
		dB(A)	dB(A)	m,m ²	dB	dB	dB		m	dB(A)	dB	dB(A)	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB(A)

Name	1 Borrass Hall Court	Floor	GF	Ld,lim	dB(A)	Le,lim	dB(A)	Ld 35.2	dB(A)	Le 35.2	dB(A)													
HH102 top drive	Point	107.0	107.0		0	0	0.0	Ld	833.5	0.0	0.0	29.5	-69.4	-1.9	-2.7	-3.5		0.0	0.0	0.0	0.0	0.0	29.5	
HH102 top drive	Point	107.0	107.0		0	0	0.0	Le	833.5	0.0	0.0	29.5	-69.4	-1.9	-2.7	-3.5		0.0	0.0	0.0	0.0	0.0	29.5	
HH102 top drive	Point	107.0	107.0		0	0	0.0	Ln	833.5	0.0	0.0	29.5	-69.4	-1.9	-2.7	-3.5		0.0	0.0	0.0	0.0	0.0	29.5	
HH 102 rig engine	Line	111.0	101.4	9.2	0	0	0.0	Ld	828.9	0.0	0.0	32.1	-69.4	-2.8	-3.2	-3.5		0.0	0.1	0.0	0.0	0.0	32.1	
HH 102 rig engine	Line	111.0	101.4	9.2	0	0	0.0	Le	828.9	0.0	0.0	32.1	-69.4	-2.8	-3.2	-3.5		0.0	0.1	0.0	0.0	0.0	32.1	
HH 102 rig engine	Line	111.0	101.4	9.2	0	0	0.0	Ln	828.9	0.0	0.0	32.1	-69.4	-2.8	-3.2	-3.5		0.0	0.1	0.0	0.0	0.0	32.1	
Motor on Sifter at Settling tank	Point	101.0	101.0		0	0	0.0	Ld	828.2	0.0	0.0	23.4	-69.4	-1.7	-3.5	-3.0		0.0	0.0	0.0	0.0	0.0	23.4	
Motor on Sifter at Settling tank	Point	101.0	101.0		0	0	0.0	Le	828.2	0.0	0.0	23.4	-69.4	-1.7	-3.5	-3.0		0.0	0.0	0.0	0.0	0.0	23.4	
Motor on Sifter at Settling tank	Point	101.0	101.0		0	0	0.0	Ln	828.2	0.0	0.0	23.4	-69.4	-1.7	-3.5	-3.0		0.0	0.0	0.0	0.0	0.0	23.4	
Sifter at settlement tanks	Point	99.0	99.0		0	0	0.0	Ld	829.8	0.0	0.0	22.3	-69.4	-1.7	-3.5	-2.2		0.0	0.0	0.0	0.0	0.0	22.3	
Sifter at settlement tanks	Point	99.0	99.0		0	0	0.0	Le	829.8	0.0	0.0	22.3	-69.4	-1.7	-3.5	-2.2		0.0	0.0	0.0	0.0	0.0	22.3	
Sifter at settlement tanks	Point	99.0	99.0		0	0	0.0	Ln	829.8	0.0	0.0	22.3	-69.4	-1.7	-3.5	-2.2		0.0	0.0	0.0	0.0	0.0	22.3	
compressor	Area	85.1	77.3	6.0	0	0	3.0	Ld	818.7	0.0	0.0	7.6	-69.3	-7.9	-1.9	-1.4		0.0	0.0	0.0	0.0	0.0	7.6	
compressor	Area	85.1	77.3	6.0	0	0	3.0	Le	818.7	0.0	0.0	7.6	-69.3	-7.9	-1.9	-1.4		0.0	0.0	0.0	0.0	0.0	7.6	
compressor	Area	85.1	77.3	6.0	0	0	3.0	Ln	818.7	0.0	0.0	7.6	-69.3	-7.9	-1.9	-1.4		0.0	0.0	0.0	0.0	0.0	7.6	
generator	Area	85.1	77.3	6.0	0	0	3.0	Ld	817.0	0.0	0.0	7.6	-69.2	-7.9	-1.9	-1.4		0.0	0.0	0.0	0.0	0.0	7.6	
generator	Area	85.1	77.3	6.0	0	0	3.0	Le	817.0	0.0	0.0	7.6	-69.2	-7.9	-1.9	-1.4		0.0	0.0	0.0	0.0	0.0	7.6	
generator	Area	85.1	77.3	6.0	0	0	3.0	Ln	817.0	0.0	0.0	7.6	-69.2	-7.9	-1.9	-1.4		0.0	0.0	0.0	0.0	0.0	7.6	
mud pump east vent	Area	103.4	95.6	6.0	0	0	3.0	Ld	813.3	0.0	0.0	25.6	-69.2	-4.7	-3.3	-3.5		0.0	0.0	0.0	0.0	0.0	25.6	
mud pump east vent	Area	103.4	95.6	6.0	0	0	3.0	Le	813.3	0.0	0.0	25.6	-69.2	-4.7	-3.3	-3.5		0.0	0.0	0.0	0.0	0.0	25.6	
mud pump east vent	Area	103.4	95.6	6.0	0	0	3.0	Ln	813.3	0.0	0.0	25.6	-69.2	-4.7	-3.3	-3.5		0.0	0.0	0.0	0.0	0.0	25.6	

Name	1 Longfield Barn	Floor	GF	Ld,lim	dB(A)	Le,lim	dB(A)	Ld 42.8	dB(A)	Le 42.8	dB(A)													
HH102 top drive	Point	107.0	107.0		0	0	0.0	Ld	462.9	0.0	0.0	38.5	-64.3	-1.8	0.0	-2.3		0.0	0.0	0.0	0.0	0.0	38.5	
HH102 top drive	Point	107.0	107.0		0	0	0.0	Le	462.9	0.0	0.0	38.5	-64.3	-1.8	0.0	-2.3		0.0	0.0	0.0	0.0	0.0	38.5	
HH102 top drive	Point	107.0	107.0		0	0	0.0	Ln	462.9	0.0	0.0	38.5	-64.3	-1.8	0.0	-2.3		0.0	0.0	0.0	0.0	0.0	38.5	
HH 102 rig engine	Line	111.0	101.4	9.2	0	0	0.0	Ld	467.4	0.0	0.0	38.8	-64.4	-2.5	-5.0	-1.9		0.0	1.5	0.0	0.0	0.0	38.8	
HH 102 rig engine	Line	111.0	101.4	9.2	0	0	0.0	Le	467.4	0.0	0.0	38.8	-64.4	-2.5	-5.0	-1.9		0.0	1.5	0.0	0.0	0.0	38.8	
HH 102 rig engine	Line	111.0	101.4	9.2	0	0	0.0	Ln	467.4	0.0	0.0	38.8	-64.4	-2.5	-5.0	-1.9		0.0	1.5	0.0	0.0	0.0	38.8	
Motor on Sifter at Settling tank	Point	101.0	101.0		0	0	0.0	Ld	489.9	0.0	0.0	29.3	-64.8	-1.5	-3.6	-1.8		0.0	0.0	0.0	0.0	0.0	29.3	
Motor on Sifter at Settling tank	Point	101.0	101.0		0	0	0.0	Le	489.9	0.0	0.0	29.3	-64.8	-1.5	-3.6	-1.8		0.0	0.0	0.0	0.0	0.0	29.3	
Motor on Sifter at Settling tank	Point	101.0	101.0		0	0	0.0	Ln	489.9	0.0	0.0	29.3	-64.8	-1.5	-3.6	-1.8		0.0	0.0	0.0	0.0	0.0	29.3	
Sifter at settlement tanks	Point	99.0	99.0		0	0	0.0	Ld	488.1	0.0	0.0	28.0	-64.8	-1.6	-3.2	-1.4		0.0	0.0	0.0	0.0	0.0	28.0	

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AS 0395 Borrás Road

Mean propagation Leq - Scenario 4

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Source	SrcType	Lw	Lw'	I or S	KI	KT	Ko	time slice	s	Li	R'w	Ls	Adiv	Agr	Abar	Aatm	Amis	ADI	dLref	dLw	ZR	Cmet	Lr	
		dB(A)	dB(A)	m,m²	dB	dB	dB		m	dB(A)	dB	dB(A)	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB(A)	
Sifter at settlement tanks	Point	99.0	99.0		0	0	0.0	Le	488.1	0.0	0.0	28.0	-64.8	-1.6	-3.2	-1.4		0.0	0.0	0.0	0.0	0.0	28.0	
Sifter at settlement tanks	Point	99.0	99.0		0	0	0.0	Ln	488.1	0.0	0.0	28.0	-64.8	-1.6	-3.2	-1.4		0.0	0.0	0.0	0.0	0.0	28.0	
compressor	Area	85.1	77.3	6.0	0	0	3.0	Ld	468.7	0.0	0.0	14.4	-64.4	-7.1	-1.5	-0.7		0.0	0.0	0.0	0.0	0.0	14.4	
compressor	Area	85.1	77.3	6.0	0	0	3.0	Le	468.7	0.0	0.0	14.4	-64.4	-7.1	-1.5	-0.7		0.0	0.0	0.0	0.0	0.0	14.4	
compressor	Area	85.1	77.3	6.0	0	0	3.0	Ln	468.7	0.0	0.0	14.4	-64.4	-7.1	-1.5	-0.7		0.0	0.0	0.0	0.0	0.0	14.4	
generator	Area	85.1	77.3	6.0	0	0	3.0	Ld	470.4	0.0	0.0	14.6	-64.4	-7.1	-1.2	-0.7		0.0	0.0	0.0	0.0	0.0	14.6	
generator	Area	85.1	77.3	6.0	0	0	3.0	Le	470.4	0.0	0.0	14.6	-64.4	-7.1	-1.2	-0.7		0.0	0.0	0.0	0.0	0.0	14.6	
generator	Area	85.1	77.3	6.0	0	0	3.0	Ln	470.4	0.0	0.0	14.6	-64.4	-7.1	-1.2	-0.7		0.0	0.0	0.0	0.0	0.0	14.6	
mud pump east vent	Area	103.4	95.6	6.0	0	0	3.0	Ld	473.0	0.0	0.0	34.2	-64.5	-4.6	-0.1	-3.0		0.0	0.0	0.0	0.0	0.0	34.2	
mud pump east vent	Area	103.4	95.6	6.0	0	0	3.0	Le	473.0	0.0	0.0	34.2	-64.5	-4.6	-0.1	-3.0		0.0	0.0	0.0	0.0	0.0	34.2	
mud pump east vent	Area	103.4	95.6	6.0	0	0	3.0	Ln	473.0	0.0	0.0	34.2	-64.5	-4.6	-0.1	-3.0		0.0	0.0	0.0	0.0	0.0	34.2	
Name 1 Longfield Barn Floor F 1 Ld,lim dB(A) Le,lim dB(A) Ld 44.4 dB(A) Le 44.4 dB(A)																								
HH102 top drive	Point	107.0	107.0		0	0	0.0	Ld	462.8	0.0	0.0	40.6	-64.3	-0.2	0.0	-1.9		0.0	0.0	0.0	0.0	0.0	40.6	
HH102 top drive	Point	107.0	107.0		0	0	0.0	Le	462.8	0.0	0.0	40.6	-64.3	-0.2	0.0	-1.9		0.0	0.0	0.0	0.0	0.0	40.6	
HH102 top drive	Point	107.0	107.0		0	0	0.0	Ln	462.8	0.0	0.0	40.6	-64.3	-0.2	0.0	-1.9		0.0	0.0	0.0	0.0	0.0	40.6	
HH 102 rig engine	Line	111.0	101.4	9.2	0	0	0.0	Ld	467.3	0.0	0.0	40.1	-64.4	-1.7	-4.5	-1.7		0.0	1.3	0.0	0.0	0.0	40.1	
HH 102 rig engine	Line	111.0	101.4	9.2	0	0	0.0	Le	467.3	0.0	0.0	40.1	-64.4	-1.7	-4.5	-1.7		0.0	1.3	0.0	0.0	0.0	40.1	
HH 102 rig engine	Line	111.0	101.4	9.2	0	0	0.0	Ln	467.3	0.0	0.0	40.1	-64.4	-1.7	-4.5	-1.7		0.0	1.3	0.0	0.0	0.0	40.1	
Motor on Sifter at Settling tank	Point	101.0	101.0		0	0	0.0	Ld	489.8	0.0	0.0	29.8	-64.8	-0.2	-4.4	-1.8		0.0	0.0	0.0	0.0	0.0	29.8	
Motor on Sifter at Settling tank	Point	101.0	101.0		0	0	0.0	Le	489.8	0.0	0.0	29.8	-64.8	-0.2	-4.4	-1.8		0.0	0.0	0.0	0.0	0.0	29.8	
Motor on Sifter at Settling tank	Point	101.0	101.0		0	0	0.0	Ln	489.8	0.0	0.0	29.8	-64.8	-0.2	-4.4	-1.8		0.0	0.0	0.0	0.0	0.0	29.8	
Sifter at settlement tanks	Point	99.0	99.0		0	0	0.0	Ld	488.0	0.0	0.0	28.5	-64.8	-0.5	-3.8	-1.4		0.0	0.0	0.0	0.0	0.0	28.5	
Sifter at settlement tanks	Point	99.0	99.0		0	0	0.0	Le	488.0	0.0	0.0	28.5	-64.8	-0.5	-3.8	-1.4		0.0	0.0	0.0	0.0	0.0	28.5	
Sifter at settlement tanks	Point	99.0	99.0		0	0	0.0	Ln	488.0	0.0	0.0	28.5	-64.8	-0.5	-3.8	-1.4		0.0	0.0	0.0	0.0	0.0	28.5	
compressor	Area	85.1	77.3	6.0	0	0	3.0	Ld	468.7	0.0	0.0	16.9	-64.4	-4.2	-1.9	-0.7		0.0	0.0	0.0	0.0	0.0	16.9	
compressor	Area	85.1	77.3	6.0	0	0	3.0	Le	468.7	0.0	0.0	16.9	-64.4	-4.2	-1.9	-0.7		0.0	0.0	0.0	0.0	0.0	16.9	
compressor	Area	85.1	77.3	6.0	0	0	3.0	Ln	468.7	0.0	0.0	16.9	-64.4	-4.2	-1.9	-0.7		0.0	0.0	0.0	0.0	0.0	16.9	
generator	Area	85.1	77.3	6.0	0	0	3.0	Ld	470.4	0.0	0.0	17.5	-64.4	-4.2	-1.2	-0.8		0.0	0.0	0.0	0.0	0.0	17.5	
generator	Area	85.1	77.3	6.0	0	0	3.0	Le	470.4	0.0	0.0	17.5	-64.4	-4.2	-1.2	-0.8		0.0	0.0	0.0	0.0	0.0	17.5	
generator	Area	85.1	77.3	6.0	0	0	3.0	Ln	470.4	0.0	0.0	17.5	-64.4	-4.2	-1.2	-0.8		0.0	0.0	0.0	0.0	0.0	17.5	
mud pump east vent	Area	103.4	95.6	6.0	0	0	3.0	Ld	473.0	0.0	0.0	36.3	-64.5	-3.3	-0.1	-2.3		0.0	0.0	0.0	0.0	0.0	36.3	
mud pump east vent	Area	103.4	95.6	6.0	0	0	3.0	Le	473.0	0.0	0.0	36.3	-64.5	-3.3	-0.1	-2.3		0.0	0.0	0.0	0.0	0.0	36.3	
mud pump east vent	Area	103.4	95.6	6.0	0	0	3.0	Ln	473.0	0.0	0.0	36.3	-64.5	-3.3	-0.1	-2.3		0.0	0.0	0.0	0.0	0.0	36.3	

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AS 0395 Borrás Road

Mean propagation Leq - Scenario 4

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Source	SrcType	Lw	Lw'	I or S	KI	KT	Ko	time slice	s	Li	R'w	Ls	Adiv	Agr	Abar	Aatm	Amis	ADI	dLref	dLw	ZR	Cmet	Lr
		dB(A)	dB(A)	m,m²	dB	dB	dB		m	dB(A)	dB	dB(A)	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB(A)

Name	2 Common Wood	Floor	GF	Ld,lim	dB(A)	Le,lim	dB(A)	Ld 43.2	dB(A)	Le 43.2	dB(A)												
HH102 top drive	Point	107.0	107.0		0	0	0.0	Ld	439.8	0.0	0.0	39.4	-63.9	-1.5	-0.1	-2.2		0.0	0.0	0.0	0.0	0.0	39.4
HH102 top drive	Point	107.0	107.0		0	0	0.0	Le	439.8	0.0	0.0	39.4	-63.9	-1.5	-0.1	-2.2		0.0	0.0	0.0	0.0	0.0	39.4
HH102 top drive	Point	107.0	107.0		0	0	0.0	Ln	439.8	0.0	0.0	39.4	-63.9	-1.5	-0.1	-2.2		0.0	0.0	0.0	0.0	0.0	39.4
HH 102 rig engine	Line	111.0	101.4	9.2	0	0	0.0	Ld	445.5	0.0	0.0	39.3	-64.0	-2.3	-4.1	-1.9		0.0	0.6	0.0	0.0	0.0	39.3
HH 102 rig engine	Line	111.0	101.4	9.2	0	0	0.0	Le	445.5	0.0	0.0	39.3	-64.0	-2.3	-4.1	-1.9		0.0	0.6	0.0	0.0	0.0	39.3
HH 102 rig engine	Line	111.0	101.4	9.2	0	0	0.0	Ln	445.5	0.0	0.0	39.3	-64.0	-2.3	-4.1	-1.9		0.0	0.6	0.0	0.0	0.0	39.3
Motor on Sifter at Settling tank	Point	101.0	101.0		0	0	0.0	Ld	466.2	0.0	0.0	30.1	-64.4	-1.1	-3.7	-1.7		0.0	0.0	0.0	0.0	0.0	30.1
Motor on Sifter at Settling tank	Point	101.0	101.0		0	0	0.0	Le	466.2	0.0	0.0	30.1	-64.4	-1.1	-3.7	-1.7		0.0	0.0	0.0	0.0	0.0	30.1
Motor on Sifter at Settling tank	Point	101.0	101.0		0	0	0.0	Ln	466.2	0.0	0.0	30.1	-64.4	-1.1	-3.7	-1.7		0.0	0.0	0.0	0.0	0.0	30.1
Sifter at settlement tanks	Point	99.0	99.0		0	0	0.0	Ld	464.0	0.0	0.0	28.8	-64.3	-1.3	-3.2	-1.4		0.0	0.0	0.0	0.0	0.0	28.8
Sifter at settlement tanks	Point	99.0	99.0		0	0	0.0	Le	464.0	0.0	0.0	28.8	-64.3	-1.3	-3.2	-1.4		0.0	0.0	0.0	0.0	0.0	28.8
Sifter at settlement tanks	Point	99.0	99.0		0	0	0.0	Ln	464.0	0.0	0.0	28.8	-64.3	-1.3	-3.2	-1.4		0.0	0.0	0.0	0.0	0.0	28.8
compressor	Area	85.1	77.3	6.0	0	0	3.0	Ld	450.3	0.0	0.0	15.3	-64.1	-6.6	-1.4	-0.7		0.0	0.0	0.0	0.0	0.0	15.3
compressor	Area	85.1	77.3	6.0	0	0	3.0	Le	450.3	0.0	0.0	15.3	-64.1	-6.6	-1.4	-0.7		0.0	0.0	0.0	0.0	0.0	15.3
compressor	Area	85.1	77.3	6.0	0	0	3.0	Ln	450.3	0.0	0.0	15.3	-64.1	-6.6	-1.4	-0.7		0.0	0.0	0.0	0.0	0.0	15.3
generator	Area	85.1	77.3	6.0	0	0	3.0	Ld	452.4	0.0	0.0	15.3	-64.1	-6.6	-1.4	-0.7		0.0	0.0	0.0	0.0	0.0	15.3
generator	Area	85.1	77.3	6.0	0	0	3.0	Le	452.4	0.0	0.0	15.3	-64.1	-6.6	-1.4	-0.7		0.0	0.0	0.0	0.0	0.0	15.3
generator	Area	85.1	77.3	6.0	0	0	3.0	Ln	452.4	0.0	0.0	15.3	-64.1	-6.6	-1.4	-0.7		0.0	0.0	0.0	0.0	0.0	15.3
mud pump east vent	Area	103.4	95.6	6.0	0	0	3.0	Ld	456.1	0.0	0.0	32.4	-64.2	-4.4	-3.8	-1.6		0.0	0.0	0.0	0.0	0.0	32.4
mud pump east vent	Area	103.4	95.6	6.0	0	0	3.0	Le	456.1	0.0	0.0	32.4	-64.2	-4.4	-3.8	-1.6		0.0	0.0	0.0	0.0	0.0	32.4
mud pump east vent	Area	103.4	95.6	6.0	0	0	3.0	Ln	456.1	0.0	0.0	32.4	-64.2	-4.4	-3.8	-1.6		0.0	0.0	0.0	0.0	0.0	32.4

Name	2 Common Wood	Floor	F 1	Ld,lim	dB(A)	Le,lim	dB(A)	Ld 44.5	dB(A)	Le 44.5	dB(A)												
HH102 top drive	Point	107.0	107.0		0	0	0.0	Ld	439.7	0.0	0.0	41.1	-63.9	-0.2	-0.1	-1.8		0.0	0.0	0.0	0.0	0.0	41.1
HH102 top drive	Point	107.0	107.0		0	0	0.0	Le	439.7	0.0	0.0	41.1	-63.9	-0.2	-0.1	-1.8		0.0	0.0	0.0	0.0	0.0	41.1
HH102 top drive	Point	107.0	107.0		0	0	0.0	Ln	439.7	0.0	0.0	41.1	-63.9	-0.2	-0.1	-1.8		0.0	0.0	0.0	0.0	0.0	41.1
HH 102 rig engine	Line	111.0	101.4	9.2	0	0	0.0	Ld	445.5	0.0	0.0	40.2	-64.0	-1.6	-3.9	-1.8		0.0	0.5	0.0	0.0	0.0	40.2
HH 102 rig engine	Line	111.0	101.4	9.2	0	0	0.0	Le	445.5	0.0	0.0	40.2	-64.0	-1.6	-3.9	-1.8		0.0	0.5	0.0	0.0	0.0	40.2
HH 102 rig engine	Line	111.0	101.4	9.2	0	0	0.0	Ln	445.5	0.0	0.0	40.2	-64.0	-1.6	-3.9	-1.8		0.0	0.5	0.0	0.0	0.0	40.2
Motor on Sifter at Settling tank	Point	101.0	101.0		0	0	0.0	Ld	466.1	0.0	0.0	30.3	-64.4	-0.2	-4.4	-1.7		0.0	0.0	0.0	0.0	0.0	30.3
Motor on Sifter at Settling tank	Point	101.0	101.0		0	0	0.0	Le	466.1	0.0	0.0	30.3	-64.4	-0.2	-4.4	-1.7		0.0	0.0	0.0	0.0	0.0	30.3
Motor on Sifter at Settling tank	Point	101.0	101.0		0	0	0.0	Ln	466.1	0.0	0.0	30.3	-64.4	-0.2	-4.4	-1.7		0.0	0.0	0.0	0.0	0.0	30.3
Sifter at settlement tanks	Point	99.0	99.0		0	0	0.0	Ld	463.9	0.0	0.0	28.9	-64.3	-0.5	-3.9	-1.4		0.0	0.0	0.0	0.0	0.0	28.9

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AS 0395 Borrás Road
Mean propagation Leq - Scenario 4

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Source	SrcType	Lw	Lw'	I or S	KI	KT	Ko	time slice	s	Li	R'w	Ls	Adiv	Agr	Abar	Aatm	Amis	ADI	dLref	dLw	ZR	Cmet	Lr	
		dB(A)	dB(A)	m,m²	dB	dB	dB		m	dB(A)	dB	dB(A)	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB(A)	
Sifter at settlement tanks	Point	99.0	99.0		0	0	0.0	Le	463.9	0.0	0.0	28.9	-64.3	-0.5	-3.9	-1.4		0.0	0.0	0.0	0.0	0.0	28.9	
Sifter at settlement tanks	Point	99.0	99.0		0	0	0.0	Ln	463.9	0.0	0.0	28.9	-64.3	-0.5	-3.9	-1.4		0.0	0.0	0.0	0.0	0.0	28.9	
compressor	Area	85.1	77.3	6.0	0	0	3.0	Ld	450.3	0.0	0.0	16.9	-64.1	-4.1	-2.3	-0.7		0.0	0.0	0.0	0.0	0.0	16.9	
compressor	Area	85.1	77.3	6.0	0	0	3.0	Le	450.3	0.0	0.0	16.9	-64.1	-4.1	-2.3	-0.7		0.0	0.0	0.0	0.0	0.0	16.9	
compressor	Area	85.1	77.3	6.0	0	0	3.0	Ln	450.3	0.0	0.0	16.9	-64.1	-4.1	-2.3	-0.7		0.0	0.0	0.0	0.0	0.0	16.9	
generator	Area	85.1	77.3	6.0	0	0	3.0	Ld	452.4	0.0	0.0	16.9	-64.1	-4.1	-2.3	-0.7		0.0	0.0	0.0	0.0	0.0	16.9	
generator	Area	85.1	77.3	6.0	0	0	3.0	Le	452.4	0.0	0.0	16.9	-64.1	-4.1	-2.3	-0.7		0.0	0.0	0.0	0.0	0.0	16.9	
generator	Area	85.1	77.3	6.0	0	0	3.0	Ln	452.4	0.0	0.0	16.9	-64.1	-4.1	-2.3	-0.7		0.0	0.0	0.0	0.0	0.0	16.9	
mud pump east vent	Area	103.4	95.6	6.0	0	0	3.0	Ld	456.0	0.0	0.0	34.4	-64.2	-3.1	-3.4	-1.3		0.0	0.0	0.0	0.0	0.0	34.4	
mud pump east vent	Area	103.4	95.6	6.0	0	0	3.0	Le	456.0	0.0	0.0	34.4	-64.2	-3.1	-3.4	-1.3		0.0	0.0	0.0	0.0	0.0	34.4	
mud pump east vent	Area	103.4	95.6	6.0	0	0	3.0	Ln	456.0	0.0	0.0	34.4	-64.2	-3.1	-3.4	-1.3		0.0	0.0	0.0	0.0	0.0	34.4	
Name Ash Brook Floor GF Ld,lim dB(A) Le,lim dB(A) Ld 34.3 dB(A) Le 34.3 dB(A)																								
HH102 top drive	Point	107.0	107.0		0	0	0.0	Ld	979.2	0.0	0.0	29.7	-70.8	-1.5	-0.5	-4.4		0.0	0.0	0.0	0.0	0.0	29.7	
HH102 top drive	Point	107.0	107.0		0	0	0.0	Le	979.2	0.0	0.0	29.7	-70.8	-1.5	-0.5	-4.4		0.0	0.0	0.0	0.0	0.0	29.7	
HH102 top drive	Point	107.0	107.0		0	0	0.0	Ln	979.2	0.0	0.0	29.7	-70.8	-1.5	-0.5	-4.4		0.0	0.0	0.0	0.0	0.0	29.7	
HH 102 rig engine	Line	111.0	101.4	9.2	0	0	0.0	Ld	981.3	0.0	0.0	30.4	-70.8	-2.3	-3.8	-3.7		0.0	0.0	0.0	0.0	0.0	30.4	
HH 102 rig engine	Line	111.0	101.4	9.2	0	0	0.0	Le	981.3	0.0	0.0	30.4	-70.8	-2.3	-3.8	-3.7		0.0	0.0	0.0	0.0	0.0	30.4	
HH 102 rig engine	Line	111.0	101.4	9.2	0	0	0.0	Ln	981.3	0.0	0.0	30.4	-70.8	-2.3	-3.8	-3.7		0.0	0.0	0.0	0.0	0.0	30.4	
Motor on Sifter at Settling tank	Point	101.0	101.0		0	0	0.0	Ld	1001.	0.0	0.0	23.8	-71.0	-1.2	-1.6	-3.4		0.0	0.0	0.0	0.0	0.0	23.8	
Motor on Sifter at Settling tank	Point	101.0	101.0		0	0	0.0	Le	1001.	0.0	0.0	23.8	-71.0	-1.2	-1.6	-3.4		0.0	0.0	0.0	0.0	0.0	23.8	
Motor on Sifter at Settling tank	Point	101.0	101.0		0	0	0.0	Ln	1001.	0.0	0.0	23.8	-71.0	-1.2	-1.6	-3.4		0.0	0.0	0.0	0.0	0.0	23.8	
Sifter at settlement tanks	Point	99.0	99.0		0	0	0.0	Ld	1001.	0.0	0.0	20.8	-71.0	-1.4	-2.5	-3.3		0.0	0.0	0.0	0.0	0.0	20.8	
Sifter at settlement tanks	Point	99.0	99.0		0	0	0.0	Le	1001.	0.0	0.0	20.8	-71.0	-1.4	-2.5	-3.3		0.0	0.0	0.0	0.0	0.0	20.8	
Sifter at settlement tanks	Point	99.0	99.0		0	0	0.0	Ln	1001.	0.0	0.0	20.8	-71.0	-1.4	-2.5	-3.3		0.0	0.0	0.0	0.0	0.0	20.8	
compressor	Area	85.1	77.3	6.0	0	0	3.0	Ld	977.6	0.0	0.0	6.4	-70.8	-7.3	-1.7	-1.9		0.0	0.0	0.0	0.0	0.0	6.4	
compressor	Area	85.1	77.3	6.0	0	0	3.0	Le	977.6	0.0	0.0	6.4	-70.8	-7.3	-1.7	-1.9		0.0	0.0	0.0	0.0	0.0	6.4	
compressor	Area	85.1	77.3	6.0	0	0	3.0	Ln	977.6	0.0	0.0	6.4	-70.8	-7.3	-1.7	-1.9		0.0	0.0	0.0	0.0	0.0	6.4	
generator	Area	85.1	77.3	6.0	0	0	3.0	Ld	978.4	0.0	0.0	6.4	-70.8	-7.3	-1.7	-1.9		0.0	0.0	0.0	0.0	0.0	6.4	
generator	Area	85.1	77.3	6.0	0	0	3.0	Le	978.4	0.0	0.0	6.4	-70.8	-7.3	-1.7	-1.9		0.0	0.0	0.0	0.0	0.0	6.4	
generator	Area	85.1	77.3	6.0	0	0	3.0	Ln	978.4	0.0	0.0	6.4	-70.8	-7.3	-1.7	-1.9		0.0	0.0	0.0	0.0	0.0	6.4	
mud pump east vent	Area	103.4	95.6	6.0	0	0	3.0	Ld	979.0	0.0	0.0	24.3	-70.8	-4.4	-2.3	-4.6		0.0	0.0	0.0	0.0	0.0	24.3	
mud pump east vent	Area	103.4	95.6	6.0	0	0	3.0	Le	979.0	0.0	0.0	24.3	-70.8	-4.4	-2.3	-4.6		0.0	0.0	0.0	0.0	0.0	24.3	
mud pump east vent	Area	103.4	95.6	6.0	0	0	3.0	Ln	979.0	0.0	0.0	24.3	-70.8	-4.4	-2.3	-4.6		0.0	0.0	0.0	0.0	0.0	24.3	

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AS 0395 Borrás Road

Mean propagation Leq - Scenario 4

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Source	SrcType	Lw	Lw'	I or S	KI	KT	Ko	time slice	s	Li	R'w	Ls	Adiv	Agr	Abar	Aatm	Amis	ADI	dLref	dLw	ZR	Cmet	Lr
		dB(A)	dB(A)	m,m²	dB	dB	dB		m	dB(A)	dB	dB(A)	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB(A)

Name	Baker's Corner	Floor	GF	Ld,lim	dB(A)	Le,lim	dB(A)	Ld 35.2	dB(A)	Le 35.2	dB(A)															
HH102 top drive	Point			107.0	107.0		0	0	0.0	Ld	519.0	0.0	0.0	33.2	-65.3	-1.5	-5.5	-1.5		0.0	0.0	0.0	0.0	0.0	33.2	
HH102 top drive	Point			107.0	107.0		0	0	0.0	Le	519.0	0.0	0.0	33.2	-65.3	-1.5	-5.5	-1.5		0.0	0.0	0.0	0.0	0.0	33.2	
HH102 top drive	Point			107.0	107.0		0	0	0.0	Ln	519.0	0.0	0.0	33.2	-65.3	-1.5	-5.5	-1.5		0.0	0.0	0.0	0.0	0.0	33.2	
HH 102 rig engine	Line			111.0	101.4	9.2	0	0	0.0	Ld	525.2	0.0	0.0	28.5	-65.4	-2.3	-13.9	-0.9		0.0	0.0	0.0	0.0	0.0	28.5	
HH 102 rig engine	Line			111.0	101.4	9.2	0	0	0.0	Le	525.2	0.0	0.0	28.5	-65.4	-2.3	-13.9	-0.9		0.0	0.0	0.0	0.0	0.0	28.5	
HH 102 rig engine	Line			111.0	101.4	9.2	0	0	0.0	Ln	525.2	0.0	0.0	28.5	-65.4	-2.3	-13.9	-0.9		0.0	0.0	0.0	0.0	0.0	28.5	
Motor on Sifter at Settling tank	Point			101.0	101.0		0	0	0.0	Ld	543.2	0.0	0.0	17.5	-65.7	-1.2	-15.4	-1.3		0.0	0.0	0.0	0.0	0.0	17.5	
Motor on Sifter at Settling tank	Point			101.0	101.0		0	0	0.0	Le	543.2	0.0	0.0	17.5	-65.7	-1.2	-15.4	-1.3		0.0	0.0	0.0	0.0	0.0	17.5	
Motor on Sifter at Settling tank	Point			101.0	101.0		0	0	0.0	Ln	543.2	0.0	0.0	17.5	-65.7	-1.2	-15.4	-1.3		0.0	0.0	0.0	0.0	0.0	17.5	
Sifter at settlement tanks	Point			99.0	99.0		0	0	0.0	Ld	540.9	0.0	0.0	21.0	-65.7	-1.4	-10.6	-0.4		0.0	0.0	0.0	0.0	0.0	21.0	
Sifter at settlement tanks	Point			99.0	99.0		0	0	0.0	Le	540.9	0.0	0.0	21.0	-65.7	-1.4	-10.6	-0.4		0.0	0.0	0.0	0.0	0.0	21.0	
Sifter at settlement tanks	Point			99.0	99.0		0	0	0.0	Ln	540.9	0.0	0.0	21.0	-65.7	-1.4	-10.6	-0.4		0.0	0.0	0.0	0.0	0.0	21.0	
compressor	Area			85.1	77.3	6.0	0	0	3.0	Ld	531.9	0.0	0.0	9.1	-65.5	-6.8	-7.2	-0.6		0.0	1.1	0.0	0.0	0.0	9.1	
compressor	Area			85.1	77.3	6.0	0	0	3.0	Le	531.9	0.0	0.0	9.1	-65.5	-6.8	-7.2	-0.6		0.0	1.1	0.0	0.0	0.0	9.1	
compressor	Area			85.1	77.3	6.0	0	0	3.0	Ln	531.9	0.0	0.0	9.1	-65.5	-6.8	-7.2	-0.6		0.0	1.1	0.0	0.0	0.0	9.1	
generator	Area			85.1	77.3	6.0	0	0	3.0	Ld	534.1	0.0	0.0	9.6	-65.5	-6.8	-7.2	-0.6		0.0	1.5	0.0	0.0	0.0	9.6	
generator	Area			85.1	77.3	6.0	0	0	3.0	Le	534.1	0.0	0.0	9.6	-65.5	-6.8	-7.2	-0.6		0.0	1.5	0.0	0.0	0.0	9.6	
generator	Area			85.1	77.3	6.0	0	0	3.0	Ln	534.1	0.0	0.0	9.6	-65.5	-6.8	-7.2	-0.6		0.0	1.5	0.0	0.0	0.0	9.6	
mud pump east vent	Area			103.4	95.6	6.0	0	0	3.0	Ld	538.2	0.0	0.0	24.9	-65.6	-4.5	-10.7	-0.8		0.0	0.1	0.0	0.0	0.0	24.9	
mud pump east vent	Area			103.4	95.6	6.0	0	0	3.0	Le	538.2	0.0	0.0	24.9	-65.6	-4.5	-10.7	-0.8		0.0	0.1	0.0	0.0	0.0	24.9	
mud pump east vent	Area			103.4	95.6	6.0	0	0	3.0	Ln	538.2	0.0	0.0	24.9	-65.6	-4.5	-10.7	-0.8		0.0	0.1	0.0	0.0	0.0	24.9	

Name	Baker's Corner	Floor	F 1	Ld,lim	dB(A)	Le,lim	dB(A)	Ld 39.1	dB(A)	Le 39.1	dB(A)													
HH102 top drive	Point			107.0	107.0		0	0	0.0	Ld	519.0	0.0	0.0	36.5	-65.3	-0.2	-3.2	-1.8	0.0	0.0	0.0	0.0	0.0	36.5
HH102 top drive	Point			107.0	107.0		0	0	0.0	Le	519.0	0.0	0.0	36.5	-65.3	-0.2	-3.2	-1.8	0.0	0.0	0.0	0.0	0.0	36.5
HH102 top drive	Point			107.0	107.0		0	0	0.0	Ln	519.0	0.0	0.0	36.5	-65.3	-0.2	-3.2	-1.8	0.0	0.0	0.0	0.0	0.0	36.5
HH 102 rig engine	Line			111.0	101.4	9.2	0	0	0.0	Ld	525.1	0.0	0.0	33.0	-65.4	-1.6	-9.8	-1.2	0.0	0.0	0.0	0.0	0.0	33.0
HH 102 rig engine	Line			111.0	101.4	9.2	0	0	0.0	Le	525.1	0.0	0.0	33.0	-65.4	-1.6	-9.8	-1.2	0.0	0.0	0.0	0.0	0.0	33.0
HH 102 rig engine	Line			111.0	101.4	9.2	0	0	0.0	Ln	525.1	0.0	0.0	33.0	-65.4	-1.6	-9.8	-1.2	0.0	0.0	0.0	0.0	0.0	33.0
Motor on Sifter at Settling tank	Point			101.0	101.0		0	0	0.0	Ld	543.2	0.0	0.0	23.7	-65.7	-0.2	-9.9	-1.5	0.0	0.0	0.0	0.0	0.0	23.7
Motor on Sifter at Settling tank	Point			101.0	101.0		0	0	0.0	Le	543.2	0.0	0.0	23.7	-65.7	-0.2	-9.9	-1.5	0.0	0.0	0.0	0.0	0.0	23.7
Motor on Sifter at Settling tank	Point			101.0	101.0		0	0	0.0	Ln	543.2	0.0	0.0	23.7	-65.7	-0.2	-9.9	-1.5	0.0	0.0	0.0	0.0	0.0	23.7
Sifter at settlement tanks	Point			99.0	99.0		0	0	0.0	Ld	540.8	0.0	0.0	25.1	-65.7	-0.5	-7.0	-0.7	0.0	0.0	0.0	0.0	0.0	25.1

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AS 0395 Borrás Road

Mean propagation Leq - Scenario 4

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Source	SrcType	Lw	Lw'	I or S	KI	KT	Ko	time slice	s	Li	R'w	Ls	Adiv	Agr	Abar	Aatm	Amis	ADI	dLref	dLw	ZR	Cmet	Lr	
		dB(A)	dB(A)	m,m ²	dB	dB	dB		m	dB(A)	dB	dB(A)	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB(A)	
Sifter at settlement tanks	Point	99.0	99.0		0	0	0.0	Le	540.8	0.0	0.0	25.1	-65.7	-0.5	-7.0	-0.7		0.0	0.0	0.0	0.0	0.0	25.1	
Sifter at settlement tanks	Point	99.0	99.0		0	0	0.0	Ln	540.8	0.0	0.0	25.1	-65.7	-0.5	-7.0	-0.7		0.0	0.0	0.0	0.0	0.0	25.1	
compressor	Area	85.1	77.3	6.0	0	0	3.0	Ld	531.8	0.0	0.0	14.2	-65.5	-4.2	-4.9	-0.7		0.0	1.3	0.0	0.0	0.0	14.2	
compressor	Area	85.1	77.3	6.0	0	0	3.0	Le	531.8	0.0	0.0	14.2	-65.5	-4.2	-4.9	-0.7		0.0	1.3	0.0	0.0	0.0	14.2	
compressor	Area	85.1	77.3	6.0	0	0	3.0	Ln	531.8	0.0	0.0	14.2	-65.5	-4.2	-4.9	-0.7		0.0	1.3	0.0	0.0	0.0	14.2	
generator	Area	85.1	77.3	6.0	0	0	3.0	Ld	534.1	0.0	0.0	14.7	-65.5	-4.2	-4.9	-0.7		0.0	1.8	0.0	0.0	0.0	14.7	
generator	Area	85.1	77.3	6.0	0	0	3.0	Le	534.1	0.0	0.0	14.7	-65.5	-4.2	-4.9	-0.7		0.0	1.8	0.0	0.0	0.0	14.7	
generator	Area	85.1	77.3	6.0	0	0	3.0	Ln	534.1	0.0	0.0	14.7	-65.5	-4.2	-4.9	-0.7		0.0	1.8	0.0	0.0	0.0	14.7	
mud pump east vent	Area	103.4	95.6	6.0	0	0	3.0	Ld	538.1	0.0	0.0	30.2	-65.6	-3.1	-6.7	-0.9		0.0	0.1	0.0	0.0	0.0	30.2	
mud pump east vent	Area	103.4	95.6	6.0	0	0	3.0	Le	538.1	0.0	0.0	30.2	-65.6	-3.1	-6.7	-0.9		0.0	0.1	0.0	0.0	0.0	30.2	
mud pump east vent	Area	103.4	95.6	6.0	0	0	3.0	Ln	538.1	0.0	0.0	30.2	-65.6	-3.1	-6.7	-0.9		0.0	0.1	0.0	0.0	0.0	30.2	
Name Borrás Head Floor GF Ld,lim dB(A) Le,lim dB(A) Ld 38.3 dB(A) Le 38.3 dB(A)																								
HH102 top drive	Point	107.0	107.0		0	0	0.0	Ld	704.1	0.0	0.0	34.8	-67.9	-1.2	0.0	-3.1		0.0	0.0	0.0	0.0	0.0	34.8	
HH102 top drive	Point	107.0	107.0		0	0	0.0	Le	704.1	0.0	0.0	34.8	-67.9	-1.2	0.0	-3.1		0.0	0.0	0.0	0.0	0.0	34.8	
HH102 top drive	Point	107.0	107.0		0	0	0.0	Ln	704.1	0.0	0.0	34.8	-67.9	-1.2	0.0	-3.1		0.0	0.0	0.0	0.0	0.0	34.8	
HH 102 rig engine	Line	111.0	101.4	9.2	0	0	0.0	Ld	698.3	0.0	0.0	34.5	-67.9	-2.2	-3.5	-3.0		0.0	0.0	0.0	0.0	0.0	34.5	
HH 102 rig engine	Line	111.0	101.4	9.2	0	0	0.0	Le	698.3	0.0	0.0	34.5	-67.9	-2.2	-3.5	-3.0		0.0	0.0	0.0	0.0	0.0	34.5	
HH 102 rig engine	Line	111.0	101.4	9.2	0	0	0.0	Ln	698.3	0.0	0.0	34.5	-67.9	-2.2	-3.5	-3.0		0.0	0.0	0.0	0.0	0.0	34.5	
Motor on Sifter at Settling tank	Point	101.0	101.0		0	0	0.0	Ld	679.0	0.0	0.0	26.2	-67.6	-0.9	-3.9	-2.4		0.0	0.0	0.0	0.0	0.0	26.2	
Motor on Sifter at Settling tank	Point	101.0	101.0		0	0	0.0	Le	679.0	0.0	0.0	26.2	-67.6	-0.9	-3.9	-2.4		0.0	0.0	0.0	0.0	0.0	26.2	
Motor on Sifter at Settling tank	Point	101.0	101.0		0	0	0.0	Ln	679.0	0.0	0.0	26.2	-67.6	-0.9	-3.9	-2.4		0.0	0.0	0.0	0.0	0.0	26.2	
Sifter at settlement tanks	Point	99.0	99.0		0	0	0.0	Ld	681.3	0.0	0.0	24.7	-67.7	-1.1	-3.6	-1.9		0.0	0.0	0.0	0.0	0.0	24.7	
Sifter at settlement tanks	Point	99.0	99.0		0	0	0.0	Le	681.3	0.0	0.0	24.7	-67.7	-1.1	-3.6	-1.9		0.0	0.0	0.0	0.0	0.0	24.7	
Sifter at settlement tanks	Point	99.0	99.0		0	0	0.0	Ln	681.3	0.0	0.0	24.7	-67.7	-1.1	-3.6	-1.9		0.0	0.0	0.0	0.0	0.0	24.7	
compressor	Area	85.1	77.3	6.0	0	0	3.0	Ld	692.8	0.0	0.0	7.8	-67.8	-6.3	-5.3	-0.9		0.0	0.0	0.0	0.0	0.0	7.8	
compressor	Area	85.1	77.3	6.0	0	0	3.0	Le	692.8	0.0	0.0	7.8	-67.8	-6.3	-5.3	-0.9		0.0	0.0	0.0	0.0	0.0	7.8	
compressor	Area	85.1	77.3	6.0	0	0	3.0	Ln	692.8	0.0	0.0	7.8	-67.8	-6.3	-5.3	-0.9		0.0	0.0	0.0	0.0	0.0	7.8	
generator	Area	85.1	77.3	6.0	0	0	3.0	Ld	690.7	0.0	0.0	7.8	-67.8	-6.3	-5.3	-0.9		0.0	0.0	0.0	0.0	0.0	7.8	
generator	Area	85.1	77.3	6.0	0	0	3.0	Le	690.7	0.0	0.0	7.8	-67.8	-6.3	-5.3	-0.9		0.0	0.0	0.0	0.0	0.0	7.8	
generator	Area	85.1	77.3	6.0	0	0	3.0	Ln	690.7	0.0	0.0	7.8	-67.8	-6.3	-5.3	-0.9		0.0	0.0	0.0	0.0	0.0	7.8	
mud pump east vent	Area	103.4	95.6	6.0	0	0	3.0	Ld	686.9	0.0	0.0	22.7	-67.7	-4.2	-10.8	-1.1		0.0	0.0	0.0	0.0	0.0	22.7	
mud pump east vent	Area	103.4	95.6	6.0	0	0	3.0	Le	686.9	0.0	0.0	22.7	-67.7	-4.2	-10.8	-1.1		0.0	0.0	0.0	0.0	0.0	22.7	
mud pump east vent	Area	103.4	95.6	6.0	0	0	3.0	Ln	686.9	0.0	0.0	22.7	-67.7	-4.2	-10.8	-1.1		0.0	0.0	0.0	0.0	0.0	22.7	

Airshed Ltd East Linton East Lothian EH40 3DB UNITED KINGDOM

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AS 0395 Borrass Road

Mean propagation Leq - Scenario 4

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Source	SrcType	Lw	Lw'	I or S	KI	KT	Ko	time slice	s	Li	R'w	Ls	Adiv	Agr	Abar	Aatm	Amis	ADI	dLref	dLw	ZR	Cmet	Lr
		dB(A)	dB(A)	m,m ²	dB	dB	dB		m	dB(A)	dB	dB(A)	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB(A)

Name	Borrass Head	Floor	F 1	Ld,lim	dB(A)	Le,lim	dB(A)	Ld 39.3	dB(A)	Le 39.3	dB(A)													
HH102 top drive	Point			107.0	107.0		0	0	0.0	Ld	704.3	0.0	0.0	36.3	-67.9	-0.1	0.0	-2.6	0.0	0.0	0.0	0.0	0.0	36.3
HH102 top drive	Point			107.0	107.0		0	0	0.0	Le	704.3	0.0	0.0	36.3	-67.9	-0.1	0.0	-2.6	0.0	0.0	0.0	0.0	0.0	36.3
HH102 top drive	Point			107.0	107.0		0	0	0.0	Ln	704.3	0.0	0.0	36.3	-67.9	-0.1	0.0	-2.6	0.0	0.0	0.0	0.0	0.0	36.3
HH 102 rig engine	Line			111.0	101.4	9.2	0	0	0.0	Ld	698.5	0.0	0.0	35.1	-67.9	-1.7	-3.6	-2.8	0.0	0.0	0.0	0.0	0.0	35.1
HH 102 rig engine	Line			111.0	101.4	9.2	0	0	0.0	Le	698.5	0.0	0.0	35.1	-67.9	-1.7	-3.6	-2.8	0.0	0.0	0.0	0.0	0.0	35.1
HH 102 rig engine	Line			111.0	101.4	9.2	0	0	0.0	Ln	698.5	0.0	0.0	35.1	-67.9	-1.7	-3.6	-2.8	0.0	0.0	0.0	0.0	0.0	35.1
Motor on Sifter at Settling tank	Point			101.0	101.0		0	0	0.0	Ld	679.1	0.0	0.0	26.3	-67.6	-0.2	-4.5	-2.4	0.0	0.0	0.0	0.0	0.0	26.3
Motor on Sifter at Settling tank	Point			101.0	101.0		0	0	0.0	Le	679.1	0.0	0.0	26.3	-67.6	-0.2	-4.5	-2.4	0.0	0.0	0.0	0.0	0.0	26.3
Motor on Sifter at Settling tank	Point			101.0	101.0		0	0	0.0	Ln	679.1	0.0	0.0	26.3	-67.6	-0.2	-4.5	-2.4	0.0	0.0	0.0	0.0	0.0	26.3
Sifter at settlement tanks	Point			99.0	99.0		0	0	0.0	Ld	681.4	0.0	0.0	25.1	-67.7	-0.5	-4.0	-1.8	0.0	0.0	0.0	0.0	0.0	25.1
Sifter at settlement tanks	Point			99.0	99.0		0	0	0.0	Le	681.4	0.0	0.0	25.1	-67.7	-0.5	-4.0	-1.8	0.0	0.0	0.0	0.0	0.0	25.1
Sifter at settlement tanks	Point			99.0	99.0		0	0	0.0	Ln	681.4	0.0	0.0	25.1	-67.7	-0.5	-4.0	-1.8	0.0	0.0	0.0	0.0	0.0	25.1
compressor	Area			85.1	77.3	6.0	0	0	3.0	Ld	692.9	0.0	0.0	8.3	-67.8	-4.3	-6.9	-0.9	0.0	0.0	0.0	0.0	0.0	8.3
compressor	Area			85.1	77.3	6.0	0	0	3.0	Le	692.9	0.0	0.0	8.3	-67.8	-4.3	-6.9	-0.9	0.0	0.0	0.0	0.0	0.0	8.3
compressor	Area			85.1	77.3	6.0	0	0	3.0	Ln	692.9	0.0	0.0	8.3	-67.8	-4.3	-6.9	-0.9	0.0	0.0	0.0	0.0	0.0	8.3
generator	Area			85.1	77.3	6.0	0	0	3.0	Ld	690.8	0.0	0.0	8.3	-67.8	-4.3	-6.9	-0.9	0.0	0.0	0.0	0.0	0.0	8.3
generator	Area			85.1	77.3	6.0	0	0	3.0	Le	690.8	0.0	0.0	8.3	-67.8	-4.3	-6.9	-0.9	0.0	0.0	0.0	0.0	0.0	8.3
generator	Area			85.1	77.3	6.0	0	0	3.0	Ln	690.8	0.0	0.0	8.3	-67.8	-4.3	-6.9	-0.9	0.0	0.0	0.0	0.0	0.0	8.3
mud pump east vent	Area			103.4	95.6	6.0	0	0	3.0	Ld	687.0	0.0	0.0	25.7	-67.7	-3.2	-8.7	-1.1	0.0	0.0	0.0	0.0	0.0	25.7
mud pump east vent	Area			103.4	95.6	6.0	0	0	3.0	Le	687.0	0.0	0.0	25.7	-67.7	-3.2	-8.7	-1.1	0.0	0.0	0.0	0.0	0.0	25.7
mud pump east vent	Area			103.4	95.6	6.0	0	0	3.0	Ln	687.0	0.0	0.0	25.7	-67.7	-3.2	-8.7	-1.1	0.0	0.0	0.0	0.0	0.0	25.7

Name	Borrass House	Floor	GF	Ld,lim	dB(A)	Le,lim	dB(A)	Ld 39.1	dB(A)	Le 39.1	dB(A)													
HH102 top drive	Point			107.0	107.0		0	0	0.0	Ld	689.8	0.0	0.0	36.1	-67.8	-0.4	0.0	-2.7	0.0	0.0	0.0	0.0	0.0	36.1
HH102 top drive	Point			107.0	107.0		0	0	0.0	Le	689.8	0.0	0.0	36.1	-67.8	-0.4	0.0	-2.7	0.0	0.0	0.0	0.0	0.0	36.1
HH102 top drive	Point			107.0	107.0		0	0	0.0	Ln	689.8	0.0	0.0	36.1	-67.8	-0.4	0.0	-2.7	0.0	0.0	0.0	0.0	0.0	36.1
HH 102 rig engine	Line			111.0	101.4	9.2	0	0	0.0	Ld	684.7	0.0	0.0	35.0	-67.7	-1.8	-3.7	-2.8	0.0	0.0	0.0	0.0	0.0	35.0
HH 102 rig engine	Line			111.0	101.4	9.2	0	0	0.0	Le	684.7	0.0	0.0	35.0	-67.7	-1.8	-3.7	-2.8	0.0	0.0	0.0	0.0	0.0	35.0
HH 102 rig engine	Line			111.0	101.4	9.2	0	0	0.0	Ln	684.7	0.0	0.0	35.0	-67.7	-1.8	-3.7	-2.8	0.0	0.0	0.0	0.0	0.0	35.0
Motor on Sifter at Settling tank	Point			101.0	101.0		0	0	0.0	Ld	662.8	0.0	0.0	26.5	-67.4	-0.3	-4.5	-2.3	0.0	0.0	0.0	0.0	0.0	26.5
Motor on Sifter at Settling tank	Point			101.0	101.0		0	0	0.0	Le	662.8	0.0	0.0	26.5	-67.4	-0.3	-4.5	-2.3	0.0	0.0	0.0	0.0	0.0	26.5
Motor on Sifter at Settling tank	Point			101.0	101.0		0	0	0.0	Ln	662.8	0.0	0.0	26.5	-67.4	-0.3	-4.5	-2.3	0.0	0.0	0.0	0.0	0.0	26.5
Sifter at settlement tanks	Point			99.0	99.0		0	0	0.0	Ld	664.8	0.0	0.0	25.1	-67.4	-0.6	-4.1	-1.8	0.0	0.0	0.0	0.0	0.0	25.1

Airshed Ltd East Linton East Lothian EH40 3DB UNITED KINGDOM

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AS 0395 Borrás Road

Mean propagation Leq - Scenario 4

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Source	SrcType	Lw	Lw'	I or S	KI	KT	Ko	time slice	s	Li	R'w	Ls	Adiv	Agr	Abar	Aatm	Amis	ADI	dLref	dLw	ZR	Cmet	Lr	
		dB(A)	dB(A)	m,m²	dB	dB	dB		m	dB(A)	dB	dB(A)	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB(A)	
Sifter at settlement tanks	Point	99.0	99.0		0	0	0.0	Le	664.8	0.0	0.0	25.1	-67.4	-0.6	-4.1	-1.8		0.0	0.0	0.0	0.0	0.0	25.1	
Sifter at settlement tanks	Point	99.0	99.0		0	0	0.0	Ln	664.8	0.0	0.0	25.1	-67.4	-0.6	-4.1	-1.8		0.0	0.0	0.0	0.0	0.0	25.1	
compressor	Area	85.1	77.3	6.0	0	0	3.0	Ld	682.1	0.0	0.0	7.9	-67.7	-4.6	-7.0	-0.8		0.0	0.0	0.0	0.0	0.0	7.9	
compressor	Area	85.1	77.3	6.0	0	0	3.0	Le	682.1	0.0	0.0	7.9	-67.7	-4.6	-7.0	-0.8		0.0	0.0	0.0	0.0	0.0	7.9	
compressor	Area	85.1	77.3	6.0	0	0	3.0	Ln	682.1	0.0	0.0	7.9	-67.7	-4.6	-7.0	-0.8		0.0	0.0	0.0	0.0	0.0	7.9	
generator	Area	85.1	77.3	6.0	0	0	3.0	Ld	680.2	0.0	0.0	8.0	-67.6	-4.6	-7.0	-0.8		0.0	0.0	0.0	0.0	0.0	8.0	
generator	Area	85.1	77.3	6.0	0	0	3.0	Le	680.2	0.0	0.0	8.0	-67.6	-4.6	-7.0	-0.8		0.0	0.0	0.0	0.0	0.0	8.0	
generator	Area	85.1	77.3	6.0	0	0	3.0	Ln	680.2	0.0	0.0	8.0	-67.6	-4.6	-7.0	-0.8		0.0	0.0	0.0	0.0	0.0	8.0	
mud pump east vent	Area	103.4	95.6	6.0	0	0	3.0	Ld	677.3	0.0	0.0	22.7	-67.6	-3.4	-11.7	-1.0		0.0	0.0	0.0	0.0	0.0	22.7	
mud pump east vent	Area	103.4	95.6	6.0	0	0	3.0	Le	677.3	0.0	0.0	22.7	-67.6	-3.4	-11.7	-1.0		0.0	0.0	0.0	0.0	0.0	22.7	
mud pump east vent	Area	103.4	95.6	6.0	0	0	3.0	Ln	677.3	0.0	0.0	22.7	-67.6	-3.4	-11.7	-1.0		0.0	0.0	0.0	0.0	0.0	22.7	
Name Borrás House Floor F 1 Ld,lim dB(A) Le,lim dB(A) Ld 39.7 dB(A) Le 39.7 dB(A)																								
HH102 top drive	Point	107.0	107.0		0	0	0.0	Ld	689.9	0.0	0.0	36.6	-67.8	0.0	0.0	-2.6		0.0	0.0	0.0	0.0	0.0	36.6	
HH102 top drive	Point	107.0	107.0		0	0	0.0	Le	689.9	0.0	0.0	36.6	-67.8	0.0	0.0	-2.6		0.0	0.0	0.0	0.0	0.0	36.6	
HH102 top drive	Point	107.0	107.0		0	0	0.0	Ln	689.9	0.0	0.0	36.6	-67.8	0.0	0.0	-2.6		0.0	0.0	0.0	0.0	0.0	36.6	
HH 102 rig engine	Line	111.0	101.4	9.2	0	0	0.0	Ld	684.9	0.0	0.0	35.4	-67.7	-1.7	-3.5	-2.7		0.0	0.0	0.0	0.0	0.0	35.4	
HH 102 rig engine	Line	111.0	101.4	9.2	0	0	0.0	Le	684.9	0.0	0.0	35.4	-67.7	-1.7	-3.5	-2.7		0.0	0.0	0.0	0.0	0.0	35.4	
HH 102 rig engine	Line	111.0	101.4	9.2	0	0	0.0	Ln	684.9	0.0	0.0	35.4	-67.7	-1.7	-3.5	-2.7		0.0	0.0	0.0	0.0	0.0	35.4	
Motor on Sifter at Settling tank	Point	101.0	101.0		0	0	0.0	Ld	662.9	0.0	0.0	26.5	-67.4	-0.2	-4.5	-2.3		0.0	0.0	0.0	0.0	0.0	26.5	
Motor on Sifter at Settling tank	Point	101.0	101.0		0	0	0.0	Le	662.9	0.0	0.0	26.5	-67.4	-0.2	-4.5	-2.3		0.0	0.0	0.0	0.0	0.0	26.5	
Motor on Sifter at Settling tank	Point	101.0	101.0		0	0	0.0	Ln	662.9	0.0	0.0	26.5	-67.4	-0.2	-4.5	-2.3		0.0	0.0	0.0	0.0	0.0	26.5	
Sifter at settlement tanks	Point	99.0	99.0		0	0	0.0	Ld	664.9	0.0	0.0	25.4	-67.4	-0.4	-4.0	-1.7		0.0	0.0	0.0	0.0	0.0	25.4	
Sifter at settlement tanks	Point	99.0	99.0		0	0	0.0	Le	664.9	0.0	0.0	25.4	-67.4	-0.4	-4.0	-1.7		0.0	0.0	0.0	0.0	0.0	25.4	
Sifter at settlement tanks	Point	99.0	99.0		0	0	0.0	Ln	664.9	0.0	0.0	25.4	-67.4	-0.4	-4.0	-1.7		0.0	0.0	0.0	0.0	0.0	25.4	
compressor	Area	85.1	77.3	6.0	0	0	3.0	Ld	682.2	0.0	0.0	8.3	-67.7	-4.2	-7.2	-0.8		0.0	0.0	0.0	0.0	0.0	8.3	
compressor	Area	85.1	77.3	6.0	0	0	3.0	Le	682.2	0.0	0.0	8.3	-67.7	-4.2	-7.2	-0.8		0.0	0.0	0.0	0.0	0.0	8.3	
compressor	Area	85.1	77.3	6.0	0	0	3.0	Ln	682.2	0.0	0.0	8.3	-67.7	-4.2	-7.2	-0.8		0.0	0.0	0.0	0.0	0.0	8.3	
generator	Area	85.1	77.3	6.0	0	0	3.0	Ld	680.4	0.0	0.0	8.1	-67.6	-4.2	-7.3	-0.8		0.0	0.0	0.0	0.0	0.0	8.1	
generator	Area	85.1	77.3	6.0	0	0	3.0	Le	680.4	0.0	0.0	8.1	-67.6	-4.2	-7.3	-0.8		0.0	0.0	0.0	0.0	0.0	8.1	
generator	Area	85.1	77.3	6.0	0	0	3.0	Ln	680.4	0.0	0.0	8.1	-67.6	-4.2	-7.3	-0.8		0.0	0.0	0.0	0.0	0.0	8.1	
mud pump east vent	Area	103.4	95.6	6.0	0	0	3.0	Ld	677.4	0.0	0.0	25.5	-67.6	-3.1	-9.2	-1.1		0.0	0.0	0.0	0.0	0.0	25.5	
mud pump east vent	Area	103.4	95.6	6.0	0	0	3.0	Le	677.4	0.0	0.0	25.5	-67.6	-3.1	-9.2	-1.1		0.0	0.0	0.0	0.0	0.0	25.5	
mud pump east vent	Area	103.4	95.6	6.0	0	0	3.0	Ln	677.4	0.0	0.0	25.5	-67.6	-3.1	-9.2	-1.1		0.0	0.0	0.0	0.0	0.0	25.5	

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AS 0395 Borrass Road

Mean propagation Leq - Scenario 4

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Source	SrcType	Lw	Lw'	I or S	KI	KT	Ko	time slice	s	Li	R'w	Ls	Adiv	Agr	Abar	Aatm	Amis	ADI	dLref	dLw	ZR	Cmet	Lr
		dB(A)	dB(A)	m,m ²	dB	dB	dB		m	dB(A)	dB	dB(A)	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB(A)

Name	Borrass Lodge	Floor	GF	Ld,lim	dB(A)	Le,lim	dB(A)	Ld 38.7	dB(A)	Le 38.7	dB(A)												
HH102 top drive	Point	107.0	107.0		0	0	0.0	Ld	713.5	0.0	0.0	35.6	-68.1	-0.5	0.0	-2.9		0.0	0.0	0.0	0.0	0.0	35.6
HH102 top drive	Point	107.0	107.0		0	0	0.0	Le	713.5	0.0	0.0	35.6	-68.1	-0.5	0.0	-2.9		0.0	0.0	0.0	0.0	0.0	35.6
HH102 top drive	Point	107.0	107.0		0	0	0.0	Ln	713.5	0.0	0.0	35.6	-68.1	-0.5	0.0	-2.9		0.0	0.0	0.0	0.0	0.0	35.6
HH 102 rig engine	Line	111.0	101.4	9.2	0	0	0.0	Ld	708.6	0.0	0.0	34.6	-68.0	-1.8	-3.7	-2.9		0.0	0.0	0.0	0.0	0.0	34.6
HH 102 rig engine	Line	111.0	101.4	9.2	0	0	0.0	Le	708.6	0.0	0.0	34.6	-68.0	-1.8	-3.7	-2.9		0.0	0.0	0.0	0.0	0.0	34.6
HH 102 rig engine	Line	111.0	101.4	9.2	0	0	0.0	Ln	708.6	0.0	0.0	34.6	-68.0	-1.8	-3.7	-2.9		0.0	0.0	0.0	0.0	0.0	34.6
Motor on Sifter at Settling tank	Point	101.0	101.0		0	0	0.0	Ld	686.5	0.0	0.0	26.1	-67.7	-0.3	-4.5	-2.4		0.0	0.0	0.0	0.0	0.0	26.1
Motor on Sifter at Settling tank	Point	101.0	101.0		0	0	0.0	Le	686.5	0.0	0.0	26.1	-67.7	-0.3	-4.5	-2.4		0.0	0.0	0.0	0.0	0.0	26.1
Motor on Sifter at Settling tank	Point	101.0	101.0		0	0	0.0	Ln	686.5	0.0	0.0	26.1	-67.7	-0.3	-4.5	-2.4		0.0	0.0	0.0	0.0	0.0	26.1
Sifter at settlement tanks	Point	99.0	99.0		0	0	0.0	Ld	688.4	0.0	0.0	24.7	-67.7	-0.6	-4.1	-1.9		0.0	0.0	0.0	0.0	0.0	24.7
Sifter at settlement tanks	Point	99.0	99.0		0	0	0.0	Le	688.4	0.0	0.0	24.7	-67.7	-0.6	-4.1	-1.9		0.0	0.0	0.0	0.0	0.0	24.7
Sifter at settlement tanks	Point	99.0	99.0		0	0	0.0	Ln	688.4	0.0	0.0	24.7	-67.7	-0.6	-4.1	-1.9		0.0	0.0	0.0	0.0	0.0	24.7
compressor	Area	85.1	77.3	6.0	0	0	3.0	Ld	706.5	0.0	0.0	7.5	-68.0	-4.8	-6.9	-0.9		0.0	0.0	0.0	0.0	0.0	7.5
compressor	Area	85.1	77.3	6.0	0	0	3.0	Le	706.5	0.0	0.0	7.5	-68.0	-4.8	-6.9	-0.9		0.0	0.0	0.0	0.0	0.0	7.5
compressor	Area	85.1	77.3	6.0	0	0	3.0	Ln	706.5	0.0	0.0	7.5	-68.0	-4.8	-6.9	-0.9		0.0	0.0	0.0	0.0	0.0	7.5
generator	Area	85.1	77.3	6.0	0	0	3.0	Ld	704.7	0.0	0.0	7.6	-68.0	-4.8	-6.9	-0.9		0.0	0.0	0.0	0.0	0.0	7.6
generator	Area	85.1	77.3	6.0	0	0	3.0	Le	704.7	0.0	0.0	7.6	-68.0	-4.8	-6.9	-0.9		0.0	0.0	0.0	0.0	0.0	7.6
generator	Area	85.1	77.3	6.0	0	0	3.0	Ln	704.7	0.0	0.0	7.6	-68.0	-4.8	-6.9	-0.9		0.0	0.0	0.0	0.0	0.0	7.6
mud pump east vent	Area	103.4	95.6	6.0	0	0	3.0	Ld	701.9	0.0	0.0	22.3	-67.9	-3.5	-11.7	-1.0		0.0	0.1	0.0	0.0	0.0	22.3
mud pump east vent	Area	103.4	95.6	6.0	0	0	3.0	Le	701.9	0.0	0.0	22.3	-67.9	-3.5	-11.7	-1.0		0.0	0.1	0.0	0.0	0.0	22.3
mud pump east vent	Area	103.4	95.6	6.0	0	0	3.0	Ln	701.9	0.0	0.0	22.3	-67.9	-3.5	-11.7	-1.0		0.0	0.1	0.0	0.0	0.0	22.3

Name	Borrass Lodge	Floor	F 1	Ld,lim	dB(A)	Le,lim	dB(A)	Ld 39.3	dB(A)	Le 39.3	dB(A)												
HH102 top drive	Point	107.0	107.0		0	0	0.0	Ld	713.6	0.0	0.0	36.3	-68.1	0.0	0.0	-2.6		0.0	0.0	0.0	0.0	0.0	36.3
HH102 top drive	Point	107.0	107.0		0	0	0.0	Le	713.6	0.0	0.0	36.3	-68.1	0.0	0.0	-2.6		0.0	0.0	0.0	0.0	0.0	36.3
HH102 top drive	Point	107.0	107.0		0	0	0.0	Ln	713.6	0.0	0.0	36.3	-68.1	0.0	0.0	-2.6		0.0	0.0	0.0	0.0	0.0	36.3
HH 102 rig engine	Line	111.0	101.4	9.2	0	0	0.0	Ld	708.8	0.0	0.0	35.0	-68.0	-1.7	-3.6	-2.7		0.0	0.1	0.0	0.0	0.0	35.0
HH 102 rig engine	Line	111.0	101.4	9.2	0	0	0.0	Le	708.8	0.0	0.0	35.0	-68.0	-1.7	-3.6	-2.7		0.0	0.1	0.0	0.0	0.0	35.0
HH 102 rig engine	Line	111.0	101.4	9.2	0	0	0.0	Ln	708.8	0.0	0.0	35.0	-68.0	-1.7	-3.6	-2.7		0.0	0.1	0.0	0.0	0.0	35.0
Motor on Sifter at Settling tank	Point	101.0	101.0		0	0	0.0	Ld	686.6	0.0	0.0	26.2	-67.7	-0.2	-4.5	-2.4		0.0	0.1	0.0	0.0	0.0	26.2
Motor on Sifter at Settling tank	Point	101.0	101.0		0	0	0.0	Le	686.6	0.0	0.0	26.2	-67.7	-0.2	-4.5	-2.4		0.0	0.1	0.0	0.0	0.0	26.2
Motor on Sifter at Settling tank	Point	101.0	101.0		0	0	0.0	Ln	686.6	0.0	0.0	26.2	-67.7	-0.2	-4.5	-2.4		0.0	0.1	0.0	0.0	0.0	26.2
Sifter at settlement tanks	Point	99.0	99.0		0	0	0.0	Ld	688.5	0.0	0.0	25.1	-67.8	-0.4	-4.0	-1.8		0.0	0.0	0.0	0.0	0.0	25.1

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AS 0395 Borrás Road

Mean propagation Leq - Scenario 4

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Source	SrcType	Lw	Lw'	I or S	KI	KT	Ko	time slice	s	Li	R'w	Ls	Adiv	Agr	Abar	Aatm	Amis	ADI	dLref	dLw	ZR	Cmet	Lr	
		dB(A)	dB(A)	m,m²	dB	dB	dB		m	dB(A)	dB	dB(A)	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB(A)	
Sifter at settlement tanks	Point	99.0	99.0		0	0	0.0	Le	688.5	0.0	0.0	25.1	-67.8	-0.4	-4.0	-1.8		0.0	0.0	0.0	0.0	0.0	25.1	
Sifter at settlement tanks	Point	99.0	99.0		0	0	0.0	Ln	688.5	0.0	0.0	25.1	-67.8	-0.4	-4.0	-1.8		0.0	0.0	0.0	0.0	0.0	25.1	
compressor	Area	85.1	77.3	6.0	0	0	3.0	Ld	706.6	0.0	0.0	7.8	-68.0	-4.2	-7.3	-0.9		0.0	0.0	0.0	0.0	0.0	7.8	
compressor	Area	85.1	77.3	6.0	0	0	3.0	Le	706.6	0.0	0.0	7.8	-68.0	-4.2	-7.3	-0.9		0.0	0.0	0.0	0.0	0.0	7.8	
compressor	Area	85.1	77.3	6.0	0	0	3.0	Ln	706.6	0.0	0.0	7.8	-68.0	-4.2	-7.3	-0.9		0.0	0.0	0.0	0.0	0.0	7.8	
generator	Area	85.1	77.3	6.0	0	0	3.0	Ld	704.9	0.0	0.0	7.8	-68.0	-4.2	-7.3	-0.9		0.0	0.0	0.0	0.0	0.0	7.8	
generator	Area	85.1	77.3	6.0	0	0	3.0	Le	704.9	0.0	0.0	7.8	-68.0	-4.2	-7.3	-0.9		0.0	0.0	0.0	0.0	0.0	7.8	
generator	Area	85.1	77.3	6.0	0	0	3.0	Ln	704.9	0.0	0.0	7.8	-68.0	-4.2	-7.3	-0.9		0.0	0.0	0.0	0.0	0.0	7.8	
mud pump east vent	Area	103.4	95.6	6.0	0	0	3.0	Ld	702.1	0.0	0.0	25.2	-67.9	-3.1	-9.1	-1.1		0.0	0.0	0.0	0.0	0.0	25.2	
mud pump east vent	Area	103.4	95.6	6.0	0	0	3.0	Le	702.1	0.0	0.0	25.2	-67.9	-3.1	-9.1	-1.1		0.0	0.0	0.0	0.0	0.0	25.2	
mud pump east vent	Area	103.4	95.6	6.0	0	0	3.0	Ln	702.1	0.0	0.0	25.2	-67.9	-3.1	-9.1	-1.1		0.0	0.0	0.0	0.0	0.0	25.2	
Name Daisy Bank Floor GF Ld,lim dB(A) Le,lim dB(A) Ld 43.2 dB(A) Le 43.2 dB(A)																								
HH102 top drive	Point	107.0	107.0		0	0	0.0	Ld	454.5	0.0	0.0	40.0	-64.1	-0.8	0.0	-2.1		0.0	0.0	0.0	0.0	0.0	40.0	
HH102 top drive	Point	107.0	107.0		0	0	0.0	Le	454.5	0.0	0.0	40.0	-64.1	-0.8	0.0	-2.1		0.0	0.0	0.0	0.0	0.0	40.0	
HH102 top drive	Point	107.0	107.0		0	0	0.0	Ln	454.5	0.0	0.0	40.0	-64.1	-0.8	0.0	-2.1		0.0	0.0	0.0	0.0	0.0	40.0	
HH 102 rig engine	Line	111.0	101.4	9.2	0	0	0.0	Ld	451.2	0.0	0.0	39.2	-64.1	-1.9	-3.9	-1.9		0.0	0.0	0.0	0.0	0.0	39.2	
HH 102 rig engine	Line	111.0	101.4	9.2	0	0	0.0	Le	451.2	0.0	0.0	39.2	-64.1	-1.9	-3.9	-1.9		0.0	0.0	0.0	0.0	0.0	39.2	
HH 102 rig engine	Line	111.0	101.4	9.2	0	0	0.0	Ln	451.2	0.0	0.0	39.2	-64.1	-1.9	-3.9	-1.9		0.0	0.0	0.0	0.0	0.0	39.2	
Motor on Sifter at Settling tank	Point	101.0	101.0		0	0	0.0	Ld	429.2	0.0	0.0	31.0	-63.6	-0.5	-4.3	-1.6		0.0	0.0	0.0	0.0	0.0	31.0	
Motor on Sifter at Settling tank	Point	101.0	101.0		0	0	0.0	Le	429.2	0.0	0.0	31.0	-63.6	-0.5	-4.3	-1.6		0.0	0.0	0.0	0.0	0.0	31.0	
Motor on Sifter at Settling tank	Point	101.0	101.0		0	0	0.0	Ln	429.2	0.0	0.0	31.0	-63.6	-0.5	-4.3	-1.6		0.0	0.0	0.0	0.0	0.0	31.0	
Sifter at settlement tanks	Point	99.0	99.0		0	0	0.0	Ld	430.5	0.0	0.0	29.4	-63.7	-0.8	-3.7	-1.3		0.0	0.0	0.0	0.0	0.0	29.4	
Sifter at settlement tanks	Point	99.0	99.0		0	0	0.0	Le	430.5	0.0	0.0	29.4	-63.7	-0.8	-3.7	-1.3		0.0	0.0	0.0	0.0	0.0	29.4	
Sifter at settlement tanks	Point	99.0	99.0		0	0	0.0	Ln	430.5	0.0	0.0	29.4	-63.7	-0.8	-3.7	-1.3		0.0	0.0	0.0	0.0	0.0	29.4	
compressor	Area	85.1	77.3	6.0	0	0	3.0	Ld	452.8	0.0	0.0	8.5	-64.1	-5.2	-9.8	-0.5		0.0	0.0	0.0	0.0	0.0	8.5	
compressor	Area	85.1	77.3	6.0	0	0	3.0	Le	452.8	0.0	0.0	8.5	-64.1	-5.2	-9.8	-0.5		0.0	0.0	0.0	0.0	0.0	8.5	
compressor	Area	85.1	77.3	6.0	0	0	3.0	Ln	452.8	0.0	0.0	8.5	-64.1	-5.2	-9.8	-0.5		0.0	0.0	0.0	0.0	0.0	8.5	
generator	Area	85.1	77.3	6.0	0	0	3.0	Ld	451.7	0.0	0.0	8.5	-64.1	-5.2	-9.7	-0.5		0.0	0.0	0.0	0.0	0.0	8.5	
generator	Area	85.1	77.3	6.0	0	0	3.0	Le	451.7	0.0	0.0	8.5	-64.1	-5.2	-9.7	-0.5		0.0	0.0	0.0	0.0	0.0	8.5	
generator	Area	85.1	77.3	6.0	0	0	3.0	Ln	451.7	0.0	0.0	8.5	-64.1	-5.2	-9.7	-0.5		0.0	0.0	0.0	0.0	0.0	8.5	
mud pump east vent	Area	103.4	95.6	6.0	0	0	3.0	Ld	450.3	0.0	0.0	25.6	-64.1	-3.8	-12.3	-0.7		0.0	0.0	0.0	0.0	0.0	25.6	
mud pump east vent	Area	103.4	95.6	6.0	0	0	3.0	Le	450.3	0.0	0.0	25.6	-64.1	-3.8	-12.3	-0.7		0.0	0.0	0.0	0.0	0.0	25.6	
mud pump east vent	Area	103.4	95.6	6.0	0	0	3.0	Ln	450.3	0.0	0.0	25.6	-64.1	-3.8	-12.3	-0.7		0.0	0.0	0.0	0.0	0.0	25.6	

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AS 0395 Borrás Road

Mean propagation Leq - Scenario 4

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Source	SrcType	Lw	Lw'	I or S	KI	KT	Ko	time slice	s	Li	R'w	Ls	Adiv	Agr	Abar	Aatm	Amis	ADI	dLref	dLw	ZR	Cmet	Lr
		dB(A)	dB(A)	m,m²	dB	dB	dB		m	dB(A)	dB	dB(A)	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB(A)

Name	Daisy Bank	Floor	F 1	Ld,lim	dB(A)	Le,lim	dB(A)	Ld 43.8	dB(A)	Le 43.8	dB(A)													
HH102 top drive	Point	107.0	107.0		0	0	0.0	Ld	454.6	0.0	0.0	40.9	-64.1	-0.1	0.0	-1.8		0.0	0.0	0.0	0.0	0.0	40.9	
HH102 top drive	Point	107.0	107.0		0	0	0.0	Le	454.6	0.0	0.0	40.9	-64.1	-0.1	0.0	-1.8		0.0	0.0	0.0	0.0	0.0	40.9	
HH102 top drive	Point	107.0	107.0		0	0	0.0	Ln	454.6	0.0	0.0	40.9	-64.1	-0.1	0.0	-1.8		0.0	0.0	0.0	0.0	0.0	40.9	
HH 102 rig engine	Line	111.0	101.4	9.2	0	0	0.0	Ld	451.3	0.0	0.0	39.6	-64.1	-1.6	-3.9	-1.8		0.0	0.0	0.0	0.0	0.0	39.6	
HH 102 rig engine	Line	111.0	101.4	9.2	0	0	0.0	Le	451.3	0.0	0.0	39.6	-64.1	-1.6	-3.9	-1.8		0.0	0.0	0.0	0.0	0.0	39.6	
HH 102 rig engine	Line	111.0	101.4	9.2	0	0	0.0	Ln	451.3	0.0	0.0	39.6	-64.1	-1.6	-3.9	-1.8		0.0	0.0	0.0	0.0	0.0	39.6	
Motor on Sifter at Settling tank	Point	101.0	101.0		0	0	0.0	Ld	429.3	0.0	0.0	31.0	-63.6	-0.2	-4.5	-1.6		0.0	0.0	0.0	0.0	0.0	31.0	
Motor on Sifter at Settling tank	Point	101.0	101.0		0	0	0.0	Le	429.3	0.0	0.0	31.0	-63.6	-0.2	-4.5	-1.6		0.0	0.0	0.0	0.0	0.0	31.0	
Motor on Sifter at Settling tank	Point	101.0	101.0		0	0	0.0	Ln	429.3	0.0	0.0	31.0	-63.6	-0.2	-4.5	-1.6		0.0	0.0	0.0	0.0	0.0	31.0	
Sifter at settlement tanks	Point	99.0	99.0		0	0	0.0	Ld	430.6	0.0	0.0	29.6	-63.7	-0.5	-3.9	-1.3		0.0	0.0	0.0	0.0	0.0	29.6	
Sifter at settlement tanks	Point	99.0	99.0		0	0	0.0	Le	430.6	0.0	0.0	29.6	-63.7	-0.5	-3.9	-1.3		0.0	0.0	0.0	0.0	0.0	29.6	
Sifter at settlement tanks	Point	99.0	99.0		0	0	0.0	Ln	430.6	0.0	0.0	29.6	-63.7	-0.5	-3.9	-1.3		0.0	0.0	0.0	0.0	0.0	29.6	
compressor	Area	85.1	77.3	6.0	0	0	3.0	Ld	452.9	0.0	0.0	11.5	-64.1	-4.2	-7.7	-0.6		0.0	0.0	0.0	0.0	0.0	11.5	
compressor	Area	85.1	77.3	6.0	0	0	3.0	Le	452.9	0.0	0.0	11.5	-64.1	-4.2	-7.7	-0.6		0.0	0.0	0.0	0.0	0.0	11.5	
compressor	Area	85.1	77.3	6.0	0	0	3.0	Ln	452.9	0.0	0.0	11.5	-64.1	-4.2	-7.7	-0.6		0.0	0.0	0.0	0.0	0.0	11.5	
generator	Area	85.1	77.3	6.0	0	0	3.0	Ld	451.8	0.0	0.0	11.5	-64.1	-4.2	-7.7	-0.6		0.0	0.0	0.0	0.0	0.0	11.5	
generator	Area	85.1	77.3	6.0	0	0	3.0	Le	451.8	0.0	0.0	11.5	-64.1	-4.2	-7.7	-0.6		0.0	0.0	0.0	0.0	0.0	11.5	
generator	Area	85.1	77.3	6.0	0	0	3.0	Ln	451.8	0.0	0.0	11.5	-64.1	-4.2	-7.7	-0.6		0.0	0.0	0.0	0.0	0.0	11.5	
mud pump east vent	Area	103.4	95.6	6.0	0	0	3.0	Ld	450.4	0.0	0.0	26.1	-64.1	-3.0	-12.5	-0.7		0.0	0.0	0.0	0.0	0.0	26.1	
mud pump east vent	Area	103.4	95.6	6.0	0	0	3.0	Le	450.4	0.0	0.0	26.1	-64.1	-3.0	-12.5	-0.7		0.0	0.0	0.0	0.0	0.0	26.1	
mud pump east vent	Area	103.4	95.6	6.0	0	0	3.0	Ln	450.4	0.0	0.0	26.1	-64.1	-3.0	-12.5	-0.7		0.0	0.0	0.0	0.0	0.0	26.1	

Name	Fairholme	Floor	GF	Ld,lim	dB(A)	Le,lim	dB(A)	Ld 34.8	dB(A)	Le 34.8	dB(A)													
HH102 top drive	Point	107.0	107.0		0	0	0.0	Ld	814.2	0.0	0.0	29.6	-69.2	-1.9	-3.3	-3.0		0.0	0.0	0.0	0.0	0.0	29.6	
HH102 top drive	Point	107.0	107.0		0	0	0.0	Le	814.2	0.0	0.0	29.6	-69.2	-1.9	-3.3	-3.0		0.0	0.0	0.0	0.0	0.0	29.6	
HH102 top drive	Point	107.0	107.0		0	0	0.0	Ln	814.2	0.0	0.0	29.6	-69.2	-1.9	-3.3	-3.0		0.0	0.0	0.0	0.0	0.0	29.6	
HH 102 rig engine	Line	111.0	101.4	9.2	0	0	0.0	Ld	808.9	0.0	0.0	32.0	-69.2	-2.7	-3.7	-3.4		0.0	0.0	0.0	0.0	0.0	32.0	
HH 102 rig engine	Line	111.0	101.4	9.2	0	0	0.0	Le	808.9	0.0	0.0	32.0	-69.2	-2.7	-3.7	-3.4		0.0	0.0	0.0	0.0	0.0	32.0	
HH 102 rig engine	Line	111.0	101.4	9.2	0	0	0.0	Ln	808.9	0.0	0.0	32.0	-69.2	-2.7	-3.7	-3.4		0.0	0.0	0.0	0.0	0.0	32.0	
Motor on Sifter at Settling tank	Point	101.0	101.0		0	0	0.0	Ld	787.3	0.0	0.0	23.6	-68.9	-1.7	-4.0	-2.7		0.0	0.0	0.0	0.0	0.0	23.6	
Motor on Sifter at Settling tank	Point	101.0	101.0		0	0	0.0	Le	787.3	0.0	0.0	23.6	-68.9	-1.7	-4.0	-2.7		0.0	0.0	0.0	0.0	0.0	23.6	
Motor on Sifter at Settling tank	Point	101.0	101.0		0	0	0.0	Ln	787.3	0.0	0.0	23.6	-68.9	-1.7	-4.0	-2.7		0.0	0.0	0.0	0.0	0.0	23.6	
Sifter at settlement tanks	Point	99.0	99.0		0	0	0.0	Ld	789.4	0.0	0.0	22.6	-68.9	-1.7	-3.7	-2.1		0.0	0.0	0.0	0.0	0.0	22.6	

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AS 0395 Borrás Road

Mean propagation Leq - Scenario 4

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Source	SrcType	Lw	Lw'	I or S	KI	KT	Ko	time slice	s	Li	R'w	Ls	Adiv	Agr	Abar	Aatm	Amis	ADI	dLref	dLw	ZR	Cmet	Lr	
		dB(A)	dB(A)	m,m²	dB	dB	dB		m	dB(A)	dB	dB(A)	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB(A)	
Sifter at settlement tanks	Point	99.0	99.0		0	0	0.0	Le	789.4	0.0	0.0	22.6	-68.9	-1.7	-3.7	-2.1		0.0	0.0	0.0	0.0	0.0	22.6	
Sifter at settlement tanks	Point	99.0	99.0		0	0	0.0	Ln	789.4	0.0	0.0	22.6	-68.9	-1.7	-3.7	-2.1		0.0	0.0	0.0	0.0	0.0	22.6	
compressor	Area	85.1	77.3	6.0	0	0	3.0	Ld	805.7	0.0	0.0	2.5	-69.1	-7.7	-7.9	-0.9		0.0	0.0	0.0	0.0	0.0	2.5	
compressor	Area	85.1	77.3	6.0	0	0	3.0	Le	805.7	0.0	0.0	2.5	-69.1	-7.7	-7.9	-0.9		0.0	0.0	0.0	0.0	0.0	2.5	
compressor	Area	85.1	77.3	6.0	0	0	3.0	Ln	805.7	0.0	0.0	2.5	-69.1	-7.7	-7.9	-0.9		0.0	0.0	0.0	0.0	0.0	2.5	
generator	Area	85.1	77.3	6.0	0	0	3.0	Ld	803.8	0.0	0.0	2.5	-69.1	-7.7	-7.9	-0.9		0.0	0.0	0.0	0.0	0.0	2.5	
generator	Area	85.1	77.3	6.0	0	0	3.0	Le	803.8	0.0	0.0	2.5	-69.1	-7.7	-7.9	-0.9		0.0	0.0	0.0	0.0	0.0	2.5	
generator	Area	85.1	77.3	6.0	0	0	3.0	Ln	803.8	0.0	0.0	2.5	-69.1	-7.7	-7.9	-0.9		0.0	0.0	0.0	0.0	0.0	2.5	
mud pump east vent	Area	103.4	95.6	6.0	0	0	3.0	Ld	800.6	0.0	0.0	19.5	-69.1	-4.8	-11.9	-1.2		0.0	0.0	0.0	0.0	0.0	19.5	
mud pump east vent	Area	103.4	95.6	6.0	0	0	3.0	Le	800.6	0.0	0.0	19.5	-69.1	-4.8	-11.9	-1.2		0.0	0.0	0.0	0.0	0.0	19.5	
mud pump east vent	Area	103.4	95.6	6.0	0	0	3.0	Ln	800.6	0.0	0.0	19.5	-69.1	-4.8	-11.9	-1.2		0.0	0.0	0.0	0.0	0.0	19.5	
Name Fairholme Floor F 1 Ld,lim dB(A) Le,lim dB(A) Ld 36.2 dB(A) Le 36.2 dB(A)																								
HH102 top drive	Point	107.0	107.0		0	0	0.0	Ld	814.3	0.0	0.0	31.3	-69.2	-0.2	-2.9	-3.4		0.0	0.0	0.0	0.0	0.0	31.3	
HH102 top drive	Point	107.0	107.0		0	0	0.0	Le	814.3	0.0	0.0	31.3	-69.2	-0.2	-2.9	-3.4		0.0	0.0	0.0	0.0	0.0	31.3	
HH102 top drive	Point	107.0	107.0		0	0	0.0	Ln	814.3	0.0	0.0	31.3	-69.2	-0.2	-2.9	-3.4		0.0	0.0	0.0	0.0	0.0	31.3	
HH 102 rig engine	Line	111.0	101.4	9.2	0	0	0.0	Ld	809.1	0.0	0.0	33.4	-69.2	-1.7	-3.6	-3.1		0.0	0.0	0.0	0.0	0.0	33.4	
HH 102 rig engine	Line	111.0	101.4	9.2	0	0	0.0	Le	809.1	0.0	0.0	33.4	-69.2	-1.7	-3.6	-3.1		0.0	0.0	0.0	0.0	0.0	33.4	
HH 102 rig engine	Line	111.0	101.4	9.2	0	0	0.0	Ln	809.1	0.0	0.0	33.4	-69.2	-1.7	-3.6	-3.1		0.0	0.0	0.0	0.0	0.0	33.4	
Motor on Sifter at Settling tank	Point	101.0	101.0		0	0	0.0	Ld	787.5	0.0	0.0	24.6	-68.9	-0.2	-4.5	-2.7		0.0	0.0	0.0	0.0	0.0	24.6	
Motor on Sifter at Settling tank	Point	101.0	101.0		0	0	0.0	Le	787.5	0.0	0.0	24.6	-68.9	-0.2	-4.5	-2.7		0.0	0.0	0.0	0.0	0.0	24.6	
Motor on Sifter at Settling tank	Point	101.0	101.0		0	0	0.0	Ln	787.5	0.0	0.0	24.6	-68.9	-0.2	-4.5	-2.7		0.0	0.0	0.0	0.0	0.0	24.6	
Sifter at settlement tanks	Point	99.0	99.0		0	0	0.0	Ld	789.5	0.0	0.0	23.5	-68.9	-0.4	-4.1	-2.0		0.0	0.0	0.0	0.0	0.0	23.5	
Sifter at settlement tanks	Point	99.0	99.0		0	0	0.0	Le	789.5	0.0	0.0	23.5	-68.9	-0.4	-4.1	-2.0		0.0	0.0	0.0	0.0	0.0	23.5	
Sifter at settlement tanks	Point	99.0	99.0		0	0	0.0	Ln	789.5	0.0	0.0	23.5	-68.9	-0.4	-4.1	-2.0		0.0	0.0	0.0	0.0	0.0	23.5	
compressor	Area	85.1	77.3	6.0	0	0	3.0	Ld	805.8	0.0	0.0	6.6	-69.1	-4.4	-7.1	-1.0		0.0	0.0	0.0	0.0	0.0	6.6	
compressor	Area	85.1	77.3	6.0	0	0	3.0	Le	805.8	0.0	0.0	6.6	-69.1	-4.4	-7.1	-1.0		0.0	0.0	0.0	0.0	0.0	6.6	
compressor	Area	85.1	77.3	6.0	0	0	3.0	Ln	805.8	0.0	0.0	6.6	-69.1	-4.4	-7.1	-1.0		0.0	0.0	0.0	0.0	0.0	6.6	
generator	Area	85.1	77.3	6.0	0	0	3.0	Ld	803.9	0.0	0.0	6.6	-69.1	-4.4	-7.1	-1.0		0.0	0.0	0.0	0.0	0.0	6.6	
generator	Area	85.1	77.3	6.0	0	0	3.0	Le	803.9	0.0	0.0	6.6	-69.1	-4.4	-7.1	-1.0		0.0	0.0	0.0	0.0	0.0	6.6	
generator	Area	85.1	77.3	6.0	0	0	3.0	Ln	803.9	0.0	0.0	6.6	-69.1	-4.4	-7.1	-1.0		0.0	0.0	0.0	0.0	0.0	6.6	
mud pump east vent	Area	103.4	95.6	6.0	0	0	3.0	Ld	800.7	0.0	0.0	21.5	-69.1	-3.2	-11.5	-1.1		0.0	0.0	0.0	0.0	0.0	21.5	
mud pump east vent	Area	103.4	95.6	6.0	0	0	3.0	Le	800.7	0.0	0.0	21.5	-69.1	-3.2	-11.5	-1.1		0.0	0.0	0.0	0.0	0.0	21.5	
mud pump east vent	Area	103.4	95.6	6.0	0	0	3.0	Ln	800.7	0.0	0.0	21.5	-69.1	-3.2	-11.5	-1.1		0.0	0.0	0.0	0.0	0.0	21.5	

Airshed Ltd East Linton East Lothian EH40 3DB UNITED KINGDOM

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AS 0395 Borrás Road

Mean propagation Leq - Scenario 4

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Source	SrcType	Lw	Lw'	I or S	KI	KT	Ko	time slice	s	Li	R'w	Ls	Adiv	Agr	Abar	Aatm	Amis	ADI	dLref	dLw	ZR	Cmet	Lr
		dB(A)	dB(A)	m,m²	dB	dB	dB		m	dB(A)	dB	dB(A)	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB(A)

Name	Five Oaks	Floor	GF	Ld,lim	dB(A)	Le,lim	dB(A)	Ld 36.8	dB(A)	Le 36.8	dB(A)												
HH102 top drive	Point	107.0	107.0		0	0	0.0	Ld	778.1	0.0	0.0	31.1	-68.8	-0.9	-3.0	-3.2		0.0	0.0	0.0	0.0	0.0	31.1
HH102 top drive	Point	107.0	107.0		0	0	0.0	Le	778.1	0.0	0.0	31.1	-68.8	-0.9	-3.0	-3.2		0.0	0.0	0.0	0.0	0.0	31.1
HH102 top drive	Point	107.0	107.0		0	0	0.0	Ln	778.1	0.0	0.0	31.1	-68.8	-0.9	-3.0	-3.2		0.0	0.0	0.0	0.0	0.0	31.1
HH 102 rig engine	Line	111.0	101.4	9.2	0	0	0.0	Ld	773.8	0.0	0.0	33.7	-68.8	-2.1	-3.3	-3.1		0.0	0.1	0.0	0.0	0.0	33.7
HH 102 rig engine	Line	111.0	101.4	9.2	0	0	0.0	Le	773.8	0.0	0.0	33.7	-68.8	-2.1	-3.3	-3.1		0.0	0.1	0.0	0.0	0.0	33.7
HH 102 rig engine	Line	111.0	101.4	9.2	0	0	0.0	Ln	773.8	0.0	0.0	33.7	-68.8	-2.1	-3.3	-3.1		0.0	0.1	0.0	0.0	0.0	33.7
Motor on Sifter at Settling tank	Point	101.0	101.0		0	0	0.0	Ld	774.2	0.0	0.0	24.8	-68.8	-0.6	-4.2	-2.7		0.0	0.0	0.0	0.0	0.0	24.8
Motor on Sifter at Settling tank	Point	101.0	101.0		0	0	0.0	Le	774.2	0.0	0.0	24.8	-68.8	-0.6	-4.2	-2.7		0.0	0.0	0.0	0.0	0.0	24.8
Motor on Sifter at Settling tank	Point	101.0	101.0		0	0	0.0	Ln	774.2	0.0	0.0	24.8	-68.8	-0.6	-4.2	-2.7		0.0	0.0	0.0	0.0	0.0	24.8
Sifter at settlement tanks	Point	99.0	99.0		0	0	0.0	Ld	775.8	0.0	0.0	23.6	-68.8	-0.9	-3.7	-2.0		0.0	0.0	0.0	0.0	0.0	23.6
Sifter at settlement tanks	Point	99.0	99.0		0	0	0.0	Le	775.8	0.0	0.0	23.6	-68.8	-0.9	-3.7	-2.0		0.0	0.0	0.0	0.0	0.0	23.6
Sifter at settlement tanks	Point	99.0	99.0		0	0	0.0	Ln	775.8	0.0	0.0	23.6	-68.8	-0.9	-3.7	-2.0		0.0	0.0	0.0	0.0	0.0	23.6
compressor	Area	85.1	77.3	6.0	0	0	3.0	Ld	763.6	0.0	0.0	10.6	-68.6	-6.1	-1.4	-1.3		0.0	0.0	0.0	0.0	0.0	10.6
compressor	Area	85.1	77.3	6.0	0	0	3.0	Le	763.6	0.0	0.0	10.6	-68.6	-6.1	-1.4	-1.3		0.0	0.0	0.0	0.0	0.0	10.6
compressor	Area	85.1	77.3	6.0	0	0	3.0	Ln	763.6	0.0	0.0	10.6	-68.6	-6.1	-1.4	-1.3		0.0	0.0	0.0	0.0	0.0	10.6
generator	Area	85.1	77.3	6.0	0	0	3.0	Ld	761.9	0.0	0.0	10.6	-68.6	-6.1	-1.4	-1.3		0.0	0.0	0.0	0.0	0.0	10.6
generator	Area	85.1	77.3	6.0	0	0	3.0	Le	761.9	0.0	0.0	10.6	-68.6	-6.1	-1.4	-1.3		0.0	0.0	0.0	0.0	0.0	10.6
generator	Area	85.1	77.3	6.0	0	0	3.0	Ln	761.9	0.0	0.0	10.6	-68.6	-6.1	-1.4	-1.3		0.0	0.0	0.0	0.0	0.0	10.6
mud pump east vent	Area	103.4	95.6	6.0	0	0	3.0	Ld	758.3	0.0	0.0	27.9	-68.6	-3.9	-3.2	-2.8		0.0	0.0	0.0	0.0	0.0	27.9
mud pump east vent	Area	103.4	95.6	6.0	0	0	3.0	Le	758.3	0.0	0.0	27.9	-68.6	-3.9	-3.2	-2.8		0.0	0.0	0.0	0.0	0.0	27.9
mud pump east vent	Area	103.4	95.6	6.0	0	0	3.0	Ln	758.3	0.0	0.0	27.9	-68.6	-3.9	-3.2	-2.8		0.0	0.0	0.0	0.0	0.0	27.9

Name	Five Oaks	Floor	F 1	Ld,lim	dB(A)	Le,lim	dB(A)	Ld 39.3	dB(A)	Le 39.3	dB(A)												
HH102 top drive	Point	107.0	107.0		0	0	0.0	Ld	778.2	0.0	0.0	34.9	-68.8	-0.1	-0.2	-3.0		0.0	0.0	0.0	0.0	0.0	34.9
HH102 top drive	Point	107.0	107.0		0	0	0.0	Le	778.2	0.0	0.0	34.9	-68.8	-0.1	-0.2	-3.0		0.0	0.0	0.0	0.0	0.0	34.9
HH102 top drive	Point	107.0	107.0		0	0	0.0	Ln	778.2	0.0	0.0	34.9	-68.8	-0.1	-0.2	-3.0		0.0	0.0	0.0	0.0	0.0	34.9
HH 102 rig engine	Line	111.0	101.4	9.2	0	0	0.0	Ld	773.8	0.0	0.0	35.4	-68.8	-1.8	-1.7	-3.4		0.0	0.1	0.0	0.0	0.0	35.4
HH 102 rig engine	Line	111.0	101.4	9.2	0	0	0.0	Le	773.8	0.0	0.0	35.4	-68.8	-1.8	-1.7	-3.4		0.0	0.1	0.0	0.0	0.0	35.4
HH 102 rig engine	Line	111.0	101.4	9.2	0	0	0.0	Ln	773.8	0.0	0.0	35.4	-68.8	-1.8	-1.7	-3.4		0.0	0.1	0.0	0.0	0.0	35.4
Motor on Sifter at Settling tank	Point	101.0	101.0		0	0	0.0	Ld	774.3	0.0	0.0	25.0	-68.8	-0.2	-4.3	-2.6		0.0	0.0	0.0	0.0	0.0	25.0
Motor on Sifter at Settling tank	Point	101.0	101.0		0	0	0.0	Le	774.3	0.0	0.0	25.0	-68.8	-0.2	-4.3	-2.6		0.0	0.0	0.0	0.0	0.0	25.0
Motor on Sifter at Settling tank	Point	101.0	101.0		0	0	0.0	Ln	774.3	0.0	0.0	25.0	-68.8	-0.2	-4.3	-2.6		0.0	0.0	0.0	0.0	0.0	25.0
Sifter at settlement tanks	Point	99.0	99.0		0	0	0.0	Ld	775.9	0.0	0.0	24.4	-68.8	-0.4	-3.6	-1.8		0.0	0.0	0.0	0.0	0.0	24.4

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Mean propagation Leq - Scenario 4

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Source	SrcType	Lw	Lw'	I or S	KI	KT	Ko	time slice	s	Li	R'w	Ls	Adiv	Agr	Abar	Aatm	Amis	ADI	dLref	dLw	ZR	Cmet	Lr	
		dB(A)	dB(A)	m,m²	dB	dB	dB		m	dB(A)	dB	dB(A)	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB(A)	
Sifter at settlement tanks	Point	99.0	99.0		0	0	0.0	Le	775.9	0.0	0.0	24.4	-68.8	-0.4	-3.6	-1.8		0.0	0.0	0.0	0.0	0.0	24.4	
Sifter at settlement tanks	Point	99.0	99.0		0	0	0.0	Ln	775.9	0.0	0.0	24.4	-68.8	-0.4	-3.6	-1.8		0.0	0.0	0.0	0.0	0.0	24.4	
compressor	Area	85.1	77.3	6.0	0	0	3.0	Ld	763.6	0.0	0.0	12.7	-68.7	-4.7	-0.5	-1.5		0.0	0.0	0.0	0.0	0.0	12.7	
compressor	Area	85.1	77.3	6.0	0	0	3.0	Le	763.6	0.0	0.0	12.7	-68.7	-4.7	-0.5	-1.5		0.0	0.0	0.0	0.0	0.0	12.7	
compressor	Area	85.1	77.3	6.0	0	0	3.0	Ln	763.6	0.0	0.0	12.7	-68.7	-4.7	-0.5	-1.5		0.0	0.0	0.0	0.0	0.0	12.7	
generator	Area	85.1	77.3	6.0	0	0	3.0	Ld	762.0	0.0	0.0	12.8	-68.6	-4.7	-0.5	-1.5		0.0	0.0	0.0	0.0	0.0	12.8	
generator	Area	85.1	77.3	6.0	0	0	3.0	Le	762.0	0.0	0.0	12.8	-68.6	-4.7	-0.5	-1.5		0.0	0.0	0.0	0.0	0.0	12.8	
generator	Area	85.1	77.3	6.0	0	0	3.0	Ln	762.0	0.0	0.0	12.8	-68.6	-4.7	-0.5	-1.5		0.0	0.0	0.0	0.0	0.0	12.8	
mud pump east vent	Area	103.4	95.6	6.0	0	0	3.0	Ld	758.4	0.0	0.0	31.1	-68.6	-3.2	-0.3	-3.3		0.0	0.0	0.0	0.0	0.0	31.1	
mud pump east vent	Area	103.4	95.6	6.0	0	0	3.0	Le	758.4	0.0	0.0	31.1	-68.6	-3.2	-0.3	-3.3		0.0	0.0	0.0	0.0	0.0	31.1	
mud pump east vent	Area	103.4	95.6	6.0	0	0	3.0	Ln	758.4	0.0	0.0	31.1	-68.6	-3.2	-0.3	-3.3		0.0	0.0	0.0	0.0	0.0	31.1	
Name	Hinte End	Floor	GF	Ld,lim	dB(A)	Le,lim	dB(A)	Ld 38.2	dB(A)	Le 38.2	dB(A)													
HH102 top drive	Point	107.0	107.0		0	0	0.0	Ld	706.5	0.0	0.0	34.7	-68.0	-1.2	0.0	-3.1		0.0	0.0	0.0	0.0	0.0	34.7	
HH102 top drive	Point	107.0	107.0		0	0	0.0	Le	706.5	0.0	0.0	34.7	-68.0	-1.2	0.0	-3.1		0.0	0.0	0.0	0.0	0.0	34.7	
HH102 top drive	Point	107.0	107.0		0	0	0.0	Ln	706.5	0.0	0.0	34.7	-68.0	-1.2	0.0	-3.1		0.0	0.0	0.0	0.0	0.0	34.7	
HH 102 rig engine	Line	111.0	101.4	9.2	0	0	0.0	Ld	701.6	0.0	0.0	34.4	-67.9	-2.3	-3.4	-2.9		0.0	0.0	0.0	0.0	0.0	34.4	
HH 102 rig engine	Line	111.0	101.4	9.2	0	0	0.0	Le	701.6	0.0	0.0	34.4	-67.9	-2.3	-3.4	-2.9		0.0	0.0	0.0	0.0	0.0	34.4	
HH 102 rig engine	Line	111.0	101.4	9.2	0	0	0.0	Ln	701.6	0.0	0.0	34.4	-67.9	-2.3	-3.4	-2.9		0.0	0.0	0.0	0.0	0.0	34.4	
Motor on Sifter at Settling tank	Point	101.0	101.0		0	0	0.0	Ld	679.5	0.0	0.0	26.2	-67.6	-0.9	-3.9	-2.4		0.0	0.0	0.0	0.0	0.0	26.2	
Motor on Sifter at Settling tank	Point	101.0	101.0		0	0	0.0	Le	679.5	0.0	0.0	26.2	-67.6	-0.9	-3.9	-2.4		0.0	0.0	0.0	0.0	0.0	26.2	
Motor on Sifter at Settling tank	Point	101.0	101.0		0	0	0.0	Ln	679.5	0.0	0.0	26.2	-67.6	-0.9	-3.9	-2.4		0.0	0.0	0.0	0.0	0.0	26.2	
Sifter at settlement tanks	Point	99.0	99.0		0	0	0.0	Ld	681.5	0.0	0.0	24.7	-67.7	-1.2	-3.6	-1.9		0.0	0.0	0.0	0.0	0.0	24.7	
Sifter at settlement tanks	Point	99.0	99.0		0	0	0.0	Le	681.5	0.0	0.0	24.7	-67.7	-1.2	-3.6	-1.9		0.0	0.0	0.0	0.0	0.0	24.7	
Sifter at settlement tanks	Point	99.0	99.0		0	0	0.0	Ln	681.5	0.0	0.0	24.7	-67.7	-1.2	-3.6	-1.9		0.0	0.0	0.0	0.0	0.0	24.7	
compressor	Area	85.1	77.3	6.0	0	0	3.0	Ld	699.1	0.0	0.0	7.4	-67.9	-6.5	-5.5	-0.9		0.0	0.0	0.0	0.0	0.0	7.4	
compressor	Area	85.1	77.3	6.0	0	0	3.0	Le	699.1	0.0	0.0	7.4	-67.9	-6.5	-5.5	-0.9		0.0	0.0	0.0	0.0	0.0	7.4	
compressor	Area	85.1	77.3	6.0	0	0	3.0	Ln	699.1	0.0	0.0	7.4	-67.9	-6.5	-5.5	-0.9		0.0	0.0	0.0	0.0	0.0	7.4	
generator	Area	85.1	77.3	6.0	0	0	3.0	Ld	697.3	0.0	0.0	7.4	-67.9	-6.5	-5.5	-0.9		0.0	0.0	0.0	0.0	0.0	7.4	
generator	Area	85.1	77.3	6.0	0	0	3.0	Le	697.3	0.0	0.0	7.4	-67.9	-6.5	-5.5	-0.9		0.0	0.0	0.0	0.0	0.0	7.4	
generator	Area	85.1	77.3	6.0	0	0	3.0	Ln	697.3	0.0	0.0	7.4	-67.9	-6.5	-5.5	-0.9		0.0	0.0	0.0	0.0	0.0	7.4	
mud pump east vent	Area	103.4	95.6	6.0	0	0	3.0	Ld	694.4	0.0	0.0	22.0	-67.8	-4.2	-11.3	-1.0		0.0	0.0	0.0	0.0	0.0	22.0	
mud pump east vent	Area	103.4	95.6	6.0	0	0	3.0	Le	694.4	0.0	0.0	22.0	-67.8	-4.2	-11.3	-1.0		0.0	0.0	0.0	0.0	0.0	22.0	
mud pump east vent	Area	103.4	95.6	6.0	0	0	3.0	Ln	694.4	0.0	0.0	22.0	-67.8	-4.2	-11.3	-1.0		0.0	0.0	0.0	0.0	0.0	22.0	

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Mean propagation Leq - Scenario 4

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Source	SrcType	Lw	Lw'	I or S	KI	KT	Ko	time slice	s	Li	R'w	Ls	Adiv	Agr	Abar	Aatm	Amis	ADI	dLref	dLw	ZR	Cmet	Lr
		dB(A)	dB(A)	m,m²	dB	dB	dB		m	dB(A)	dB	dB(A)	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB(A)

Name	Hinter End	Floor	F 1	Ld,lim	dB(A)	Le,lim	dB(A)	Ld 39.3	dB(A)	Le 39.3	dB(A)													
HH102 top drive	Point			107.0	107.0		0	0	0.0	Ld	706.6	0.0	0.0	36.2	-68.0	-0.1	0.0	-2.7		0.0	0.0	0.0	0.0	36.2
HH102 top drive	Point			107.0	107.0		0	0	0.0	Le	706.6	0.0	0.0	36.2	-68.0	-0.1	0.0	-2.7		0.0	0.0	0.0	0.0	36.2
HH102 top drive	Point			107.0	107.0		0	0	0.0	Ln	706.6	0.0	0.0	36.2	-68.0	-0.1	0.0	-2.7		0.0	0.0	0.0	0.0	36.2
HH 102 rig engine	Line			111.0	101.4	9.2	0	0	0.0	Ld	701.7	0.0	0.0	35.0	-67.9	-1.7	-3.6	-2.8		0.0	0.0	0.0	0.0	35.0
HH 102 rig engine	Line			111.0	101.4	9.2	0	0	0.0	Le	701.7	0.0	0.0	35.0	-67.9	-1.7	-3.6	-2.8		0.0	0.0	0.0	0.0	35.0
HH 102 rig engine	Line			111.0	101.4	9.2	0	0	0.0	Ln	701.7	0.0	0.0	35.0	-67.9	-1.7	-3.6	-2.8		0.0	0.0	0.0	0.0	35.0
Motor on Sifter at Settling tank	Point			101.0	101.0		0	0	0.0	Ld	679.7	0.0	0.0	26.2	-67.6	-0.2	-4.5	-2.4		0.0	0.0	0.0	0.0	26.2
Motor on Sifter at Settling tank	Point			101.0	101.0		0	0	0.0	Le	679.7	0.0	0.0	26.2	-67.6	-0.2	-4.5	-2.4		0.0	0.0	0.0	0.0	26.2
Motor on Sifter at Settling tank	Point			101.0	101.0		0	0	0.0	Ln	679.7	0.0	0.0	26.2	-67.6	-0.2	-4.5	-2.4		0.0	0.0	0.0	0.0	26.2
Sifter at settlement tanks	Point			99.0	99.0		0	0	0.0	Ld	681.6	0.0	0.0	25.1	-67.7	-0.5	-4.0	-1.8		0.0	0.0	0.0	0.0	25.1
Sifter at settlement tanks	Point			99.0	99.0		0	0	0.0	Le	681.6	0.0	0.0	25.1	-67.7	-0.5	-4.0	-1.8		0.0	0.0	0.0	0.0	25.1
Sifter at settlement tanks	Point			99.0	99.0		0	0	0.0	Ln	681.6	0.0	0.0	25.1	-67.7	-0.5	-4.0	-1.8		0.0	0.0	0.0	0.0	25.1
compressor	Area			85.1	77.3	6.0	0	0	3.0	Ld	699.3	0.0	0.0	8.0	-67.9	-4.3	-7.1	-0.9		0.0	0.0	0.0	0.0	8.0
compressor	Area			85.1	77.3	6.0	0	0	3.0	Le	699.3	0.0	0.0	8.0	-67.9	-4.3	-7.1	-0.9		0.0	0.0	0.0	0.0	8.0
compressor	Area			85.1	77.3	6.0	0	0	3.0	Ln	699.3	0.0	0.0	8.0	-67.9	-4.3	-7.1	-0.9		0.0	0.0	0.0	0.0	8.0
generator	Area			85.1	77.3	6.0	0	0	3.0	Ld	697.5	0.0	0.0	7.9	-67.9	-4.3	-7.2	-0.9		0.0	0.0	0.0	0.0	7.9
generator	Area			85.1	77.3	6.0	0	0	3.0	Le	697.5	0.0	0.0	7.9	-67.9	-4.3	-7.2	-0.9		0.0	0.0	0.0	0.0	7.9
generator	Area			85.1	77.3	6.0	0	0	3.0	Ln	697.5	0.0	0.0	7.9	-67.9	-4.3	-7.2	-0.9		0.0	0.0	0.0	0.0	7.9
mud pump east vent	Area			103.4	95.6	6.0	0	0	3.0	Ld	694.6	0.0	0.0	25.3	-67.8	-3.2	-9.0	-1.1		0.0	0.0	0.0	0.0	25.3
mud pump east vent	Area			103.4	95.6	6.0	0	0	3.0	Le	694.6	0.0	0.0	25.3	-67.8	-3.2	-9.0	-1.1		0.0	0.0	0.0	0.0	25.3
mud pump east vent	Area			103.4	95.6	6.0	0	0	3.0	Ln	694.6	0.0	0.0	25.3	-67.8	-3.2	-9.0	-1.1		0.0	0.0	0.0	0.0	25.3

Name	Hoseley Bank Farm	Floor	GF	Ld,lim	dB(A)	Le,lim	dB(A)	Ld 32.7	dB(A)	Le 32.7	dB(A)													
HH102 top drive	Point			107.0	107.0		0	0	0.0	Ld	752.9	0.0	0.0	29.1	-68.5	-0.5	-6.9	-2.0		0.0	0.0	0.0	0.0	29.1
HH102 top drive	Point			107.0	107.0		0	0	0.0	Le	752.9	0.0	0.0	29.1	-68.5	-0.5	-6.9	-2.0		0.0	0.0	0.0	0.0	29.1
HH102 top drive	Point			107.0	107.0		0	0	0.0	Ln	752.9	0.0	0.0	29.1	-68.5	-0.5	-6.9	-2.0		0.0	0.0	0.0	0.0	29.1
HH 102 rig engine	Line			111.0	101.4	9.2	0	0	0.0	Ld	751.2	0.0	0.0	29.4	-68.5	-1.9	-9.4	-1.8		0.0	0.0	0.0	0.0	29.4
HH 102 rig engine	Line			111.0	101.4	9.2	0	0	0.0	Le	751.2	0.0	0.0	29.4	-68.5	-1.9	-9.4	-1.8		0.0	0.0	0.0	0.0	29.4
HH 102 rig engine	Line			111.0	101.4	9.2	0	0	0.0	Ln	751.2	0.0	0.0	29.4	-68.5	-1.9	-9.4	-1.8		0.0	0.0	0.0	0.0	29.4
Motor on Sifter at Settling tank	Point			101.0	101.0		0	0	0.0	Ld	731.4	0.0	0.0	15.9	-68.3	-0.3	-14.7	-1.7		0.0	0.0	0.0	0.0	15.9
Motor on Sifter at Settling tank	Point			101.0	101.0		0	0	0.0	Le	731.4	0.0	0.0	15.9	-68.3	-0.3	-14.7	-1.7		0.0	0.0	0.0	0.0	15.9
Motor on Sifter at Settling tank	Point			101.0	101.0		0	0	0.0	Ln	731.4	0.0	0.0	15.9	-68.3	-0.3	-14.7	-1.7		0.0	0.0	0.0	0.0	15.9
Sifter at settlement tanks	Point			99.0	99.0		0	0	0.0	Ld	732.1	0.0	0.0	19.3	-68.3	-0.6	-10.3	-0.6		0.0	0.0	0.0	0.0	19.3

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Mean propagation Leq - Scenario 4

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Source	SrcType	Lw	Lw'	I or S	KI	KT	Ko	time slice	s	Li	R'w	Ls	Adiv	Agr	Abar	Aatm	Amis	ADI	dLref	dLw	ZR	Cmet	Lr	
		dB(A)	dB(A)	m,m²	dB	dB	dB		m	dB(A)	dB	dB(A)	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB(A)	
Sifter at settlement tanks	Point	99.0	99.0		0	0	0.0	Le	732.1	0.0	0.0	19.3	-68.3	-0.6	-10.3	-0.6		0.0	0.0	0.0	0.0	0.0	19.3	
Sifter at settlement tanks	Point	99.0	99.0		0	0	0.0	Ln	732.1	0.0	0.0	19.3	-68.3	-0.6	-10.3	-0.6		0.0	0.0	0.0	0.0	0.0	19.3	
compressor	Area	85.1	77.3	6.0	0	0	3.0	Ld	755.6	0.0	0.0	0.7	-68.6	-4.7	-13.4	-0.8		0.0	0.0	0.0	0.0	0.0	0.7	
compressor	Area	85.1	77.3	6.0	0	0	3.0	Le	755.6	0.0	0.0	0.7	-68.6	-4.7	-13.4	-0.8		0.0	0.0	0.0	0.0	0.0	0.7	
compressor	Area	85.1	77.3	6.0	0	0	3.0	Ln	755.6	0.0	0.0	0.7	-68.6	-4.7	-13.4	-0.8		0.0	0.0	0.0	0.0	0.0	0.7	
generator	Area	85.1	77.3	6.0	0	0	3.0	Ld	755.0	0.0	0.0	0.7	-68.6	-4.7	-13.4	-0.8		0.0	0.0	0.0	0.0	0.0	0.7	
generator	Area	85.1	77.3	6.0	0	0	3.0	Le	755.0	0.0	0.0	0.7	-68.6	-4.7	-13.4	-0.8		0.0	0.0	0.0	0.0	0.0	0.7	
generator	Area	85.1	77.3	6.0	0	0	3.0	Ln	755.0	0.0	0.0	0.7	-68.6	-4.7	-13.4	-0.8		0.0	0.0	0.0	0.0	0.0	0.7	
mud pump east vent	Area	103.4	95.6	6.0	0	0	3.0	Ld	754.7	0.0	0.0	17.8	-68.5	-3.5	-15.5	-1.0		0.0	0.0	0.0	0.0	0.0	17.8	
mud pump east vent	Area	103.4	95.6	6.0	0	0	3.0	Le	754.7	0.0	0.0	17.8	-68.5	-3.5	-15.5	-1.0		0.0	0.0	0.0	0.0	0.0	17.8	
mud pump east vent	Area	103.4	95.6	6.0	0	0	3.0	Ln	754.7	0.0	0.0	17.8	-68.5	-3.5	-15.5	-1.0		0.0	0.0	0.0	0.0	0.0	17.8	
Name Hoseley Bank Farm Floor F 1 Ld,lim dB(A) Le,lim dB(A) Ld 35.6 dB(A) Le 35.6 dB(A)																								
HH102 top drive	Point	107.0	107.0		0	0	0.0	Ld	752.9	0.0	0.0	31.2	-68.5	0.0	-4.6	-2.6		0.0	0.0	0.0	0.0	0.0	31.2	
HH102 top drive	Point	107.0	107.0		0	0	0.0	Le	752.9	0.0	0.0	31.2	-68.5	0.0	-4.6	-2.6		0.0	0.0	0.0	0.0	0.0	31.2	
HH102 top drive	Point	107.0	107.0		0	0	0.0	Ln	752.9	0.0	0.0	31.2	-68.5	0.0	-4.6	-2.6		0.0	0.0	0.0	0.0	0.0	31.2	
HH 102 rig engine	Line	111.0	101.4	9.2	0	0	0.0	Ld	751.3	0.0	0.0	32.9	-68.5	-1.7	-5.5	-2.4		0.0	0.0	0.0	0.0	0.0	32.9	
HH 102 rig engine	Line	111.0	101.4	9.2	0	0	0.0	Le	751.3	0.0	0.0	32.9	-68.5	-1.7	-5.5	-2.4		0.0	0.0	0.0	0.0	0.0	32.9	
HH 102 rig engine	Line	111.0	101.4	9.2	0	0	0.0	Ln	751.3	0.0	0.0	32.9	-68.5	-1.7	-5.5	-2.4		0.0	0.0	0.0	0.0	0.0	32.9	
Motor on Sifter at Settling tank	Point	101.0	101.0		0	0	0.0	Ld	731.5	0.0	0.0	21.4	-68.3	-0.2	-9.1	-2.0		0.0	0.0	0.0	0.0	0.0	21.4	
Motor on Sifter at Settling tank	Point	101.0	101.0		0	0	0.0	Le	731.5	0.0	0.0	21.4	-68.3	-0.2	-9.1	-2.0		0.0	0.0	0.0	0.0	0.0	21.4	
Motor on Sifter at Settling tank	Point	101.0	101.0		0	0	0.0	Ln	731.5	0.0	0.0	21.4	-68.3	-0.2	-9.1	-2.0		0.0	0.0	0.0	0.0	0.0	21.4	
Sifter at settlement tanks	Point	99.0	99.0		0	0	0.0	Ld	732.2	0.0	0.0	22.5	-68.3	-0.4	-6.8	-1.0		0.0	0.0	0.0	0.0	0.0	22.5	
Sifter at settlement tanks	Point	99.0	99.0		0	0	0.0	Le	732.2	0.0	0.0	22.5	-68.3	-0.4	-6.8	-1.0		0.0	0.0	0.0	0.0	0.0	22.5	
Sifter at settlement tanks	Point	99.0	99.0		0	0	0.0	Ln	732.2	0.0	0.0	22.5	-68.3	-0.4	-6.8	-1.0		0.0	0.0	0.0	0.0	0.0	22.5	
compressor	Area	85.1	77.3	6.0	0	0	3.0	Ld	755.7	0.0	0.0	2.2	-68.6	-4.1	-12.4	-0.8		0.0	0.0	0.0	0.0	0.0	2.2	
compressor	Area	85.1	77.3	6.0	0	0	3.0	Le	755.7	0.0	0.0	2.2	-68.6	-4.1	-12.4	-0.8		0.0	0.0	0.0	0.0	0.0	2.2	
compressor	Area	85.1	77.3	6.0	0	0	3.0	Ln	755.7	0.0	0.0	2.2	-68.6	-4.1	-12.4	-0.8		0.0	0.0	0.0	0.0	0.0	2.2	
generator	Area	85.1	77.3	6.0	0	0	3.0	Ld	755.1	0.0	0.0	2.2	-68.6	-4.1	-12.4	-0.8		0.0	0.0	0.0	0.0	0.0	2.2	
generator	Area	85.1	77.3	6.0	0	0	3.0	Le	755.1	0.0	0.0	2.2	-68.6	-4.1	-12.4	-0.8		0.0	0.0	0.0	0.0	0.0	2.2	
generator	Area	85.1	77.3	6.0	0	0	3.0	Ln	755.1	0.0	0.0	2.2	-68.6	-4.1	-12.4	-0.8		0.0	0.0	0.0	0.0	0.0	2.2	
mud pump east vent	Area	103.4	95.6	6.0	0	0	3.0	Ld	754.8	0.0	0.0	19.4	-68.5	-3.0	-14.4	-1.0		0.0	0.0	0.0	0.0	0.0	19.4	
mud pump east vent	Area	103.4	95.6	6.0	0	0	3.0	Le	754.8	0.0	0.0	19.4	-68.5	-3.0	-14.4	-1.0		0.0	0.0	0.0	0.0	0.0	19.4	
mud pump east vent	Area	103.4	95.6	6.0	0	0	3.0	Ln	754.8	0.0	0.0	19.4	-68.5	-3.0	-14.4	-1.0		0.0	0.0	0.0	0.0	0.0	19.4	

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Mean propagation Leq - Scenario 4

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Source	SrcType	Lw	Lw'	I or S	KI	KT	Ko	time slice	s	Li	R'w	Ls	Adiv	Agr	Abar	Aatm	Amis	ADI	dLref	dLw	ZR	Cmet	Lr
		dB(A)	dB(A)	m,m ²	dB	dB	dB		m	dB(A)	dB	dB(A)	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB(A)

Name	Long Byre	Floor	GF	Ld,lim	dB(A)	Le,lim	dB(A)	Ld 38.0	dB(A)	Le 38.0	dB(A)													
HH102 top drive	Point			107.0	107.0		0	0	0.0	Ld	718.0	0.0	0.0	34.5	-68.1	-1.1	-0.1	-3.2	0.0	0.0	0.0	0.0	0.0	34.5
HH102 top drive	Point			107.0	107.0		0	0	0.0	Le	718.0	0.0	0.0	34.5	-68.1	-1.1	-0.1	-3.2	0.0	0.0	0.0	0.0	0.0	34.5
HH102 top drive	Point			107.0	107.0		0	0	0.0	Ln	718.0	0.0	0.0	34.5	-68.1	-1.1	-0.1	-3.2	0.0	0.0	0.0	0.0	0.0	34.5
HH 102 rig engine	Line			111.0	101.4	9.2	0	0	0.0	Ld	713.1	0.0	0.0	34.2	-68.1	-2.2	-3.5	-3.0	0.0	0.0	0.0	0.0	0.0	34.2
HH 102 rig engine	Line			111.0	101.4	9.2	0	0	0.0	Le	713.1	0.0	0.0	34.2	-68.1	-2.2	-3.5	-3.0	0.0	0.0	0.0	0.0	0.0	34.2
HH 102 rig engine	Line			111.0	101.4	9.2	0	0	0.0	Ln	713.1	0.0	0.0	34.2	-68.1	-2.2	-3.5	-3.0	0.0	0.0	0.0	0.0	0.0	34.2
Motor on Sifter at Settling tank	Point			101.0	101.0		0	0	0.0	Ld	691.0	0.0	0.0	26.0	-67.8	-0.8	-4.0	-2.4	0.0	0.0	0.0	0.0	0.0	26.0
Motor on Sifter at Settling tank	Point			101.0	101.0		0	0	0.0	Le	691.0	0.0	0.0	26.0	-67.8	-0.8	-4.0	-2.4	0.0	0.0	0.0	0.0	0.0	26.0
Motor on Sifter at Settling tank	Point			101.0	101.0		0	0	0.0	Ln	691.0	0.0	0.0	26.0	-67.8	-0.8	-4.0	-2.4	0.0	0.0	0.0	0.0	0.0	26.0
Sifter at settlement tanks	Point			99.0	99.0		0	0	0.0	Ld	693.0	0.0	0.0	24.6	-67.8	-1.1	-3.7	-1.9	0.0	0.0	0.0	0.0	0.0	24.6
Sifter at settlement tanks	Point			99.0	99.0		0	0	0.0	Le	693.0	0.0	0.0	24.6	-67.8	-1.1	-3.7	-1.9	0.0	0.0	0.0	0.0	0.0	24.6
Sifter at settlement tanks	Point			99.0	99.0		0	0	0.0	Ln	693.0	0.0	0.0	24.6	-67.8	-1.1	-3.7	-1.9	0.0	0.0	0.0	0.0	0.0	24.6
compressor	Area			85.1	77.3	6.0	0	0	3.0	Ld	710.7	0.0	0.0	7.2	-68.0	-6.3	-5.7	-0.9	0.0	0.0	0.0	0.0	0.0	7.2
compressor	Area			85.1	77.3	6.0	0	0	3.0	Le	710.7	0.0	0.0	7.2	-68.0	-6.3	-5.7	-0.9	0.0	0.0	0.0	0.0	0.0	7.2
compressor	Area			85.1	77.3	6.0	0	0	3.0	Ln	710.7	0.0	0.0	7.2	-68.0	-6.3	-5.7	-0.9	0.0	0.0	0.0	0.0	0.0	7.2
generator	Area			85.1	77.3	6.0	0	0	3.0	Ld	708.9	0.0	0.0	7.3	-68.0	-6.3	-5.7	-0.9	0.0	0.0	0.0	0.0	0.0	7.3
generator	Area			85.1	77.3	6.0	0	0	3.0	Le	708.9	0.0	0.0	7.3	-68.0	-6.3	-5.7	-0.9	0.0	0.0	0.0	0.0	0.0	7.3
generator	Area			85.1	77.3	6.0	0	0	3.0	Ln	708.9	0.0	0.0	7.3	-68.0	-6.3	-5.7	-0.9	0.0	0.0	0.0	0.0	0.0	7.3
mud pump east vent	Area			103.4	95.6	6.0	0	0	3.0	Ld	706.0	0.0	0.0	21.9	-68.0	-4.1	-11.4	-1.0	0.0	0.0	0.0	0.0	0.0	21.9
mud pump east vent	Area			103.4	95.6	6.0	0	0	3.0	Le	706.0	0.0	0.0	21.9	-68.0	-4.1	-11.4	-1.0	0.0	0.0	0.0	0.0	0.0	21.9
mud pump east vent	Area			103.4	95.6	6.0	0	0	3.0	Ln	706.0	0.0	0.0	21.9	-68.0	-4.1	-11.4	-1.0	0.0	0.0	0.0	0.0	0.0	21.9

Name	Long Byre	Floor	F 1	Ld,lim	dB(A)	Le,lim	dB(A)	Ld 39.1	dB(A)	Le 39.1	dB(A)													
HH102 top drive	Point			107.0	107.0		0	0	0.0	Ld	718.1	0.0	0.0	36.1	-68.1	-0.1	0.0	-2.7	0.0	0.0	0.0	0.0	0.0	36.1
HH102 top drive	Point			107.0	107.0		0	0	0.0	Le	718.1	0.0	0.0	36.1	-68.1	-0.1	0.0	-2.7	0.0	0.0	0.0	0.0	0.0	36.1
HH102 top drive	Point			107.0	107.0		0	0	0.0	Ln	718.1	0.0	0.0	36.1	-68.1	-0.1	0.0	-2.7	0.0	0.0	0.0	0.0	0.0	36.1
HH 102 rig engine	Line			111.0	101.4	9.2	0	0	0.0	Ld	713.2	0.0	0.0	34.8	-68.1	-1.7	-3.6	-2.8	0.0	0.0	0.0	0.0	0.0	34.8
HH 102 rig engine	Line			111.0	101.4	9.2	0	0	0.0	Le	713.2	0.0	0.0	34.8	-68.1	-1.7	-3.6	-2.8	0.0	0.0	0.0	0.0	0.0	34.8
HH 102 rig engine	Line			111.0	101.4	9.2	0	0	0.0	Ln	713.2	0.0	0.0	34.8	-68.1	-1.7	-3.6	-2.8	0.0	0.0	0.0	0.0	0.0	34.8
Motor on Sifter at Settling tank	Point			101.0	101.0		0	0	0.0	Ld	691.1	0.0	0.0	26.1	-67.8	-0.2	-4.5	-2.4	0.0	0.0	0.0	0.0	0.0	26.1
Motor on Sifter at Settling tank	Point			101.0	101.0		0	0	0.0	Le	691.1	0.0	0.0	26.1	-67.8	-0.2	-4.5	-2.4	0.0	0.0	0.0	0.0	0.0	26.1
Motor on Sifter at Settling tank	Point			101.0	101.0		0	0	0.0	Ln	691.1	0.0	0.0	26.1	-67.8	-0.2	-4.5	-2.4	0.0	0.0	0.0	0.0	0.0	26.1
Sifter at settlement tanks	Point			99.0	99.0		0	0	0.0	Ld	693.1	0.0	0.0	24.9	-67.8	-0.4	-4.0	-1.8	0.0	0.0	0.0	0.0	0.0	24.9

Airshed Ltd East Linton East Lothian EH40 3DB UNITED KINGDOM

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AS 0395 Borrás Road
Mean propagation Leq - Scenario 4

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Source	SrcType	Lw	Lw'	I or S	KI	KT	Ko	time slice	s	Li	R'w	Ls	Adiv	Agr	Abar	Aatm	Amis	ADI	dLref	dLw	ZR	Cmet	Lr	
		dB(A)	dB(A)	m,m²	dB	dB	dB		m	dB(A)	dB	dB(A)	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB(A)	
Sifter at settlement tanks	Point	99.0	99.0		0	0	0.0	Le	693.1	0.0	0.0	24.9	-67.8	-0.4	-4.0	-1.8		0.0	0.0	0.0	0.0	0.0	24.9	
Sifter at settlement tanks	Point	99.0	99.0		0	0	0.0	Ln	693.1	0.0	0.0	24.9	-67.8	-0.4	-4.0	-1.8		0.0	0.0	0.0	0.0	0.0	24.9	
compressor	Area	85.1	77.3	6.0	0	0	3.0	Ld	710.8	0.0	0.0	7.9	-68.0	-4.3	-7.1	-0.9		0.0	0.0	0.0	0.0	0.0	7.9	
compressor	Area	85.1	77.3	6.0	0	0	3.0	Le	710.8	0.0	0.0	7.9	-68.0	-4.3	-7.1	-0.9		0.0	0.0	0.0	0.0	0.0	7.9	
compressor	Area	85.1	77.3	6.0	0	0	3.0	Ln	710.8	0.0	0.0	7.9	-68.0	-4.3	-7.1	-0.9		0.0	0.0	0.0	0.0	0.0	7.9	
generator	Area	85.1	77.3	6.0	0	0	3.0	Ld	709.0	0.0	0.0	7.7	-68.0	-4.3	-7.2	-0.9		0.0	0.0	0.0	0.0	0.0	7.7	
generator	Area	85.1	77.3	6.0	0	0	3.0	Le	709.0	0.0	0.0	7.7	-68.0	-4.3	-7.2	-0.9		0.0	0.0	0.0	0.0	0.0	7.7	
generator	Area	85.1	77.3	6.0	0	0	3.0	Ln	709.0	0.0	0.0	7.7	-68.0	-4.3	-7.2	-0.9		0.0	0.0	0.0	0.0	0.0	7.7	
mud pump east vent	Area	103.4	95.6	6.0	0	0	3.0	Ld	706.1	0.0	0.0	25.1	-68.0	-3.2	-9.0	-1.1		0.0	0.0	0.0	0.0	0.0	25.1	
mud pump east vent	Area	103.4	95.6	6.0	0	0	3.0	Le	706.1	0.0	0.0	25.1	-68.0	-3.2	-9.0	-1.1		0.0	0.0	0.0	0.0	0.0	25.1	
mud pump east vent	Area	103.4	95.6	6.0	0	0	3.0	Ln	706.1	0.0	0.0	25.1	-68.0	-3.2	-9.0	-1.1		0.0	0.0	0.0	0.0	0.0	25.1	
Name Longfield Barn Floor GF Ld,lim dB(A) Le,lim dB(A) Ld 37.2 dB(A) Le 37.2 dB(A)																								
HH102 top drive	Point	107.0	107.0		0	0	0.0	Ld	488.1	0.0	0.0	34.2	-64.8	-1.6	-4.9	-1.5		0.0	0.0	0.0	0.0	0.0	34.2	
HH102 top drive	Point	107.0	107.0		0	0	0.0	Le	488.1	0.0	0.0	34.2	-64.8	-1.6	-4.9	-1.5		0.0	0.0	0.0	0.0	0.0	34.2	
HH102 top drive	Point	107.0	107.0		0	0	0.0	Ln	488.1	0.0	0.0	34.2	-64.8	-1.6	-4.9	-1.5		0.0	0.0	0.0	0.0	0.0	34.2	
HH 102 rig engine	Line	111.0	101.4	9.2	0	0	0.0	Ld	492.9	0.0	0.0	30.8	-64.8	-2.4	-12.7	-0.9		0.0	0.6	0.0	0.0	0.0	30.8	
HH 102 rig engine	Line	111.0	101.4	9.2	0	0	0.0	Le	492.9	0.0	0.0	30.8	-64.8	-2.4	-12.7	-0.9		0.0	0.6	0.0	0.0	0.0	30.8	
HH 102 rig engine	Line	111.0	101.4	9.2	0	0	0.0	Ln	492.9	0.0	0.0	30.8	-64.8	-2.4	-12.7	-0.9		0.0	0.6	0.0	0.0	0.0	30.8	
Motor on Sifter at Settling tank	Point	101.0	101.0		0	0	0.0	Ld	515.3	0.0	0.0	20.2	-65.2	-1.3	-12.9	-1.3		0.0	0.0	0.0	0.0	0.0	20.2	
Motor on Sifter at Settling tank	Point	101.0	101.0		0	0	0.0	Le	515.3	0.0	0.0	20.2	-65.2	-1.3	-12.9	-1.3		0.0	0.0	0.0	0.0	0.0	20.2	
Motor on Sifter at Settling tank	Point	101.0	101.0		0	0	0.0	Ln	515.3	0.0	0.0	20.2	-65.2	-1.3	-12.9	-1.3		0.0	0.0	0.0	0.0	0.0	20.2	
Sifter at settlement tanks	Point	99.0	99.0		0	0	0.0	Ld	513.4	0.0	0.0	23.3	-65.2	-1.4	-8.6	-0.5		0.0	0.0	0.0	0.0	0.0	23.3	
Sifter at settlement tanks	Point	99.0	99.0		0	0	0.0	Le	513.4	0.0	0.0	23.3	-65.2	-1.4	-8.6	-0.5		0.0	0.0	0.0	0.0	0.0	23.3	
Sifter at settlement tanks	Point	99.0	99.0		0	0	0.0	Ln	513.4	0.0	0.0	23.3	-65.2	-1.4	-8.6	-0.5		0.0	0.0	0.0	0.0	0.0	23.3	
compressor	Area	85.1	77.3	6.0	0	0	3.0	Ld	494.9	0.0	0.0	9.7	-64.9	-6.9	-6.1	-0.5		0.0	0.0	0.0	0.0	0.0	9.7	
compressor	Area	85.1	77.3	6.0	0	0	3.0	Le	494.9	0.0	0.0	9.7	-64.9	-6.9	-6.1	-0.5		0.0	0.0	0.0	0.0	0.0	9.7	
compressor	Area	85.1	77.3	6.0	0	0	3.0	Ln	494.9	0.0	0.0	9.7	-64.9	-6.9	-6.1	-0.5		0.0	0.0	0.0	0.0	0.0	9.7	
generator	Area	85.1	77.3	6.0	0	0	3.0	Ld	496.7	0.0	0.0	9.8	-64.9	-6.9	-5.9	-0.5		0.0	0.0	0.0	0.0	0.0	9.8	
generator	Area	85.1	77.3	6.0	0	0	3.0	Le	496.7	0.0	0.0	9.8	-64.9	-6.9	-5.9	-0.5		0.0	0.0	0.0	0.0	0.0	9.8	
generator	Area	85.1	77.3	6.0	0	0	3.0	Ln	496.7	0.0	0.0	9.8	-64.9	-6.9	-5.9	-0.5		0.0	0.0	0.0	0.0	0.0	9.8	
mud pump east vent	Area	103.4	95.6	6.0	0	0	3.0	Ld	499.5	0.0	0.0	30.2	-65.0	-4.5	-5.3	-1.5		0.0	0.0	0.0	0.0	0.0	30.2	
mud pump east vent	Area	103.4	95.6	6.0	0	0	3.0	Le	499.5	0.0	0.0	30.2	-65.0	-4.5	-5.3	-1.5		0.0	0.0	0.0	0.0	0.0	30.2	
mud pump east vent	Area	103.4	95.6	6.0	0	0	3.0	Ln	499.5	0.0	0.0	30.2	-65.0	-4.5	-5.3	-1.5		0.0	0.0	0.0	0.0	0.0	30.2	

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Mean propagation Leq - Scenario 4

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Source	SrcType	Lw	Lw'	I or S	KI	KT	Ko	time slice	s	Li	R'w	Ls	Adiv	Agr	Abar	Aatm	Amis	ADI	dLref	dLw	ZR	Cmet	Lr
		dB(A)	dB(A)	m,m²	dB	dB	dB		m	dB(A)	dB	dB(A)	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB(A)

Name	Longfield Cottage	Floor	GF	Ld,lim	dB(A)	Le,lim	dB(A)	Ld 37.7	dB(A)	Le 37.7	dB(A)													
HH102 top drive	Point			107.0	107.0		0	0	0.0	Ld	485.8	0.0	0.0	35.0	-64.7	-1.6	-4.1	-1.6	0.0	0.0	0.0	0.0	0.0	35.0
HH102 top drive	Point			107.0	107.0		0	0	0.0	Le	485.8	0.0	0.0	35.0	-64.7	-1.6	-4.1	-1.6	0.0	0.0	0.0	0.0	0.0	35.0
HH102 top drive	Point			107.0	107.0		0	0	0.0	Ln	485.8	0.0	0.0	35.0	-64.7	-1.6	-4.1	-1.6	0.0	0.0	0.0	0.0	0.0	35.0
HH 102 rig engine	Line			111.0	101.4	9.2	0	0	0.0	Ld	490.8	0.0	0.0	31.4	-64.8	-2.5	-11.9	-1.0	0.0	0.6	0.0	0.0	0.0	31.4
HH 102 rig engine	Line			111.0	101.4	9.2	0	0	0.0	Le	490.8	0.0	0.0	31.4	-64.8	-2.5	-11.9	-1.0	0.0	0.6	0.0	0.0	0.0	31.4
HH 102 rig engine	Line			111.0	101.4	9.2	0	0	0.0	Ln	490.8	0.0	0.0	31.4	-64.8	-2.5	-11.9	-1.0	0.0	0.6	0.0	0.0	0.0	31.4
Motor on Sifter at Settling tank	Point			101.0	101.0		0	0	0.0	Ld	512.9	0.0	0.0	21.1	-65.2	-1.3	-12.1	-1.3	0.0	0.0	0.0	0.0	0.0	21.1
Motor on Sifter at Settling tank	Point			101.0	101.0		0	0	0.0	Le	512.9	0.0	0.0	21.1	-65.2	-1.3	-12.1	-1.3	0.0	0.0	0.0	0.0	0.0	21.1
Motor on Sifter at Settling tank	Point			101.0	101.0		0	0	0.0	Ln	512.9	0.0	0.0	21.1	-65.2	-1.3	-12.1	-1.3	0.0	0.0	0.0	0.0	0.0	21.1
Sifter at settlement tanks	Point			99.0	99.0		0	0	0.0	Ld	510.9	0.0	0.0	23.8	-65.2	-1.4	-8.1	-0.5	0.0	0.0	0.0	0.0	0.0	23.8
Sifter at settlement tanks	Point			99.0	99.0		0	0	0.0	Le	510.9	0.0	0.0	23.8	-65.2	-1.4	-8.1	-0.5	0.0	0.0	0.0	0.0	0.0	23.8
Sifter at settlement tanks	Point			99.0	99.0		0	0	0.0	Ln	510.9	0.0	0.0	23.8	-65.2	-1.4	-8.1	-0.5	0.0	0.0	0.0	0.0	0.0	23.8
compressor	Area			85.1	77.3	6.0	0	0	3.0	Ld	493.6	0.0	0.0	10.2	-64.9	-6.8	-5.7	-0.5	0.0	0.0	0.0	0.0	0.0	10.2
compressor	Area			85.1	77.3	6.0	0	0	3.0	Le	493.6	0.0	0.0	10.2	-64.9	-6.8	-5.7	-0.5	0.0	0.0	0.0	0.0	0.0	10.2
compressor	Area			85.1	77.3	6.0	0	0	3.0	Ln	493.6	0.0	0.0	10.2	-64.9	-6.8	-5.7	-0.5	0.0	0.0	0.0	0.0	0.0	10.2
generator	Area			85.1	77.3	6.0	0	0	3.0	Ld	495.5	0.0	0.0	10.5	-64.9	-6.8	-5.4	-0.5	0.0	0.0	0.0	0.0	0.0	10.5
generator	Area			85.1	77.3	6.0	0	0	3.0	Le	495.5	0.0	0.0	10.5	-64.9	-6.8	-5.4	-0.5	0.0	0.0	0.0	0.0	0.0	10.5
generator	Area			85.1	77.3	6.0	0	0	3.0	Ln	495.5	0.0	0.0	10.5	-64.9	-6.8	-5.4	-0.5	0.0	0.0	0.0	0.0	0.0	10.5
mud pump east vent	Area			103.4	95.6	6.0	0	0	3.0	Ld	498.6	0.0	0.0	29.9	-64.9	-4.5	-5.4	-1.6	0.0	0.0	0.0	0.0	0.0	29.9
mud pump east vent	Area			103.4	95.6	6.0	0	0	3.0	Le	498.6	0.0	0.0	29.9	-64.9	-4.5	-5.4	-1.6	0.0	0.0	0.0	0.0	0.0	29.9
mud pump east vent	Area			103.4	95.6	6.0	0	0	3.0	Ln	498.6	0.0	0.0	29.9	-64.9	-4.5	-5.4	-1.6	0.0	0.0	0.0	0.0	0.0	29.9

Name	Longfield Cottage	Floor	F 1	Ld,lim	dB(A)	Le,lim	dB(A)	Ld 40.3	dB(A)	Le 40.3	dB(A)													
HH102 top drive	Point			107.0	107.0		0	0	0.0	Ld	485.7	0.0	0.0	36.5	-64.7	-0.2	-3.9	-1.7	0.0	0.0	0.0	0.0	0.0	36.5
HH102 top drive	Point			107.0	107.0		0	0	0.0	Le	485.7	0.0	0.0	36.5	-64.7	-0.2	-3.9	-1.7	0.0	0.0	0.0	0.0	0.0	36.5
HH102 top drive	Point			107.0	107.0		0	0	0.0	Ln	485.7	0.0	0.0	36.5	-64.7	-0.2	-3.9	-1.7	0.0	0.0	0.0	0.0	0.0	36.5
HH 102 rig engine	Line			111.0	101.4	9.2	0	0	0.0	Ld	490.8	0.0	0.0	35.2	-64.8	-1.7	-8.7	-1.2	0.0	0.6	0.0	0.0	0.0	35.2
HH 102 rig engine	Line			111.0	101.4	9.2	0	0	0.0	Le	490.8	0.0	0.0	35.2	-64.8	-1.7	-8.7	-1.2	0.0	0.6	0.0	0.0	0.0	35.2
HH 102 rig engine	Line			111.0	101.4	9.2	0	0	0.0	Ln	490.8	0.0	0.0	35.2	-64.8	-1.7	-8.7	-1.2	0.0	0.6	0.0	0.0	0.0	35.2
Motor on Sifter at Settling tank	Point			101.0	101.0		0	0	0.0	Ld	512.8	0.0	0.0	26.5	-65.2	-0.2	-7.5	-1.6	0.0	0.0	0.0	0.0	0.0	26.5
Motor on Sifter at Settling tank	Point			101.0	101.0		0	0	0.0	Le	512.8	0.0	0.0	26.5	-65.2	-0.2	-7.5	-1.6	0.0	0.0	0.0	0.0	0.0	26.5
Motor on Sifter at Settling tank	Point			101.0	101.0		0	0	0.0	Ln	512.8	0.0	0.0	26.5	-65.2	-0.2	-7.5	-1.6	0.0	0.0	0.0	0.0	0.0	26.5
Sifter at settlement tanks	Point			99.0	99.0		0	0	0.0	Ld	510.9	0.0	0.0	26.9	-65.2	-0.5	-5.5	-0.9	0.0	0.0	0.0	0.0	0.0	26.9

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AS 0395 Borrás Road

Mean propagation Leq - Scenario 4

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Source	SrcType	Lw	Lw'	I or S	KI	KT	Ko	time slice	s	Li	R'w	Ls	Adiv	Agr	Abar	Aatm	Amis	ADI	dLref	dLw	ZR	Cmet	Lr
		dB(A)	dB(A)	m,m²	dB	dB	dB		m	dB(A)	dB	dB(A)	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB(A)
Sifter at settlement tanks	Point	99.0	99.0		0	0	0.0	Le	510.9	0.0	0.0	26.9	-65.2	-0.5	-5.5	-0.9		0.0	0.0	0.0	0.0	0.0	26.9
Sifter at settlement tanks	Point	99.0	99.0		0	0	0.0	Ln	510.9	0.0	0.0	26.9	-65.2	-0.5	-5.5	-0.9		0.0	0.0	0.0	0.0	0.0	26.9
compressor	Area	85.1	77.3	6.0	0	0	3.0	Ld	493.6	0.0	0.0	13.4	-64.9	-4.2	-5.1	-0.6		0.0	0.0	0.0	0.0	0.0	13.4
compressor	Area	85.1	77.3	6.0	0	0	3.0	Le	493.6	0.0	0.0	13.4	-64.9	-4.2	-5.1	-0.6		0.0	0.0	0.0	0.0	0.0	13.4
compressor	Area	85.1	77.3	6.0	0	0	3.0	Ln	493.6	0.0	0.0	13.4	-64.9	-4.2	-5.1	-0.6		0.0	0.0	0.0	0.0	0.0	13.4
generator	Area	85.1	77.3	6.0	0	0	3.0	Ld	495.4	0.0	0.0	13.6	-64.9	-4.2	-4.9	-0.6		0.0	0.0	0.0	0.0	0.0	13.6
generator	Area	85.1	77.3	6.0	0	0	3.0	Le	495.4	0.0	0.0	13.6	-64.9	-4.2	-4.9	-0.6		0.0	0.0	0.0	0.0	0.0	13.6
generator	Area	85.1	77.3	6.0	0	0	3.0	Ln	495.4	0.0	0.0	13.6	-64.9	-4.2	-4.9	-0.6		0.0	0.0	0.0	0.0	0.0	13.6
mud pump east vent	Area	103.4	95.6	6.0	0	0	3.0	Ld	498.5	0.0	0.0	33.3	-64.9	-3.2	-3.5	-1.5		0.0	0.0	0.0	0.0	0.0	33.3
mud pump east vent	Area	103.4	95.6	6.0	0	0	3.0	Le	498.5	0.0	0.0	33.3	-64.9	-3.2	-3.5	-1.5		0.0	0.0	0.0	0.0	0.0	33.3
mud pump east vent	Area	103.4	95.6	6.0	0	0	3.0	Ln	498.5	0.0	0.0	33.3	-64.9	-3.2	-3.5	-1.5		0.0	0.0	0.0	0.0	0.0	33.3
Name Plas Bostock Floor GF Ld,lim dB(A) Le,lim dB(A) Ld 36.2 dB(A) Le 36.2 dB(A)																							
HH102 top drive	Point	107.0	107.0		0	0	0.0	Ld	948.4	0.0	0.0	30.8	-70.5	-1.6	0.0	-4.0		0.0	0.0	0.0	0.0	0.0	30.8
HH102 top drive	Point	107.0	107.0		0	0	0.0	Le	948.4	0.0	0.0	30.8	-70.5	-1.6	0.0	-4.0		0.0	0.0	0.0	0.0	0.0	30.8
HH102 top drive	Point	107.0	107.0		0	0	0.0	Ln	948.4	0.0	0.0	30.8	-70.5	-1.6	0.0	-4.0		0.0	0.0	0.0	0.0	0.0	30.8
HH 102 rig engine	Line	111.0	101.4	9.2	0	0	0.0	Ld	949.0	0.0	0.0	32.9	-70.5	-2.6	-0.9	-4.1		0.0	0.0	0.0	0.0	0.0	32.9
HH 102 rig engine	Line	111.0	101.4	9.2	0	0	0.0	Le	949.0	0.0	0.0	32.9	-70.5	-2.6	-0.9	-4.1		0.0	0.0	0.0	0.0	0.0	32.9
HH 102 rig engine	Line	111.0	101.4	9.2	0	0	0.0	Ln	949.0	0.0	0.0	32.9	-70.5	-2.6	-0.9	-4.1		0.0	0.0	0.0	0.0	0.0	32.9
Motor on Sifter at Settling tank	Point	101.0	101.0		0	0	0.0	Ld	966.8	0.0	0.0	24.7	-70.7	-1.3	-0.8	-3.4		0.0	0.0	0.0	0.0	0.0	24.7
Motor on Sifter at Settling tank	Point	101.0	101.0		0	0	0.0	Le	966.8	0.0	0.0	24.7	-70.7	-1.3	-0.8	-3.4		0.0	0.0	0.0	0.0	0.0	24.7
Motor on Sifter at Settling tank	Point	101.0	101.0		0	0	0.0	Ln	966.8	0.0	0.0	24.7	-70.7	-1.3	-0.8	-3.4		0.0	0.0	0.0	0.0	0.0	24.7
Sifter at settlement tanks	Point	99.0	99.0		0	0	0.0	Ld	966.5	0.0	0.0	23.9	-70.7	-1.5	-0.7	-2.2		0.0	0.0	0.0	0.0	0.0	23.9
Sifter at settlement tanks	Point	99.0	99.0		0	0	0.0	Le	966.5	0.0	0.0	23.9	-70.7	-1.5	-0.7	-2.2		0.0	0.0	0.0	0.0	0.0	23.9
Sifter at settlement tanks	Point	99.0	99.0		0	0	0.0	Ln	966.5	0.0	0.0	23.9	-70.7	-1.5	-0.7	-2.2		0.0	0.0	0.0	0.0	0.0	23.9
compressor	Area	85.1	77.3	6.0	0	0	3.0	Ld	943.2	0.0	0.0	8.3	-70.5	-7.5	0.0	-1.8		0.0	0.0	0.0	0.0	0.0	8.3
compressor	Area	85.1	77.3	6.0	0	0	3.0	Le	943.2	0.0	0.0	8.3	-70.5	-7.5	0.0	-1.8		0.0	0.0	0.0	0.0	0.0	8.3
compressor	Area	85.1	77.3	6.0	0	0	3.0	Ln	943.2	0.0	0.0	8.3	-70.5	-7.5	0.0	-1.8		0.0	0.0	0.0	0.0	0.0	8.3
generator	Area	85.1	77.3	6.0	0	0	3.0	Ld	943.4	0.0	0.0	8.3	-70.5	-7.5	0.0	-1.8		0.0	0.0	0.0	0.0	0.0	8.3
generator	Area	85.1	77.3	6.0	0	0	3.0	Le	943.4	0.0	0.0	8.3	-70.5	-7.5	0.0	-1.8		0.0	0.0	0.0	0.0	0.0	8.3
generator	Area	85.1	77.3	6.0	0	0	3.0	Ln	943.4	0.0	0.0	8.3	-70.5	-7.5	0.0	-1.8		0.0	0.0	0.0	0.0	0.0	8.3
mud pump east vent	Area	103.4	95.6	6.0	0	0	3.0	Ld	943.0	0.0	0.0	26.4	-70.5	-4.5	-0.1	-4.9		0.0	0.0	0.0	0.0	0.0	26.4
mud pump east vent	Area	103.4	95.6	6.0	0	0	3.0	Le	943.0	0.0	0.0	26.4	-70.5	-4.5	-0.1	-4.9		0.0	0.0	0.0	0.0	0.0	26.4
mud pump east vent	Area	103.4	95.6	6.0	0	0	3.0	Ln	943.0	0.0	0.0	26.4	-70.5	-4.5	-0.1	-4.9		0.0	0.0	0.0	0.0	0.0	26.4

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Source	SrcType	Lw	Lw'	I or S	KI	KT	Ko	time slice	s	Li	R'w	Ls	Adiv	Agr	Abar	Aatm	Amis	ADI	dLref	dLw	ZR	Cmet	Lr
		dB(A)	dB(A)	m,m²	dB	dB	dB		m	dB(A)	dB	dB(A)	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB(A)

Name	Plas Bostock	Floor	F 1	Ld,lim	dB(A)	Le,lim	dB(A)	Ld 37.9	dB(A)	Le 37.9	dB(A)													
HH102 top drive	Point	107.0	107.0		0	0	0.0	Ld	948.3	0.0	0.0	33.0	-70.5	-0.2	0.0	-3.4		0.0	0.0	0.0	0.0	0.0	33.0	
HH102 top drive	Point	107.0	107.0		0	0	0.0	Le	948.3	0.0	0.0	33.0	-70.5	-0.2	0.0	-3.4		0.0	0.0	0.0	0.0	0.0	33.0	
HH102 top drive	Point	107.0	107.0		0	0	0.0	Ln	948.3	0.0	0.0	33.0	-70.5	-0.2	0.0	-3.4		0.0	0.0	0.0	0.0	0.0	33.0	
HH 102 rig engine	Line	111.0	101.4	9.2	0	0	0.0	Ld	949.0	0.0	0.0	34.3	-70.5	-1.7	-0.8	-3.7		0.0	0.0	0.0	0.0	0.0	34.3	
HH 102 rig engine	Line	111.0	101.4	9.2	0	0	0.0	Le	949.0	0.0	0.0	34.3	-70.5	-1.7	-0.8	-3.7		0.0	0.0	0.0	0.0	0.0	34.3	
HH 102 rig engine	Line	111.0	101.4	9.2	0	0	0.0	Ln	949.0	0.0	0.0	34.3	-70.5	-1.7	-0.8	-3.7		0.0	0.0	0.0	0.0	0.0	34.3	
Motor on Sifter at Settling tank	Point	101.0	101.0		0	0	0.0	Ld	966.8	0.0	0.0	25.8	-70.7	-0.2	-1.1	-3.2		0.0	0.0	0.0	0.0	0.0	25.8	
Motor on Sifter at Settling tank	Point	101.0	101.0		0	0	0.0	Le	966.8	0.0	0.0	25.8	-70.7	-0.2	-1.1	-3.2		0.0	0.0	0.0	0.0	0.0	25.8	
Motor on Sifter at Settling tank	Point	101.0	101.0		0	0	0.0	Ln	966.8	0.0	0.0	25.8	-70.7	-0.2	-1.1	-3.2		0.0	0.0	0.0	0.0	0.0	25.8	
Sifter at settlement tanks	Point	99.0	99.0		0	0	0.0	Ld	966.5	0.0	0.0	24.8	-70.7	-0.4	-0.9	-2.2		0.0	0.0	0.0	0.0	0.0	24.8	
Sifter at settlement tanks	Point	99.0	99.0		0	0	0.0	Le	966.5	0.0	0.0	24.8	-70.7	-0.4	-0.9	-2.2		0.0	0.0	0.0	0.0	0.0	24.8	
Sifter at settlement tanks	Point	99.0	99.0		0	0	0.0	Ln	966.5	0.0	0.0	24.8	-70.7	-0.4	-0.9	-2.2		0.0	0.0	0.0	0.0	0.0	24.8	
compressor	Area	85.1	77.3	6.0	0	0	3.0	Ld	943.2	0.0	0.0	11.1	-70.5	-4.8	0.0	-1.7		0.0	0.0	0.0	0.0	0.0	11.1	
compressor	Area	85.1	77.3	6.0	0	0	3.0	Le	943.2	0.0	0.0	11.1	-70.5	-4.8	0.0	-1.7		0.0	0.0	0.0	0.0	0.0	11.1	
compressor	Area	85.1	77.3	6.0	0	0	3.0	Ln	943.2	0.0	0.0	11.1	-70.5	-4.8	0.0	-1.7		0.0	0.0	0.0	0.0	0.0	11.1	
generator	Area	85.1	77.3	6.0	0	0	3.0	Ld	943.4	0.0	0.0	11.1	-70.5	-4.8	0.0	-1.7		0.0	0.0	0.0	0.0	0.0	11.1	
generator	Area	85.1	77.3	6.0	0	0	3.0	Le	943.4	0.0	0.0	11.1	-70.5	-4.8	0.0	-1.7		0.0	0.0	0.0	0.0	0.0	11.1	
generator	Area	85.1	77.3	6.0	0	0	3.0	Ln	943.4	0.0	0.0	11.1	-70.5	-4.8	0.0	-1.7		0.0	0.0	0.0	0.0	0.0	11.1	
mud pump east vent	Area	103.4	95.6	6.0	0	0	3.0	Ld	943.0	0.0	0.0	28.7	-70.5	-3.3	-0.1	-3.8		0.0	0.0	0.0	0.0	0.0	28.7	
mud pump east vent	Area	103.4	95.6	6.0	0	0	3.0	Le	943.0	0.0	0.0	28.7	-70.5	-3.3	-0.1	-3.8		0.0	0.0	0.0	0.0	0.0	28.7	
mud pump east vent	Area	103.4	95.6	6.0	0	0	3.0	Ln	943.0	0.0	0.0	28.7	-70.5	-3.3	-0.1	-3.8		0.0	0.0	0.0	0.0	0.0	28.7	

Name	Plum Tree Farm	Floor	GF	Ld,lim	dB(A)	Le,lim	dB(A)	Ld 34.6	dB(A)	Le 34.6	dB(A)													
HH102 top drive	Point	107.0	107.0		0	0	0.0	Ld	1000.	0.0	0.0	30.4	-71.0	-1.5	0.0	-4.2		0.0	0.0	0.0	0.0	0.0	30.4	
HH102 top drive	Point	107.0	107.0		0	0	0.0	Le	1000.	0.0	0.0	30.4	-71.0	-1.5	0.0	-4.2		0.0	0.0	0.0	0.0	0.0	30.4	
HH102 top drive	Point	107.0	107.0		0	0	0.0	Ln	1000.	0.0	0.0	30.4	-71.0	-1.5	0.0	-4.2		0.0	0.0	0.0	0.0	0.0	30.4	
HH 102 rig engine	Line	111.0	101.4	9.2	0	0	0.0	Ld	1002.	0.0	0.0	30.2	-71.0	-2.3	-3.8	-3.8		0.0	0.1	0.0	0.0	0.0	30.2	
HH 102 rig engine	Line	111.0	101.4	9.2	0	0	0.0	Le	1002.	0.0	0.0	30.2	-71.0	-2.3	-3.8	-3.8		0.0	0.1	0.0	0.0	0.0	30.2	
HH 102 rig engine	Line	111.0	101.4	9.2	0	0	0.0	Ln	1002.	0.0	0.0	30.2	-71.0	-2.3	-3.8	-3.8		0.0	0.1	0.0	0.0	0.0	30.2	
Motor on Sifter at Settling tank	Point	101.0	101.0		0	0	0.0	Ld	1023.	0.0	0.0	23.6	-71.2	-1.2	-1.6	-3.4		0.0	0.0	0.0	0.0	0.0	23.6	
Motor on Sifter at Settling tank	Point	101.0	101.0		0	0	0.0	Le	1023.	0.0	0.0	23.6	-71.2	-1.2	-1.6	-3.4		0.0	0.0	0.0	0.0	0.0	23.6	
Motor on Sifter at Settling tank	Point	101.0	101.0		0	0	0.0	Ln	1023.	0.0	0.0	23.6	-71.2	-1.2	-1.6	-3.4		0.0	0.0	0.0	0.0	0.0	23.6	
Sifter at settlement tanks	Point	99.0	99.0		0	0	0.0	Ld	1022.	0.0	0.0	21.7	-71.2	-1.4	-1.0	-3.7		0.0	0.0	0.0	0.0	0.0	21.7	

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Source	SrcType	Lw	Lw'	I or S	KI	KT	Ko	time slice	s	Li	R'w	Ls	Adiv	Agr	Abar	Aatm	Amis	ADI	dLref	dLw	ZR	Cmet	Lr	
		dB(A)	dB(A)	m,m²	dB	dB	dB		m	dB(A)	dB	dB(A)	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB(A)	
Sifter at settlement tanks	Point	99.0	99.0		0	0	0.0	Le	1022.	0.0	0.0	21.7	-71.2	-1.4	-1.0	-3.7		0.0	0.0	0.0	0.0	0.0	21.7	
Sifter at settlement tanks	Point	99.0	99.0		0	0	0.0	Ln	1022.	0.0	0.0	21.7	-71.2	-1.4	-1.0	-3.7		0.0	0.0	0.0	0.0	0.0	21.7	
compressor	Area	85.1	77.3	6.0	0	0	3.0	Ld	999.2	0.0	0.0	6.4	-71.0	-7.3	-1.2	-2.2		0.0	0.0	0.0	0.0	0.0	6.4	
compressor	Area	85.1	77.3	6.0	0	0	3.0	Le	999.2	0.0	0.0	6.4	-71.0	-7.3	-1.2	-2.2		0.0	0.0	0.0	0.0	0.0	6.4	
compressor	Area	85.1	77.3	6.0	0	0	3.0	Ln	999.2	0.0	0.0	6.4	-71.0	-7.3	-1.2	-2.2		0.0	0.0	0.0	0.0	0.0	6.4	
generator	Area	85.1	77.3	6.0	0	0	3.0	Ld	1000.	0.0	0.0	6.7	-71.0	-7.3	-0.8	-2.3		0.0	0.0	0.0	0.0	0.0	6.7	
generator	Area	85.1	77.3	6.0	0	0	3.0	Le	1000.	0.0	0.0	6.7	-71.0	-7.3	-0.8	-2.3		0.0	0.0	0.0	0.0	0.0	6.7	
generator	Area	85.1	77.3	6.0	0	0	3.0	Ln	1000.	0.0	0.0	6.7	-71.0	-7.3	-0.8	-2.3		0.0	0.0	0.0	0.0	0.0	6.7	
mud pump east vent	Area	103.4	95.6	6.0	0	0	3.0	Ld	1000.	0.0	0.0	25.8	-71.0	-4.4	-0.1	-5.0		0.0	0.0	0.0	0.0	0.0	25.8	
mud pump east vent	Area	103.4	95.6	6.0	0	0	3.0	Le	1000.	0.0	0.0	25.8	-71.0	-4.4	-0.1	-5.0		0.0	0.0	0.0	0.0	0.0	25.8	
mud pump east vent	Area	103.4	95.6	6.0	0	0	3.0	Ln	1000.	0.0	0.0	25.8	-71.0	-4.4	-0.1	-5.0		0.0	0.0	0.0	0.0	0.0	25.8	
Name Plum Tree Farm Floor F 1 Ld,lim dB(A) Le,lim dB(A) Ld 36.3 dB(A) Le 36.3 dB(A)																								
HH102 top drive	Point	107.0	107.0		0	0	0.0	Ld	1000.	0.0	0.0	32.4	-71.0	-0.1	0.0	-3.5		0.0	0.0	0.0	0.0	0.0	32.4	
HH102 top drive	Point	107.0	107.0		0	0	0.0	Le	1000.	0.0	0.0	32.4	-71.0	-0.1	0.0	-3.5		0.0	0.0	0.0	0.0	0.0	32.4	
HH102 top drive	Point	107.0	107.0		0	0	0.0	Ln	1000.	0.0	0.0	32.4	-71.0	-0.1	0.0	-3.5		0.0	0.0	0.0	0.0	0.0	32.4	
HH 102 rig engine	Line	111.0	101.4	9.2	0	0	0.0	Ld	1002.	0.0	0.0	31.6	-71.0	-1.6	-3.5	-3.4		0.0	0.1	0.0	0.0	0.0	31.6	
HH 102 rig engine	Line	111.0	101.4	9.2	0	0	0.0	Le	1002.	0.0	0.0	31.6	-71.0	-1.6	-3.5	-3.4		0.0	0.1	0.0	0.0	0.0	31.6	
HH 102 rig engine	Line	111.0	101.4	9.2	0	0	0.0	Ln	1002.	0.0	0.0	31.6	-71.0	-1.6	-3.5	-3.4		0.0	0.1	0.0	0.0	0.0	31.6	
Motor on Sifter at Settling tank	Point	101.0	101.0		0	0	0.0	Ld	1023.	0.0	0.0	24.5	-71.2	-0.2	-1.8	-3.2		0.0	0.0	0.0	0.0	0.0	24.5	
Motor on Sifter at Settling tank	Point	101.0	101.0		0	0	0.0	Le	1023.	0.0	0.0	24.5	-71.2	-0.2	-1.8	-3.2		0.0	0.0	0.0	0.0	0.0	24.5	
Motor on Sifter at Settling tank	Point	101.0	101.0		0	0	0.0	Ln	1023.	0.0	0.0	24.5	-71.2	-0.2	-1.8	-3.2		0.0	0.0	0.0	0.0	0.0	24.5	
Sifter at settlement tanks	Point	99.0	99.0		0	0	0.0	Ld	1022.	0.0	0.0	23.0	-71.2	-0.4	-1.0	-3.4		0.0	0.0	0.0	0.0	0.0	23.0	
Sifter at settlement tanks	Point	99.0	99.0		0	0	0.0	Le	1022.	0.0	0.0	23.0	-71.2	-0.4	-1.0	-3.4		0.0	0.0	0.0	0.0	0.0	23.0	
Sifter at settlement tanks	Point	99.0	99.0		0	0	0.0	Ln	1022.	0.0	0.0	23.0	-71.2	-0.4	-1.0	-3.4		0.0	0.0	0.0	0.0	0.0	23.0	
compressor	Area	85.1	77.3	6.0	0	0	3.0	Ld	999.2	0.0	0.0	9.8	-71.0	-4.8	-0.6	-1.9		0.0	0.0	0.0	0.0	0.0	9.8	
compressor	Area	85.1	77.3	6.0	0	0	3.0	Le	999.2	0.0	0.0	9.8	-71.0	-4.8	-0.6	-1.9		0.0	0.0	0.0	0.0	0.0	9.8	
compressor	Area	85.1	77.3	6.0	0	0	3.0	Ln	999.2	0.0	0.0	9.8	-71.0	-4.8	-0.6	-1.9		0.0	0.0	0.0	0.0	0.0	9.8	
generator	Area	85.1	77.3	6.0	0	0	3.0	Ld	1000.	0.0	0.0	10.0	-71.0	-4.8	-0.4	-2.0		0.0	0.0	0.0	0.0	0.0	10.0	
generator	Area	85.1	77.3	6.0	0	0	3.0	Le	1000.	0.0	0.0	10.0	-71.0	-4.8	-0.4	-2.0		0.0	0.0	0.0	0.0	0.0	10.0	
generator	Area	85.1	77.3	6.0	0	0	3.0	Ln	1000.	0.0	0.0	10.0	-71.0	-4.8	-0.4	-2.0		0.0	0.0	0.0	0.0	0.0	10.0	
mud pump east vent	Area	103.4	95.6	6.0	0	0	3.0	Ld	1000.	0.0	0.0	28.1	-71.0	-3.3	-0.1	-4.0		0.0	0.0	0.0	0.0	0.0	28.1	
mud pump east vent	Area	103.4	95.6	6.0	0	0	3.0	Le	1000.	0.0	0.0	28.1	-71.0	-3.3	-0.1	-4.0		0.0	0.0	0.0	0.0	0.0	28.1	
mud pump east vent	Area	103.4	95.6	6.0	0	0	3.0	Ln	1000.	0.0	0.0	28.1	-71.0	-3.3	-0.1	-4.0		0.0	0.0	0.0	0.0	0.0	28.1	

Airshed Ltd East Linton East Lothian EH40 3DB UNITED KINGDOM

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AS 0395 Borrás Road

Mean propagation Leq - Scenario 4

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Source	SrcType	Lw	Lw'	I or S	KI	KT	Ko	time slice	s	Li	R'w	Ls	Adiv	Agr	Abar	Aatm	Amis	ADI	dLref	dLw	ZR	Cmet	Lr
		dB(A)	dB(A)	m,m²	dB	dB	dB		m	dB(A)	dB	dB(A)	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB(A)

Name	Springfield	Floor	GF	Ld,lim	dB(A)	Le,lim	dB(A)	Ld 42.0	dB(A)	Le 42.0	dB(A)												
HH102 top drive	Point	107.0	107.0		0	0	0.0	Ld	496.3	0.0	0.0	38.4	-64.9	-1.3	-0.1	-2.4		0.0	0.0	0.0	0.0	0.0	38.4
HH102 top drive	Point	107.0	107.0		0	0	0.0	Le	496.3	0.0	0.0	38.4	-64.9	-1.3	-0.1	-2.4		0.0	0.0	0.0	0.0	0.0	38.4
HH102 top drive	Point	107.0	107.0		0	0	0.0	Ln	496.3	0.0	0.0	38.4	-64.9	-1.3	-0.1	-2.4		0.0	0.0	0.0	0.0	0.0	38.4
HH 102 rig engine	Line	111.0	101.4	9.2	0	0	0.0	Ld	502.4	0.0	0.0	37.6	-65.0	-2.1	-4.1	-2.2		0.0	0.0	0.0	0.0	0.0	37.6
HH 102 rig engine	Line	111.0	101.4	9.2	0	0	0.0	Le	502.4	0.0	0.0	37.6	-65.0	-2.1	-4.1	-2.2		0.0	0.0	0.0	0.0	0.0	37.6
HH 102 rig engine	Line	111.0	101.4	9.2	0	0	0.0	Ln	502.4	0.0	0.0	37.6	-65.0	-2.1	-4.1	-2.2		0.0	0.0	0.0	0.0	0.0	37.6
Motor on Sifter at Settling tank	Point	101.0	101.0		0	0	0.0	Ld	520.7	0.0	0.0	29.0	-65.3	-0.9	-3.8	-1.9		0.0	0.0	0.0	0.0	0.0	29.0
Motor on Sifter at Settling tank	Point	101.0	101.0		0	0	0.0	Le	520.7	0.0	0.0	29.0	-65.3	-0.9	-3.8	-1.9		0.0	0.0	0.0	0.0	0.0	29.0
Motor on Sifter at Settling tank	Point	101.0	101.0		0	0	0.0	Ln	520.7	0.0	0.0	29.0	-65.3	-0.9	-3.8	-1.9		0.0	0.0	0.0	0.0	0.0	29.0
Sifter at settlement tanks	Point	99.0	99.0		0	0	0.0	Ld	518.3	0.0	0.0	27.6	-65.3	-1.2	-3.4	-1.5		0.0	0.0	0.0	0.0	0.0	27.6
Sifter at settlement tanks	Point	99.0	99.0		0	0	0.0	Le	518.3	0.0	0.0	27.6	-65.3	-1.2	-3.4	-1.5		0.0	0.0	0.0	0.0	0.0	27.6
Sifter at settlement tanks	Point	99.0	99.0		0	0	0.0	Ln	518.3	0.0	0.0	27.6	-65.3	-1.2	-3.4	-1.5		0.0	0.0	0.0	0.0	0.0	27.6
compressor	Area	85.1	77.3	6.0	0	0	3.0	Ld	509.0	0.0	0.0	14.5	-65.1	-6.3	-1.4	-0.8		0.0	0.0	0.0	0.0	0.0	14.5
compressor	Area	85.1	77.3	6.0	0	0	3.0	Le	509.0	0.0	0.0	14.5	-65.1	-6.3	-1.4	-0.8		0.0	0.0	0.0	0.0	0.0	14.5
compressor	Area	85.1	77.3	6.0	0	0	3.0	Ln	509.0	0.0	0.0	14.5	-65.1	-6.3	-1.4	-0.8		0.0	0.0	0.0	0.0	0.0	14.5
generator	Area	85.1	77.3	6.0	0	0	3.0	Ld	511.2	0.0	0.0	16.1	-65.2	-6.3	-1.4	-0.9		0.0	1.6	0.0	0.0	0.0	16.1
generator	Area	85.1	77.3	6.0	0	0	3.0	Le	511.2	0.0	0.0	16.1	-65.2	-6.3	-1.4	-0.9		0.0	1.6	0.0	0.0	0.0	16.1
generator	Area	85.1	77.3	6.0	0	0	3.0	Ln	511.2	0.0	0.0	16.1	-65.2	-6.3	-1.4	-0.9		0.0	1.6	0.0	0.0	0.0	16.1
mud pump east vent	Area	103.4	95.6	6.0	0	0	3.0	Ld	515.2	0.0	0.0	32.4	-65.2	-4.2	-3.2	-2.0		0.0	0.7	0.0	0.0	0.0	32.4
mud pump east vent	Area	103.4	95.6	6.0	0	0	3.0	Le	515.2	0.0	0.0	32.4	-65.2	-4.2	-3.2	-2.0		0.0	0.7	0.0	0.0	0.0	32.4
mud pump east vent	Area	103.4	95.6	6.0	0	0	3.0	Ln	515.2	0.0	0.0	32.4	-65.2	-4.2	-3.2	-2.0		0.0	0.7	0.0	0.0	0.0	32.4

Name	Springfield	Floor	F 1	Ld,lim	dB(A)	Le,lim	dB(A)	Ld 43.2	dB(A)	Le 43.2	dB(A)												
HH102 top drive	Point	107.0	107.0		0	0	0.0	Ld	496.2	0.0	0.0	39.9	-64.9	-0.2	-0.1	-2.0		0.0	0.0	0.0	0.0	0.0	39.9
HH102 top drive	Point	107.0	107.0		0	0	0.0	Le	496.2	0.0	0.0	39.9	-64.9	-0.2	-0.1	-2.0		0.0	0.0	0.0	0.0	0.0	39.9
HH102 top drive	Point	107.0	107.0		0	0	0.0	Ln	496.2	0.0	0.0	39.9	-64.9	-0.2	-0.1	-2.0		0.0	0.0	0.0	0.0	0.0	39.9
HH 102 rig engine	Line	111.0	101.4	9.2	0	0	0.0	Ld	502.3	0.0	0.0	38.8	-65.0	-1.6	-3.6	-2.0		0.0	0.0	0.0	0.0	0.0	38.8
HH 102 rig engine	Line	111.0	101.4	9.2	0	0	0.0	Le	502.3	0.0	0.0	38.8	-65.0	-1.6	-3.6	-2.0		0.0	0.0	0.0	0.0	0.0	38.8
HH 102 rig engine	Line	111.0	101.4	9.2	0	0	0.0	Ln	502.3	0.0	0.0	38.8	-65.0	-1.6	-3.6	-2.0		0.0	0.0	0.0	0.0	0.0	38.8
Motor on Sifter at Settling tank	Point	101.0	101.0		0	0	0.0	Ld	520.6	0.0	0.0	29.1	-65.3	-0.2	-4.5	-1.9		0.0	0.0	0.0	0.0	0.0	29.1
Motor on Sifter at Settling tank	Point	101.0	101.0		0	0	0.0	Le	520.6	0.0	0.0	29.1	-65.3	-0.2	-4.5	-1.9		0.0	0.0	0.0	0.0	0.0	29.1
Motor on Sifter at Settling tank	Point	101.0	101.0		0	0	0.0	Ln	520.6	0.0	0.0	29.1	-65.3	-0.2	-4.5	-1.9		0.0	0.0	0.0	0.0	0.0	29.1
Sifter at settlement tanks	Point	99.0	99.0		0	0	0.0	Ld	518.3	0.0	0.0	27.9	-65.3	-0.5	-3.9	-1.5		0.0	0.0	0.0	0.0	0.0	27.9

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Mean propagation Leq - Scenario 4

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Source	SrcType	Lw	Lw'	I or S	KI	KT	Ko	time slice	s	Li	R'w	Ls	Adiv	Agr	Abar	Aatm	Amis	ADI	dLref	dLw	ZR	Cmet	Lr	
		dB(A)	dB(A)	m,m²	dB	dB	dB		m	dB(A)	dB	dB(A)	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB(A)	
Sifter at settlement tanks	Point	99.0	99.0		0	0	0.0	Le	518.3	0.0	0.0	27.9	-65.3	-0.5	-3.9	-1.5		0.0	0.0	0.0	0.0	0.0	27.9	
Sifter at settlement tanks	Point	99.0	99.0		0	0	0.0	Ln	518.3	0.0	0.0	27.9	-65.3	-0.5	-3.9	-1.5		0.0	0.0	0.0	0.0	0.0	27.9	
compressor	Area	85.1	77.3	6.0	0	0	3.0	Ld	508.9	0.0	0.0	15.8	-65.1	-4.1	-2.2	-0.8		0.0	0.0	0.0	0.0	0.0	15.8	
compressor	Area	85.1	77.3	6.0	0	0	3.0	Le	508.9	0.0	0.0	15.8	-65.1	-4.1	-2.2	-0.8		0.0	0.0	0.0	0.0	0.0	15.8	
compressor	Area	85.1	77.3	6.0	0	0	3.0	Ln	508.9	0.0	0.0	15.8	-65.1	-4.1	-2.2	-0.8		0.0	0.0	0.0	0.0	0.0	15.8	
generator	Area	85.1	77.3	6.0	0	0	3.0	Ld	511.1	0.0	0.0	15.8	-65.2	-4.1	-2.2	-0.8		0.0	0.0	0.0	0.0	0.0	15.8	
generator	Area	85.1	77.3	6.0	0	0	3.0	Le	511.1	0.0	0.0	15.8	-65.2	-4.1	-2.2	-0.8		0.0	0.0	0.0	0.0	0.0	15.8	
generator	Area	85.1	77.3	6.0	0	0	3.0	Ln	511.1	0.0	0.0	15.8	-65.2	-4.1	-2.2	-0.8		0.0	0.0	0.0	0.0	0.0	15.8	
mud pump east vent	Area	103.4	95.6	6.0	0	0	3.0	Ld	515.2	0.0	0.0	33.8	-65.2	-3.1	-3.0	-1.7		0.0	0.5	0.0	0.0	0.0	33.8	
mud pump east vent	Area	103.4	95.6	6.0	0	0	3.0	Le	515.2	0.0	0.0	33.8	-65.2	-3.1	-3.0	-1.7		0.0	0.5	0.0	0.0	0.0	33.8	
mud pump east vent	Area	103.4	95.6	6.0	0	0	3.0	Ln	515.2	0.0	0.0	33.8	-65.2	-3.1	-3.0	-1.7		0.0	0.5	0.0	0.0	0.0	33.8	
Name	The Parks	Floor	GF	Ld,lim	dB(A)	Le,lim	dB(A)	Ld 39.5	dB(A)	Le 39.5	dB(A)													
HH102 top drive	Point	107.0	107.0		0	0	0.0	Ld	580.2	0.0	0.0	35.7	-66.3	-2.0	-0.1	-2.9		0.0	0.0	0.0	0.0	0.0	35.7	
HH102 top drive	Point	107.0	107.0		0	0	0.0	Le	580.2	0.0	0.0	35.7	-66.3	-2.0	-0.1	-2.9		0.0	0.0	0.0	0.0	0.0	35.7	
HH102 top drive	Point	107.0	107.0		0	0	0.0	Ln	580.2	0.0	0.0	35.7	-66.3	-2.0	-0.1	-2.9		0.0	0.0	0.0	0.0	0.0	35.7	
HH 102 rig engine	Line	111.0	101.4	9.2	0	0	0.0	Ld	581.6	0.0	0.0	36.0	-66.3	-2.6	-3.5	-2.7		0.0	0.0	0.0	0.0	0.0	36.0	
HH 102 rig engine	Line	111.0	101.4	9.2	0	0	0.0	Le	581.6	0.0	0.0	36.0	-66.3	-2.6	-3.5	-2.7		0.0	0.0	0.0	0.0	0.0	36.0	
HH 102 rig engine	Line	111.0	101.4	9.2	0	0	0.0	Ln	581.6	0.0	0.0	36.0	-66.3	-2.6	-3.5	-2.7		0.0	0.0	0.0	0.0	0.0	36.0	
Motor on Sifter at Settling tank	Point	101.0	101.0		0	0	0.0	Ld	570.1	0.0	0.0	27.5	-66.1	-1.8	-3.5	-2.2		0.0	0.0	0.0	0.0	0.0	27.5	
Motor on Sifter at Settling tank	Point	101.0	101.0		0	0	0.0	Le	570.1	0.0	0.0	27.5	-66.1	-1.8	-3.5	-2.2		0.0	0.0	0.0	0.0	0.0	27.5	
Motor on Sifter at Settling tank	Point	101.0	101.0		0	0	0.0	Ln	570.1	0.0	0.0	27.5	-66.1	-1.8	-3.5	-2.2		0.0	0.0	0.0	0.0	0.0	27.5	
Sifter at settlement tanks	Point	99.0	99.0		0	0	0.0	Ld	569.5	0.0	0.0	26.1	-66.1	-1.7	-3.4	-1.7		0.0	0.0	0.0	0.0	0.0	26.1	
Sifter at settlement tanks	Point	99.0	99.0		0	0	0.0	Le	569.5	0.0	0.0	26.1	-66.1	-1.7	-3.4	-1.7		0.0	0.0	0.0	0.0	0.0	26.1	
Sifter at settlement tanks	Point	99.0	99.0		0	0	0.0	Ln	569.5	0.0	0.0	26.1	-66.1	-1.7	-3.4	-1.7		0.0	0.0	0.0	0.0	0.0	26.1	
compressor	Area	85.1	77.3	6.0	0	0	3.0	Ld	590.0	0.0	0.0	5.9	-66.4	-7.6	-7.6	-0.6		0.0	0.0	0.0	0.0	0.0	5.9	
compressor	Area	85.1	77.3	6.0	0	0	3.0	Le	590.0	0.0	0.0	5.9	-66.4	-7.6	-7.6	-0.6		0.0	0.0	0.0	0.0	0.0	5.9	
compressor	Area	85.1	77.3	6.0	0	0	3.0	Ln	590.0	0.0	0.0	5.9	-66.4	-7.6	-7.6	-0.6		0.0	0.0	0.0	0.0	0.0	5.9	
generator	Area	85.1	77.3	6.0	0	0	3.0	Ld	590.6	0.0	0.0	5.8	-66.4	-7.6	-7.6	-0.7		0.0	0.0	0.0	0.0	0.0	5.8	
generator	Area	85.1	77.3	6.0	0	0	3.0	Le	590.6	0.0	0.0	5.8	-66.4	-7.6	-7.6	-0.7		0.0	0.0	0.0	0.0	0.0	5.8	
generator	Area	85.1	77.3	6.0	0	0	3.0	Ln	590.6	0.0	0.0	5.8	-66.4	-7.6	-7.6	-0.7		0.0	0.0	0.0	0.0	0.0	5.8	
mud pump east vent	Area	103.4	95.6	6.0	0	0	3.0	Ld	592.6	0.0	0.0	22.6	-66.4	-4.8	-11.7	-0.9		0.0	0.0	0.0	0.0	0.0	22.6	
mud pump east vent	Area	103.4	95.6	6.0	0	0	3.0	Le	592.6	0.0	0.0	22.6	-66.4	-4.8	-11.7	-0.9		0.0	0.0	0.0	0.0	0.0	22.6	
mud pump east vent	Area	103.4	95.6	6.0	0	0	3.0	Ln	592.6	0.0	0.0	22.6	-66.4	-4.8	-11.7	-0.9		0.0	0.0	0.0	0.0	0.0	22.6	

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Mean propagation Leq - Scenario 4

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Source	SrcType	Lw	Lw'	I or S	KI	KT	Ko	time slice	s	Li	R'w	Ls	Adiv	Agr	Abar	Aatm	Amis	ADI	dLref	dLw	ZR	Cmet	Lr
		dB(A)	dB(A)	m,m²	dB	dB	dB		m	dB(A)	dB	dB(A)	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB(A)

Name	The Parks	Floor	F 1	Ld,lim	dB(A)	Le,lim	dB(A)	Ld 41.2	dB(A)	Le 41.2	dB(A)												
HH102 top drive	Point	107.0	107.0		0	0	0.0	Ld	580.1	0.0	0.0	38.1	-66.3	-0.2	-0.1	-2.3	0.0	0.0	0.0	0.0	0.0	38.1	
HH102 top drive	Point	107.0	107.0		0	0	0.0	Le	580.1	0.0	0.0	38.1	-66.3	-0.2	-0.1	-2.3	0.0	0.0	0.0	0.0	0.0	38.1	
HH102 top drive	Point	107.0	107.0		0	0	0.0	Ln	580.1	0.0	0.0	38.1	-66.3	-0.2	-0.1	-2.3	0.0	0.0	0.0	0.0	0.0	38.1	
HH 102 rig engine	Line	111.0	101.4	9.2	0	0	0.0	Ld	581.6	0.0	0.0	37.4	-66.3	-1.6	-3.4	-2.3	0.0	0.0	0.0	0.0	0.0	37.4	
HH 102 rig engine	Line	111.0	101.4	9.2	0	0	0.0	Le	581.6	0.0	0.0	37.4	-66.3	-1.6	-3.4	-2.3	0.0	0.0	0.0	0.0	0.0	37.4	
HH 102 rig engine	Line	111.0	101.4	9.2	0	0	0.0	Ln	581.6	0.0	0.0	37.4	-66.3	-1.6	-3.4	-2.3	0.0	0.0	0.0	0.0	0.0	37.4	
Motor on Sifter at Settling tank	Point	101.0	101.0		0	0	0.0	Ld	570.1	0.0	0.0	28.1	-66.1	-0.2	-4.5	-2.0	0.0	0.0	0.0	0.0	0.0	28.1	
Motor on Sifter at Settling tank	Point	101.0	101.0		0	0	0.0	Le	570.1	0.0	0.0	28.1	-66.1	-0.2	-4.5	-2.0	0.0	0.0	0.0	0.0	0.0	28.1	
Motor on Sifter at Settling tank	Point	101.0	101.0		0	0	0.0	Ln	570.1	0.0	0.0	28.1	-66.1	-0.2	-4.5	-2.0	0.0	0.0	0.0	0.0	0.0	28.1	
Sifter at settlement tanks	Point	99.0	99.0		0	0	0.0	Ld	569.5	0.0	0.0	26.8	-66.1	-0.5	-4.0	-1.6	0.0	0.0	0.0	0.0	0.0	26.8	
Sifter at settlement tanks	Point	99.0	99.0		0	0	0.0	Le	569.5	0.0	0.0	26.8	-66.1	-0.5	-4.0	-1.6	0.0	0.0	0.0	0.0	0.0	26.8	
Sifter at settlement tanks	Point	99.0	99.0		0	0	0.0	Ln	569.5	0.0	0.0	26.8	-66.1	-0.5	-4.0	-1.6	0.0	0.0	0.0	0.0	0.0	26.8	
compressor	Area	85.1	77.3	6.0	0	0	3.0	Ld	590.0	0.0	0.0	6.2	-66.4	-4.2	-10.6	-0.7	0.0	0.0	0.0	0.0	0.0	6.2	
compressor	Area	85.1	77.3	6.0	0	0	3.0	Le	590.0	0.0	0.0	6.2	-66.4	-4.2	-10.6	-0.7	0.0	0.0	0.0	0.0	0.0	6.2	
compressor	Area	85.1	77.3	6.0	0	0	3.0	Ln	590.0	0.0	0.0	6.2	-66.4	-4.2	-10.6	-0.7	0.0	0.0	0.0	0.0	0.0	6.2	
generator	Area	85.1	77.3	6.0	0	0	3.0	Ld	590.6	0.0	0.0	6.1	-66.4	-4.2	-10.7	-0.7	0.0	0.0	0.0	0.0	0.0	6.1	
generator	Area	85.1	77.3	6.0	0	0	3.0	Le	590.6	0.0	0.0	6.1	-66.4	-4.2	-10.7	-0.7	0.0	0.0	0.0	0.0	0.0	6.1	
generator	Area	85.1	77.3	6.0	0	0	3.0	Ln	590.6	0.0	0.0	6.1	-66.4	-4.2	-10.7	-0.7	0.0	0.0	0.0	0.0	0.0	6.1	
mud pump east vent	Area	103.4	95.6	6.0	0	0	3.0	Ld	592.6	0.0	0.0	23.2	-66.4	-3.2	-12.7	-0.8	0.0	0.0	0.0	0.0	0.0	23.2	
mud pump east vent	Area	103.4	95.6	6.0	0	0	3.0	Le	592.6	0.0	0.0	23.2	-66.4	-3.2	-12.7	-0.8	0.0	0.0	0.0	0.0	0.0	23.2	
mud pump east vent	Area	103.4	95.6	6.0	0	0	3.0	Ln	592.6	0.0	0.0	23.2	-66.4	-3.2	-12.7	-0.8	0.0	0.0	0.0	0.0	0.0	23.2	

Name	Well Cottage	Floor	GF	Ld,lim	dB(A)	Le,lim	dB(A)	Ld 42.4	dB(A)	Le 42.4	dB(A)												
HH102 top drive	Point	107.0	107.0		0	0	0.0	Ld	464.2	0.0	0.0	38.7	-64.3	-1.6	-0.1	-2.3	0.0	0.0	0.0	0.0	0.0	38.7	
HH102 top drive	Point	107.0	107.0		0	0	0.0	Le	464.2	0.0	0.0	38.7	-64.3	-1.6	-0.1	-2.3	0.0	0.0	0.0	0.0	0.0	38.7	
HH102 top drive	Point	107.0	107.0		0	0	0.0	Ln	464.2	0.0	0.0	38.7	-64.3	-1.6	-0.1	-2.3	0.0	0.0	0.0	0.0	0.0	38.7	
HH 102 rig engine	Line	111.0	101.4	9.2	0	0	0.0	Ld	470.4	0.0	0.0	38.2	-64.4	-2.3	-4.0	-2.0	0.0	0.0	0.0	0.0	0.0	38.2	
HH 102 rig engine	Line	111.0	101.4	9.2	0	0	0.0	Le	470.4	0.0	0.0	38.2	-64.4	-2.3	-4.0	-2.0	0.0	0.0	0.0	0.0	0.0	38.2	
HH 102 rig engine	Line	111.0	101.4	9.2	0	0	0.0	Ln	470.4	0.0	0.0	38.2	-64.4	-2.3	-4.0	-2.0	0.0	0.0	0.0	0.0	0.0	38.2	
Motor on Sifter at Settling tank	Point	101.0	101.0		0	0	0.0	Ld	487.3	0.0	0.0	29.4	-64.7	-1.3	-3.7	-1.8	0.0	0.0	0.0	0.0	0.0	29.4	
Motor on Sifter at Settling tank	Point	101.0	101.0		0	0	0.0	Le	487.3	0.0	0.0	29.4	-64.7	-1.3	-3.7	-1.8	0.0	0.0	0.0	0.0	0.0	29.4	
Motor on Sifter at Settling tank	Point	101.0	101.0		0	0	0.0	Ln	487.3	0.0	0.0	29.4	-64.7	-1.3	-3.7	-1.8	0.0	0.0	0.0	0.0	0.0	29.4	
Sifter at settlement tanks	Point	99.0	99.0		0	0	0.0	Ld	484.9	0.0	0.0	28.2	-64.7	-1.4	-3.3	-1.4	0.0	0.0	0.0	0.0	0.0	28.2	

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Source	SrcType	Lw	Lw'	I or S	KI	KT	Ko	time slice	s	Li	R'w	Ls	Adiv	Agr	Abar	Aatm	Amis	ADI	dLref	dLw	ZR	Cmet	Lr	
		dB(A)	dB(A)	m,m²	dB	dB	dB		m	dB(A)	dB	dB(A)	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB(A)	
Sifter at settlement tanks	Point	99.0	99.0		0	0	0.0	Le	484.9	0.0	0.0	28.2	-64.7	-1.4	-3.3	-1.4		0.0	0.0	0.0	0.0	0.0	28.2	
Sifter at settlement tanks	Point	99.0	99.0		0	0	0.0	Ln	484.9	0.0	0.0	28.2	-64.7	-1.4	-3.3	-1.4		0.0	0.0	0.0	0.0	0.0	28.2	
compressor	Area	85.1	77.3	6.0	0	0	3.0	Ld	477.7	0.0	0.0	16.5	-64.6	-6.8	-1.4	-0.8		0.0	2.0	0.0	0.0	0.0	16.5	
compressor	Area	85.1	77.3	6.0	0	0	3.0	Le	477.7	0.0	0.0	16.5	-64.6	-6.8	-1.4	-0.8		0.0	2.0	0.0	0.0	0.0	16.5	
compressor	Area	85.1	77.3	6.0	0	0	3.0	Ln	477.7	0.0	0.0	16.5	-64.6	-6.8	-1.4	-0.8		0.0	2.0	0.0	0.0	0.0	16.5	
generator	Area	85.1	77.3	6.0	0	0	3.0	Ld	480.0	0.0	0.0	15.9	-64.6	-6.8	-1.4	-0.8		0.0	1.5	0.0	0.0	0.0	15.9	
generator	Area	85.1	77.3	6.0	0	0	3.0	Le	480.0	0.0	0.0	15.9	-64.6	-6.8	-1.4	-0.8		0.0	1.5	0.0	0.0	0.0	15.9	
generator	Area	85.1	77.3	6.0	0	0	3.0	Ln	480.0	0.0	0.0	15.9	-64.6	-6.8	-1.4	-0.8		0.0	1.5	0.0	0.0	0.0	15.9	
mud pump east vent	Area	103.4	95.6	6.0	0	0	3.0	Ld	484.1	0.0	0.0	32.7	-64.7	-4.5	-3.3	-2.0		0.0	0.7	0.0	0.0	0.0	32.7	
mud pump east vent	Area	103.4	95.6	6.0	0	0	3.0	Le	484.1	0.0	0.0	32.7	-64.7	-4.5	-3.3	-2.0		0.0	0.7	0.0	0.0	0.0	32.7	
mud pump east vent	Area	103.4	95.6	6.0	0	0	3.0	Ln	484.1	0.0	0.0	32.7	-64.7	-4.5	-3.3	-2.0		0.0	0.7	0.0	0.0	0.0	32.7	
Name Well Cottage Floor F 1 Ld,lim dB(A) Le,lim dB(A) Ld 43.9 dB(A) Le 43.9 dB(A)																								
HH102 top drive	Point	107.0	107.0		0	0	0.0	Ld	464.1	0.0	0.0	40.5	-64.3	-0.2	-0.1	-1.9		0.0	0.0	0.0	0.0	0.0	40.5	
HH102 top drive	Point	107.0	107.0		0	0	0.0	Le	464.1	0.0	0.0	40.5	-64.3	-0.2	-0.1	-1.9		0.0	0.0	0.0	0.0	0.0	40.5	
HH102 top drive	Point	107.0	107.0		0	0	0.0	Ln	464.1	0.0	0.0	40.5	-64.3	-0.2	-0.1	-1.9		0.0	0.0	0.0	0.0	0.0	40.5	
HH 102 rig engine	Line	111.0	101.4	9.2	0	0	0.0	Ld	470.3	0.0	0.0	39.5	-64.4	-1.6	-3.6	-1.8		0.0	0.0	0.0	0.0	0.0	39.5	
HH 102 rig engine	Line	111.0	101.4	9.2	0	0	0.0	Le	470.3	0.0	0.0	39.5	-64.4	-1.6	-3.6	-1.8		0.0	0.0	0.0	0.0	0.0	39.5	
HH 102 rig engine	Line	111.0	101.4	9.2	0	0	0.0	Ln	470.3	0.0	0.0	39.5	-64.4	-1.6	-3.6	-1.8		0.0	0.0	0.0	0.0	0.0	39.5	
Motor on Sifter at Settling tank	Point	101.0	101.0		0	0	0.0	Ld	487.2	0.0	0.0	29.8	-64.7	-0.2	-4.5	-1.8		0.0	0.0	0.0	0.0	0.0	29.8	
Motor on Sifter at Settling tank	Point	101.0	101.0		0	0	0.0	Le	487.2	0.0	0.0	29.8	-64.7	-0.2	-4.5	-1.8		0.0	0.0	0.0	0.0	0.0	29.8	
Motor on Sifter at Settling tank	Point	101.0	101.0		0	0	0.0	Ln	487.2	0.0	0.0	29.8	-64.7	-0.2	-4.5	-1.8		0.0	0.0	0.0	0.0	0.0	29.8	
Sifter at settlement tanks	Point	99.0	99.0		0	0	0.0	Ld	484.9	0.0	0.0	28.5	-64.7	-0.5	-3.9	-1.4		0.0	0.0	0.0	0.0	0.0	28.5	
Sifter at settlement tanks	Point	99.0	99.0		0	0	0.0	Le	484.9	0.0	0.0	28.5	-64.7	-0.5	-3.9	-1.4		0.0	0.0	0.0	0.0	0.0	28.5	
Sifter at settlement tanks	Point	99.0	99.0		0	0	0.0	Ln	484.9	0.0	0.0	28.5	-64.7	-0.5	-3.9	-1.4		0.0	0.0	0.0	0.0	0.0	28.5	
compressor	Area	85.1	77.3	6.0	0	0	3.0	Ld	477.7	0.0	0.0	19.1	-64.6	-4.1	-2.2	-0.8		0.0	2.7	0.0	0.0	0.0	19.1	
compressor	Area	85.1	77.3	6.0	0	0	3.0	Le	477.7	0.0	0.0	19.1	-64.6	-4.1	-2.2	-0.8		0.0	2.7	0.0	0.0	0.0	19.1	
compressor	Area	85.1	77.3	6.0	0	0	3.0	Ln	477.7	0.0	0.0	19.1	-64.6	-4.1	-2.2	-0.8		0.0	2.7	0.0	0.0	0.0	19.1	
generator	Area	85.1	77.3	6.0	0	0	3.0	Ld	479.9	0.0	0.0	18.7	-64.6	-4.1	-2.2	-0.8		0.0	2.4	0.0	0.0	0.0	18.7	
generator	Area	85.1	77.3	6.0	0	0	3.0	Le	479.9	0.0	0.0	18.7	-64.6	-4.1	-2.2	-0.8		0.0	2.4	0.0	0.0	0.0	18.7	
generator	Area	85.1	77.3	6.0	0	0	3.0	Ln	479.9	0.0	0.0	18.7	-64.6	-4.1	-2.2	-0.8		0.0	2.4	0.0	0.0	0.0	18.7	
mud pump east vent	Area	103.4	95.6	6.0	0	0	3.0	Ld	484.1	0.0	0.0	34.3	-64.7	-3.1	-3.1	-1.6		0.0	0.5	0.0	0.0	0.0	34.3	
mud pump east vent	Area	103.4	95.6	6.0	0	0	3.0	Le	484.1	0.0	0.0	34.3	-64.7	-3.1	-3.1	-1.6		0.0	0.5	0.0	0.0	0.0	34.3	
mud pump east vent	Area	103.4	95.6	6.0	0	0	3.0	Ln	484.1	0.0	0.0	34.3	-64.7	-3.1	-3.1	-1.6		0.0	0.5	0.0	0.0	0.0	34.3	

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Mean propagation Leq - Scenario 4

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Source	SrcType	Lw	Lw'	I or S	KI	KT	Ko	time slice	s	Li	R'w	Ls	Adiv	Agr	Abar	Aatm	Amis	ADI	dLref	dLw	ZR	Cmet	Lr
		dB(A)	dB(A)	m,m ²	dB	dB	dB		m	dB(A)	dB	dB(A)	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB(A)

Name	Well Cottage	Floor	GF	Ld,lim	dB(A)	Le,lim	dB(A)	Ld 42.5	dB(A)	Le 42.5	dB(A)													
HH102 top drive	Point	107.0	107.0		0	0	0.0	Ld	466.5	0.0	0.0	38.9	-64.4	-1.4	-0.1	-2.3		0.0	0.0	0.0	0.0	0.0	38.9	
HH102 top drive	Point	107.0	107.0		0	0	0.0	Le	466.5	0.0	0.0	38.9	-64.4	-1.4	-0.1	-2.3		0.0	0.0	0.0	0.0	0.0	38.9	
HH102 top drive	Point	107.0	107.0		0	0	0.0	Ln	466.5	0.0	0.0	38.9	-64.4	-1.4	-0.1	-2.3		0.0	0.0	0.0	0.0	0.0	38.9	
HH 102 rig engine	Line	111.0	101.4	9.2	0	0	0.0	Ld	472.6	0.0	0.0	38.1	-64.5	-2.2	-4.1	-2.1		0.0	0.0	0.0	0.0	0.0	38.1	
HH 102 rig engine	Line	111.0	101.4	9.2	0	0	0.0	Le	472.6	0.0	0.0	38.1	-64.5	-2.2	-4.1	-2.1		0.0	0.0	0.0	0.0	0.0	38.1	
HH 102 rig engine	Line	111.0	101.4	9.2	0	0	0.0	Ln	472.6	0.0	0.0	38.1	-64.5	-2.2	-4.1	-2.1		0.0	0.0	0.0	0.0	0.0	38.1	
Motor on Sifter at Settling tank	Point	101.0	101.0		0	0	0.0	Ld	489.8	0.0	0.0	29.6	-64.8	-1.1	-3.8	-1.8		0.0	0.0	0.0	0.0	0.0	29.6	
Motor on Sifter at Settling tank	Point	101.0	101.0		0	0	0.0	Le	489.8	0.0	0.0	29.6	-64.8	-1.1	-3.8	-1.8		0.0	0.0	0.0	0.0	0.0	29.6	
Motor on Sifter at Settling tank	Point	101.0	101.0		0	0	0.0	Ln	489.8	0.0	0.0	29.6	-64.8	-1.1	-3.8	-1.8		0.0	0.0	0.0	0.0	0.0	29.6	
Sifter at settlement tanks	Point	99.0	99.0		0	0	0.0	Ld	487.4	0.0	0.0	28.2	-64.8	-1.3	-3.3	-1.4		0.0	0.0	0.0	0.0	0.0	28.2	
Sifter at settlement tanks	Point	99.0	99.0		0	0	0.0	Le	487.4	0.0	0.0	28.2	-64.8	-1.3	-3.3	-1.4		0.0	0.0	0.0	0.0	0.0	28.2	
Sifter at settlement tanks	Point	99.0	99.0		0	0	0.0	Ln	487.4	0.0	0.0	28.2	-64.8	-1.3	-3.3	-1.4		0.0	0.0	0.0	0.0	0.0	28.2	
compressor	Area	85.1	77.3	6.0	0	0	3.0	Ld	479.9	0.0	0.0	14.8	-64.6	-6.5	-1.4	-0.8		0.0	0.0	0.0	0.0	0.0	14.8	
compressor	Area	85.1	77.3	6.0	0	0	3.0	Le	479.9	0.0	0.0	14.8	-64.6	-6.5	-1.4	-0.8		0.0	0.0	0.0	0.0	0.0	14.8	
compressor	Area	85.1	77.3	6.0	0	0	3.0	Ln	479.9	0.0	0.0	14.8	-64.6	-6.5	-1.4	-0.8		0.0	0.0	0.0	0.0	0.0	14.8	
generator	Area	85.1	77.3	6.0	0	0	3.0	Ld	482.1	0.0	0.0	16.3	-64.7	-6.5	-1.4	-0.8		0.0	1.5	0.0	0.0	0.0	16.3	
generator	Area	85.1	77.3	6.0	0	0	3.0	Le	482.1	0.0	0.0	16.3	-64.7	-6.5	-1.4	-0.8		0.0	1.5	0.0	0.0	0.0	16.3	
generator	Area	85.1	77.3	6.0	0	0	3.0	Ln	482.1	0.0	0.0	16.3	-64.7	-6.5	-1.4	-0.8		0.0	1.5	0.0	0.0	0.0	16.3	
mud pump east vent	Area	103.4	95.6	6.0	0	0	3.0	Ld	486.3	0.0	0.0	32.8	-64.7	-4.3	-3.2	-2.0		0.0	0.7	0.0	0.0	0.0	32.8	
mud pump east vent	Area	103.4	95.6	6.0	0	0	3.0	Le	486.3	0.0	0.0	32.8	-64.7	-4.3	-3.2	-2.0		0.0	0.7	0.0	0.0	0.0	32.8	
mud pump east vent	Area	103.4	95.6	6.0	0	0	3.0	Ln	486.3	0.0	0.0	32.8	-64.7	-4.3	-3.2	-2.0		0.0	0.7	0.0	0.0	0.0	32.8	

Name	Well Cottage	Floor	F 1	Ld,lim	dB(A)	Le,lim	dB(A)	Ld 43.9	dB(A)	Le 43.9	dB(A)													
HH102 top drive	Point	107.0	107.0		0	0	0.0	Ld	466.4	0.0	0.0	40.5	-64.4	-0.2	-0.1	-1.9		0.0	0.0	0.0	0.0	0.0	40.5	
HH102 top drive	Point	107.0	107.0		0	0	0.0	Le	466.4	0.0	0.0	40.5	-64.4	-0.2	-0.1	-1.9		0.0	0.0	0.0	0.0	0.0	40.5	
HH102 top drive	Point	107.0	107.0		0	0	0.0	Ln	466.4	0.0	0.0	40.5	-64.4	-0.2	-0.1	-1.9		0.0	0.0	0.0	0.0	0.0	40.5	
HH 102 rig engine	Line	111.0	101.4	9.2	0	0	0.0	Ld	472.6	0.0	0.0	39.4	-64.5	-1.6	-3.6	-1.8		0.0	0.0	0.0	0.0	0.0	39.4	
HH 102 rig engine	Line	111.0	101.4	9.2	0	0	0.0	Le	472.6	0.0	0.0	39.4	-64.5	-1.6	-3.6	-1.8		0.0	0.0	0.0	0.0	0.0	39.4	
HH 102 rig engine	Line	111.0	101.4	9.2	0	0	0.0	Ln	472.6	0.0	0.0	39.4	-64.5	-1.6	-3.6	-1.8		0.0	0.0	0.0	0.0	0.0	39.4	
Motor on Sifter at Settling tank	Point	101.0	101.0		0	0	0.0	Ld	489.8	0.0	0.0	29.7	-64.8	-0.2	-4.5	-1.8		0.0	0.0	0.0	0.0	0.0	29.7	
Motor on Sifter at Settling tank	Point	101.0	101.0		0	0	0.0	Le	489.8	0.0	0.0	29.7	-64.8	-0.2	-4.5	-1.8		0.0	0.0	0.0	0.0	0.0	29.7	
Motor on Sifter at Settling tank	Point	101.0	101.0		0	0	0.0	Ln	489.8	0.0	0.0	29.7	-64.8	-0.2	-4.5	-1.8		0.0	0.0	0.0	0.0	0.0	29.7	
Sifter at settlement tanks	Point	99.0	99.0		0	0	0.0	Ld	487.4	0.0	0.0	28.4	-64.8	-0.5	-3.9	-1.4		0.0	0.0	0.0	0.0	0.0	28.4	

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Mean propagation Leq - Scenario 4

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Source	SrcType	Lw	Lw'	I or S	KI	KT	Ko	time slice	s	Li	R'w	Ls	Adiv	Agr	Abar	Aatm	Amis	ADI	dLref	dLw	ZR	Cmet	Lr	
		dB(A)	dB(A)	m,m²	dB	dB	dB		m	dB(A)	dB	dB(A)	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB(A)	
Sifter at settlement tanks	Point	99.0	99.0		0	0	0.0	Le	487.4	0.0	0.0	28.4	-64.8	-0.5	-3.9	-1.4		0.0	0.0	0.0	0.0	0.0	28.4	
Sifter at settlement tanks	Point	99.0	99.0		0	0	0.0	Ln	487.4	0.0	0.0	28.4	-64.8	-0.5	-3.9	-1.4		0.0	0.0	0.0	0.0	0.0	28.4	
compressor	Area	85.1	77.3	6.0	0	0	3.0	Ld	479.8	0.0	0.0	16.3	-64.6	-4.1	-2.2	-0.8		0.0	0.0	0.0	0.0	0.0	16.3	
compressor	Area	85.1	77.3	6.0	0	0	3.0	Le	479.8	0.0	0.0	16.3	-64.6	-4.1	-2.2	-0.8		0.0	0.0	0.0	0.0	0.0	16.3	
compressor	Area	85.1	77.3	6.0	0	0	3.0	Ln	479.8	0.0	0.0	16.3	-64.6	-4.1	-2.2	-0.8		0.0	0.0	0.0	0.0	0.0	16.3	
generator	Area	85.1	77.3	6.0	0	0	3.0	Ld	482.1	0.0	0.0	18.7	-64.7	-4.1	-2.2	-0.8		0.0	2.4	0.0	0.0	0.0	18.7	
generator	Area	85.1	77.3	6.0	0	0	3.0	Le	482.1	0.0	0.0	18.7	-64.7	-4.1	-2.2	-0.8		0.0	2.4	0.0	0.0	0.0	18.7	
generator	Area	85.1	77.3	6.0	0	0	3.0	Ln	482.1	0.0	0.0	18.7	-64.7	-4.1	-2.2	-0.8		0.0	2.4	0.0	0.0	0.0	18.7	
mud pump east vent	Area	103.4	95.6	6.0	0	0	3.0	Ld	486.2	0.0	0.0	34.3	-64.7	-3.1	-3.1	-1.6		0.0	0.5	0.0	0.0	0.0	34.3	
mud pump east vent	Area	103.4	95.6	6.0	0	0	3.0	Le	486.2	0.0	0.0	34.3	-64.7	-3.1	-3.1	-1.6		0.0	0.5	0.0	0.0	0.0	34.3	
mud pump east vent	Area	103.4	95.6	6.0	0	0	3.0	Ln	486.2	0.0	0.0	34.3	-64.7	-3.1	-3.1	-1.6		0.0	0.5	0.0	0.0	0.0	34.3	
Name	Westfield	Floor	GF	Ld,lim	dB(A)	Le,lim	dB(A)	Ld 41.6	dB(A)	Le 41.6	dB(A)													
HH102 top drive	Point	107.0	107.0		0	0	0.0	Ld	516.4	0.0	0.0	37.5	-65.3	-1.6	-0.1	-2.5		0.0	0.0	0.0	0.0	0.0	37.5	
HH102 top drive	Point	107.0	107.0		0	0	0.0	Le	516.4	0.0	0.0	37.5	-65.3	-1.6	-0.1	-2.5		0.0	0.0	0.0	0.0	0.0	37.5	
HH102 top drive	Point	107.0	107.0		0	0	0.0	Ln	516.4	0.0	0.0	37.5	-65.3	-1.6	-0.1	-2.5		0.0	0.0	0.0	0.0	0.0	37.5	
HH 102 rig engine	Line	111.0	101.4	9.2	0	0	0.0	Ld	521.9	0.0	0.0	38.0	-65.3	-2.3	-4.1	-2.3		0.0	1.0	0.0	0.0	0.0	38.0	
HH 102 rig engine	Line	111.0	101.4	9.2	0	0	0.0	Le	521.9	0.0	0.0	38.0	-65.3	-2.3	-4.1	-2.3		0.0	1.0	0.0	0.0	0.0	38.0	
HH 102 rig engine	Line	111.0	101.4	9.2	0	0	0.0	Ln	521.9	0.0	0.0	38.0	-65.3	-2.3	-4.1	-2.3		0.0	1.0	0.0	0.0	0.0	38.0	
Motor on Sifter at Settling tank	Point	101.0	101.0		0	0	0.0	Ld	543.2	0.0	0.0	28.4	-65.7	-1.3	-3.7	-2.0		0.0	0.0	0.0	0.0	0.0	28.4	
Motor on Sifter at Settling tank	Point	101.0	101.0		0	0	0.0	Le	543.2	0.0	0.0	28.4	-65.7	-1.3	-3.7	-2.0		0.0	0.0	0.0	0.0	0.0	28.4	
Motor on Sifter at Settling tank	Point	101.0	101.0		0	0	0.0	Ln	543.2	0.0	0.0	28.4	-65.7	-1.3	-3.7	-2.0		0.0	0.0	0.0	0.0	0.0	28.4	
Sifter at settlement tanks	Point	99.0	99.0		0	0	0.0	Ld	541.0	0.0	0.0	27.2	-65.7	-1.4	-3.2	-1.5		0.0	0.0	0.0	0.0	0.0	27.2	
Sifter at settlement tanks	Point	99.0	99.0		0	0	0.0	Le	541.0	0.0	0.0	27.2	-65.7	-1.4	-3.2	-1.5		0.0	0.0	0.0	0.0	0.0	27.2	
Sifter at settlement tanks	Point	99.0	99.0		0	0	0.0	Ln	541.0	0.0	0.0	27.2	-65.7	-1.4	-3.2	-1.5		0.0	0.0	0.0	0.0	0.0	27.2	
compressor	Area	85.1	77.3	6.0	0	0	3.0	Ld	526.0	0.0	0.0	13.5	-65.4	-6.9	-1.5	-0.8		0.0	0.0	0.0	0.0	0.0	13.5	
compressor	Area	85.1	77.3	6.0	0	0	3.0	Le	526.0	0.0	0.0	13.5	-65.4	-6.9	-1.5	-0.8		0.0	0.0	0.0	0.0	0.0	13.5	
compressor	Area	85.1	77.3	6.0	0	0	3.0	Ln	526.0	0.0	0.0	13.5	-65.4	-6.9	-1.5	-0.8		0.0	0.0	0.0	0.0	0.0	13.5	
generator	Area	85.1	77.3	6.0	0	0	3.0	Ld	528.0	0.0	0.0	13.5	-65.4	-6.9	-1.5	-0.8		0.0	0.0	0.0	0.0	0.0	13.5	
generator	Area	85.1	77.3	6.0	0	0	3.0	Le	528.0	0.0	0.0	13.5	-65.4	-6.9	-1.5	-0.8		0.0	0.0	0.0	0.0	0.0	13.5	
generator	Area	85.1	77.3	6.0	0	0	3.0	Ln	528.0	0.0	0.0	13.5	-65.4	-6.9	-1.5	-0.8		0.0	0.0	0.0	0.0	0.0	13.5	
mud pump east vent	Area	103.4	95.6	6.0	0	0	3.0	Ld	531.4	0.0	0.0	30.7	-65.5	-4.5	-3.8	-1.9		0.0	0.0	0.0	0.0	0.0	30.7	
mud pump east vent	Area	103.4	95.6	6.0	0	0	3.0	Le	531.4	0.0	0.0	30.7	-65.5	-4.5	-3.8	-1.9		0.0	0.0	0.0	0.0	0.0	30.7	
mud pump east vent	Area	103.4	95.6	6.0	0	0	3.0	Ln	531.4	0.0	0.0	30.7	-65.5	-4.5	-3.8	-1.9		0.0	0.0	0.0	0.0	0.0	30.7	

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AS 0395 Borrass Road

Mean propagation Leq - Scenario 4

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Source	SrcType	Lw	Lw'	I or S	KI	KT	Ko	time slice	s	Li	R'w	Ls	Adiv	Agr	Abar	Aatm	Amis	ADI	dLref	dLw	ZR	Cmet	Lr	
		dB(A)	dB(A)	m,m ²	dB	dB	dB		m	dB(A)	dB	dB(A)	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB(A)	

Name	Westfield	Floor	F 1	Ld,lim	dB(A)	Le,lim	dB(A)	Ld 43.1	dB(A)	Le 43.1	dB(A)													
HH102 top drive	Point	107.0	107.0		0	0	0.0	Ld	516.3	0.0	0.0	39.4	-65.3	-0.2	-0.1	-2.1		0.0	0.0	0.0	0.0	0.0	39.4	
HH102 top drive	Point	107.0	107.0		0	0	0.0	Le	516.3	0.0	0.0	39.4	-65.3	-0.2	-0.1	-2.1		0.0	0.0	0.0	0.0	0.0	39.4	
HH102 top drive	Point	107.0	107.0		0	0	0.0	Ln	516.3	0.0	0.0	39.4	-65.3	-0.2	-0.1	-2.1		0.0	0.0	0.0	0.0	0.0	39.4	
HH 102 rig engine	Line	111.0	101.4	9.2	0	0	0.0	Ld	521.9	0.0	0.0	39.1	-65.3	-1.6	-3.7	-2.0		0.0	0.8	0.0	0.0	0.0	39.1	
HH 102 rig engine	Line	111.0	101.4	9.2	0	0	0.0	Le	521.9	0.0	0.0	39.1	-65.3	-1.6	-3.7	-2.0		0.0	0.8	0.0	0.0	0.0	39.1	
HH 102 rig engine	Line	111.0	101.4	9.2	0	0	0.0	Ln	521.9	0.0	0.0	39.1	-65.3	-1.6	-3.7	-2.0		0.0	0.8	0.0	0.0	0.0	39.1	
Motor on Sifter at Settling tank	Point	101.0	101.0		0	0	0.0	Ld	543.1	0.0	0.0	28.7	-65.7	-0.2	-4.4	-1.9		0.0	0.0	0.0	0.0	0.0	28.7	
Motor on Sifter at Settling tank	Point	101.0	101.0		0	0	0.0	Le	543.1	0.0	0.0	28.7	-65.7	-0.2	-4.4	-1.9		0.0	0.0	0.0	0.0	0.0	28.7	
Motor on Sifter at Settling tank	Point	101.0	101.0		0	0	0.0	Ln	543.1	0.0	0.0	28.7	-65.7	-0.2	-4.4	-1.9		0.0	0.0	0.0	0.0	0.0	28.7	
Sifter at settlement tanks	Point	99.0	99.0		0	0	0.0	Ld	541.0	0.0	0.0	27.5	-65.7	-0.5	-3.8	-1.5		0.0	0.0	0.0	0.0	0.0	27.5	
Sifter at settlement tanks	Point	99.0	99.0		0	0	0.0	Le	541.0	0.0	0.0	27.5	-65.7	-0.5	-3.8	-1.5		0.0	0.0	0.0	0.0	0.0	27.5	
Sifter at settlement tanks	Point	99.0	99.0		0	0	0.0	Ln	541.0	0.0	0.0	27.5	-65.7	-0.5	-3.8	-1.5		0.0	0.0	0.0	0.0	0.0	27.5	
compressor	Area	85.1	77.3	6.0	0	0	3.0	Ld	525.9	0.0	0.0	15.4	-65.4	-4.2	-2.3	-0.8		0.0	0.0	0.0	0.0	0.0	15.4	
compressor	Area	85.1	77.3	6.0	0	0	3.0	Le	525.9	0.0	0.0	15.4	-65.4	-4.2	-2.3	-0.8		0.0	0.0	0.0	0.0	0.0	15.4	
compressor	Area	85.1	77.3	6.0	0	0	3.0	Ln	525.9	0.0	0.0	15.4	-65.4	-4.2	-2.3	-0.8		0.0	0.0	0.0	0.0	0.0	15.4	
generator	Area	85.1	77.3	6.0	0	0	3.0	Ld	527.9	0.0	0.0	15.4	-65.4	-4.2	-2.2	-0.8		0.0	0.0	0.0	0.0	0.0	15.4	
generator	Area	85.1	77.3	6.0	0	0	3.0	Le	527.9	0.0	0.0	15.4	-65.4	-4.2	-2.2	-0.8		0.0	0.0	0.0	0.0	0.0	15.4	
generator	Area	85.1	77.3	6.0	0	0	3.0	Ln	527.9	0.0	0.0	15.4	-65.4	-4.2	-2.2	-0.8		0.0	0.0	0.0	0.0	0.0	15.4	
mud pump east vent	Area	103.4	95.6	6.0	0	0	3.0	Ld	531.4	0.0	0.0	33.0	-65.5	-3.1	-3.2	-1.5		0.0	0.0	0.0	0.0	0.0	33.0	
mud pump east vent	Area	103.4	95.6	6.0	0	0	3.0	Le	531.4	0.0	0.0	33.0	-65.5	-3.1	-3.2	-1.5		0.0	0.0	0.0	0.0	0.0	33.0	
mud pump east vent	Area	103.4	95.6	6.0	0	0	3.0	Ln	531.4	0.0	0.0	33.0	-65.5	-3.1	-3.2	-1.5		0.0	0.0	0.0	0.0	0.0	33.0	

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Appendix 2 – Consultation Documentation

Steve Fraser

From: Nick Minshall <Nick.Minshall@wrexham.gov.uk>
Sent: 08 November 2013 11:38
To: steve@theairshed.com
Cc: Martha_Savage@flintshire.gov.uk
Subject: RE: AS 0395 Borrass Road

Hello Steve

I have looked through the noise report and would comment as follows:

Implementation of the noise mitigation measures detailed in Section 6 of the report should ensure that unacceptable levels of noise disturbance are not caused to noise sensitive residential properties.

The predicted external night-time noise level of 43dB at 4 of the closest noise sensitive residential properties, does not however, meet the 2009 updated WHO guideline for external night-time noise which is specified as:
Night noise guideline (NNG) $L_{night,outside} = 40$ dB.

Although this is unlikely to result in unacceptable noise levels within the nearest noise sensitive properties taking into account the temporary nature of the proposed works and the limited level of exceedance, the updated 40dB level should be referenced for the sake of accuracy.

Regards Nick

From: Steve Fraser [<mailto:steve@theairshed.com>]
Sent: 05 November 2013 22:13
To: Nick Minshall
Subject: AS 0395 Borrass Road

Hi Nick

I've been asked by my client if I've had any feedback from Wrexham on this. I'd be grateful for a response.

Kind regards

Steve

From: Steve Fraser [<mailto:steve@theairshed.com>]
Sent: 28 October 2013 12:40
To: 'nick.minshall@wrexham.gov.uk'
Cc: 'Katharine Blythe' (BlytheK@rpsgroup.com); Euan Brown (ebrown@dartgas.com)
Subject: AS 0395 Borrass Road

Hi

Euan Brown of Dart Energy has asked me to forward you a copy of the draft noise impact assessment for the proposed temporary drilling operations for the appraisal borehole at land off Borrass Road. I suggest that a baseline survey to establish background noise is unnecessary as the main objective is to prevent sleep disturbance, which we have assessed against the absolute WHO limits rather than relating to the pre-existing baseline.

In our experience noise during daytime and evening are not usually an issue, provided the night-time levels comply with WHO sleep disturbance criteria. Daytime noise levels are probably less of an issue.

We initially looked at using the biggest rig on site suggested by Dart Energy (a Schramm TDX 200), but this would have been too noisy for the location. The HH102 rig is the next noisiest rig for which we have

good data (extended environmental noise surveys over several days of operation at several sites). With mitigation, the predicted noise complies with WHO night-time criteria. The worst case predicted noise level (ground floor level) is 43 dB LAeq 1 hour free field at Common Wood Farm, Daisy Bank, Well Cottage and Longfield Barn.

Kind regards



Steve Fraser BSc MPhil CEnv MCIWM MIOA
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