

THE FORMER SSI STEELWORKS, REDCAR – GROUND INVESTIGATION CONTRACT – PRIORITY AREAS WITHIN SSI LANDHOLDINGS CONTRACT 3



Final Factual Report

**Allied
Exploration &
Geotechnics Ltd.**

Contract Number: 4155
Client: South Tees Site Company Ltd
Consulting Engineer: Arcadis

Date: June 2018

Head Office (Registered Office)
Unit 25 Stella Gill Industrial Estate
Pelton Fell
Chester-le-Street
Co. Durham
DH2 2RG
☎ 0191 3874700
📠 0191 3874710

Regional Office
Unit 20 Business Development Centre
Eanam Wharf
Blackburn
BB1 5BL

☎ 01254 503 200
📠 01254 662 590

REPORT CONTROL SHEET

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Client/Consultant Engineer Details

Client	Consultant Engineer
South Tees Site Company Ltd 1 Victoria Street London SW1H 0ET	Arcadis 1 Whitehall Riverside Leeds LS1 4BN

Signed & Approved
On Behalf of Allied Exploration & Geotechnics Limited

Reports Engineer	Approved:	Date:
Laura Clarke BSc (Hons).		11/06/2018
Engineering Reports Manager	Approved:	Date:
Kerry Wade BSc (Hons), MSc, FGS, MCMI		11/06/2018
Technical Director	Approved:	Date:
Nick Vater BSc (Hons), MSc, CGeol, EurGeol, FGS.		11/06/2018

Head Office (Registered Office):	Unit 25, Stella Gill Industrial Estate, Pelton Fell, Chester-le-Street, Co. Durham, DH2 2RG.	Tel: 01913874700 Fax: 01913874710
Regional Office:	Unit 20, Business Development Centre, Eanam Wharf, Blackburn, BB1 5BL	Tel: 01254503200 Fax: 01254662590

THE FORMER SSI STEELWORKS, REDCAR – GROUND INVESTIGATION WORKS – PRIORITY AREAS WITHIN SSI LANDHOLDINGS CONTRACT 3

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Abbreviation	Definition
CP	Cable Percussion
RO	Rotary Openhole
RC	Rotary Coring

Text Abbreviations

1. INTRODUCTION

The site works were commissioned in order to assess the current ground and groundwater conditions on the site prior to the proposed redevelopment of the former Recdar Steel Works, Redcar.

Allied Exploration & Geotechnics Limited (AEG) were contracted by South Tees Site Company Ltd. with Arcadis acting in the capacity of Consulting Engineer to perform a ground investigation at this site in order to provide information on the subsurface ground and groundwater conditions as well as to obtain samples for geotechnical and specialist chemical testing.

1.1 Scope of Works

The investigation works consisted of the following main elements:

- Six cable percussion boreholes, one of which was further advanced using rotary openhole/coring techniques.
- One hundred and seventeen machine excavated trial pits.
- Associated sampling.
- *In-situ* Standard Penetration, Hand Shear Vane and Photo-ionisation Detector Testing.
- UXO Survey.
- Installation of gas/groundwater monitoring instrumentation.
- During site works and post site works gas/groundwater monitoring.

Site work was carried out between the 10th October and 13th November 2017 with subsequent post site work monitoring, laboratory testing and reporting thereafter. A factual report only was requested.

The comments and opinions expressed in this report are based on the ground conditions encountered during the site work and on the results of tests carried out in the field and in the laboratory. There may, however, be special conditions prevailing on the site which have not been disclosed by this investigation and which have not been taken into account by this report.

2. THE SITE

2.1 Location

The National Grid Reference of the approximate centre of the site is NZ 553 212. This can be found on Ordnance Survey 1:50,000 Sheet Number 93 (Middlesbrough, Darlington & Hartlepool). Part of this sheet is reproduced as Figure 1, the Site Location Plan.

The site is located approximately 9km south west of Redcar town centre.



Figure 1: Site Location Plan

Reproduced from the Ordnance Survey 1:50,000 scale Landranger map by permission of Ordnance Survey on behalf of The Controller of Her Majesty's Stationery Office, Crown Copyright. All rights reserved. Licence number AL 100002282.

2.2 Site Description and Topography

The site is located within the former Sahaviriya Steel Industries within Redcar Steelworks. The site comprises areas of hardstanding, unoccupied buildings and derelict land. The site is bound to the south and east by the A66/A1053, and the northwest by a railway line and Tees Dock Road.

3. SITE OPERATIONS

3.1 General

All exploratory hole work, associated sampling, *in-situ* testing and logging was carried out in accordance with techniques outlined in Table 1, as appropriate; at positions as near as practicable to those supplied by the Consulting Engineer. These are shown on the Exploratory Hole Location Plan, Field Data Enclosure 1.

Reference Code Number	Title
BS 1377:1990	Methods of Test for Soils for Civil Engineering Purposes (where not in contravention or superseded by Eurocode references)
BS 5930:2015	Code of Practice for Ground Investigation (where not in contravention or superseded by Eurocode references)
BS EN ISO 14689-1:2003	Identification and Classification of Rock
BS EN ISO 14688-1:2002 & 14688-2:2004	Identification and Classification of Soil
BS 10175:2011+A1:2013	Investigation of Potentially Contaminated Sites
BS EN ISO 22476-3: 2005	Geotechnical investigation and testing - Field testing - Part 3 Standard Penetration Testing

Table 1: British Standard Reference Code Number

The depths of all boreholes and trial pits, descriptions of the material encountered, details of any groundwater encountered, samples taken and *in-situ* testing carried out together with any other relevant information can be found on the Borehole and Trial Pit Records, Field Data Enclosures 2 and 3 respectively. A key to all symbols and abbreviations used throughout the report is included in the Key Sheets.

In accordance with the Site Investigation Steering Group publication “Guidelines for the Safe Investigation by Drilling of Landfills and Contaminated Land” the site was classified YELLOW.

The primary purpose of ground investigation exploratory holes is to probe the stratified sequences of soil and/or rock. From the results of these probings no conclusion should be drawn concerning the presence of, size, lithological nature, and numbers per unit volume of ground cobbles and boulders in soil types such as glacial till (boulder clay). With respect to rotary coring, driller's records and observations of the recovered core are used to determine any zones of no recovery (core loss). These zones are based on the interpretation of the logging engineer and are therefore subjective.

3.2 Health & Safety Considerations: UXO Survey

EOD Contracts Ltd. were present on site to undertake a UXO Survey during the investigation works at the site. They reported no UXO anomalies during the works.

3.3 Health & Safety Considerations: Services

Before the commencement of any exploratory hole a search for underground services was conducted as prescribed in HSE publication 'Avoiding Underground Services (HSG47)' and in accordance with in-house internal safety procedure AEG-14.

Service plans were provided by the Client and were consulted prior to using a service locating device (such as a Cable Avoidance Tool or C.A.T.) to scan a working area around the proposed exploratory hole location. Where no services were indicated a 'Permit-to-Work' form was issued by the investigation supervisor and, with the exception of trial pits, the position was commenced with a hand excavated inspection pit. The inspection pit was also scanned during the excavation procedure. It should be noted that the digging of an inspection pit only confirms or guards against the possible presence of underground public utility services within the excavated pit. Where no services were indicated by the scanning procedure or inspection pit the exploratory hole was commenced in accordance with the Contract Specification.

Where services were located or there was reasonable belief that they were present, the position was relocated in agreement with the Client. Details of any services uncovered/located during this investigation are given in Table 2.

Exploratory Hole Number	Type of Service	Orientation & Depth (size where indicated)	Status (Damaged/Undamaged)	Additional Remarks
S3-TPA02	Redundant electric cable	095° at 2.00m BGL (20mm diameter)	Damaged	Cable made safe prior to backfilling pit.
S3-TPA37	Possible service	1.05m BGL	Not uncovered	Trial pit terminated due to anticipating service.
S3-TPA41	Clay field drain	1.40m BGL	Undamaged	Trial pit terminated
S3-TPA42	Possible service	1.60m BGL	Not uncovered	Trial pit terminated due to anticipating service.
S3-TPB10	Redundant cast iron pipe	255° at 1.70m BGL	Damaged	None
S3-TPB20	Disused cable	105° at 1.00m BGL	Damaged	None
S3-TPB22	Aluminium cable	220° at 0.20m BGL (20mm diameter)	Undamaged	None
S3-TPB55	Disused plastic water pipe	140° at 0.50m BGL (25mm diameter)	Damaged	None
S3-TPB60	Disused clay drain (silted up)	078° at 0.50m BGL	Damaged	None

Table 2: Services Encountered

3.4 Exploratory Holes: Boreholes

Six boreholes were sunk using a Dando 2000 drilling rig, utilising cable percussive (shell and clay cutter) techniques, to depths of between 6.50m (S3-BHA01) and 10.30m BGL (S3-BHB03). One borehole was further advanced using a Boart Longyear DB520 drilling rig, utilising rotary openhole/coring methods, to a depth of 37.20m BGL (S3-BHB01).

Rotary openhole drilling was performed using a 120mm diameter tri-cone rock bit in combination with air flush. Rotary coring employed a 'P' (121mm OD) barrel in combination with an Easycut drill bit together with

air/mist flushing medium. This coring assembly was used to recover 92mm lined cylindrical specimens of rock core. The Borehole Records are presented as Field Data Enclosure 2 and a summary of the boreholes and any relevant remarks are detailed in Table 3.

Exploratory Hole Number	Drilling Method	Completion Depth (m BGL)	Installation	Remarks
S3-BHA01	CP	6.50	Yes – refer to Section 3.8	Terminated due to refusal.
S3-BHA02	CP	7.30	Yes – refer to Section 3.8	Advanced to required depth.
S3-BHB01	CP/RO/RC	37.20	Yes – refer to Section 3.8	Advanced by rotary drilling from 9.00m BGL Advanced to required depth.
S3-BHB02	CP	8.95	Yes – refer to Section 3.8	Advanced to required depth.
S3-BHB03	CP	10.30	Yes – refer to Section 3.8	Advanced to required depth.
S3-BHB04	CP	10.00	Yes – refer to Section 3.8	Advanced to required depth.

Any relevant photographs are presented after the applicable Borehole Record

Table 3: Borehole Summary

3.5 Exploratory Holes: Mechanically Excavated Trial Pits

One hundred and seventeen trial pits were mechanically excavated using the back-hoe bucket of a JCB 360 Tracked excavator to depths of between 0.40m (S3-TPB09 & S3-TPB11) and 4.20m BGL (S3-TPA09). The Trial Pit Records are presented along with a Summary Table as Field Data Enclosure 3.

3.6 Samples

Representative samples of soil and rock were obtained from the exploratory holes and were taken to the laboratory for selected geotechnical and specialist chemical testing.

Environmental samples were taken in accordance with the contract specification during the investigation using an approved selection of container types in order to suit the encountered material properties and designated laboratory analytical parameters. Full chain of custody procedures were in place post sampling and during the transportation stage to the nominated specialist chemical laboratory. Environmental samples were administered appropriately following the best practice guidance provided in the contract specification.

3.7 Groundwater

The comments on groundwater conditions are based on the observations made at the time of investigation. It should be noted that groundwater levels may vary due to seasonal and other effects. Furthermore, water was added during advancement of borehole S3-BHB01 in order to facilitate drilling operations. As a consequence there is a possibility that this could have masked the discrete ingress of natural groundwater into the borehole, which subsequently may have been sealed as a result of progressing the casing.

Groundwater was encountered in a number of boreholes and trial pits during the site works operation. Where groundwater observations were made details are given on the relevant Borehole and Trial Pit Record and in greater detail (collectively in tabulated format) as Field Data Enclosure 4: Groundwater Observations

Made at the Time of Site Works. Standing groundwater levels were recorded in all boreholes at the beginning and/or end of each drilling shift. The water level is indicated on the applicable Borehole Record as part of the boring progress information.

3.8 Instrumentation & Monitoring

All six boreholes were installed with monitoring instrumentation in accordance with the requirements of the Consulting Engineer. Details of the installations are shown in Table 4 and on the relevant Borehole Records.

Exploratory Hole Number	Instrumentation	Installation Depth (m BGL)	Response Zone (m BGL)
S3-BHA01	1 No. 50mm diameter slotted standpipe	4.00	1.00-4.00
S3-BHA02	1 No. 50mm diameter slotted standpipe	5.00	2.00-5.00
S3-BHB01	1 No. 50mm diameter slotted standpipe	4.00	1.00-4.00
S3-BHB02	1 No. 50mm diameter slotted standpipe	4.00	1.00-4.00
S3-BHB03	1 No. 50mm diameter slotted standpipe	3.00	1.00-3.00
S3-BHB04	2 No. 50mm diameter slotted standpipes	1.50 and 5.00	0.30-1.50 and 4.00-5.00

Table 4: Instrumentation Summary

Instruments were monitored for gas and/or groundwater both during site works and after the completion of the site works in accordance with the Contract Specification. A record of the readings is presented as Field Data Enclosure 5 (Groundwater Monitoring Results) and Field Data Enclosure 6 (Gas Monitoring Results).

All installations were commissioned after the site works period by removing of up to 10 well volumes to prove function.

3.9 Operative Observations: Potential Contamination

For the purposes of determining the condition of the site, with regard to human health and environmental issues, reference should specifically be made to any specialist chemical testing undertaken as part of the investigation scheme, as well as any supporting desk study and risk assessment documentation. The information given herein collates the observations made by the operatives involved in the investigation only and comments that have been indicated on the engineering records.

Where there was potential evidence of contamination, principally as a consequence of olfactory and visual identification, information is provided in Table 5.

Exploratory Hole Number	Occurrence (in-situ/surface/laboratory sample)	Visual / Olfactory / Laboratory Testing	Depth (m BGL)	Occurrence Type	Additional Remarks
S3-BHB02	<i>In-situ</i>	Olfactory	0.00-2.00	Slight hydrocarbon odour	None
S3-TPA03	<i>In-situ</i>	Olfactory	0.00-1.00	Sulphurous odour	None

Table 5: Potential Contamination Encountered

Exploratory Hole Number	Occurrence (<i>in-situ</i> /surface/ laboratory sample)	Visual / Olfactory / Laboratory Testing	Depth (m BGL)	Occurrence Type	Additional Remarks
S3-TPA06	<i>In-situ</i>	Olfactory	0.00- 1.00	Sulphurous odour	None
S3-TPA29	<i>In-situ</i>	Olfactory	0.00- 0.80	Engineer notes bitumen odour	None
S3-TPA32	<i>In-situ</i>	Olfactory	0.70- 1.30	Engineer notes bitumen odour	None
S3-TPB13	<i>In-situ</i>	Olfactory	1.60- 2.60	Hydrocarbon odour	None
S3-TPB22	<i>In-situ</i>	Olfactory and Visual	1.70- 2.10	Bitumen and strong hydrocarbon odour and staining/sheen	None
S3-TPB36	<i>In-situ</i>	Olfactory	2.00	Hydrocarbon odour	None
S3-TPB39	<i>In-situ</i>	Olfactory	0.90	Possible asbestos	Trial pit terminated.
S3-TPB52	<i>In-situ</i>	Visual	1.50- 1.60	Engineer notes tar like substance.	None
S3-TPB53	<i>In-situ</i>	Visual	1.10	Hydrocarbon film on water surface and at clay surface	None
S3-TPB59	<i>In-situ</i>	Visual	2.20- 2.40	Engineer notes tar like substance.	None

Table 5 (... Continued): Potential Contamination Encountered

It should be stressed that the information provided herein is subjective, as it is based on the perceptions of individuals and not specialists routinely involved in the chemical determination of contaminated residues, liquors, vapours or solid contaminants.

3.10 Surveying

The investigation positions were surveyed after completion of site works using a Leica Smartrover (Model ATX 1230+ GNSS) GPS based instrument which provides corrected Ordnance Survey co-ordinates in real time to an accuracy of within ± 30 mm vertical and ± 30 mm horizontal. These positions have been subsequently plotted in AutoCAD® software and are shown on the Exploratory Hole Location Plan, Field Data Enclosure 1.

4. IN-SITU TESTING

4.1 General

In-situ testing as specified by the Consulting Engineer was carried out in selected boreholes and trial pits in accordance with techniques outlined in the relevant British Standard and/or AEG Quality Procedure. The results are presented in the *In-situ* Testing Enclosures with a number of the test results summarised at the relevant depth on the Borehole and Trial Pit Records.

4.2 Standard Penetration Test Results

Standard Penetration Testing (SPT) was carried out in the boreholes in accordance with techniques outlined in BS EN ISO 22476-3: 2005 in order to determine the relative density and consistency of the strata encountered. The 'N' value (number of blows per 300mm penetration) or the penetration per blow was recorded for each test. Uncorrected 'N' values or penetration per blow data are provided on the applicable Borehole Records. (Refer to page 6 of the key sheets for further details).

More detailed information concerning the standard penetration testing is given in *In-situ* Testing Enclosure 1 which includes the following;

- Initial exploratory hole conditions prior to the test procedure.
- Calibration and energy ratio (E_m) information for the SPT hammer device used to carry out the test.
- A breakdown of blows for each 75mm penetration interval.
- Rod length (C_R) and energy (C_E) correction ratios.
- Uncorrected 'N' value.
- Corrected 'N₆₀' value that applies the rod (C_R) and energy (C_E) corrections indicated.
- Pertinent remarks corresponding to the test procedure.

In addition to the above, a graph has been prepared for each exploratory hole which plots the uncorrected and corrected 'N' value results against depth. Calibration certificates for the SPT apparatus used during the testing procedure are also presented for reference within this *In-situ* Testing Enclosure.

4.3 Hand Shear Vane

Hand shear vane testing using a calibrated Edeco Pilcon equipment was carried out in the trial pits in accordance to the ground conditions encountered. The results are presented on the relevant Trial Pit Record and in further detail within *In-situ* Testing Enclosure 2.

4.4 Photo Ionisation Detector (PID)

Photo-ionisation detector (PID) screening for semi-volatile and volatile organic compounds was conducted on selected environmental samples taken during the investigation. The results for the sample based PID tests are recorded in tabular format as *In-situ* Testing Enclosure 3 and, where applicable, on the relevant Borehole and Trial Pit Records.

5. LABORATORY TESTING

5.1 General

Laboratory testing as scheduled by the Consulting Engineer was carried out on selected samples in accordance with techniques outlined in BS 1377:1990, AEG Laboratory Quality Procedures or other appropriate standard as quoted.

5.2 Geotechnical Testing

The results are presented in the Laboratory Enclosures with an outline list of the procedures undertaken given in Table 6.

Test	Procedure
Moisture Content	BS 1377 Part 2 1990 (BS EN ISO 17892-1:2014) and ISRM 1981
Plasticity Index and Moisture Content	BS 1377 Part 2 1990 (BS EN ISO 17892-1:2014)
Determination of Particle Density	BS 1377 Part 2 1990
Particle Size Distribution Sieving	BS 1377 Part 2 1990
Particle Size Distribution Sedimentation	BS 1377 Part 2 1990
Determination of Dry Density/Moisture Content Relationship	BS 1377 Part 4 1990
Determination of One Dimensional Consolidation Properties	BS 1377 Part 5 1990
Undrained Shear Strength in Triaxial Cell without Pore Water Pressure Measurement	BS 1377 Part 7 1990
Determination of Point Load Index	ISRM 1985
Determination of Unconfined Compressive Strength (Tested externally)	ISRM 1985
XRF Analysis using Thermo Scientific Niton XL2 980 Gold XRF Analyser	-
Slag Analysis carried out by Thomas Research Services Limited	-

Table 6: Geotechnical Testing

5.3 X-Ray Fluorescence (XRF) Testing

A number of samples were selected for XRF Testing using a Thermo Scientific Niton XL2 980 GOLDD XRF Analyser. This equipment used x-ray fluorescence to scan samples and determine the constituents in the slag material. The data is presented in tabular format within the Laboratory Enclosures.

5.4 Specialist Chemical Testing

Selected samples have been submitted for chemical analysis as specified by the Consulting Engineer, conducted under a subcontract arrangement with Derwentside Environmental Testing Services (DETS). The results of this testing are presented as Appendix I.

5.5 Laboratory Identified Asbestos

Selected samples were analysed for asbestos content as specified by the Consulting Engineer. A number of samples tested positive for presence of asbestos (see Appendix I for further details).

Key Sheets



Allied Exploration and Geotechnics Limited

Key Sheets



INTRODUCTION

The following explanatory notes define the terminologies, abbreviations and symbols pertaining to each individual column or section of the Exploratory Hole records. 'Exploratory Hole' is used as a general term in this report to comprise borehole, drillhole, and trial pit. All exploratory hole records have been produced using 'gINT®', which is an integrated software environment for the storage and manipulation of subsurface data.

The primary purpose of ground investigation exploratory holes is to probe the stratified sequences of soil and/or rock. From the results of these probings no conclusion should be drawn concerning the presence of, size, lithological nature, and numbers per unit volume of ground cobbles and boulders in soil types such as glacial till (boulder clay). With respect to rotary coring, driller's records and observations of the recovered core are used to determine any zones of no recovery (core loss). These zones are based on the interpretation of the logging engineer and are therefore potentially subjective.

INFORMATION COMMON TO ALL EXPLORATORY HOLE RECORDS

Status Box

The status box in the top right hand corner of each exploratory hole record gives the status of each individual record i.e. PRELIM1, PRELIM2, PRELIM3 FINAL etc. The date shown relates to the last instance the data was revised. This information is for AEG Quality Assurance only.

Exploratory Hole No

The identity number used throughout the report.

Project

The ground investigation project name. Occasionally the project name may be shortened or abbreviated due to string length restraints imposed by the gINT® computer programme.

Client

Client's name responsible for funding the ground investigation project. The Client's name may be shortened or abbreviated due to string length restraints imposed by the gINT® computer programme.

Location

The exploratory hole position given as either national grid co-ordinates, local grid if specified, or a reference name normally pertaining to the area of investigation.

Method (Equipment)

Represents the drilling, excavation or boring method(s) or equipment used.

Ground Level (m(AOD))

The precise ground level in metres above Ordnance Datum at the exploratory hole location from which the reduced level for each stratigraphic boundary is calculated.

Date

The date relating to the start of the exploratory hole excavation.

Sheet

The sheet number and total number of sheets for the particular record.

Checked By

Printed signature of the person who has carried out the technical quality check on the log.

Logged By

The name of the engineer who has carried out the logging of the exploratory hole.

Contract No.

The Allied Exploration & Geotechnics Limited reference number for the project.



Allied Exploration and Geotechnics Limited

Key Sheets






INFORMATION RELEVANT TO BOREHOLE AND WINDOW/WINDOWLESS SAMPLE HOLE RECORDS

Sample & Tests Columns

Depth	The depth over which a sample or test is taken is shown in depth column of the exploratory hole record in a "from...to" format.
Type No	Indicates the type of sample/test and number given by the driller.
Test Result	Result of the test given in the applicable units.

Water Column

Water Strike	Level of groundwater strike within an exploratory hole. The symbol  denotes a water strike and is suffixed with a number, which indicates the strike order. The corresponding unfilled symbol  is the depth the strike rose to.
Seepage	Groundwater seepage within an exploratory hole is denoted by the  symbol.

Strata Columns

Reduced Level	The corresponding reduced level of each soil or rock boundary in metres Ordnance Datum.
Legend	A graphical representation of the materials encountered using BS 5930:2015 recommended symbols for soil and rock.
Depth (Thickness)	The depth below ground level of each soil or rock boundary in metres and the thickness of each individual stratigraphic unit (given in brackets).
Description	<p>Engineering description of each individual soil or rock type follows recommendations outlined in BS 5930:2015 with the following implementation:</p> <ol style="list-style-type: none">1 The amendment of section 6 incorporates the guidance indicated in BS EN ISO 14688-1:2002, BS EN ISO 14688-2:2004 and BS EN ISO 14689-1:2003 European Standard with particular emphasis on current UK practice.2 Supplementary laboratory or in-situ assessed measurements of undrained strength are provided where applicable information is available in parenthesis in accordance with BS 5930:2015 after the field strength determined consistency. The description based measurement table indicating the quantitative undrained strength classification divisions is provided in Key Sheets Table 1.

Term based on measurement	Undrained strength classification definition cu, in kPa (from BS EN ISO 14688-2:2004, 5.3, Table 5)
Extremely low	<10
Very low	10-20
Low	20-40
Medium	40-75
High	75-150
Very High	150-300
Extremely High	300-600

KEY SHEETS TABLE 1

- 3 Cobble and boulder content is expressed in accordance with the terms provided in EN ISO 14688-2: 2004 where visually identified in trial pit excavations, or inferred/recovered during the drilling operations. The assessment of frequency and spatial occurrence of coarse and very coarse rock material should not be considered as precise, but only an indicator or estimate of the potential conditions. It should be noted that the recovery of coarse or very coarse particles in boreholes is dependent on the limitations imposed by the casing diameter. The terminology used is outlined in Key Sheets Table 2.



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Key Sheets



Fraction	Percent by Mass	Term
Boulders	<5	Low boulder content
	5 to 20	Medium boulder content
	>20	High boulder content
Cobbles	<10	Low cobble content
	10 to 20	Medium cobble content
	>20	High cobble content

KEY SHEETS TABLE 2

- 4 Rock Strength based on assessed field or measured unconfined compressive strength follows the classification scheme given in BS5930:2015 as outlined in Key Sheets Table 3.

Term for use in field or based on measurement	Definition for field use	Definition on basis of Unconfined Compressive Strength measurement (MPa)	Old Classification of rock strength: Terminology (Strength Range MPa)	Old Classification of rock strength: Determination Method
Extremely weak	Can be indented by thumbnail. Gravel sized lumps crush between finger and thumb.	0.6-1.0	Very Weak (<1.25)	Lumps can be crushed between fingers
Very weak	Crumbles under firm blows with point of geological hammer. Can be peeled by a pocket knife.	1-5	Weak (1.25 – 5)	Lumps can be broken with heavy hand pressure
Weak	Can be peeled by a pocket knife with difficulty. Shallow indentations made by firm blow with the point of geological hammer.	5-25	Moderately Weak (5-12.50)	This slab can be broken with heavy pressure
Medium Strong	Cannot be scraped with pocket knife. Can be fractured with a single firm blow of geological hammer.	25-50	Moderately Strong (12.50-50)	Rock can be broken in the hand with a hammer
Strong	Requires more than one blow of geological hammer to fracture.	50-100	Strong (50-100)	Rock can be broken on a flat surface using a hammer
Very Strong	Requires many blows of geological hammer to fracture.	100-250	Very Strong (100-200)	Rock chipped by blows with a hammer
Extremely strong	Can only be chipped with geological hammer.	>250	Extremely Strong (>200)	Rock rings when hit with a hammer
Based on BS EN ISO 14689-1:2003 4.2.7, Table 5			BS5930: 1999 – Section 6 (Superseded Version)	

KEY SHEETS TABLE 3

- 5 Where 'rock weathering classification' can be applied it is 'Approach 4' which will be used. If any other approach is used the factual text of the report will provide details of the applicable specific approach. (Ref.: BS5930:2015). An outline of the 'Approach 4' rock weathering classification scheme is provided as Key Sheets Table 4.

APPROACH 4 CLASSIFICATION INCORPORATING MATERIAL AND MASS FEATURES		
Class	Classifier	Typical characteristics
A	Unweathered	Original strength, colour, fracture spacing
B	Partially weathered	Slightly reduced strength, slightly closer fracture spacing, weathering penetrating in from fractures, brown oxidation
C	Distinctly weathered	Further weathered, much closer fracture spacing grey reduction
D	Destructured	Greatly weakened, mottled, ordered lithorelics in matrix becoming weakened and disordered, bedding disturbed.
E	Residual or reworked	Matrix with occasional altered random or 'apparent' lithorelics, bedding destroyed. Classed as reworked when foreign inclusions are present as a result of transportation.

KEY SHEETS TABLE 4



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Key Sheets



Instrument/Backfill Column

A graphical representation of backfill material or instrumentation detail using graphic legends. Its placement in the column is relative to depth in metres and corresponds to the exploratory hole in scale.

Boring Progress and Water Observations Columns

This section provides information on each day's production as a daily log.

Date	Date of shift.
Depth	Depth of hole at the start of the shift.
Casing	Casing's depth at the start of the shift.
Casing Dia	Casing's diameter at the start of the shift.
Water Depth	Water level within the borehole at the start and end of shift.

Chiselling Columns

Indicates where hard strata occurred in the borehole and breaking out was carried out to advance the borehole.

From	The depth commenced.
To	The depth finished.
Hours	The time spent for breaking out.

Water Added Columns

Indicates the depth range where water was added to the borehole to facilitate boring or to prevent stress relief disturbance "blowing/boiling" in granular soils.

From	Depth in metres from where water was added.
To	Depth in metres to where water was added.

General Remarks

Any remarks believed to be relevant to the exploratory hole.

INFORMATION RELEVANT TO PIT/TRENCH RECORDS

The pit/trench records follow the same format as the borehole and window/windowless sample hole records for the Samples & Tests, Water and Strata columns. However, in addition to these there are the following:

Plan

A schematic plan view of the pit showing its excavated dimensions together with its orientation, given as a compass bearing to magnetic north.

Groundwater

Notes on water bearing horizons.

Stability

The engineer's comments outlining the stability of the sides during pit excavation.

General Remarks

The engineer's comments of any other information relevant to construction of the pit.

Additional Information

An indication if a sketch and/or photographs accompany the record.



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Key Sheets



Underground Services

Depth	Depth service was encountered.
Orientation	Orientation given as a compass bearing to magnetic north.
Type	Type of service encountered.
Diameter	Diameter of service encountered.
Condition	Condition the service encountered was noticed in.

INFORMATION RELEVANT TO DRILLHOLE RECORDS AND ROTARY CONTINUATION

Run Details Columns

Depth	Each drill run is highlighted by a horizontal line with the top and bottom depths shown in metres. Core diameter (C Dia) is presented also within each run.
TCR (SCR) RQD	Information provided on the total core recovery, solid core recovery and rock quality designation. Refer to Abbreviations for further details.
Fracture Index	Information given relating to the fracture index of the rock.

Strata Columns

As the strata columns for borehole and window/windowless sample hole records except for description which is as follows:

Discontinuities Detail	Information on core discontinuities, localised variations in weathering, lithology, strength and structure follows recommendations outlined in BS 5930:2015.
Main	Engineering description of each individual soil or rock type follows recommendations outlined in BS 5930:2015.

Instrument/Backfill Column

A graphical representation of backfill material or instrumentation detail using graphic legends. Its placement in the column is relative to depth in metres and corresponds to the exploratory hole in scale.

Drilling Progress and Water Observations Columns

Date	Date of shift.
Depth	Depth of hole at the start of the shift.
Casing	Casing's depth at the start of the shift.
Water Strike	Depth at which water was encountered.
Water Standing	Depth at which water in the hole levelled off.
Water Remarks	Any remarks believed to be relevant to the water e.g. Artesian.

Standard Penetration Test

Depth	The depth commenced.
Type	Type of standard penetration test (SPT).
Result	Result of SPT.

Flush

From	The depth commenced.
To	The depth finished.
Type	Details of the type of flush used. A = Air, F = Foam, W = Water and Pol = Polymer.
Returns	An indication of the percentage of the returned flush material.

General Remarks

Any remarks believed to be relevant to the exploratory hole.



Allied Exploration and Geotechnics Limited

Key Sheets



SAMPLES

B	Bulk disturbed sample.
ES	Environmental soil sample.
EW	Environmental water sample.
G	Gas sample.
J	Small disturbed sample.
LB	Large bulk disturbed sample.
P	Piston sample.
P*	An attempted but failed undisturbed piston sample.
U	Undisturbed sample.
U*	An attempted but failed general purpose undisturbed sample.
U _(ss)	Sample has been subsampled.
ES _(U)	Brackets following a sample denotes a subsample. The sample information within the brackets is the origin of the subsample.
W	Water sample.

IN-SITU TESTS

CBR	California Bearing Ratio mould sample or test.
HSV	In-situ hand shear vane.
HSV*	An attempted but failed in-situ hand shear vane.
HSV result of e.g 80(20)kPa	Denotes average HSV peak result followed by average HSV residual result (in brackets).
HP	Hand penetrometer test.
K (F)	Falling head permeability test.
K (R)	Rising head permeability test.
K (C)	Constant head permeability test.
K (P)	Packer permeability test.
PT	Pressuremeter test.
PID	Photo ionisation detector test.
FID	Flame ionisation detector test.
S	Standard Penetration Test (SPT) using the split barrel sampler (shoe). The corresponding uncorrected 'N' value is given in the test result column with more detailed information provided in the In-Situ Testing Enclosures where applicable. Testing has been conducted in accordance with BS EN ISO 22476-3: 2005.
C	Denotes SPT test using a solid cone in preference to the split barrel sampler (usually in coarse granular soil) with all other reporting requirements as outlined above for the split barrel sampler.
S/C result of e.g. 1/2.94	Denotes where full penetration has not been achieved during the SPT test. In such cases the penetration (mm) per blow is recorded in the test result column e.g. 1/2.94 is 2.94mm of penetration per single blow.
SV	In-situ down-the-hole shear vane test. The remoulded shear strength is given in brackets.

ROCK QUALITY AND CORE RECOVERY

TCR	Total Core Recovery - the length of the recovered core expressed as a percentage of the length of core run.
SCR	Solid Core Recovery - the sum length of all core pieces that are recovered with at least one full diameter, expressed as a percentage of the length of core run.
RQD	Rock Quality Designation - The sum length of all core pieces that are 100mm or longer (measured along the centre of the core), expressed as a percentage of the length of core run.
FI	Fracture Index - The number of fractures per 1000mm length of solid core.
NI	Non-intact - The material recovered in a non-intact state.
NR	No recovery from the core run. These zones are based on the interpretation of the logging engineer and are therefore potentially subjective.



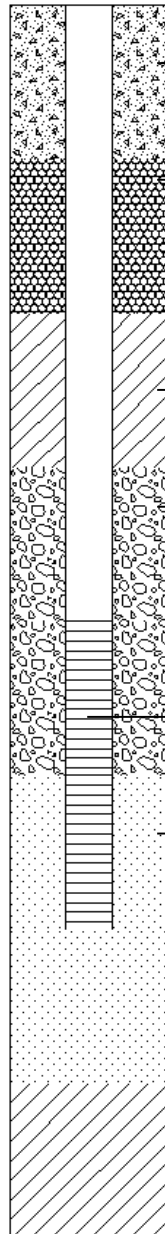
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Key Sheets

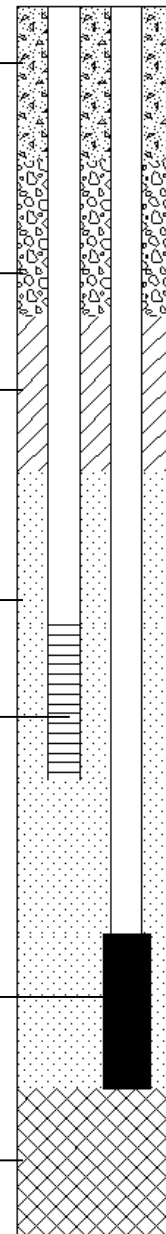


Symbols and Abbreviations: Explanation of Instrumentation Legends Used

SINGLE INSTRUMENT



DOUBLE INSTRUMENT



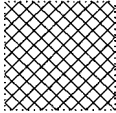
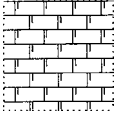
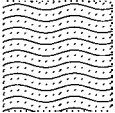
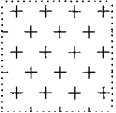

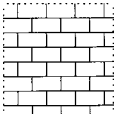
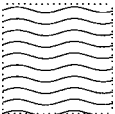
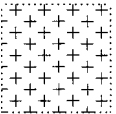
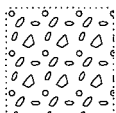
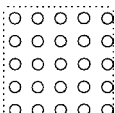


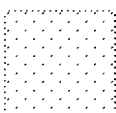
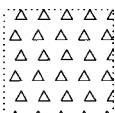

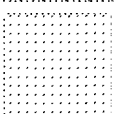
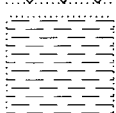
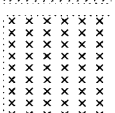


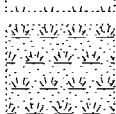
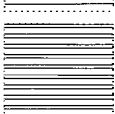

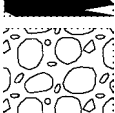



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Key Sheets



Symbols and Abbreviations: Explanation of Legends Used

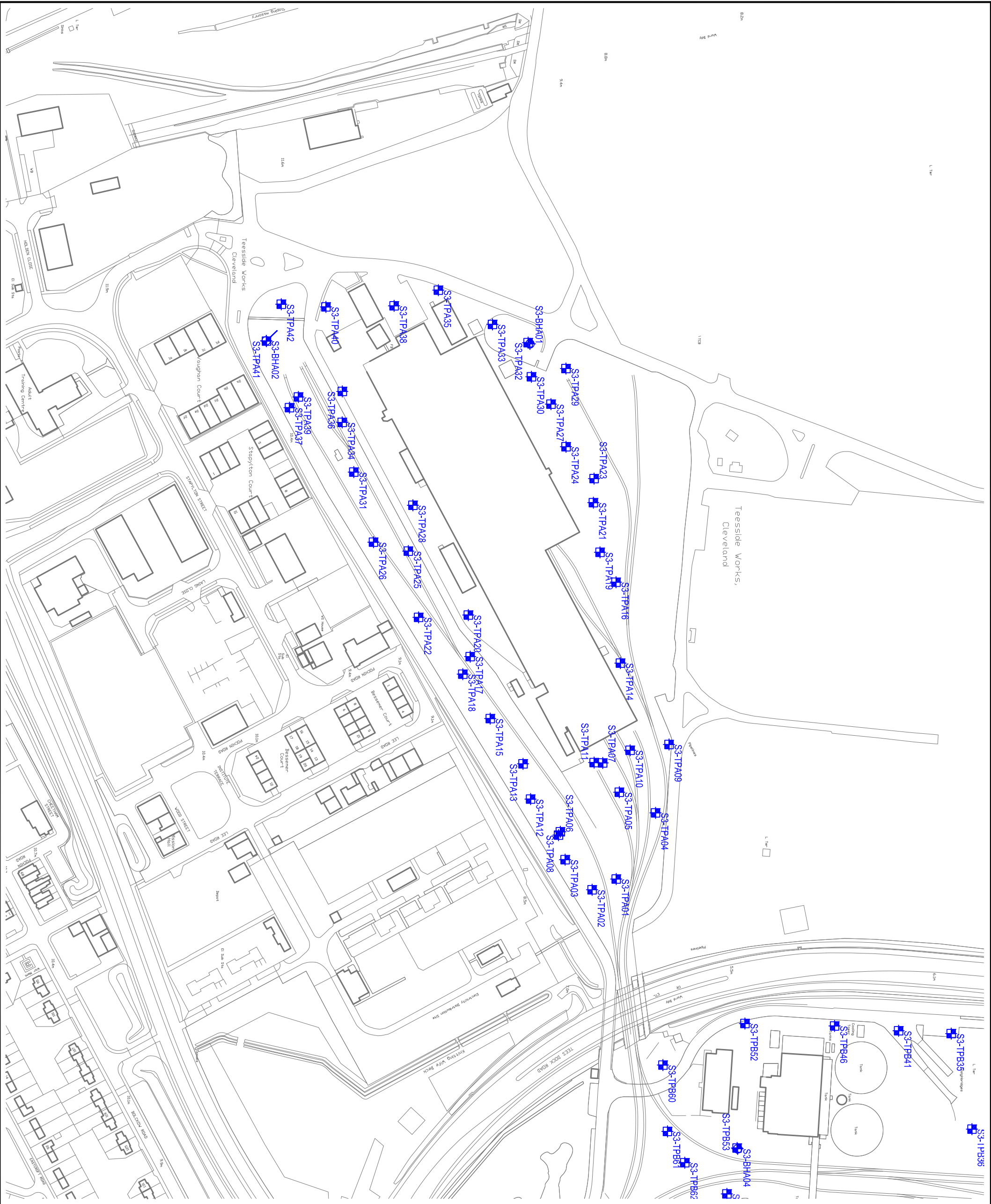
Soils	Rocks		
	<i>Sedimentary</i>	<i>Metamorphic</i>	<i>Igneous</i>
			
Made Ground			
	Chalk		
		Coarse Grained	Coarse Grained
			
Cobbles and Boulders	Limestone	Medium Grained	Medium Grained
			
Gravel	Conglomerate	Fine Grained	Fine Grained
			
Sand	Breccia		
			
Silt	Sandstone		
			
Clay	Siltstone		
			
Peat	Mudstone		
			
Topsoil	Shale		
			
	Coal		
			
	Pyroclastic (Volcanic Ash)		
			
	Gypsum		


Note: Composite soil types will be signified by combined symbols e.g.

 Silty Sand


Exploratory Hole Location Plan








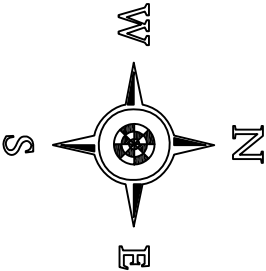
Allied Exploration and Geotechnics Limited
Unit 25 Sella C&I Industrial Estate
Palton Fell
Chester - Le - Street
Co Durham
DH2 2RG
(Tel): 0191 361 4700
(Fax): 0191 361 4710
(Email: enquiries@aeguk.net)



BOREHOLE



TRIAL PIT



Base Plan Supplied by Consulting Engineer

Drawing Title:

ENC 01 : Exploratory Hole Location Plan

Drawing No.:

AEG/4155/01

Contract Title:

The Former SSI Steelworks, Redcar –
Ground Investigation Contract –
Priority Areas Within SSI Landholdings Contract 3

Client:

South Tees Site Company Ltd
1 Victoria Street
London, SW1H 0ET

Consultant:

Arcadis
1 Whitehall Riverside
Leeds, LS1 4BN

Contract No.:

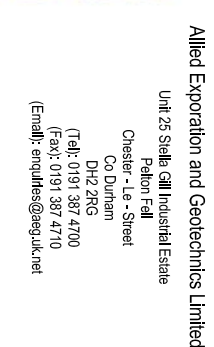
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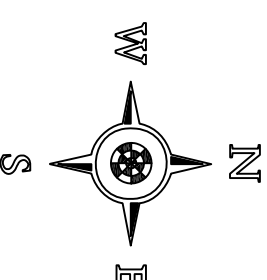
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Date:

30/01/2018



BOREHOLE TRIAL PIT



Base Plan Supplied by Consulting Engineer

Drawing Title:

ENC 01 : Exploratory Hole Location Plan

Drawing No.:

AEG/4155/02

Contract Title: The Former SSI Steelworks, Redcar – Ground Investigation Contract – Priority Areas Within SSI Landholdings Contract 3

Client:

South Tees Site Company Ltd
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Consultant:

Arcadis
1 Whitehall Riverside
Leeds, LS1 4BN

Contract No.:

4155

Scale:

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Date: _____

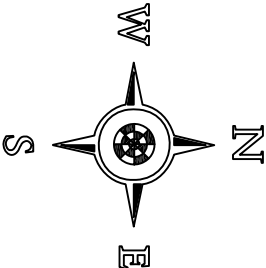
30/01/2018



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Unit 25 Sella, GMI Industrial Estate
Palton Fell
Chester - Le - Street
Co Durham
DH2 2RG
(Tel): 0191 361 4700
(Fax): 0191 361 4710
(Email: enquiries@aeguk.net)

KEY:

-  BOREHOLE
-  TRIAL PIT



Base Plan Supplied by Consulting Engineer

Drawing Title:

ENC 01 : Exploratory Hole Location Plan

Drawing No.:

AEG/4155/03

Contract Title:

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Priority Areas Within SSI Landholdings Contract 3

Client:

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1 Victoria Street
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Consultant:

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Contract No.:

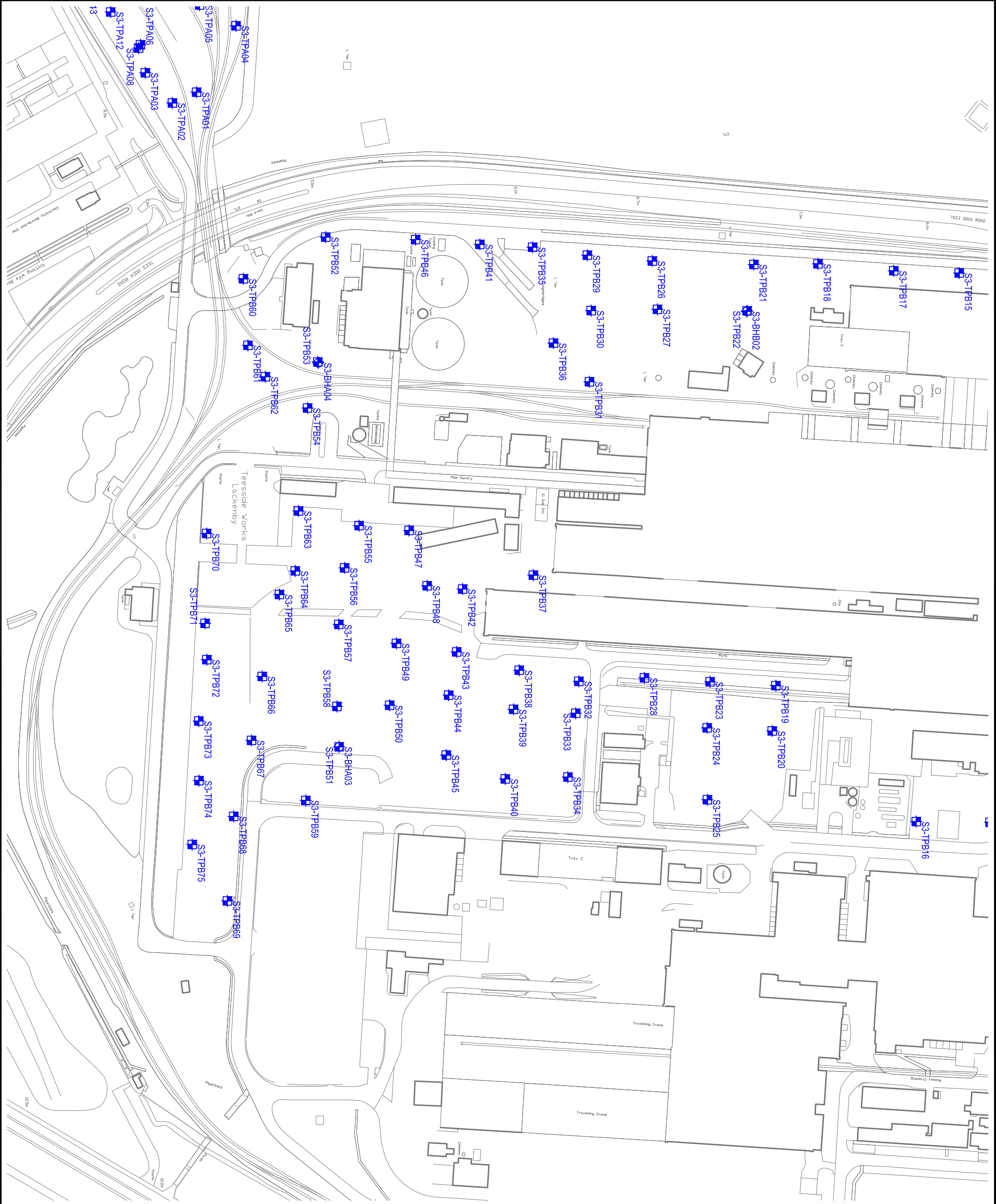
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Scale:

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Date:

30/01/2018



Borehole Records





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Regional Office: Unit 20, Business Development Centre, Eanam Wharf, Blackburn, BB1 5BL

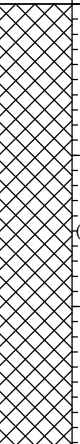
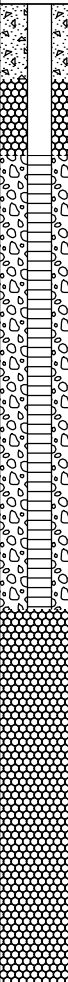
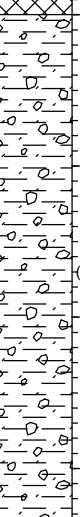
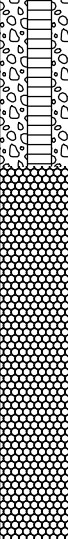








Tel: 0191 387 4700 Fax: 0191 387 4710
Tel: 01772 735 300 Fax: 01772 735 999

BOREHOLE RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3			Exploratory Hole No. S3-BHA01		
Client: South Tees Site Company Ltd		Location: Redcar Steel Works E:454678.872 N:521139.259			
Method (Equipment): Cable Percussion (Dando 2000)		Ground Level (m(AOD)): 10.276		Start Date: 10/11/2017	Sheet: 1 of 1

SAMPLES & TESTS			Water	STRATA				Instrument/ Backfill
Depth	Type No	Test Result		Reduced Level	Legend	Depth (Thickness)	DESCRIPTION	
1.00 1.00 1.20	B1 PID ES2	3.2ppm				(3.00)	MADE GROUND (Black brown clayey sandy gravel. Sand is fine to coarse. Gravel is fine to coarse subangular and includes clinker, concrete, macadam, slag and brick).	
3.00-3.45 3.00-3.45 3.00	SJ3 B4 PID	N15 0.5ppm		7.276		3.00	Firm red brown sandy slightly gravelly CLAY. Sand is fine to medium. Gravel is fine to medium subangular to rounded and includes sandstone and mudstone.	
3.50	ES5							
4.00-4.45 4.00-4.45 4.00	SJ6 B7 PID	N15 0.5ppm				(3.40)		
5.00-5.45	U*B8	(10)					at c.5.00m BGL ... clay is of low to intermediate plasticity.	
6.40 6.50-6.95 6.50	J9 SJ10 CC11	1/2.78 1/0.35		3.876 3.776		6.40 (0.10) 6.50	(1) BOULDER. (Recovered as gravel. Gravel is fine to coarse angular and includes limestone). Borehole terminated at 6.50m BGL due to refusal.	

Boring Progress and Water Observations					Chiselling			Water Added		General Remarks
Date	Depth	Casing	Casing Dia (mm)	Water Standing	From	To	Hours (hh:mm)	From	To	
10/11/2017	0.00	0.00			6.40	6.50	01:00			(1) Description derived from drillers daily report. (2) Inspection pit dug prior to drilling. (3) 50mm diameter slotted standpipe installed to 4.00m BGL.
10/11/2017	3.00	3.00	300							
10/11/2017	6.50	6.40	200	5.00						

All dimensions in metres Scale 1:50	For explanation of symbols and abbreviations see Key Sheets	Checked by: <i>K.W.</i>	Logged by: D. Portsmouth	Contract No. 4155
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Regional Office: Unit 20, Business Development Centre, Eanam Wharf, Blackburn, BB1 5BL

Tel: 0191 387 4700 Fax: 0191 387 4710
Tel: 01772 735 300 Fax: 01772 735 999

BOREHOLE RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3			Exploratory Hole No. S3-BHA02		
Client: South Tees Site Company Ltd		Location: Redcar Steel Works E:454676.712 N:520952.974			
Method (Equipment): Cable Percussion (Dando 2000)		Ground Level (m(AOD)): 11.162		Start Date: 10/11/2017	Sheet: 1 of 1

SAMPLES & TESTS			Water	STRATA				Instrument/ Backfill
Depth	Type No	Test Result		Reduced Level	Legend	Depth (Thickness)	DESCRIPTION	
0.50 0.50	B1 PID	2.4ppm				(0.90)	MADE GROUND (Black grey sandy gravel. Sand is fine to coarse. Gravel is fine to coarse subangular and includes limestone, macadam, slag, clinker and concrete). 	
1.20	ES2			10.262		0.90		
1.60 1.60	B3 PID	0.5ppm		9.762		(0.50) 1.40	Firm brown sandy slightly gravelly CLAY. Sand is fine to medium. Gravel is fine to medium subangular and includes sandstone, mudstone and slag. (Engineer notes Possible Made Ground).	
2.00 2.00 2.10	B4 PID U5	0.5ppm (41)		9.262		(0.50) 1.90	Firm brown grey yellow sandy CLAY. Sand is fine to medium. at c.1.60m BGL ... clay is of high plasticity.	
2.60	J6						Firm laminated brown CLAY with silt dustings on the laminae. at c.2.00m BGL ... clay is of intermediate plasticity with silt dustings on the laminae. at c.2.10m BGL ... medium strength.	
3.00 3.00	SJ7 PID	N8 <0.1ppm				(3.00)		
3.50	B8						at c.3.50m BGL ... clay is of intermediate plasticity.	
4.00	U9	(39)					at c.4.00m BGL ... medium strength.	
4.50	J10			6.262		4.90	at c.4.50m BGL ... laminated with silt dustings on the laminae. Clay is of high plasticity.	
5.50-5.95	SB11	1/0.94				(2.00)	Firm red brown slightly sandy slightly gravelly CLAY. Sand is fine to medium. Gravel is fine to medium subangular to subrounded and includes sandstone and mudstone. at c.5.50m BGL ... possible obstruction. at c.5.50m BGL ... clay is of intermediate plasticity.	
6.50	U*B12			4.262		6.90		
6.90-7.35	SJ13	1/1.22				(0.40)	Extremely weak grey MUDSTONE distinctly weathered. (Recovered as clayey gravel/gravelly clay. Gravel is fine to medium angular).	
7.10	B14			3.862		7.30		
7.30	SJ15	N19					Borehole complete at 7.30m BGL.	

Boring Progress and Water Observations					Chiselling			Water Added		General Remarks
Date	Depth	Casing	Casing Dia (mm)	Water Standing	From	To	Hours (hh:mm)	From	To	
10/11/2017	0.00	0.00			6.10	6.40	00:30			(1) Description derived from drillers daily report. (2) Inspection pit dug prior to drilling. (3) 50mm diameter slotted standpipe installed to 5.00m BGL.
10/11/2017	1.50	1.50	250		7.10	7.30	00:30			
10/11/2017	5.00	4.80	200	Dry						
13/11/2017	5.00	5.00	200	4.69						
13/11/2017	7.30	6.40	200	Dry						

All dimensions in metres Scale 1:50	For explanation of symbols and abbreviations see Key Sheets	Checked by: <i>K.W.</i>	Logged by: D. Portsmouth	Contract No. 4155
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Regional Office: Unit 20, Business Development Centre, Eanam Wharf, Blackburn, BB1 5BL

Tel: 0191 387 4700 Fax: 0191 387 4710
Tel: 01772 735 300 Fax: 01772 735 999

BOREHOLE RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3			Exploratory Hole No. S3-BHB01
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455497.766 N:522121.486		
Method (Equipment): Percussion/Openhole/Coring (Dando 2000/Boart Longyear DB520)	Ground Level (m(AOD)): 9.760	Start Date: 07/11/2017	Sheet: 1 of 2

SAMPLES & TESTS			Water	STRATA				Instrument/ Backfill
Depth	Type No	Test Result		Reduced Level	Legend	Depth (Thickness)	DESCRIPTION	
2.40	J1			7.360	(2.40)	2.40	MADE GROUND (Black brown very gravelly clay. Gravel is fine to coarse subangular and includes slag, concrete and mudstone).	
2.60	ES2							
2.80	B3	2.0ppm					Firm to stiff brown red grey slightly sandy slightly gravelly CLAY with occasional laminations and fissuring. Sand is fine to medium. Gravel is fine to medium subangular and mudstone and sandstone.	
2.80	PID	N19					at c.2.80m BGL ... clay is of high plasticity.	
3.00-3.45	SJ4	1.2ppm						
3.00	B5							
3.00	PID							
3.60	J6							
3.80	ES7							
4.00-4.45	SJ8	N18					at c.4.00m BGL ... clay is of intermediate plasticity.	
4.00	B9	0.5ppm						
4.00	PID							
5.00-5.45	SJ10	N19						
5.00	B11							
6.00-6.45	SJ12	N22					at c.6.00m BGL ... clay is of intermediate plasticity.	
6.00	B13							
6.80	J14			2.960		6.80	Firm to stiff red brown slightly gravelly CLAY. Gravel is fine to medium subrounded and includes mudstone and sandstone.	
7.00-7.45	SJ15	N62					at c.7.00m BGL ... clay is of low plasticity.	
7.00	B16			2.260		7.50	(1) BOULDERS.	

Boring Progress and Water Observations					Chiselling			Water Added		General Remarks
Date	Depth	Casing	Casing Dia (mm)	Water Standing	From	To	Hours (hh:mm)	From	To	
07/11/2017	0.00	0.00			0.00	2.40	01:30			(1) Description derived from drillers daily report. (2) Inspection pit dug prior to drilling. (3) Water strike at 11.00m BGL - slow inflow.
07/11/2017	1.70	1.70	300		7.50	9.00	02:00			
07/11/2017	7.50	7.50	200	Dry						
08/11/2017	7.50	7.50	200	Dry						

All dimensions in metres Scale 1:50	For explanation of symbols and abbreviations see Key Sheets	Checked by: <i>K.W.</i>	Logged by: D. Portsmouth	Contract No. 4155
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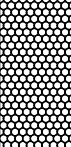
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BOREHOLE RECORD

Status:-

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Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-BHB01
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455497.766 N:522121.486	
Method (Equipment): Percussion/Openhole/Coring (Dando 2000/Boart Longyear DB520)	Ground Level (m(AOD)): 9.760	Start Date: 07/11/2017
		Sheet: 2 of 2

SAMPLES & TESTS			Water	STRATA				Instrument/ Backfill
Depth	Type No	Test Result		Reduced Level	Legend	Depth (Thickness)	DESCRIPTION	
9.00	S	1/0.32		0.760		(1.50) 9.00	(Continued...) (1) BOULDERS.	
							Boring complete at 9.00m BGL - continued by rotary follow on.	

Boring Progress and Water Observations					Chiselling			Water Added		General Remarks
Date	Depth	Casing	Casing Dia (mm)	Water Standing	From	To	Hours (hh:mm)	From	To	
08/11/2017	9.00	8.45	200	Dry	9.00	9.00	01:00			(1) Description derived from drillers daily report. (2) Inspection pit dug prior to drilling. (3) Water strike at 11.00m BGL - slow inflow.

All dimensions in metres Scale 1:50	For explanation of symbols and abbreviations see Key Sheets	Checked by: <i>K.W.</i>	Logged by: D. Portsmouth	Contract No. 4155
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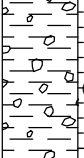
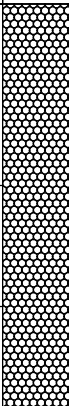
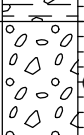


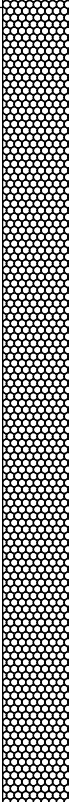
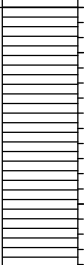
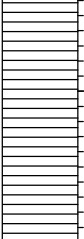
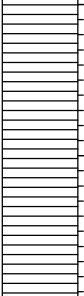
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Tel: 01772 735 300 Fax: 01772 735 999

Status:-

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ROTARY CONTINUATION

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3			Exploratory Hole No. S3-BHB01	
Client: South Tees Site Company Ltd		Location: Redcar Steel Works E:455497.766 N:522121.486		
Method (Equipment): Percussion/Openhole/Coring (Dando 2000/Boart Longyear DB520)		Ground Level (m(AOD)): 9.760	Start Date: 07/11/2017	Sheet: 1 of 9

RUN DETAILS			STRATA					Instrument/ Backfill		
Depth	TCR (SCR) RQD	Fracture Index	Reduced Level	Legend	Depth (Thick- ness)	DESCRIPTION				
						Discontinuities Detail	Main			
11.70		RO	0.760		9.00	9.00-11.70m ... rotary openhole drilling.	Boring complete at 9.00m BGL - continued by rotary follow on. (1) Grey gravelly CLAY.			
			- 0.440		10.20		(1) Grey GRAVEL. Gravel includes limestone.			
			- 1.240		11.00		(1) Brown MUDSTONE.			
					(0.70)					
11.70			- 1.940		11.70	11.70-11.80m ... no recovery. 11.80-14.10m ... subhorizontal (5-30 degrees) medium to widely spaced open to tight irregular rough clean discontinuities.	Weak red green sandy MARL partially weathered with many calcite veins and inclusions.			
C Dia (92mm)	94 (92) 78	NR 3							14.10-14.20m ... non-intact. 14.20-14.65m ... subhorizontal (5-30 degrees) closely spaced open irregular rough clean discontinuities. 14.65-15.05m ... non-intact.	14.65-15.05m ... extremely weak and distinctly weathered.
C Dia (92mm)	100 (83) 67	NI 12							15.05-17.00m ... subhorizontal (5-30 degrees) medium to widely spaced open to tight irregular rough clean discontinuities.	
16.50										
C Dia (92mm)	96 (70) 54									

Drilling Progress and Water Observations						Standard Penetration Test			Flush				General Remarks
Date	Depth	Casing	Water Strike	Water Standing	Water Remarks	Depth	Type	Result	From	To	Type	Returns (%)	
08/11/2017	9.00	9.00	11.00	10.50		9.00	S	1/0.32	9.00	10.50	A	100	(1) Description derived from drillers daily report. (2) Inspection pit dug prior to drilling. (3) Water strike at 11.00m BGL - slow inflow.
08/11/2017	11.70	10.50				10.50	C	1/0.20	10.50	11.70	A	100	
09/11/2017	11.70	11.70				11.70	C	1/0.40	11.70	13.50	A/M	100	
									13.50	16.50	A/M	100	
									16.50	19.20	A/M	100	

All dimensions in metres Scale 1:50	For explanation of symbols and abbreviations see Key Sheets	Checked by: <i>K.W.</i>	Logged by: D. Portsmouth	Contract No. 4155
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Regional Office: Unit 20, Business Development Centre, Eanam Wharf, Blackburn, BB1 5BL

Tel: 0191 387 4700 Fax: 0191 387 4710
Tel: 01772 735 300 Fax: 01772 735 999

ROTARY CONTINUATION

Status:-

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Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3			Exploratory Hole No. S3-BHB01
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455497.766 N:522121.486		
Method (Equipment): Percussion/Openhole/Coring (Dando 2000/Boart Longyear DB520)	Ground Level (m(AOD)): 9.760	Start Date: 07/11/2017	Sheet: 2 of 9

RUN DETAILS			STRATA					Instrument/ Backfill
Depth	TCR (SCR) RQD	Fracture Index	Reduced Level	Legend	Depth (Thick- ness)	DESCRIPTION		
						Discontinuities Detail	Main	
C Dia (92mm)		NI				17.00-17.60m ... non-intact.	<i>(Continued ...)</i> Weak red green sandy MARL partially weathered with many calcite veins and inclusions. 17.00-17.60m ... extremely weak and distinctly weathered.	
		3				17.60-19.00m ... subhorizontal (5-30 degrees) medium to widely spaced open to tight irregular rough clean discontinuities.		
		NI				19.00-19.10m ... non-intact.		
		NR				19.10-19.20m ... no recovery.		
19.20	100 (87) 80	NI				19.20-19.60m ... non-intact.	19.20-19.60m ... extremely weak and distinctly weathered.	
C Dia (92mm)		4	19.60-31.20m ... subhorizontal (5-30 degrees) medium to widely spaced open to tight irregular rough clean discontinuities.					
22.20								
C Dia (92mm)	100 (98) 83					22.40-22.45m ... non-intact.		

Drilling Progress and Water Observations						Standard Penetration Test			Flush				General Remarks
Date	Depth	Casing	Water Strike	Water Standing	Water Remarks	Depth	Type	Result	From	To	Type	Returns (%)	
									19.20 22.20	22.20 25.20	A/M A/M	100 100	
													(1) Description derived from drillers daily report. (2) Inspection pit dug prior to drilling. (3) Water strike at 11.00m BGL - slow inflow.

All dimensions in metres Scale 1:50	For explanation of symbols and abbreviations see Key Sheets	Checked by: <i>K.W.</i>	Logged by: D. Portsmouth	Contract No. 4155
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ROTARY CONTINUATION

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3			Exploratory Hole No. S3-BHB01
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455497.766 N:522121.486		
Method (Equipment): Percussion/Openhole/Coring (Dando 2000/Boart Longyear DB520)	Ground Level (m(AOD)): 9.760	Start Date: 07/11/2017	
			Sheet: 3 of 9

[illegible]

Drilling Progress and Water Observations						Standard Penetration Test			Flush				General Remarks
Date	Depth	Casing	Water Strike	Water Standing	Water Remarks	Depth	Type	Result	From	To	Type	Returns (%)	
									25.20	28.20	A/M	100	(1) Description derived from drillers daily report. (2) Inspection pit dug prior to drilling. (3) Water strike at 11.00m BGL - slow inflow.
									28.20	31.20	A/M	100	
									31.20	34.20	A/M	100	

All dimensions in metres Scale 1:50	For explanation of symbols and abbreviations see Key Sheets	Checked by: <i>K.W.</i>	Logged by: D. Portsmouth	Contract No. 4155
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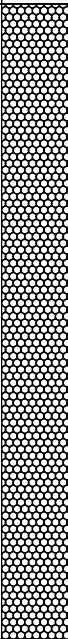
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ROTARY CONTINUATION

Status:-

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Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3			Exploratory Hole No. S3-BHB01		
Client: South Tees Site Company Ltd		Location: Redcar Steel Works E:455497.766 N:522121.486			
Method (Equipment): Percussion/Openhole/Coring (Dando 2000/Boart Longyear DB520)		Ground Level (m(AOD)): 9.760		Start Date: 07/11/2017	Sheet: 4 of 9

RUN DETAILS			STRATA					Instrument/ Backfill
Depth	TCR (SCR) RQD	Fracture Index	Reduced Level	Legend	Depth (Thick- ness)	DESCRIPTION		
						Discontinuities Detail	Main	
34.20						34.20-34.30m ... non-intact. 34.30-37.20m ... subhorizontal (5-30 degrees) medium to widely spaced open to tight irregular rough clean discontinuities.	(Continued ...) Weak red green sandy MARL partially weathered with many calcite veins and inclusions.	
C Dia (92mm)	100 (97) 80	NI 3						
			- 27.440		37.20			
							Borehole complete at 37.20m BGL.	

Drilling Progress and Water Observations						Standard Penetration Test			Flush				General Remarks
Date	Depth	Casing	Water Strike	Water Standing	Water Remarks	Depth	Type	Result	From	To	Type	Returns (%)	
09/11/2017	37.20	11.70		19.30					34.20	37.20	A/M	100	
(1) Description derived from drillers daily report. (2) Inspection pit dug prior to drilling. (3) Water strike at 11.00m BGL - slow inflow.													

All dimensions in metres Scale 1:50	For explanation of symbols and abbreviations see Key Sheets	Checked by: <i>K.W.</i>	Logged by: D. Portsmouth	Contract No. 4155
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ROTARY CONTINUATION

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Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455497.766 N:522121.486	
Method (Equipment): Percussion/Openhole/Coring (Dando 2000/Boart Longyear DB520)	Ground Level (m(AOD)): 9.760	Start Date: 07/11/2017
		Sheet: 5 of 9



Figure S3-BHB01.1
S3-BHB01 11.70-13.50m BGL



Figure S3-BHB01.2
S3-BHB01 13.50-16.50m BGL



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Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455497.766 N:522121.486	
Method (Equipment): Percussion/Openhole/Coring (Dando 2000/Boart Longyear DB520)	Ground Level (m(AOD)): 9.760	Start Date: 07/11/2017
		Sheet: 6 of 9



Figure S3-BHB01.3
S3-BHB01 16.50-19.20m BGL



Figure S3-BHB01.4
S3-BHB01 19.20-22.20m BGL



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Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455497.766 N:522121.486	
Method (Equipment): Percussion/Openhole/Coring (Dando 2000/Boart Longyear DB520)	Ground Level (m(AOD)): 9.760	Start Date: 07/11/2017
		Sheet: 7 of 9



Figure S3-BHB01.5
S3-BHB01 22.50-25.20m BGL



Figure S3-BHB01.6
S3-BHB01 25.20-28.20m BGL



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ROTARY CONTINUATION

Status:-

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Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-BHB01
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455497.766 N:522121.486	
Method (Equipment): Percussion/Openhole/Coring (Dando 2000/Boart Longyear DB520)	Ground Level (m(AOD)): 9.760	Start Date: 07/11/2017
		Sheet: 8 of 9



Figure S3-BHB01.7
S3-BHB01 28.20-31.20m BGL



Figure S3-BHB01.8
S3-BHB01 31.20-34.20m BGL



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ROTARY CONTINUATION

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Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455497.766 N:522121.486	
Method (Equipment): Percussion/Openhole/Coring (Dando 2000/Boart Longyear DB520)	Ground Level (m(AOD)): 9.760	Start Date: 07/11/2017
		Sheet: 9 of 9



Figure S3-BHB01.9
S3-BHB01 34.20-37.20m BGL



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BOREHOLE RECORD

Status:-

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Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3			Exploratory Hole No. S3-BHB02		
Client: South Tees Site Company Ltd		Location: Redcar Steel Works E:455211.176 N:521587.602			
Method (Equipment): Cable Percussion (Dando 2000)		Ground Level (m(AOD)): 9.844		Start Date: 09/11/2017	Sheet: 1 of 2

SAMPLES & TESTS			Water	STRATA				Instrument/ Backfill
Depth	Type No	Test Result		Reduced Level	Legend	Depth (Thickness)	DESCRIPTION	
1.00 1.00 1.20	B1 PID J2	4.8ppm				(2.00)	MADE GROUND (Black brown clayey sandy gravel with slight hydrocarbon odour. Sand is fine to coarse. Gravel is fine to coarse subangular and includes slag, concrete and brick).	
2.00	ES3			7.844		2.00	Firm to stiff brown grey slightly sandy slightly gravelly CLAY. Sand is fine to medium. Gravel is fine to medium subrounded and includes mudstone and sandstone. at c.2.50m BGL ... clay is of intermediate plasticity.	
2.50-2.95 2.50-2.95 2.50	SJ4 B5 PID	N18 2.6ppm				(1.50)		
3.50-3.95	U*B6	(20)		6.344		3.50	Soft to firm laminated brown CLAY with dustings of silt on the laminae. at c.3.50m BGL ... clay is of intermediate plasticity	
4.50-4.95 4.50-4.95 4.50	SJ7 B8 PID	N8 0.3ppm				(2.50)	at c.4.50m BGL ... clay is of intermediate plasticity.	
5.50-5.95 5.50-5.95	SJ9 B10	N7					at c.5.50m BGL ... clay is of intermediate plasticity.	
6.50-6.95	U*B11	(22)		3.844		6.00	Firm brown red slightly sandy slightly gravelly CLAY. Sand is fine to medium. Gravel is fine to medium subangular and includes sandstone and mudstone. at c.6.50m BGL ... clay is of intermediate plasticity.	
7.50-7.95 7.50-7.95	SJ12 B13	N12				(2.50)		

Boring Progress and Water Observations					Chiselling			Water Added		General Remarks
Date	Depth	Casing	Casing Dia (mm)	Water Standing	From	To	Hours (hh:mm)	From	To	
09/11/2017	0.00	0.00			0.00	2.00	03:00			(1) Description derived from drillers daily report. (2) Inspection pit dug prior to drilling. (3) 50mm diameter slotted standpipe installed to 4.00m BGL.

All dimensions in metres
Scale 1:50

For explanation of symbols and abbreviations see Key Sheets

Checked by:
K.W.

Logged by:
D. Portsmouth

Contract No.
4155



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Regional Office: Unit 20, Business Development Centre, Eanam Wharf, Blackburn, BB1 5BL

Tel: 0191 387 4700 Fax: 0191 387 4710
Tel: 01772 735 300 Fax: 01772 735 999

BOREHOLE RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-BHB02
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455211.176 N:521587.602	
Method (Equipment): Cable Percussion (Dando 2000)	Ground Level (m(AOD)): 9.844	Start Date: 09/11/2017
Sheet: 2 of 2		

SAMPLES & TESTS			Water	STRATA				Instrument/ Backfill
Depth	Type No	Test Result		Reduced Level	Legend	Depth (Thickness)	DESCRIPTION	
8.50-8.95	SJ14	N33		1.344		8.50	(Continued...) Firm brown red slightly sandy slightly gravelly CLAY. Sand is fine to medium. Gravel is fine to medium subangular and includes sandstone and mudstone. Extremely weak grey MUDSTONE distinctly weathered. (Recovered as clayey gravel/gravelly clay. Gravel is fine to medium subangular). Boring complete at 8.95m BGL.	

Boring Progress and Water Observations					Chiselling			Water Added		General Remarks
Date	Depth	Casing	Casing Dia (mm)	Water Standing	From	To	Hours (hh:mm)	From	To	
09/11/2017	8.95	8.50	200	7.50						(1) Description derived from drillers daily report. (2) Inspection pit dug prior to drilling. (3) 50mm diameter slotted standpipe installed to 4.00m BGL.

All dimensions in metres Scale 1:50	For explanation of symbols and abbreviations see Key Sheets	Checked by: <i>K.W.</i>	Logged by: D. Portsmouth	Contract No. 4155
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ALLIED EXPLORATION & GEOTECHNICS LIMITED

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 Regional Office: Unit 20, Business Development Centre, Eanam Wharf, Blackburn, BB1 5BL
 Tel: 0191 387 4700 Fax: 0191 387 4710
 Tel: 01772 735 300 Fax: 01772 735 999

BOREHOLE RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3				Exploratory Hole No. S3-BHB03
Client: South Tees Site Company Ltd		Location: Redcar Steel Works E:455517.702 N:521300.565		
Method (Equipment): Cable Percussion (Dando 2000)		Ground Level (m(AOD)): 9.961	Start Date: 09/11/2017	Sheet: 1 of 2

SAMPLES & TESTS			Water	STRATA				Instrument/ Backfill
Depth	Type No	Test Result		Reduced Level	Legend	Depth (Thickness)	DESCRIPTION	
1.00 1.00	B1 PID	1.0ppm				(2.10)	MADE GROUND (Black brown clayey sandy gravel. Sand is fine to coarse. Gravel is fine to coarse subangular and includes slag, dolomite, macadam, concrete and brick).	
1.40	ES2							
1.90 1.90	B3 PID	0.5ppm		7.861		2.10		
2.40 2.50 2.50	ES4 B5 PID	N11 0.5ppm		7.261		(0.60) 2.70	MADE GROUND (Firm brown sandy gravelly clay. Sand is fine to medium. Gravel is fine to medium subangular and includes slag, concrete and sandstone). at c.2.50m BGL ... clay is of intermediate plasticity.	
3.50	J6	N9				(1.90)	Soft to firm grey brown sandy slightly gravelly CLAY. Sand is fine. Gravel is fine to medium subangular and includes sandstone. (Driller notes grey veining).	
3.80 3.80	B7 PID	0.5ppm						
4.50	U*B8	(41)		5.361		4.60	at c.4.50m BGL ... clay is of intermediate plasticity.	
5.00	U9	(49)				(1.50)	Soft to firm laminated brown CLAY. at c.5.00m BGL ... low strength.	
5.50	J10							
6.00-6.45	SJ11	N11		3.861		6.10	Firm red brown sandy slightly gravelly CLAY. Sand is fine to medium. Gravel is fine to medium subangular and includes sandstone and mudstone.	
7.00	U12	(47)					at c.7.00m BGL ... high strength.	
7.50	J13					(3.30)		

Boring Progress and Water Observations					Chiselling			Water Added		General Remarks
Date	Depth	Casing	Casing Dia (mm)	Water Standing	From	To	Hours (hh:mm)	From	To	
09/11/2017	0.00	0.00								(1) Description derived from drillers daily report. (2) Inspection pit dug prior to drilling. (3) Water seepage at 2.70m BGL. (4) 50mm diameter slotted standpipe installed to 3.00m BGL.
09/11/2017	3.00	3.00	250							
09/11/2017	4.00	4.00	200	Damp						
10/11/2017	4.00	4.00	200	Dry						

All dimensions in metres Scale 1:50	For explanation of symbols and abbreviations see Key Sheets	Checked by: <i>K.W.</i>	Logged by: D. Portsmouth	Contract No. 4155
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Regional Office: Unit 20, Business Development Centre, Eanam Wharf, Blackburn, BB1 5BL

Tel: 0191 387 4700 Fax: 0191 387 4710
Tel: 01772 735 300 Fax: 01772 735 999

BOREHOLE RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3			Exploratory Hole No. S3-BHB03	
Client: South Tees Site Company Ltd		Location: Redcar Steel Works E:455517.702 N:521300.565		
Method (Equipment): Cable Percussion (Dando 2000)		Ground Level (m(AOD)): 9.961	Start Date: 09/11/2017	Sheet: 2 of 2

SAMPLES & TESTS			Water	STRATA				Instrument/ Backfill
Depth	Type No	Test Result		Reduced Level	Legend	Depth (Thickness)	DESCRIPTION	
8.00-8.45	SB14	N12					(Continued...) Firm red brown sandy slightly gravelly CLAY. Sand is fine to medium. Gravel is fine to medium subangular and includes sandstone and mudstone. at c.8.00m BGL ... clay is of low to intermediate plasticity.	
9.00	U15	(106)		0.561		9.40	at c.9.00m BGL ... high strength.	
9.50	J16					(0.90)	Firm grey sandy gravelly CLAY. Sand is fine to medium. Gravel is fine to medium angular and includes mudstone and sandstone.	
10.00	SJ17	1/2.10		-0.339		10.30	c.10.30m BGL ... extremely weak grey mudstone distinctly weathered. (Recovered as clayey gravel. Gravel is fine to medium angular). Borehole complete at 10.30m BGL.	

Boring Progress and Water Observations					Chiselling			Water Added		General Remarks
Date	Depth	Casing	Casing Dia (mm)	Water Standing	From	To	Hours (hh:mm)	From	To	
10/11/2017	10.30	5.60	200	Dry	9.80	10.00	00:30			(1) Description derived from drillers daily report. (2) Inspection pit dug prior to drilling. (3) Water seepage at 2.70m BGL. (4) 50mm diameter slotted standpipe installed to 3.00m BGL.

All dimensions in metres Scale 1:50	For explanation of symbols and abbreviations see Key Sheets	Checked by: <i>K.W.</i>	Logged by: D. Portsmouth	Contract No. 4155
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Regional Office: Unit 20, Business Development Centre, Eanam Wharf, Blackburn, BB1 5BL

Tel: 0191 387 4700 Fax: 0191 387 4710
Tel: 01772 735 300 Fax: 01772 735 999

BOREHOLE RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3			Exploratory Hole No. S3-BHB04		
Client: South Tees Site Company Ltd		Location: Redcar Steel Works E:455247.368 N:521285.972			
Method (Equipment): Cable Percussion (Dando 2000)		Ground Level (m(AOD)): 9.898		Start Date: 08/11/2017	Sheet: 1 of 2

SAMPLES & TESTS			Water	STRATA				Instrument/ Backfill
Depth	Type No	Test Result		Reduced Level	Legend	Depth (Thickness)	DESCRIPTION	
0.90 0.90	B1 PID	1.2ppm				(1.30)	MADE GROUND (Black brown clayey sandy gravel. Sand is fine to coarse. Gravel is fine to coarse subangular and includes slag, macadam, concrete and brick).	
1.30	ES2			8.598		1.30		
1.90 1.90	B3 PID	0.5ppm				(1.00)	Firm red brown sandy slightly gravelly CLAY. Sand is fine to medium. Gravel is fine to medium subangular and includes sandstone and mudstone.	
				7.598		2.30		
2.50-2.95	SJ4	N6					Soft to firm laminated brown grey CLAY.	
3.00 3.00	B5 PID	0.5ppm				(1.80)	at c.3.00m BGL ... clay is of intermediate plasticity.	
3.50-3.95	SJ6	N6						
4.00 4.00	B7 PID	0.5ppm				5.798	at c.4.00m BGL ... clay is of intermediate plasticity.	
4.50	U*B8	(41)				4.10	Firm brown red slightly sandy gravelly CLAY. Sand is fine to medium. Gravel is fine to medium subangular and includes mudstone and sandstone.	
5.00	U9	(61)					at c.5.00m BGL ... high strength.	
5.50	J10							
6.00-6.45	SJ11	N17				(4.20)		
6.50	B12						at c.6.50m BGL ... clay is of intermediate plasticity.	
7.00	U13	(86)					at c.7.00m BGL ... high strength.	
7.50	J14							

Boring Progress and Water Observations					Chiselling			Water Added		General Remarks
Date	Depth	Casing	Casing Dia (mm)	Water Standing	From	To	Hours (hh:mm)	From	To	
08/11/2017	0.00	0.00			0.60	0.90	00:45			(1) Description derived from drillers daily report. (2) Inspection pit dug prior to drilling. (3) Double installation: 2No. 50mm diameter slotted standpipes installed to 1.50m and 8.00m BGL.
08/11/2017	2.00	2.00	200	Dry						
09/11/2017	2.00	2.00	200	1.96						

All dimensions in metres Scale 1:50	For explanation of symbols and abbreviations see Key Sheets	Checked by: <i>K.W.</i>	Logged by: D. Portsmouth	Contract No. 4155
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Regional Office: Unit 20, Business Development Centre, Eanam Wharf, Blackburn, BB1 5BL

Tel: 0191 387 4700 Fax: 0191 387 4710
Tel: 01772 735 300 Fax: 01772 735 999

BOREHOLE RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3			Exploratory Hole No. S3-BHB04	
Client: South Tees Site Company Ltd		Location: Redcar Steel Works E:455247.368 N:521285.972		
Method (Equipment): Cable Percussion (Dando 2000)		Ground Level (m(AOD)): 9.898	Start Date: 08/11/2017	Sheet: 2 of 2

SAMPLES & TESTS			Water	STRATA				Instrument/ Backfill
Depth	Type No	Test Result		Reduced Level	Legend	Depth (Thickness)	DESCRIPTION	
8.00-8.45	SB15	N17		1.598		8.30	(Continued...) Firm brown red slightly sandy gravelly CLAY. Sand is fine to medium. Gravel is fine to medium subangular and includes mudstone and sandstone.	
8.50	B16					(1.00)	Firm brown laminated red sandy CLAY. Sand is fine to medium.	
9.00	U*B17	(90)		0.598		9.30	at c.9.00m BGL ... clay is of low plasticity.	
9.60	B18			0.098		9.80	Firm brown grey sandy very gravelly CLAY. Sand is fine to medium. Gravel is fine to coarse subangular and includes mudstone.	
10.00	SJ19	1/0.94		-0.102		(0.20) 10.00	Extremely weak grey MUDSTONE distinctly weathered. (Recovered as clayey gravel. Gravel is fine to medium angular). Borehole complete at 10.00m BGL.	

Boring Progress and Water Observations					Chiselling			Water Added		General Remarks
Date	Depth	Casing	Casing Dia (mm)	Water Standing	From	To	Hours (hh:mm)	From	To	
09/11/2017	10.00	5.60	200	Dry	9.30	9.60	00:45			(1) Description derived from drillers daily report. (2) Inspection pit dug prior to drilling. (3) Double installation: 2No. 50mm diameter slotted standpipes installed to 1.50m and 8.00m BGL.

All dimensions in metres Scale 1:50	For explanation of symbols and abbreviations see Key Sheets	Checked by: <i>K.W.</i>	Logged by: D. Portsmouth	Contract No. 4155
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Trial Pit Records



Trial Pit Summary Table

Exploratory Hole Number	Excavation Method	Completion Depth (m BGL)	Remarks
S3-TPA01	Machine Excavated	3.90	Advanced to required depth.
S3-TPA02	Machine Excavated	2.00	Terminated due to encountering service.
S3-TPA03	Machine Excavated	3.90	Terminated – excavator unable to progress.
S3-TPA04	Machine Excavated	3.20	Advanced to required depth.
S3-TPA05	Machine Excavated	3.20	Terminated due to groundwater ingress.
S3-TPA06	Machine Excavated	2.80	Terminated – unable to progress.
S3-TPA07	Machine Excavated	3.20	Terminated due encountering groundwater.
S3-TPA08	Machine Excavated	3.20	Advanced to required depth.
S3-TPA09	Machine Excavated	4.20	Advanced to required depth.
S3-TPA10	Machine Excavated	3.60	Advanced to required depth.
S3-TPA11	Machine Excavated	3.00	Advanced to required depth.
S3-TPA12	Machine Excavated	2.50	Terminated due to obstruction.
S3-TPA13	Machine Excavated	3.50	Advanced to required depth.
S3-TPA14	Machine Excavated	1.30	Advanced to required depth.
S3-TPA15	Machine Excavated	2.90	Advanced to required depth.
S3-TPA16	Machine Excavated	1.70	Terminated due to groundwater ingress.
S3-TPA17	Machine Excavated	3.50	Advanced to required depth.
S3-TPA18	Machine Excavated	3.50	Advanced to required depth.
S3-TPA19	Machine Excavated	1.80	Advanced to required depth.
S3-TPA20	Machine Excavated	3.60	Advanced to required depth.
S3-TPA21	Machine Excavated	1.70	Terminated due to groundwater ingress.
S3-TPA22	Machine Excavated	3.30	Advanced to required depth.
S3-TPA23	Machine Excavated	1.80	Advanced to required depth.
S3-TPA24	Machine Excavated	1.80	Terminated due to groundwater ingress.
S3-TPA25	Machine Excavated	2.50	Terminated due to concrete obstruction.
S3-TPA26	Machine Excavated	3.70	Advanced to required depth.
S3-TPA27	Machine Excavated	1.50	Advanced to required depth.
S3-TPA28	Machine Excavated	4.00	Advanced to required depth.
S3-TPA29	Machine Excavated	3.60	Advanced to required depth.
S3-TPA30	Machine Excavated	2.20	Advanced to required depth.
S3-TPA31	Machine Excavated	2.80	Advanced to required depth.
S3-TPA32	Machine Excavated	3.20	Advanced to required depth.
S3-TPA33	Machine Excavated	2.80	Advanced to required depth.
S3-TPA34	Machine Excavated	3.30	Advanced to required depth.
S3-TPA35	Machine Excavated	2.60	Advanced to required depth.
S3-TPA36	Machine Excavated	2.60	Advanced to required depth.
S3-TPA37	Machine Excavated	1.05	Terminated due to anticipating encountering service.
S3-TPA38	Machine Excavated	2.10	Advanced to required depth.

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S3-TPA39	Machine Excavated	2.40	Advanced to required depth.
S3-TPA40	Machine Excavated	2.00	Advanced to required depth.
S3-TPA41	Machine Excavated	1.40	Terminated due to services.
S3-TPA42	Machine Excavated	1.60	Terminated due to anticipating encountering service.
S3-TPB01	Machine Excavated	2.80	Advanced to required depth.
S3-TPB02	Machine Excavated	1.20	Terminated due to groundwater ingress.
S3-TPB03	Machine Excavated	3.80	Terminated due to collapse back to 3.40m BGL.
S3-TPB04	Machine Excavated	3.50	Terminated due to collapsed pit sides.
S3-TPB05	Machine Excavated	3.40	Terminated – unable to advance.
S3-TPB06	Machine Excavated	2.00	Advanced to required depth.
S3-TPB07	Machine Excavated	3.80	Terminated – unable to advance.
S3-TPB08	Machine Excavated	2.00	Terminated – unable to advance.
S3-TPB09	Machine Excavated	0.40	Terminated due to slow progress.
S3-TPB10	Machine Excavated	3.50	Terminated – unable to progress.
S3-TPB11	Machine Excavated	0.40	Terminated due to slow progress.
S3-TPB12	Machine Excavated	1.90	Advanced to required depth.
S3-TPB13	Machine Excavated	2.80	Terminated due to groundwater ingress.
S3-TPB14	Machine Excavated	2.40	Advanced to required depth.
S3-TPB15	Machine Excavated	2.50	Advanced to required depth.
S3-TPB16	Machine Excavated	3.80	Terminated due to groundwater ingress and pit side collapse.
S3-TPB17	Machine Excavated	1.80	Terminated due to groundwater ingress.
S3-TPB18	Machine Excavated	2.50	Terminated due to groundwater ingress.
S3-TPB19	Machine Excavated	1.60	Terminated due to groundwater ingress.
S3-TPB20	Machine Excavated	3.20	Advanced to required depth.
S3-TPB21	Machine Excavated	2.40	Terminated due to groundwater ingress.
S3-TPB22	Machine Excavated	2.30	Terminated due to groundwater ingress.
S3-TPB23	Machine Excavated	2.40	Terminated due to groundwater ingress.
S3-TPB24	Machine Excavated	3.50	Terminated due to groundwater ingress.
S3-TPB25	Machine Excavated	2.60	Advanced to required depth.
S3-TPB26	Machine Excavated	1.70	Terminated due to groundwater ingress.
S3-TPB27	Machine Excavated	1.90	Terminated due to groundwater ingress.
S3-TPB28	Machine Excavated	3.50	Terminated due to groundwater ingress.
S3-TPB29	Machine Excavated	1.90	Advanced to required depth.
S3-TPB30	Machine Excavated	2.00	Advanced to required depth.
S3-TPB31	Machine Excavated	1.90	Terminated due to groundwater ingress.
S3-TPB32	Machine Excavated	3.30	Advanced to required depth.
S3-TPB33	Machine Excavated	3.00	Advanced to required depth.
S3-TPB34	Machine Excavated	2.70	Advanced to required depth.
S3-TPB35	Machine Excavated	1.70	Advanced to required depth.
S3-TPB36	Machine Excavated	2.10	Terminated due to groundwater ingress.
S3-TPB37	Machine Excavated	2.90	Advanced to required depth.
S3-TPB38	Machine Excavated	2.20	Terminated due to groundwater ingress.

S3-TPB39	Machine Excavated	0.90	Terminated due to possible asbestos/concrete obstruction.
S3-TPB40	Machine Excavated	2.20	Terminated due to groundwater ingress.
S3-TPB41	Machine Excavated	1.50	Advanced to required depth.
S3-TPB42	Machine Excavated	3.00	Advanced to required depth.
S3-TPB43	Machine Excavated	3.70	Advanced to required depth.
S3-TPB44	Machine Excavated	2.50	Terminated due to groundwater ingress.
S3-TPB45	Machine Excavated	2.80	Advanced to required depth.
S3-TPB46	Machine Excavated	0.50	Terminated due to encountering concrete (possible foundation).
S3-TPB47	Machine Excavated	2.70	Advanced to required depth.
S3-TPB48	Machine Excavated	2.70	Advanced to required depth.
S3-TPB49	Machine Excavated	2.20	Terminated due to groundwater ingress.
S3-TPB50	Machine Excavated	2.60	Terminated due to groundwater ingress.
S3-TPB51	Machine Excavated	2.70	Advanced to required depth.
S3-TPB52	Machine Excavated	2.10	Advanced to required depth.
S3-TPB53	Machine Excavated	1.30	Terminated due to groundwater ingress.
S3-TPB54	Machine Excavated	2.20	Advanced to required depth.
S3-TPB55	Machine Excavated	1.30	Advanced to required depth.
S3-TPB56	Machine Excavated	1.30	Advanced to required depth.
S3-TPB57	Machine Excavated	2.40	Terminated due to groundwater ingress.
S3-TPB58	Machine Excavated	2.40	Terminated due to groundwater ingress.
S3-TPB59	Machine Excavated	2.80	Terminated due to groundwater ingress.
S3-TPB60	Machine Excavated	1.60	Advanced to required depth.
S3-TPB61	Machine Excavated	2.00	Terminated due to groundwater ingress.
S3-TPB62	Machine Excavated	1.70	Terminated due to groundwater ingress.
S3-TPB63	Machine Excavated	2.40	Advanced to required depth.
S3-TPB64	Machine Excavated	2.80	Advanced to required depth.
S3-TPB65	Machine Excavated	2.60	Advanced to required depth.
S3-TPB66	Machine Excavated	2.40	Advanced to required depth.
S3-TPB67	Machine Excavated	2.80	Terminated due to groundwater ingress.
S3-TPB68	Machine Excavated	2.30	Terminated due to groundwater ingress.
S3-TPB69	Machine Excavated	1.90	Advanced to required depth.
S3-TPB70	Machine Excavated	2.30	Terminated due to groundwater ingress.
S3-TPB71	Machine Excavated	2.20	Advanced to required depth.
S3-TPB72	Machine Excavated	2.50	Advanced to required depth.
S3-TPB73	Machine Excavated	2.50	Terminated due to groundwater ingress.
S3-TPB74	Machine Excavated	1.60	Terminated due to groundwater ingress.
S3-TPB75	Machine Excavated	1.60	Terminated due to groundwater ingress.



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Tel: 0191 387 4700 Fax: 0191 387 4710
Tel: 01772 735 300 Fax: 01772 735 999

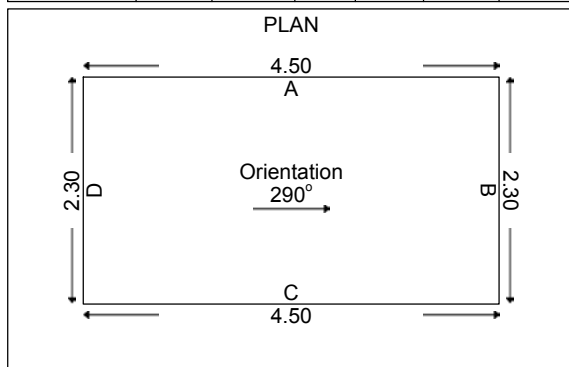
TRIAL PIT RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3			Exploratory Hole No. S3-TPA01	
Client: South Tees Site Company Ltd		Location: Redcar Steel Works E:455056.835 N:521200.185		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)		Ground Level (m(AOD)):	Start Date:	Sheet:
		10.412	24/10/2017	1 of 4

SAMPLES & TESTS			Water	STRATA			
Depth	Type No	Test Result		Reduced Level	Legend	Depth (Thickness)	DESCRIPTION
0.20	LB1			10.312		(0.10) 0.10	MADE GROUND (Grass over brown sandy clay).
				10.112		(0.20) 0.30	MADE GROUND (Grey sandy gravel. Sand includes ash. Gravel is fine to coarse angular to subangular and includes slag).
				9.912		(0.20) 0.50	MADE GROUND (Brown slightly clayey gravelly sand. Gravel is fine to coarse angular to subangular and includes slag).
0.60	J2					(0.50)	MADE GROUND (Black slightly clayey slightly gravelly sand. Sand includes ash and coal fines. Gravel is fine to coarse angular to subangular and includes clinker, coal and slag).
0.70	ES3			9.412		1.00	MADE GROUND (Soft to firm red brown sandy slightly gravelly clay intermixed with clayey sand with low cobble content. Gravel is fine to coarse angular to subangular and includes brick, concrete and slag. Cobbles are angular and include brick and concrete).
0.80	B4					(0.70)	MADE GROUND (Grey clayey sandy gravel. Sand includes ash. Gravel is fine to coarse angular to subangular and includes slag).
1.20	J5					(0.20) 1.90	MADE GROUND (Grey very clayey very gravelly sand. Sand includes ash. Gravel is fine to coarse angular to subangular and includes slag).
1.40	ES6			8.712		(1.00)	Firm brown with some grey mottling slightly sandy slightly gravelly CLAY. Gravel is fine to coarse subrounded to rounded and includes sandstone.
1.60	B7			8.512		(1.00)	at c.3.70m BGL ... clay/silt is of extremely high plasticity.
1.80	B8					3.90	Trial pit complete at 3.90m BGL.
2.00	J9						
2.40	ES10						
2.70	B11			7.512			
3.20	J12						
3.70	B13			6.512			



GROUNDWATER No groundwater inflow observed.
--

STABILITY Pit sides stable throughout excavation.
--

GENERAL REMARKS

ADDITIONAL INFORMATION		
Sketch Diagram:	No Sketch Taken	
Photographs:	Yes	See additional sheets.

UNDERGROUND SERVICES				
Depth	Orientation	Type	Diameter (mm)	Condition

All dimensions in metres Scale 1:50	For explanation of symbols and abbreviations see Key Sheets	Checked by: K.W.	Logged by: S. Duncan	Contract No. 4155
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Tel: 0191 387 4700 Fax: 0191 387 4710
Tel: 01772 735 300 Fax: 01772 735 999

TRIAL PIT RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPA01	
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455056.835 N:521200.185		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 10.412	Start Date: 24/10/2017	Sheet: 2 of 4



Figure S3-TPA01.1
S3-TPA01 - Before investigation works



Figure S3-TPA01.2
S3-TPA01



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Regional Office: Unit 20, Business Development Centre, Eanam Wharf, Blackburn, BB1 5BL

Tel: 0191 387 4700 Fax: 0191 387 4710
Tel: 01772 735 300 Fax: 01772 735 999

TRIAL PIT RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPA01	
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455056.835 N:521200.185		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 10.412	Start Date: 24/10/2017	Sheet: 3 of 4



Figure S3-TPA01.3
S3-TPA01



Figure S3-TPA01.4
S3-TPA01



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TRIAL PIT RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPA01	
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455056.835 N:521200.185		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 10.412	Start Date: 24/10/2017	Sheet: 4 of 4



Figure S3-TPA01.5
S3-TPA01 - Spoil

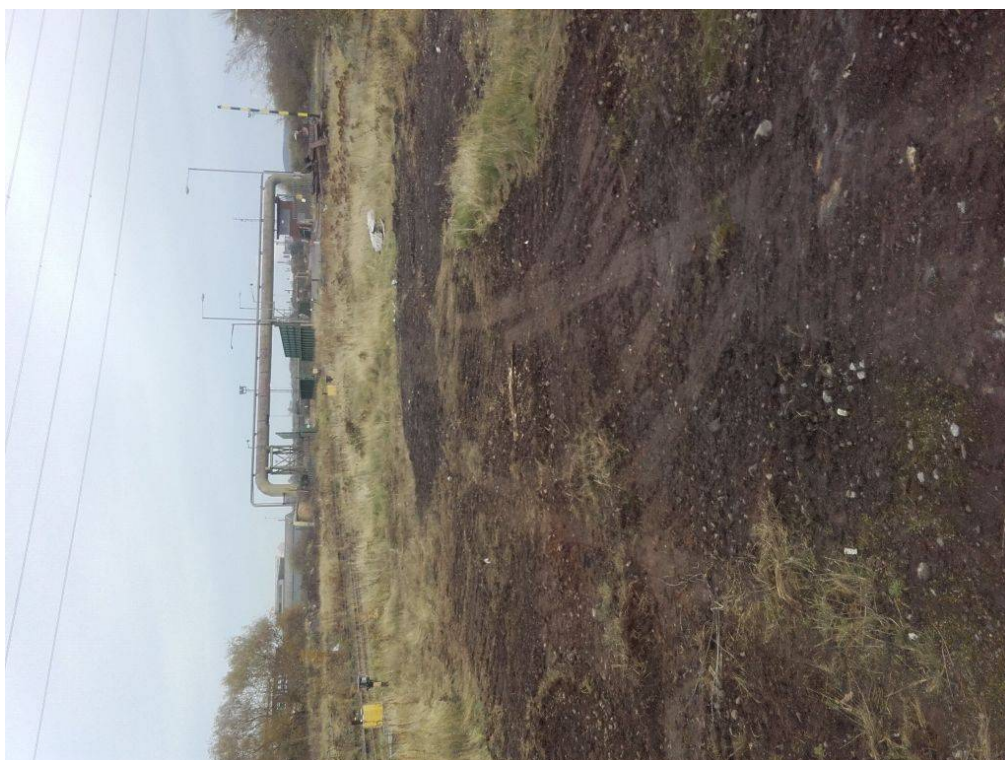


Figure S3-TPA01.6
S3-TPA01 - Reinstatement



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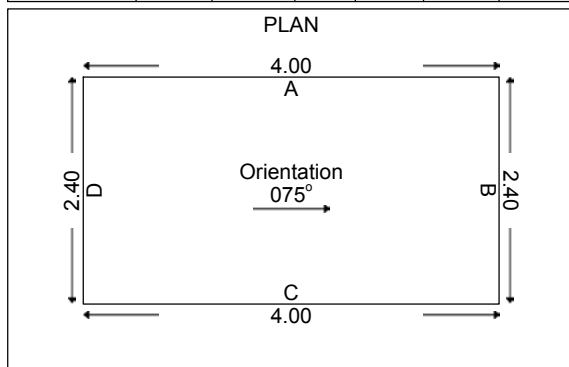
TRIAL PIT RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3				Exploratory Hole No. S3-TPA02	
Client: South Tees Site Company Ltd		Location: Redcar Steel Works E:455064.411 N:521183.139			
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)		Ground Level (m(AOD)):	10.505	Start Date:	23/10/2017
				Sheet:	1 of 3

SAMPLES & TESTS			Water	STRATA			
Depth	Type No	Test Result		Reduced Level	Legend	Depth (Thickness)	DESCRIPTION
0.40 0.50 0.60 0.60	J1 ES2 B3 PID	3.2ppm		10.205		(0.30) 0.30	MADE GROUND (Macadam).
				9.805		(0.40) 0.70	MADE GROUND (Brown clayey gravelly sand with low cobble content and fragments of metal, redundant cable and tile. Gravel is fine to coarse angular to subrounded and includes slag, concrete, brick and clinker).
				9.305		(0.50) 1.20	MADE GROUND (Grey sandy gravel. Gravel is coarse angular to subrounded and includes slag and roadstone).
1.30 1.50	J4 ES5					(0.80)	MADE GROUND (Brown clayey sandy gravel and cobbles intermixed sandy clay with fragments of metal and redundant cable. Gravel is fine to coarse angular to subrounded and includes slag, concrete, brick and clinker).
1.80 1.80	B6 PID	0.5ppm		8.505		2.00	at c.2.00m BGL ... redundant 20mm electric cable running 095 degrees. Trial pit terminated at 2.00m BGL - due to encountering service.



GROUNDWATER No groundwater inflow observed.
STABILITY Pit sides stable throughout excavation.
GENERAL REMARKS (1) Redcar personnel assessed cable and made safe prior to backfill.

ADDITIONAL INFORMATION			UNDERGROUND SERVICES				
Sketch Diagram:	No Sketch Taken		Depth	Orientation	Type	Diameter (mm)	Condition
Photographs:	Yes	See additional sheets.	2.00	095	Electric cable	20	Damaged

All dimensions in metres Scale 1:50	For explanation of symbols and abbreviations see Key Sheets	Checked by: <i>K.W.</i>	Logged by: S. Duncan	Contract No. 4155
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TRIAL PIT RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPA02	
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455064.411 N:521183.139		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 10.505	Start Date: 23/10/2017	Sheet: 2 of 3

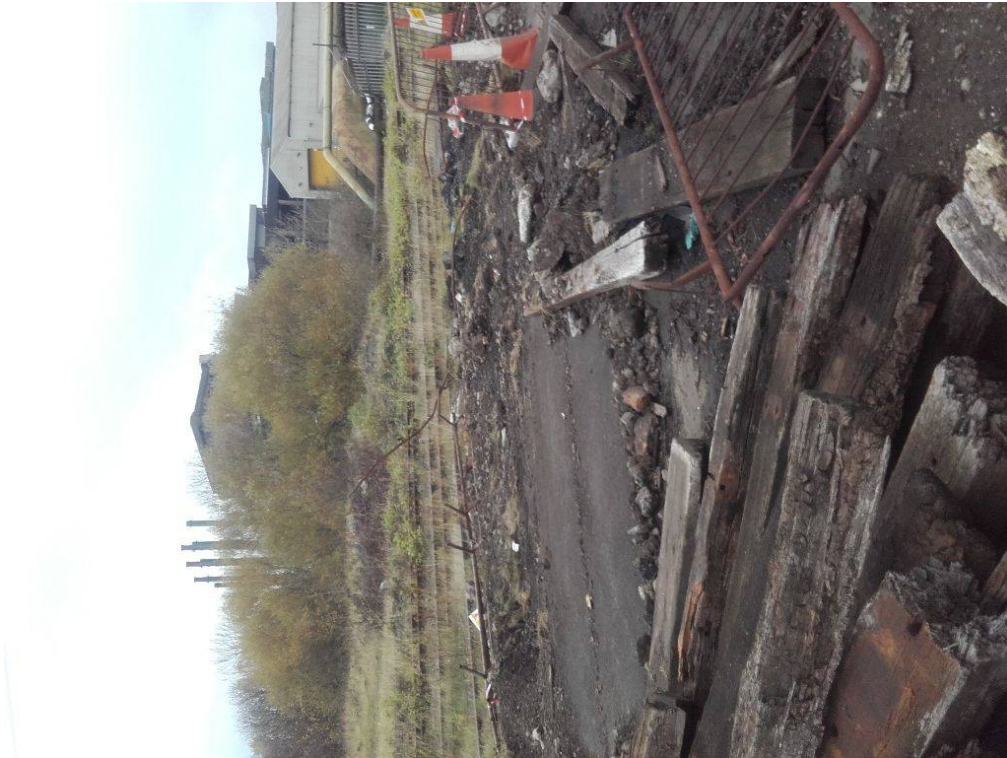


Figure S3-TPA02.1
S3-TPA02 Before investigation works



Figure S3-TPA02.2
S3-TPA02



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TRIAL PIT RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPA02	
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455064.411 N:521183.139		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 10.505	Start Date: 23/10/2017	Sheet: 3 of 3



Figure S3-TPA02.3
S3-TPA02



Figure S3-TPA02.4
S3-TPA02 - Spoil



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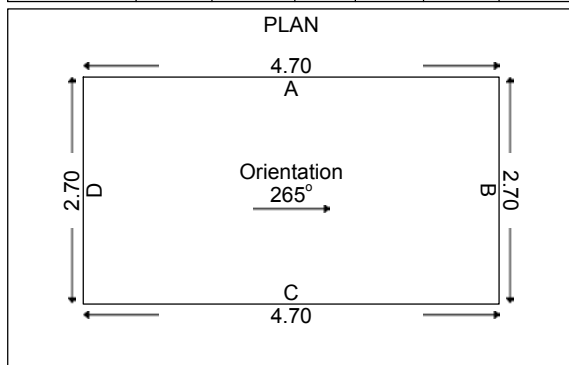
TRIAL PIT RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3			Exploratory Hole No. S3-TPA03	
Client: South Tees Site Company Ltd		Location: Redcar Steel Works E:455043.146 N:521164.108		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)		Ground Level (m(AOD)): 10.685	Start Date: 23/10/2017	Sheet: 1 of 4

SAMPLES & TESTS			Water	STRATA			
Depth	Type No	Test Result		Reduced Level	Legend	Depth (Thickness)	DESCRIPTION
0.30 0.50	J1 ES2	5.8ppm				(1.00)	MADE GROUND (Dark brown grey slightly clayey gravelly sand with medium cobble and boulder content and sulphurous odour noted. Sand includes ash. Gravel is fine to coarse angular to subangular and includes concrete, slag and clinker. Cobbles and boulders are angular and include concrete and slag).
0.80 0.80	B3 PID			9.685		1.00	
		9.385		(0.30) 1.30	MADE GROUND (Concrete with rebar).		
1.50 1.80	J4 ES5			(1.10)			
2.20 2.20	B6 PID	3.8ppm		8.285	2.40	MADE GROUND (Red brown clayey sandy gravel intermixed with sandy gravelly clay and low to medium cobble content. Gravel is fine to coarse angular to subrounded and includes brick, concrete, slag and clinker. Cobbles are angular and include brick and concrete).	
2.50 2.70	J7 ES8				(0.60)		
2.90 2.90	B9 PID	4.0ppm		7.685	3.00	MADE GROUND (Dark brown grey slightly clayey gravelly sand. Gravel is fine to coarse angular to subangular and includes brick and concrete).	
3.20 3.50	J10 ES11				(0.90)		
3.80 3.80	B12 PID	2.9ppm		6.785	3.90	MADE GROUND (Firm dark brown sandy gravelly clay. Gravel is fine to coarse angular to subrounded and includes brick, slag and concrete).	
Trial pit terminated at 3.90m BGL - excavator unable to progress.							



GROUNDWATER No groundwater inflow observed.
STABILITY Pit sides stable throughout excavation.
GENERAL REMARKS

ADDITIONAL INFORMATION			UNDERGROUND SERVICES				
Sketch Diagram:	No Sketch Taken		Depth	Orientation	Type	Diameter (mm)	Condition
Photographs:	Yes	See additional sheets.					

All dimensions in metres Scale 1:50	For explanation of symbols and abbreviations see Key Sheets	Checked by: <i>K.W.</i>	Logged by: S. Duncan	Contract No. 4155
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TRIAL PIT RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPA03	
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455043.146 N:521164.108		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 10.685	Start Date: 23/10/2017	Sheet: 2 of 4



Figure S3-TPA03.1
S3-TPA03 - Before investigation works



Figure S3-TPA03.2
S3-TPA03



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TRIAL PIT RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPA03	
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455043.146 N:521164.108		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 10.685	Start Date: 23/10/2017	Sheet: 3 of 4



Figure S3-TPA03.3
S3-TPA03



Figure S3-TPA03.4
S3-TPA03



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TRIAL PIT RECORD

Status:-

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Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPA03	
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455043.146 N:521164.108		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 10.685	Start Date: 23/10/2017	Sheet: 4 of 4

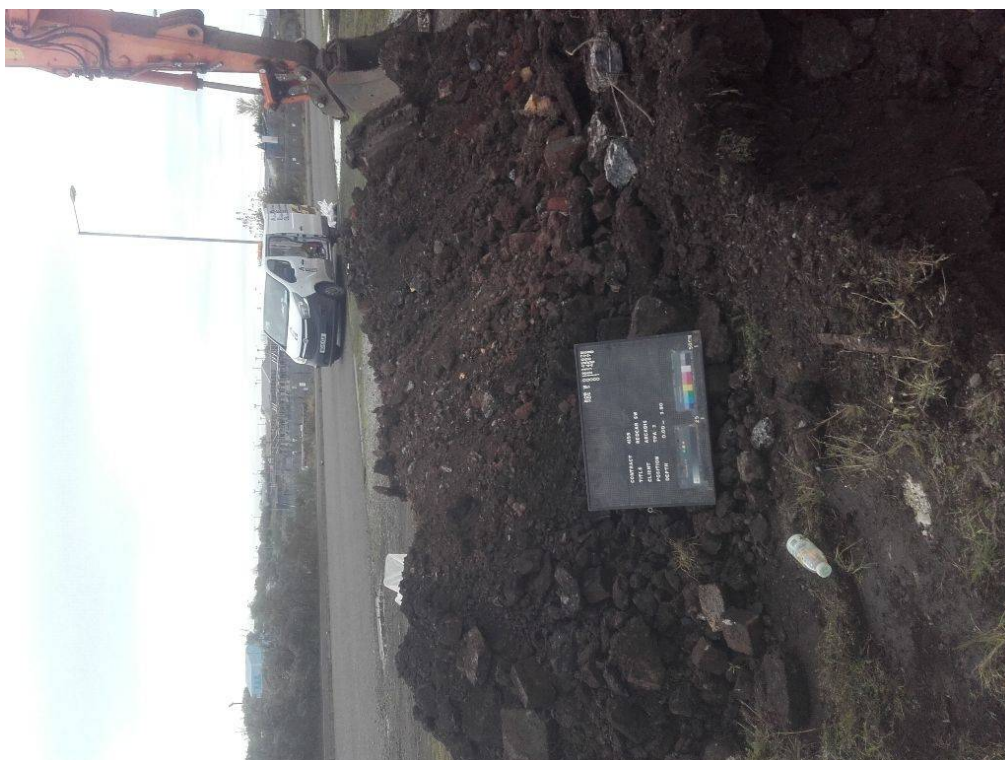


Figure S3-TPA03.5
S3-TPA03 - Spoil

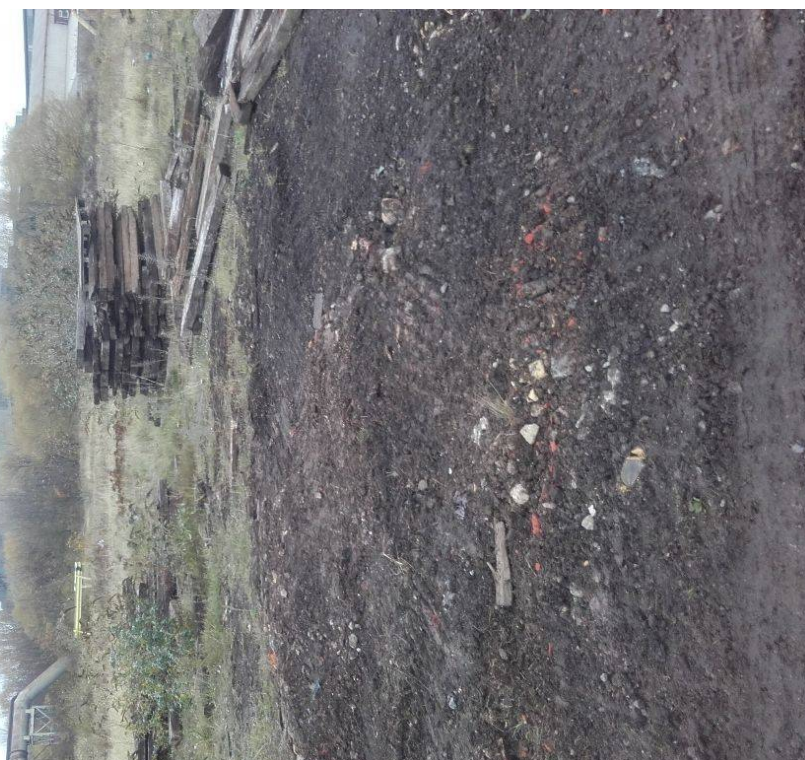


Figure S3-TPA03.6
S3-TPA03 - Reinstatement



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
Tel: 0191 387 4700 Fax: 0191 387 4710
Tel: 01772 735 300 Fax: 01772 735 999

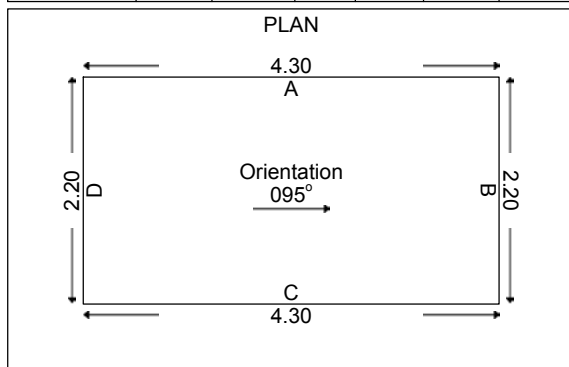
TRIAL PIT RECORD

Status:-

FINAL

Project:	The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3			Exploratory Hole No.
Client:	South Tees Site Company Ltd	Location:	Redcar Steel Works E:455010.092 N:521227.963	
Method (Equipment):	Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)):	9.928	Start Date: 24/10/2017
				Sheet: 1 of 4

SAMPLES & TESTS			Water	STRATA				
Depth	Type No	Test Result		Reduced Level	Legend	Depth (Thickness)	DESCRIPTION	
0.40 0.50 0.70 0.90 1.00 1.20	J1 ES2 B3 J4 ES5 B6			9.828		(0.10) 0.10	MADE GROUND (Brown clayey slightly gravelly sand. Gravel is fine to coarse angular to subangular and includes slag).	
				9.628		(0.20) 0.30		
							(0.50)	MADE GROUND (Grey sandy gravel. Gravel is fine subangular to rounded and includes slag).
				9.128			0.80	MADE GROUND (Brown grey clayey very sandy gravel with low cobble content. Gravel is fine to coarse angular to subangular and includes slag and burnt shale. Cobbles are angular and include slag).
							(0.50)	MADE GROUND (Black sandy gravel. Sand includes ash. Gravel is fine to coarse angular to subangular and includes clinker and slag).
				8.628			1.30	
							(0.90)	MADE GROUND (Yellow red gravelly cobbles. Gravel is fine to coarse angular and includes brick, clinker, concrete and slag. Cobbles are angular and include brick and clinker).
				7.728			2.20	MADE GROUND (Black sandy gravel with low cobble content. Sand includes ash and coal fines. Gravel is fine to coarse angular to subangular and includes slag and clinker. Cobbles are angular and includes slag).
				7.428			(0.30) 2.50	
							(0.70)	
2.20 2.30 2.40 2.70	J7 ES8 B9 J10			6.728		3.20	Trial pit complete at 3.20m BGL.	



GROUNDWATER
No groundwater inflow observed.

STABILITY
Pit sides moderately unstable throughout excavation.

GENERAL REMARKS

ADDITIONAL INFORMATION		
Sketch Diagram:	No Sketch Taken	
Photographs:	Yes	See additional sheets.

UNDERGROUND SERVICES				
Depth	Orientation	Type	Diameter (mm)	Condition

All dimensions in metres
Scale 1:50

For explanation of symbols and
abbreviations see Key Sheets

Checked by:
K.W.

Logged by:
S. Duncan

Contract No.
4155



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TRIAL PIT RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPA04
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455010.092 N:521227.963	
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 9.928	Start Date: 24/10/2017
		Sheet: 2 of 4



Figure S3-TPA04.1
S3-TPA04 - Before investigation work.



Figure S3-TPA04.2
S3-TPA04.



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TRIAL PIT RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPA04	
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455010.092 N:521227.963		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 9.928	Start Date: 24/10/2017	Sheet: 3 of 4



Figure S3-TPA04.3
S3-TPA04 (2).



Figure S3-TPA04.4
S3-TPA04 Spoil.



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TRIAL PIT RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3			Exploratory Hole No. S3-TPA04
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455010.092 N:521227.963		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 9.928	Start Date: 24/10/2017	Sheet: 4 of 4



Figure S3-TPA04.5
S3-TPA04 Reinstatement.



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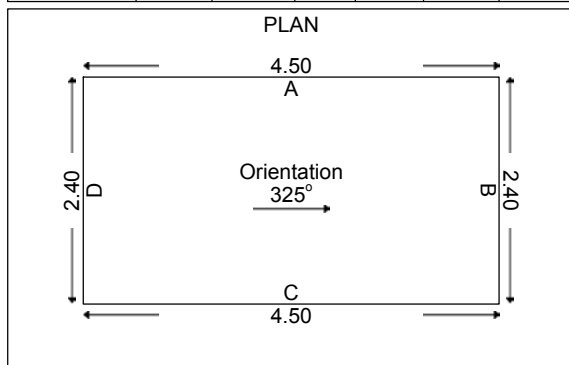
TRIAL PIT RECORD

Status:-

FINAL

Project:	The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3			Exploratory Hole No.
Client:	South Tees Site Company Ltd		Location:	Redcar Steel Works E:454995.508 N:521202.344
Method (Equipment):	Machine Excavated (JCB 360 Tracked Excavator)		Ground Level (m(AOD)):	10.062
			Start Date:	24/10/2017
			Sheet:	1 of 4

SAMPLES & TESTS			Water	STRATA			
Depth	Type No	Test Result		Reduced Level	Legend	Depth (Thickness)	DESCRIPTION
0.30 0.50 0.70	J1 ES2 B3			9.062		(1.00) 1.00	MADE GROUND (Brown clayey gravelly sand with medium cobble content and fragments of metal and wood. Gravel is fine to coarse angular to subangular and includes slag and brick. Cobbles are angular and include slag and brick). at c.0.70-1.30m BGL ... first strata boundary slopes from 0.70m in SE to 1.30m BGL in NW.
1.50 2.00 2.20	J4 ES5 B6			7.562		(1.50) 2.50	MADE GROUND (Light grey slightly sandy gravel with high cobble content and fragments of metal and iron. Sand includes ash. Gravel is fine to coarse angular to subangular and includes slag, clinker, brick and concrete. Cobbles are angular and include slag and brick).
2.60 2.70 2.80 3.00	J7 ES8 B9 J10			7.262		(0.30) 2.80	MADE GROUND (Dark grey clayey sand and gravel. Sand includes ash. Gravel is fine to coarse angular to subangular and includes slag).
				6.862		(0.40) 3.20	Firm brown with grey and orange mottling slightly sandy slightly gravelly CLAY. Gravel is fine and includes sandstone. Trial pit terminated at 3.20m BGL - due to groundwater ingress.



GROUNDWATER Water strike at 2.50m BGL - moderate inflow.
STABILITY Pit sides moderately unstable throughout excavation.
GENERAL REMARKS

ADDITIONAL INFORMATION			UNDERGROUND SERVICES				
Sketch Diagram:	No Sketch Taken		Depth	Orientation	Type	Diameter (mm)	Condition
Photographs:	Yes	See additional sheets.					

All dimensions in metres Scale 1:50	For explanation of symbols and abbreviations see Key Sheets	Checked by: K.W.	Logged by: S. Duncan	Contract No. 4155
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TRIAL PIT RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3			Exploratory Hole No. S3-TPA05
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:454995.508 N:521202.344		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 10.062	Start Date: 24/10/2017	Sheet: 2 of 4



Figure S3-TPA05.1
S3-TPA05 Before investigation work.



Figure S3-TPA05.2
S3-TPA05.



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TRIAL PIT RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No.	
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:454995.508 N:521202.344		S3-TPA05
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 10.062	Start Date: 24/10/2017	Sheet: 3 of 4



Figure S3-TPA05.3
S3-TPA05 (2).



Figure S3-TPA05.4
S3-TPA05 Spoil.



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TRIAL PIT RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3			Exploratory Hole No. S3-TPA05
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:454995.508 N:521202.344		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 10.062	Start Date: 24/10/2017	Sheet: 4 of 4



Figure S3-TPA05.5
S3-TPA05 Reinstatement.



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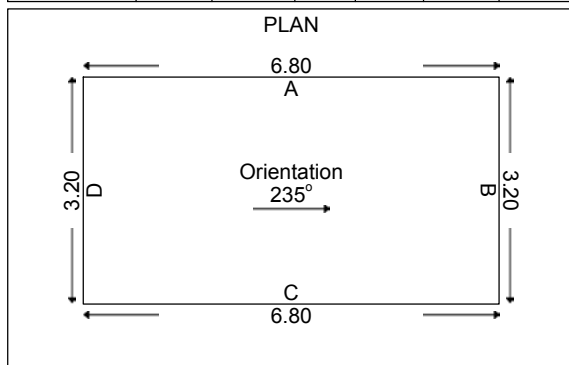
TRIAL PIT RECORD

Status:-

FINAL

Project:	The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3			Exploratory Hole No.
Client:	South Tees Site Company Ltd	Location:	Redcar Steel Works E:455023.459 N:521160.707	
Method (Equipment):	Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)):	10.506	Start Date: 23/10/2017
				Sheet: 1 of 4

SAMPLES & TESTS			Water	STRATA			
Depth	Type No	Test Result		Reduced Level	Legend	Depth (Thickness)	DESCRIPTION
0.30	J1	8.1ppm				(1.00)	MADE GROUND (Dark brown grey clayey very sandy gravel with medium cobble and boulder content and sulphurous odour noted. Sand includes ash. Gravel is fine to coarse angular to subangular and includes concrete, slag and clinker. Cobbles are angular and include concrete and slag).
0.50	ES2						
0.70	B3						
0.70	PID			9.506		1.00	
				9.206		(0.30) 1.30	MADE GROUND (Concrete with rebar).
1.50	J4					(1.40)	MADE GROUND (Dark brown slightly clayey gravelly sand with medium cobble content. Gravel is fine to coarse angular to subangular and includes slag and concrete. Cobbles are angular and include concrete).
2.00	ES5						
2.50	B6	3.5ppm		7.806		2.70	MADE GROUND (Black gravelly sand with low cobble content. Sand includes ash. Gravel is fine to coarse angular to subrounded and includes concrete and brick. Cobbles are angular and include brick). at c.2.80m BGL ... flat surface at base with apparent brick and concrete. Trial pit terminated at 2.80m BGL - unable to progress.
2.50	PID			7.706		(0.10) 2.80	
2.75	J7	2.7ppm					
2.75	B9						
2.75	PID						
2.75	ES8						



GROUNDWATER
No groundwater inflow observed.

STABILITY
Pit sides stable throughout excavation.

GENERAL REMARKS

ADDITIONAL INFORMATION		
Sketch Diagram:	No Sketch Taken	
Photographs:	Yes	See additional sheets.

UNDERGROUND SERVICES				
Depth	Orientation	Type	Diameter (mm)	Condition

All dimensions in metres
Scale 1:50

For explanation of symbols and
abbreviations see Key Sheets

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S. Duncan

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 Tel: 01772 735 300 Fax: 01772 735 999

TRIAL PIT RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPA06	
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455023.459 N:521160.707		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 10.506	Start Date: 23/10/2017	Sheet: 2 of 4



Figure S3-TPA06.1
S3-TPA06 Before investigation work.



Figure S3-TPA06.2
S3-TPA06.



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TRIAL PIT RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPA06
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455023.459 N:521160.707	
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 10.506	Start Date: 23/10/2017
		Sheet: 3 of 4



Figure S3-TPA06.3
S3-TPA06 (2).



Figure S3-TPA06.4
S3-TPA06 Spoil.



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Tel: 01772 735 300 Fax: 01772 735 999

TRIAL PIT RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3			Exploratory Hole No. S3-TPA06
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455023.459 N:521160.707		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 10.506	Start Date: 23/10/2017	Sheet: 4 of 4



Figure S3-TPA06.5
S3-TPA06 Reinstatement.



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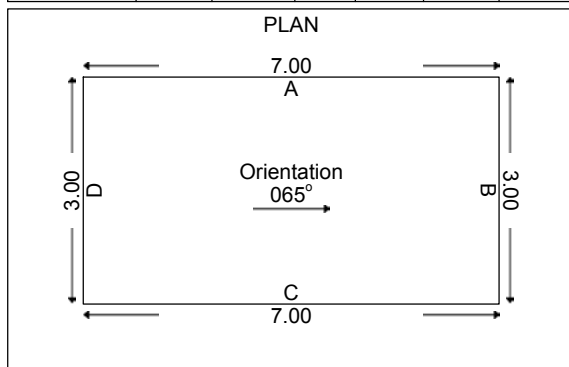
TRIAL PIT RECORD

Status:-

FINAL

Project:	The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3			Exploratory Hole No.
Client:	South Tees Site Company Ltd	Location:	Redcar Steel Works E:454974.848 N:521190.649	
Method (Equipment):	Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)):	9.975	Start Date: 01/11/2017
			Sheet:	1 of 4

SAMPLES & TESTS			Water	STRATA			
Depth	Type No	Test Result		Reduced Level	Legend	Depth (Thickness)	DESCRIPTION
0.20	J1					(0.70)	MADE GROUND (Grass over dark grey brown clayey gravelly sand. Sand includes ash. Gravel is fine to coarse angular to subangular and includes slag).
0.40	ES2					0.70	
0.60	B3			9.275		0.70	
0.80	LB4			8.975		1.00	MADE GROUND (Dark grey sandy gravel with medium cobble content. Sand includes ash. Gravel is fine to coarse angular to subangular and includes slag).
1.20	J5						MADE GROUND (Dark grey and brown slightly clayey very sandy gravel with medium cobble and boulder content and fragments of metal and wood. Gravel is fine to coarse angular to subangular and includes slag. Cobbles and boulders are angular and include slag). at c.1.40m BGL ... foundations located.
1.50	ES6						
1.70	B7						
2.20	J8					(2.20)	
2.50	ES9						
2.70	B10			6.775		3.20	Trial pit terminated at 3.20m BGL - due to encountering water.



GROUNDWATER
Water strike at 3.00m BGL - moderate inflow.

STABILITY
Pit sides stable throughout excavation.

GENERAL REMARKS
(1) Foundations located - refer to following sketch for further information.

ADDITIONAL INFORMATION		
Sketch Diagram:	Sketch Taken	
Photographs:	Yes	See additional sheets.

UNDERGROUND SERVICES				
Depth	Orientation	Type	Diameter (mm)	Condition

All dimensions in metres
Scale 1:50

For explanation of symbols and
abbreviations see Key Sheets

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TRIAL PIT RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPA07	
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:454974.848 N:521190.649		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 9.975	Start Date: 01/11/2017	Sheet: 2 of 4

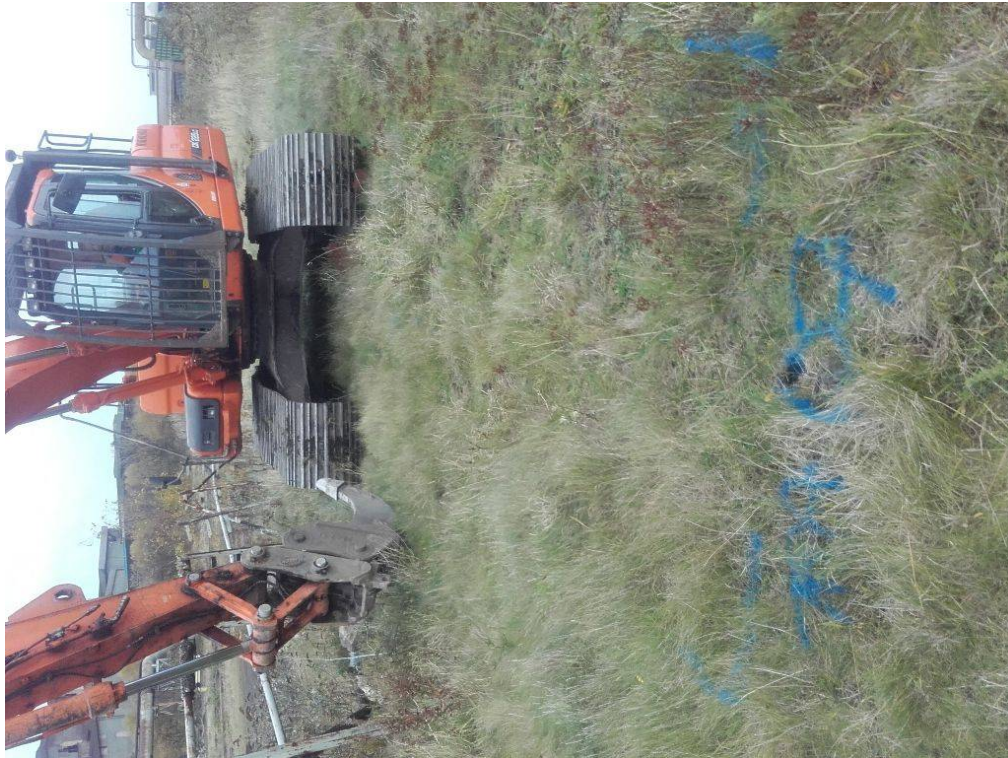


Figure S3-TPA07.1
S3-TPA07 Before investigation work.

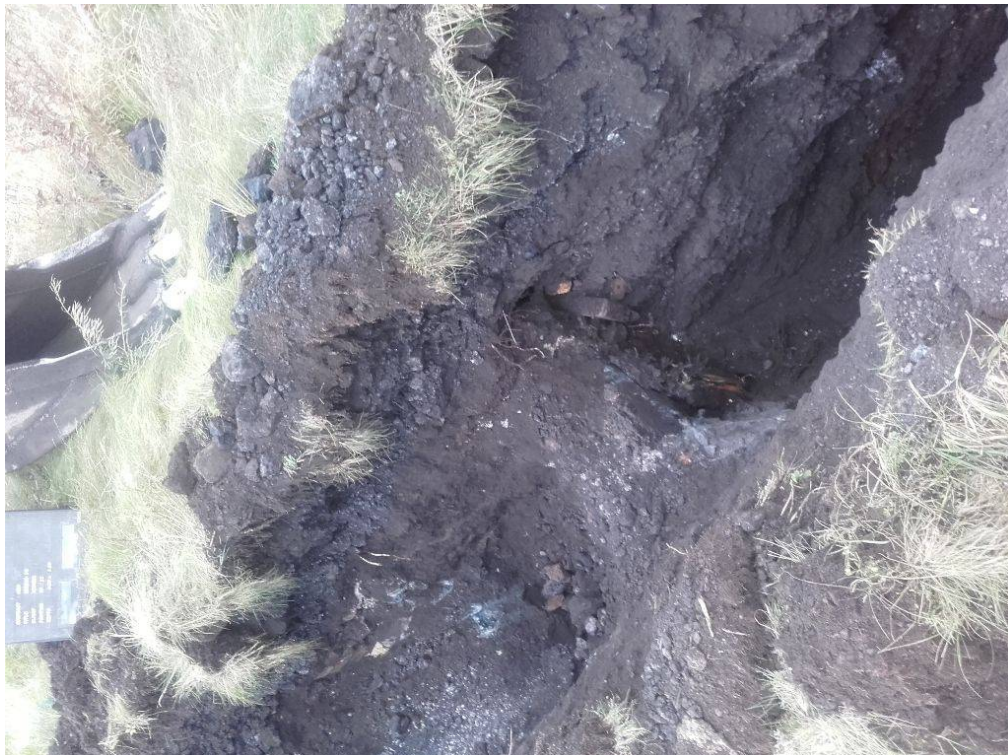


Figure S3-TPA07.2
S3-TPA07.



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TRIAL PIT RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPA07	
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:454974.848 N:521190.649		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 9.975	Start Date: 01/11/2017	Sheet: 3 of 4



Figure S3-TPA07.3
S3-TPA07 (2).



Figure S3-TPA07.4
S3-TPA07 (3).



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TRIAL PIT RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3			Exploratory Hole No. S3-TPA07
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:454974.848 N:521190.649		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 9.975	Start Date: 01/11/2017	Sheet: 4 of 4



Figure S3-TPA07.5
S3-TPA07 Spoil.

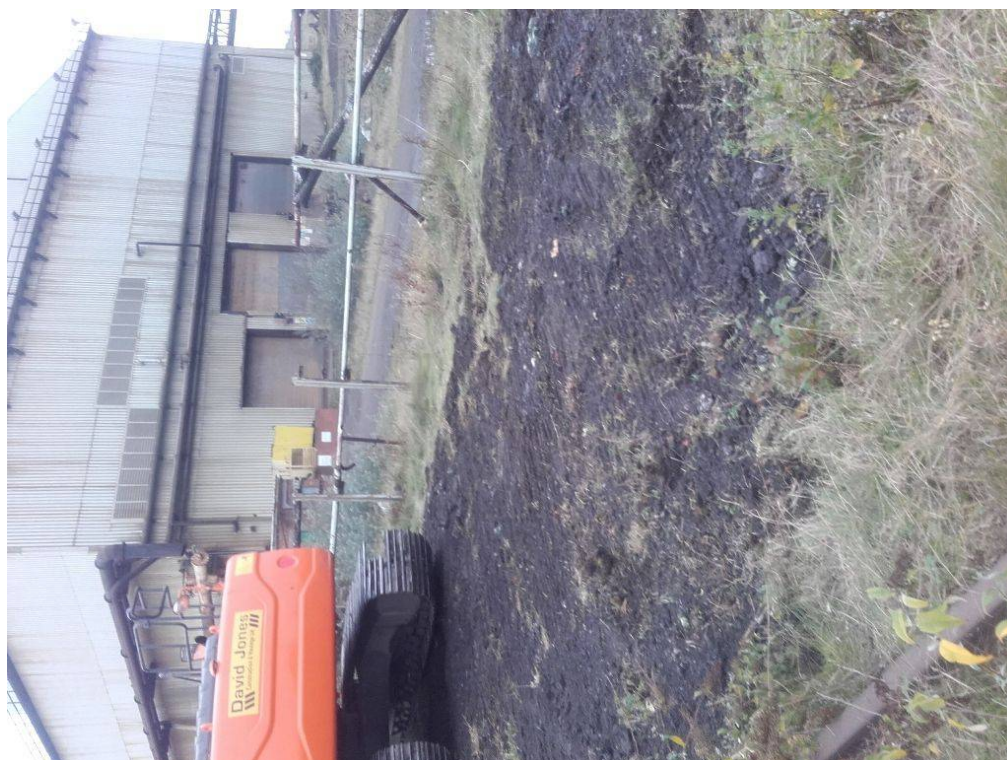


Figure S3-TPA07.6
S3-TPA07 Reinstatement.



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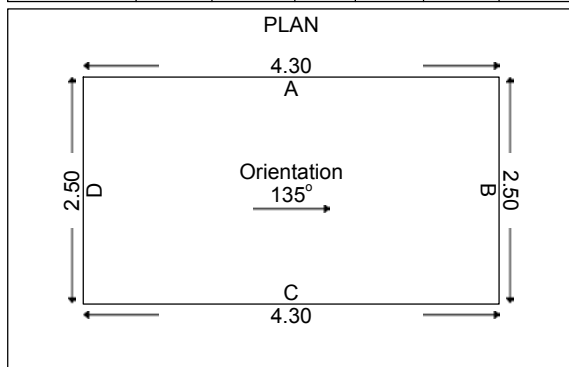
TRIAL PIT RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3			Exploratory Hole No. S3-TPA08
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455025.804 N:521159.441		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)		Ground Level (m(AOD)): 10.531	Start Date: 20/10/2017
			Sheet: 1 of 4

SAMPLES & TESTS			Water	STRATA			
Depth	Type No	Test Result		Reduced Level	Legend	Depth (Thick-ness)	DESCRIPTION
0.40 0.60 0.90 1.00 1.10 1.10 1.30	J1 ES2	4.6ppm		10.381		(0.15) 0.15	MADE GROUND (Brown clayey gravelly sand. Gravel is fine to coarse angular to subangular and includes slag).
				(0.65)		MADE GROUND (Black sandy gravel with medium to high cobble content with fragments of iron. Sand includes ash. Gravel is fine to coarse angular to subangular and includes slag).	
	9.731			0.80		MADE GROUND (Brown gravelly sand. Gravel is fine to coarse angular to subangular and includes slag).	
				(0.40) 1.20		MADE GROUND (Brown gravelly sand. Gravel is fine to coarse angular to subangular and includes slag).	
	9.331			1.20		MADE GROUND (Red brown sandy gravelly clay intermixed with clayey sandy gravel with medium cobble content. Gravel is fine to coarse angular to subangular and includes brick, concrete, slag and clinker).	
	(0.30) 1.50	MADE GROUND (Red brown sandy gravelly clay intermixed with clayey sandy gravel with medium cobble content. Gravel is fine to coarse angular to subangular and includes brick, concrete, slag and clinker).					
9.031	1.50	MADE GROUND (Red brown sandy gravelly clay intermixed with clayey sandy gravel with medium cobble content. Gravel is fine to coarse angular to subangular and includes brick, concrete, slag and clinker).					
	(0.40) 1.90	MADE GROUND (Black sandy gravel. Sand includes ash. Gravel is fine to coarse angular to subangular and includes clinker and slag).					
8.631	1.90	MADE GROUND (Black sandy gravel. Sand includes ash. Gravel is fine to coarse angular to subangular and includes clinker and slag).					
	(0.40) 2.30	MADE GROUND (Brown sandy gravelly clay intermixed with clayey gravelly sand with low cobble content. Gravel is fine to coarse angular to subangular and includes slag. Cobbles are angular and include slag).					
8.231	2.30	MADE GROUND (Brown sandy gravelly clay intermixed with clayey gravelly sand with low cobble content. Gravel is fine to coarse angular to subangular and includes slag. Cobbles are angular and include slag).					
	(0.50) 2.80	MADE GROUND (Black sandy gravel. Sand includes ash. Gravel is fine to coarse angular to subangular and includes clinker and slag).					
7.731	2.80	MADE GROUND (Black sandy gravel. Sand includes ash. Gravel is fine to coarse angular to subangular and includes clinker and slag).					
	(0.40) 3.20	Firm brown slightly sandy slightly gravelly CLAY. Gravel is fine to coarse subrounded to rounded and includes sandstone.					
7.331	3.20	Firm brown slightly sandy slightly gravelly CLAY. Gravel is fine to coarse subrounded to rounded and includes sandstone.					
						Trial pit complete at 3.20m BGL.	



GROUNDWATER
No groundwater inflow observed.

STABILITY
Pit sides stable throughout excavation.

GENERAL REMARKS

ADDITIONAL INFORMATION		
Sketch Diagram:	No Sketch Taken	
Photographs:	Yes	See additional sheets.

UNDERGROUND SERVICES				
Depth	Orientation	Type	Diameter (mm)	Condition

All dimensions in metres
Scale 1:50

For explanation of symbols and
abbreviations see Key Sheets

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Contract No.
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Tel: 0191 387 4700 Fax: 0191 387 4710
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TRIAL PIT RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPA08	
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455025.804 N:521159.441		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 10.531	Start Date: 20/10/2017	Sheet: 2 of 4



Figure S3-TPA08.1
S3-TPA08 Before investigation work.



Figure S3-TPA08.2
S3-TPA08.



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TRIAL PIT RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPA08
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455025.804 N:521159.441	
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 10.531	Start Date: 20/10/2017
		Sheet: 3 of 4



Figure S3-TPA08.3
S3-TPA08 (2).



Figure S3-TPA08.4
S3-TPA08 (3).



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TRIAL PIT RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3			Exploratory Hole No. S3-TPA08
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455025.804 N:521159.441		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 10.531	Start Date: 20/10/2017	Sheet: 4 of 4



Figure S3-TPA08.5
S3-TPA08 Spoil.

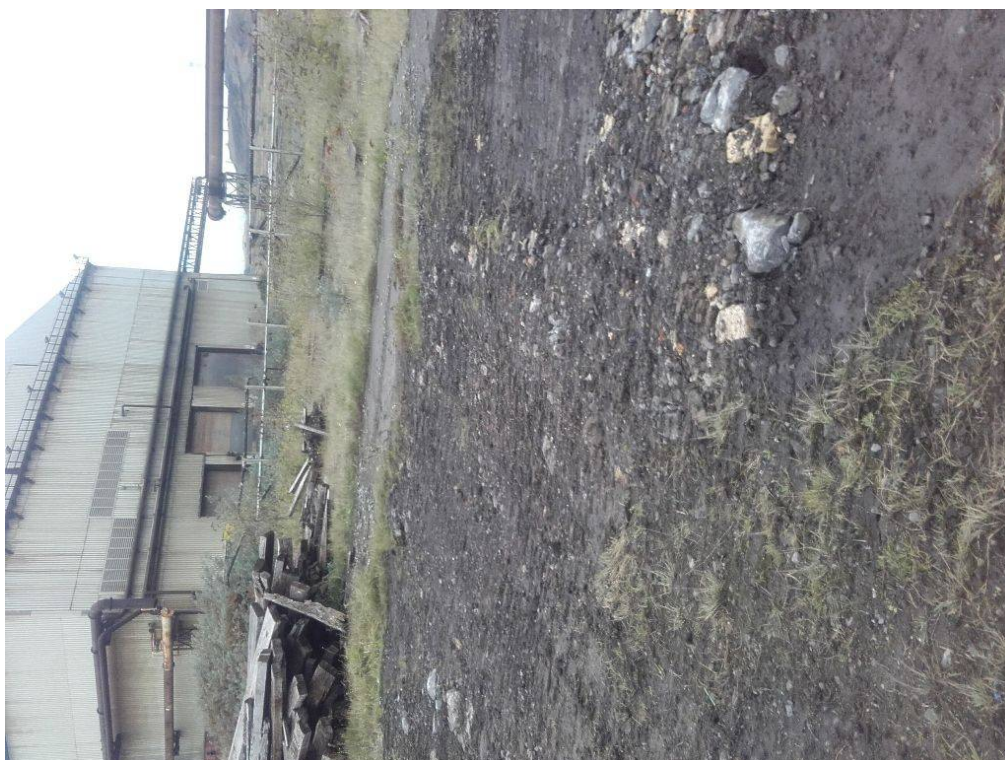


Figure S3-TPA08.6
S3-TPA08 Reinstatement.



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




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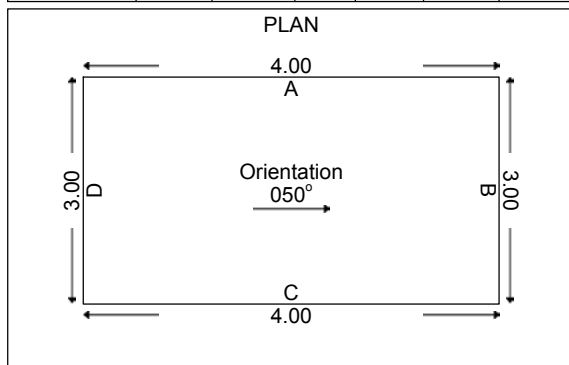
TRIAL PIT RECORD

Status:-

FINAL

Project:	The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3			Exploratory Hole No.
Client:	South Tees Site Company Ltd	Location:	Redcar Steel Works E:454961.808 N:521237.485	
Method (Equipment):	Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)):	9.381	Start Date: 13/10/2017
				Sheet: 1 of 4

SAMPLES & TESTS			Water	STRATA			
Depth	Type No	Test Result		Reduced Level	Legend	Depth (Thickness)	DESCRIPTION
0.10 0.20	J1 ES2	1.2ppm		9.081		(0.30) 0.30	MADE GROUND (Dark brown and grey slightly clayey sand and gravel with fragments of iron. Sand includes ash. Gravel is fine to coarse angular to subangular and includes slag).
				8.781		(0.30) 0.60	MADE GROUND (Light grey gravel. Gravel is fine to coarse subangular to subrounded and includes slag and roadstone).
0.70 0.80	J3 ES4			8.381		(0.40) 1.00	at c.0.30-0.60m BGL ... concrete on north face.
0.90 0.90	B5 PID			8.081		(0.30) 1.30	MADE GROUND (Dark grey sand and gravel with low cobble content and fragments of iron. Sand includes ash. Gravel is fine to coarse angular to subangular and includes slag and clinker. Cobbles are angular and include slag).
1.00 1.20 1.40	J6 ES7 J8					(0.90)	MADE GROUND (Black sand and gravel. Sand includes ash. Gravel is fine to coarse angular to subangular and includes clinker and slag).
1.70	ES9	1.5ppm					MADE GROUND (Dark grey sand and gravel with low cobble content. Sand includes ash. Gravel is fine to coarse angular to subangular and includes slag and clinker. Cobbles are angular and include slag).
2.00 2.00	B10 PID			7.181		2.20	from c.1.80-2.20m BGL ... engineer notes pockets of brown clay, becoming more frequent with depth.
2.50	J11						Firm brown with grey and orange mottling slightly sandy to sandy slightly gravelly CLAY. Gravel is fine to coarse subrounded to rounded and includes sandstone and mudstone.
3.00	ES12	1.3ppm				(2.00)	at c.2.50m BGL ... clay is of high plasticity.
3.50 3.50	B13 PID						
			5.181		4.20	Trial pit complete at 4.20m BGL.	



GROUNDWATER
Seepage at 2.00m BGL - slight inflow.

STABILITY
Pit sides stable throughout excavation.

GENERAL REMARKS

ADDITIONAL INFORMATION

Sketch Diagram:	No Sketch Taken	
Photographs:	Yes	See additional sheets.

UNDERGROUND SERVICES

Depth	Orientation	Type	Diameter (mm)	Condition

All dimensions in metres
Scale 1:50

For explanation of symbols and
abbreviations see Key Sheets

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S. Duncan

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TRIAL PIT RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPA09
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:454961.808 N:521237.485	
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 9.381	Start Date: 13/10/2017
		Sheet: 2 of 4



Figure S3-TPA09.1
S3-TPA09 Before investigation works.



Figure S3-TPA09.2
S3-TPA09.



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TRIAL PIT RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPA09
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:454961.808 N:521237.485	
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 9.381	Start Date: 13/10/2017
		Sheet: 3 of 4



Figure S3-TPA09.3
S3-TPA09 (2).



Figure S3-TPA09.4
S3-TPA09 Spoil.



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TRIAL PIT RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3			Exploratory Hole No. S3-TPA09
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:454961.808 N:521237.485		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 9.381	Start Date: 13/10/2017	Sheet: 4 of 4



Figure S3-TPA09.5
S3-TPA09 Reinstatement.



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
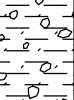
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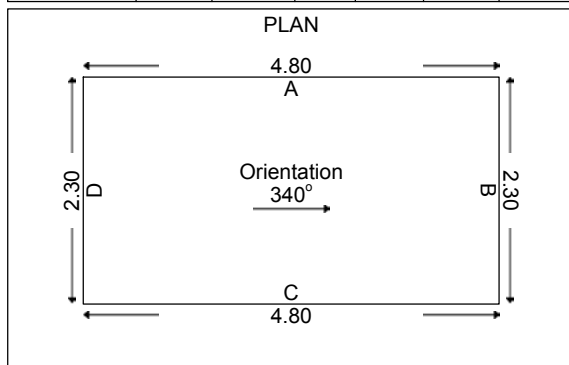
TRIAL PIT RECORD

Status:-

FINAL

Project:	The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3			Exploratory Hole No.
Client:	South Tees Site Company Ltd	Location:	Redcar Steel Works E:454965.893 N:521209.988	
Method (Equipment):	Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)):	12.518	Start Date: 13/10/2017
				Sheet: 1 of 4

SAMPLES & TESTS			Water	STRATA					
Depth	Type No	Test Result		Reduced Level	Legend	Depth (Thickness)	DESCRIPTION		
0.20	J1	3.2ppm		11.718		(0.80)	MADE GROUND (Dark brown and grey slightly clayey sand and gravel with fragments of iron. Sand includes ash. Gravel is fine to coarse angular to subangular and includes slag).		
0.50	ES2					0.80			
0.80	J3			10.818		(0.90)	MADE GROUND (Dark grey and black sand and gravel with low cobble content and fragments of metal and iron. Sand includes ash and coal. Gravel is fine to coarse angular to subangular and includes slag. Cobbles are angular and include slag).		
1.00	ES4					1.70			
1.20	B5					10.218			(0.60)
1.20	PID								
1.40	J6								
1.50	ES7								
1.60	B8	10.218			(0.60)	MADE GROUND (Black gravelly sand with fragments of iron. Sand includes ash and coal. Gravel is fine to coarse angular to subangular and includes slag).			
1.60	PID								
1.90	J9								
2.10	ES10								
2.50	J11	2.3ppm			(1.30)	Soft to firm light brown slightly sandy to sandy slightly gravelly CLAY. Gravel is fine to coarse subrounded to rounded and includes sandstone and mudstone. at c.2.50m BGL ... clay is of high plasticity.			
3.00	ES12								
3.50	B13								
3.50	PID								
			8.918					3.60	Trial pit complete at 3.60m BGL.



GROUNDWATER Seepage at 2.00m BGL - slight inflow.
STABILITY Pit sides stable throughout excavation.
GENERAL REMARKS

ADDITIONAL INFORMATION			UNDERGROUND SERVICES				
Sketch Diagram:	No Sketch Taken		Depth	Orientation	Type	Diameter (mm)	Condition
Photographs:	Yes	See additional sheets.					

All dimensions in metres Scale 1:50	For explanation of symbols and abbreviations see Key Sheets	Checked by: <i>K.W.</i>	Logged by: S. Duncan	Contract No. 4155
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TRIAL PIT RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPA10	
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:454965.893 N:521209.988		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 12.518	Start Date: 13/10/2017	Sheet: 2 of 4



Figure S3-TPA10.1
S3-TPA10.



Figure S3-TPA10.2
S3-TPA10 (2).



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TRIAL PIT RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPA10
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:454965.893 N:521209.988	
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 12.518	Start Date: 13/10/2017
		Sheet: 3 of 4



Figure S3-TPA10.3
S3-TPA10 (3).



Figure S3-TPA10.4
S3-TPA10 Spoil.



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TRIAL PIT RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3			Exploratory Hole No. S3-TPA10
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:454965.893 N:521209.988		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 12.518	Start Date: 13/10/2017	Sheet: 4 of 4



Figure S3-TPA10.5
S3-TPA10 Reinstatement.



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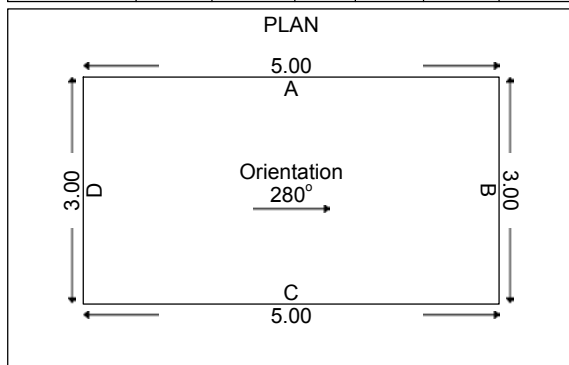
TRIAL PIT RECORD

Status:-

FINAL

Project:	The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3			Exploratory Hole No.
Client:	South Tees Site Company Ltd	Location:	Redcar Steel Works E:454974.584 N:521184.600	
Method (Equipment):	Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)):	9.390	Start Date: 20/10/2017
				Sheet: 1 of 4

SAMPLES & TESTS			Water	STRATA			
Depth	Type No	Test Result		Reduced Level	Legend	Depth (Thickness)	DESCRIPTION
0.50	J1			9.240		(0.15) 0.15	MADE GROUND (Brown slightly clayey sandy gravel. Gravel is fine to coarse subangular to rounded and includes slag).
						(0.65)	MADE GROUND (Light grey sandy gravel with medium cobble content and fragments of iron. Sand includes ash. Gravel is fine to coarse angular to subangular and includes slag. Cobbles are angular and include slag).
0.90	J2			8.590		0.80	
1.00	ES3					(0.50)	MADE GROUND (Dark brown clayey very sandy gravel with fragments of iron. Sand includes ash. Gravel is fine to coarse angular to subangular and includes slag and brick).
1.20	B4	1.7ppm		8.090		1.30	
1.20	PID					(0.30)	MADE GROUND (Dark grey sandy gravel with low cobble content and fragments of iron. Sand includes ash. Gravel is fine to coarse angular to subangular and includes slag).
1.50	LB5	3.2ppm		7.790		1.60	
1.50	PID					(0.90)	MADE GROUND (Dark grey gravelly sand and sandy gravel. Sand includes ash and coal fines. Gravel is fine to coarse angular to subangular and includes slag, clinker and brick).
1.70	J6					2.50	at c.1.60-2.00m BGL ... interbed of predominantly coarse angular gravel.
2.00	ES7			6.890			
2.30	B8	0.5ppm				(0.50)	Firm brown with some grey mottling slightly sandy to sandy slightly gravelly CLAY and pockets of light brown sand. Gravel is fine to coarse subrounded to rounded and includes sandstone.
2.30	PID					3.00	at c.2.90m BGL ... clay is of intermediate plasticity.
2.70	J9			6.390			
2.90	B10	<0.1ppm					Trial pit complete at 3.00m BGL.
2.90	PID						



GROUNDWATER
No groundwater inflow observed.

STABILITY
Pit sides unstable throughout excavation.

GENERAL REMARKS

ADDITIONAL INFORMATION		
Sketch Diagram:	No Sketch Taken	
Photographs:	Yes	See additional sheets.

UNDERGROUND SERVICES				
Depth	Orientation	Type	Diameter (mm)	Condition

All dimensions in metres Scale 1:50	For explanation of symbols and abbreviations see Key Sheets	Checked by: K.W.	Logged by: S. Duncan	Contract No. 4155
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TRIAL PIT RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPA11	
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:454974.584 N:521184.600		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 9.390	Start Date: 20/10/2017	Sheet: 2 of 4



Figure S3-TPA11.1
S3-TPA11 Before investigation work.



Figure S3-TPA11.2
S3-TPA11.



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TRIAL PIT RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPA11
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:454974.584 N:521184.600	
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 9.390	Start Date: 20/10/2017
		Sheet: 3 of 4



Figure S3-TPA11.3
S3-TPA11 (2).



Figure S3-TPA11.4
S3-TPA11 (3).



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TRIAL PIT RECORD

Status:-

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Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPA11
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:454974.584 N:521184.600	
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 9.390	Start Date: 20/10/2017
		Sheet: 4 of 4



Figure S3-TPA11.5
S3-TPA11 Spoil.



Figure S3-TPA11.6
S3-TPA11 Reinstatement.



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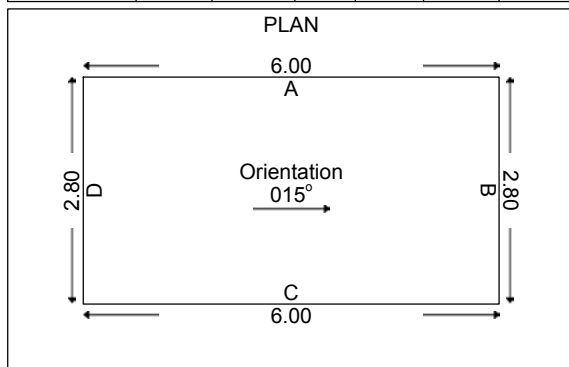
TRIAL PIT RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3			Exploratory Hole No. S3-TPA12	
Client: South Tees Site Company Ltd		Location: Redcar Steel Works E:455000.373 N:521139.701		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)		Ground Level (m(AOD)): 10.578	Start Date: 20/10/2017	Sheet: 1 of 4

SAMPLES & TESTS			Water	STRATA			
Depth	Type No	Test Result		Reduced Level	Legend	Depth (Thickness)	DESCRIPTION
0.20	J1	5.4ppm		10.478		(0.10) 0.10	MADE GROUND (Grass over brown clayey gravelly sand).
0.40	ES2					(0.50)	MADE GROUND (Purple brown clayey gravelly sand. Gravel is fine to coarse angular to subrounded and includes slag, clinker and concrete).
0.80	J3			9.978		0.60	
						(0.40)	MADE GROUND (Light grey sandy gravel with low cobble content. Sand includes ash. Gravel is fine to coarse angular to subangular and includes slag).
1.20	J4			9.578		1.00	
1.50	ES5					(1.50)	MADE GROUND (Brown clayey very sandy gravel intermixed with soft sandy gravelly clay with low cobble content and fragments of metal, wood and iron. Sand includes ash. Gravel is fine to coarse angular to subangular and includes slag, clinker and concrete).
1.70	B6						at c.1.60-2.50m BGL ... trial pit bounded on northwest and south east by concrete foundations.
1.70	PID						
2.20	J7						
2.50	ES8			8.078		2.50	Trial pit terminated at 2.50m BGL - due to obstruction.



GROUNDWATER No groundwater inflow observed.
--

STABILITY Pit sides slightly unstable throughout excavation.

GENERAL REMARKS

ADDITIONAL INFORMATION		
Sketch Diagram:	No Sketch Taken	
Photographs:	Yes	See additional sheets.

UNDERGROUND SERVICES				
Depth	Orientation	Type	Diameter (mm)	Condition

All dimensions in metres Scale 1:50	For explanation of symbols and abbreviations see Key Sheets	Checked by: <i>K.W.</i>	Logged by: S. Duncan	Contract No. 4155
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TRIAL PIT RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPA12	
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455000.373 N:521139.701		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 10.578	Start Date: 20/10/2017	Sheet: 2 of 4

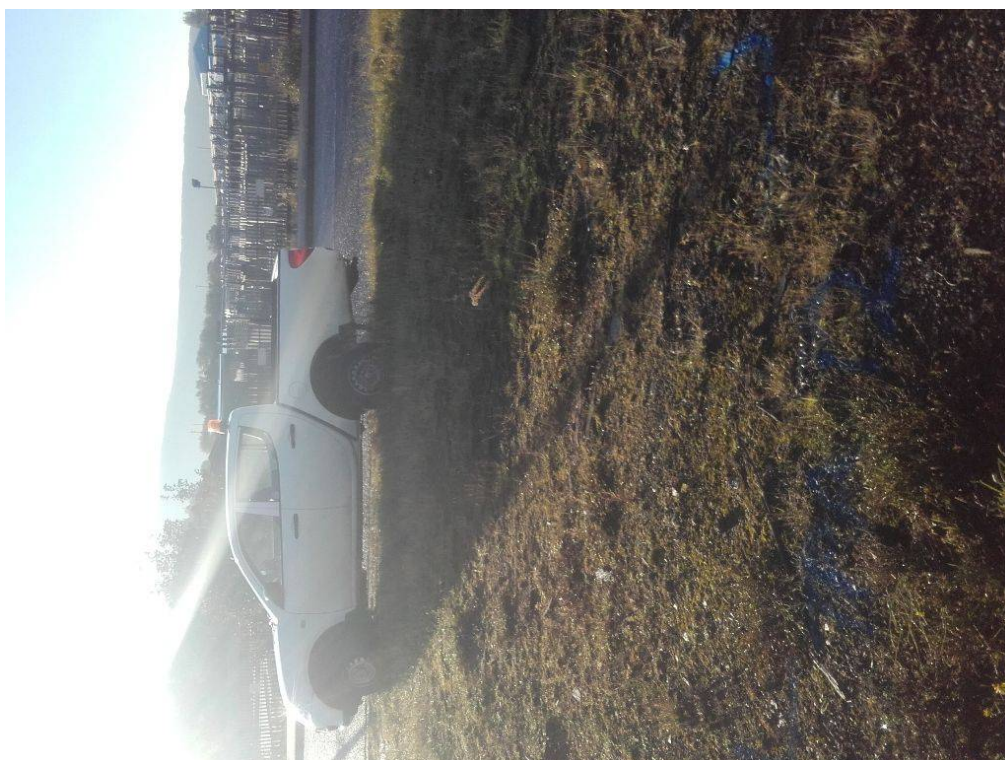


Figure S3-TPA12.1
S3-TPA12 Before investigation work.



Figure S3-TPA12.2
S3-TPA12.



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TRIAL PIT RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPA12	
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455000.373 N:521139.701		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 10.578	Start Date: 20/10/2017	Sheet: 3 of 4



Figure S3-TPA12.3
S3-TPA12 (2).



Figure S3-TPA12.4
S3-TPA12 (3).



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TRIAL PIT RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPA12	
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455000.373 N:521139.701		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 10.578	Start Date: 20/10/2017	Sheet: 4 of 4



Figure S3-TPA12.5
S3-TPA12 Spoil.

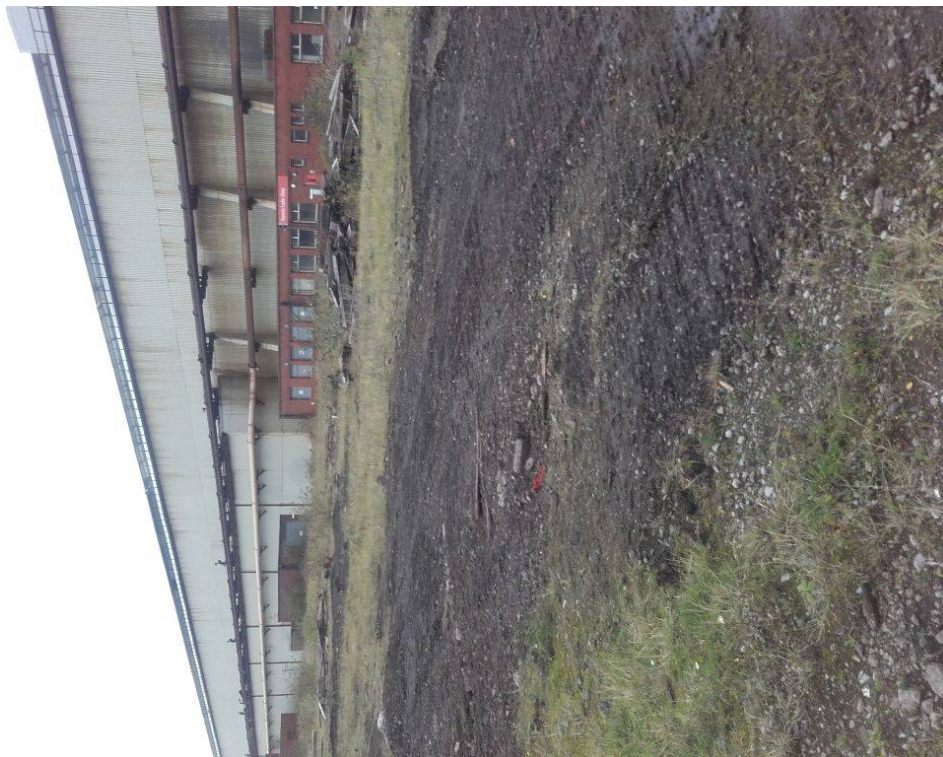


Figure S3-TPA12.6
S3-TPA12 Reinstatement.



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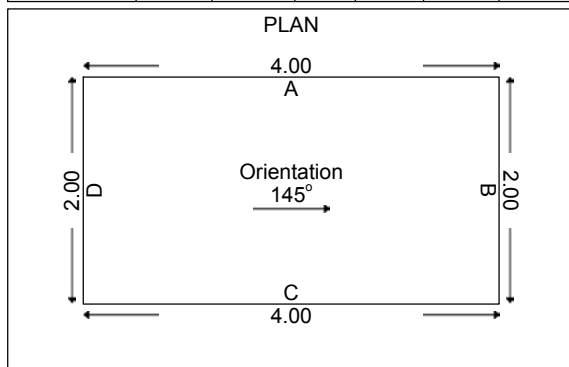
TRIAL PIT RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3			Exploratory Hole No. S3-TPA13
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:454975.471 N:521134.382		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)		Ground Level (m(AOD)): 10.493	Start Date: 20/10/2017
			Sheet: 1 of 4

SAMPLES & TESTS			Water	STRATA			
Depth	Type No	Test Result		Reduced Level	Legend	Depth (Thickness)	DESCRIPTION
0.50 0.50	LB1 PID	3.0ppm		10.293		(0.20) 0.20	MADE GROUND (Brown slightly clayey sandy gravel. Gravel is fine to coarse subangular to subrounded and includes slag).
						(0.80)	MADE GROUND (Light grey sandy gravel with medium cobble content and fragments of iron. Sand includes ash. Gravel is fine to coarse angular to subangular and includes slag. Cobbles are angular and include slag).
1.10 1.20	J2 ES3			9.493		1.00	
1.50 1.50 1.70	B4 PID J5	3.5ppm		8.893		1.60	MADE GROUND (Dark brown clayey gravelly sand with fragments of iron. Sand includes ash. Gravel is fine to coarse angular to subangular and includes slag and brick).
2.00	ES6					(0.90)	MADE GROUND (Dark grey clayey sandy gravel. Sand includes ash and coal fines. Gravel is fine to coarse angular to subangular and includes slag, clinker and brick).
2.30 2.30	B7 PID	0.8ppm		7.993		2.50	
2.70	J8					(1.00)	Firm brown with some grey mottling slightly sandy slightly gravelly CLAY with pockets of light brown sand. Gravel is fine to coarse subrounded to rounded and includes sandstone.
3.00 3.20 3.20	ES9 B10 PID	0.4ppm		6.993		3.50	at c.3.20m BGL ... clay is of intermediate plasticity.
				Trial pit complete at 3.50m BGL.			



GROUNDWATER
No groundwater inflow observed.

STABILITY
Pit sides stable throughout excavation.

GENERAL REMARKS

ADDITIONAL INFORMATION		
Sketch Diagram:	No Sketch Taken	
Photographs:	Yes	See additional sheets.

UNDERGROUND SERVICES				
Depth	Orientation	Type	Diameter (mm)	Condition

All dimensions in metres Scale 1:50	For explanation of symbols and abbreviations see Key Sheets	Checked by: K.W.	Logged by: S. Duncan	Contract No. 4155
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TRIAL PIT RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPA13	
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:454975.471 N:521134.382		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 10.493	Start Date: 20/10/2017	Sheet: 2 of 4



Figure S3-TPA13.1
S3-TPA13.



Figure S3-TPA13.2
S3-TPA13 (2).



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TRIAL PIT RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPA13	
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:454975.471 N:521134.382		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 10.493	Start Date: 20/10/2017	Sheet: 3 of 4



Figure S3-TPA13.3
S3-TPA13 (3).



Figure S3-TPA13.4
S3-TPA13 Spoil.



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TRIAL PIT RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPA13	
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:454975.471 N:521134.382		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 10.493	Start Date: 20/10/2017	Sheet: 4 of 4



Figure S3-TPA13.5
S3-TPA13 Reinstatement.

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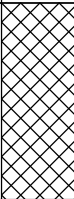
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Tel: 01772 735 300 Fax: 01772 735 999

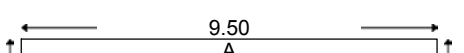
TRIAL PIT RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3			Exploratory Hole No. S3-TPA14
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:454904.334 N:521203.162		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 9.437	Start Date: 12/10/2017	Sheet: 1 of 5

SAMPLES & TESTS			Water	STRATA			
Depth	Type No	Test Result		Reduced Level	Legend	Depth (Thickness)	DESCRIPTION
0.50 0.50 0.50 0.50 1.00 1.00	PID J1 B3 ES2 J4 ES5	5.3ppm		8.137		(1.30) 1.30	MADE GROUND (Black and dark grey clayey very sandy gravel with low cobble and boulder content and fragments of metal and wood. Sand includes ash. Gravel is fine to coarse angular to subangular and includes slag. Cobbles and boulders are angular and include slag). at c.0.00-0.30m BGL ... occasionally very clayey.
							Trial pit complete at 1.30m BGL.

<p>PLAN</p> 	<p>GROUNDWATER</p> <p>No groundwater inflow observed.</p>
	<p>STABILITY</p> <p>Pit sides moderately stable throughout excavation.</p>
	<p>GENERAL REMARKS</p>

ADDITIONAL INFORMATION			UNDERGROUND SERVICES				
Sketch Diagram:	No Sketch Taken		Depth	Orientation	Type	Diameter (mm)	Condition
Photographs:	Yes	See additional sheets.					

All dimensions in metres Scale 1:50	For explanation of symbols and abbreviations see Key Sheets	Checked by: <i>K.W.</i>	Logged by: S. Duncan	Contract No. 4155
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TRIAL PIT RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPA14
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:454904.334 N:521203.162	
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 9.437	Start Date: 12/10/2017
		Sheet: 2 of 5



Figure S3-TPA14.1
S3-TPA14 Before Investigation work.



Figure S3-TPA14.2
S3-TPA14.



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TRIAL PIT RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPA14	
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:454904.334 N:521203.162		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 9.437	Start Date: 12/10/2017	Sheet: 3 of 5



Figure S3-TPA14.3
S3-TPA14 (2).



Figure S3-TPA14.4
S3-TPA14 Service 1.



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TRIAL PIT RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPA14	
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:454904.334 N:521203.162		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 9.437	Start Date: 12/10/2017	Sheet: 4 of 5



Figure S3-TPA14.5
S3-TPA14 Service 2.



Figure S3-TPA14.6
S3-TPA14 Spoil.



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TRIAL PIT RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPA14	
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:454904.334 N:521203.162		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 9.437	Start Date: 12/10/2017	Sheet: 5 of 5



Figure S3-TPA14.7
S3-TPA14 Reinstatement.



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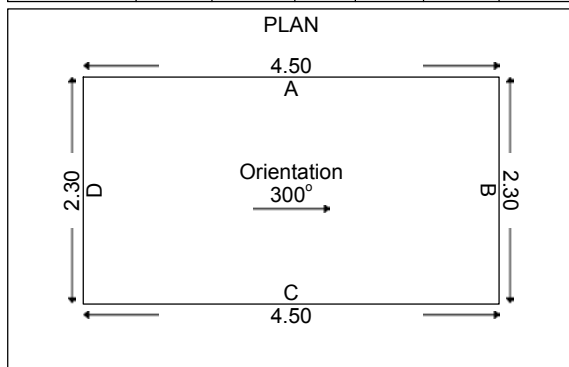
TRIAL PIT RECORD

Status:-

FINAL

Project:	The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3			Exploratory Hole No.
Client:	South Tees Site Company Ltd	Location:	Redcar Steel Works E:454943.516 N:521111.211	
Method (Equipment):	Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)):	10.600	Start Date: 19/10/2017
				Sheet: 1 of 4

SAMPLES & TESTS			Water	STRATA			
Depth	Type No	Test Result		Reduced Level	Legend	Depth (Thick-ness)	DESCRIPTION
0.50	B1	3.6ppm		10.500		(0.10) 0.10	MADE GROUND (Grass over brown clayey gravelly sand. Gravel is fine to coarse angular to subrounded and includes slag and roadstone).
0.50	PID			10.300		(0.20) 0.30	
0.80	J2					(0.40)	MADE GROUND (Grey red brown sandy gravel. Gravel is fine to coarse subangular to subrounded and includes slag).
1.00	ES3			9.900		0.70	MADE GROUND (Slag layer: light grey sandy gravel with medium cobble/boulder content. Sand includes ash. Gravel is fine to coarse angular to subangular and includes slag. Cobbles/boulders are angular and include slag).
1.30	B4	3.5ppm				(0.80)	MADE GROUND (Grey brown clayey very sandy gravel with low cobble content and fragments of fragments of iron. Sand includes ash. Gravel is fine to coarse angular to subangular and includes slag. Cobbles are angular and include slag).
1.30	PID			9.100		1.50	MADE GROUND (Grey brown clayey very sandy gravel with low cobble content and fragments of fragments of iron. Sand includes ash. Gravel is fine to coarse angular to subangular and includes slag. Cobbles are angular and include slag).
1.60	B5	2.9ppm		8.900		(0.20) 1.70	
1.60	PID			8.700		(0.20) 1.90	MADE GROUND (Slag layer).
1.75	J6						MADE GROUND (Black slightly gravelly sand. Sand includes ash and coal fines. Gravel is fine to medium angular to subangular and includes slag).
1.85	ES7					(1.00)	Firm brown occasionally laminated brown slightly sandy to sandy slightly gravelly CLAY with pockets of light brown sand. Gravel is fine subangular to rounded and includes sandstone and quartz.
2.20	J8						at 2.70m BGL ... clay is of intermediate to high plasticity.
2.70	B9	4.1ppm		7.700		2.90	Trial pit complete at 2.90m BGL.
2.70	PID						



GROUNDWATER
No groundwater inflow observed.

STABILITY
Pit sides unstable throughout excavation.

GENERAL REMARKS

ADDITIONAL INFORMATION		
Sketch Diagram:	No Sketch Taken	
Photographs:	Yes	See additional sheets.

UNDERGROUND SERVICES				
Depth	Orientation	Type	Diameter (mm)	Condition

All dimensions in metres Scale 1:50	For explanation of symbols and abbreviations see Key Sheets	Checked by: K.W.	Logged by: S. Duncan	Contract No. 4155
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TRIAL PIT RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPA15	
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:454943.516 N:521111.211		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 10.600	Start Date: 19/10/2017	Sheet: 2 of 4



Figure S3-TPA15.1
S3-TPA15 Before Investigation work.



Figure S3-TPA15.2
S3-TPA15.



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TRIAL PIT RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPA15	
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:454943.516 N:521111.211		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 10.600	Start Date: 19/10/2017	Sheet: 3 of 4



Figure S3-TPA15.3
S3-TPA15 (2).



Figure S3-TPA15.4
S3-TPA15 Spoil.



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TRIAL PIT RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3			Exploratory Hole No. S3-TPA15
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:454943.516 N:521111.211		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 10.600	Start Date: 19/10/2017	Sheet: 4 of 4



Figure S3-TPA15.5
S3-TPA15 Reinstatement.



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
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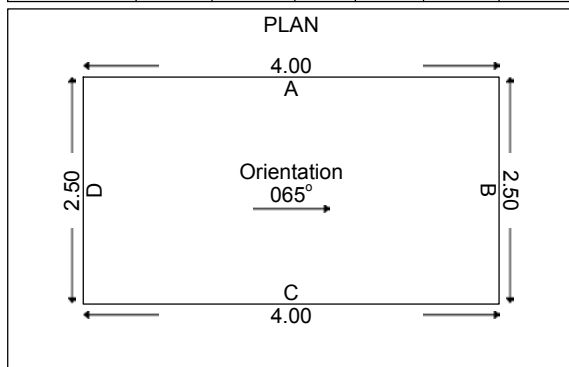
TRIAL PIT RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3			Exploratory Hole No. S3-TPA16
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:454847.213 N:521200.015		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)		Ground Level (m(AOD)): 9.693	Start Date: 12/10/2017
			Sheet: 1 of 4

SAMPLES & TESTS			Water	STRATA			
Depth	Type No	Test Result		Reduced Level	Legend	Depth (Thickness)	DESCRIPTION
0.10 0.20 0.40 0.70 1.00 1.00 1.40 1.50 1.60 1.60	J1 ES2 J3 ES4 PID B5 J6 ES7 PID B8	 0.5ppm 8.7ppm		9.393 8.393 7.993	  	(0.30) 0.30 (1.00) (0.40) 1.70	MADE GROUND (Grass over brown clayey gravelly sand with fragments of metal. Sand includes ash. Gravel is fine to coarse angular to subangular and includes slag). MADE GROUND (Black and dark grey clayey very sandy gravel with low cobble content and fragments of metal. Sand includes ash. Gravel is fine to coarse angular to subangular and includes slag and clinker. Cobbles and boulders are angular and include slag). Firm to stiff brown with grey dark grey and orange mottling slightly sandy slightly gravelly CLAY. Gravel is fine to coarse subrounded to rounded and includes sandstone and mudstone. Trial pit terminated at 1.70m BGL - due to groundwater ingress.



GROUNDWATER
Water seepage at 1.20m BGL - slow inflow.

STABILITY
Pit sides stable throughout excavation.

GENERAL REMARKS

ADDITIONAL INFORMATION		
Sketch Diagram:	No Sketch Taken	
Photographs:	Yes	See additional sheets.

UNDERGROUND SERVICES				
Depth	Orientation	Type	Diameter (mm)	Condition

All dimensions in metres
Scale 1:50

For explanation of symbols and abbreviations see Key Sheets

Checked by:
K.W.

Logged by:
S. Duncan

Contract No.
4155



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TRIAL PIT RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPA16	
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:454847.213 N:521200.015		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 9.693	Start Date: 12/10/2017	Sheet: 2 of 4

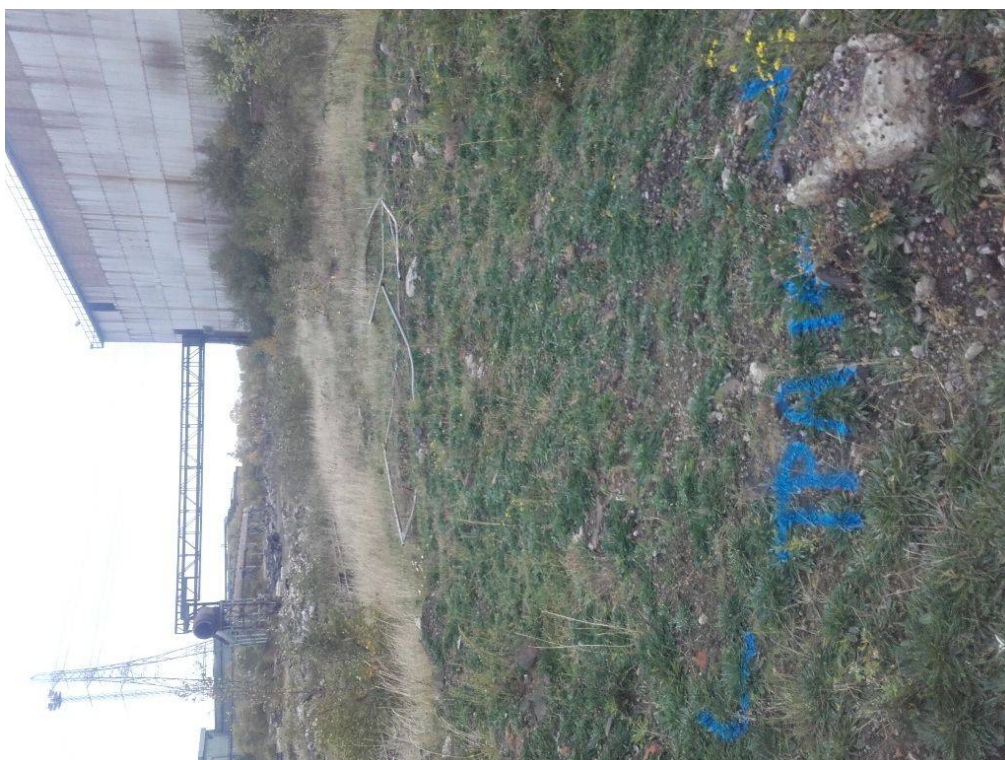


Figure S3-TPA16.1
S3-TPA16 Before Investigation work.



Figure S3-TPA16.2
S3-TPA16.



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TRIAL PIT RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPA16	
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:454847.213 N:521200.015		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 9.693	Start Date: 12/10/2017	Sheet: 3 of 4



Figure S3-TPA16.3
S3-TPA16 (2).



Figure S3-TPA16.4
S3-TPA16 Spoil.



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TRIAL PIT RECORD

Status:-

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Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPA16	
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:454847.213 N:521200.015		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 9.693	Start Date: 12/10/2017	Sheet: 4 of 4



Figure S3-TPA16.5
S3-TPA16 Reinstatement.



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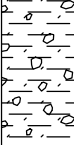
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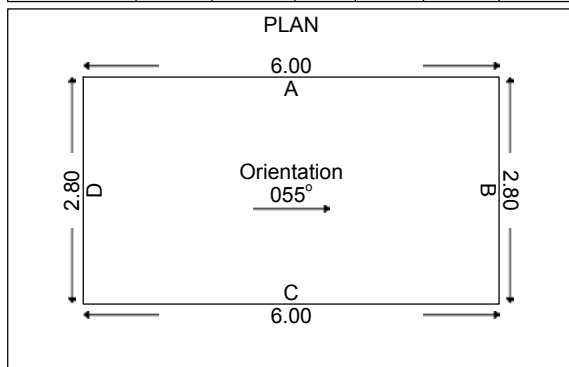
TRIAL PIT RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3			Exploratory Hole No. S3-TPA17	
Client: South Tees Site Company Ltd		Location: Redcar Steel Works E:454899.753 N:521097.054		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)		Ground Level (m(AOD)): 10.757	Start Date: 19/10/2017	Sheet: 1 of 4

SAMPLES & TESTS			Water	STRATA				
Depth	Type No	Test Result		Reduced Level	Legend	Depth (Thickness)	DESCRIPTION	
0.15	J1	2.8ppm		10.657		(0.10) 0.10	MADE GROUND (Grass over brown clayey gravelly sand).	
0.25	ES2			10.457		(0.20) 0.30	MADE GROUND (Black sandy gravel. Sand includes ash. Gravel is fine to coarse angular to subangular and includes slag and macadam).	
0.40	J3					(0.60)	(Engineer notes bitumous appearance).	
0.60	ES4						MADE GROUND (Dark brown sandy gravel and gravelly sand with fragments of wood, metal and iron. Sand includes ash. Gravel is fine to coarse angular to subangular and includes slag).	
0.80	B5							
0.80	PID			9.857		(0.40)	MADE GROUND (Red sandy gravelly cobbles. Gravel is fine to coarse angular to subangular and includes brick, slag and concrete).	
1.40	LB6	1.5ppm		9.457		1.30	(Engineer notes south half of pit is dark brown sandy gravel and gravelly sand (as between 0.30-0.90m BGL).	
1.40	PID			9.157		1.60	MADE GROUND (Slag layer).	
1.70	J7					(0.60)	MADE GROUND (Brown sandy gravelly clay and clayey gravelly sand with low cobble content and fragments of fragments of iron. Sand includes ash. Gravel is fine to coarse angular to subangular and includes slag. Cobbles are angular and include slag).	
1.90	ES8	8.3ppm		8.557		2.20	MADE GROUND (Black gravelly sand. Sand includes ash and coal fines. Gravel is fine to coarse angular to subangular and includes clinker, slag and coal).	
2.10	B9					(0.30)	Firm to stiff brown with grey mottling slightly sandy to sandy slightly gravelly CLAY with pockets of light brown sand. Gravel is fine to coarse subrounded to rounded and includes sandstone.	
2.10	PID			8.257		2.50	at c.3.20m BGL ... clay is of intermediate plasticity.	
2.30	ES10						Trial pit complete at 3.50m BGL.	
2.70	J11	4.5ppm				(1.00)		
3.20	B12							
3.20	PID			7.257		3.50		



GROUNDWATER
No groundwater inflow observed.

STABILITY
Pit sides unstable throughout excavation.

GENERAL REMARKS

ADDITIONAL INFORMATION		
Sketch Diagram:	No Sketch Taken	
Photographs:	Yes	See additional sheets.

UNDERGROUND SERVICES				
Depth	Orientation	Type	Diameter (mm)	Condition

All dimensions in metres Scale 1:50	For explanation of symbols and abbreviations see Key Sheets	Checked by: <i>K.W.</i>	Logged by: S. Duncan	Contract No. 4155
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TRIAL PIT RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3			Exploratory Hole No. S3-TPA17
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:454899.753 N:521097.054		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 10.757	Start Date: 19/10/2017	Sheet: 2 of 4



Figure S3-TPA17.1
S3-TPA17 Before Investigation work.



Figure S3-TPA17.2
S3-TPA17.



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TRIAL PIT RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPA17	
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:454899.753 N:521097.054		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 10.757	Start Date: 19/10/2017	Sheet: 3 of 4



Figure S3-TPA17.3
S3-TPA17 (2).



Figure S3-TPA17.4
S3-TPA17 (3).



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TRIAL PIT RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPA17	
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:454899.753 N:521097.054		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 10.757	Start Date: 19/10/2017	Sheet: 4 of 4



Figure S3-TPA17.5
S3-TPA17 Spoil.

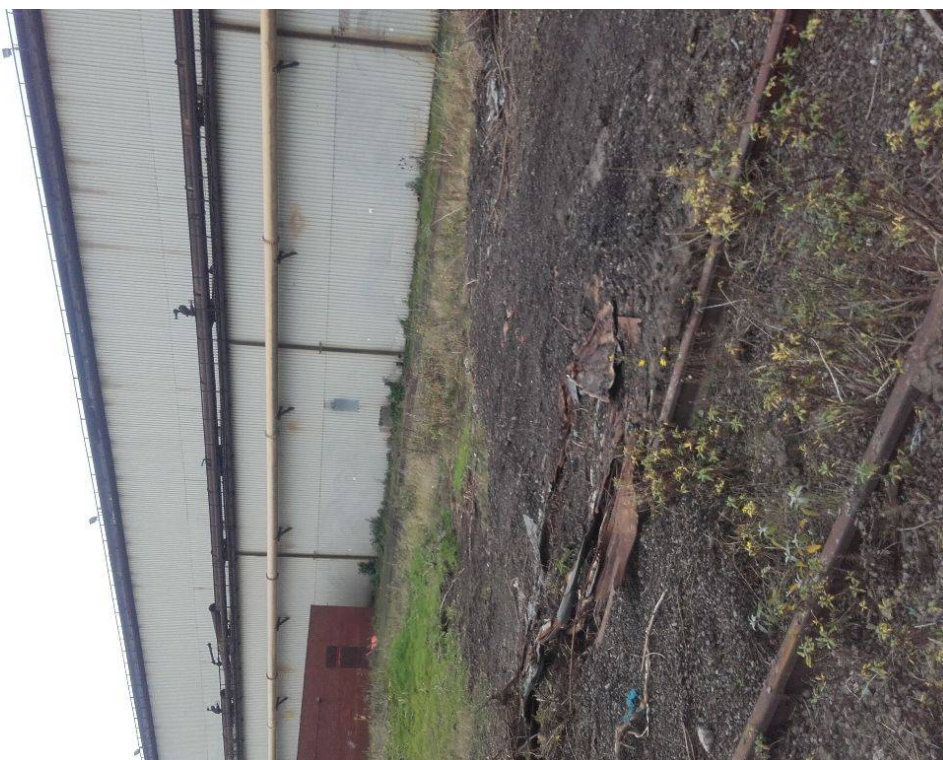


Figure S3-TPA17.6
S3-TPA17 Reinstatement.



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Tel: 01772 735 300 Fax: 01772 735 999

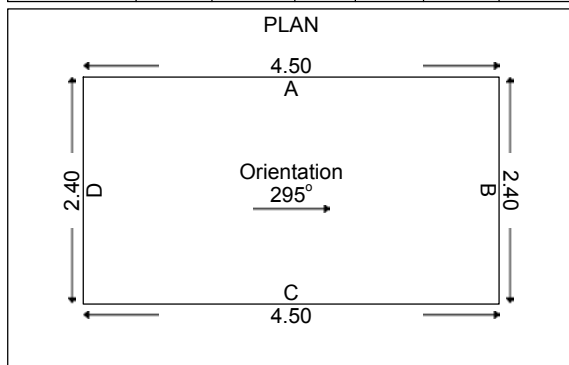
TRIAL PIT RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPA18	
Client: South Tees Site Company Ltd		Location: Redcar Steel Works E:454912.143 N:521091.824	
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)		Ground Level (m(AOD)): 10.641	Start Date: 19/10/2017 Sheet: 1 of 4

SAMPLES & TESTS			Water	STRATA			
Depth	Type No	Test Result		Reduced Level	Legend	Depth (Thickness)	DESCRIPTION
0.10 0.15	J1 ES2	1.1ppm		10.541 10.441		(0.10) 0.10 (0.10) 0.20	MADE GROUND (Grass over brown clayey gravelly sand. Gravel is fine to coarse angular to subrounded and includes slag and roadstone). MADE GROUND (Grey red brown sandy gravel. Gravel is fine to coarse subangular to subrounded and includes slag).
0.70	J3					(1.30)	MADE GROUND (Grey brown sandy gravel with high cobble/boulder content. Sand includes ash. Gravel is fine to coarse angular to subangular and includes slag. Cobbles/boulders are angular and include slag).
1.00	ES4						
1.20 1.20	LB5 PID			9.141 9.041		1.50 (0.10) 1.60	
1.50 1.55	J6 ES7					(0.60)	MADE GROUND (White clayey/silty sand). (Engineer notes possible powdery lime). MADE GROUND (Slag layer).
2.50	J8	0.1ppm		8.441		2.20 (1.30)	Firm brown occasionally laminated brown slightly sandy to sandy slightly gravelly CLAY with pockets of light brown sand. Gravel is fine subangular to rounded and includes sandstone and quartz.
3.00 3.00	B9 PID						at c.3.00m BGL ... clay is of high plasticity.
				7.141		3.50	Trial pit complete at 3.50m BGL.



GROUNDWATER
No groundwater inflow observed.

STABILITY
Pit sides stable throughout excavation.

GENERAL REMARKS

ADDITIONAL INFORMATION		
Sketch Diagram:	No Sketch Taken	
Photographs:	Yes	See additional sheets.

UNDERGROUND SERVICES				
Depth	Orientation	Type	Diameter (mm)	Condition

All dimensions in metres Scale 1:50	For explanation of symbols and abbreviations see Key Sheets	Checked by: <i>K.W.</i>	Logged by: S. Duncan	Contract No. 4155
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TRIAL PIT RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPA18	
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:454912.143 N:521091.824		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 10.641	Start Date: 19/10/2017	Sheet: 2 of 4

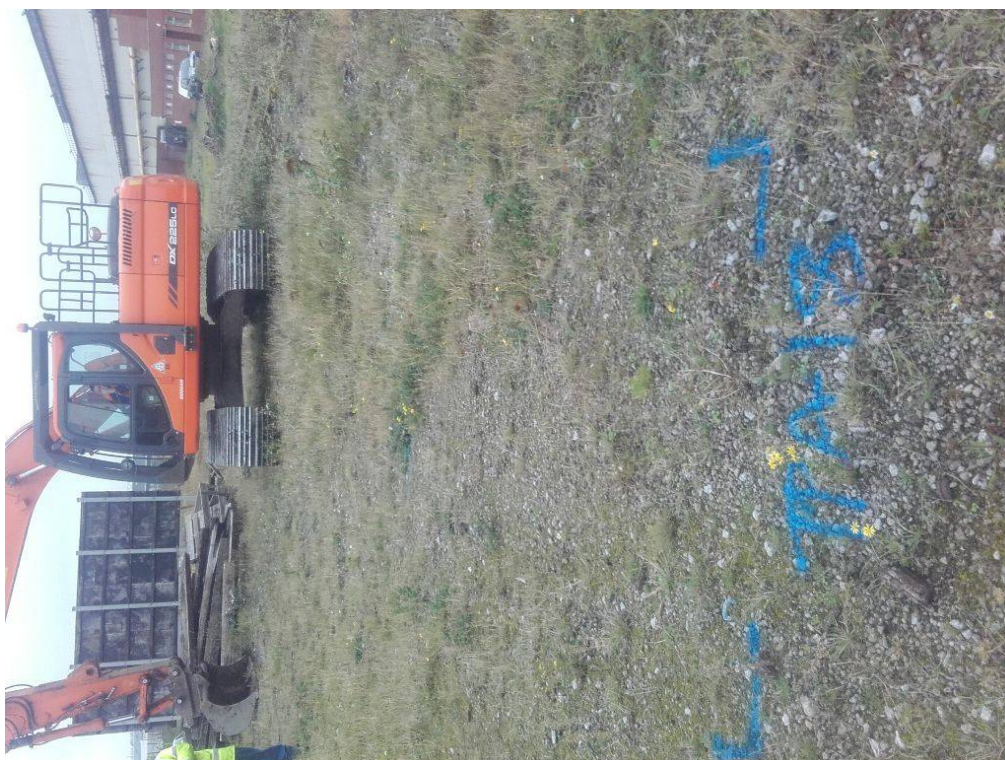


Figure S3-TPA18.1
S3-TPA18 Before Investigation work.



Figure S3-TPA18.2
S3-TPA17.



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Tel: 01772 735 300 Fax: 01772 735 999

TRIAL PIT RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPA18
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:454912.143 N:521091.824	
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 10.641	Start Date: 19/10/2017
		Sheet: 3 of 4



Figure S3-TPA18.3
S3-TPA17 (2).



Figure S3-TPA18.4
S3-TPA17 (3).



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TRIAL PIT RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3			Exploratory Hole No. S3-TPA18
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:454912.143 N:521091.824		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 10.641	Start Date: 19/10/2017	Sheet: 4 of 4



Figure S3-TPA18.5
S3-TPA18 Spoil.

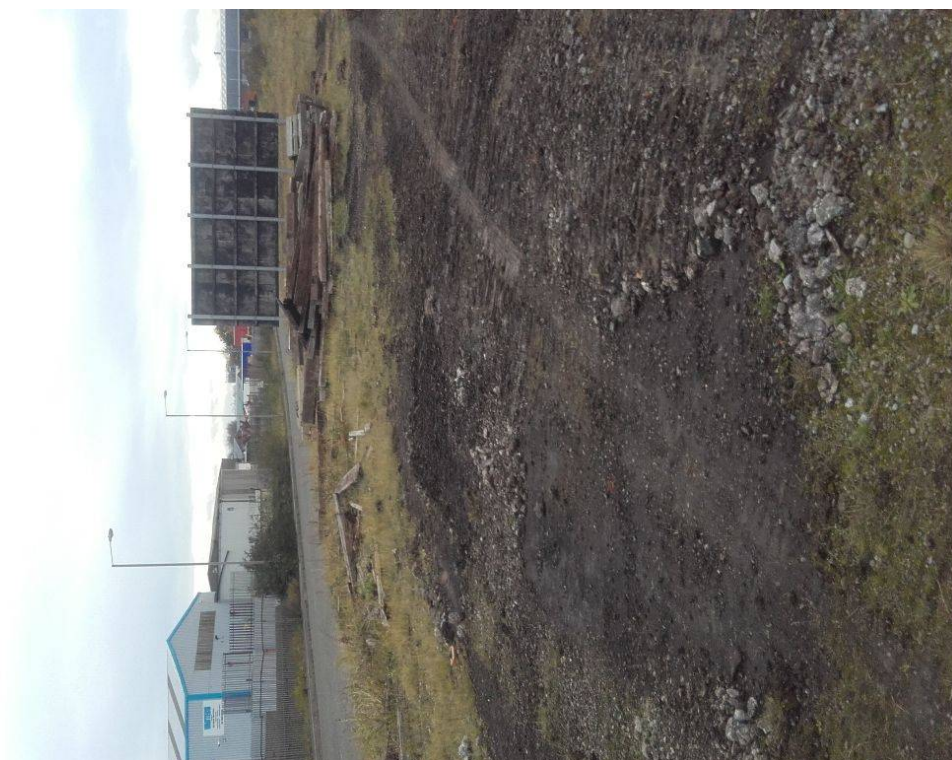


Figure S3-TPA18.6
S3-TPA18 Reinstatement.



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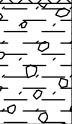
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Tel: 01772 735 300 Fax: 01772 735 999

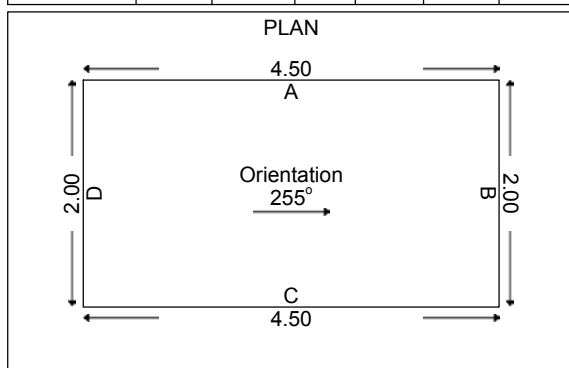
TRIAL PIT RECORD

Status:-

FINAL

Project:	The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3			Exploratory Hole No.
Client:	South Tees Site Company Ltd	Location:	Redcar Steel Works E:454826.089 N:521188.732	S3-TPA19
Method (Equipment):	Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)):	9.482	Start Date: 12/10/2017
				Sheet: 1 of 4

SAMPLES & TESTS			Water	STRATA			
Depth	Type No	Test Result		Reduced Level	Legend	Depth (Thickness)	DESCRIPTION
0.20 0.40 0.50 0.70 0.70	J1 J2 ES3 PID B4	25.3ppm		8.482		(1.00) 1.00	MADE GROUND (Black dark grey clayey gravelly sand with low cobble content and fragments of metal. Sand includes ash. Gravel is fine to coarse angular to subangular and includes slag and clinker. Cobbles are angular and include slag). at c.0.00-0.35m BGL ... very clayey, no ash noted. at c.0.35-0.60m BGL ... layer of slag.
1.10 1.40 1.60 1.60	J5 ES6 PID B7	1.4ppm		7.682		(0.80) 1.80	Firm to stiff brown with grey dark grey and orange mottling slightly sandy slightly gravelly CLAY. Gravel is fine to coarse subrounded to rounded and includes sandstone and mudstone. at c.1.60m BGL ... clay is of high plasticity. Trial pit complete at 1.80m BGL.



GROUNDWATER
No groundwater inflow observed.

STABILITY
Pit sides stable throughout excavation.

GENERAL REMARKS

ADDITIONAL INFORMATION		
Sketch Diagram:	No Sketch Taken	
Photographs:	Yes	See additional sheets.

UNDERGROUND SERVICES				
Depth	Orientation	Type	Diameter (mm)	Condition

All dimensions in metres
Scale 1:50

For explanation of symbols and
abbreviations see Key Sheets

Checked by:
K.W.

Logged by:
S. Duncan

Contract No.
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Tel: 01772 735 300 Fax: 01772 735 999

TRIAL PIT RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPA19
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:454826.089 N:521188.732	
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 9.482	Start Date: 12/10/2017
		Sheet: 2 of 4



Figure S3-TPA19.1
S3-TPA19 Before Investigation work.



Figure S3-TPA19.2
S3-TPA18.



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TRIAL PIT RECORD

Status:-

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Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPA19	
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:454826.089 N:521188.732		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 9.482	Start Date: 12/10/2017	Sheet: 3 of 4



Figure S3-TPA19.3
S3-TPA19.



Figure S3-TPA19.4
S3-TPA19 Spoil.



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TRIAL PIT RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3			Exploratory Hole No. S3-TPA19
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:454826.089 N:521188.732		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 9.482	Start Date: 12/10/2017	Sheet: 4 of 4



Figure S3-TPA19.5
S3-TPA19 Reinstatement.



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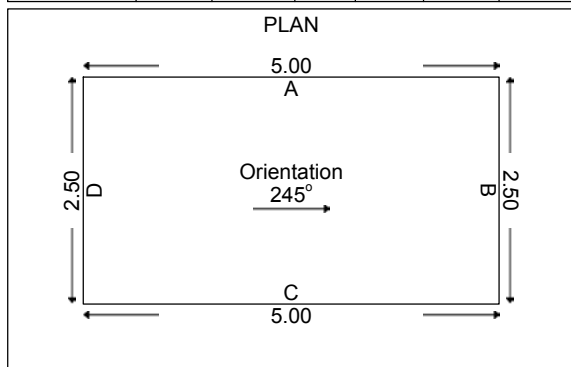
TRIAL PIT RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3			Exploratory Hole No. S3-TPA20
Client: South Tees Site Company Ltd		Location: Redcar Steel Works E:454870.385 N:521095.739	
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)		Ground Level (m(AOD)): 9.624	Start Date: 19/10/2017 Sheet: 1 of 4

SAMPLES & TESTS			Water	STRATA			
Depth	Type No	Test Result		Reduced Level	Legend	Depth (Thickness)	DESCRIPTION
0.20	J1			9.424		(0.20) 0.20	MADE GROUND (Dark grey sand and gravel. Gravel is fine to coarse angular to subangular and includes slag, concrete and roadstone).
0.30	ES2			9.224		(0.20) 0.40	
0.50	J3						MADE GROUND (Red sandy gravelly cobbles. Gravel is fine to coarse angular to subangular and includes brick. Cobbles are angular and include whole bricks and fragments of brick).
1.00	ES4					(1.50)	MADE GROUND (Brown clayey sandy gravel intermixed with brown sandy gravelly clay with high cobble/boulder content and fragments of metal, wood and fragments of iron. Sand includes ash. Gravel is fine to coarse angular to subangular and includes slag and concrete. Cobbles/boulders are angular and include slag).
1.50	LB5	10.3ppm					
1.50	PID			7.724		1.90	
1.80	B6	6.6ppm					
1.80	PID						
2.20	J7			7.224		(0.50) 2.40	MADE GROUND (Dark grey green cobbles/boulders. Cobbles/boulders are angular and include slag).
2.80	B8	0.3ppm				(1.20)	Firm occasionally laminated brown with orange and grey mottling slightly sandy to sandy slightly gravelly CLAY with pockets of light brown sand. Gravel is fine to coarse subrounded to rounded and includes sandstone. at c.2.80m BGL ... clay is of intermediate plasticity.
2.80	PID						
3.20	J9			6.024		3.60	
							Trial pit complete at 3.60m BGL.



GROUNDWATER No groundwater inflow observed.
--

STABILITY Pit sides unstable throughout excavation.
--

GENERAL REMARKS

ADDITIONAL INFORMATION		
Sketch Diagram:	No Sketch Taken	
Photographs:	Yes	See additional sheets.

UNDERGROUND SERVICES				
Depth	Orientation	Type	Diameter (mm)	Condition

All dimensions in metres Scale 1:50	For explanation of symbols and abbreviations see Key Sheets	Checked by: K.W.	Logged by: S. Duncan	Contract No. 4155
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TRIAL PIT RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPA20	
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:454870.385 N:521095.739		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 9.624	Start Date: 19/10/2017	Sheet: 2 of 4



Figure S3-TPA20.1
S3-TPA20 Before Investigation work.



Figure S3-TPA20.2
S3-TPA20.



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TRIAL PIT RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPA20	
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:454870.385 N:521095.739		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 9.624	Start Date: 19/10/2017	Sheet: 3 of 4



Figure S3-TPA20.3
S3-TPA20 (2).

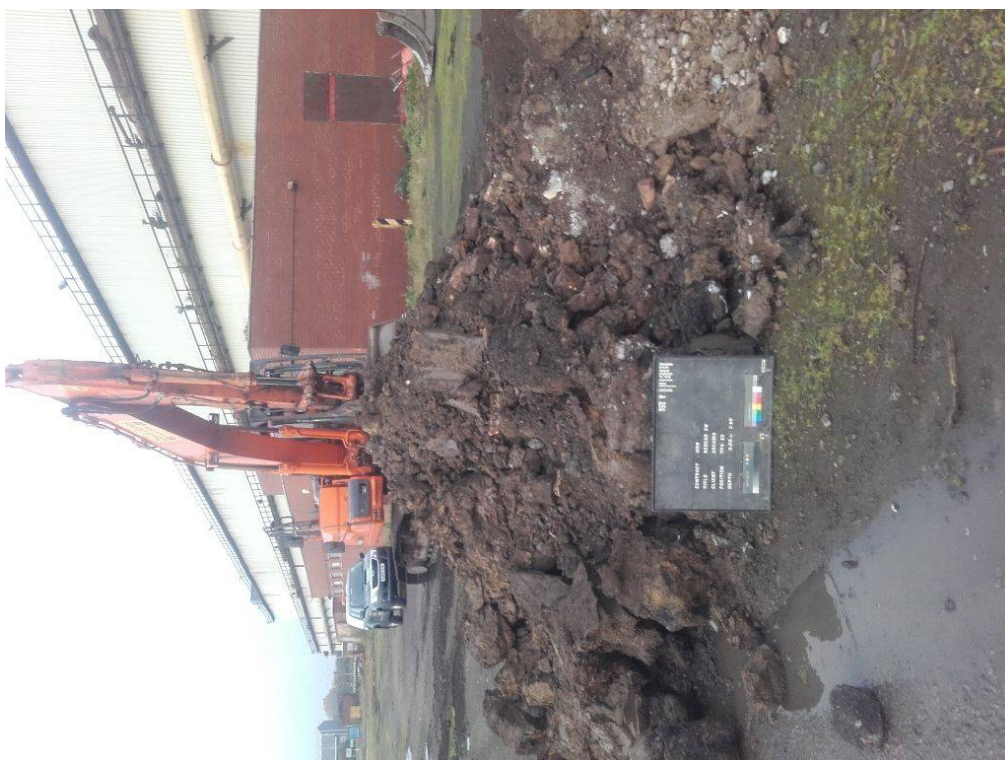


Figure S3-TPA20.4
S3-TPA20 Spoil.



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TRIAL PIT RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPA20	
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:454870.385 N:521095.739		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 9.624	Start Date: 19/10/2017	Sheet: 4 of 4



Figure S3-TPA20.5
S3-TPA20 Reinstatement.



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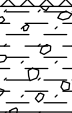
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Tel: 01772 735 300 Fax: 01772 735 999

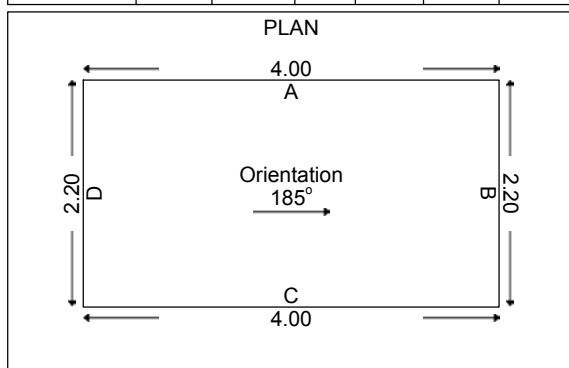
TRIAL PIT RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPA21	
Client: South Tees Site Company Ltd		Location: Redcar Steel Works E:454791.016 N:521184.039	
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)		Ground Level (m(AOD)): 10.034	Start Date: 12/10/2017 Sheet: 1 of 4

SAMPLES & TESTS			Water	STRATA				
Depth	Type No	Test Result		Reduced Level	Legend	Depth (Thickness)	DESCRIPTION	
0.30	J1	2.6ppm		9.034		(1.00)	MADE GROUND (Black dark grey clayey very sandy gravel with low cobble and boulder content and fragments of metal. Sand includes ash. Gravel is fine to coarse angular to subangular and includes slag and clinker. Cobbles and boulders are angular and include slag). at c.0.50-1.00m BGL ... engineer notes high ash/clinker content in sand and gravel.	
0.50	ES2							
0.70	PID							
0.70	B3							
1.10	J4	<0.1ppm			8.334	(0.70)	1.70	Soft to firm light brown with orange and grey mottling slightly sandy to sandy slightly gravelly CLAY. Gravel is fine to coarse subrounded to rounded and includes sandstone and mudstone. at c.1.60m BGL ... clay is of intermediate to high plasticity. Trial pit terminated at 1.70m BGL - due to groundwater ingress.
1.40	ES5							
1.60	PID							
1.60	B6							



GROUNDWATER
Water strike at 0.70m BGL - moderate inflow.

STABILITY
Pit sides stable throughout excavation.

GENERAL REMARKS

ADDITIONAL INFORMATION		
Sketch Diagram:	No Sketch Taken	
Photographs:	Yes	See additional sheets.

UNDERGROUND SERVICES				
Depth	Orientation	Type	Diameter (mm)	Condition

All dimensions in metres
Scale 1:50

For explanation of symbols and abbreviations see Key Sheets

Checked by:
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Logged by:
S. Duncan

Contract No.
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TRIAL PIT RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPA21	
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:454791.016 N:521184.039		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 10.034	Start Date: 12/10/2017	Sheet: 2 of 4



Figure S3-TPA21.1
S3-TPA21 Before Investigation work.



Figure S3-TPA21.2
S3-TPA21.



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TRIAL PIT RECORD

Status:-

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Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPA21
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:454791.016 N:521184.039	
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 10.034	Start Date: 12/10/2017
		Sheet: 3 of 4



Figure S3-TPA21.3
S3-TPA21 (2).



Figure S3-TPA21.4
S3-TPA21 Spoil.



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TRIAL PIT RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3			Exploratory Hole No. S3-TPA21
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:454791.016 N:521184.039		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 10.034	Start Date: 12/10/2017	Sheet: 4 of 4



Figure S3-TPA21.5
S3-TPA21 Reinstatement.



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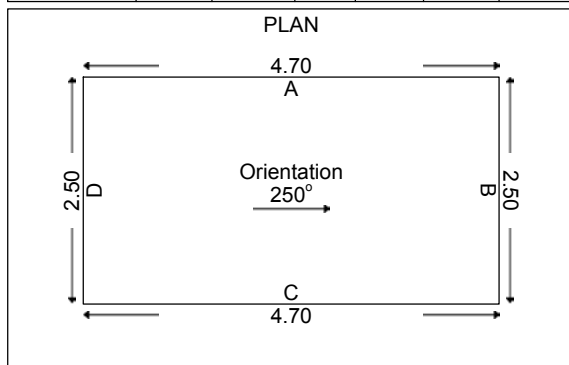
TRIAL PIT RECORD

Status:-

FINAL

Project:	The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3			Exploratory Hole No.
Client:	South Tees Site Company Ltd		Location:	Redcar Steel Works E:454872.024 N:521060.611
Method (Equipment):	Machine Excavated (JCB 360 Tracked Excavator)		Ground Level (m(AOD)):	10.633
			Start Date:	19/10/2017
			Sheet:	1 of 4

SAMPLES & TESTS			Water	STRATA			
Depth	Type No	Test Result		Reduced Level	Legend	Depth (Thickness)	DESCRIPTION
0.20	ES1	1.4ppm		10.383		(0.25) 0.25	MADE GROUND (Grass over brown gravelly sand. Gravel is fine to coarse angular to subrounded and includes slag and roadstone).
0.40	J2					(0.75)	MADE GROUND (Light grey sandy gravel with low cobble content and fragments of iron. Sand includes ash. Gravel is fine to coarse angular to subangular and includes slag. Cobbles are angular and include slag).
0.60	ES3						
0.80	LB4			9.633		1.00	
0.80	PID			9.533		(0.10) 1.10	MADE GROUND (Slag layer).
1.40	J5					(1.20)	MADE GROUND (Black clayey very sandy gravel. Sand includes ash and coal fines. Gravel is fine to coarse angular to subangular and includes slag).
1.80	ES6						between c.1.50-2.10m BGL ... engineer notes foundation on north face appears to consist of green slag material with sharp straight edges.
2.20	B7	0.7ppm		8.333		2.30	
2.20	PID						
2.50	J8					(1.00)	Firm brown with grey mottling slightly sandy to sandy slightly gravelly CLAY with pockets of light brown sand. Gravel is fine to coarse subrounded to rounded and includes sandstone.
3.00	B9	0.3ppm					
3.00	PID			7.333		3.30	at c.3.00m BGL ... clay is of high plasticity.
							Trial pit complete at 3.30m BGL.



GROUNDWATER
No groundwater inflow observed.

STABILITY
Pit sides stable throughout excavation.

GENERAL REMARKS

ADDITIONAL INFORMATION		
Sketch Diagram:	No Sketch Taken	
Photographs:	Yes	See additional sheets.

UNDERGROUND SERVICES				
Depth	Orientation	Type	Diameter (mm)	Condition

All dimensions in metres Scale 1:50	For explanation of symbols and abbreviations see Key Sheets	Checked by: <i>K.W.</i>	Logged by: S. Duncan	Contract No. 4155
--	---	----------------------------	-------------------------	-----------------------------



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TRIAL PIT RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPA22
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:454872.024 N:521060.611	
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 10.633	Start Date: 19/10/2017
		Sheet: 2 of 4



Figure S3-TPA22.1
S3-TPA22 Before Investigation work.



Figure S3-TPA22.2
S3-TPA22.



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Tel: 01772 735 300 Fax: 01772 735 999

TRIAL PIT RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPA22	
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:454872.024 N:521060.611		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 10.633	Start Date: 19/10/2017	Sheet: 3 of 4



Figure S3-TPA22.3
S3-TPA22 (2).



Figure S3-TPA22.4
S3-TPA22 (3).



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TRIAL PIT RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPA22	
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:454872.024 N:521060.611		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 10.633	Start Date: 19/10/2017	Sheet: 4 of 4



Figure S3-TPA22.5
S3-TPA22 Spoil.

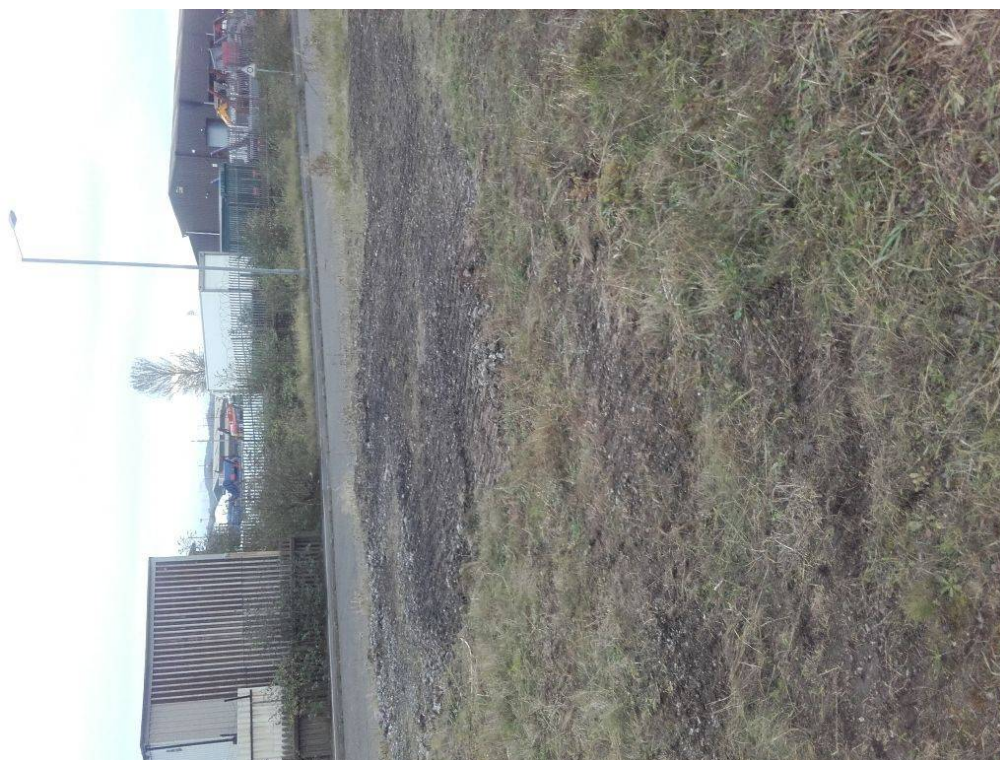


Figure S3-TPA22.6
S3-TPA22 Reinstatement.



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Tel: 01772 735 300 Fax: 01772 735 999

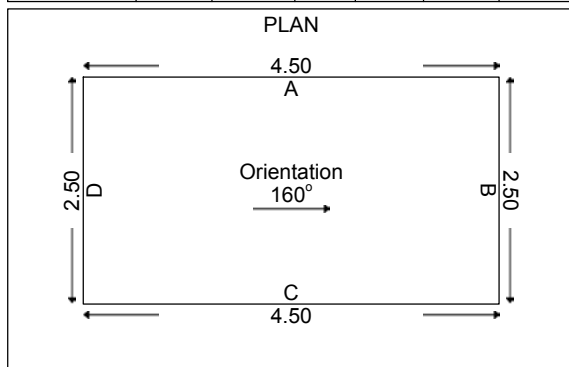
TRIAL PIT RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPA23	
Client: South Tees Site Company Ltd		Location: Redcar Steel Works E:454774.041 N:521184.556	
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)		Ground Level (m(AOD)): 10.117	Start Date: 10/10/2017
		Sheet: 1 of 4	

SAMPLES & TESTS			Water	STRATA			
Depth	Type No	Test Result		Reduced Level	Legend	Depth (Thickness)	DESCRIPTION
0.50	J1			9.917		(0.20) 0.20	MADE GROUND (Dark brown slightly clayey slightly gravelly to gravelly sand with low cobble and boulder content. Sand includes ash. Gravel is fine to coarse angular to subangular and includes clinker, slag and brick. Cobbles and boulders are angular and include slag).
0.70	ES2					(1.00)	MADE GROUND (Grey and brown slightly clayey very sandy gravel with high cobble and boulder content and fragments of metal (iron), rebar and pipe. Sand includes ash. Gravel is fine to coarse angular to subangular and includes slag and clinker. Cobbles and boulders are angular and include slag).
1.00	PID B3	<0.1ppm		8.917		1.20	
1.30	J4					(0.60)	Stiff brown occasionally laminated with some orange and grey mottling slightly sandy slightly gravelly CLAY. Gravel is fine and includes sandstone, mudstone and coal.
1.50	ES5			8.317		1.80	at c.1.70m BGL ... clay is of intermediate plasticity.
1.70	PID B6	<0.1ppm					Trial pit complete at 1.80m BGL.
1.70							



GROUNDWATER
Water strike at 1.70m BGL - slow to moderate inflow.

STABILITY
Pit sides slightly unstable throughout excavation.

GENERAL REMARKS

ADDITIONAL INFORMATION		
Sketch Diagram:	No Sketch Taken	
Photographs:	Yes	See additional sheets.

UNDERGROUND SERVICES				
Depth	Orientation	Type	Diameter (mm)	Condition

All dimensions in metres
Scale 1:50

For explanation of symbols and abbreviations see Key Sheets

Checked by:
K.W.

Logged by:
S. Duncan

Contract No.
4155



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Tel: 0191 387 4700 Fax: 0191 387 4710
Tel: 01772 735 300 Fax: 01772 735 999

TRIAL PIT RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPA23	
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:454774.041 N:521184.556		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 10.117	Start Date: 10/10/2017	Sheet: 2 of 4



Figure S3-TPA23.1
S3-TPA23 Before Investigation work.



Figure S3-TPA23.2
S3-TPA23.



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TRIAL PIT RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPA23
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:454774.041 N:521184.556	
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 10.117	Start Date: 10/10/2017
		Sheet: 3 of 4



Figure S3-TPA23.3
S3-TPA23 (2).



Figure S3-TPA23.4
S3-TPA23 Spoil.



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TRIAL PIT RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3			Exploratory Hole No. S3-TPA23
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:454774.041 N:521184.556		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 10.117	Start Date: 10/10/2017	Sheet: 4 of 4



Figure S3-TPA23.5
S3-TPA23 Reinstatement.



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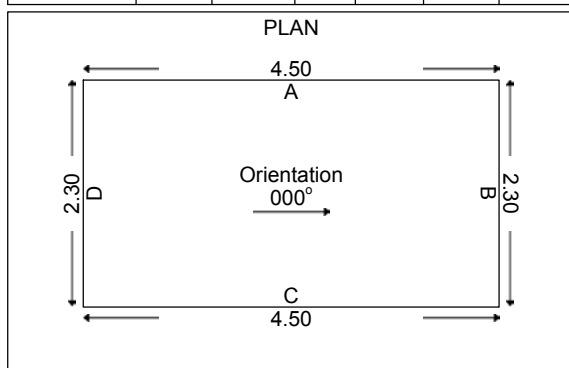
TRIAL PIT RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3			Exploratory Hole No. S3-TPA24	
Client: South Tees Site Company Ltd		Location: Redcar Steel Works E:454751.531 N:521164.740		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)		Ground Level (m(AOD)): 10.185	Start Date: 10/10/2017	Sheet: 1 of 4

SAMPLES & TESTS			Water	STRATA			
Depth	Type No	Test Result		Reduced Level	Legend	Depth (Thickness)	DESCRIPTION
0.20 0.30 0.50	J1 ES2 J3			9.785		0.40	MADE GROUND (Dark brown slightly clayey slightly gravelly to gravelly sand with low cobble and boulder content. Sand includes ash. Gravel is fine to coarse angular to subangular and includes clinker, slag and brick. Cobbles and boulders are angular and include slag).
1.00	ES4	0.8ppm		8.985		1.20	MADE GROUND (Dark grey sandy gravelly cobbles and boulders with fragments of wood and metal. Sand includes ash. Gravel is fine to coarse angular to subangular and includes slag. Cobbles and boulders are angular and include slag).
1.20 1.20 1.40 1.50 1.70 1.70	PID B5 J6 ES7 PID B8	2.3ppm		8.385		1.80	MADE GROUND (Grey slightly clayey very sandy gravel with low cobble content and fragments of metal. Sand includes ash. Gravel is fine to coarse angular to subangular and includes slag).
							Trial pit terminated at 1.80m BGL - due to groundwater ingress.



GROUNDWATER
Water strike at 1.60m BGL - moderate inflow.

STABILITY
Pit sides moderately stable throughout excavation.

GENERAL REMARKS

ADDITIONAL INFORMATION		
Sketch Diagram:	No Sketch Taken	
Photographs:	Yes	See additional sheets.

UNDERGROUND SERVICES				
Depth	Orientation	Type	Diameter (mm)	Condition

All dimensions in metres
Scale 1:50

For explanation of symbols and abbreviations see Key Sheets

Checked by:
K.W.

Logged by:
S. Duncan

Contract No.
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TRIAL PIT RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPA24
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:454751.531 N:521164.740	
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 10.185	Start Date: 10/10/2017
		Sheet: 2 of 4



Figure S3-TPA24.1
S3-TPA24 Before Investigation work.



Figure S3-TPA24.2
S3-TPA24.



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TRIAL PIT RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPA24	
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:454751.531 N:521164.740		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 10.185	Start Date: 10/10/2017	Sheet: 3 of 4



Figure S3-TPA24.3
S3-TPA24 (2).



Figure S3-TPA24.4
S3-TPA24 Spoil.



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TRIAL PIT RECORD

Status:-

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Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3			Exploratory Hole No. S3-TPA24
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:454751.531 N:521164.740		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 10.185	Start Date: 10/10/2017	Sheet: 4 of 4



Figure S3-TPA24.5
S3-TPA24 Reinstatement.



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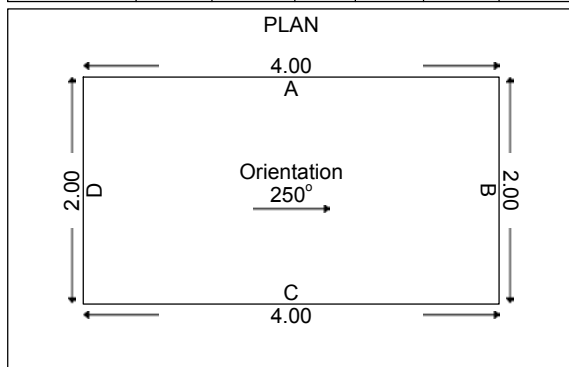
TRIAL PIT RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3			Exploratory Hole No. S3-TPA25
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:454825.224 N:521053.347		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)		Ground Level (m(AOD)): 10.949	Start Date: 19/10/2017
			Sheet: 1 of 4

SAMPLES & TESTS			Water	STRATA			
Depth	Type No	Test Result		Reduced Level	Legend	Depth (Thickness)	DESCRIPTION
0.50	J1						MADE GROUND (Dark grey and brown slightly clayey sandy gravel with medium cobble/boulder content and fragments of metal (rebar, chains, wire and rods) and wood. Gravel is coarse angular to subrounded and includes brick, concrete, clinker and slag. Cobbles/boulders are angular and include concrete). (Engineer notes metal fragments include rebar, chains, wire and rods). between c.0.00-2.50m BGL ... full concrete face on south wall. between c.0.80-2.50m BGL ... concrete face on north wall. at c.2.50m BGL ... flat concrete surface running length of trial pit. Trial pit terminated at 2.50m BGL - due to concrete obstruction.
1.00	ES2						
1.20	PID	3.2ppm				(2.50)	
1.20	B3						
1.70	J4						
2.00	ES5						
2.30	PID	0.3ppm		8.449		2.50	
2.30	B6						



GROUNDWATER
No groundwater inflow observed.

STABILITY
Pit sides stable throughout excavation.

GENERAL REMARKS

ADDITIONAL INFORMATION		
Sketch Diagram:	No Sketch Taken	
Photographs:	Yes	See additional sheets.

UNDERGROUND SERVICES				
Depth	Orientation	Type	Diameter (mm)	Condition

All dimensions in metres
Scale 1:50

For explanation of symbols and
abbreviations see Key Sheets

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K.W.

Logged by:
S. Duncan

Contract No.
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TRIAL PIT RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPA25	
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:454825.224 N:521053.347		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 10.949	Start Date: 19/10/2017	Sheet: 2 of 4

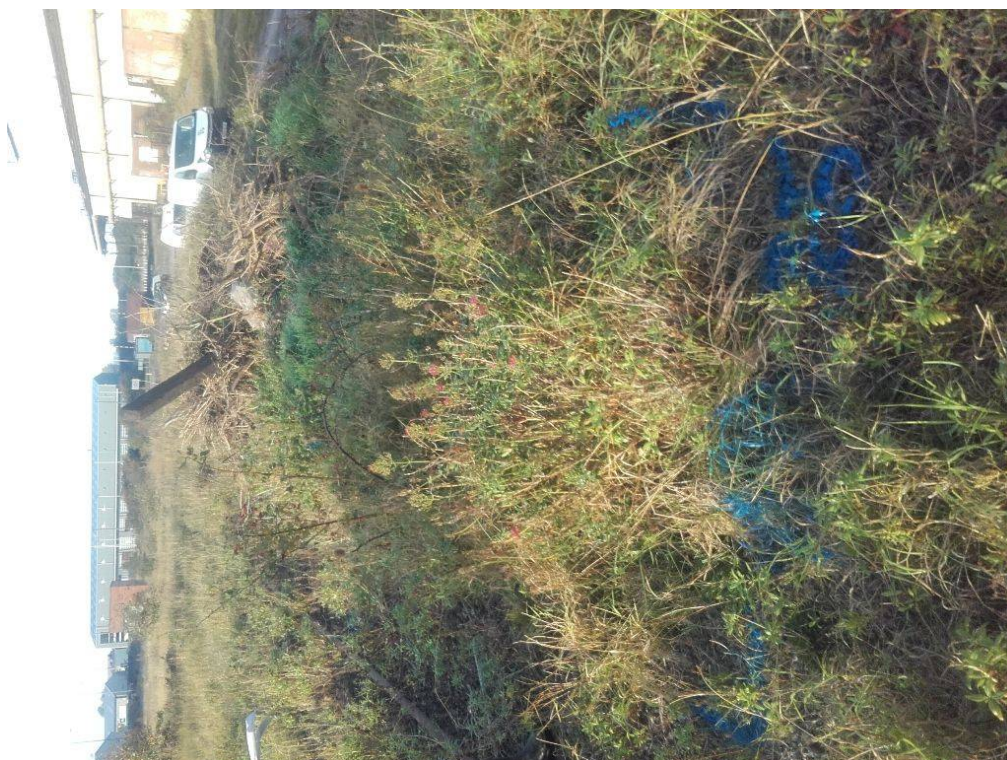


Figure S3-TPA25.1
S3-TPA25 Before Investigation work.



Figure S3-TPA25.2
S3-TPA25.



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TRIAL PIT RECORD

Status:-

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Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPA25	
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:454825.224 N:521053.347		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 10.949	Start Date: 19/10/2017	Sheet: 3 of 4



Figure S3-TPA25.3
S3-TPA25 (2).



Figure S3-TPA25.4
S3-TPA25 (3).



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TRIAL PIT RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3			Exploratory Hole No. S3-TPA25
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:454825.224 N:521053.347		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 10.949	Start Date: 19/10/2017	Sheet: 4 of 4



Figure S3-TPA25.5
S3-TPA25 Spoil.



Figure S3-TPA25.6
S3-TPA25 Reinstatement.



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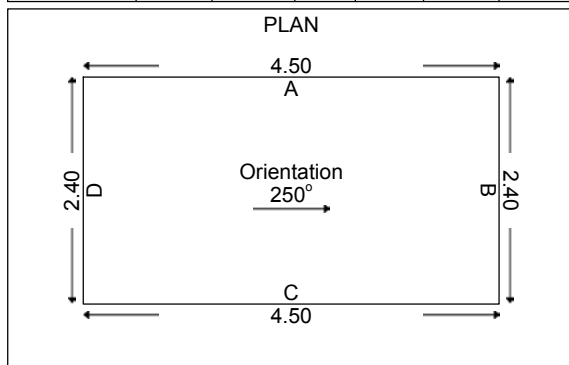
TRIAL PIT RECORD

Status:-

FINAL

Project:	The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3			Exploratory Hole No.
Client:	South Tees Site Company Ltd	Location:	Redcar Steel Works E:454818.920 N:521028.738	
Method (Equipment):	Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)):	10.872	Start Date: 18/10/2017
				Sheet: 1 of 4

SAMPLES & TESTS			Water	STRATA			
Depth	Type No	Test Result		Reduced Level	Legend	Depth (Thickness)	DESCRIPTION
0.10 0.20 0.25 0.25 0.50 0.70	J1 ES2 B3 PID J4 ES5	1.1ppm		10.572		(0.30) 0.30	MADE GROUND (Grass over brown sandy gravelly topsoil).
						(0.50) 0.80	MADE GROUND (Grey gravelly sand with low cobble content. Sand includes ash. Gravel is fine to coarse angular to subangular and includes slag. Cobbles are angular and include slag).
1.00 1.00	LB6 PID	2.3ppm		10.072		(0.40) 1.20	MADE GROUND (Grey sandy gravel with low cobble content. Sand includes ash. Gravel is fine to coarse angular to subangular and includes slag. Cobbles are angular and include slag).
1.40 1.70	J7 ES8			9.672		(1.10)	MADE GROUND (Dark grey clayey very sandy gravel with medium cobble content. Sand includes ash. Gravel is fine to coarse angular to subangular and includes brick, clinker and slag).
2.20 2.20 2.50	B9 PID J10	2.5ppm		8.572		2.30	Firm to stiff brown with some grey mottling slightly sandy to sandy slightly gravelly CLAY with pockets of light brown fine grained sand. Gravel is fine to coarse subrounded to rounded and includes sandstone.
3.00	ES11					(1.40)	
3.50 3.50	B12 PID	0.2ppm		7.172		3.70	at c.3.50m BGL ... clay is of high plasticity. Trial pit complete at 3.70m BGL.



GROUNDWATER
No groundwater inflow observed.

STABILITY
Pit sides stable throughout excavation.

GENERAL REMARKS

ADDITIONAL INFORMATION			UNDERGROUND SERVICES				
Sketch Diagram:	No Sketch Taken		Depth	Orientation	Type	Diameter (mm)	Condition
Photographs:	Yes	See additional sheets.					

All dimensions in metres
Scale 1:50

For explanation of symbols and
abbreviations see Key Sheets

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Contract No.
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Tel: 01772 735 300 Fax: 01772 735 999

TRIAL PIT RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPA26	
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:454818.920 N:521028.738		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 10.872	Start Date: 18/10/2017	Sheet: 2 of 4



Figure S3-TPA26.1
S3-TPA26 Before Investigation work.

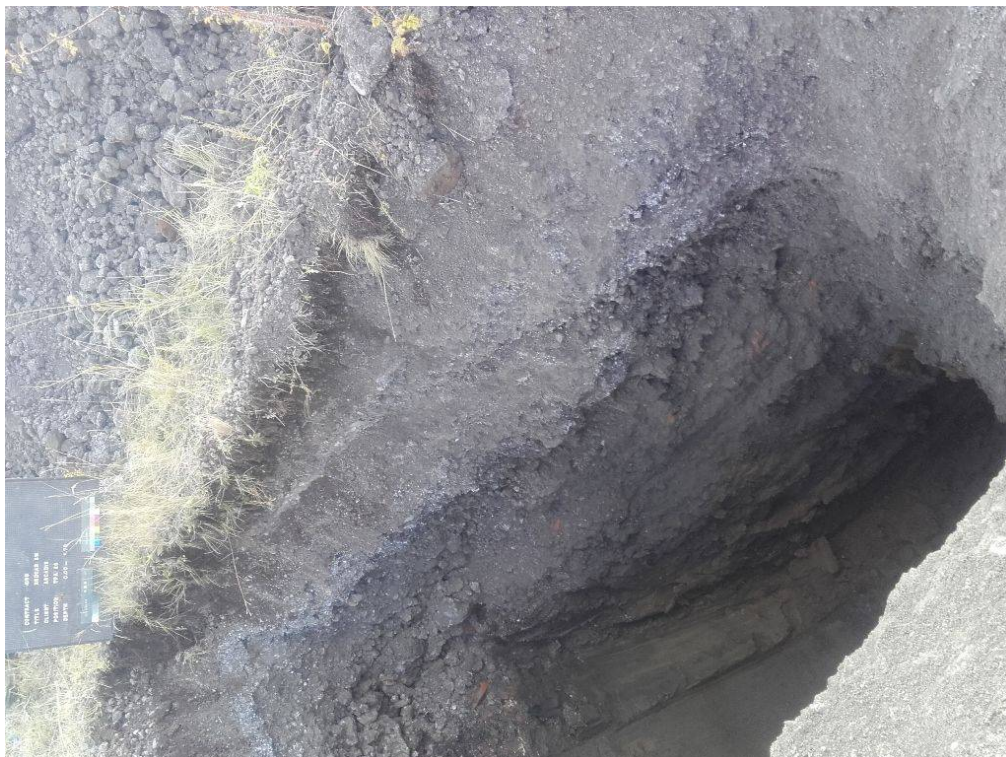


Figure S3-TPA26.2
S3-TPA26.



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TRIAL PIT RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPA26	
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:454818.920 N:521028.738		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 10.872	Start Date: 18/10/2017	Sheet: 3 of 4



Figure S3-TPA26.3
S3-TPA26 (2).

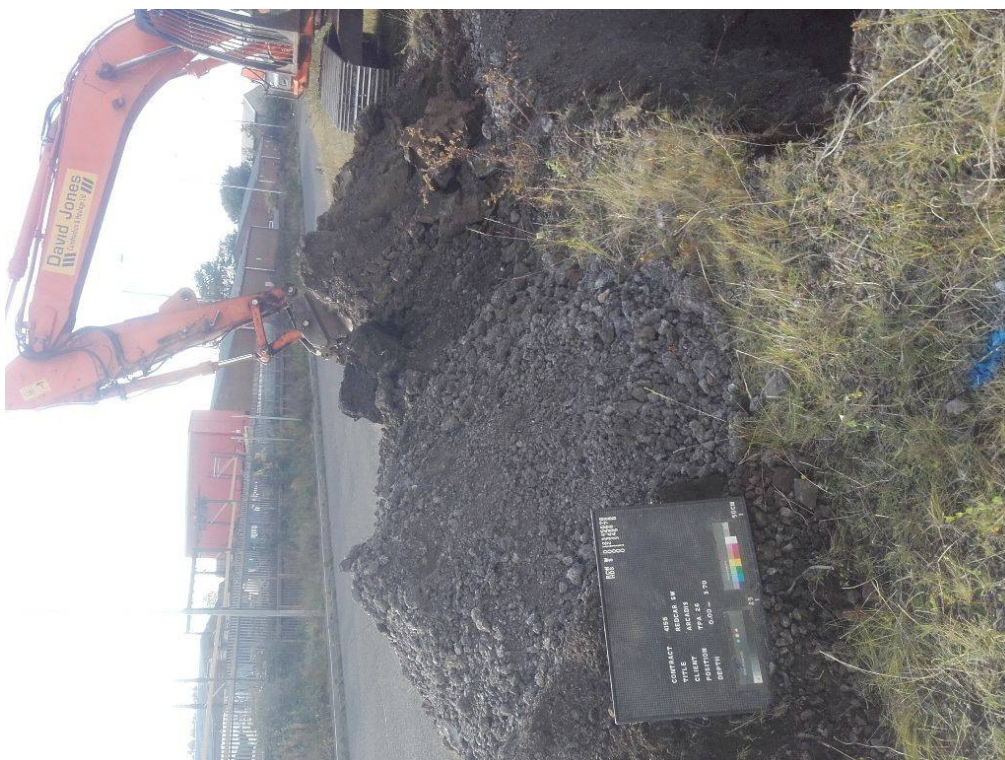


Figure S3-TPA26.4
S3-TPA26 Spoil.



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Tel: 01772 735 300 **Fax:** 01772 735 999

TRIAL PIT RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPA26	
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:454818.920 N:521028.738		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 10.872	Start Date: 18/10/2017	Sheet: 4 of 4



Figure S3-TPA26.5
S3-TPA26 Reinstatement.



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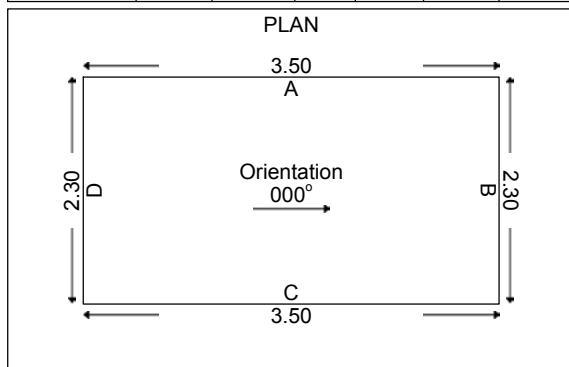
TRIAL PIT RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPA27	
Client: South Tees Site Company Ltd		Location: Redcar Steel Works E:454721.438 N:521154.107	
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)		Ground Level (m(AOD)): 10.160	Start Date: 10/10/2017
		Sheet: 1 of 4	

SAMPLES & TESTS			Water	STRATA			
Depth	Type No	Test Result		Reduced Level	Legend	Depth (Thickness)	DESCRIPTION
0.30	J1			9.910	(0.25)	0.25	MADE GROUND (Dark brown slightly clayey slightly gravelly to gravelly sand with low cobble and boulder content. Sand includes ash. Gravel is fine to coarse angular to subangular and includes clinker, slag and brick. Cobbles and boulders are angular and include slag).
0.50	ES2				(0.75)		
0.70	LB3			9.160		1.00	MADE GROUND (Grey and light grey cobbles and boulders with some sandy gravel and fragments of wood. Sand includes ash. Gravel is fine to coarse angular to subangular and includes slag and ironstone. Cobbles and boulders are angular and include slag).
1.00	PID J4	<0.1ppm			(0.60)		at c.0.25-1.00m BGL ... solid layer of slag with fragments of iron.
1.00	ES5						
1.20							
1.50	PID B6	<0.1ppm		8.560		1.60	Stiff occasionally laminated brown with orange and grey mottling slightly sandy slightly gravelly CLAY with some rootlets and pockets of organic clay and light brown sand. Sand is fine to medium. Gravel is fine and includes sandstone, mudstone and coal.
1.50							at c.1.50m BGL ... clay is of intermediate plasticity.
							Trial pit complete at 1.60m BGL.



GROUNDWATER No groundwater inflow observed.
STABILITY Pit sides slightly unstable throughout excavation.
GENERAL REMARKS

ADDITIONAL INFORMATION			UNDERGROUND SERVICES				
Sketch Diagram:	No Sketch Taken		Depth	Orientation	Type	Diameter (mm)	Condition
Photographs:	Yes	See additional sheets.					

All dimensions in metres Scale 1:50	For explanation of symbols and abbreviations see Key Sheets	Checked by: <i>K.W.</i>	Logged by: S. Duncan	Contract No. 4155
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TRIAL PIT RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPA27
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:454721.438 N:521154.107	
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 10.160	Start Date: 10/10/2017
		Sheet: 2 of 4



Figure S3-TPA27.1
S3-TPA27 Before Investigation work.



Figure S3-TPA27.2
S3-TPA27.



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TRIAL PIT RECORD

Status:-

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Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No.	
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:454721.438 N:521154.107		S3-TPA27
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 10.160	Start Date: 10/10/2017	Sheet: 3 of 4



Figure S3-TPA27.3
S3-TPA27 (2).



Figure S3-TPA27.4
S3-TPA27 Spoil.



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TRIAL PIT RECORD

Status:-

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Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3			Exploratory Hole No. S3-TPA27
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:454721.438 N:521154.107		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 10.160	Start Date: 10/10/2017	Sheet: 4 of 4



Figure S3-TPA27.5
S3-TPA27 Reinstatement.



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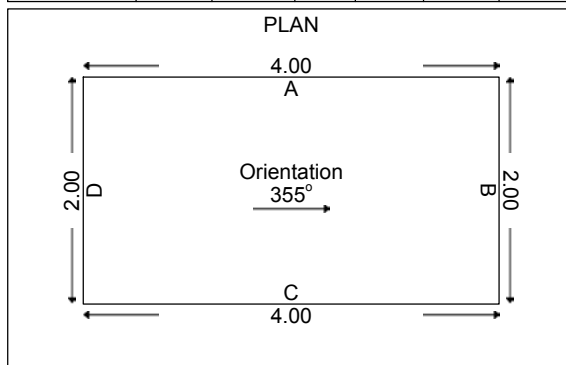
TRIAL PIT RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3			Exploratory Hole No. S3-TPA28	
Client: South Tees Site Company Ltd		Location: Redcar Steel Works E:454792.855 N:521056.610		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)		Ground Level (m(AOD)): 9.684	Start Date: 19/10/2017	Sheet: 1 of 4

SAMPLES & TESTS			Water	STRATA			
Depth	Type No	Test Result		Reduced Level	Legend	Depth (Thickness)	DESCRIPTION
0.10 0.20 0.30 0.30	J1 ES2 PID B3	0.2ppm		9.284		(0.40) 0.40	MADE GROUND (Brown and red brown slightly clayey gravelly sand with low cobble content. Gravel is fine to coarse angular to subangular and includes brick, clinker, concrete and slag. Cobbles are angular and include brick). between 0.00-4.00m BGL ... concrete foundation on north face.
0.80 1.00	J4 ES5					(1.10)	MADE GROUND (Red brown slightly clayey sandy gravelly cobbles with some metal bars. Gravel is fine to coarse angular to subangular and includes brick and concrete. Cobbles are angular and include brick and concrete).
1.40 1.40	PID B6	2.4ppm		8.184		1.50	MADE GROUND (Red brown clayey gravelly sand intermixed with dark brown sandy gravelly clay. Gravel is fine to coarse angular to subangular and includes brick and concrete).
1.80 2.00	J7 ES8					(1.30)	
2.50 2.50	PID B9	3.9ppm		6.884		2.80	MADE GROUND (Soft dark brown and red brown slightly sandy slightly gravelly clay. Gravel is fine to coarse angular to subangular and includes brick and concrete).
3.00	J10					(1.20)	
3.50	ES11		↓	5.684		4.00	Trial pit complete at 4.00m BGL.
4.00 4.00	B12 PID	0.1ppm					



GROUNDWATER
Water strike at 3.70m BGL - moderate inflow.

STABILITY
Pit sides unstable throughout excavation.

GENERAL REMARKS

ADDITIONAL INFORMATION		
Sketch Diagram:	No Sketch Taken	
Photographs:	Yes	See additional sheets.

UNDERGROUND SERVICES				
Depth	Orientation	Type	Diameter (mm)	Condition

All dimensions in metres
Scale 1:50

For explanation of symbols and
abbreviations see Key Sheets

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Logged by:
S. Duncan

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TRIAL PIT RECORD

Status:-

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Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPA28	
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:454792.855 N:521056.610		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 9.684	Start Date: 19/10/2017	Sheet: 2 of 4



Figure S3-TPA28.1
S3-TPA28 Before Investigation work.



Figure S3-TPA28.2
S3-TPA28.



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TRIAL PIT RECORD

Status:-

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Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPA28	
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:454792.855 N:521056.610		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 9.684	Start Date: 19/10/2017	Sheet: 3 of 4



Figure S3-TPA28.3
S3-TPA28 (2).

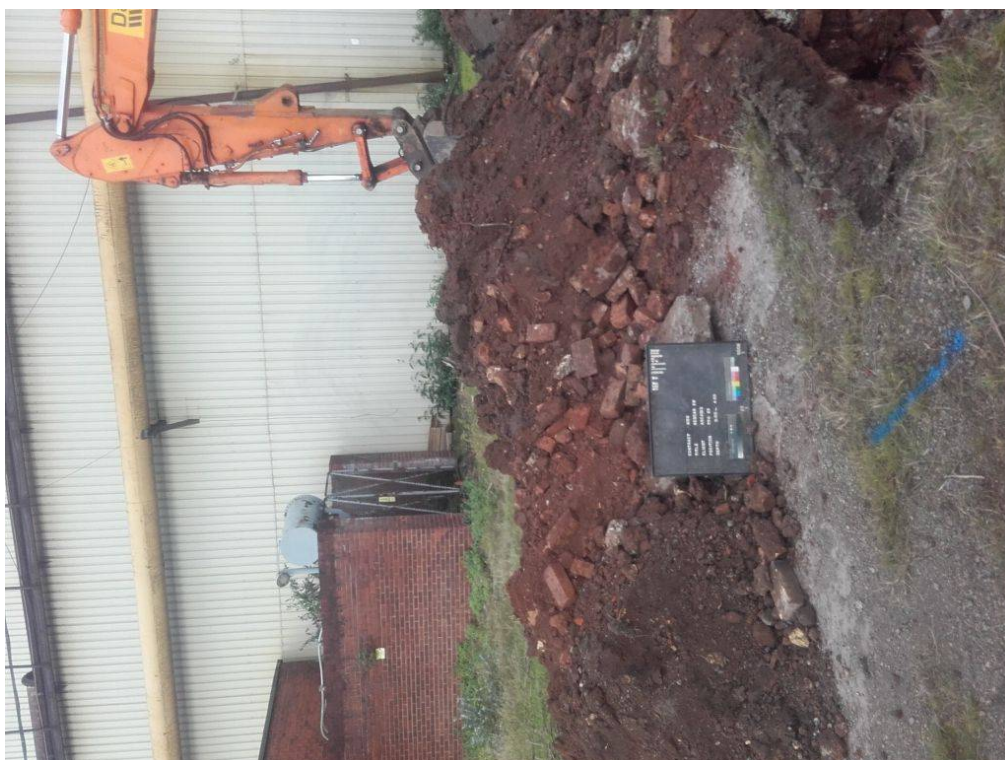


Figure S3-TPA28.4
S3-TPA28 Spoil.



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TRIAL PIT RECORD

Status:-

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Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPA28	
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:454792.855 N:521056.610		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 9.684	Start Date: 19/10/2017	Sheet: 4 of 4



Figure S3-TPA28.5
S3-TPA28 Reinstatement.



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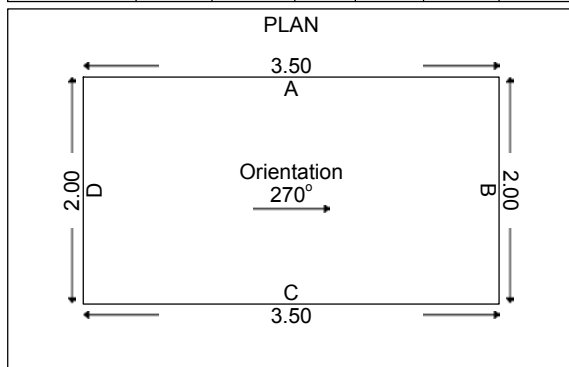
TRIAL PIT RECORD

Status:-

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Project:	The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3			Exploratory Hole No.
Client:	South Tees Site Company Ltd	Location:	Redcar Steel Works E:454696.301 N:521164.704	
Method (Equipment):	Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)):	9.673	Start Date: 13/10/2017
				Sheet: 1 of 4

SAMPLES & TESTS			Water	STRATA			
Depth	Type No	Test Result		Reduced Level	Legend	Depth (Thickness)	DESCRIPTION
0.20	J1	2.9ppm		8.873		(0.80)	MADE GROUND (Dark brown clayey gravelly sand with fragments of metal and iron. Sand includes ash. Gravel is fine to coarse angular to subangular and includes slag. Engineer notes bitumen odour).
0.50	ES2					0.80	
0.70	B3					0.80	
0.70	PID	2.4ppm		8.073		(0.80)	MADE GROUND (Soft to firm brown slightly sandy to sandy slightly gravelly clay. Gravel is fine to coarse subrounded to rounded and includes sandstone and mudstone).
1.20	J4					1.60	at c.0.80-1.60m BGL ... Engineer notes concrete with metal bar at base on west side of pit.
1.50	ES5					1.60	
2.20	B6	2.4ppm		6.073		(2.00)	Firm brown with grey and orange mottling slightly sandy to sandy slightly gravelly CLAY with pockets of light brown sand and some rootlets. Sand is fine. Gravel is fine to coarse subrounded to rounded and includes sandstone and mudstone.
2.20						3.60	at c.2.20m BGL ... clay is of intermediate plasticity.
2.80	J7	1.8ppm		6.073		3.60	
3.20	B8					3.60	
3.20	PID						Trial pit complete at 3.60m BGL.



GROUNDWATER Seepage at 0.60m BGL - slight inflow.
STABILITY Pit sides stable throughout excavation.
GENERAL REMARKS

ADDITIONAL INFORMATION			UNDERGROUND SERVICES				
Sketch Diagram:	No Sketch Taken		Depth	Orientation	Type	Diameter (mm)	Condition
Photographs:	Yes	See additional sheets.					

All dimensions in metres Scale 1:50	For explanation of symbols and abbreviations see Key Sheets	Checked by: <i>K.W.</i>	Logged by: S. Duncan	Contract No. 4155
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TRIAL PIT RECORD

Status:-

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Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPA29	
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:454696.301 N:521164.704		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 9.673	Start Date: 13/10/2017	Sheet: 2 of 4



Figure S3-TPA29.1
S3-TPA29 Before investigation works.



Figure S3-TPA29.2
S3-TPA29.



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TRIAL PIT RECORD

Status:-

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Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPA29
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:454696.301 N:521164.704	
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 9.673	Start Date: 13/10/2017
		Sheet: 3 of 4



Figure S3-TPA29.3
S3-TPA29 (2).



Figure S3-TPA29.4
S3-TPA29 Spoil.



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TRIAL PIT RECORD

Status:-

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Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPA29	
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:454696.301 N:521164.704		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 9.673	Start Date: 13/10/2017	Sheet: 4 of 4



Figure S3-TPA29.5
S3-TPA29 Reinstatement.



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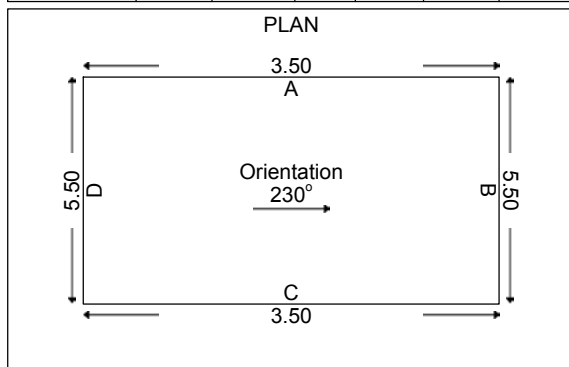
TRIAL PIT RECORD

Status:-

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Project:	The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3			Exploratory Hole No.
Client:	South Tees Site Company Ltd	Location:	Redcar Steel Works E:454702.110 N:521140.306	
Method (Equipment):	Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)):	10.480	Start Date: 10/10/2017
				Sheet: 1 of 3

SAMPLES & TESTS			Water	STRATA			
Depth	Type No	Test Result		Reduced Level	Legend	Depth (Thickness)	DESCRIPTION
0.20	J1	2.3ppm		10.080		(0.40) 0.40	MADE GROUND (Dark brown slightly clayey slightly gravelly to gravelly sand with low cobble and boulder content. Sand includes ash. Gravel is fine to coarse angular to subangular and includes clinker, slag and brick. Cobbles and boulders are angular and includes slag and clinker).
0.40	ES2						
0.50	J3						
1.00	ES4	<0.1ppm				(1.10)	MADE GROUND (Grey and light grey clayey very sandy gravel with high cobble and boulder content. Sand includes ash. Gravel is fine to coarse angular to subangular and includes slag and ironstone. Cobbles and boulders are angular and include slag).
1.20	PID B5			8.980		1.50	at c.0.40-1.50m BGL ... solid layer of slag and fragments of iron.
1.20							
1.60	J6	<0.1ppm				(0.70)	Stiff occasionally laminated brown with orange and grey mottling slightly sandy slightly gravelly CLAY. Gravel is fine and includes sandstone, mudstone and coal.
2.00	ES7			8.280		2.20	at c.2.20m BGL ... clay is of high plasticity.
2.20	PID B8						Trial pit complete at 2.20m BGL.
2.20							



GROUNDWATER
No groundwater inflow observed.

STABILITY
Pit sides stable throughout excavation.

GENERAL REMARKS

ADDITIONAL INFORMATION			UNDERGROUND SERVICES				
Sketch Diagram:	No Sketch Taken		Depth	Orientation	Type	Diameter (mm)	Condition
Photographs:	Yes	See additional sheets.					

All dimensions in metres
Scale 1:50

For explanation of symbols and
abbreviations see Key Sheets

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Logged by:
S. Duncan

Contract No.
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TRIAL PIT RECORD

Status:-

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Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPA30	
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:454702.110 N:521140.306		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 10.480	Start Date: 10/10/2017	Sheet: 2 of 3



Figure S3-TPA30.1
S3-TPA30.



Figure S3-TPA30.2
S3-TPA30 (2).



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TRIAL PIT RECORD

Status:-

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Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPA30	
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:454702.110 N:521140.306		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 10.480	Start Date: 10/10/2017	Sheet: 3 of 3



Figure S3-TPA30.3
S3-TPA30 Spoil.



Figure S3-TPA30.4
S3-TPA30 Reinstatement.



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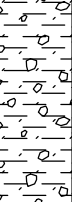
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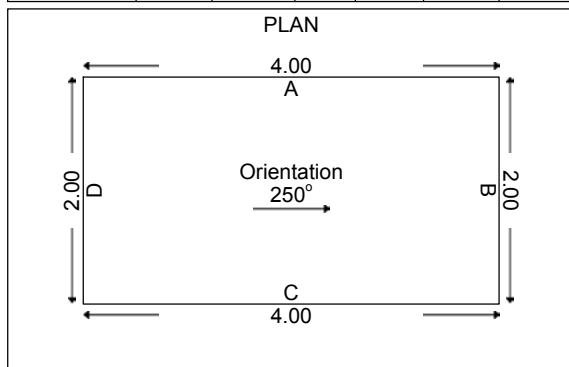
TRIAL PIT RECORD

Status:-

FINAL

Project:	The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3			Exploratory Hole No.
Client:	South Tees Site Company Ltd	Location:	Redcar Steel Works E:454769.439 N:521014.851	
Method (Equipment):	Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)):	11.087	Start Date: 19/10/2017
				Sheet: 1 of 4

SAMPLES & TESTS			Water	STRATA			
Depth	Type No	Test Result		Reduced Level	Legend	Depth (Thickness)	DESCRIPTION
0.10 0.20 0.40 0.40 0.60 0.80 1.00 1.00	J1 ES2 B3 PID J4 ES5 B6 PID	0.3ppm 1.5ppm		10.587 9.687		(0.50) 0.50 (0.90) 1.40	MADE GROUND (Dark brown clayey gravelly sand. Gravel is fine to coarse angular to subangular and includes slag and concrete). MADE GROUND (Dark brown grey clayey very sandy gravel with low cobble content. Sand includes ash. Gravel is fine to coarse angular to subangular and includes slag, brick, concrete and clinker. Cobbles are angular and include slag, brick and concrete).
1.50 2.00 2.50 2.50	J7 ES8 B9 PID	 0.8ppm		 8.287		(1.40) 2.80	Firm to stiff occasionally laminated brown with grey mottling slightly sandy to sandy slightly gravelly CLAY with pockets of light brown sand. Sand is fine. Gravel is fine to coarse subrounded to rounded and includes sandstone. at c.2.50m BGL ... clay is of high plasticity. Trial pit complete at 2.80m BGL.



GROUNDWATER
No groundwater inflow observed.

STABILITY
Pit sides stable throughout excavation.

GENERAL REMARKS

ADDITIONAL INFORMATION			UNDERGROUND SERVICES				
Sketch Diagram:	No Sketch Taken		Depth	Orientation	Type	Diameter (mm)	Condition
Photographs:	Yes	See additional sheets.					

All dimensions in metres
Scale 1:50

For explanation of symbols and
abbreviations see Key Sheets

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TRIAL PIT RECORD

Status:-

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Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPA31	
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:454769.439 N:521014.851		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 11.087	Start Date: 19/10/2017	Sheet: 2 of 4



Figure S3-TPA31.1
S3-TPA31 Before investigation work.



Figure S3-TPA31.2
S3-TPA31.



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TRIAL PIT RECORD

Status:-

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Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPA31	
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:454769.439 N:521014.851		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 11.087	Start Date: 19/10/2017	Sheet: 3 of 4



Figure S3-TPA31.3
S3-TPA31 (2).



Figure S3-TPA31.4
S3-TPA31 Spoil.



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TRIAL PIT RECORD

Status:-

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Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3			Exploratory Hole No. S3-TPA31
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:454769.439 N:521014.851		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 11.087	Start Date: 19/10/2017	Sheet: 4 of 4



Figure S3-TPA31.5
S3-TPA31 Reinstatement.



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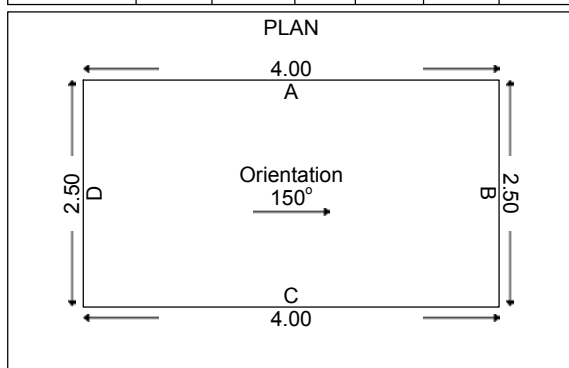
TRIAL PIT RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPA32	
Client: South Tees Site Company Ltd		Location: Redcar Steel Works E:454678.022 N:521137.956	
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)		Ground Level (m(AOD)): 10.244	Start Date: 13/10/2017
		Sheet: 1 of 4	

SAMPLES & TESTS			Water	STRATA			
Depth	Type No	Test Result		Reduced Level	Legend	Depth (Thickness)	DESCRIPTION
0.20	J1	12.0ppm		10.144		(0.10) 0.10	MADE GROUND (Macadam).
0.40	ES2			9.744		(0.40) 0.50	MADE GROUND (Dark grey brown slightly clayey sand and gravel. Sand includes ash. Gravel is fine to coarse angular to subangular and includes slag).
0.80	J3			9.544		(0.20) 0.70	MADE GROUND (Slag).
1.00	ES4			8.944		(0.60) 1.30	MADE GROUND (Dark grey sand and gravel with low cobble content and fragments of iron. Sand includes ash. Gravel is fine to coarse angular to subangular and includes slag and clinker. Cobbles are angular and include slag). (Engineer notes bitumen odour).
1.20	B5	11.8ppm				(1.90)	Soft to firm light brown with orange and grey mottling slightly sandy to sandy slightly gravelly CLAY. Gravel is fine subrounded to rounded and includes sandstone.
1.20	PID						at c.1.50m BGL ... fissured. Clay is of intermediate plasticity.
1.50	J6						
2.00	ES7						
2.80	B8	11.8ppm				3.20	Trial pit complete at 3.20m BGL.
2.80	PID						
				7.044			



GROUNDWATER Seepage at 1.20m BGL - slight inflow.
STABILITY Pit sides stable throughout excavation.
GENERAL REMARKS

ADDITIONAL INFORMATION			UNDERGROUND SERVICES				
Sketch Diagram:	No Sketch Taken		Depth	Orientation	Type	Diameter (mm)	Condition
Photographs:	Yes	See additional sheets.					

All dimensions in metres Scale 1:50	For explanation of symbols and abbreviations see Key Sheets	Checked by: <i>K.W.</i>	Logged by: S. Duncan	Contract No. 4155
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TRIAL PIT RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3			Exploratory Hole No. S3-TPA32
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:454678.022 N:521137.956		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 10.244	Start Date: 13/10/2017	Sheet: 2 of 4



Figure S3-TPA32.1
S3-TPA32 Before investigation works (NOT 31).



Figure S3-TPA32.2
S3-TPA32.



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TRIAL PIT RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPA32	
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:454678.022 N:521137.956		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 10.244	Start Date: 13/10/2017	Sheet: 3 of 4



Figure S3-TPA32.3
S3-TPA32 (2).

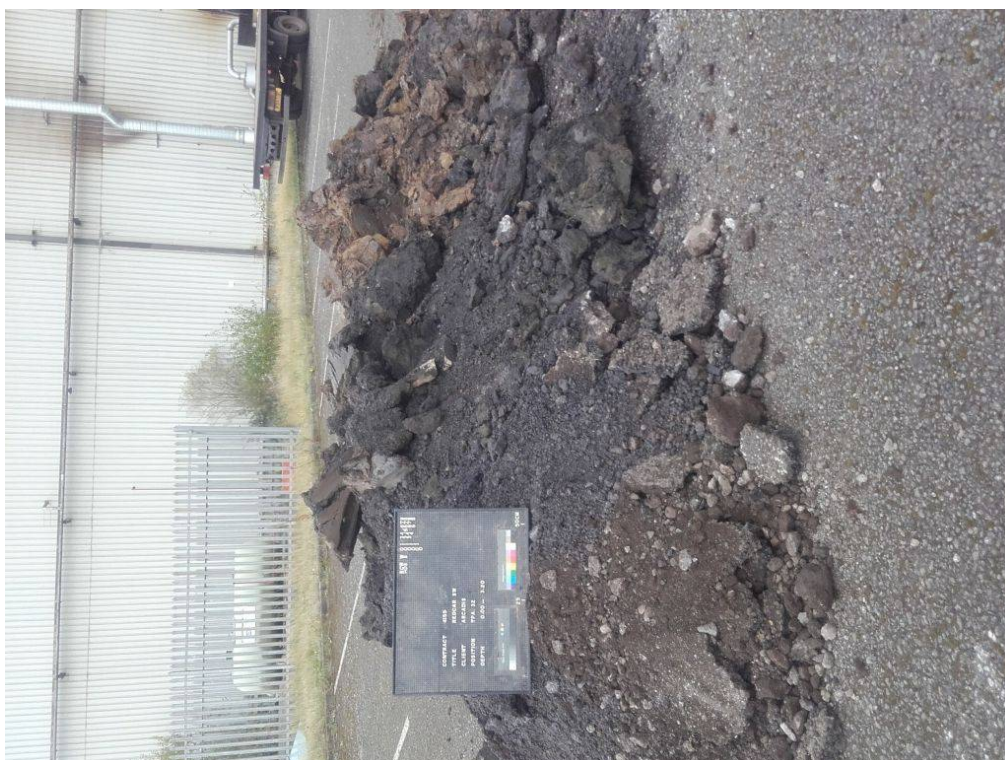


Figure S3-TPA32.4
S3-TPA32 Spoil.



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TRIAL PIT RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3			Exploratory Hole No. S3-TPA32
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:454678.022 N:521137.956		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 10.244	Start Date: 13/10/2017	Sheet: 4 of 4



Figure S3-TPA32.5
S3-TPA32 Reinstatement.



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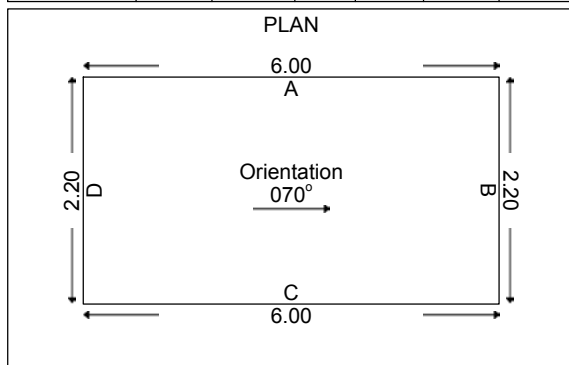
TRIAL PIT RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3			Exploratory Hole No. S3-TPA33
Client: South Tees Site Company Ltd		Location: Redcar Steel Works E:454665.123 N:521112.797	
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)		Ground Level (m(AOD)): 10.340	Start Date: 16/10/2017
			Sheet: 1 of 4

SAMPLES & TESTS			Water	STRATA			
Depth	Type No	Test Result		Reduced Level	Legend	Depth (Thickness)	DESCRIPTION
0.20	J1	6.7ppm		10.240		(0.10) 0.10	MADE GROUND (Macadam).
0.50	ES2					(0.70)	MADE GROUND (Dark grey clayey sandy gravel with medium cobble content and fragments of metal. Sand includes ash. Gravel is fine to coarse angular to subangular and includes slag).
0.70	B3			9.540		0.80	
0.70	PID						
1.00	J4	4.4ppm		9.140		(0.40)	MADE GROUND (Firm to soft brown black slightly sandy to sandy slightly gravelly clay with low cobble content. Gravel is fine to coarse subrounded to rounded and includes sandstone and mudstone. Cobbles are subrounded and include quartz).
1.20	ES5					1.20	at c.0.80-1.20m BGL ... engineer notes southwest side of pit comprised of concrete.
1.50	B6						Firm to stiff occasionally soft laminated brown slightly sandy slightly gravelly
1.50	PID						CLAY with pockets of sand. Sand is fine. Gravel is fine to coarse subrounded to rounded and includes sandstone and mudstone.
2.00	J7	<0.1ppm				(1.60)	at c.1.50m BGL ... clay is of high plasticity.
2.50	B8						
2.50	PID			7.540		2.80	Trial pit complete at 2.80m BGL.



GROUNDWATER
Groundwater seepage at 0.80m and water strike at 1.80m BGL (moderate inflow).

STABILITY
Pit sides stable throughout excavation.

GENERAL REMARKS

ADDITIONAL INFORMATION		
Sketch Diagram:	No Sketch Taken	
Photographs:	Yes	See additional sheets.

UNDERGROUND SERVICES				
Depth	Orientation	Type	Diameter (mm)	Condition

All dimensions in metres Scale 1:50	For explanation of symbols and abbreviations see Key Sheets	Checked by: <i>K.W.</i>	Logged by: S. Duncan	Contract No. 4155
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TRIAL PIT RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPA33	
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:454665.123 N:521112.797		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 10.340	Start Date: 16/10/2017	Sheet: 2 of 4



Figure S3-TPA33.1
S3-TPA33 Before investigation work.



Figure S3-TPA33.2
S3-TPA33.



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Status:-

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Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPA33
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:454665.123 N:521112.797	
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 10.340	Start Date: 16/10/2017
		Sheet: 3 of 4



Figure S3-TPA33.3
S3-TPA33 (2).



Figure S3-TPA33.4
S3-TPA33 (3).



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TRIAL PIT RECORD

Status:-

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Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3			Exploratory Hole No. S3-TPA33
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:454665.123 N:521112.797		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 10.340	Start Date: 16/10/2017	Sheet: 4 of 4



Figure S3-TPA33.5
S3-TPA33 Spoil.

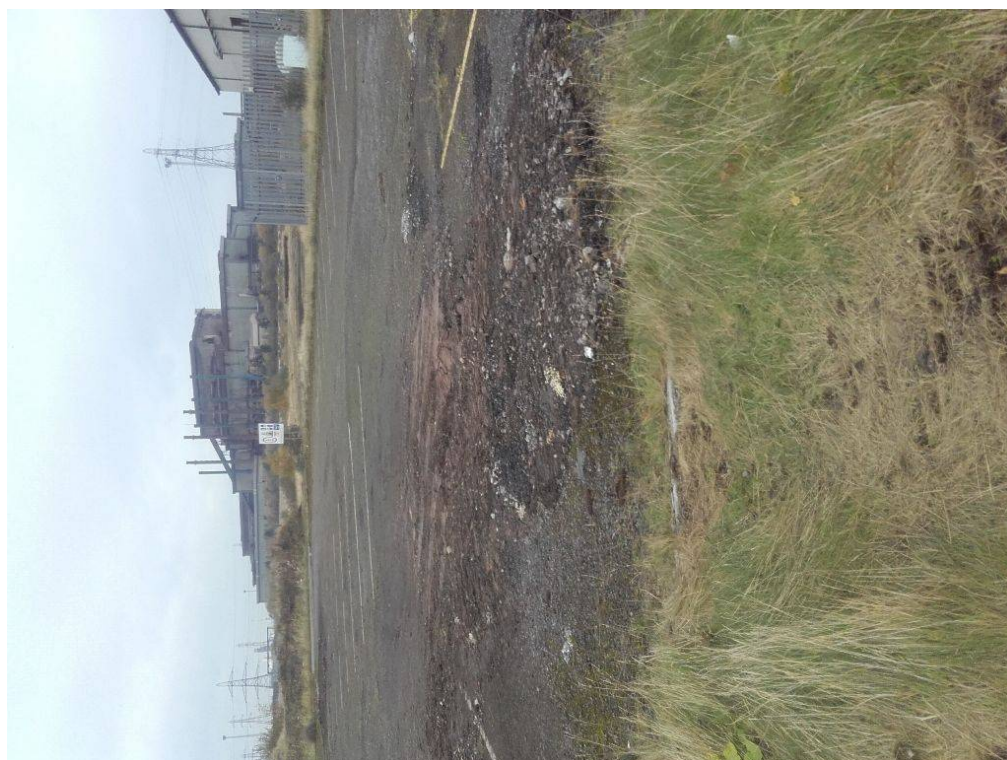


Figure S3-TPA33.6
S3-TPA33 Reinstatement.



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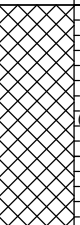
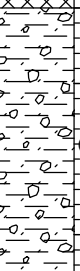
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Tel: 01772 735 300 Fax: 01772 735 999

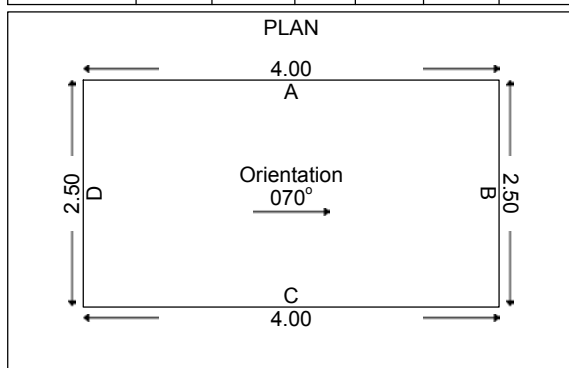
TRIAL PIT RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3			Exploratory Hole No. S3-TPA34
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:454734.323 N:521006.649		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)		Ground Level (m(AOD)): 10.794	Start Date: 17/10/2017
			Sheet: 1 of 4

SAMPLES & TESTS			Water	STRATA				
Depth	Type No	Test Result		Reduced Level	Legend	Depth (Thickness)	DESCRIPTION	
0.50	J1	5.6ppm		9.294		(1.50)	MADE GROUND (Brown clayey very sandy gravel with medium cobble content. Gravel is fine to coarse angular to subrounded and includes brick, slag, roadstone and clinker. Cobbles are subangular and include slag and clinker).	
0.80	ES2							
1.20	B3					1.50		
1.20	PID	3.4ppm			7.494	3.30	Firm to stiff brown with some grey mottling slightly sandy to sandy slightly gravelly CLAY with pockets of light brown sand. Sand is fine. Gravel is fine to coarse subrounded to rounded and includes sandstone. at c.2.00m BGL ... clay is of intermediate plasticity.	
1.50	ES4							
1.70	J5							(1.80)
2.00	B6							
2.00	PID							
2.50	J7							
3.00	B8	<0.1ppm		7.494	3.30	Trial pit complete at 3.30m BGL.		
3.00	PID							



GROUNDWATER
No groundwater inflow observed.

STABILITY
Pit sides stable throughout excavation.

GENERAL REMARKS

ADDITIONAL INFORMATION		
Sketch Diagram:	No Sketch Taken	
Photographs:	Yes	See additional sheets.

UNDERGROUND SERVICES				
Depth	Orientation	Type	Diameter (mm)	Condition

All dimensions in metres
Scale 1:50

For explanation of symbols and
abbreviations see Key Sheets

Checked by:
K.W.

Logged by:
S. Duncan

Contract No.
4155



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TRIAL PIT RECORD

Status:-

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Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPA34	
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:454734.323 N:521006.649		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 10.794	Start Date: 17/10/2017	Sheet: 2 of 4



Figure S3-TPA34.1
S3-TPA34 Before investigation work.



Figure S3-TPA34.2
S3-TPA34.



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TRIAL PIT RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPA34	
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:454734.323 N:521006.649		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 10.794	Start Date: 17/10/2017	Sheet: 3 of 4

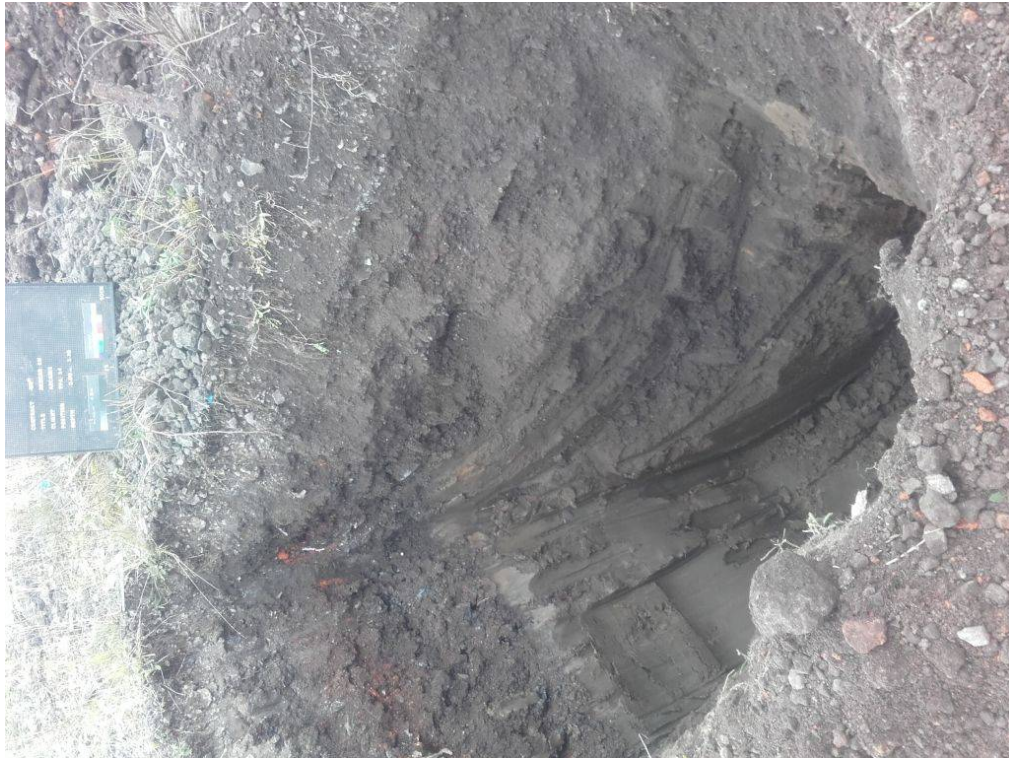


Figure S3-TPA34.3
S3-TPA34 (2).



Figure S3-TPA34.4
S3-TPA34 Spoil.



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TRIAL PIT RECORD

Status:-

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Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3			Exploratory Hole No. S3-TPA34
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:454734.323 N:521006.649		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 10.794	Start Date: 17/10/2017	Sheet: 4 of 4



Figure S3-TPA34.5
S3-TPA34 Reinstatmt.



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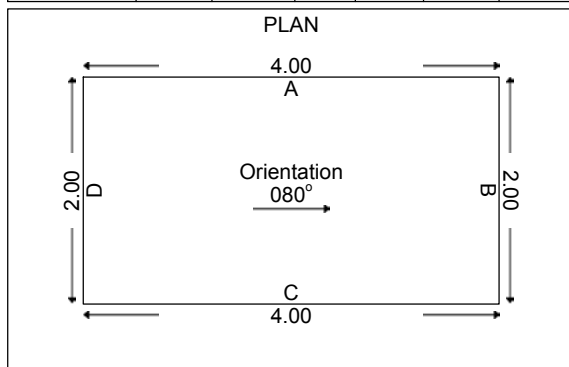
TRIAL PIT RECORD

Status:-

FINAL

Project:	The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3			Exploratory Hole No.
Client:	South Tees Site Company Ltd	Location:	Redcar Steel Works E:454640.949 N:521074.565	
Method (Equipment):	Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)):	10.428	Start Date: 16/10/2017
				Sheet: 1 of 4

SAMPLES & TESTS			Water	STRATA			
Depth	Type No	Test Result		Reduced Level	Legend	Depth (Thickness)	DESCRIPTION
0.20	J1					(0.70)	MADE GROUND (Dark grey sand and gravel with fragments of metal. Sand includes ash. Gravel is fine to coarse angular to subangular and includes slag).
0.40	ES2					0.70	
0.60	HSV	95		9.728			Firm to stiff (occasionally soft) laminated brown with grey and orange mottling slightly sandy slightly gravelly CLAY with pockets of sand. Sand is fine. Gravel is fine to coarse subrounded to rounded and includes sandstone and mudstone.
0.60	B3	(26)kPa					
0.60	PID	3.8ppm					at c.1.50m BGL ... clay is of intermediate plasticity.
0.80	J4						
1.20	ES5						
1.50	B6	3.2ppm				(1.90)	
1.50	PID						
2.00	J7						
2.50	B8	0.2ppm		7.828		2.60	Trial pit complete at 2.60m BGL.
2.50	PID						



GROUNDWATER
No groundwater inflow observed.

STABILITY
Pit sides slightly stable throughout excavation.

GENERAL REMARKS

ADDITIONAL INFORMATION			UNDERGROUND SERVICES				
Sketch Diagram:	No Sketch Taken		Depth	Orientation	Type	Diameter (mm)	Condition
Photographs:	Yes	See additional sheets.					

All dimensions in metres
Scale 1:50

For explanation of symbols and
abbreviations see Key Sheets

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Logged by:
S. Duncan

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TRIAL PIT RECORD

Status:-

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Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPA35	
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:454640.949 N:521074.565		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 10.428	Start Date: 16/10/2017	Sheet: 2 of 4



Figure S3-TPA35.1
S3-TPA35 Before investigation work.



Figure S3-TPA35.2
S3-TPA35.



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TRIAL PIT RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3			Exploratory Hole No. S3-TPA35
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:454640.949 N:521074.565		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 10.428	Start Date: 16/10/2017	Sheet: 3 of 4



Figure S3-TPA35.3
S3-TPA35 (2).



Figure S3-TPA35.4
S3-TPA35 Spoil.



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TRIAL PIT RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3			Exploratory Hole No. S3-TPA35
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:454640.949 N:521074.565		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 10.428	Start Date: 16/10/2017	Sheet: 4 of 4



Figure S3-TPA35.5
S3-TPA35 Reinstatement.



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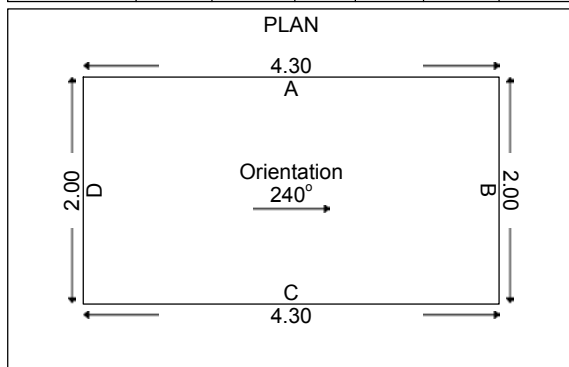
TRIAL PIT RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPA36	
Client: South Tees Site Company Ltd		Location: Redcar Steel Works E:454712.457 N:521006.738	
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)		Ground Level (m(AOD)): 9.771	Start Date: 17/10/2017
		Sheet: 1 of 4	

SAMPLES & TESTS			Water	STRATA			
Depth	Type No	Test Result		Reduced Level	Legend	Depth (Thickness)	DESCRIPTION
0.20	J1					(1.00)	MADE GROUND (Brown clayey sandy gravel with medium cobble and boulder content. Gravel is fine to coarse angular to subrounded and includes slag, brick, roadstone and clinker. Cobbles and boulders (up to c.2.00m diameter) are subangular and include blue green slag).
0.50	ES2	4.0ppm					
0.60	B3	2.6ppm		8.771		1.00	
0.60	PID						
0.80	LB4						
0.80	PID						Firm brown with some grey mottling slightly sandy to sandy slightly gravelly CLAY with pockets of light brown sand. Sand is fine. Gravel is fine to coarse subrounded to rounded and includes sandstone.
1.20	J5	3.1ppm				(1.60)	
1.20	PID						
1.50	ES6						
2.00	B7						
2.20	J8						at c.2.00m BGL ... clay is of intermediate plasticity.
2.50	B9	<0.1ppm		7.171		2.60	Trial pit complete at 2.60m BGL.
2.50	PID						



GROUNDWATER
No groundwater inflow observed.

STABILITY
Pit sides moderately unstable throughout excavation.

GENERAL REMARKS

ADDITIONAL INFORMATION			UNDERGROUND SERVICES				
Sketch Diagram:	No Sketch Taken		Depth	Orientation	Type	Diameter (mm)	Condition
Photographs:	Yes	See additional sheets.					

All dimensions in metres
Scale 1:50

For explanation of symbols and
abbreviations see Key Sheets

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Contract No.
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TRIAL PIT RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPA36	
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:454712.457 N:521006.738		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 9.771	Start Date: 17/10/2017	Sheet: 2 of 4



Figure S3-TPA36.1
S3-TPA36 Before investigation work.



Figure S3-TPA36.2
S3-TPA36.



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TRIAL PIT RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPA36
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:454712.457 N:521006.738	
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 9.771	Start Date: 17/10/2017
		Sheet: 3 of 4



Figure S3-TPA36.3
S3-TPA36 (1).



Figure S3-TPA36.4
S3-TPA36 Spoil.



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Tel: 01772 735 300 Fax: 01772 735 999

TRIAL PIT RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPA36	
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:454712.457 N:521006.738		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 9.771	Start Date: 17/10/2017	Sheet: 4 of 4



Figure S3-TPA36.5
S3-TPA36 Reinstatement.



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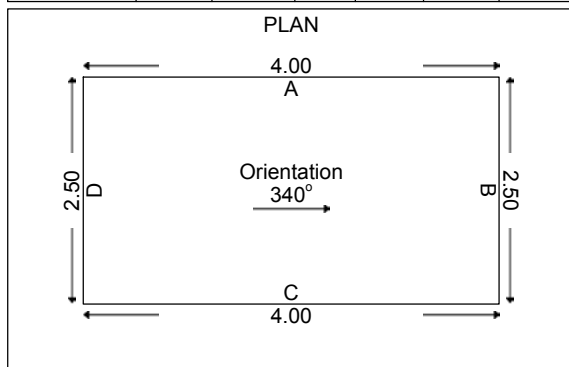
TRIAL PIT RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPA37	
Client: South Tees Site Company Ltd		Location: Redcar Steel Works E:454723.926 N:520969.450	
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)		Ground Level (m(AOD)): 10.851	Start Date: 17/10/2017 Sheet: 1 of 4

SAMPLES & TESTS			Water	STRATA			
Depth	Type No	Test Result		Reduced Level	Legend	Depth (Thickness)	DESCRIPTION
0.50 0.50 0.70 0.95	LB1 PID ES2 J3	1.7ppm				(0.90) 0.90 (0.10) 1.00 (0.05) 1.05	MADE GROUND (Grey sandy gravel with high cobble content and fragments of metal and wood. Gravel is fine to coarse angular to subangular and includes slag, clinker and roadstone). at c.0.90m BGL ... geotextile layer. MADE GROUND (Yellow sand. Sand is fine). Firm to stiff brown with grey mottling slightly sandy CLAY. Gravel is fine to coarse subrounded to rounded and includes sandstone. Trial pit terminated at 1.05m BGL - due to anticipating encountering service. (see S3-TPA41).



GROUNDWATER
No groundwater inflow observed.

STABILITY
Pit sides stable throughout excavation.

GENERAL REMARKS

ADDITIONAL INFORMATION		
Sketch Diagram:	No Sketch Taken	
Photographs:	Yes	See additional sheets.

UNDERGROUND SERVICES				
Depth	Orientation	Type	Diameter (mm)	Condition

All dimensions in metres Scale 1:50	For explanation of symbols and abbreviations see Key Sheets	Checked by: <i>K.W.</i>	Logged by: S. Duncan	Contract No. 4155
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Tel: 01772 735 300 Fax: 01772 735 999

TRIAL PIT RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPA37	
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:454723.926 N:520969.450		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 10.851	Start Date: 17/10/2017	Sheet: 2 of 4



Figure S3-TPA37.1
S3-TPA37 Before investigation work.



Figure S3-TPA37.2
S3-TPA37.



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TRIAL PIT RECORD

Status:-

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Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPA37	
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:454723.926 N:520969.450		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 10.851	Start Date: 17/10/2017	Sheet: 3 of 4



Figure S3-TPA37.3
S3-TPA37 (2).



Figure S3-TPA37.4
S3-TPA37 Spoil.



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TRIAL PIT RECORD

Status:-

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Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3			Exploratory Hole No. S3-TPA37
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:454723.926 N:520969.450		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 10.851	Start Date: 17/10/2017	Sheet: 4 of 4



Figure S3-TPA37.5
S3-TPA37 Reinstatement.



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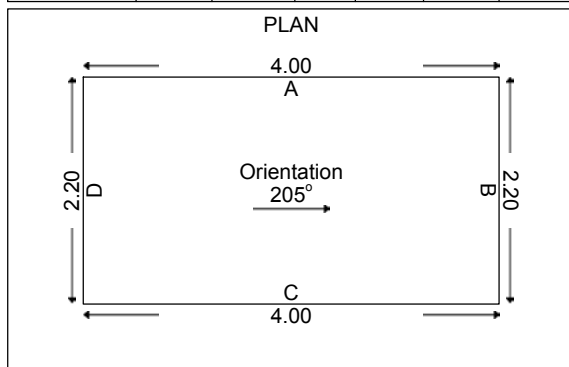
TRIAL PIT RECORD

Status:-

FINAL

Project:	The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3			Exploratory Hole No.
Client:	South Tees Site Company Ltd	Location:	Redcar Steel Works E:454652.020 N:521043.313	
Method (Equipment):	Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)):	10.299	Start Date: 16/10/2017
			Sheet:	1 of 4

SAMPLES & TESTS			Water	STRATA			
Depth	Type No	Test Result		Reduced Level	Legend	Depth (Thickness)	DESCRIPTION
0.20	J1			10.199		(0.10) 0.10	MADE GROUND (Macadam).
0.50	ES2					(0.70)	MADE GROUND (Dark grey clayey sand and gravel with fragments of metal. Sand includes ash. Gravel is fine to coarse angular to subangular and includes slag).
0.70	B3	7.0ppm		9.499		0.80	
0.70	PID	80					
0.80	HSV	(23)kPa					Firm to stiff occasionally soft laminated brown with orange and grey mottling slightly sandy slightly gravelly CLAY with pockets of sand. Sand is fine. Gravel is fine to coarse subrounded to rounded and includes sandstone and mudstone.
0.80	J4					(1.30)	
1.20	ES5						
1.50	B6	0.5ppm					at c.1.50m BGL ... clay is of intermediate plasticity.
1.50	PID						
2.00	J7			8.199		2.10	Trial pit complete at 2.10m BGL.



GROUNDWATER No groundwater inflow observed.
STABILITY Pit sides stable throughout excavation.
GENERAL REMARKS

ADDITIONAL INFORMATION			UNDERGROUND SERVICES				
Sketch Diagram:	No Sketch Taken		Depth	Orientation	Type	Diameter (mm)	Condition
Photographs:	Yes	See additional sheets.					

All dimensions in metres Scale 1:50	For explanation of symbols and abbreviations see Key Sheets	Checked by: <i>K.W.</i>	Logged by: S. Duncan	Contract No. 4155
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TRIAL PIT RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPA38	
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:454652.020 N:521043.313		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 10.299	Start Date: 16/10/2017	Sheet: 2 of 4



Figure S3-TPA38.1
S3-TPA38 Before investigation work.



Figure S3-TPA38.2
S3-TPA38.



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TRIAL PIT RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPA38
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:454652.020 N:521043.313	
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 10.299	Start Date: 16/10/2017
		Sheet: 3 of 4



Figure S3-TPA38.3
S3-TPA38 (2).

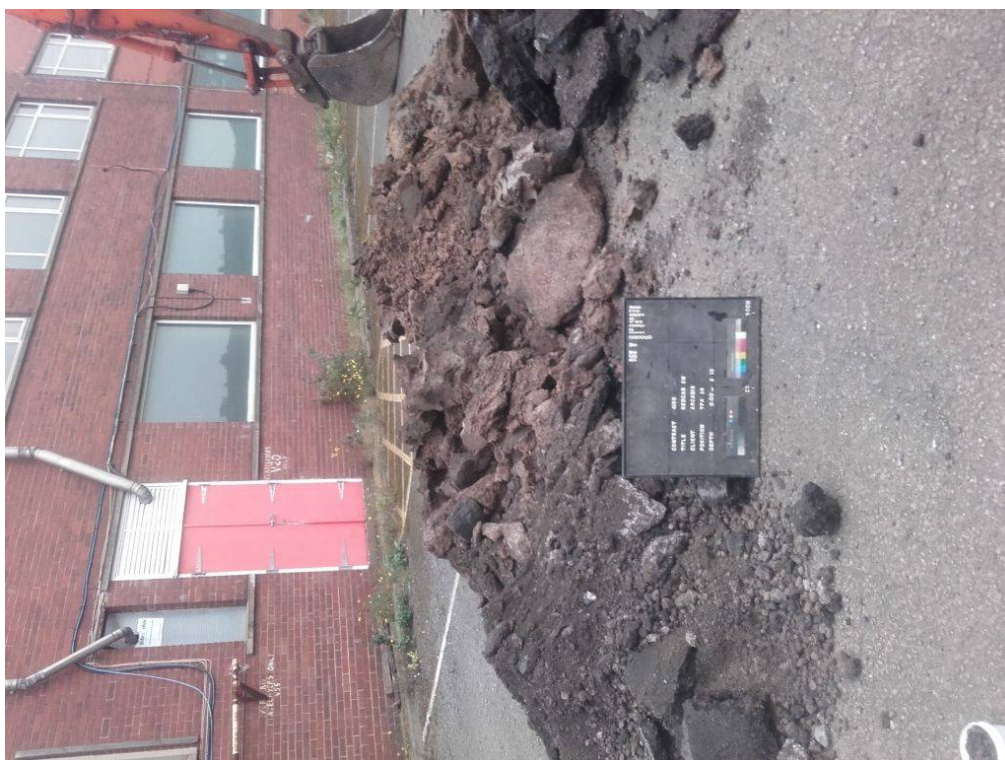


Figure S3-TPA38.4
S3-TPA38 Spoil.



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TRIAL PIT RECORD

Status:-

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Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3			Exploratory Hole No. S3-TPA38
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:454652.020 N:521043.313		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 10.299	Start Date: 16/10/2017	Sheet: 4 of 4



Figure S3-TPA38.5
S3-TPA38 Reinstatement.



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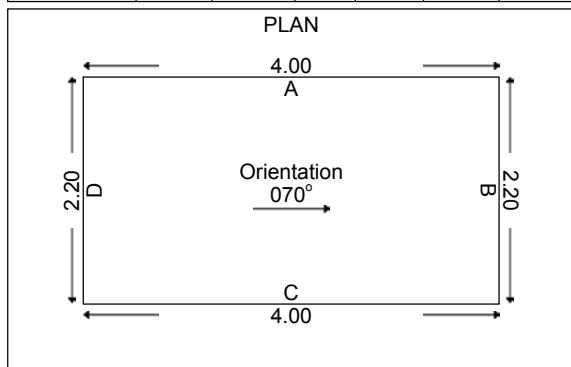
TRIAL PIT RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3			Exploratory Hole No. S3-TPA39
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:454716.372 N:520975.734		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 10.876	Start Date: 17/10/2017	Sheet: 1 of 4

SAMPLES & TESTS			Water	STRATA			
Depth	Type No	Test Result		Reduced Level	Legend	Depth (Thickness)	DESCRIPTION
0.10	J1					(0.50)	MADE GROUND (Brown slightly clayey gravelly sand with low cobble content. Gravel is fine to coarse angular to subrounded and includes slag, roadstone and clinker. Cobbles are subangular and include slag and clinker).
0.30	ES2			10.376		0.50	
0.40	B3	2.7ppm				(0.50)	MADE GROUND (Stiff to firm brown with some grey mottling slightly sandy slightly gravelly clay. Gravel is fine to coarse subrounded to rounded and includes brick, slag, burnt shale and roadstone).
0.40	PID						
0.70	J4					1.00	Stiff to firm brown with some grey mottling slightly sandy to sandy slightly gravelly CLAY with pockets of light brown sand. Sand is fine. Gravel is fine to coarse subrounded to rounded and includes sandstone.
0.80	HSV	110 (59)kPa		9.876			
0.80	ES5						at c.2.00m BGL ... clay is of intermediate plasticity.
0.90	B6	3.3ppm					
0.90	PID						Trial pit complete at 2.40m BGL.
1.50	J7					(1.40)	
2.00	B8	0.2ppm					
2.00	PID			8.476		2.40	



GROUNDWATER
No groundwater inflow observed.

STABILITY
Pit sides stable throughout excavation.

GENERAL REMARKS

ADDITIONAL INFORMATION			UNDERGROUND SERVICES				
Sketch Diagram:	No Sketch Taken		Depth	Orientation	Type	Diameter (mm)	Condition
Photographs:	Yes	See additional sheets.					

All dimensions in metres
Scale 1:50

For explanation of symbols and abbreviations see Key Sheets

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K.W.

Logged by:
S. Duncan

Contract No.
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TRIAL PIT RECORD

Status:-

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Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:454716.372 N:520975.734		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 10.876	Start Date: 17/10/2017	Sheet: 2 of 4



Figure S3-TPA39.1
S3-TPA39 Before investigation work.



Figure S3-TPA39.2
S3-TPA39.



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TRIAL PIT RECORD

Status:-

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Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPA39	
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:454716.372 N:520975.734		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 10.876	Start Date: 17/10/2017	Sheet: 3 of 4



Figure S3-TPA39.3
S3-TPA39 (2).



Figure S3-TPA39.4
S3-TPA39 Spoil.



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TRIAL PIT RECORD

Status:-

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Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3			Exploratory Hole No. S3-TPA39
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:454716.372 N:520975.734		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 10.876	Start Date: 17/10/2017	Sheet: 4 of 4



Figure S3-TPA39.5
S3-TPA39 Reinstatement.



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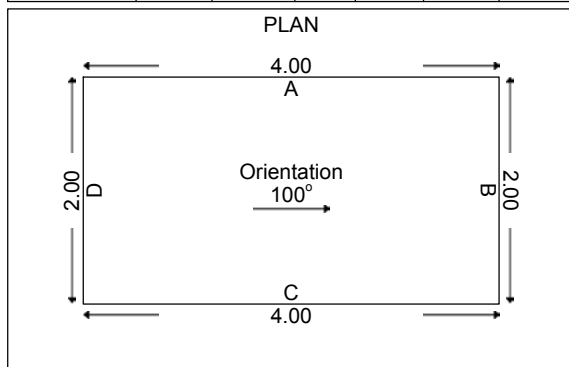
TRIAL PIT RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPA40	
Client: South Tees Site Company Ltd		Location: Redcar Steel Works E:454652.763 N:520995.170	
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)		Ground Level (m(AOD)): 10.775	Start Date: 16/10/2017 Sheet: 1 of 4

SAMPLES & TESTS			Water	STRATA			
Depth	Type No	Test Result		Reduced Level	Legend	Depth (Thickness)	DESCRIPTION
0.25	J1	10.3ppm		10.675		(0.10) 0.10	MADE GROUND (Macadam).
0.40	ES2			10.675		(0.10) 0.20	MADE GROUND (Roadstone gravel).
0.50	LB3					(0.55)	MADE GROUND (Dark grey and black very sandy gravel with locally heavily oxidised gravel bands, clay pockets and fragments of metal. Sand includes ash and coal fines. Gravel is fine to coarse angular to subangular and includes slag and clinker).
0.50	PID			10.025		0.75	
0.70	B4						
0.70	PID	5.4ppm			Firm to stiff occasionally soft laminated brown with orange and grey mottling slightly sandy slightly gravelly CLAY with pockets of sand and veins of light grey silt. Sand is fine. Gravel is fine to coarse subrounded to rounded and includes sandstone and mudstone. at c.1.50m BGL ... clay is of intermediate plasticity.		
0.80	HSV	>116					
0.80	J5	(15)kPa					
1.20	ES6	0.3ppm				Trial pit complete at 2.00m BGL.	
1.50	B7						
1.50	PID						
2.00	J8		8.775		2.00		



GROUNDWATER
No groundwater inflow observed.

STABILITY
Pit sides slightly stable throughout excavation.

GENERAL REMARKS

ADDITIONAL INFORMATION			UNDERGROUND SERVICES				
Sketch Diagram:	No Sketch Taken		Depth	Orientation	Type	Diameter (mm)	Condition
Photographs:	Yes	See additional sheets.					

All dimensions in metres
Scale 1:50

For explanation of symbols and abbreviations see Key Sheets

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Logged by:
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TRIAL PIT RECORD

Status:-

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Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPA40	
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:454652.763 N:520995.170		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 10.775	Start Date: 16/10/2017	Sheet: 2 of 4



Figure S3-TPA40.1
S3-TPA40 Before investigation work.



Figure S3-TPA40.2
S3-TPA40.



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TRIAL PIT RECORD

Status:-

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Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3			Exploratory Hole No. S3-TPA40
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:454652.763 N:520995.170		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 10.775	Start Date: 16/10/2017	Sheet: 3 of 4



Figure S3-TPA40.3
S3-TPA40 (2).

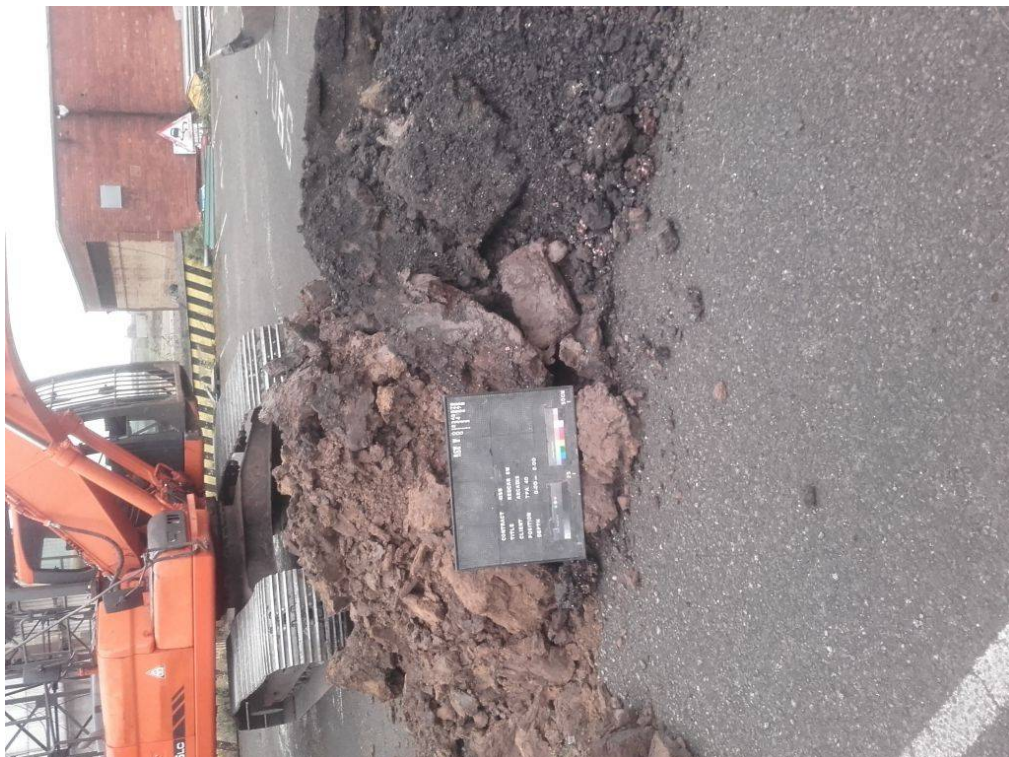


Figure S3-TPA40.4
S3-TPA40 Spoil.



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TRIAL PIT RECORD

Status:-

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Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3			Exploratory Hole No. S3-TPA40
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:454652.763 N:520995.170		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 10.775	Start Date: 16/10/2017	Sheet: 4 of 4



Figure S3-TPA40.5
S3-TPA40 Reinstatement.



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
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Tel: 01772 735 300 Fax: 01772 735 999

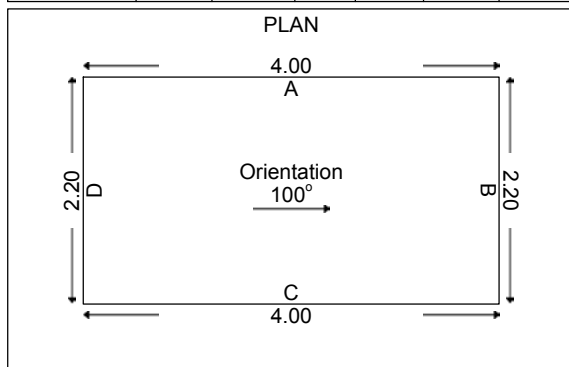
TRIAL PIT RECORD

Status:-

FINAL

Project:	The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3			Exploratory Hole No.
Client:	South Tees Site Company Ltd	Location:	Redcar Steel Works E:454676.933 N:520953.186	S3-TPA41
Method (Equipment):	Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)):	11.207	Start Date: 17/10/2017
				Sheet: 1 of 4

SAMPLES & TESTS			Water	STRATA			
Depth	Type No	Test Result		Reduced Level	Legend	Depth (Thickness)	DESCRIPTION
0.50 0.50 0.80	LB1 PID ES2	0.8ppm				(1.20)	MADE GROUND (Grey slightly sandy gravel and cobbles with fragments of metal and wood. Gravel is fine to coarse angular to subangular and includes slag, clinker and roadstone).
1.25 1.35	J3 J4			10.007 9.907 9.807		1.20 (0.10) 1.30 (0.10) 1.40	at c.1.20m BGL ... geotextile layer. MADE GROUND (Yellow sand. Sand is fine). Stiff to firm brown with some grey mottling slightly sandy CLAY. Gravel is fine to coarse subrounded to rounded and includes sandstone. at c.1.40m BGL ... 100mm clay field drain running 270 degrees. Trial pit terminated at 1.40m BGL - due to services.



GROUNDWATER
No groundwater inflow observed.

STABILITY
Pit sides stable throughout excavation.

GENERAL REMARKS
(1) Engineer notes clay field drain at 1.40m BGL.

ADDITIONAL INFORMATION			UNDERGROUND SERVICES				
Sketch Diagram:	No Sketch Taken		Depth	Orientation	Type	Diameter (mm)	Condition
Photographs:	Yes	See additional sheets.	1.40	270	Field Drain	100	Damaged

All dimensions in metres
Scale 1:50

For explanation of symbols and
abbreviations see Key Sheets

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TRIAL PIT RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3			Exploratory Hole No. S3-TPA41
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:454676.933 N:520953.186		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 11.207	Start Date: 17/10/2017	Sheet: 2 of 4



Figure S3-TPA41.1
S3-TPA41 Before investigation work.



Figure S3-TPA41.2
S3-TPA41.



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TRIAL PIT RECORD

Status:-

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Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPA41
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:454676.933 N:520953.186	
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 11.207	Start Date: 17/10/2017
		Sheet: 3 of 4



Figure S3-TPA41.3
S3-TPA41 (2).



Figure S3-TPA41.4
S3-TPA41 Spoil.



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TRIAL PIT RECORD

Status:-

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Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3			Exploratory Hole No. S3-TPA41
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:454676.933 N:520953.186		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 11.207	Start Date: 17/10/2017	Sheet: 4 of 4



Figure S3-TPA41.5
S3-TPA41 Reinstatement.



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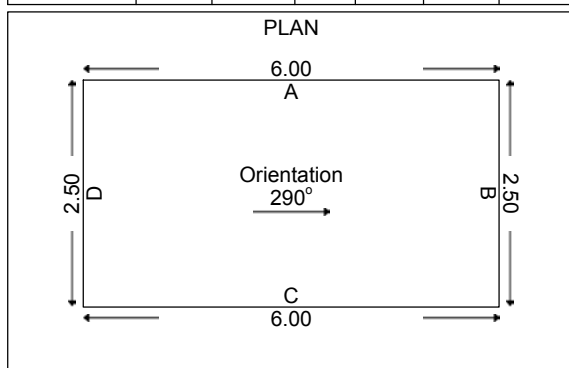
TRIAL PIT RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPA42	
Client: South Tees Site Company Ltd		Location: Redcar Steel Works E:454650.871 N:520963.632	
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)		Ground Level (m(AOD)): 11.535	Start Date: 18/10/2017
		Sheet: 1 of 4	

SAMPLES & TESTS			Water	STRATA			
Depth	Type No	Test Result		Reduced Level	Legend	Depth (Thickness)	DESCRIPTION
0.10 0.20	J1 ES2			11.235		(0.30) 0.30	MADE GROUND (Light grey clayey gravelly sand. Gravel is fine to coarse angular to subangular and includes roadstone, concrete and slag).
				11.035		(0.20) 0.50	MADE GROUND (Macadam).
1.00 1.00	B3 PID	0.2ppm				(1.10)	MADE GROUND (Grey sandy gravel with medium to high cobble content and fragments of iron. Gravel is fine to coarse angular to subangular and includes slag).
				9.935		1.60	at c.1.10m BGL ... light brown sand.
							at c.1.60m BGL ... light brown sand.
							Trial pit terminated at 1.60m BGL - due to anticipating encountering service.



GROUNDWATER No groundwater inflow observed.
STABILITY Pit sides stable throughout excavation.
GENERAL REMARKS

ADDITIONAL INFORMATION			UNDERGROUND SERVICES				
Sketch Diagram:	No Sketch Taken		Depth	Orientation	Type	Diameter (mm)	Condition
Photographs:	Yes	See additional sheets.					

All dimensions in metres Scale 1:50	For explanation of symbols and abbreviations see Key Sheets	Checked by: <i>K.W.</i>	Logged by: S. Duncan	Contract No. 4155
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TRIAL PIT RECORD

Status:-

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Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPA42
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:454650.871 N:520963.632	
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 11.535	Start Date: 18/10/2017
		Sheet: 2 of 4



Figure S3-TPA42.1
S3-TPA42 Before investigation work.



Figure S3-TPA42.2
S3-TPA42.



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Status:-

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Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPA42
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:454650.871 N:520963.632	
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 11.535	Start Date: 18/10/2017
		Sheet: 3 of 4



Figure S3-TPA42.3
S3-TPA42 (2).



Figure S3-TPA42.4
S3-TPA42 Spoil.



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Status:-

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Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3			Exploratory Hole No. S3-TPA42
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:454650.871 N:520963.632		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 11.535	Start Date: 18/10/2017	Sheet: 4 of 4



Figure S3-TPA42.5
S3-TPA42 Reinstatement.



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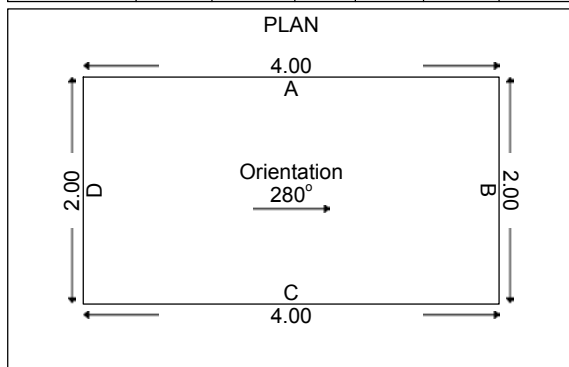
TRIAL PIT RECORD

Status:-

FINAL

Project:	The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3			Exploratory Hole No.
Client:	South Tees Site Company Ltd	Location:	Redcar Steel Works E:455497.766 N:522121.486	S3-TPB01
Method (Equipment):	Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)):	9.760	Start Date: 26/10/2017
				Sheet: 1 of 4

SAMPLES & TESTS			Water	STRATA			
Depth	Type No	Test Result		Reduced Level	Legend	Depth (Thickness)	DESCRIPTION
0.05 0.10 0.20 0.20	J1 ES2 PID B3	3.5ppm		9.460		(0.30) 0.30	MADE GROUND (Grey sandy gravel. Gravel is fine to coarse angular to subrounded and includes slag and roadstone).
0.70 0.70	PID LB4	0.7ppm				(1.20)	MADE GROUND (Slag layer: recovered as sandy gravelly cobbles and boulders. Gravel is fine to coarse angular and includes slag. Cobbles and boulders are angular and include slag).
1.40 1.60 1.80 1.80	J5 ES6 PID B7	2.3ppm	↓	8.260 7.760		1.50 (0.50) 2.00	MADE GROUND (Grey clayey very sandy gravel with medium cobble and boulder content. Sand includes ash. Gravel is fine to coarse angular to subangular and includes slag. Cobbles and boulders are angular to subangular and include slag).
2.20 2.40 2.60 2.60	J8 ES9 PID B10	0.2ppm		6.960		(0.80) 2.80	Firm to stiff brown with orange mottling and grey veins slightly sandy slightly gravelly CLAY with pockets of black carbonaceous material. Gravel is fine subangular to rounded and includes sandstone and mudstone. at c.2.60m BGL ... clay is of high plasticity. Trial pit complete at 2.80m BGL.



GROUNDWATER
Water seepage at 2.00m BGL - slight inflow.

STABILITY
Pit sides moderately stable throughout excavation.

GENERAL REMARKS

ADDITIONAL INFORMATION			UNDERGROUND SERVICES				
Sketch Diagram:	No Sketch Taken		Depth	Orientation	Type	Diameter (mm)	Condition
Photographs:	Yes	See additional sheets.					

All dimensions in metres
Scale 1:50

For explanation of symbols and
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Status:-

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Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPB01
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455497.766 N:522121.486	
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 9.760	Start Date: 26/10/2017
		Sheet: 2 of 4



Figure S3-TPB01.1
S3-TPB01 Before investigation works.



Figure S3-TPB01.2
S3-TPB01.



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TRIAL PIT RECORD

Status:-

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Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPB01
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455497.766 N:522121.486	
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 9.760	Start Date: 26/10/2017
		Sheet: 3 of 4



Figure S3-TPB01.3
S3-TPB01 (2).



Figure S3-TPB01.4
S3-TPB01 Spoil.



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TRIAL PIT RECORD

Status:-

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Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPB01	
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455497.766 N:522121.486		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 9.760	Start Date: 26/10/2017	Sheet: 4 of 4



Figure S3-TPB01.5
S3-TPB01 Reinstatement.



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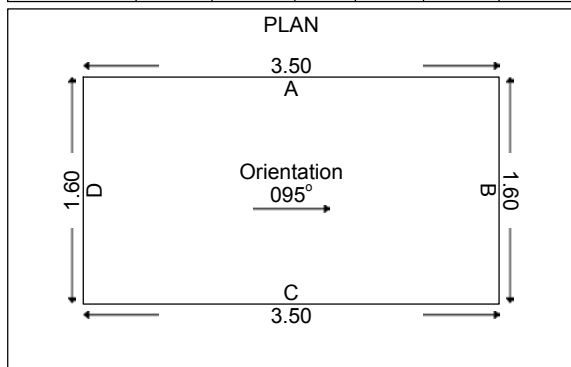
TRIAL PIT RECORD

Status:-

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Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3			Exploratory Hole No. S3-TPB02
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455557.474 N:522115.477		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)		Ground Level (m(AOD)): 9.860	Start Date: 26/10/2017
			Sheet: 1 of 4

SAMPLES & TESTS			Water	STRATA			
Depth	Type No	Test Result		Reduced Level	Legend	Depth (Thickness)	DESCRIPTION
0.50 0.50	PID LB1	0.4ppm		9.760		(0.10) 0.10	MADE GROUND (Macadam).
				9.560		(0.20) 0.30	MADE GROUND (Concrete).
						(0.90)	MADE GROUND (Slag layer: recovered as sandy gravelly cobbles and boulders. Gravel is fine to coarse angular and includes slag. Cobbles and boulders are angular and include slag. Engineer notes slag appears fused together, extremely hard).
				8.660		1.20	Trial pit terminated at 1.20m BGL - due to groundwater ingress.



GROUNDWATER
Water strike at 1.20m BGL - heavy inflow.

STABILITY
Pit sides stable throughout excavation.

GENERAL REMARKS

ADDITIONAL INFORMATION		
Sketch Diagram:	No Sketch Taken	
Photographs:	Yes	See additional sheets.

UNDERGROUND SERVICES				
Depth	Orientation	Type	Diameter (mm)	Condition

All dimensions in metres
Scale 1:50

For explanation of symbols and
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Status:-

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Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3			Exploratory Hole No. S3-TPB02
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455557.474 N:522115.477		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 9.860	Start Date: 26/10/2017	Sheet: 2 of 4



Figure S3-TPB02.1
S3-TPB02 Before investigation works.

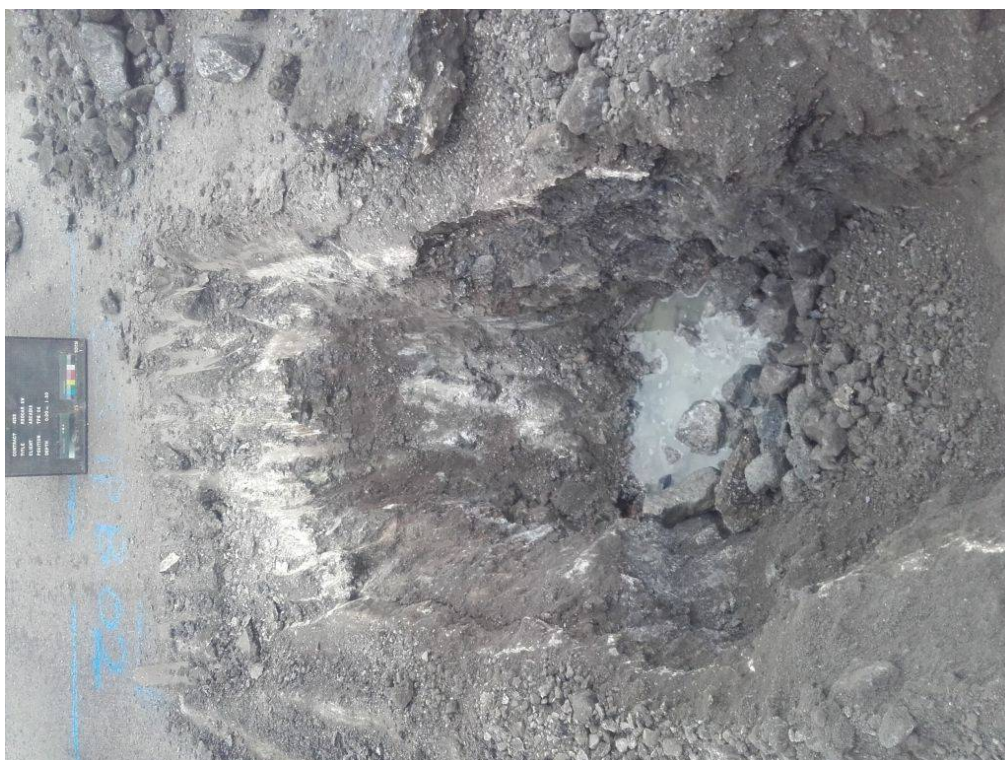


Figure S3-TPB02.2
S3-TPB02.



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TRIAL PIT RECORD

Status:-

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Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPB02
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455557.474 N:522115.477	
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 9.860	Start Date: 26/10/2017
		Sheet: 3 of 4



Figure S3-TPB02.3
S3-TPB02 (2).



Figure S3-TPB02.4
S3-TPB02 Spoil.



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TRIAL PIT RECORD

Status:-

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Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3			Exploratory Hole No. S3-TPB02
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455557.474 N:522115.477		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 9.860	Start Date: 26/10/2017	Sheet: 4 of 4

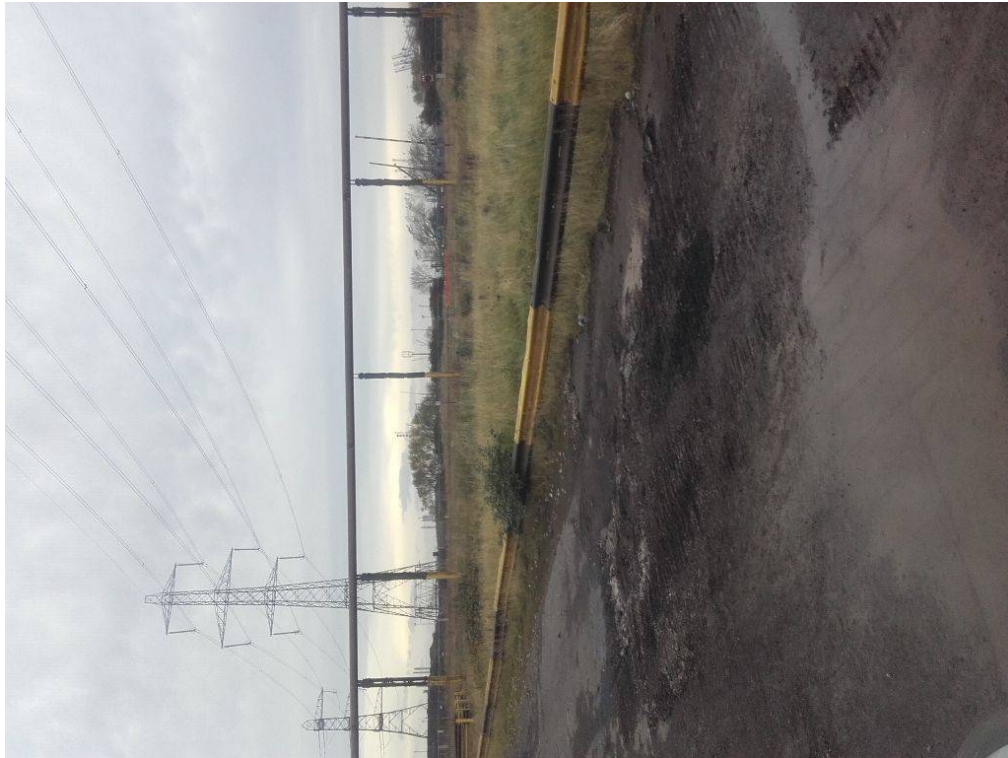


Figure S3-TPB02.5
S3-TPB02 Reinstatement.



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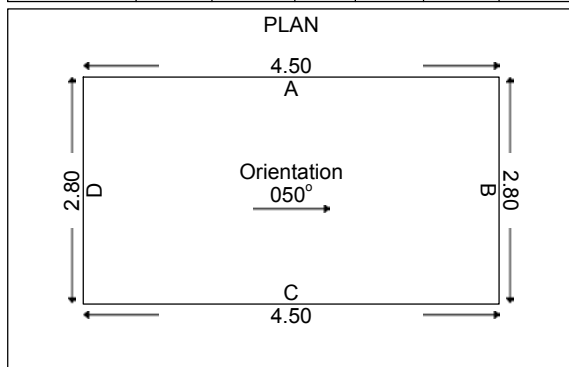
TRIAL PIT RECORD

Status:-

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Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3			Exploratory Hole No. S3-TPB03
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455435.287 N:522066.550		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)		Ground Level (m(AOD)): 9.813	Start Date: 27/10/2017
			Sheet: 1 of 4

SAMPLES & TESTS			Water	STRATA			
Depth	Type No	Test Result		Reduced Level	Legend	Depth (Thickness)	DESCRIPTION
0.50 0.70	J1 ES2	0.5ppm		9.513		(0.30) 0.30	MADE GROUND (Black macadam with fragments of metal and slag aggregate).
					(0.90)	MADE GROUND (Grey sandy gravel with high cobble content. Gravel is fine to coarse angular to subrounded and includes slag. Cobbles are subangular and include slag).	
1.00 1.00	PID B3	8.613			1.20		
1.40 1.60	J4 ES5	1.0ppm				(0.80)	MADE GROUND (Grey with brown very sandy gravel with high cobble and low to medium boulder content. Sand includes ash. Gravel is fine to coarse angular to subrounded and includes slag. Cobbles and boulders are angular to subangular and include slag).
1.80 1.80	PID B6			7.813		2.00	
2.20	J7	0.1ppm					MADE GROUND (Grey sand and gravel with high cobble content. Sand includes ash. Gravel is fine to coarse angular to subrounded and includes slag. Cobbles are subangular and include slag).
2.70	ES8					(1.80)	
3.20 3.20	PID B9			6.013		3.80	
Trial pit terminated at 3.80m BGL - due to collapse back to 3.40m BGL.							



GROUNDWATER
No groundwater inflow observed.

STABILITY
Pit sides moderately unstable throughout excavation.

GENERAL REMARKS

ADDITIONAL INFORMATION		
Sketch Diagram:	No Sketch Taken	
Photographs:	Yes	See additional sheets.

UNDERGROUND SERVICES				
Depth	Orientation	Type	Diameter (mm)	Condition

All dimensions in metres
Scale 1:50

For explanation of symbols and
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Status:-

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Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPB03	
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455435.287 N:522066.550		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 9.813	Start Date: 27/10/2017	Sheet: 2 of 4



Figure S3-TPB03.1
S3-TPB03 Before investigation works.



Figure S3-TPB03.2
S3-TPB03.



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TRIAL PIT RECORD

Status:-

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Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPB03
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455435.287 N:522066.550	
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 9.813	Start Date: 27/10/2017
		Sheet: 3 of 4



Figure S3-TPB03.3
S3-TPB03 (2).



Figure S3-TPB03.4
S3-TPB03 Spoil.



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TRIAL PIT RECORD

Status:-

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Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3			Exploratory Hole No. S3-TPB03
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455435.287 N:522066.550		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 9.813	Start Date: 27/10/2017	Sheet: 4 of 4



Figure S3-TPB03.5
S3-TPB03 Reinstatement.



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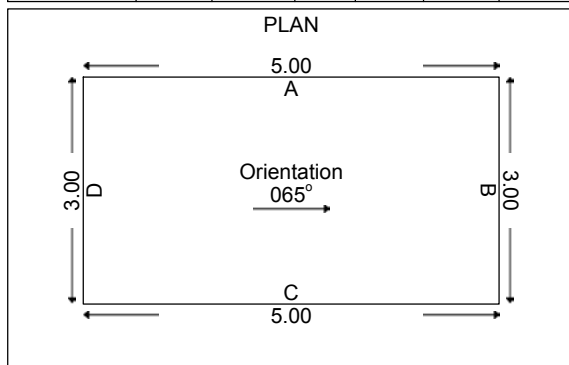
TRIAL PIT RECORD

Status:-

FINAL

Project:	The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3			Exploratory Hole No.
Client:	South Tees Site Company Ltd		Location:	Redcar Steel Works E:455369.139 N:522020.575
Method (Equipment):	Machine Excavated (JCB 360 Tracked Excavator)		Ground Level (m(AOD)):	9.666
			Start Date:	27/10/2017
			Sheet:	1 of 4

SAMPLES & TESTS			Water	STRATA				
Depth	Type No	Test Result		Reduced Level	Legend	Depth (Thick-ness)	DESCRIPTION	
0.05	J1	1.2ppm		9.516		(0.15) 0.15	MADE GROUND (Black and dark grey slightly clayey gravelly sand. Gravel is fine to coarse angular to subrounded and includes slag).	
0.10	ES2			9.366		(0.15) 0.30		
0.40	J3					(0.60)	MADE GROUND (Grey sandy gravel with fragments of railway sleeper and gravel. Sand includes ash. Gravel is fine to medium subangular to subrounded and includes slag).	
0.60	ES4							
0.80	PID	1.1ppm		8.766			0.90	MADE GROUND (Grey and brown clayey sandy gravel. Gravel is fine to coarse angular to subangular and includes slag).
0.80	B5					(0.60)		
1.00	J6						MADE GROUND (Very soft and soft brown sandy gravelly clay. Sand includes ash. Gravel is fine to coarse angular to subrounded and includes slag).	
1.20	ES7							
1.40	PID	0.4ppm		8.166			1.50	MADE GROUND (Grey and brown sand and gravel with high cobble content and fragments of metal. Sand includes ash. Gravel is fine to coarse angular to subangular and includes slag, brick, clinker and concrete. Cobbles are angular and include brick).
1.40	B8					(2.00)		
2.00	J9							
2.50	ES10							
3.00	PID	0.4ppm						Trial pit terminated at 3.50m BGL - due to collapsed pit sides.
3.00	B11							



GROUNDWATER
No groundwater inflow observed.

STABILITY
Pit sides moderately unstable throughout excavation.

GENERAL REMARKS

ADDITIONAL INFORMATION		
Sketch Diagram:	No Sketch Taken	
Photographs:	Yes	See additional sheets.

UNDERGROUND SERVICES				
Depth	Orientation	Type	Diameter (mm)	Condition

All dimensions in metres
Scale 1:50

For explanation of symbols and abbreviations see Key Sheets

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TRIAL PIT RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPB04	
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455369.139 N:522020.575		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 9.666	Start Date: 27/10/2017	Sheet: 2 of 4



Figure S3-TPB04.1
S3-TPB04 Before investigation works.



Figure S3-TPB04.2
S3-TPB04.



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TRIAL PIT RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPB04	
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455369.139 N:522020.575		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 9.666	Start Date: 27/10/2017	Sheet: 3 of 4



Figure S3-TPB04.3
S3-TPB04 (2).



Figure S3-TPB04.4
S3-TPB04 Spoil.



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TRIAL PIT RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3			Exploratory Hole No. S3-TPB04
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455369.139 N:522020.575		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 9.666	Start Date: 27/10/2017	Sheet: 4 of 4



Figure S3-TPB04.5
S3-TPB04 Reinstatement.



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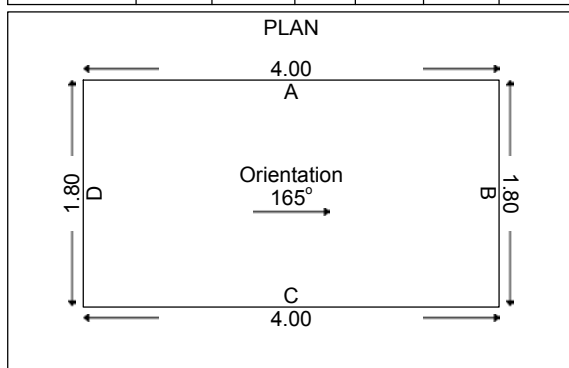
TRIAL PIT RECORD

Status:-

FINAL

Project:	The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3			Exploratory Hole No.
Client:	South Tees Site Company Ltd		Location:	Redcar Steel Works E:455333.650 N:521977.778
Method (Equipment):	Machine Excavated (JCB 360 Tracked Excavator)		Ground Level (m(AOD)):	9.965
			Start Date:	27/10/2017
			Sheet:	1 of 3

SAMPLES & TESTS			Water	STRATA			
Depth	Type No	Test Result		Reduced Level	Legend	Depth (Thickness)	DESCRIPTION
0.10 0.20 0.30 0.30	J1 ES2 PID B3	0.5ppm		9.565		(0.40) 0.40	MADE GROUND (Dark grey gravelly sand with low cobble content. Sand includes ash. Gravel is fine to coarse angular to subrounded and includes slag. Cobbles are subangular and include slag).
0.75 0.75	PID LB4	0.2ppm				(1.10)	MADE GROUND (Slag layer with some sections of concrete).
1.60 2.00	J5 ES6			8.465		1.50	MADE GROUND (Brown grey clayey very sandy gravel with low to medium cobble content. Sand includes ash. Gravel is fine to coarse angular to subangular and includes slag. Cobbles are angular and include slag).
2.50 2.50	PID B7	<0.1ppm				(1.90)	
3.00	J8						at c.2.80m BGL ... becomes very gravelly.
3.40 3.40	PID B9	<0.1ppm		6.565		3.40	Trial pit terminated at 3.40m BGL - unable to advance.



GROUNDWATER
No groundwater inflow observed.

STABILITY
Pit sides stable throughout excavation.

GENERAL REMARKS

ADDITIONAL INFORMATION			UNDERGROUND SERVICES				
Sketch Diagram:	No Sketch Taken		Depth	Orientation	Type	Diameter (mm)	Condition
Photographs:	Yes	See additional sheets.					

All dimensions in metres
Scale 1:50

For explanation of symbols and
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TRIAL PIT RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPB05
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455333.650 N:521977.778	
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 9.965	Start Date: 27/10/2017
		Sheet: 2 of 3



Figure S3-TPB05.1
S3-TPB05 Before investigation works.



Figure S3-TPB05.2
S3-TPB05.



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TRIAL PIT RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPB05	
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455333.650 N:521977.778		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 9.965	Start Date: 27/10/2017	Sheet: 3 of 3



Figure S3-TPB05.3
S3-TPB05 (2).



Figure S3-TPB05.4
S3-TPB05 Spoil.



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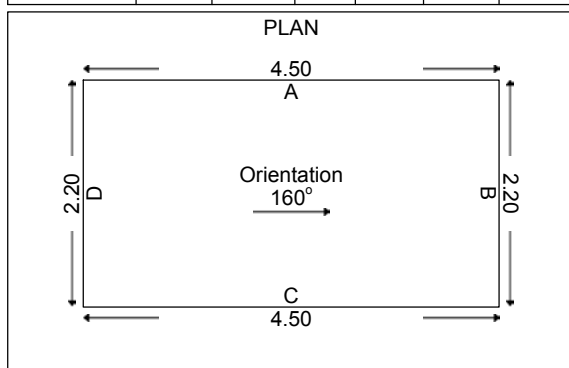
TRIAL PIT RECORD

Status:-

FINAL

Project:	The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3			Exploratory Hole No.
Client:	South Tees Site Company Ltd	Location:	Redcar Steel Works E:455544.184 N:521961.968	
Method (Equipment):	Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)):	9.911	Start Date: 25/10/2017
				Sheet: 1 of 4

SAMPLES & TESTS			Water	STRATA			
Depth	Type No	Test Result		Reduced Level	Legend	Depth (Thickness)	DESCRIPTION
0.20	J1			9.861		(0.05) 0.05	MADE GROUND (Macadam).
0.50	ES2					(0.95)	MADE GROUND (Grey brown clayey very sandy gravel. Gravel is fine to coarse angular to subrounded and includes slag).
0.70	PID B3	2.6ppm		8.911		1.00	at c.0.95-1.00m BGL ... black carbonaceous interbed.
0.70	J4						Firm to stiff occasionally soft red brown with orange mottling and grey veining slightly sandy slightly gravelly CLAY with pockets of black carbonaceous material.
1.00	ES5						Gravel is fine subrounded to rounded and includes sandstone and mudstone.
1.00	HSV J6	94 (19)kPa				(1.00)	at c.1.70m BGL ... clay is of intermediate plasticity.
1.30	J6						
1.30	PID B7	0.6ppm		7.911		2.00	Trial pit complete at 2.00m BGL.
1.70							
1.70							



GROUNDWATER
Water strike at 0.70m BGL - slow inflow.

STABILITY
Pit sides stable throughout excavation.

GENERAL REMARKS

ADDITIONAL INFORMATION		
Sketch Diagram:	No Sketch Taken	
Photographs:	Yes	See additional sheets.

UNDERGROUND SERVICES				
Depth	Orientation	Type	Diameter (mm)	Condition

All dimensions in metres
Scale 1:50

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TRIAL PIT RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPB06	
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455544.184 N:521961.968		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 9.911	Start Date: 25/10/2017	Sheet: 2 of 4



Figure S3-TPB06.1
S3-TPB06 Before investigation works.



Figure S3-TPB06.2
S3-TPB06.



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TRIAL PIT RECORD

Status:-

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Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPB06	
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455544.184 N:521961.968		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 9.911	Start Date: 25/10/2017	Sheet: 3 of 4



Figure S3-TPB06.3
S3-TPB06 (2).



Figure S3-TPB06.4
S3-TPB06 Spoil.



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TRIAL PIT RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPB06	
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455544.184 N:521961.968		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 9.911	Start Date: 25/10/2017	Sheet: 4 of 4



Figure S3-TPB06.5
S3-TPB06 Reinstatement.



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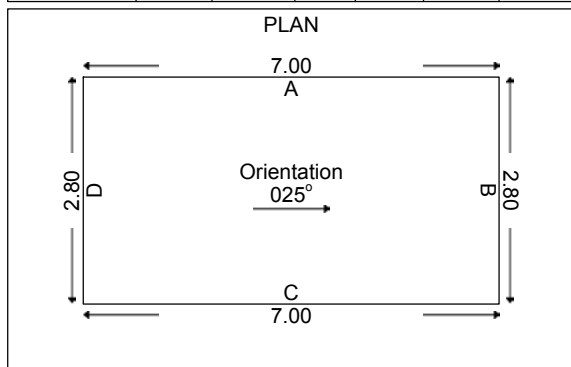
TRIAL PIT RECORD

Status:-

FINAL

Project:	The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3			Exploratory Hole No.
Client:	South Tees Site Company Ltd	Location:	Redcar Steel Works E:455280.387 N:521929.813	
Method (Equipment):	Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)):	10.163	Start Date: 27/10/2017
				Sheet: 1 of 4

SAMPLES & TESTS			Water	STRATA			
Depth	Type No	Test Result		Reduced Level	Legend	Depth (Thickness)	DESCRIPTION
0.20	J1					(0.70)	MADE GROUND (Brown grey gravelly sand. Gravel is fine to coarse angular to subrounded and includes slag).
0.40	ES2						
0.60	PID B3	0.5ppm		9.463		0.70	
0.60						(0.50)	MADE GROUND (Slag layer: recovered as sand and gravel. Engineer notes very difficult digging).
1.00	PID LB4	0.1ppm		8.963		1.20	
1.00	ES5					(0.60)	MADE GROUND (Yellow brown clayey sandy gravel with high cobble content and much oxidation noted. Gravel is fine to coarse angular to subangular and includes slag and brick).
1.20							
1.50	PID LB6	0.2ppm		8.363		1.80	MADE GROUND (Soft to firm brown sandy slightly gravelly to gravelly clay with low cobble content. Gravel is fine to coarse angular to subrounded and includes slag and brick. Cobbles are angular and include brick).
1.50							
2.00	J7						
2.50	ES8					(2.00)	Trial pit terminated 3.80m BGL - unable to advance.
3.00	PID B9	0.1ppm					
3.00				6.363		3.80	



GROUNDWATER
No groundwater inflow observed.

STABILITY
Pit sides stable throughout excavation.

GENERAL REMARKS

ADDITIONAL INFORMATION			UNDERGROUND SERVICES				
Sketch Diagram:	No Sketch Taken		Depth	Orientation	Type	Diameter (mm)	Condition
Photographs:	Yes	See additional sheets.					

All dimensions in metres
Scale 1:50

For explanation of symbols and
abbreviations see Key Sheets

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TRIAL PIT RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPB07	
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455280.387 N:521929.813		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 10.163	Start Date: 27/10/2017	Sheet: 2 of 4



Figure S3-TPB07.1
S3-TPB07 Before investigation works.



Figure S3-TPB07.2
S3-TPB07.



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TRIAL PIT RECORD

Status:-

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Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPB07	
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455280.387 N:521929.813		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 10.163	Start Date: 27/10/2017	Sheet: 3 of 4



Figure S3-TPB07.3
S3-TPB07 (2).



Figure S3-TPB07.4
S3-TPB07 (3).



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TRIAL PIT RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPB07	
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455280.387 N:521929.813		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 10.163	Start Date: 27/10/2017	Sheet: 4 of 4



Figure S3-TPB07.5
S3-TPB07 Spoil.

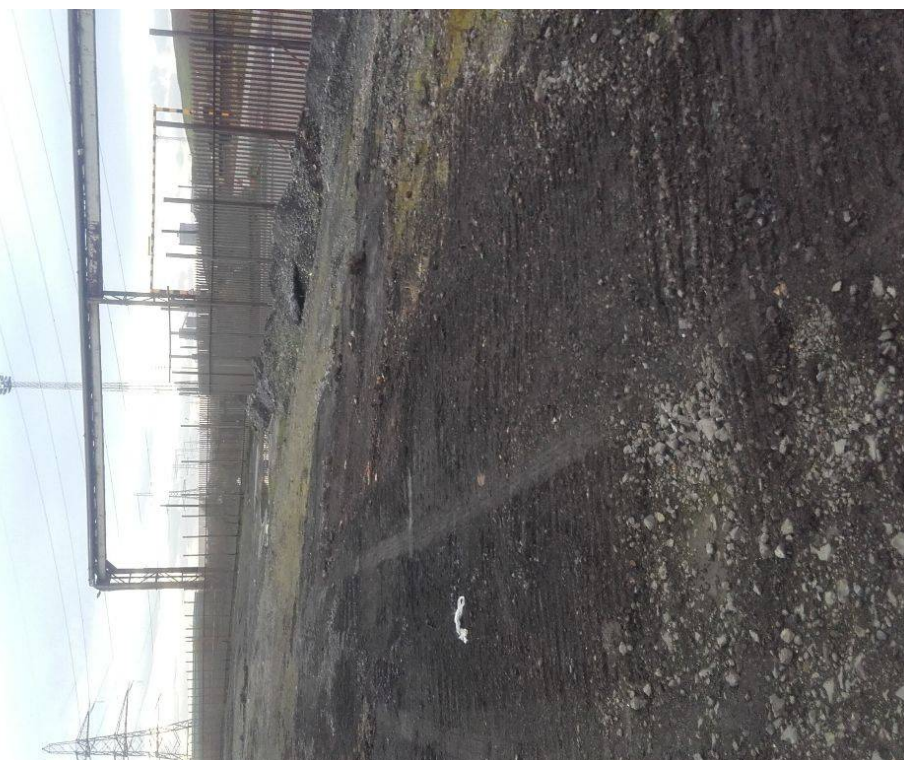


Figure S3-TPB07.6
S3-TPB07 Reinstatement.



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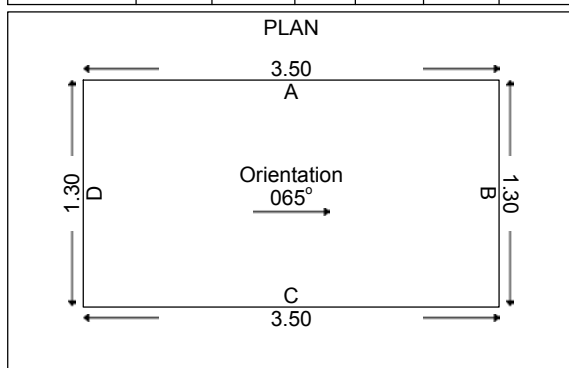
TRIAL PIT RECORD

Status:-

FINAL

Project:	The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3			Exploratory Hole No.
Client:	South Tees Site Company Ltd		Location:	Redcar Steel Works E:455240.595 N:521890.201
Method (Equipment):	Machine Excavated (JCB 360 Tracked Excavator)		Ground Level (m(AOD)):	10.097
			Start Date:	30/10/2017
			Sheet:	1 of 4

SAMPLES & TESTS			Water	STRATA			
Depth	Type No	Test Result		Reduced Level	Legend	Depth (Thickness)	DESCRIPTION
0.50 0.50 0.50	PID B2 ES1	0.1ppm		9.297		0.80	MADE GROUND (Dark grey slag layer).
1.00 1.00	PID B3	0.3ppm		8.897		1.20	MADE GROUND (Grey and in places yellow sandy gravel with low cobble content. Gravel is fine to coarse angular to subangular and includes slag. Cobbles are angular and include slag).
1.50 1.50	PID LB4	0.1ppm		8.097		2.00	MADE GROUND (Grey sandy gravel with high cobble and boulder content. Gravel is fine to coarse angular to subangular and include slag. Cobbles and boulders are angular and include slag).
Trial pit terminated at 2.00m BGL - unable to advance.							



GROUNDWATER
No groundwater inflow observed.

STABILITY
Pit sides stable throughout excavation.

GENERAL REMARKS

ADDITIONAL INFORMATION		
Sketch Diagram:	No Sketch Taken	
Photographs:	Yes	See additional sheets.

UNDERGROUND SERVICES				
Depth	Orientation	Type	Diameter (mm)	Condition

All dimensions in metres
Scale 1:50

For explanation of symbols and
abbreviations see Key Sheets

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TRIAL PIT RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3			Exploratory Hole No. S3-TPB08
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455240.595 N:521890.201		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 10.097	Start Date: 30/10/2017	Sheet: 2 of 4



Figure S3-TPB08.1
S3-TPB08 Before investigation works.



Figure S3-TPB08.2
S3-TPB08.



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TRIAL PIT RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPB08	
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455240.595 N:521890.201		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 10.097	Start Date: 30/10/2017	Sheet: 3 of 4



Figure S3-TPB08.3
S3-TPB08 (2).



Figure S3-TPB08.4
S3-TPB08 Spoil.



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TRIAL PIT RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3			Exploratory Hole No. S3-TPB08
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455240.595 N:521890.201		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 10.097	Start Date: 30/10/2017	Sheet: 4 of 4

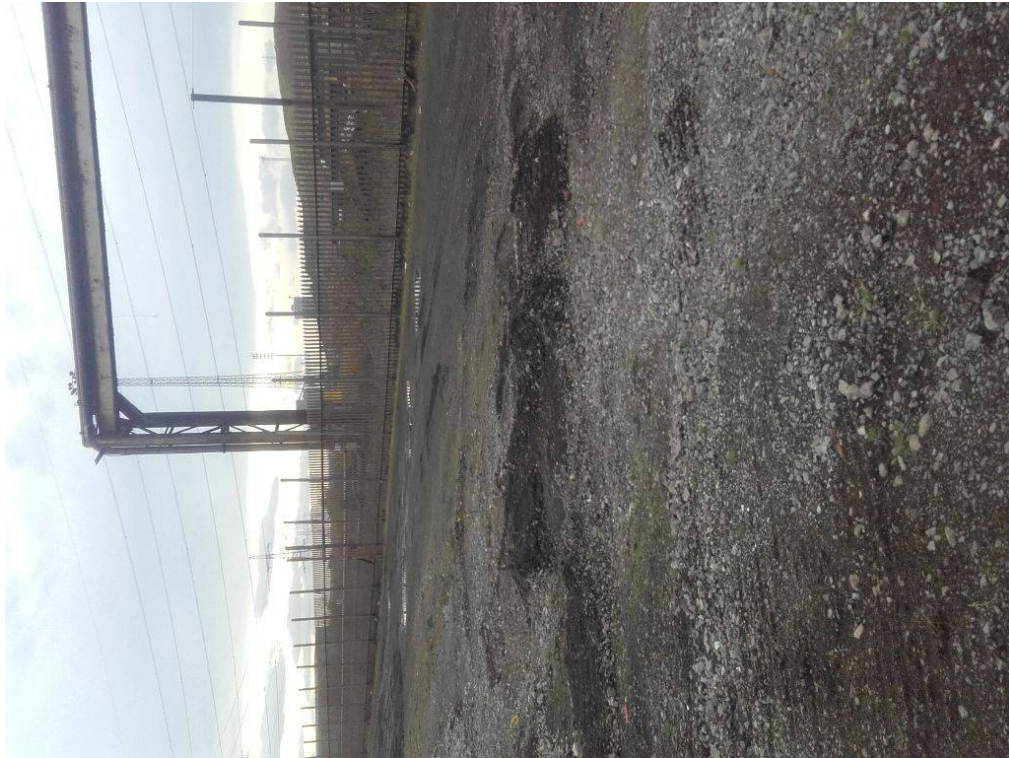


Figure S3-TPB08.5
S3-TPB08 Reinstatement.



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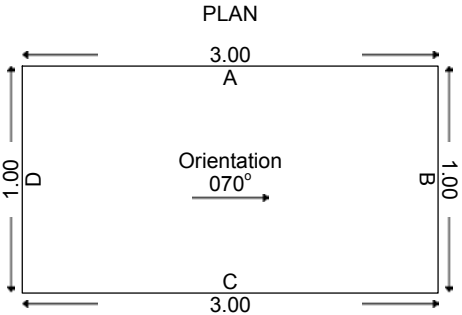
TRIAL PIT RECORD

Status:-

FINAL

Project:		The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPB09
Client:		South Tees Site Company Ltd		
Location:		Redcar Steel Works E:455275.352 N:521870.884		
Method (Equipment):		Ground Level (m(AOD)):	Start Date:	Sheet:
Machine Excavated (JCB 360 Tracked Excavator)		10.975	30/10/2017	1 of 2

SAMPLES & TESTS			Water	STRATA			
Depth	Type No	Test Result		Reduced Level	Legend	Depth (Thickness)	DESCRIPTION
0.20	ES1			10.575		(0.40) 0.40	MADE GROUND (Dark grey slag).
							Trial pit terminated at 0.40m BGL - due to slow progress.

	GROUNDWATER No groundwater inflow observed.
	STABILITY Pit sides stable throughout excavation.
	GENERAL REMARKS

ADDITIONAL INFORMATION			UNDERGROUND SERVICES				
Sketch Diagram:	No Sketch Taken		Depth	Orientation	Type	Diameter (mm)	Condition
Photographs:	Yes	See additional sheets.					

All dimensions in metres
Scale 1:50

For explanation of symbols and
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TRIAL PIT RECORD

Status:-

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Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3			Exploratory Hole No. S3-TPB09
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455275.352 N:521870.884		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 10.975	Start Date: 30/10/2017	Sheet: 2 of 2



Figure S3-TPB09.1
S3-TPB09 Before investigation works.

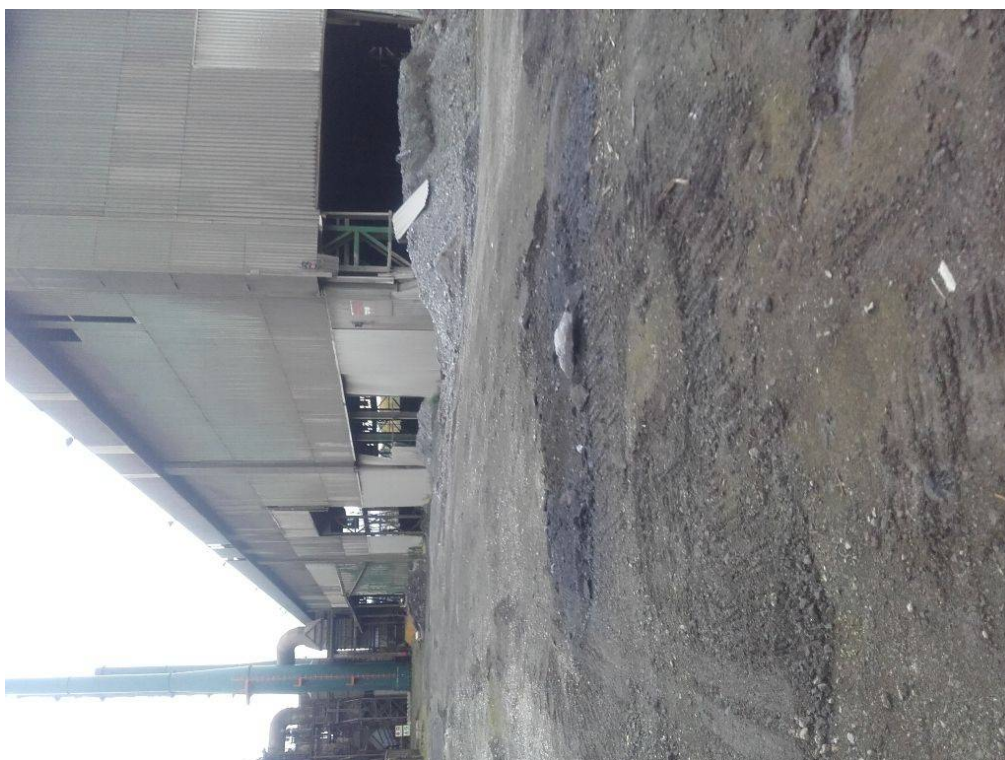


Figure S3-TPB09.2
S3-TPB09 Reinstatement.



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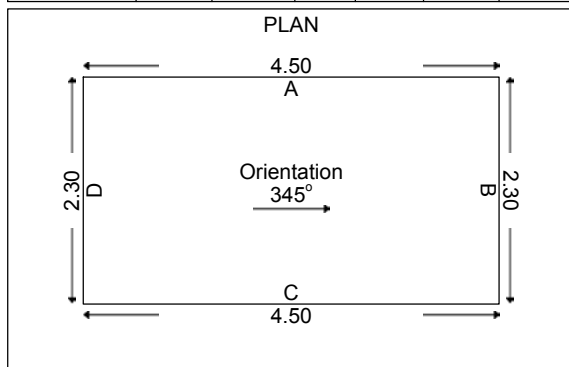
TRIAL PIT RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3			Exploratory Hole No. S3-TPB10
Client: South Tees Site Company Ltd		Location: Redcar Steel Works E:455223.732 N:521840.711	
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)		Ground Level (m(AOD)): 9.859	Start Date: 30/10/2017 Sheet: 1 of 4

SAMPLES & TESTS			Water	STRATA			
Depth	Type No	Test Result		Reduced Level	Legend	Depth (Thickness)	DESCRIPTION
0.20 0.30 0.40 0.50 0.70	J1 ES2 B3 PID J4	10.3ppm		9.359		(0.50) 0.50	MADE GROUND (Dark grey gravelly sand with low cobble content and fragments of metal and iron. Sand includes ash and coal. Gravel is fine to coarse angular to subangular and includes slag. Cobbles are angular and include slag).
1.00	ES5					(1.20)	MADE GROUND (Slag and concrete). (Recovered as sand and gravel).
1.50 1.50 1.80 2.00	PID B6 J7 ES8	3.2ppm		8.159		1.70	MADE GROUND (Red brown clayey very gravelly sand with high cobble and boulder content and fragments of metal and iron. Gravel is fine to coarse angular to subangular and includes slag, brick, concrete and clinker. Cobbles and boulders are angular and include slag and brick). at c.1.70m BGL ... redundant cast iron pipe running 255 degrees and possible foundation.
2.50 2.50 2.80 3.00	PID B9 J10 ES11	1.7ppm				(1.80)	
3.50 3.50	PID B12	1.5ppm		6.359		3.50	Trial pit terminated at 3.50m BGL - unable to progress.



GROUNDWATER No groundwater inflow observed.
STABILITY Pit sides stable throughout excavation.
GENERAL REMARKS

ADDITIONAL INFORMATION			UNDERGROUND SERVICES				
Sketch Diagram:	No Sketch Taken		Depth	Orientation	Type	Diameter (mm)	Condition
Photographs:	Yes	See additional sheets.	1.70	255	Cast Iron Pipe		Destroyed

All dimensions in metres Scale 1:50	For explanation of symbols and abbreviations see Key Sheets	Checked by: <i>K.W.</i>	Logged by: S. Duncan	Contract No. 4155
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Tel: 01772 735 300 Fax: 01772 735 999

TRIAL PIT RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPB10
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455223.732 N:521840.711	
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 9.859	Start Date: 30/10/2017
		Sheet: 2 of 4



Figure S3-TPB10.1
S3-TPB10 Before investigation works.



Figure S3-TPB10.2
S3-TPB10.



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TRIAL PIT RECORD

Status:-

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Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPB10
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455223.732 N:521840.711	
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 9.859	Start Date: 30/10/2017
		Sheet: 3 of 4



Figure S3-TPB10.3
S3-TPB10 (2).



Figure S3-TPB10.4
S3-TPB10 (3).



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TRIAL PIT RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPB10	
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455223.732 N:521840.711		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 9.859	Start Date: 30/10/2017	Sheet: 4 of 4



Figure S3-TPB10.5
S3-TPB10 Spoil.



Figure S3-TPB10.6
S3-TPB10 Reinstatement.



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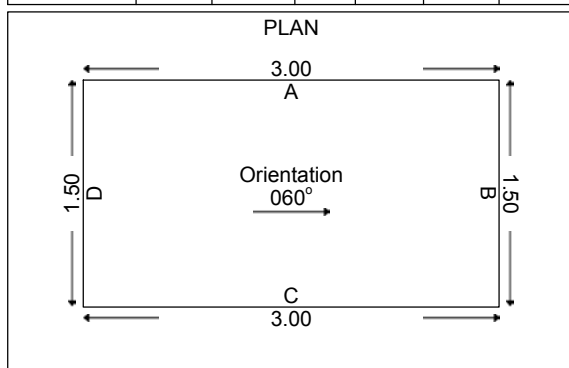
TRIAL PIT RECORD

Status:-

FINAL

Project:		The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPB11
Client:		South Tees Site Company Ltd		
Location:		Redcar Steel Works E:455279.871 N:521859.665		
Method (Equipment):		Ground Level (m(AOD)):	Start Date:	Sheet:
Machine Excavated (JCB 360 Tracked Excavator)		10.915	31/10/2017	1 of 3

SAMPLES & TESTS			Water	STRATA			
Depth	Type No	Test Result		Reduced Level	Legend	Depth (Thickness)	DESCRIPTION
0.20	ES1			10.515		(0.40) 0.40	MADE GROUND (Slag layer).
							Trial pit terminated at 0.40m BGL - due to slow progress.



GROUNDWATER
No groundwater inflow observed.

STABILITY
Pit sides stable throughout excavation.

GENERAL REMARKS

ADDITIONAL INFORMATION		
Sketch Diagram:	No Sketch Taken	
Photographs:	Yes	See additional sheets.

UNDERGROUND SERVICES				
Depth	Orientation	Type	Diameter (mm)	Condition

All dimensions in metres
Scale 1:50

For explanation of symbols and
abbreviations see Key Sheets

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Logged by:
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TRIAL PIT RECORD

Status:-

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Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPB11	
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455279.871 N:521859.665		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 10.915	Start Date: 31/10/2017	Sheet: 2 of 3



Figure S3-TPB11.1
S3-TPB11 Before investigation works.



Figure S3-TPB11.2
S3-TPB11.



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Status:-

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Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPB11	
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455279.871 N:521859.665		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 10.915	Start Date: 31/10/2017	Sheet: 3 of 3



Figure S3-TPB11.3
S3-TPB11 (2).



Figure S3-TPB11.4
S3-TPB11 Reinstatement.



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TRIAL PIT RECORD

Status:-

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Project:	The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3			Exploratory Hole No.
Client:	South Tees Site Company Ltd		Location:	Redcar Steel Works E:455545.462 N:521826.641
Method (Equipment):	Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)):	9.653	Start Date: 25/10/2017 Sheet: 1 of 4

SAMPLES & TESTS			Water	STRATA			
Depth	Type No	Test Result		Reduced Level	Legend	Depth (Thickness)	DESCRIPTION
0.20	J1	0.2ppm		9.603		(0.05) 0.05	MADE GROUND (Macadam).
0.30	ES2					(0.45)	MADE GROUND (Grey brown slightly clayey gravelly sand. Gravel is fine to coarse angular to subrounded and includes slag).
0.40	PID			9.153		0.50	
0.40	B3			8.953		(0.20) 0.70	MADE GROUND (White clayey sandy gravel with low cobble content. Clay includes lime. Gravel is fine to coarse angular to subrounded and includes slag. Cobbles are angular and include slag).
0.50	J4			8.753		(0.20) 0.90	
0.60	ES5	97					MADE GROUND (Firm to stiff and occasionally soft red brown slightly sandy slightly gravelly clay with black carbonaceous pockets. Gravel is fine to coarse subangular to subrounded and includes slag, sandstone and mudstone).
0.80	HSV	(31)kPa					at c.0.90m BGL ... black carbonaceous interbed. Clay is of intermediate plasticity.
0.80	J6	1.1ppm					Firm to stiff occasionally soft red brown with orange mottling and grey veins slightly sandy slightly gravelly CLAY with pockets of black carbonaceous material. Gravel is fine subrounded to rounded and includes sandstone and mudstone.
0.90	PID						
0.90	B7						
1.50	HSV	76					
1.50	B8	(20)kPa		7.753		1.90	Trial pit complete at 1.90m BGL.

PLAN Orientation 080°	GROUNDWATER Water seepage at 0.70m BGL - slow inflow.
	STABILITY Pit sides stable throughout excavation.
	GENERAL REMARKS

ADDITIONAL INFORMATION			UNDERGROUND SERVICES				
Sketch Diagram:	No Sketch Taken		Depth	Orientation	Type	Diameter (mm)	Condition
Photographs:	Yes	See additional sheets.					

All dimensions in metres Scale 1:50	For explanation of symbols and abbreviations see Key Sheets	Checked by: K.W.	Logged by: S. Duncan	Contract No. 4155
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TRIAL PIT RECORD

Status:-

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Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3			Exploratory Hole No. S3-TPB12
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455545.462 N:521826.641		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 9.653	Start Date: 25/10/2017	Sheet: 2 of 4

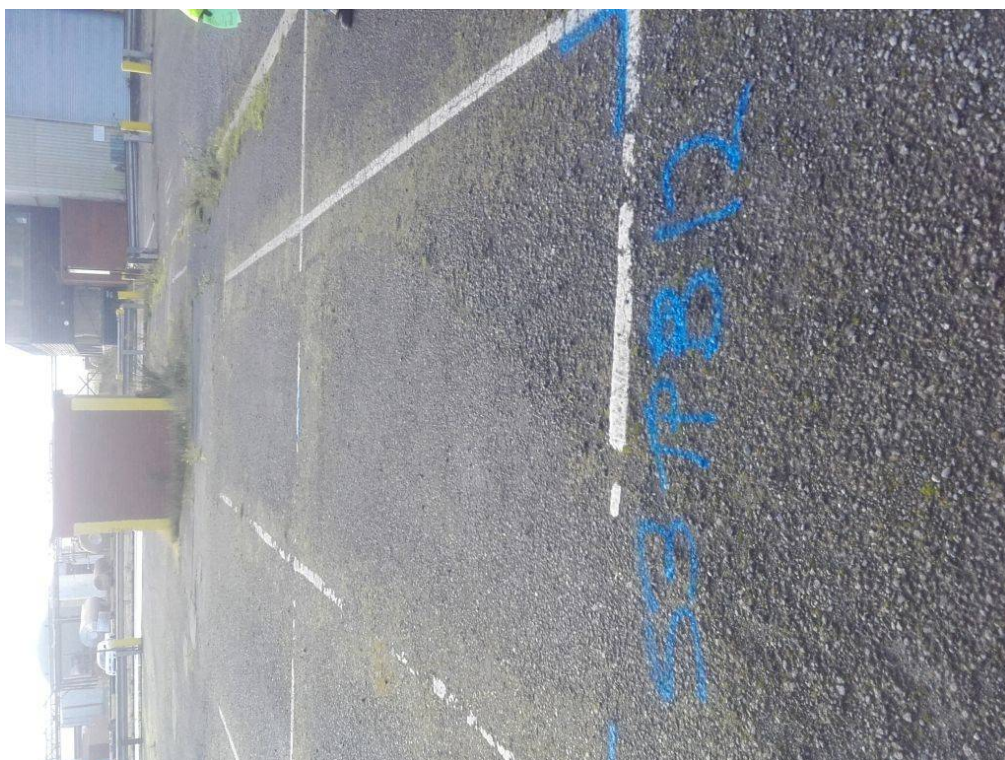


Figure S3-TPB12.1
S3-TPB12 Before investigation works.



Figure S3-TPB12.2
S3-TPB12.



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TRIAL PIT RECORD

Status:-

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Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPB12
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455545.462 N:521826.641	
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 9.653	Start Date: 25/10/2017
		Sheet: 3 of 4



Figure S3-TPB12.3
S3-TPB12 (2).



Figure S3-TPB12.4
S3-TPB12 (3).



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Status:-

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Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPB12	
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455545.462 N:521826.641		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 9.653	Start Date: 25/10/2017	Sheet: 4 of 4

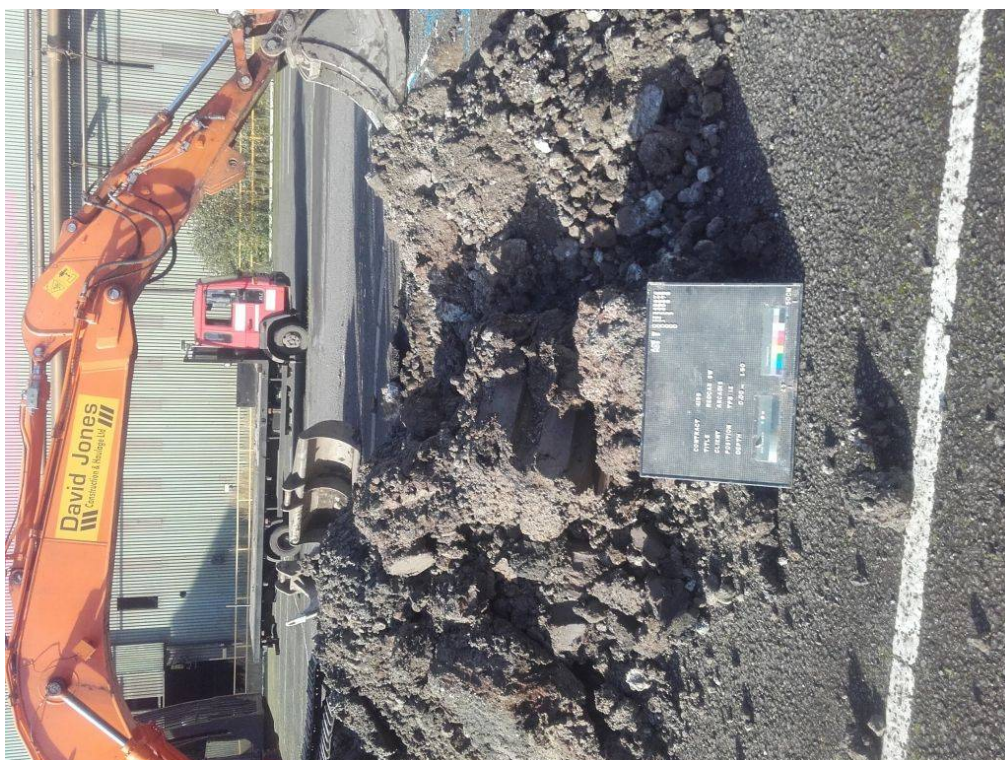


Figure S3-TPB12.5
S3-TPB12 Spoil.



Figure S3-TPB12.6
S3-TPB12 Reinstatement.



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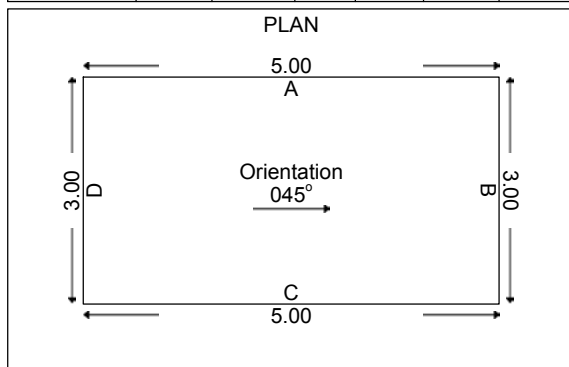
TRIAL PIT RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPB13	
Client: South Tees Site Company Ltd		Location: Redcar Steel Works E:455194.119 N:521776.618	
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)		Ground Level (m(AOD)): 9.787	Start Date: 31/10/2017
		Sheet: 1 of 4	

SAMPLES & TESTS			Water	STRATA			
Depth	Type No	Test Result		Reduced Level	Legend	Depth (Thickness)	DESCRIPTION
0.05	J1			9.587		(0.20) 0.20	MADE GROUND (Moss over purple brown clayey gravelly sand).
0.15	ES2						
0.30	J3					(0.60)	MADE GROUND (Dark blue grey clayey gravelly sand. Sand includes ash. Gravel is fine to coarse angular to subrounded and includes slag).
0.50	ES4			8.987		0.80	
0.70	B5						
1.00	LB6			8.487		(0.50) 1.30	MADE GROUND (Grey sandy very gravelly cobbles and low boulder content and fragments of iron. Sand includes ash. Gravel is fine to coarse angular to subangular and includes slag. Cobbles and boulders are angular and include slag).
1.40	J7			8.187		(0.30) 1.60	MADE GROUND (Grey sandy gravel with medium cobble and boulder content. Sand includes ash. Gravel is fine to coarse angular to subangular and includes slag. Cobbles are angular and include slag).
1.50	ES8						
1.60	B9						
1.60	J10						
2.00	ES11					(0.90)	MADE GROUND (Grey sandy gravel with high cobble and medium boulder content. Sand includes ash. Gravel is fine to coarse angular to subangular and includes slag. Cobbles and boulders are angular and include slag. Hydrocarbon odour noted).
2.20	B12			7.287		2.50	
2.60	J13			6.987		(0.30) 2.80	Soft to firm brown with grey and orange mottling slightly sandy CLAY.
2.70	ES14						at c.2.80m BGL ... clay is of high to very high plasticity.
2.80	B15						Trial pit terminated at 2.80m BGL - due to groundwater ingress.



GROUNDWATER
Water strike at 2.50m BGL - heavy inflow.

STABILITY
Pit sides slightly unstable throughout excavation.

GENERAL REMARKS

ADDITIONAL INFORMATION		
Sketch Diagram:	No Sketch Taken	
Photographs:	Yes	See additional sheets.

UNDERGROUND SERVICES				
Depth	Orientation	Type	Diameter (mm)	Condition

All dimensions in metres
Scale 1:50

For explanation of symbols and abbreviations see Key Sheets

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TRIAL PIT RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPB13
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455194.119 N:521776.618	
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 9.787	Start Date: 31/10/2017
		Sheet: 2 of 4



Figure S3-TPB13.1
S3-TPB13 Before investigation works.



Figure S3-TPB13.2
S3-TPB13.



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TRIAL PIT RECORD

Status:-

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Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPB13
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455194.119 N:521776.618	
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 9.787	Start Date: 31/10/2017
		Sheet: 3 of 4



Figure S3-TPB13.3
S3-TPB13 (2).

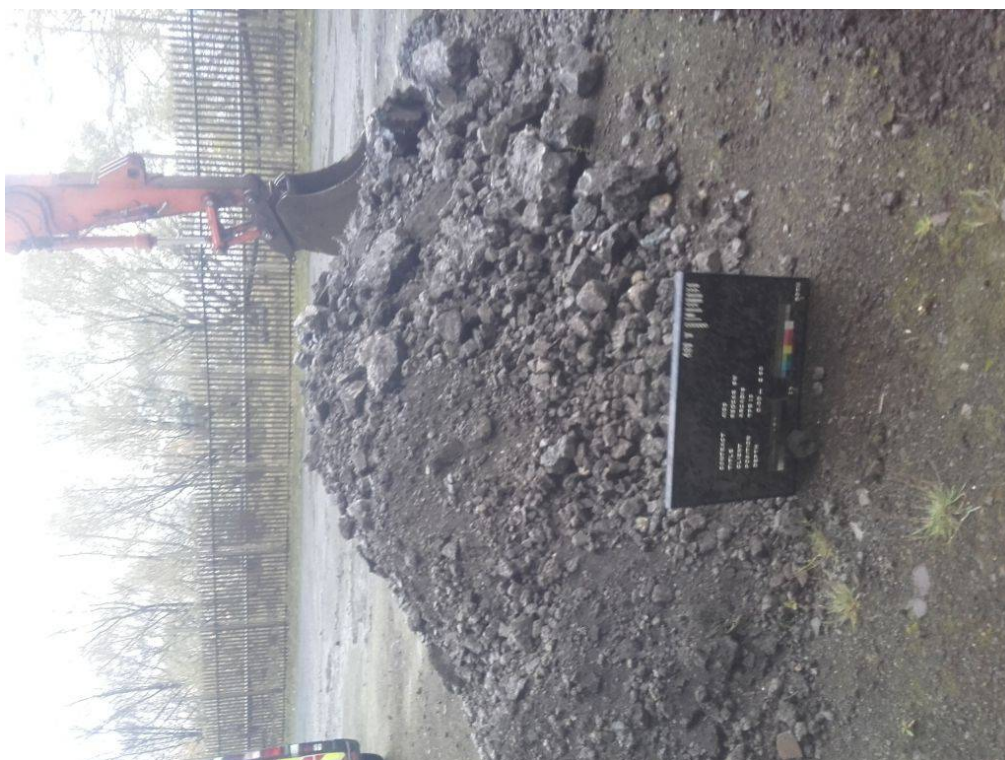


Figure S3-TPB13.4
S3-TPB13 Spoil.



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TRIAL PIT RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPB13	
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455194.119 N:521776.618		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 9.787	Start Date: 31/10/2017	Sheet: 4 of 4

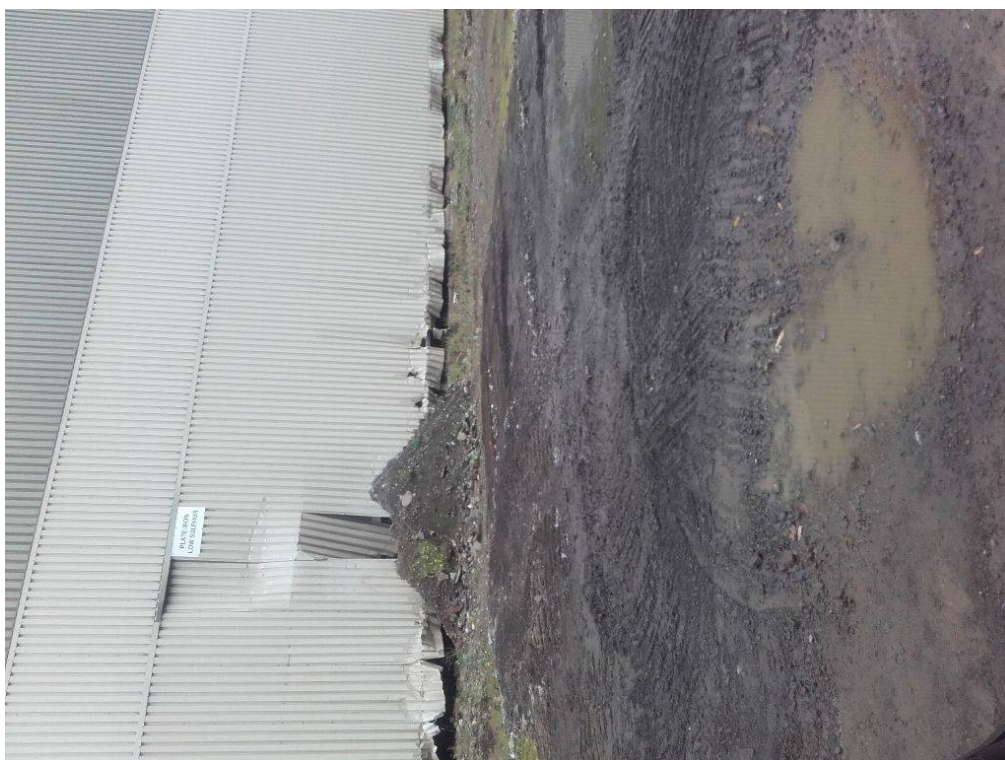


Figure S3-TPB13.5
S3-TPB13 Reinstatement.



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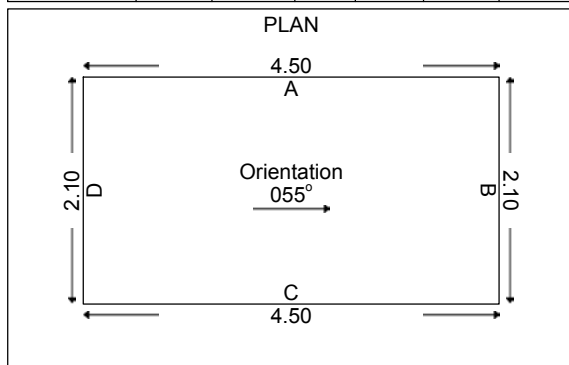
TRIAL PIT RECORD

Status:-

FINAL

Project:	The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3			Exploratory Hole No.
Client:	South Tees Site Company Ltd	Location:	Redcar Steel Works E:455570.834 N:521758.867	
Method (Equipment):	Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)):	10.067	Start Date: 25/10/2017
				Sheet: 1 of 4

SAMPLES & TESTS			Water	STRATA			
Depth	Type No	Test Result		Reduced Level	Legend	Depth (Thickness)	DESCRIPTION
0.10	J1	0.8ppm		10.017		(0.05) 0.05	MADE GROUND (Macadam).
0.20	ES2			9.667		(0.35) 0.40	MADE GROUND (Grey brown slightly clayey gravelly sand. Gravel is fine to coarse angular to subrounded and includes slag).
0.30	PID					(0.60)	MADE GROUND (Red brown sandy gravel with low cobble content and occasional clay pockets. Gravel is fine to coarse angular to subrounded and includes slag. Cobbles are subangular and include slag).
0.60	J4						at c.0.40-0.45m BGL ... light brown cream layer of slag and clinker.
0.70	ES5	1.8ppm		9.067		1.00	Firm to stiff occasionally soft red brown with orange mottling and grey veining slightly sandy slightly gravelly CLAY with pockets of black carbonaceous material. Gravel is fine subrounded to rounded and includes sandstone and mudstone.
0.80	PID						
0.80	B6						
1.20	HSV						
1.20	J7	82 (18)kPa					
1.70	ES8	<0.1ppm				(1.40)	
2.20	PID						
2.20	B9			7.667		2.40	at c.2.20m BGL ... clay is of intermediate plasticity.
							Trial pit complete at 2.40m BGL.



GROUNDWATER
No groundwater inflow observed.

STABILITY
Pit sides stable throughout excavation.

GENERAL REMARKS

ADDITIONAL INFORMATION		
Sketch Diagram:	No Sketch Taken	
Photographs:	Yes	See additional sheets.

UNDERGROUND SERVICES				
Depth	Orientation	Type	Diameter (mm)	Condition

All dimensions in metres
Scale 1:50

For explanation of symbols and abbreviations see Key Sheets

Checked by:
K.W.

Logged by:
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Contract No.
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TRIAL PIT RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPB14	
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455570.834 N:521758.867		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 10.067	Start Date: 25/10/2017	Sheet: 2 of 4



Figure S3-TPB14.1
S3-TPB14 Before investigation works.



Figure S3-TPB14.2
S3-TPB14.



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TRIAL PIT RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPB14
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455570.834 N:521758.867	
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 10.067	Start Date: 25/10/2017
		Sheet: 3 of 4



Figure S3-TPB14.3
S3-TPB14 (2).



Figure S3-TPB14.4
S3-TPB14 (3).



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TRIAL PIT RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPB14
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455570.834 N:521758.867	
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 10.067	Start Date: 25/10/2017
		Sheet: 4 of 4



Figure S3-TPB14.5
S3-TPB14 Spoil.

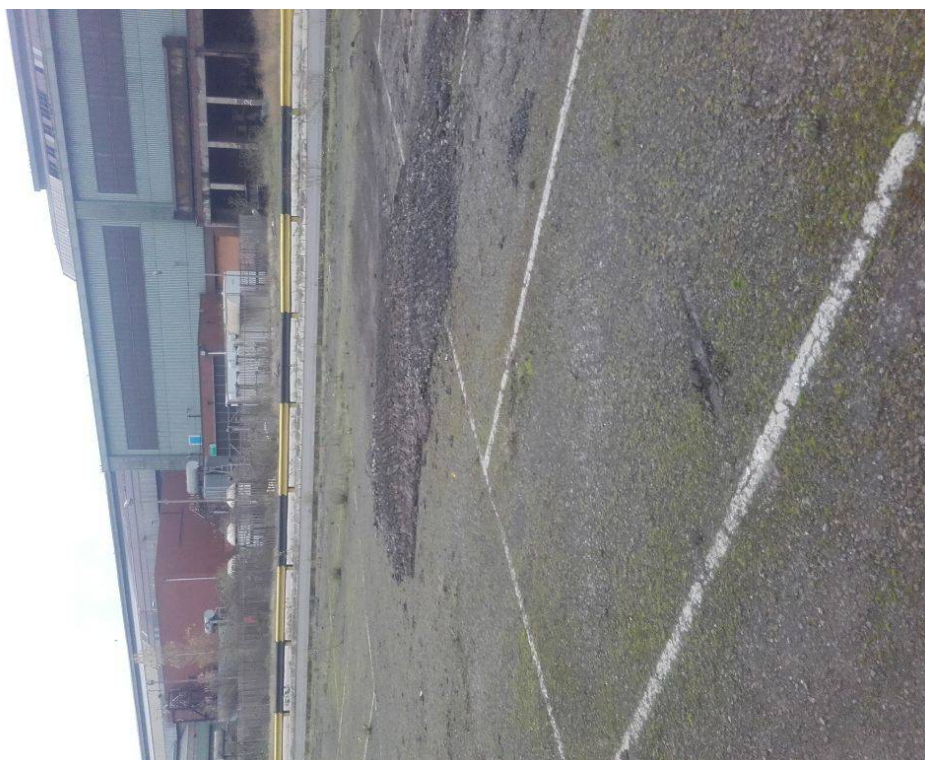


Figure S3-TPB14.6
S3-TPB14 Reinstatement.



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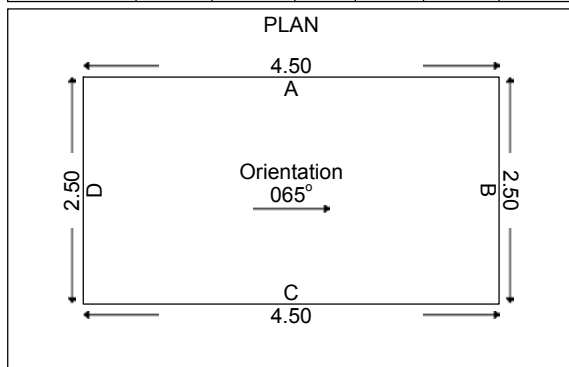
TRIAL PIT RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3			Exploratory Hole No. S3-TPB15	
Client: South Tees Site Company Ltd		Location: Redcar Steel Works E:455184.171 N:521737.105		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)		Ground Level (m(AOD)): 9.723	Start Date: 31/10/2017	Sheet: 1 of 4

SAMPLES & TESTS			Water	STRATA			
Depth	Type No	Test Result		Reduced Level	Legend	Depth (Thickness)	DESCRIPTION
0.10 0.20 0.40 0.50 0.60	J1 ES2 J3 ES4 B5			9.423		(0.30) 0.30	MADE GROUND (Dark grey gravelly sand. Sand includes ash. Gravel is fine to coarse angular to subrounded and includes slag).
				9.023		(0.40) 0.70	MADE GROUND (Grey gravelly sand with low to medium cobble content. Sand includes ash. Gravel is fine to coarse angular to subrounded and includes slag. Cobbles are angular and include slag).
1.00	LB6			8.423		(0.60) 1.30	MADE GROUND (Grey brown sandy gravel with high cobble and boulder content. Gravel is fine to coarse angular to subangular and includes slag, brick, clinker and concrete. Cobbles and boulders are angular to subangular and include slag and brick).
1.50 1.70	J7 ES8					(1.00)	MADE GROUND (Soft to firm brown with pockets of dark grey slightly sandy slightly gravelly clay. Sand includes ash. Gravel is fine to coarse subangular to subrounded and includes brick and clinker).
2.00	B9			7.423		2.30	
2.40 2.50	J10 B11			7.223		(0.20) 2.50	Soft to firm brown with grey and orange mottling slightly sandy CLAY. Trial pit complete 2.50m BGL.



GROUNDWATER
Water seepage at 2.30m BGL - slow inflow.

STABILITY
Pit sides slightly stable throughout excavation.

GENERAL REMARKS

ADDITIONAL INFORMATION		
Sketch Diagram:	No Sketch Taken	
Photographs:	Yes	See additional sheets.

UNDERGROUND SERVICES				
Depth	Orientation	Type	Diameter (mm)	Condition

All dimensions in metres Scale 1:50	For explanation of symbols and abbreviations see Key Sheets	Checked by: K.W.	Logged by: S. Duncan	Contract No. 4155
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TRIAL PIT RECORD

Status:-

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Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPB15
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455184.171 N:521737.105	
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 9.723	Start Date: 31/10/2017
		Sheet: 2 of 4



Figure S3-TPB15.1
S3-TPB15 Before investigation works.



Figure S3-TPB15.2
S3-TPB15.



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TRIAL PIT RECORD

Status:-

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Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPB15
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455184.171 N:521737.105	
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 9.723	Start Date: 31/10/2017
		Sheet: 3 of 4

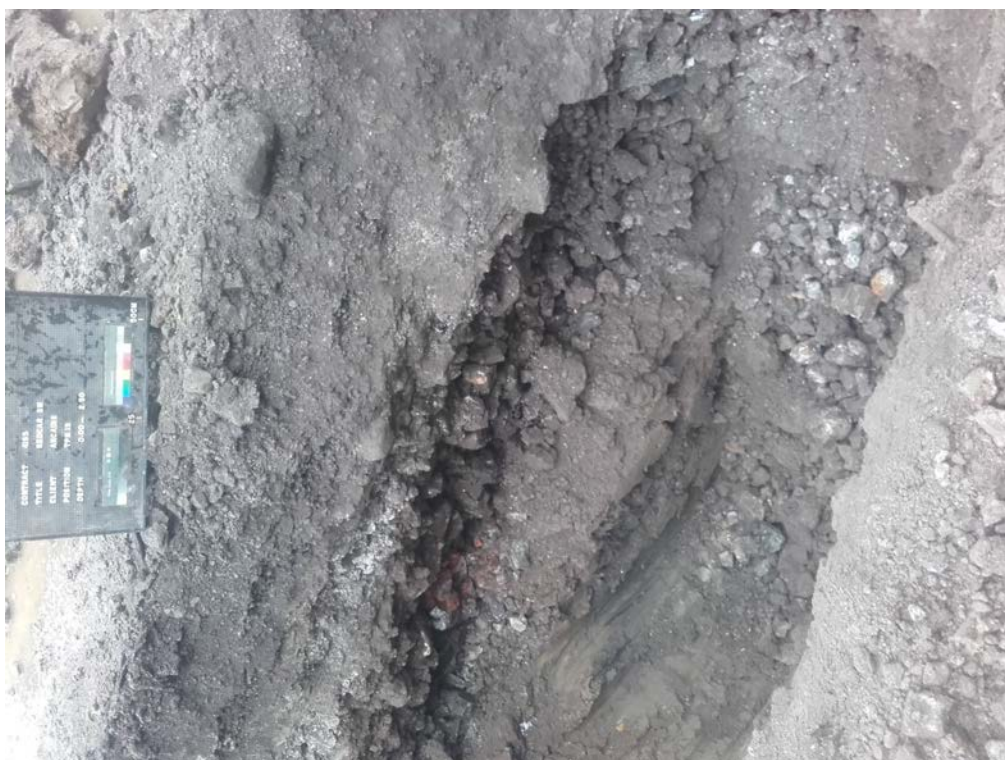


Figure S3-TPB15.3
S3-TPB15 (2).



Figure S3-TPB15.4
S3-TPB15 Spoil.



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TRIAL PIT RECORD

Status:-

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Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPB15	
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455184.171 N:521737.105		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 9.723	Start Date: 31/10/2017	Sheet: 4 of 4



Figure S3-TPB15.5
S3-TPB15 Reinstatement.



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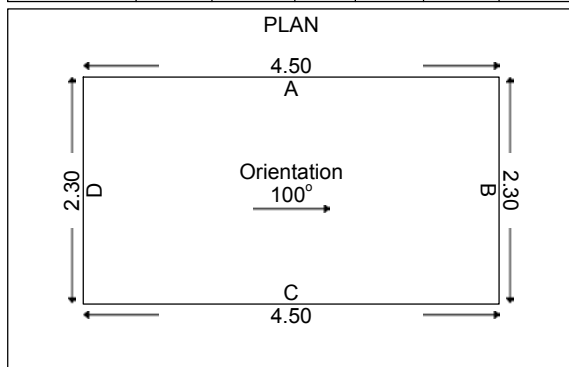
TRIAL PIT RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3			Exploratory Hole No. S3-TPB16	
Client: South Tees Site Company Ltd		Location: Redcar Steel Works E:455570.331 N:521706.869		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)		Ground Level (m(AOD)): 9.795	Start Date: 25/10/2017	Sheet: 1 of 4

SAMPLES & TESTS			Water	STRATA			
Depth	Type No	Test Result		Reduced Level	Legend	Depth (Thickness)	DESCRIPTION
0.20 0.30 0.40 0.40 0.60 0.70 0.80 0.80 1.20	J1 ES2 PID B3 J4 ES5 PID B6 J7	0.2ppm 1.5ppm		9.295		(0.50) 0.50	MADE GROUND (Grey gravelly clay. Sand includes ash. Gravel is fine to coarse angular to subrounded and include slag).
				8.795		(0.50) 1.00	MADE GROUND (Grey slightly clayey gravelly sand with medium cobble content and fragments of iron. Sand includes ash. Gravel is fine to coarse angular to subangular and includes slag and brick). at c.0.50-0.55m BGL ... thin layer of light grey slag.
1.70	ES8					(1.20)	MADE GROUND (Dark grey slightly sandy gravelly clay with low cobble content. Sand includes ash. Gravel is fine to coarse angular to subangular and includes slag, brick and clinker. Cobbles are angular and include slag and brick).
2.00 2.00	PID B9	0.9ppm		7.595		2.20	
2.50	J10						MADE GROUND (Dark grey slightly sandy gravelly clay with pockets of low cobble content. Sand includes ash. Gravel is fine to coarse angular to subangular and includes slag, brick and clinker. Cobbles are angular and include slag and brick).
3.00	ES11					(1.60)	
3.50 3.50	PID B12	0.2ppm		5.995		3.80	
Trial pit terminated at 3.80m BGL - due to groundwater ingress and pit side collapse.							



GROUNDWATER
Water seepage at 1.50m and water strike at 3.60m BGL (heavy inflow).

STABILITY
Pit sides stable throughout excavation.

GENERAL REMARKS

ADDITIONAL INFORMATION		
Sketch Diagram:	No Sketch Taken	
Photographs:	Yes	See additional sheets.

UNDERGROUND SERVICES				
Depth	Orientation	Type	Diameter (mm)	Condition

All dimensions in metres Scale 1:50	For explanation of symbols and abbreviations see Key Sheets	Checked by: <i>K.W.</i>	Logged by: S. Duncan	Contract No. 4155
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TRIAL PIT RECORD

Status:-

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Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPB16
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455570.331 N:521706.869	
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 9.795	Start Date: 25/10/2017
		Sheet: 2 of 4



Figure S3-TPB16.1
S3-TPB16 Before investigation works.



Figure S3-TPB16.2
S3-TPB16.



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TRIAL PIT RECORD

Status:-

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Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPB16	
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455570.331 N:521706.869		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 9.795	Start Date: 25/10/2017	Sheet: 3 of 4



Figure S3-TPB16.3
S3-TPB16 (2).



Figure S3-TPB16.4
S3-TPB16 Spoil.



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TRIAL PIT RECORD

Status:-

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Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3			Exploratory Hole No. S3-TPB16
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455570.331 N:521706.869		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 9.795	Start Date: 25/10/2017	Sheet: 4 of 4



Figure S3-TPB16.5
S3-TPB16 Reinstatement.



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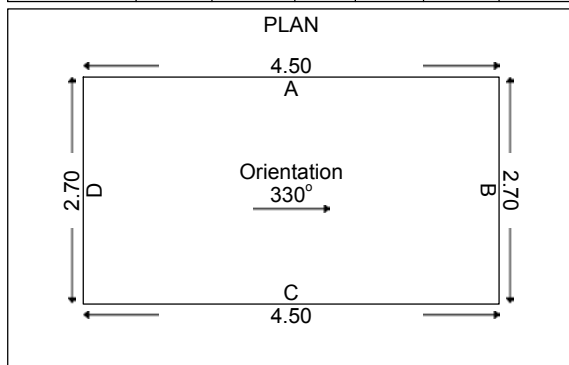
TRIAL PIT RECORD

Status:-

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Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPB17	
Client: South Tees Site Company Ltd		Location: Redcar Steel Works E:455182.572 N:521691.052	
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)		Ground Level (m(AOD)): 9.826	Start Date: 31/10/2017
		Sheet: 1 of 4	

SAMPLES & TESTS			Water	STRATA			
Depth	Type No	Test Result		Reduced Level	Legend	Depth (Thickness)	DESCRIPTION
0.10 0.20 0.40 0.50 0.60 0.80	J1 ES2 J3 ES4 PID B5 J6	0.5ppm		9.526		(0.30) 0.30	MADE GROUND (Brown grey gravelly sand. Gravel is fine to coarse angular to subrounded and includes slag).
				9.126		(0.40) 0.70	MADE GROUND (Light grey sand and gravel with low cobble content. Sand includes ash. Gravel is fine to coarse angular to subangular and includes slag. Cobbles are angular and include slag).
1.20 1.20 1.50 1.60 1.80	PID B7 J8 ES9 J10	1.3ppm	↓	8.326		(0.80) 1.50	MADE GROUND (Grey brown sandy gravelly cobbles with fragments of metal. Sand includes ash. Gravel is fine to coarse angular to subangular and includes slag). at c.1.20m BGL ... very clayey.
				8.126		(0.20) 1.70	MADE GROUND (Firm brown sandy slightly gravelly clay. Gravel is fine to coarse angular to subangular and includes slag and brick).
				8.026		(0.10) 1.80	Firm brown with orange and grey mottling slightly sandy to sandy CLAY. Trial pit terminated at 1.80m BGL - due to groundwater ingress.



GROUNDWATER Water strike at 1.70m BGL - heavy inflow.
STABILITY Pit sides stable throughout excavation.
GENERAL REMARKS

ADDITIONAL INFORMATION			UNDERGROUND SERVICES				
Sketch Diagram:	No Sketch Taken		Depth	Orientation	Type	Diameter (mm)	Condition
Photographs:	Yes	See additional sheets.					

All dimensions in metres Scale 1:50	For explanation of symbols and abbreviations see Key Sheets	Checked by: <i>K.W.</i>	Logged by: S. Duncan	Contract No. 4155
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TRIAL PIT RECORD

Status:-

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Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPB17	
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455182.572 N:521691.052		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 9.826	Start Date: 31/10/2017	Sheet: 2 of 4



Figure S3-TPB17.1
S3-TPB17 Before investigation works.



Figure S3-TPB17.2
S3-TPB17.



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TRIAL PIT RECORD

Status:-

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Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPB17
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455182.572 N:521691.052	
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 9.826	Start Date: 31/10/2017
		Sheet: 3 of 4



Figure S3-TPB17.3
S3-TPB17 (2).

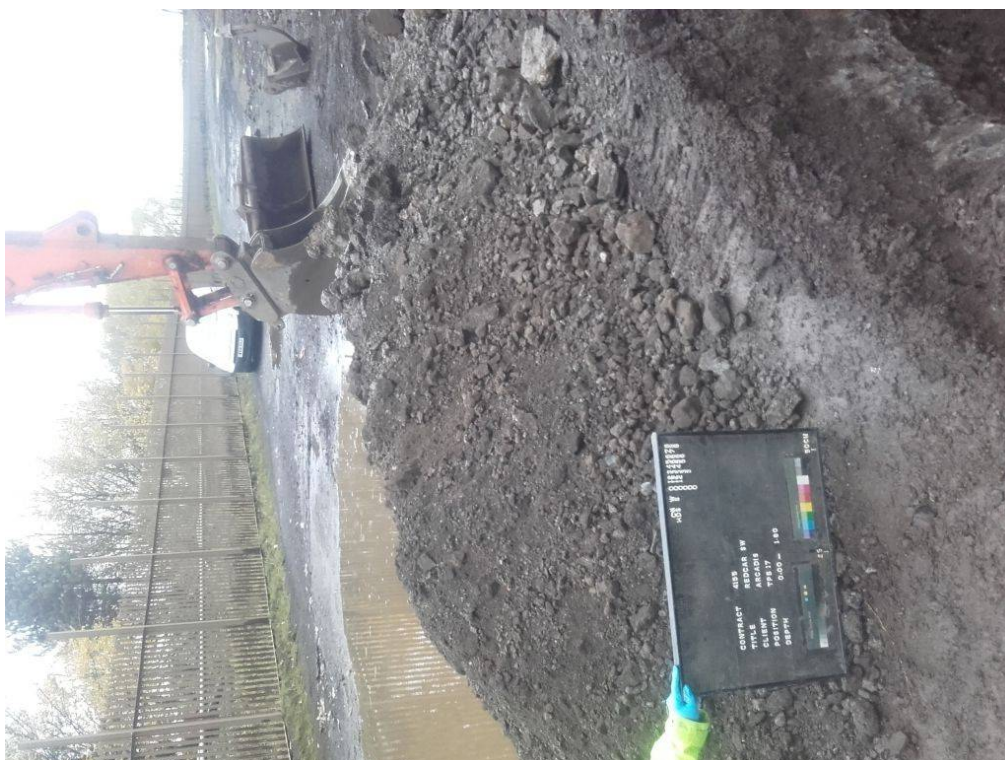


Figure S3-TPB17.4
S3-TPB17 Spoil.



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TRIAL PIT RECORD

Status:-

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Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPB17	
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455182.572 N:521691.052		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 9.826	Start Date: 31/10/2017	Sheet: 4 of 4



Figure S3-TPB17.5
S3-TPB17 Reinstatement.



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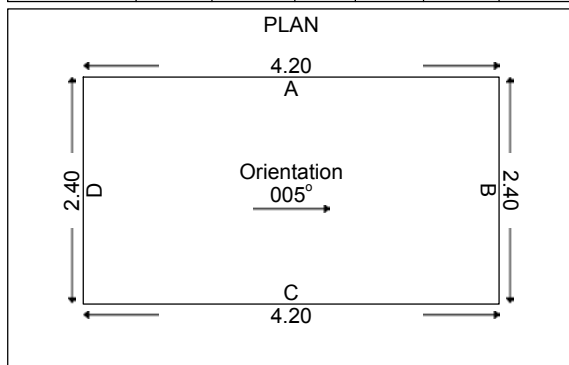
TRIAL PIT RECORD

Status:-

FINAL

Project:	The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3			Exploratory Hole No.
Client:	South Tees Site Company Ltd	Location:	Redcar Steel Works E:455177.698 N:521637.661	
Method (Equipment):	Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)):	9.976	Start Date: 31/10/2017
				Sheet: 1 of 4

SAMPLES & TESTS			Water	STRATA			
Depth	Type No	Test Result		Reduced Level	Legend	Depth (Thickness)	DESCRIPTION
0.30	J1	0.4ppm ↓ <0.1ppm 75 (21)kPa	↓	9.576		(0.40) 0.40	MADE GROUND (Dark grey gravelly sand. Gravel is fine to coarse angular to subrounded and includes slag).
0.50	J2			9.176		(0.40) 0.80	MADE GROUND (Light grey sandy gravel. Sand includes ash. Gravel is medium subangular to rounded and includes slag).
1.00	J3					(0.80)	MADE GROUND (Grey and brown sandy gravelly cobbles and low boulder content. Sand includes ash. Gravel is fine to coarse angular to subangular and include slag. Cobbles are angular to subangular and include slag).
1.20	ES4						
1.50	PID			8.376		1.60	MADE GROUND (Soft to firm dark brown sandy gravelly clay with pockets of black carbonaceous material and fragments of wood. Gravel is fine to coarse angular to subangular and includes slag and brick).
1.50	B5			8.076		(0.30) 1.90	
1.60	J6						Firm brown with grey and orange mottling slightly sandy CLAY. at c.2.00m BGL ... clay is of high plasticity.
1.70	ES7						
1.80	PID					(0.60)	
1.80	B8						
2.00	HSV			7.476		2.50	Trial pit terminated at 2.50m BGL - due to groundwater ingress.
2.00	J9						
2.20	ES10						



GROUNDWATER
Water strike at 1.70m BGL - moderate inflow.

STABILITY
Pit sides stable throughout excavation.

GENERAL REMARKS

ADDITIONAL INFORMATION		
Sketch Diagram:	No Sketch Taken	
Photographs:	Yes	See additional sheets.

UNDERGROUND SERVICES				
Depth	Orientation	Type	Diameter (mm)	Condition

All dimensions in metres
Scale 1:50

For explanation of symbols and
abbreviations see Key Sheets

Checked by:
K.W.

Logged by:
S. Duncan

Contract No.
4155



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TRIAL PIT RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPB18
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455177.698 N:521637.661	
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 9.976	Start Date: 31/10/2017
		Sheet: 2 of 4



Figure S3-TPB18.1
S3-TPB18 Before investigation works.



Figure S3-TPB18.2
S3-TPB18.



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TRIAL PIT RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPB18	
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455177.698 N:521637.661		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 9.976	Start Date: 31/10/2017	Sheet: 3 of 4



Figure S3-TPB18.3
S3-TPB18 (2).



Figure S3-TPB18.4
S3-TPB18 Spoil.



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TRIAL PIT RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPB18
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455177.698 N:521637.661	
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 9.976	Start Date: 31/10/2017
		Sheet: 4 of 4



Figure S3-TPB18.5
S3-TPB18 Reinstatement.



ALLIED EXPLORATION & GEOTECHNICS LIMITED

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Tel: 01772 735 300 Fax: 01772 735 999

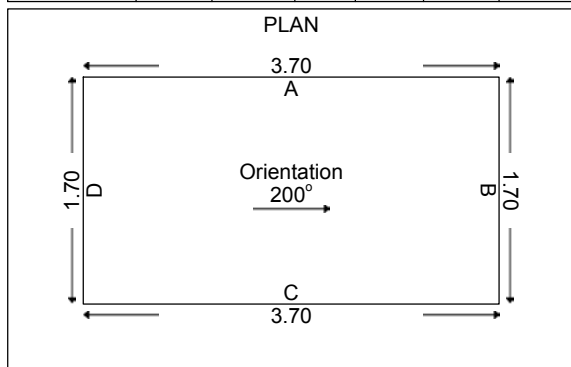
TRIAL PIT RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3			Exploratory Hole No. S3-TPB19	
Client: South Tees Site Company Ltd		Location: Redcar Steel Works E:455474.661 N:521608.036		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)		Ground Level (m(AOD)): 9.847	Start Date: 13/10/2017	Sheet: 1 of 4

SAMPLES & TESTS			Water	STRATA			
Depth	Type No	Test Result		Reduced Level	Legend	Depth (Thickness)	DESCRIPTION
0.05	J1			9.747		(0.10) 0.10	MADE GROUND (Dark brown sandy gravelly topsoil with some rootlets).
0.50	J2						MADE GROUND (Dark grey brown slightly clayey sandy gravel with high cobble and boulder content and fragments of metal, plastic and wood. Gravel is fine to coarse angular to subangular and includes slag, brick and concrete. Cobbles and boulders are angular to subangular and include slag, brick and concrete).
0.50	ES3					(1.50)	
1.00	PID	5.3ppm					
1.00	LB4						
1.50	J5			8.247		1.60	Trial pit terminated at 1.60m BGL - due to groundwater ingress.
1.50	ES6						



GROUNDWATER Water strike at 1.50m BGL - moderate inflow.	
STABILITY Pit sides stable throughout excavation.	
GENERAL REMARKS	

ADDITIONAL INFORMATION			UNDERGROUND SERVICES				
Sketch Diagram:	No Sketch Taken		Depth	Orientation	Type	Diameter (mm)	Condition
Photographs:	Yes	See additional sheets.					

All dimensions in metres Scale 1:50	For explanation of symbols and abbreviations see Key Sheets	Checked by: <i>K.W.</i>	Logged by: P. Jansson	Contract No. 4155
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TRIAL PIT RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPB19	
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455474.661 N:521608.036		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 9.847	Start Date: 13/10/2017	Sheet: 2 of 4



Figure S3-TPB19.1
S3-TPB19 Before investigation works..



Figure S3-TPB19.2
S3-TPB19.



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Status:-

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Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No.	
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455474.661 N:521608.036		S3-TPB19
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 9.847	Start Date: 13/10/2017	Sheet: 3 of 4



Figure S3-TPB19.3
S3-TPB19 (2).



Figure S3-TPB19.4
S3-TPB19 Spoil.



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TRIAL PIT RECORD

Status:-

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Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3			Exploratory Hole No. S3-TPB19
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455474.661 N:521608.036		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 9.847	Start Date: 13/10/2017	Sheet: 4 of 4



Figure S3-TPB19.5
S3-TPB19 Reinstatement.



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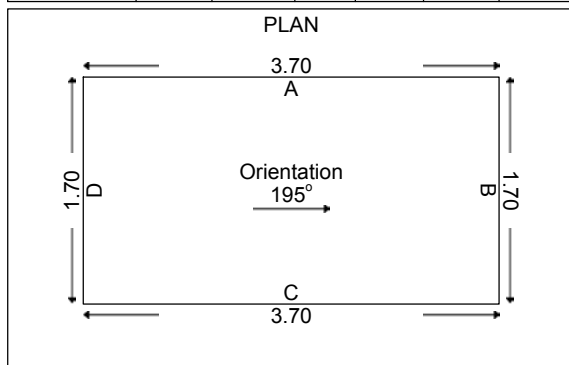
TRIAL PIT RECORD

Status:-

FINAL

Project:	The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3			Exploratory Hole No.
Client:	South Tees Site Company Ltd	Location:	Redcar Steel Works E:455506.531 N:521605.475	
Method (Equipment):	Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)):	9.620	Start Date: 13/10/2017
				Sheet: 1 of 4

SAMPLES & TESTS			Water	STRATA			
Depth	Type No	Test Result		Reduced Level	Legend	Depth (Thickness)	DESCRIPTION
0.10	J1			9.420		(0.20) 0.20	MADE GROUND (Grey sandy gravel. Gravel is fine to coarse angular to subangular and includes slag and limestone).
0.50	J2						MADE GROUND (Dark grey brown sandy gravel with high cobble and boulder content and fragments of metal, plastic and wood. Gravel is fine to coarse angular to subangular and includes slag, brick and concrete. Cobbles and boulders are angular to subangular and include slag, brick and concrete). at c.1.00m BGL ... disused cable running 105 degrees.
0.50	ES3					(1.40)	
1.00	PID	2.1ppm					
1.00	B4			8.020		1.60	
1.70	HSV	50					MADE GROUND (Firm dark brown silty slightly sandy slightly gravelly clay with low cobble content. Gravel is fine to coarse angular to subangular and includes sandstone, slag, brick and concrete. Cobbles are angular to subangular and include slag and brick). at c.2.00m BGL ... clay is of intermediate plasticity.
1.70	J5	(20)kPa				(0.80)	
1.70	ES6						
2.00	PID	1.9ppm		7.220		2.40	
2.00	B7						Firm and stiff brown mottled grey slightly sandy slightly gravelly CLAY with organic carbonaceous material. Gravel is fine subrounded to subangular and includes mudstone. at c.3.00m BGL ... clay is of high plasticity.
2.50	HSV	67				(0.80)	
2.50	J8	(27)kPa					
2.50	ES9			6.420		3.20	
3.00	PID	0.2ppm					Trial pit complete at 3.20m BGL.
3.00	B10						



GROUNDWATER
No groundwater inflow observed.

STABILITY
Pit sides stable throughout excavation.

GENERAL REMARKS

ADDITIONAL INFORMATION		
Sketch Diagram:	No Sketch Taken	
Photographs:	Yes	See additional sheets.

UNDERGROUND SERVICES				
Depth	Orientation	Type	Diameter (mm)	Condition
1.00		Cable		Disused

All dimensions in metres
Scale 1:50

For explanation of symbols and
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TRIAL PIT RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3			Exploratory Hole No. S3-TPB20
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455506.531 N:521605.475		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 9.620	Start Date: 13/10/2017	Sheet: 2 of 4



Figure S3-TPB20.1
S3-TPB20 Before investigation works.



Figure S3-TPB20.2
S3-TPB20.



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TRIAL PIT RECORD

Status:-

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Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No.	
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455506.531 N:521605.475		S3-TPB20
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 9.620	Start Date: 13/10/2017	Sheet: 3 of 4



Figure S3-TPB20.3
S3-TPB20 (2).



Figure S3-TPB20.4
S3-TPB20 Spoil.



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TRIAL PIT RECORD

Status:-

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Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No.	
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455506.531 N:521605.475		S3-TPB20
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)):	Start Date:	Sheet:
	9.620	13/10/2017	4 of 4



Figure S3-TPB20.5
S3-TPB20 Spoil (2).



Figure S3-TPB20.6
S3-TPB20 Reinstatement.



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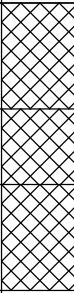

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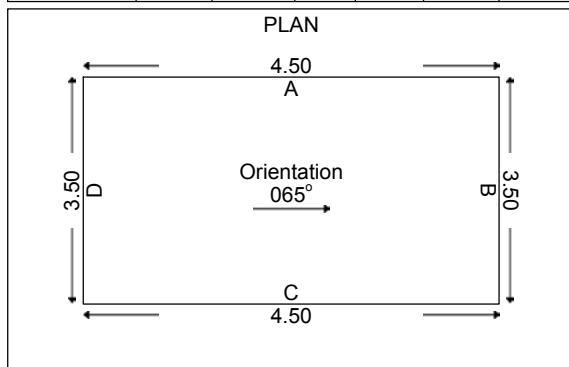
TRIAL PIT RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3			Exploratory Hole No. S3-TPB21	
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455178.139 N:521592.518			
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)		Ground Level (m(AOD)): 9.924	Start Date: 01/11/2017	Sheet: 1 of 4

SAMPLES & TESTS			Water	STRATA			
Depth	Type No	Test Result		Reduced Level	Legend	Depth (Thickness)	DESCRIPTION
0.20	J1	95 (32)kPa		9.224		(0.70)	MADE GROUND (Dark grey gravelly sand with low cobble content and fragments of metal, wood, plastic and iron. Sand includes ash. Gravel is fine to coarse angular to subangular and includes slag, clinker and concrete). at c.0.10-0.50m BGL ... railway sleepers and gravel from adjacent track on west of pit.
0.40	ES2					0.70	
0.60	B3						
0.80	J4					(0.50)	
1.00	ES5					1.20	
1.10	B6						
1.30	J7					(0.70)	
1.50	ES8						
1.70	B9					1.90	
2.00	HSV						
2.00	J10	7.524		(0.50)	2.40	Firm brown with grey and orange mottling slightly sandy CLAY. at c.2.00m BGL ... clay is of intermediate plasticity.	
Trial pit terminated at 2.40m BGL - due to groundwater ingress.							



GROUNDWATER
Water seepage at 1.70m BGL - slow inflow.

STABILITY
Pit sides moderately unstable throughout excavation.

GENERAL REMARKS

ADDITIONAL INFORMATION			UNDERGROUND SERVICES				
Sketch Diagram:	No Sketch Taken		Depth	Orientation	Type	Diameter (mm)	Condition
Photographs:	Yes	See additional sheets.					

All dimensions in metres
Scale 1:50

For explanation of symbols and
abbreviations see Key Sheets

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Logged by:
S. Duncan

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TRIAL PIT RECORD

Status:-

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Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455178.139 N:521592.518	
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 9.924	Start Date: 01/11/2017
		Sheet: 2 of 4



Figure S3-TPB21.1
S3-TPB21 Before investigation works.



Figure S3-TPB21.2
S3-TPB21.



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TRIAL PIT RECORD

Status:-

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Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455178.139 N:521592.518	
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 9.924	Start Date: 01/11/2017
		Sheet: 3 of 4



Figure S3-TPB21.3
S3-TPB21 (2).



Figure S3-TPB21.4
S3-TPB21 Spoil.



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Status:-

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Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPB21	
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455178.139 N:521592.518		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 9.924	Start Date: 01/11/2017	Sheet: 4 of 4



Figure S3-TPB21.5
S3-TPB21 Reinstatement.



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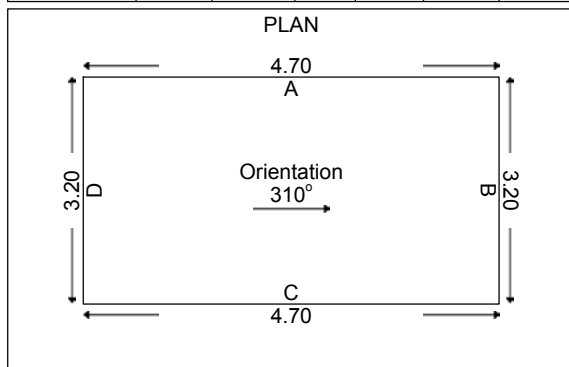
TRIAL PIT RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3			Exploratory Hole No. S3-TPB22	
Client: South Tees Site Company Ltd		Location: Redcar Steel Works E:455210.756 N:521587.790		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)		Ground Level (m(AOD)):	9.808	Start Date: 01/11/2017
			Sheet:	1 of 4

SAMPLES & TESTS			Water	STRATA			
Depth	Type No	Test Result		Reduced Level	Legend	Depth (Thickness)	DESCRIPTION
0.30	J1					(1.20)	MADE GROUND (Dark grey and dark brown slightly clayey sandy gravel with medium cobble content and fragments of metal and wood. Sand includes ash. Gravel is fine to coarse angular to subrounded and includes slag and concrete). at c.0.20m BGL ... redundant 20mm diameter aluminium cable in northeast face running 220 degrees.
0.70	ES2						
1.00	B3			8.608		1.20	
1.50	LB4			8.108		(0.50)	MADE GROUND (Yellow brown clayey sandy gravel with medium cobble content. Gravel is fine to coarse angular to subangular and includes slag. Cobbles are angular and include slag).
1.80	J5					(0.40)	MADE GROUND (Soft to firm black and dark grey sandy gravelly clay with a high degree of bitumen and pockets of sandy gravel. Strong hydrocarbon odour, staining and sheen noted). Firm brown with grey and orange mottling slightly sandy CLAY. Trial pit terminated at 2.30m BGL - due to groundwater ingress.
1.90	ES6			7.708		2.10	
2.00	B7			7.508		(0.20)	
2.20	HSV	78 (20)kPa					
2.20	J8						
2.20	B10						
2.20	ES9						



GROUNDWATER Water strike at 1.70m BGL - heavy inflow.
--

STABILITY Pit sides moderately unstable throughout excavation.

GENERAL REMARKS

ADDITIONAL INFORMATION		
Sketch Diagram:	No Sketch Taken	
Photographs:	Yes	See additional sheets.

UNDERGROUND SERVICES				
Depth	Orientation	Type	Diameter (mm)	Condition

All dimensions in metres Scale 1:50	For explanation of symbols and abbreviations see Key Sheets	Checked by: <i>K.W.</i>	Logged by: S. Duncan	Contract No. 4155
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TRIAL PIT RECORD

Status:-

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Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3			Exploratory Hole No. S3-TPB22
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455210.756 N:521587.790		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 9.808	Start Date: 01/11/2017	Sheet: 2 of 4



Figure S3-TPB22.1
S3-TPB22 Before investigation works.



Figure S3-TPB22.2
S3-TPB22.



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TRIAL PIT RECORD

Status:-

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Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPB22
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455210.756 N:521587.790	
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 9.808	Start Date: 01/11/2017
		Sheet: 3 of 4



Figure S3-TPB22.3
S3-TPB22 (2).

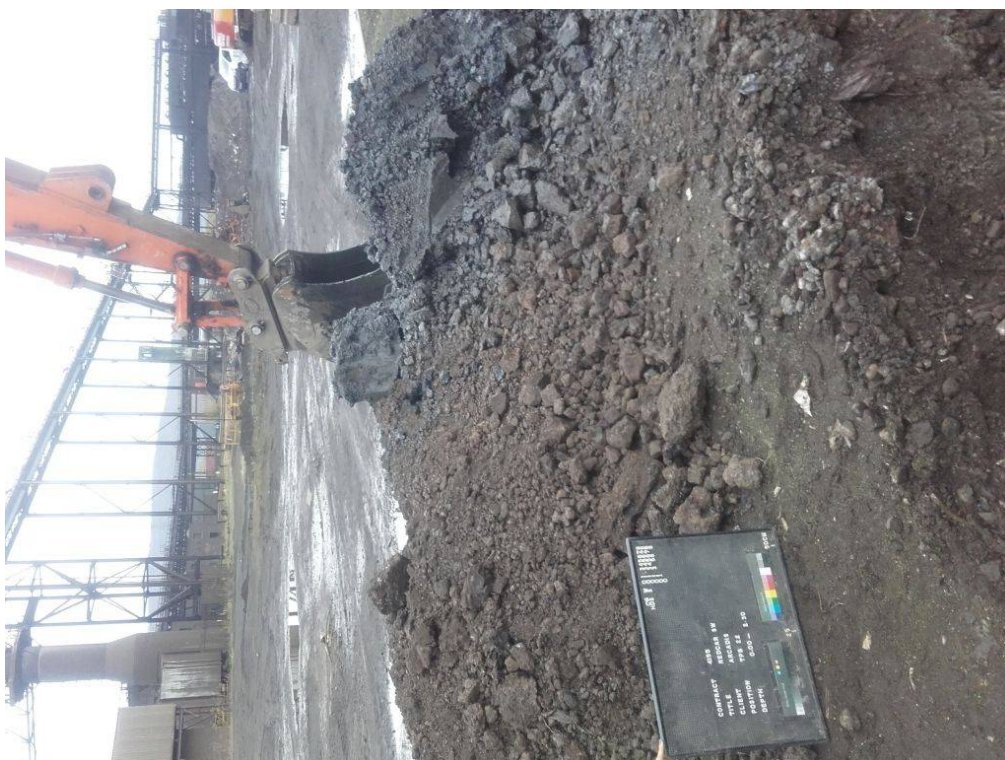


Figure S3-TPB22.4
S3-TPB22 Spoil.



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TRIAL PIT RECORD

Status:-

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Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPB22	
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455210.756 N:521587.790		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 9.808	Start Date: 01/11/2017	Sheet: 4 of 4



Figure S3-TPB22.5
S3-TPB22 Reinstatement.



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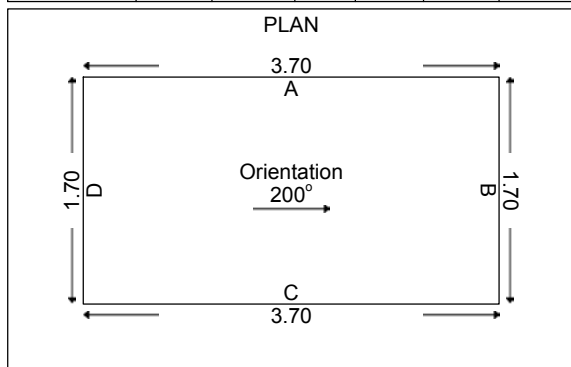
TRIAL PIT RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3			Exploratory Hole No. S3-TPB23
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455471.945 N:521561.731		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)		Ground Level (m(AOD)): 9.823	Start Date: 13/10/2017
			Sheet: 1 of 4

SAMPLES & TESTS			Water	STRATA				
Depth	Type No	Test Result		Reduced Level	Legend	Depth (Thickness)	DESCRIPTION	
0.20	J1	12.2ppm		9.523		(0.30) 0.30	MADE GROUND (Dark brown sandy gravelly topsoil with some rootlets).	
0.50	J2						(1.30)	MADE GROUND (Grey to dark brown grey slightly clayey very sandy gravel with high cobble and boulder content and fragments of metal, glass and wood. Gravel is fine to coarse angular to subangular and includes slag, brick and concrete. Cobbles and boulders are angular to subangular and include slag, brick and concrete).
0.50	ES3							
1.00	PID	9.8ppm			8.223		(0.80)	MADE GROUND (Soft and firm dark brown grey silty slightly sandy slightly gravelly clay with low to medium cobble content. Gravel is fine to coarse angular to subangular and includes slag, brick and concrete. Cobbles are angular to subangular and include slag and brick).
1.00	B4							
1.50	J5	(22)kPa						Trail pit terminated at 2.40m BGL - due to groundwater ingress.
1.50	ES6							
2.00	PID							
2.00	B7							
2.00	HSV							
2.40	J8							
2.40	ES9							



GROUNDWATER
Water strike at 2.30m BGL - moderate inflow.

STABILITY
Pit sides stable throughout excavation.

GENERAL REMARKS

ADDITIONAL INFORMATION		
Sketch Diagram:	No Sketch Taken	
Photographs:	Yes	See additional sheets.

UNDERGROUND SERVICES				
Depth	Orientation	Type	Diameter (mm)	Condition

All dimensions in metres
Scale 1:50

For explanation of symbols and abbreviations see Key Sheets

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Logged by:
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TRIAL PIT RECORD

Status:-

FINAL

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Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455471.945 N:521561.731		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 9.823	Start Date: 13/10/2017	Sheet: 2 of 4



Figure S3-TPB23.1
S3-TPB23 Before investigation works.



Figure S3-TPB23.2
S3-TPB23.



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TRIAL PIT RECORD

Status:-

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Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPB23
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455471.945 N:521561.731	
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 9.823	Start Date: 13/10/2017
		Sheet: 3 of 4



Figure S3-TPB23.3
S3-TPB23 (2).



Figure S3-TPB23.4
S3-TPB23 Spoil.



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TRIAL PIT RECORD

Status:-

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Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPB23	
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455471.945 N:521561.731		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 9.823	Start Date: 13/10/2017	Sheet: 4 of 4



Figure S3-TPB23.5
S3-TPB23 Spoil (2).



Figure S3-TPB23.6
S3-TPB23 Reinstatement.



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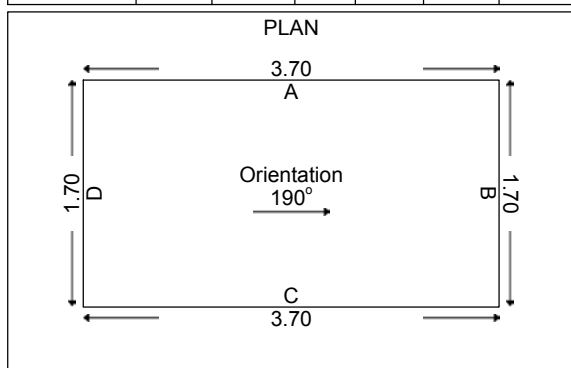
TRIAL PIT RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3			Exploratory Hole No. S3-TPB24	
Client: South Tees Site Company Ltd		Location: Redcar Steel Works E:455504.354 N:521559.641		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)		Ground Level (m(AOD)):	Start Date:	Sheet:
		9.836	16/10/2017	1 of 4

SAMPLES & TESTS			Water	STRATA			
Depth	Type No	Test Result		Reduced Level	Legend	Depth (Thickness)	DESCRIPTION
0.10	J1			9.636		(0.20) 0.20	MADE GROUND (Brown grey sandy gravelly topsoil with occasional rootlets).
0.50	J2						MADE GROUND (Dark brown grey sandy gravel with medium cobble and boulder content and fragments of metal and plastic. Gravel is fine to coarse angular to subangular and includes slag, brick and concrete. Cobbles and boulders are angular to subangular and include slag and brick).
0.50	ES3						
1.00	PID	26.3ppm				(1.50)	
1.00	LB4						
1.50	J5			8.136		1.70	MADE GROUND (Firm dark brown silty slightly sandy slightly gravelly clay with low to medium cobble content and fragments of wood and tile. Gravel is fine to coarse angular to subangular and includes sandstone, slag, brick and concrete. Cobbles are angular to subangular and include slag and brick).
1.50	ES6						
2.00	PID	5.5ppm					
2.00	B7	47				(1.40)	
2.00	HSV	(15)kPa					
2.50	J8						
2.50	ES9			6.736		3.10	
3.30	PID	9.2ppm		6.336		(0.40)	Stiff brown mottled grey sandy CLAY with occasional organic carbonaceous material.
3.30	HSV	86				3.50	at c.3.30m BGL ... clay is of high plasticity.
3.30	B10	(29)kPa					Trial pit terminated at 3.50m BGL - due to groundwater ingress.
3.30	ES11						
3.30	J12						



GROUNDWATER Water strike at 3.10m BGL - slight inflow.

STABILITY Pit sides stable throughout excavation.
--

GENERAL REMARKS

ADDITIONAL INFORMATION		
Sketch Diagram:	No Sketch Taken	
Photographs:	Yes	See additional sheets.

UNDERGROUND SERVICES				
Depth	Orientation	Type	Diameter (mm)	Condition

All dimensions in metres Scale 1:50	For explanation of symbols and abbreviations see Key Sheets	Checked by: K.W.	Logged by: P. Jansson	Contract No. 4155
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TRIAL PIT RECORD

Status:-

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Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPB24	
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455504.354 N:521559.641		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 9.836	Start Date: 16/10/2017	Sheet: 2 of 4



Figure S3-TPB24.1
S3-TPB24 Before investigation works.



Figure S3-TPB24.2
S3-TPB24.



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TRIAL PIT RECORD

Status:-

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Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPB24	
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455504.354 N:521559.641		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 9.836	Start Date: 16/10/2017	Sheet: 3 of 4



Figure S3-TPB24.3
S3-TPB24 (2).



Figure S3-TPB24.4
S3-TPB24 Spoil.



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TRIAL PIT RECORD

Status:-

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Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No.	
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455504.354 N:521559.641		S3-TPB24
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)):	Start Date:	Sheet:
	9.836	16/10/2017	4 of 4



Figure S3-TPB24.5
S3-TPB24 Spoil (2).



Figure S3-TPB24.6
S3-TPB24 Reinstatement.



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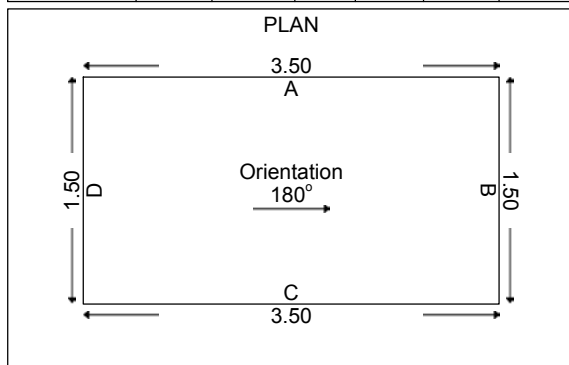
TRIAL PIT RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3			Exploratory Hole No. S3-TPB25	
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455554.977 N:521559.819			
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)		Ground Level (m(AOD)): 9.837	Start Date: 01/11/2017	Sheet: 1 of 4

SAMPLES & TESTS			Water	STRATA			
Depth	Type No	Test Result		Reduced Level	Legend	Depth (Thickness)	DESCRIPTION
0.10	J1			9.737		(0.10) 0.10	MADE GROUND (Dark grey sandy gravel with low cobble content. Gravel is fine to coarse angular to subangular and includes slag. Cobbles are angular to subangular and include slag).
0.50	J2						
0.50	ES3						MADE GROUND (Firm to stiff brown slightly sandy slightly gravelly clay with high cobble and low boulder content. Fragments of tile and glass. Gravel is fine to coarse angular to subangular and includes slag and brick. Cobbles and boulders are angular to subangular and include slag).
1.00	PID	1.9ppm				(2.10)	
1.00	HSV	79					
1.00	B4	(38)kPa					
1.50	J5						
1.50	ES6						
2.00	PID	0.7ppm		7.637		2.20	Stiff orange brown mottled grey slightly sandy to sandy slightly gravelly CLAY.
2.00	B7					(0.40)	Gravel is fine subrounded and includes sandstone and mudstone.
2.60	PID	<0.1ppm		7.237		2.60	Trial pit complete at 2.60m BGL.
2.60	HSV	104					
2.60	J8	(47)kPa					
2.60	B10						
2.60	ES9						



GROUNDWATER
Water seepage at 2.20m BGL - slight inflow.

STABILITY
Pit sides stable throughout excavation.

GENERAL REMARKS

ADDITIONAL INFORMATION		
Sketch Diagram:	No Sketch Taken	
Photographs:	Yes	See additional sheets.

UNDERGROUND SERVICES				
Depth	Orientation	Type	Diameter (mm)	Condition

All dimensions in metres
Scale 1:50

For explanation of symbols and
abbreviations see Key Sheets

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Logged by:
P. Jansson

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TRIAL PIT RECORD

Status:-

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Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPB25	
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455554.977 N:521559.819		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 9.837	Start Date: 01/11/2017	Sheet: 2 of 4



Figure S3-TPB25.1
S3-TPB25 Before investigation works.



Figure S3-TPB25.2
S3-TPB25.



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TRIAL PIT RECORD

Status:-

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Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No.	
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455554.977 N:521559.819		S3-TPB25
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 9.837	Start Date: 01/11/2017	Sheet: 3 of 4



Figure S3-TPB25.3
S3-TPB25 (2).



Figure S3-TPB25.4
S3-TPB25 Spoil.



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TRIAL PIT RECORD

Status:-

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Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPB25	
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455554.977 N:521559.819		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 9.837	Start Date: 01/11/2017	Sheet: 4 of 4



Figure S3-TPB25.5
S3-TPB25 Spoil (2).



Figure S3-TPB25.6
S3-TPB25 Reinstatement.



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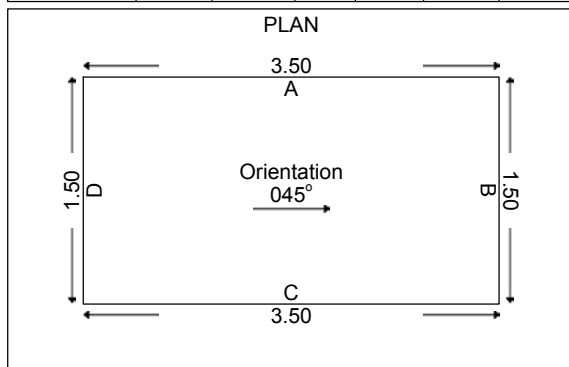
TRIAL PIT RECORD

Status:-

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Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3			Exploratory Hole No. S3-TPB26
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455175.658 N:521520.996		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 9.867	Start Date: 30/10/2017	Sheet: 1 of 4

SAMPLES & TESTS			Water	STRATA			
Depth	Type No	Test Result		Reduced Level	Legend	Depth (Thickness)	DESCRIPTION
0.50 0.50	J1 ES2			9.817		(0.05) 0.05	MADE GROUND (Dark brown silty sandy topsoil with occasional rootlets).
1.00 1.00	PID LB3	0.6ppm				(1.55)	MADE GROUND (Dark brown grey to dark grey sandy gravel with medium cobble and boulder content and fragments of plastic. Gravel is fine to coarse angular to subangular and includes slag, brick and concrete. Cobbles and boulders are angular to subangular and include slag).
1.70 1.70 1.70 1.70	PID J4 B6 ES5	0.2ppm		8.267 8.167		1.60 (0.10) 1.70	Soft fibrous black very silty sandy PEAT. at c.1.70m BGL ... silt is of high plasticity. Trial pit terminated at 1.70m BGL - due to groundwater ingress.



GROUNDWATER
Water strike at 1.60m BGL - moderate inflow.

STABILITY
Pit sides stable throughout excavation.

GENERAL REMARKS

ADDITIONAL INFORMATION		
Sketch Diagram:	No Sketch Taken	
Photographs:	Yes	See additional sheets.

UNDERGROUND SERVICES				
Depth	Orientation	Type	Diameter (mm)	Condition

All dimensions in metres
Scale 1:50

For explanation of symbols and
abbreviations see Key Sheets

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K.W.

Logged by:
P. Jansson

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TRIAL PIT RECORD

Status:-

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Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPB26	
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455175.658 N:521520.996		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 9.867	Start Date: 30/10/2017	Sheet: 2 of 4



Figure S3-TPB26.1
S3-TPB26 Before investigation works.



Figure S3-TPB26.2
S3-TPB26.



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TRIAL PIT RECORD

Status:-

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Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPB26	
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455175.658 N:521520.996		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 9.867	Start Date: 30/10/2017	Sheet: 3 of 4



Figure S3-TPB26.3
S3-TPB26 (2).



Figure S3-TPB26.4
S3-TPB26 Spoil.



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TRIAL PIT RECORD

Status:-

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Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPB26
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455175.658 N:521520.996	
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 9.867	Start Date: 30/10/2017
		Sheet: 4 of 4



Figure S3-TPB26.5
S3-TPB26 Spoil (2).



Figure S3-TPB26.6
S3-TPB26 Reinstatement.



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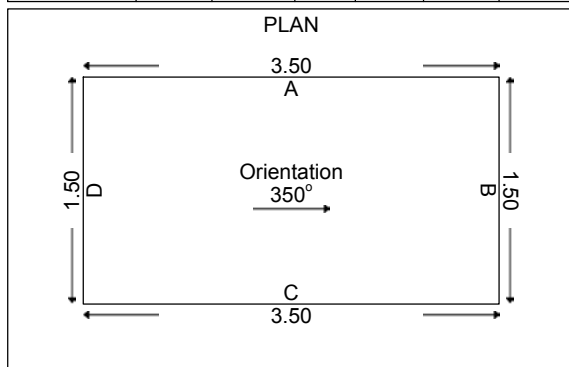
TRIAL PIT RECORD

Status:-

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Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPB27	
Client: South Tees Site Company Ltd		Location: Redcar Steel Works E:455209.708 N:521524.643	
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)		Ground Level (m(AOD)): 10.082	Start Date: 01/11/2017
		Sheet: 1 of 4	

SAMPLES & TESTS			Water	STRATA			
Depth	Type No	Test Result		Reduced Level	Legend	Depth (Thickness)	DESCRIPTION
0.50 0.50	J1 ES2						MADE GROUND (Dark grey brown to grey brown slightly sandy to sandy gravel with medium cobble and boulder content and fragments of metal and plastic. Gravel is fine to coarse angular to subangular and includes slag, brick and concrete. Cobbles and boulders are angular to subangular and include slag, brick and concrete).
1.00 1.00	PID LB3	0.7ppm				(1.90)	
1.50 1.50	J4 ES5		↓	8.182		1.90	Trial pit terminated 1.90m BGL - due to groundwater ingress.
1.90 1.90	PID B6	2.0ppm					



GROUNDWATER Water strike at 1.70m BGL - moderate inflow.
STABILITY Pit sides stable throughout excavation.
GENERAL REMARKS

ADDITIONAL INFORMATION			UNDERGROUND SERVICES				
Sketch Diagram:	No Sketch Taken		Depth	Orientation	Type	Diameter (mm)	Condition
Photographs:	Yes	See additional sheets.					

All dimensions in metres Scale 1:50	For explanation of symbols and abbreviations see Key Sheets	Checked by: <i>K.W.</i>	Logged by: P. Jansson	Contract No. 4155
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Status:-

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Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPB27	
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455209.708 N:521524.643		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 10.082	Start Date: 01/11/2017	Sheet: 2 of 4



Figure S3-TPB27.1
S3-TPB27 Before investigation works.



Figure S3-TPB27.2
S3-TPB27.



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TRIAL PIT RECORD

Status:-

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Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPB27	
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455209.708 N:521524.643		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 10.082	Start Date: 01/11/2017	Sheet: 3 of 4



Figure S3-TPB27.3
S3-TPB27 (2).



Figure S3-TPB27.4
S3-TPB27 Spoil.



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TRIAL PIT RECORD

Status:-

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Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPB27	
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455209.708 N:521524.643		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 10.082	Start Date: 01/11/2017	Sheet: 4 of 4



Figure S3-TPB27.5
S3-TPB27 Spoil (2).



Figure S3-TPB27.6
S3-TPB27 Reinstatement.



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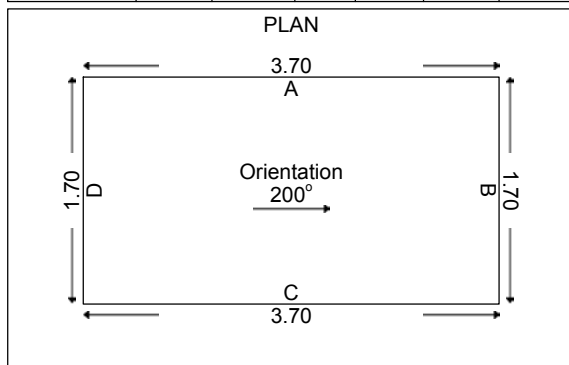
TRIAL PIT RECORD

Status:-

FINAL

Project:	The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3			Exploratory Hole No.
Client:	South Tees Site Company Ltd	Location:	Redcar Steel Works E:455469.145 N:521515.477	S3-TPB28
Method (Equipment):	Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)):	9.883	Start Date: 13/10/2017
				Sheet: 1 of 4

SAMPLES & TESTS			Water	STRATA			
Depth	Type No	Test Result		Reduced Level	Legend	Depth (Thickness)	DESCRIPTION
0.05	J1			9.783		(0.10) 0.10	MADE GROUND (Dark brown sandy gravelly topsoil with some rootlets).
0.50	J2						MADE GROUND (Dark brown grey slightly sandy to sandy gravel with high cobble and boulder content and fragments of metal, glass and plastic. Gravel is fine to coarse angular to subangular and includes slag, brick and concrete. Cobbles and boulders are angular to subangular and include slag, brick and concrete).
0.50	ES3						
1.00	PID	0.7ppm					
1.00	B4						
1.50	J5					(2.60)	
1.50	ES6						
2.00	PID	7.3ppm					at c.1.80-2.70m BGL ... some clayey lenses.
2.00	LB7						
2.50	J8			7.183		2.70	
2.50	ES9						
3.00	PID	6.8ppm				(0.80)	MADE GROUND (Soft and firm dark brown grey slightly sandy to sandy slightly gravelly clay with low to medium cobble content. Gravel is fine to coarse angular to subangular and includes sandstone, mudstone, slag, brick and concrete. Cobbles are angular to subangular and include slag and brick).
3.00	HSV	45					
3.00	B10	(15)kPa		6.383		3.50	
3.50	J11						Trial pit terminated at 3.50m BGL - due to groundwater ingress.
3.50	ES12						



GROUNDWATER
Water seepage at 2.70m and water strike 3.40m BGL (slight inflow).

STABILITY
Pit sides stable throughout excavation.

GENERAL REMARKS

ADDITIONAL INFORMATION		
Sketch Diagram:	No Sketch Taken	
Photographs:	Yes	See additional sheets.

UNDERGROUND SERVICES				
Depth	Orientation	Type	Diameter (mm)	Condition

All dimensions in metres
Scale 1:50

For explanation of symbols and abbreviations see Key Sheets

Checked by:
K.W.

Logged by:
P. Jansson

Contract No.
4155



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TRIAL PIT RECORD

Status:-

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Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPB28	
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455469.145 N:521515.477		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 9.883	Start Date: 13/10/2017	Sheet: 2 of 4



Figure S3-TPB28.1
S3-TPB28 Before investigation works.



Figure S3-TPB28.2
S3-TPB28.



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TRIAL PIT RECORD

Status:-

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Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No.	
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455469.145 N:521515.477		S3-TPB28
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 9.883	Start Date: 13/10/2017	Sheet: 3 of 4



Figure S3-TPB28.3
S3-TPB28 (2).



Figure S3-TPB28.4
S3-TPB28 Spoil.



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TRIAL PIT RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPB28	
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455469.145 N:521515.477		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 9.883	Start Date: 13/10/2017	Sheet: 4 of 4



Figure S3-TPB28.5
S3-TPB28 Spoil (2).



Figure S3-TPB28.6
S3-TPB28 Reinstatement.



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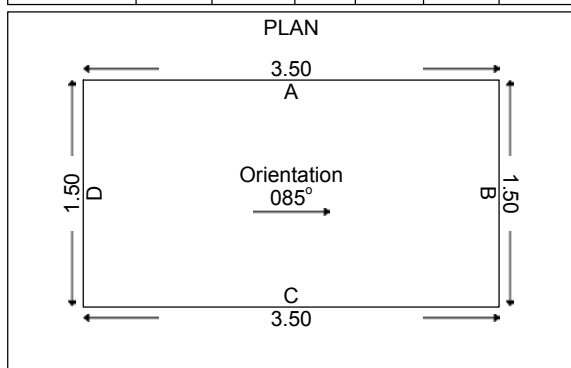
TRIAL PIT RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3			Exploratory Hole No. S3-TPB29
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455171.590 N:521475.283		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 9.742	Start Date: 31/10/2017	Sheet: 1 of 4

SAMPLES & TESTS			Water	STRATA			
Depth	Type No	Test Result		Reduced Level	Legend	Depth (Thickness)	DESCRIPTION
0.50 0.50	J1 ES2					(1.60)	MADE GROUND (Grey brown slightly clayey sandy gravel with medium cobble and boulder content and occasional fragments of metal, wood and plastic. Gravel is fine to coarse angular to subangular and includes slag, brick and concrete. Cobbles and boulders are angular to subangular and include slag and brick).
1.00 1.00	LB3 PID	0.4ppm					
1.50 1.50	J4 ES5			8.142		1.60	Firm brown mottled grey slightly sandy CLAY with occasional organic carbonaceous material. at c.1.90m BGL ... clay is of high plasticity. Trial pit complete at 1.90m BGL.
1.90 1.90	PID HSV	0.2ppm 58		7.842		(0.30)	
1.90 1.90	J6 B8	(34)kPa				1.90	
1.90 1.90	ES7						
1.90 1.90							



GROUNDWATER Water seepage at 1.60m BGL - slight inflow.
STABILITY Pit sides stable throughout excavation.
GENERAL REMARKS

ADDITIONAL INFORMATION			UNDERGROUND SERVICES				
Sketch Diagram:	No Sketch Taken		Depth	Orientation	Type	Diameter (mm)	Condition
Photographs:	Yes	See additional sheets.					

All dimensions in metres Scale 1:50	For explanation of symbols and abbreviations see Key Sheets	Checked by: <i>K.W.</i>	Logged by: P. Jansson	Contract No. 4155
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TRIAL PIT RECORD

Status:-

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Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPB29
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455171.590 N:521475.283	
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 9.742	Start Date: 31/10/2017
		Sheet: 2 of 4



Figure S3-TPB29.1
S3-TPB29 Before investigation works.



Figure S3-TPB29.2
S3-TPB29.



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TRIAL PIT RECORD

Status:-

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Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPB29	
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455171.590 N:521475.283		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 9.742	Start Date: 31/10/2017	Sheet: 3 of 4



Figure S3-TPB29.3
S3-TPB29 (2).



Figure S3-TPB29.4
S3-TPB29 Spoil.



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TRIAL PIT RECORD

Status:-

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Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPB29	
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455171.590 N:521475.283		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 9.742	Start Date: 31/10/2017	Sheet: 4 of 4



Figure S3-TPB29.5
S3-TPB29 Spoil (2).



Figure S3-TPB29.6
S3-TPB29 Reinstatement.



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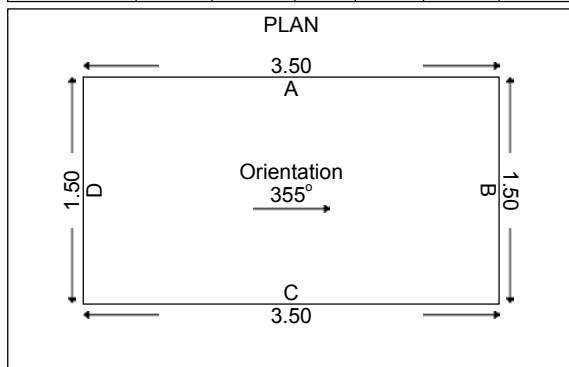
TRIAL PIT RECORD

Status:-

FINAL

Project:	The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3			Exploratory Hole No.
Client:	South Tees Site Company Ltd	Location:	Redcar Steel Works E:455210.594 N:521478.006	S3-TPB30
Method (Equipment):	Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)):	9.933	Start Date: 31/10/2017 Sheet: 1 of 4

SAMPLES & TESTS			Water	STRATA			
Depth	Type No	Test Result		Reduced Level	Legend	Depth (Thickness)	DESCRIPTION
0.50 0.50	J1 ES2			9.853 9.753	(0.08) (0.10)	0.08 0.18	MADE GROUND (Block paving). MADE GROUND (Brown sand. Sand is fine to coarse).
1.00 1.00	PID B3	0.4ppm				(1.82)	MADE GROUND (Dark grey brown slightly clayey very sandy gravel with medium cobble and boulder content and occasional clayey lenses, fragments of metal, wood and plastic. Sand is fine to coarse. Gravel is fine to coarse angular to subangular and includes slag, brick and concrete. Cobbles and boulders are angular to subangular and include slag, brick and concrete).
1.50 1.50	J4 ES5		↓				at c.1.50-2.00m BGL ... slag and concrete boulders.
2.00 2.00	PID B6	0.5ppm		7.933		2.00	Trial pit complete at 2.00m BGL.



GROUNDWATER
Water strike at 1.70m BGL - heavy inflow.

STABILITY
Pit sides stable throughout excavation.

GENERAL REMARKS

ADDITIONAL INFORMATION		
Sketch Diagram:	No Sketch Taken	
Photographs:	Yes	See additional sheets.

UNDERGROUND SERVICES				
Depth	Orientation	Type	Diameter (mm)	Condition

All dimensions in metres Scale 1:50	For explanation of symbols and abbreviations see Key Sheets	Checked by: <i>K.W.</i>	Logged by: P. Jansson	Contract No. 4155
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TRIAL PIT RECORD

Status:-

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Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPB30	
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455210.594 N:521478.006		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 9.933	Start Date: 31/10/2017	Sheet: 2 of 4



Figure S3-TPB30.1
S3-TPB30 Before investigation works.



Figure S3-TPB30.2
S3-TPB30.



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TRIAL PIT RECORD

Status:-

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Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No.	
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455210.594 N:521478.006		S3-TPB30
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 9.933	Start Date: 31/10/2017	Sheet: 3 of 4



Figure S3-TPB30.3
S3-TPB30 (2).



Figure S3-TPB30.4
S3-TPB30 Spoil.



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TRIAL PIT RECORD

Status:-

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Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPB30	
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455210.594 N:521478.006		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 9.933	Start Date: 31/10/2017	Sheet: 4 of 4



Figure S3-TPB30.5
S3-TPB30 Spoil (2).



Figure S3-TPB30.6
S3-TPB30 Reinstatement.



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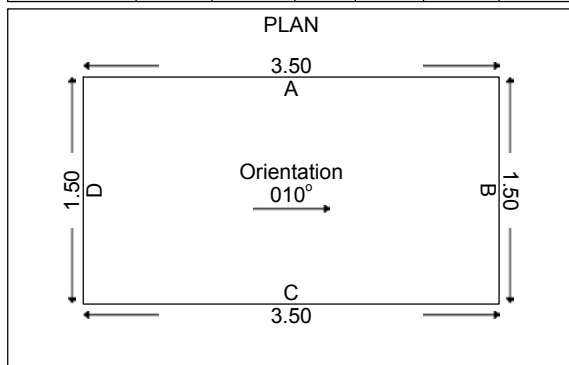
TRIAL PIT RECORD

Status:-

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Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPB31	
Client: South Tees Site Company Ltd		Location: Redcar Steel Works E:455260.695 N:521476.790	
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)		Ground Level (m(AOD)): 9.873	Start Date: 31/10/2017 Sheet: 1 of 4

SAMPLES & TESTS			Water	STRATA			
Depth	Type No	Test Result		Reduced Level	Legend	Depth (Thickness)	DESCRIPTION
0.50 0.50	J1 ES2			9.853		0.02	MADE GROUND (Macadam).
1.00 1.00	PID B3	<0.1ppm				(1.88)	MADE GROUND (Dark grey to grey sandy gravel with high cobble and boulder content and occasional fragments of metal and wood. Gravel is fine to coarse angular to subangular and includes slag and brick. Cobbles and boulders are angular to subangular and include slag).
1.50 1.50	J4 ES5		↓				
1.90 1.90	PID B6	<0.1ppm		7.973		1.90	Trial pit terminated at 1.90m BGL - due to groundwater ingress.



GROUNDWATER Water strike at 1.60m BGL - heavy inflow.
STABILITY Pit sides stable throughout excavation.
GENERAL REMARKS

ADDITIONAL INFORMATION			UNDERGROUND SERVICES				
Sketch Diagram:	No Sketch Taken		Depth	Orientation	Type	Diameter (mm)	Condition
Photographs:	Yes	See additional sheets.					

All dimensions in metres Scale 1:50	For explanation of symbols and abbreviations see Key Sheets	Checked by: <i>K.W.</i>	Logged by: P. Jansson	Contract No. 4155
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TRIAL PIT RECORD

Status:-

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Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPB31	
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455260.695 N:521476.790		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 9.873	Start Date: 31/10/2017	Sheet: 2 of 4



Figure S3-TPB31.1
S3-TPB31 Before investigation works.



Figure S3-TPB31.2
S3-TPB31.



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TRIAL PIT RECORD

Status:-

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Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No.	
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455260.695 N:521476.790		S3-TPB31
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 9.873	Start Date: 31/10/2017	Sheet: 3 of 4



Figure S3-TPB31.3
S3-TPB31 (2).



Figure S3-TPB31.4
S3-TPB31 Spoil.



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TRIAL PIT RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3			Exploratory Hole No. S3-TPB31
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455260.695 N:521476.790		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 9.873	Start Date: 31/10/2017	Sheet: 4 of 4



Figure S3-TPB31.5
S3-TPB31 Reinstatement.



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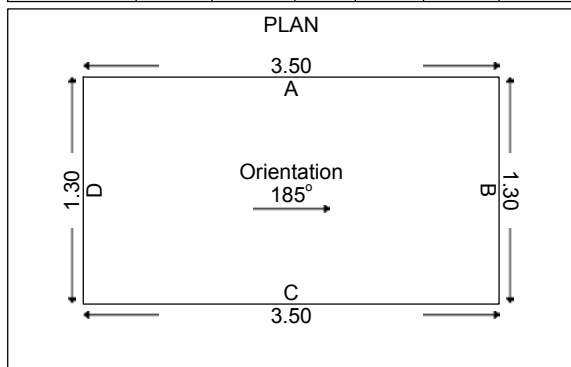
TRIAL PIT RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPB32	
Client: South Tees Site Company Ltd		Location: Redcar Steel Works E:455471.617 N:521469.329	
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)		Ground Level (m(AOD)): 9.937	Start Date: 12/10/2017 Sheet: 1 of 4

SAMPLES & TESTS			Water	STRATA				
Depth	Type No	Test Result		Reduced Level	Legend	Depth (Thickness)	DESCRIPTION	
0.20	J1	<0.1ppm		9.837		(0.10) 0.10	MADE GROUND (Macadam).	
0.50	PID						MADE GROUND (Brown grey slightly clayey sandy gravel with medium to high cobble content. Gravel is fine to coarse angular to subangular and includes slag, brick and concrete. Cobbles are angular to subangular and include slag).	
0.50	B2					(1.20)		
0.50	ES3							
1.00	J4	2.2ppm		8.637		1.30	MADE GROUND (Soft and firm brown slightly sandy slightly gravelly clay with low to medium cobble and boulder content).	
1.50	PID						at c.1.50m BGL ... large timber.	
1.50	B5					(1.50)		
1.50	ES6							
2.00	J7	1.4ppm 33 (14)kPa		7.137		2.80	MADE GROUND (Yellow brown slightly gravelly sand with low cobble and boulder content. Sand is medium to coarse. Gravel is fine to medium angular to subangular and includes slag. Cobbles and boulders are angular to subangular and include slag).	
2.50	PID						at c.2.50m BGL ... large slag boulder.	
2.50	HSV					(0.50)		
2.50	B8							
2.50	ES9	3.0ppm		6.637		3.30	MADE GROUND (Soft and firm brown slightly sandy slightly gravelly clay with low to medium cobble and boulder content).	
3.00	J10						Trial pit complete at 3.30m BGL.	
3.30	PID							
3.30	B11							
3.30	ES12							



GROUNDWATER Water strike at 3.20m BGL - moderate inflow.
STABILITY Pit sides stable throughout excavation.
GENERAL REMARKS

ADDITIONAL INFORMATION			UNDERGROUND SERVICES				
Sketch Diagram:	No Sketch Taken		Depth	Orientation	Type	Diameter (mm)	Condition
Photographs:	Yes	See additional sheets.					

All dimensions in metres Scale 1:50	For explanation of symbols and abbreviations see Key Sheets	Checked by: <i>K.W.</i>	Logged by: P. Jansson	Contract No. 4155
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TRIAL PIT RECORD

Status:-

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Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPB32	
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455471.617 N:521469.329		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 9.937	Start Date: 12/10/2017	Sheet: 2 of 4



Figure S3-TPB32.1
S3-TPB32 Before investigation works.



Figure S3-TPB32.2
S3-TPB32.



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TRIAL PIT RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPB32
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455471.617 N:521469.329	
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 9.937	Start Date: 12/10/2017
		Sheet: 3 of 4



Figure S3-TPB32.3
S3-TPB32 (2).



Figure S3-TPB32.4
S3-TPB32 Spoil.



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TRIAL PIT RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3			Exploratory Hole No. S3-TPB32
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455471.617 N:521469.329		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 9.937	Start Date: 12/10/2017	Sheet: 4 of 4



Figure S3-TPB32.5
S3-TPB32 Reinstatement.



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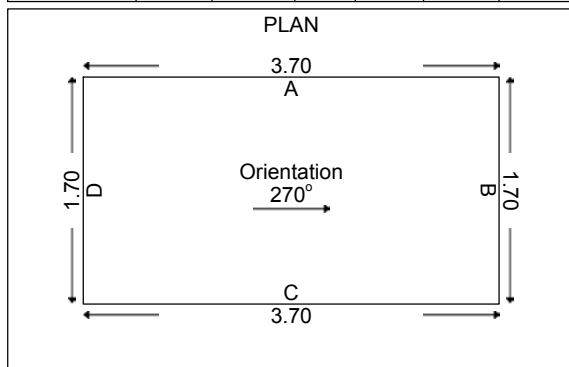
TRIAL PIT RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3			Exploratory Hole No. S3-TPB33	
Client: South Tees Site Company Ltd		Location: Redcar Steel Works E:455494.083 N:521467.154		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)		Ground Level (m(AOD)): 9.819	Start Date: 16/10/2017	Sheet: 1 of 4

SAMPLES & TESTS			Water	STRATA			
Depth	Type No	Test Result		Reduced Level	Legend	Depth (Thickness)	DESCRIPTION
0.10	J1	5.3ppm		9.619		(0.20) 0.20	MADE GROUND (Brown grey sandy gravelly topsoil with occasional rootlets).
0.50	J2					(0.70)	MADE GROUND (Brown to dark brown grey sandy gravel with medium cobble and boulder content and occasional fragments of metal. Gravel is fine to coarse angular to subangular and includes slag, brick and concrete. Cobbles and boulders are angular to subangular and include slag and brick).
0.50	ES3						
0.80	PID			8.919		0.90	MADE GROUND (Firm dark brown slightly sandy slightly gravelly clay with low to medium cobble content and occasional fragments of wood and glass. Gravel is fine to coarse angular to subangular and includes sandstone, slag, brick and concrete. Cobbles are angular to subangular and include slag and brick).
0.80	B4						
1.50	J5	33.6ppm 55 (24)kPa				(1.70)	
1.50	ES6						
2.00	PID						Firm to stiff brown mottled grey sandy slightly gravelly CLAY with organic carbonaceous material. Gravel is fine subrounded and includes sandstone and mudstone.
2.00	HSV			7.219		2.60	
2.00	B7						
2.50	J8					(0.40)	
2.50	ES9	20.2ppm 76 (30)kPa		6.819		3.00	
3.00	PID						Trial pit complete at 3.00m BGL.
3.00	HSV						
3.00	J12						
3.00	B10						
3.00	ES11						



GROUNDWATER
No groundwater inflow observed.

STABILITY
Pit sides stable throughout excavation.

GENERAL REMARKS

ADDITIONAL INFORMATION		
Sketch Diagram:	No Sketch Taken	
Photographs:	Yes	See additional sheets.

UNDERGROUND SERVICES				
Depth	Orientation	Type	Diameter (mm)	Condition

All dimensions in metres Scale 1:50	For explanation of symbols and abbreviations see Key Sheets	Checked by: <i>K.W.</i>	Logged by: P. Jansson	Contract No. 4155
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Tel: 01772 735 300 Fax: 01772 735 999

TRIAL PIT RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPB33	
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455494.083 N:521467.154		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 9.819	Start Date: 16/10/2017	Sheet: 2 of 4



Figure S3-TPB33.1
S3-TPB33 Before investigation works.



Figure S3-TPB33.2
S3-TPB33.



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TRIAL PIT RECORD

Status:-

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Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPB33
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455494.083 N:521467.154	
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 9.819	Start Date: 16/10/2017
		Sheet: 3 of 4



Figure S3-TPB33.3
S3-TPB33 (2).



Figure S3-TPB33.4
S3-TPB33 Spoil.



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TRIAL PIT RECORD

Status:-

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Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No.	
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455494.083 N:521467.154		S3-TPB33
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 9.819	Start Date: 16/10/2017	Sheet: 4 of 4



Figure S3-TPB33.5
S3-TPB33 Spoil (2).



Figure S3-TPB33.6
S3-TPB33 Reinstatement.



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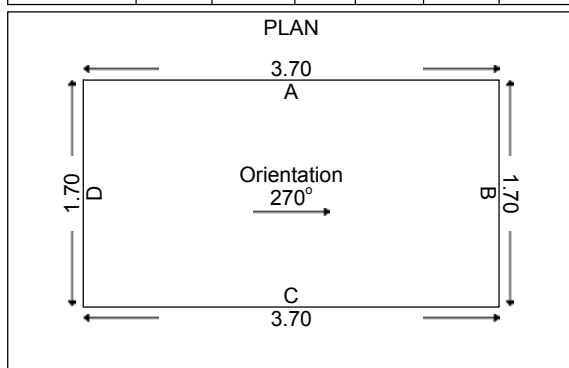
TRIAL PIT RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3			Exploratory Hole No. S3-TPB34
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455539.011 N:521461.622		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 9.727	Start Date: 16/10/2017	Sheet: 1 of 4

SAMPLES & TESTS			Water	STRATA			
Depth	Type No	Test Result		Reduced Level	Legend	Depth (Thickness)	DESCRIPTION
0.05	J1			9.627		(0.10) 0.10	MADE GROUND (Brown grey sandy gravelly topsoil with occasional rootlets).
0.50	J2						MADE GROUND (Brown to dark brown grey clayey sandy gravel with low to medium cobble and boulder content, occasional clayey lenses and occasional fragments of plastic, metal and glass. Gravel is fine to coarse angular to subangular and includes slag, brick, concrete, dolomite and macadam. Cobbles and boulders are angular to subangular and include slag, brick, concrete and macadam).
0.50	J2 ES3					(1.70)	
1.00	PID LB4	21.8ppm					
1.00							
1.50	J5			7.927		1.80	at c.1.70-1.80m BGL ... black, peaty.
1.50	J5 ES6						Firm to stiff brown mottled grey slightly sandy to sandy slightly gravelly CLAY with organic carbonaceous material. Gravel is fine subrounded and includes sandstone and mudstone.
2.00	PID HSV B7	19.4ppm 82 (29)kPa				(0.90)	
2.00							at c.2.00m BGL ... clay is of high plasticity.
2.50	J8			7.027		2.70	Trial pit complete at 2.70m BGL.
2.50	J8 ES9						



GROUNDWATER
No groundwater inflow observed.

STABILITY
Pit sides stable throughout excavation.

GENERAL REMARKS

ADDITIONAL INFORMATION		
Sketch Diagram:	No Sketch Taken	
Photographs:	Yes	See additional sheets.

UNDERGROUND SERVICES				
Depth	Orientation	Type	Diameter (mm)	Condition

All dimensions in metres
Scale 1:50

For explanation of symbols and abbreviations see Key Sheets

Checked by:
K.W.

Logged by:
P. Jansson

Contract No.
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TRIAL PIT RECORD

Status:-

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Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPB34	
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455539.011 N:521461.622		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 9.727	Start Date: 16/10/2017	Sheet: 2 of 4



Figure S3-TPB34.1
S3-TPB34 Before investigation works.



Figure S3-TPB34.2
S3-TPB34.



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TRIAL PIT RECORD

Status:-

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Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No.	
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455539.011 N:521461.622		S3-TPB34
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 9.727	Start Date: 16/10/2017	Sheet: 3 of 4



Figure S3-TPB34.3
S3-TPB34 (2).



Figure S3-TPB34.4
S3-TPB34 Spoil.



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TRIAL PIT RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPB34	
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455539.011 N:521461.622		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 9.727	Start Date: 16/10/2017	Sheet: 4 of 4



Figure S3-TPB34.5
S3-TPB34 Spoil (2).



Figure S3-TPB34.6
S3-TPB34 Reinstatement.



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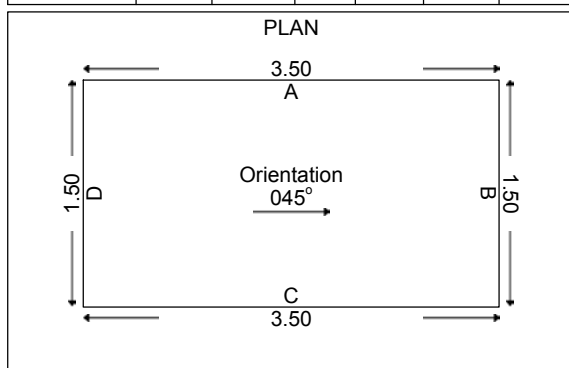
TRIAL PIT RECORD

Status:-

FINAL

Project:	The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3			Exploratory Hole No.
Client:	South Tees Site Company Ltd	Location:	Redcar Steel Works E:455165.995 N:521436.781	S3-TPB35
Method (Equipment):	Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)):	9.974	Start Date: 30/10/2017 Sheet: 1 of 4

SAMPLES & TESTS			Water	STRATA			
Depth	Type No	Test Result		Reduced Level	Legend	Depth (Thickness)	DESCRIPTION
0.50	J1			9.894		(0.08) 0.08	MADE GROUND (Block paving).
0.50	ES2			9.794		(0.10) 0.10	MADE GROUND (Brown sand. Sand is fine to coarse).
1.00	PID	0.6ppm				(1.22)	MADE GROUND (Grey brown to dark grey brown slightly clayey sandy gravel with medium to high cobble and boulder content. Gravel is fine to coarse angular to subangular and includes slag, brick and concrete. Cobbles and boulders are angular to subangular and include slag and brick).
1.00	LB3			8.574		1.40	
1.50	PID	0.2ppm		8.274		(0.30) 1.70	Stiff orange brown mottled grey slightly sandy CLAY with occasional organic carbonaceous material.
1.50	HSV	86					at c.1.50m BGL ... clay is of high plasticity.
1.50	J4	(38)kPa					Trial pit complete at 1.70m BGL.
1.50	B6						
1.50	ES5						



GROUNDWATER
No groundwater inflow observed.

STABILITY
Pit sides stable throughout excavation.

GENERAL REMARKS

ADDITIONAL INFORMATION		
Sketch Diagram:	No Sketch Taken	
Photographs:	Yes	See additional sheets.

UNDERGROUND SERVICES				
Depth	Orientation	Type	Diameter (mm)	Condition

All dimensions in metres
Scale 1:50

For explanation of symbols and abbreviations see Key Sheets

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K.W.

Logged by:
P. Jansson

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TRIAL PIT RECORD

Status:-

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Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPB35	
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455165.995 N:521436.781		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 9.974	Start Date: 30/10/2017	Sheet: 2 of 4



Figure S3-TPB35.1
S3-TPB35 Before investigation works.



Figure S3-TPB35.2
S3-TPB35.



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TRIAL PIT RECORD

Status:-

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Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPB35	
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455165.995 N:521436.781		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 9.974	Start Date: 30/10/2017	Sheet: 3 of 4



Figure S3-TPB35.3
S3-TPB35 (2).



Figure S3-TPB35.4
S3-TPB35 Spoil.



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TRIAL PIT RECORD

Status:-

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Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3			Exploratory Hole No. S3-TPB35
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455165.995 N:521436.781		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 9.974	Start Date: 30/10/2017	Sheet: 4 of 4



Figure S3-TPB35.5
S3-TPB35 Spoil (2).



Figure S3-TPB35.6
S3-TPB35 Reinstatement.



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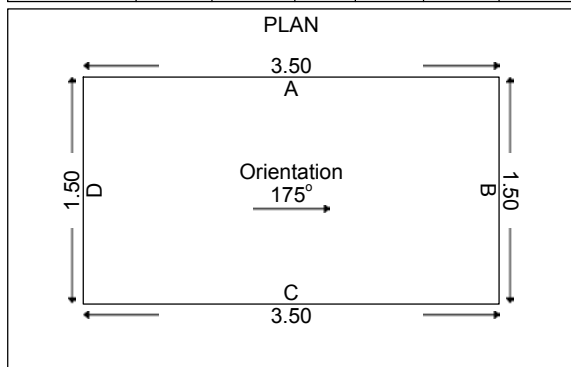
TRIAL PIT RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPB36	
Client: South Tees Site Company Ltd		Location: Redcar Steel Works E:455233.468 N:521451.449	
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)		Ground Level (m(AOD)): 10.015	Start Date: 31/10/2017
		Sheet: 1 of 4	

SAMPLES & TESTS			Water	STRATA			
Depth	Type No	Test Result		Reduced Level	Legend	Depth (Thickness)	DESCRIPTION
0.05	J1			9.915		(0.10) 0.10	MADE GROUND (Dark brown silty sandy topsoil with occasional rootlets).
0.50	J2						MADE GROUND (Dark brown grey clayey sandy gravel with medium cobble and boulder content and occasional clayey lenses and fragments of wood and metal. Gravel is fine to coarse angular to subangular and includes brick and concrete. Cobbles and boulders are angular to subangular and include slag and brick).
0.50	ES3						at c.0.10-0.50m BGL ... very sandy.
1.00	PID	<0.1ppm				(2.00)	
1.00	LB4						
1.50	J5						at c.1.70-2.10m BGL ... slightly sandy.
1.50	ES6						
2.00	PID	0.1ppm		7.915		2.10	at c.2.00m BGL ... hydrocarbon odour noted.
2.00	B7						Trial pit terminated at 2.10m BGL - due to groundwater ingress.



GROUNDWATER Water strike at 1.90m BGL - heavy inflow.
STABILITY Pit sides stable throughout excavation.
GENERAL REMARKS

ADDITIONAL INFORMATION			UNDERGROUND SERVICES				
Sketch Diagram:	No Sketch Taken		Depth	Orientation	Type	Diameter (mm)	Condition
Photographs:	Yes	See additional sheets.					

All dimensions in metres Scale 1:50	For explanation of symbols and abbreviations see Key Sheets	Checked by: <i>K.W.</i>	Logged by: P. Jansson	Contract No. 4155
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TRIAL PIT RECORD

Status:-

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Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPB36	
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455233.468 N:521451.449		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 10.015	Start Date: 31/10/2017	Sheet: 2 of 4



Figure S3-TPB36.1
S3-TPB36 Before investigation works.



Figure S3-TPB36.2
S3-TPB36.



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TRIAL PIT RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No.	
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455233.468 N:521451.449		S3-TPB36
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 10.015	Start Date: 31/10/2017	Sheet: 3 of 4



Figure S3-TPB36.3
S3-TPB36 (2).



Figure S3-TPB36.4
S3-TPB36 Spoil.



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TRIAL PIT RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPB36	
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455233.468 N:521451.449		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 10.015	Start Date: 31/10/2017	Sheet: 4 of 4



Figure S3-TPB36.5
S3-TPB36 Spoil (2).



Figure S3-TPB36.6
S3-TPB36 Reinstatement.



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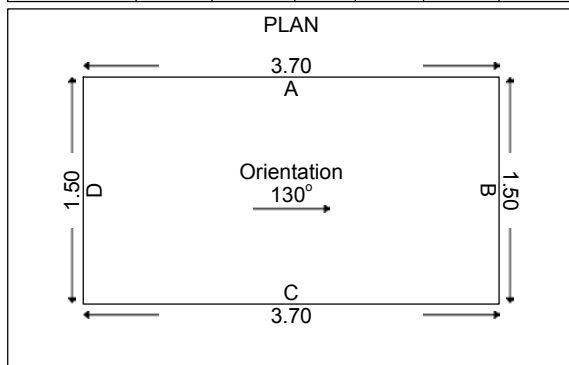
TRIAL PIT RECORD

Status:-

FINAL

Project:	The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3			Exploratory Hole No.
Client:	South Tees Site Company Ltd	Location:	Redcar Steel Works E:455396.858 N:521437.314	
Method (Equipment):	Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)):	10.062	Start Date: 27/10/2017
				Sheet: 1 of 4

SAMPLES & TESTS			Water	STRATA			
Depth	Type No	Test Result		Reduced Level	Legend	Depth (Thickness)	DESCRIPTION
0.50 0.50	J1 ES2					(1.50)	MADE GROUND (Brown grey to grey sandy gravel with medium cobble and boulder content. Gravel is fine to coarse angular to subangular and includes slag and brick. Cobbles and boulders are angular to subangular and include slag and brick).
1.00 1.00	PID B3	0.1ppm		8.562		1.50	
1.50 1.50	J4 ES5					(1.20)	MADE GROUND (Soft to firm brown slightly sandy slightly gravelly clay with low to medium cobble and boulder content, some lenses of gravelly sand and occasional fragments of glass. Gravel is fine to coarse angular to subangular and includes slag, brick and sandstone. Cobbles and boulders are angular to subangular and include slag and brick).
2.00 2.00 2.00	PID HSV* B6	0.3ppm					
2.70 2.70 2.70 2.70 2.70	PID HSV J7 B9 ES8	<0.1ppm 82 (35)kPa		7.362 7.162		2.70 (0.20) 2.90	at c.2.70m BGL ... clay is of high to very high plasticity. Stiff brown mottled grey slightly sandy CLAY with occasional organic carbonaceous material. Trial pit complete at 2.90m BGL.



GROUNDWATER Water seepage at 2.70m BGL - slight inflow.
STABILITY Pit sides stable throughout excavation.
GENERAL REMARKS (1) HSV test failed at 2.00m BGL - too disturbed.

ADDITIONAL INFORMATION			UNDERGROUND SERVICES				
Sketch Diagram:	No Sketch Taken		Depth	Orientation	Type	Diameter (mm)	Condition
Photographs:	Yes	See additional sheets.					

All dimensions in metres Scale 1:50	For explanation of symbols and abbreviations see Key Sheets	Checked by: K.W.	Logged by: P. Jansson	Contract No. 4155
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TRIAL PIT RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPB37	
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455396.858 N:521437.314		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 10.062	Start Date: 27/10/2017	Sheet: 2 of 4



Figure S3-TPB37.1
S3-TPB37 Before investigation works.



Figure S3-TPB37.2
S3-TPB37.



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TRIAL PIT RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPB37
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455396.858 N:521437.314	
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 10.062	Start Date: 27/10/2017
		Sheet: 3 of 4



Figure S3-TPB37.3
S3-TPB37 (2).



Figure S3-TPB37.4
S3-TPB37 Spoil.



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TRIAL PIT RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPB37	
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455396.858 N:521437.314		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 10.062	Start Date: 27/10/2017	Sheet: 4 of 4



Figure S3-TPB37.5
S3-TPB37 Spoil (2).



Figure S3-TPB37.6
S3-TPB37 Reinstatement.



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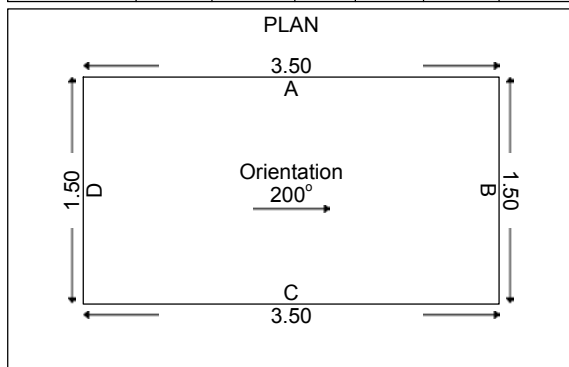
TRIAL PIT RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3			Exploratory Hole No. S3-TPB38	
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455463.779 N:521427.339			
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)		Ground Level (m(AOD)): 9.787	Start Date: 17/10/2017	Sheet: 1 of 4

SAMPLES & TESTS			Water	STRATA			
Depth	Type No	Test Result		Reduced Level	Legend	Depth (Thickness)	DESCRIPTION
0.10	J1			9.587		(0.20) 0.20	MADE GROUND (Grey sandy gravel. Gravel is fine to medium angular to subangular and includes slag and limestone).
0.50	J2						MADE GROUND (Light grey brown sandy gravel with medium to high cobble and medium boulder content and occasional fragments of metal and wood. Gravel is fine to coarse angular to subangular and includes concrete, brick and slag. Cobbles are angular to subangular and include concrete, brick and slag. Boulders are angular to subangular and include concrete and slag).
0.50	ES3						
1.00	PID	<0.1ppm				(2.00)	
1.00	B4						
1.50	J5						
1.50	ES6						
2.00	PID	<0.1ppm		7.587		2.20	Trial pit terminated at 2.20m BGL - due to groundwater ingress.
2.00	B7						



GROUNDWATER
Water strike at 2.10m BGL - heavy inflow.

STABILITY
Pit sides stable throughout excavation.

GENERAL REMARKS

ADDITIONAL INFORMATION		
Sketch Diagram:	No Sketch Taken	
Photographs:	Yes	See additional sheets.

UNDERGROUND SERVICES				
Depth	Orientation	Type	Diameter (mm)	Condition

All dimensions in metres
Scale 1:50

For explanation of symbols and abbreviations see Key Sheets

Checked by:
K.W.

Logged by:
P. Jansson

Contract No.
4155



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Tel: 01772 735 300 Fax: 01772 735 999

TRIAL PIT RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3			Exploratory Hole No. S3-TPB38
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455463.779 N:521427.339		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 9.787	Start Date: 17/10/2017	Sheet: 2 of 4



Figure S3-TPB38.1
S3-TPB38 Before investigation works.



Figure S3-TPB38.2
S3-TPB38.



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TRIAL PIT RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPB38	
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455463.779 N:521427.339		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 9.787	Start Date: 17/10/2017	Sheet: 3 of 4



Figure S3-TPB38.3
S3-TPB38 (2).



Figure S3-TPB38.4
S3-TPB38 Spoil.



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TRIAL PIT RECORD

Status:-

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Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPB38	
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455463.779 N:521427.339		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 9.787	Start Date: 17/10/2017	Sheet: 4 of 4



Figure S3-TPB38.5
S3-TPB38 Reinstatement.



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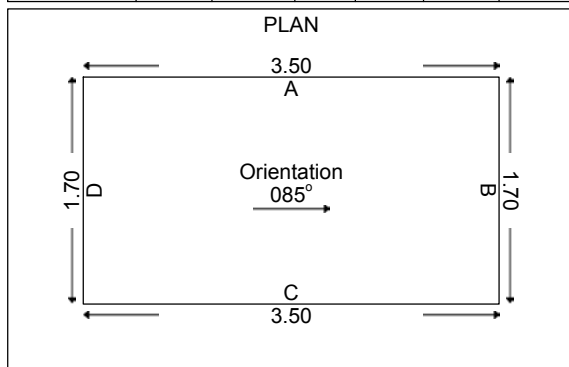
TRIAL PIT RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPB39	
Client: South Tees Site Company Ltd		Location: Redcar Steel Works E:455491.311 N:521423.370	
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)		Ground Level (m(AOD)): 10.040	Start Date: 17/10/2017
		Sheet: 1 of 4	

SAMPLES & TESTS			Water	STRATA			
Depth	Type No	Test Result		Reduced Level	Legend	Depth (Thickness)	DESCRIPTION
0.50	ES1			9.140		(0.90) 0.90	MADE GROUND (Brown grey slightly sandy gravel with high cobble and boulder content and occasional fragments of metal. Gravel is fine to coarse angular to subangular and includes concrete, slag and brick. Cobbles and boulders are angular to subangular and include slag, concrete and brick). Trial pit terminated at 0.90m BGL - due to possible asbestos/concrete obstruction.



GROUNDWATER No groundwater inflow observed.
STABILITY Pit sides stable throughout excavation.
GENERAL REMARKS (1) Engineer notes possible asbestos.

ADDITIONAL INFORMATION			UNDERGROUND SERVICES				
Sketch Diagram:	No Sketch Taken		Depth	Orientation	Type	Diameter (mm)	Condition
Photographs:	Yes	See additional sheets.					

All dimensions in metres Scale 1:50	For explanation of symbols and abbreviations see Key Sheets	Checked by: <i>K.W.</i>	Logged by: P. Jansson	Contract No. 4155
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TRIAL PIT RECORD

Status:-

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Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3			Exploratory Hole No. S3-TPB39
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455491.311 N:521423.370		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 10.040	Start Date: 17/10/2017	Sheet: 2 of 4



Figure S3-TPB39.1
S3-TPB39 Before investigation works.

Figure S3-TPB39.2
S3-TPB39.



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TRIAL PIT RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPB39	
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455491.311 N:521423.370		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 10.040	Start Date: 17/10/2017	Sheet: 3 of 4



Figure S3-TPB39.3
S3-TPB39 (2).



Figure S3-TPB39.4
S3-TPB39 Spoil.



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TRIAL PIT RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPB39	
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455491.311 N:521423.370		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 10.040	Start Date: 17/10/2017	Sheet: 4 of 4



Figure S3-TPB39.5
S3-TPB39 Spoil (2).



Figure S3-TPB39.6
S3-TPB39 Reinstatement.



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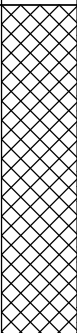
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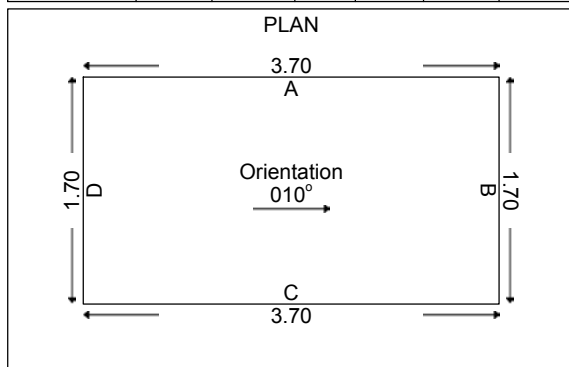
TRIAL PIT RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3			Exploratory Hole No. S3-TPB40
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455540.303 N:521417.483		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 9.925	Start Date: 16/10/2017	Sheet: 1 of 4

SAMPLES & TESTS			Water	STRATA			
Depth	Type No	Test Result		Reduced Level	Legend	Depth (Thickness)	DESCRIPTION
0.50 0.50	J1 ES2						MADE GROUND (Dark brown slightly sandy to sandy gravel with high cobble and boulder content and occasional fragments of metal and glass. Gravel is fine to coarse angular to subangular and includes slag, concrete and brick. Cobbles and boulders are angular to subangular and include slag, concrete and brick). at c.0.00-2.20m BGL ... some concrete boulders contain rebar.
1.00 1.00	PID B3	7.1ppm				(2.20)	
1.50 1.50	J4 ES5						
2.00 2.00	PID B6	17.7ppm		7.725		2.20	
Trial pit terminated at 2.20m BGL - due to groundwater ingress.							



GROUNDWATER
Water strike at 2.00m BGL - heavy inflow.

STABILITY
Pit sides stable throughout excavation.

GENERAL REMARKS

ADDITIONAL INFORMATION		
Sketch Diagram:	No Sketch Taken	
Photographs:	Yes	See additional sheets.

UNDERGROUND SERVICES				
Depth	Orientation	Type	Diameter (mm)	Condition

All dimensions in metres
Scale 1:50

For explanation of symbols and
abbreviations see Key Sheets

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K.W.

Logged by:
P. Jansson

Contract No.
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TRIAL PIT RECORD

Status:-

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Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3			Exploratory Hole No. S3-TPB40
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455540.303 N:521417.483		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 9.925	Start Date: 16/10/2017	Sheet: 2 of 4



Figure S3-TPB40.1
S3-TPB40 Before investigation works.



Figure S3-TPB40.2
S3-TPB40.



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TRIAL PIT RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No.	
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455540.303 N:521417.483		S3-TPB40
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 9.925	Start Date: 16/10/2017	Sheet: 3 of 4



Figure S3-TPB40.3
S3-TPB40 (2).



Figure S3-TPB40.4
S3-TPB40 Spoil.



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TRIAL PIT RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3			Exploratory Hole No. S3-TPB40
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455540.303 N:521417.483		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 9.925	Start Date: 16/10/2017	Sheet: 4 of 4



Figure S3-TPB40.5
S3-TPB40 Reinstatement.



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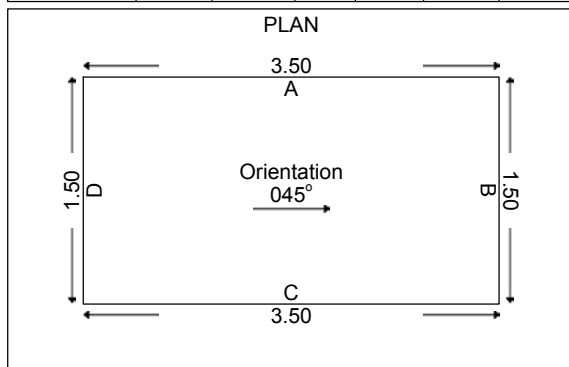
TRIAL PIT RECORD

Status:-

FINAL

Project:	The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3			Exploratory Hole No.
Client:	South Tees Site Company Ltd	Location:	Redcar Steel Works E:455163.984 N:521399.624	
Method (Equipment):	Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)):	9.997	Start Date: 30/10/2017
				Sheet: 1 of 4

SAMPLES & TESTS			Water	STRATA			
Depth	Type No	Test Result		Reduced Level	Legend	Depth (Thickness)	DESCRIPTION
0.50	J1			9.917		(0.08) 0.08	MADE GROUND (Block paving).
0.50	ES2			9.817		(0.10) 0.10	MADE GROUND (Brown sand. Sand is fine to coarse).
1.00	LB3	2.6ppm				(1.12)	MADE GROUND (Grey brown to dark grey brown clayey very sandy gravel with medium cobble and boulder content and occasional fragments of metal. Gravel is fine to coarse angular to subangular and includes slag, brick and concrete. Cobbles and boulders are angular to subangular and include slag and concrete).
1.00	PID			8.697		1.30	
1.50	PID	16.9ppm		8.497		(0.20) 1.50	Stiff orange brown mottled grey sandy CLAY with occasional organic carbonaceous material.
1.50	HSV	95					at c.1.50m BGL ... clay is of high plasticity.
1.50	J4	(45)kPa					Trial pit complete at 1.50m BGL.
1.50	B6						
1.50	ES5						



GROUNDWATER
No groundwater inflow observed.

STABILITY
Pit sides stable throughout excavation.

GENERAL REMARKS

ADDITIONAL INFORMATION			UNDERGROUND SERVICES				
Sketch Diagram:	No Sketch Taken		Depth	Orientation	Type	Diameter (mm)	Condition
Photographs:	Yes	See additional sheets.					

All dimensions in metres
Scale 1:50

For explanation of symbols and
abbreviations see Key Sheets

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K.W.

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P. Jansson

Contract No.
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TRIAL PIT RECORD

Status:-

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Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPB41	
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455163.984 N:521399.624		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 9.997	Start Date: 30/10/2017	Sheet: 2 of 4



Figure S3-TPB41.1
S3-TPB41 Before investigation works.



Figure S3-TPB41.2
S3-TPB41.



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TRIAL PIT RECORD

Status:-

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Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPB41
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455163.984 N:521399.624	
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 9.997	Start Date: 30/10/2017
		Sheet: 3 of 4



Figure S3-TPB41.3
S3-TPB41 (2).



Figure S3-TPB41.4
S3-TPB41 Spoil.



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TRIAL PIT RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPB41	
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455163.984 N:521399.624		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 9.997	Start Date: 30/10/2017	Sheet: 4 of 4



Figure S3-TPB41.5
S3-TPB41 Spoil (2).



Figure S3-TPB41.6
S3-TPB41 Reinstatement.



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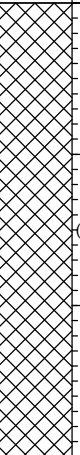

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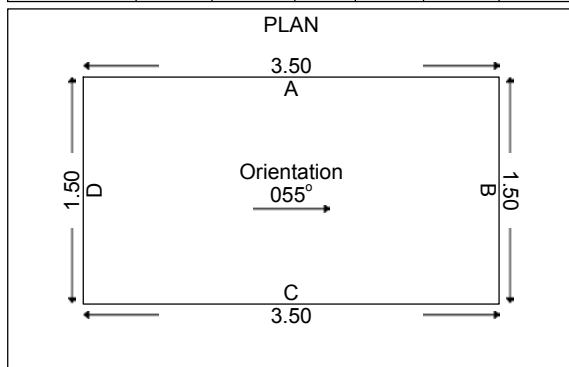
TRIAL PIT RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3			Exploratory Hole No. S3-TPB42	
Client: South Tees Site Company Ltd		Location: Redcar Steel Works E:455406.637 N:521387.482		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)		Ground Level (m(AOD)): 9.786	Start Date: 27/10/2017	Sheet: 1 of 4

SAMPLES & TESTS			Water	STRATA			
Depth	Type No	Test Result		Reduced Level	Legend	Depth (Thickness)	DESCRIPTION
0.50 0.50	J1 ES2						MADE GROUND (Grey brown to grey slightly clayey sandy gravel with medium to high cobble and boulder content. Gravel is fine to coarse angular to subangular and includes slag and brick. Cobbles and boulders are angular to subangular and includes slag and brick).
1.00 1.00	PID B3	<0.1ppm					
1.50 1.50	J4 ES5					(3.00)	
2.00 2.00	PID B6	0.5ppm					
2.50 2.50	J7 ES8						
3.00 3.00	PID B9	<0.1ppm		6.786		3.00	Trial pit complete at 3.00m BGL.



GROUNDWATER
Water strike at 2.80m BGL - moderate inflow.

STABILITY
Pit sides stable throughout excavation.

GENERAL REMARKS

ADDITIONAL INFORMATION		
Sketch Diagram:	No Sketch Taken	
Photographs:	Yes	See additional sheets.

UNDERGROUND SERVICES				
Depth	Orientation	Type	Diameter (mm)	Condition

All dimensions in metres
Scale 1:50

For explanation of symbols and
abbreviations see Key Sheets

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K.W.

Logged by:
P. Jansson

Contract No.
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TRIAL PIT RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPB42	
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455406.637 N:521387.482		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 9.786	Start Date: 27/10/2017	Sheet: 2 of 4



Figure S3-TPB42.1
S3-TPB42 Before investigation works.



Figure S3-TPB42.2
S3-TPB42.



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TRIAL PIT RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPB42
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455406.637 N:521387.482	
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 9.786	Start Date: 27/10/2017
		Sheet: 3 of 4



Figure S3-TPB42.3
S3-TPB42 (2).



Figure S3-TPB42.4
S3-TPB42 Spoil.



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TRIAL PIT RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPB42	
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455406.637 N:521387.482		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 9.786	Start Date: 27/10/2017	Sheet: 4 of 4



Figure S3-TPB42.5
S3-TPB42 Spoil (2).



Figure S3-TPB42.6
S3-TPB42 Reinstatement.



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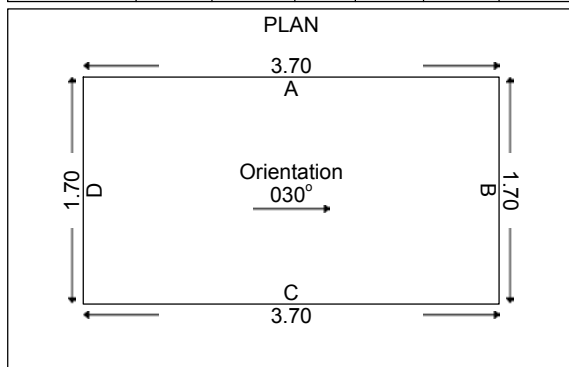
TRIAL PIT RECORD

Status:-

FINAL

Project:	The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3			Exploratory Hole No.
Client:	South Tees Site Company Ltd		Location:	Redcar Steel Works E:455450.872 N:521383.311
Method (Equipment):	Machine Excavated (JCB 360 Tracked Excavator)		Ground Level (m(AOD)):	9.853
			Start Date:	17/10/2017
			Sheet:	1 of 4

SAMPLES & TESTS			Water	STRATA			
Depth	Type No	Test Result		Reduced Level	Legend	Depth (Thickness)	DESCRIPTION
0.50 0.50	J1 ES2			9.823		(0.03) 0.03	MADE GROUND (Macadam).
1.00 1.00	PID B3	<0.1ppm					MADE GROUND (Brown grey slightly clayey sandy gravel with high cobble and boulder content. Gravel is fine to coarse angular to subangular and includes slag and concrete. Cobbles and boulders are angular to subangular and include slag and concrete).
1.50 1.50	J4 ES5					(3.37)	
2.00 2.00	PID LB6	2.2ppm					
2.50 2.50	J7 ES8						
3.50 3.50 3.50 3.50 3.50	PID HSV J11 B9 ES10	4.9ppm 75 (29)kPa		6.453 6.153		3.40 (0.30) 3.70	Firm to stiff brown grey slightly sandy slightly gravelly CLAY. Gravel is fine subrounded and includes sandstone and mudstone. at c.3.50m BGL ... clay is of high plasticity. Trial pit complete at 3.70m BGL.



GROUNDWATER
No groundwater inflow observed.

STABILITY
Pit sides moderately stable throughout excavation.

GENERAL REMARKS

ADDITIONAL INFORMATION			UNDERGROUND SERVICES				
Sketch Diagram:	No Sketch Taken		Depth	Orientation	Type	Diameter (mm)	Condition
Photographs:	Yes	See additional sheets.					

All dimensions in metres
Scale 1:50

For explanation of symbols and
abbreviations see Key Sheets

Checked by:
K.W.

Logged by:
P. Jansson

Contract No.
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Tel: 0191 387 4700 Fax: 0191 387 4710
Tel: 01772 735 300 Fax: 01772 735 999

TRIAL PIT RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPB43
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455450.872 N:521383.311	
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 9.853	Start Date: 17/10/2017
		Sheet: 2 of 4



Figure S3-TPB43.1
S3-TPB43 Before investigation works.



Figure S3-TPB43.2
S3-TPB43.



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TRIAL PIT RECORD

Status:-

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Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPB43	
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455450.872 N:521383.311		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 9.853	Start Date: 17/10/2017	Sheet: 3 of 4



Figure S3-TPB43.3
S3-TPB43 (2).



Figure S3-TPB43.4
S3-TPB43 Spoil.



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Tel: 01772 735 300 Fax: 01772 735 999

TRIAL PIT RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3			Exploratory Hole No. S3-TPB43
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455450.872 N:521383.311		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 9.853	Start Date: 17/10/2017	Sheet: 4 of 4



Figure S3-TPB43.5
S3-TPB43 Reinstatement.



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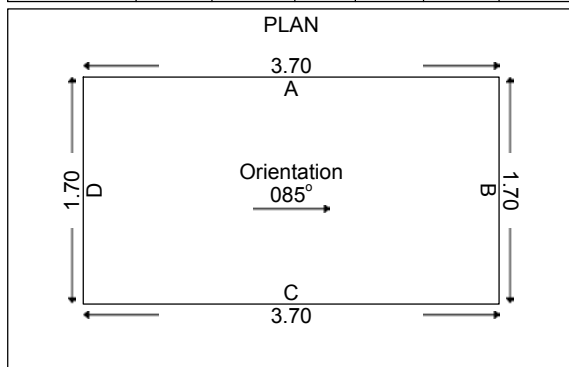
TRIAL PIT RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3			Exploratory Hole No. S3-TPB44
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455481.325 N:521377.682		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)		Ground Level (m(AOD)): 9.931	Start Date: 18/10/2017
			Sheet: 1 of 4

SAMPLES & TESTS			Water	STRATA			
Depth	Type No	Test Result		Reduced Level	Legend	Depth (Thickness)	DESCRIPTION
0.50 0.50	J1 ES2			9.911		0.02	MADE GROUND (Macadam).
1.00 1.00	PID B3	0.5ppm				(2.48)	MADE GROUND (Brown grey to dark brown grey sandy gravel with medium to high cobble and boulder content and fragments of metal and wood. Gravel is fine to coarse angular to subangular and includes concrete, slag and brick. Cobbles and boulders are angular to subangular and include concrete and slag).
1.50 1.50	J4 ES5						at c.1.00m BGL ... reinforced concrete structure. Possible old foundations (extent unknown).
2.00 2.00	PID B6	0.9ppm					
2.50 2.50	J7 ES8			7.431		2.50	Trial pit terminated at 2.50m BGL - due to groundwater ingress.



GROUNDWATER
Water strike at 2.40m BGL - moderate inflow.

STABILITY
Pit sides stable throughout excavation.

GENERAL REMARKS

ADDITIONAL INFORMATION		
Sketch Diagram:	No Sketch Taken	
Photographs:	Yes	See additional sheets.

UNDERGROUND SERVICES				
Depth	Orientation	Type	Diameter (mm)	Condition

All dimensions in metres
Scale 1:50

For explanation of symbols and
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TRIAL PIT RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPB44	
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455481.325 N:521377.682		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 9.931	Start Date: 18/10/2017	Sheet: 2 of 4



Figure S3-TPB44.1
S3-TPB44 Before investigation works.



Figure S3-TPB44.2
S3-TPB44.



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TRIAL PIT RECORD

Status:-

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Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPB44
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455481.325 N:521377.682	
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 9.931	Start Date: 18/10/2017
		Sheet: 3 of 4



Figure S3-TPB44.3
S3-TPB44 (2).



Figure S3-TPB44.4
S3-TPB44 Spoil.



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TRIAL PIT RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPB44	
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455481.325 N:521377.682		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 9.931	Start Date: 18/10/2017	Sheet: 4 of 4



Figure S3-TPB44.5
S3-TPB44 Spoil (2).



Figure S3-TPB44.6
S3-TPB44 Reinstatement.



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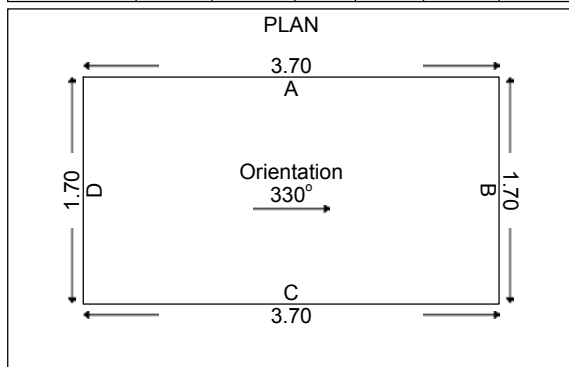
TRIAL PIT RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3			Exploratory Hole No. S3-TPB45
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455523.534 N:521375.975		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)		Ground Level (m(AOD)): 9.822	Start Date: 18/10/2017
			Sheet: 1 of 4

SAMPLES & TESTS			Water	STRATA			
Depth	Type No	Test Result		Reduced Level	Legend	Depth (Thickness)	DESCRIPTION
0.50 0.50	J1 ES2			9.802		(0.02) 0.02	MADE GROUND (Macadam).
1.00 1.00	PID B3	18.7ppm				(2.18)	MADE GROUND (Brown grey clayey sandy gravel with high cobble and boulder content and occasional fragments of metal. Gravel is fine to coarse angular to subangular and includes slag, brick and concrete. Cobbles and boulders are angular to subangular and include slag and concrete).
1.50 1.50	J4 ES5						
2.00 2.00	PID LB6	0.2ppm		7.622		2.20	Stiff brown mottled grey slightly sandy slightly gravelly CLAY with occasional organic carbonaceous material. Gravel is fine subrounded and includes sandstone and mudstone.
2.50 2.50	PID HSV	2.3ppm				(0.60)	
2.50 2.50	J7 B9	105		7.022		2.80	Trial pit complete at 2.80m BGL.
2.50 2.50	ES8	(41)kPa					



GROUNDWATER
Water seepage at 2.20m BGL - slight inflow.

STABILITY
Pit sides stable throughout excavation.

GENERAL REMARKS

ADDITIONAL INFORMATION		
Sketch Diagram:	No Sketch Taken	
Photographs:	Yes	See additional sheets.

UNDERGROUND SERVICES				
Depth	Orientation	Type	Diameter (mm)	Condition

All dimensions in metres
Scale 1:50

For explanation of symbols and
abbreviations see Key Sheets

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Logged by:
P. Jansson

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TRIAL PIT RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPB45	
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455523.534 N:521375.975		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 9.822	Start Date: 18/10/2017	Sheet: 2 of 4



Figure S3-TPB45.1
S3-TPB45 Before investigation works.



Figure S3-TPB45.2
S3-TPB45.



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TRIAL PIT RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPB45
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455523.534 N:521375.975	
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 9.822	Start Date: 18/10/2017
		Sheet: 3 of 4



Figure S3-TPB45.3
S3-TPB45 (2).



Figure S3-TPB45.4
S3-TPB45 Spoil.



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TRIAL PIT RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPB45	
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455523.534 N:521375.975		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 9.822	Start Date: 18/10/2017	Sheet: 4 of 4



Figure S3-TPB45.5
S3-TPB45 Spoil (2).



Figure S3-TPB45.6
S3-TPB45 Reinstatement.



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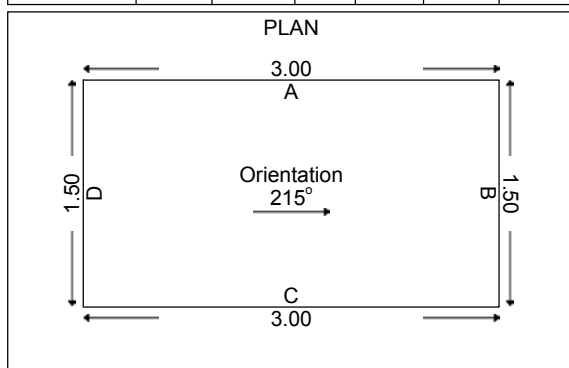
TRIAL PIT RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPB46
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455160.580 N:521354.411	
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 9.912	Start Date: 30/10/2017
		Sheet: 1 of 3

SAMPLES & TESTS			Water	STRATA			
Depth	Type No	Test Result		Reduced Level	Legend	Depth (Thickness)	DESCRIPTION
0.05	J1	0.3ppm		9.812		(0.10) 0.10	MADE GROUND (Dark brown silty gravelly topsoil with some rootlets).
0.20	J2					(0.40)	MADE GROUND (Dark brown grey sandy gravel with high cobble content. Gravel is fine to coarse angular to subangular and includes slag. Cobbles are angular to subangular and include slag).
0.40	B4			9.412		0.50	at c.0.50m BGL ... concrete (possible foundation).
0.40	PID						Trial pit terminated at 0.50m BGL - due to encountering concrete (possible foundation).
0.40	ES3						



GROUNDWATER
No groundwater inflow observed.

STABILITY
Pit sides stable throughout excavation.

GENERAL REMARKS

ADDITIONAL INFORMATION		
Sketch Diagram:	No Sketch Taken	
Photographs:	Yes	See additional sheets.

UNDERGROUND SERVICES				
Depth	Orientation	Type	Diameter (mm)	Condition

All dimensions in metres
Scale 1:50

For explanation of symbols and abbreviations see Key Sheets

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TRIAL PIT RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPB46	
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455160.580 N:521354.411		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 9.912	Start Date: 30/10/2017	Sheet: 2 of 3



Figure S3-TPB46.1
S3-TPB46 Before investigation works.



Figure S3-TPB46.2
S3-TPB46.



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TRIAL PIT RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3			Exploratory Hole No. S3-TPB46
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455160.580 N:521354.411		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 9.912	Start Date: 30/10/2017	Sheet: 3 of 3



Figure S3-TPB46.3
S3-TPB46 (2).



Figure S3-TPB46.4
S3-TPB46 Spoil.



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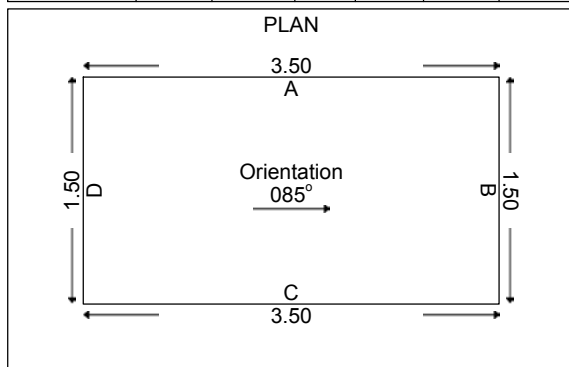
TRIAL PIT RECORD

Status:-

FINAL

Project:	The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3			Exploratory Hole No.
Client:	South Tees Site Company Ltd	Location:	Redcar Steel Works E:455365.404 N:521349.853	
Method (Equipment):	Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)):	9.749	Start Date: 27/10/2017
				Sheet: 1 of 4

SAMPLES & TESTS			Water	STRATA			
Depth	Type No	Test Result		Reduced Level	Legend	Depth (Thickness)	DESCRIPTION
0.50 0.50	J1 ES2						MADE GROUND (Brown grey to grey slightly clayey sandy gravel with medium to high cobble and boulder content. Gravel is fine to coarse angular to subangular and includes slag and brick. Cobbles and boulders angular to subangular and include slag and brick).
1.00 1.00	PID LB3	0.3ppm				(2.00)	
1.50 1.50	J4 ES5						
2.00	PID	0.5ppm		7.749		2.00	Firm to stiff brown mottled grey slightly sandy to sandy slightly gravelly CLAY with occasional organic carbonaceous material. Gravel is fine subrounded and includes sandstone and mudstone. at c.2.00-2.10m BGL ... black, peaty. at c.2.50m BGL ... clay is of high plasticity. Trial pit complete at 2.70m BGL.
2.50 2.50 2.50 2.50	PID HSV J6 B8 ES7	<0.1ppm 71 (27)kPa		7.049		(0.70) 2.70	



GROUNDWATER
No groundwater inflow observed.

STABILITY
Pit sides stable throughout excavation.

GENERAL REMARKS

ADDITIONAL INFORMATION			UNDERGROUND SERVICES				
Sketch Diagram:	No Sketch Taken		Depth	Orientation	Type	Diameter (mm)	Condition
Photographs:	Yes	See additional sheets.					

All dimensions in metres
Scale 1:50

For explanation of symbols and
abbreviations see Key Sheets

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TRIAL PIT RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPB47
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455365.404 N:521349.853	
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 9.749	Start Date: 27/10/2017
		Sheet: 2 of 4



Figure S3-TPB47.1
S3-TPB47 Before investigation works.



Figure S3-TPB47.2
S3-TPB47.



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TRIAL PIT RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPB47	
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455365.404 N:521349.853		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 9.749	Start Date: 27/10/2017	Sheet: 3 of 4

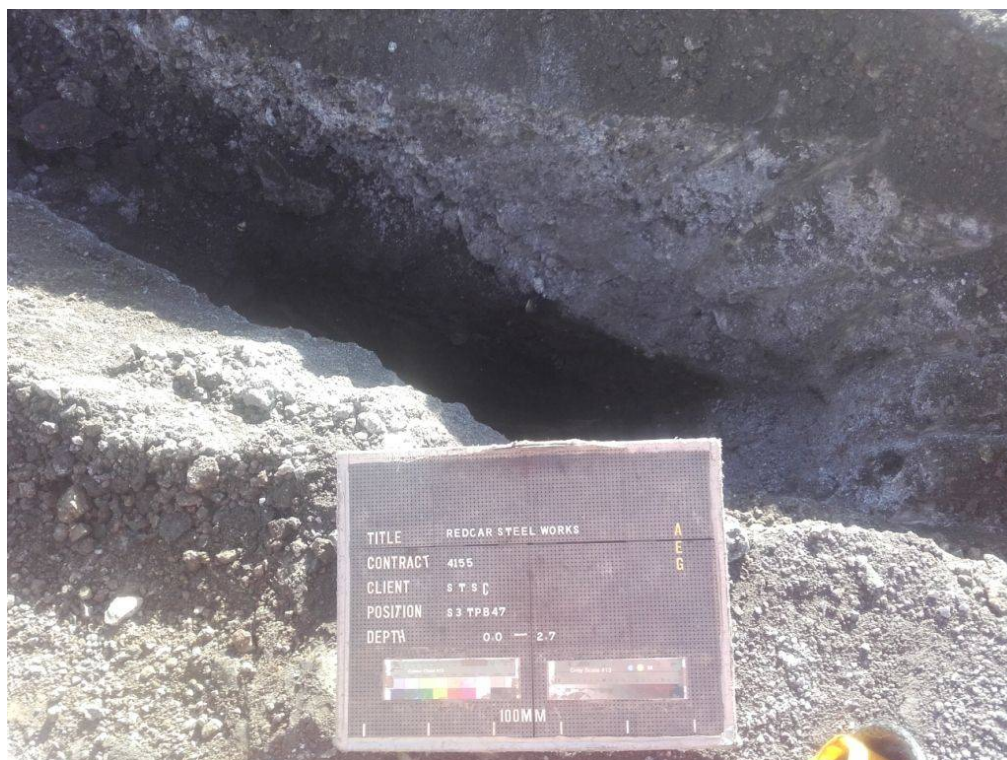


Figure S3-TPB47.3
S3-TPB47 (2).

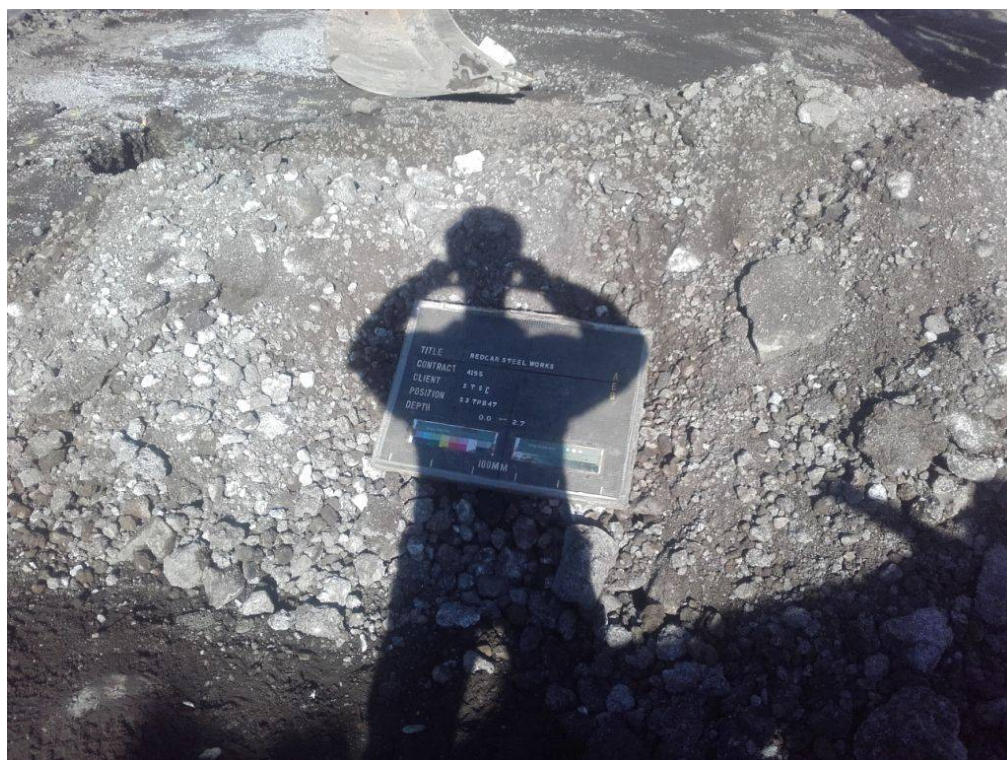


Figure S3-TPB47.4
S3-TPB47 Spoil.



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TRIAL PIT RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPB47	
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455365.404 N:521349.853		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 9.749	Start Date: 27/10/2017	Sheet: 4 of 4



Figure S3-TPB47.5
S3-TPB47 Spoil (2).



Figure S3-TPB47.6
S3-TPB47 Reinstatement.



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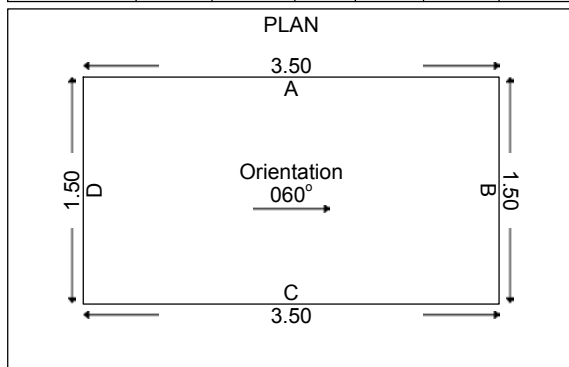
TRIAL PIT RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3			Exploratory Hole No. S3-TPB48	
Client: South Tees Site Company Ltd		Location: Redcar Steel Works E:455404.337 N:521362.525		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)		Ground Level (m(AOD)): 9.793	Start Date: 27/10/2017	Sheet: 1 of 4

SAMPLES & TESTS			Water	STRATA			
Depth	Type No	Test Result		Reduced Level	Legend	Depth (Thickness)	DESCRIPTION
0.50 0.50	J1 ES2					(1.30)	MADE GROUND (Grey brown sandy gravel with medium cobble and boulder content and occasional fragments of metal. Gravel is fine to coarse angular to subangular and includes slag, brick and concrete. Cobbles and boulders are angular to subangular and include slag and brick).
1.00 1.00	PID LB3	<0.1ppm		8.493		1.30	
1.50 1.50	J4 ES5					(1.10)	MADE GROUND (Dark red brown slightly clayey very sandy gravel with high cobble and low boulder content. Sand is fine to coarse. Gravel is fine to coarse angular to subangular and includes slag and brick. Cobbles and boulders are angular to subangular and include slag and brick).
2.00 2.00	PID B6	<0.1ppm		7.393		2.40	
2.50 2.50 2.50 2.50 2.50	PID HSV J7 ES8 B9	<0.1ppm 73 (35)kPa		7.093		(0.30) 2.70	Firm to stiff brown mottled grey slightly sandy to sandy slightly gravelly CLAY with occasional organic carbonaceous material. Gravel is fine subrounded and includes sandstone and mudstone. at c.2.50m BGL ... clay is of high plasticity. Trial pit complete at 2.70m BGL.



GROUNDWATER
No groundwater inflow observed.

STABILITY
Pit sides stable throughout excavation.

GENERAL REMARKS

ADDITIONAL INFORMATION		
Sketch Diagram:	No Sketch Taken	
Photographs:	Yes	See additional sheets.

UNDERGROUND SERVICES				
Depth	Orientation	Type	Diameter (mm)	Condition

All dimensions in metres Scale 1:50	For explanation of symbols and abbreviations see Key Sheets	Checked by: <i>K.W.</i>	Logged by: P. Jansson	Contract No. 4155
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Tel: 01772 735 300 Fax: 01772 735 999

TRIAL PIT RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3			Exploratory Hole No. S3-TPB48
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455404.337 N:521362.525		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 9.793	Start Date: 27/10/2017	Sheet: 2 of 4



Figure S3-TPB48.1
S3-TPB48 Before investigation works.



Figure S3-TPB48.2
S3-TPB48.



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TRIAL PIT RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No.	
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455404.337 N:521362.525		S3-TPB48
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 9.793	Start Date: 27/10/2017	Sheet: 3 of 4



Figure S3-TPB48.3
S3-TPB48 (2).



Figure S3-TPB48.4
S3-TPB48 Spoil.



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TRIAL PIT RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPB48	
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455404.337 N:521362.525		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 9.793	Start Date: 27/10/2017	Sheet: 4 of 4



Figure S3-TPB48.5
S3-TPB48 Spoil (2).



Figure S3-TPB48.6
S3-TPB48 Reinstatement.



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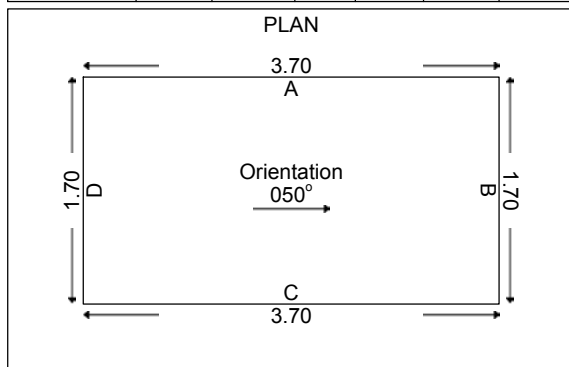
TRIAL PIT RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3			Exploratory Hole No. S3-TPB49
Client: South Tees Site Company Ltd		Location: Redcar Steel Works E:455444.860 N:521340.905	
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)		Ground Level (m(AOD)): 9.697	Start Date: 17/10/2017
			Sheet: 1 of 4

SAMPLES & TESTS			Water	STRATA			
Depth	Type No	Test Result		Reduced Level	Legend	Depth (Thickness)	DESCRIPTION
0.05	J1			9.597		(0.10) 0.10	MADE GROUND (Grey sandy gravel. Gravel is fine to medium angular and includes slag and limestone).
0.50	J2						MADE GROUND (Brown grey slightly sandy to sandy gravel with high cobble and boulder content and occasional fragments of metal. Gravel is fine to coarse angular to subangular and includes slag, brick and concrete. Cobbles and boulders are angular to subangular and include slag, brick and concrete).
0.50	ES3						
1.00	PID	<0.1ppm				(1.90)	
1.00	LB4						
1.50	J5						
1.50	ES6			7.697		2.00	
2.20	PID	<0.1ppm		7.497		(0.20) 2.20	MADE GROUND (Soft to firm sandy slightly gravelly to gravelly clay with low cobble content. Gravel is fine to coarse angular to subrounded and includes sandstone, mudstone, slag and brick. Cobbles are angular to subangular and include slag).
2.20	HSV	43					Trial pit terminated at 2.20m BGL - due to groundwater ingress.
2.20	J9	(20)kPa					
2.20	B7						
2.20	ES8						
2.20							



GROUNDWATER Water strike at 2.10m BGL - moderate inflow.
--

STABILITY Pit sides moderately stable throughout excavation.
--

GENERAL REMARKS

ADDITIONAL INFORMATION		
Sketch Diagram:	No Sketch Taken	
Photographs:	Yes	See additional sheets.

UNDERGROUND SERVICES				
Depth	Orientation	Type	Diameter (mm)	Condition

All dimensions in metres Scale 1:50	For explanation of symbols and abbreviations see Key Sheets	Checked by: <i>K.W.</i>	Logged by: P. Jansson	Contract No. 4155
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TRIAL PIT RECORD

Status:-

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Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPB49
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455444.860 N:521340.905	
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 9.697	Start Date: 17/10/2017
		Sheet: 2 of 4



Figure S3-TPB49.1
S3-TPB49 Before investigation works.



Figure S3-TPB49.2
S3-TPB49.



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TRIAL PIT RECORD

Status:-

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Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455444.860 N:521340.905	
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 9.697	Start Date: 17/10/2017
		Sheet: 3 of 4



Figure S3-TPB49.3
S3-TPB49 (2).



Figure S3-TPB49.4
S3-TPB49 Spoil.



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TRIAL PIT RECORD

Status:-

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Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPB49	
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455444.860 N:521340.905		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 9.697	Start Date: 17/10/2017	Sheet: 4 of 4



Figure S3-TPB49.5
S3-TPB49 Reinstatement.



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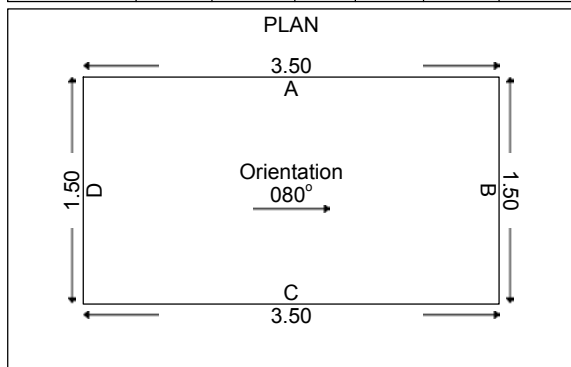
TRIAL PIT RECORD

Status:-

FINAL

Project:	The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3			Exploratory Hole No.
Client:	South Tees Site Company Ltd	Location:	Redcar Steel Works E:455488.445 N:521336.128	
Method (Equipment):	Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)):	9.939	Start Date: 18/10/2017
				Sheet: 1 of 4

SAMPLES & TESTS			Water	STRATA			
Depth	Type No	Test Result		Reduced Level	Legend	Depth (Thickness)	DESCRIPTION
0.50 0.50	J1 ES2			9.909		(0.03) 0.03	MADE GROUND (Macadam).
1.00 1.00	PID B3	2.4ppm					MADE GROUND (Dark brown grey clayey sandy gravel with medium to high cobble and boulder content and occasional fragments of metal and wood. Gravel is fine to coarse angular to subangular and includes slag, brick and concrete. Cobbles and boulders are angular to subangular and include slag and brick).
1.30 1.30	J4 ES5					(2.57)	
2.00 2.00	PID LB6	2.8ppm					
2.50 2.50	J7 ES8			7.339		2.60	Trial pit terminated at 2.60m BGL - due to groundwater ingress.



GROUNDWATER
Water strike at 2.50m BGL - heavy inflow.

STABILITY
Pit sides stable throughout excavation.

GENERAL REMARKS

ADDITIONAL INFORMATION		
Sketch Diagram:	No Sketch Taken	
Photographs:	Yes	See additional sheets.

UNDERGROUND SERVICES				
Depth	Orientation	Type	Diameter (mm)	Condition

All dimensions in metres
Scale 1:50

For explanation of symbols and
abbreviations see Key Sheets

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K.W.

Logged by:
P. Jansson

Contract No.
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TRIAL PIT RECORD

Status:-

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Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPB50	
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455488.445 N:521336.128		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 9.939	Start Date: 18/10/2017	Sheet: 2 of 4



Figure S3-TPB50.1
S3-TPB50 Before investigation works.



Figure S3-TPB50.2
S3-TPB50.



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TRIAL PIT RECORD

Status:-

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Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPB50
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455488.445 N:521336.128	
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 9.939	Start Date: 18/10/2017
		Sheet: 3 of 4



Figure S3-TPB50.3
S3-TPB50 (2).



Figure S3-TPB50.4
S3-TPB50 Spoil.



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TRIAL PIT RECORD

Status:-

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Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPB50	
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455488.445 N:521336.128		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 9.939	Start Date: 18/10/2017	Sheet: 4 of 4



Figure S3-TPB50.5
S3-TPB50 Spoil (2).



Figure S3-TPB50.6
S3-TPB50 Reinstatement.



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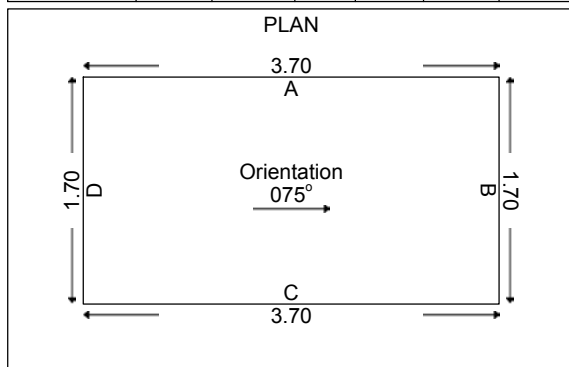
TRIAL PIT RECORD

Status:-

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Project:	The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3			Exploratory Hole No.
Client:	South Tees Site Company Ltd	Location:	Redcar Steel Works E:455517.702 N:521300.565	
Method (Equipment):	Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)):	9.961	Start Date: 18/10/2017
				Sheet: 1 of 4

SAMPLES & TESTS			Water	STRATA			
Depth	Type No	Test Result		Reduced Level	Legend	Depth (Thickness)	DESCRIPTION
0.50 0.50	J1 ES2			9.931		(0.03) 0.03	MADE GROUND (Macadam).
1.00 1.00	PID B3	10.1ppm				(2.37)	MADE GROUND (Brown grey slightly clayey sandy gravel with high cobble and boulder content and occasional fragments of metal. Gravel is fine to coarse angular to subangular and includes slag, brick and concrete. Cobbles and boulders are angular to subangular and include slag).
1.50 1.50	J4 ES5						
2.00 2.00	PID B6	4.3ppm		7.561		2.40	
2.50 2.50 2.50 2.50 2.50	PID HSV J7 B9 ES8	3.3ppm 82 (33)kPa		7.261		(0.30) 2.70	Stiff brown mottled grey slightly sandy slightly gravelly CLAY with occasional organic carbonaceous material. Gravel is fine subrounded and includes sandstone and mudstone. at c.2.50m BGL ... clay is of high plasticity. Trial pit complete at 2.70m BGL.



GROUNDWATER
No groundwater inflow observed.

STABILITY
Pit sides stable throughout excavation.

GENERAL REMARKS

ADDITIONAL INFORMATION		
Sketch Diagram:	No Sketch Taken	
Photographs:	Yes	See additional sheets.

UNDERGROUND SERVICES				
Depth	Orientation	Type	Diameter (mm)	Condition

All dimensions in metres
Scale 1:50

For explanation of symbols and
abbreviations see Key Sheets

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P. Jansson

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TRIAL PIT RECORD

Status:-

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Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPB51	
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455517.702 N:521300.565		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 9.961	Start Date: 18/10/2017	Sheet: 2 of 4



Figure S3-TPB51.1
S3-TPB51 Before investigation works.





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TRIAL PIT RECORD

Status:-

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Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPB51
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455517.702 N:521300.565	
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 9.961	Start Date: 18/10/2017
		Sheet: 3 of 4



Figure S3-TPB51.3
S3-TPB51 (2).



Figure S3-TPB51.4
S3-TPB51 Spoil.



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TRIAL PIT RECORD

Status:-

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Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No.	
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455517.702 N:521300.565		S3-TPB51
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 9.961	Start Date: 18/10/2017	Sheet: 4 of 4



Figure S3-TPB51.5
S3-TPB51 Spoil.



Figure S3-TPB51.6
S3-TPB51 Reinstatement.



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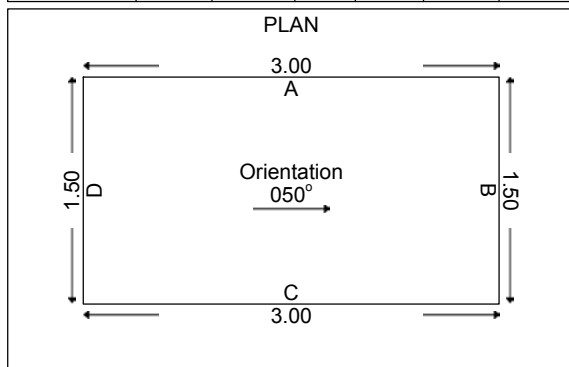
TRIAL PIT RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3			Exploratory Hole No. S3-TPB52
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455158.851 N:521291.107		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 9.869	Start Date: 26/10/2017	Sheet: 1 of 4

SAMPLES & TESTS			Water	STRATA			
Depth	Type No	Test Result		Reduced Level	Legend	Depth (Thickness)	DESCRIPTION
0.50 0.50	J1 ES2	1.9ppm		9.829		(0.04) 0.04	MADE GROUND (Macadam).
1.00 1.00	PID LB3					(1.56)	MADE GROUND (Grey brown slightly clayey very sandy gravel with medium to high cobble and boulder content and occasional fragments of wood. Gravel is fine to coarse angular to subangular and includes slag, concrete and brick. Cobbles and boulders are angular to subangular and includes slag, concrete and brick).
1.50 1.55	J4 ES5			8.269		1.60	at c.1.50-1.60m BGL ... engineer notes tar like substance pervading soil strata (Sample ES5).
2.00 2.00 2.00 2.00	PID HSV J6 B8 ES7	12.6ppm 89 (39)kPa		7.769		(0.50) 2.10	Stiff brown mottled grey slightly sandy slightly gravelly CLAY with organic carbonaceous material. Gravel is fine subrounded and includes sandstone and mudstone. at c.2.00m BGL ... clay is of intermediate plasticity. Trial pit complete at 2.10m BGL.



GROUNDWATER
Water seepage at 1.60m BGL - slight inflow.

STABILITY
Pit sides stable throughout excavation.

GENERAL REMARKS

ADDITIONAL INFORMATION			UNDERGROUND SERVICES				
Sketch Diagram:	No Sketch Taken		Depth	Orientation	Type	Diameter (mm)	Condition
Photographs:	Yes	See additional sheets.					

All dimensions in metres
Scale 1:50

For explanation of symbols and
abbreviations see Key Sheets

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P. Jansson

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TRIAL PIT RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPB52	
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455158.851 N:521291.107		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 9.869	Start Date: 26/10/2017	Sheet: 2 of 4



Figure S3-TPB52.1
S3-TPB52 Before investigation works.



Figure S3-TPB52.2
S3-TPB52.



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TRIAL PIT RECORD

Status:-

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Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPB52
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455158.851 N:521291.107	
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 9.869	Start Date: 26/10/2017
		Sheet: 3 of 4



Figure S3-TPB52.3
S3-TPB52 (2).



Figure S3-TPB52.4
S3-TPB52 Spoil.



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TRIAL PIT RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPB52	
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455158.851 N:521291.107		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 9.869	Start Date: 26/10/2017	Sheet: 4 of 4



Figure S3-TPB52.5
S3-TPB52 Reinstatement.



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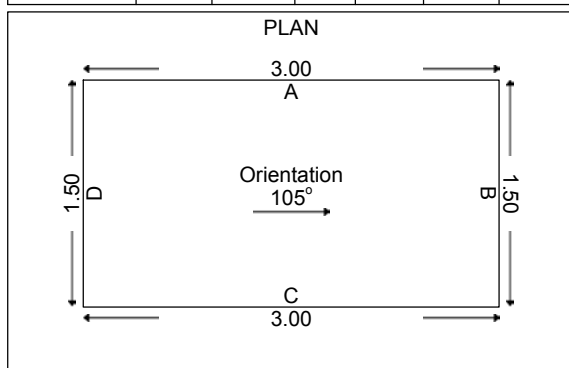
TRIAL PIT RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPB53	
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455246.786 N:521285.533		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 9.858	Start Date: 25/10/2017	Sheet: 1 of 4

SAMPLES & TESTS			Water	STRATA			
Depth	Type No	Test Result		Reduced Level	Legend	Depth (Thickness)	DESCRIPTION
0.50	J1			9.658		(0.20) 0.20	MADE GROUND (Macadam).
0.50	ES2					(0.90)	MADE GROUND (Grey brown clayey sandy gravel with high cobble and low boulder content. Gravel is fine to coarse angular to subangular and includes slag, concrete and brick. Cobbles and boulders are angular to subangular and include slag and brick).
1.00	PID	2.8ppm		8.758		1.10	
1.00	HSV*	5.3ppm		8.558		(0.20) 1.30	Firm to stiff grey brown slightly sandy CLAY with occasional organic carbonaceous material and plant remains.
1.00	B3						at c.1.10m BGL ... engineer notes hydrocarbon film over surface of water and at clay surface.
1.10	PID						at c.1.10m BGL ... clay is of intermediate plasticity.
1.10	J4						Trial pit terminated at 1.30m BGL - due to groundwater ingress.
1.10	B6						
1.10	ES5						



GROUNDWATER
Water strike at 1.10m BGL - moderate inflow.

STABILITY
Pit sides stable throughout excavation.

GENERAL REMARKS
(1) HSV test failed at 1.10m BGL - too disturbed.

ADDITIONAL INFORMATION			UNDERGROUND SERVICES				
Sketch Diagram:	No Sketch Taken		Depth	Orientation	Type	Diameter (mm)	Condition
Photographs:	Yes	See additional sheets.					

All dimensions in metres
Scale 1:50

For explanation of symbols and
abbreviations see Key Sheets

Checked by:
K.W.

Logged by:
P. Jansson

Contract No.
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Tel: 0191 387 4700 Fax: 0191 387 4710
Tel: 01772 735 300 Fax: 01772 735 999

TRIAL PIT RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPB53	
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455246.786 N:521285.533		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 9.858	Start Date: 25/10/2017	Sheet: 2 of 4



Figure S3-TPB53.1
S3-TPB53 Before investigation works.



Figure S3-TPB53.2
S3-TPB53.



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TRIAL PIT RECORD

Status:-

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Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPB53	
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455246.786 N:521285.533		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 9.858	Start Date: 25/10/2017	Sheet: 3 of 4



Figure S3-TPB53.3
S3-TPB53 (2).



Figure S3-TPB53.4
S3-TPB53 Spoil.



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TRIAL PIT RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPB53	
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455246.786 N:521285.533		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 9.858	Start Date: 25/10/2017	Sheet: 4 of 4



Figure S3-TPB53.5
S3-TPB53 Spoil (2).



Figure S3-TPB53.6
S3-TPB53 Reinstatement.



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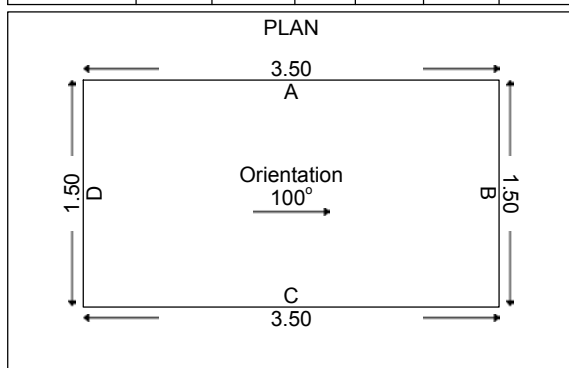
TRIAL PIT RECORD

Status:-

FINAL

Project:	The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3			Exploratory Hole No.
Client:	South Tees Site Company Ltd	Location:	Redcar Steel Works E:455279.185 N:521278.344	
Method (Equipment):	Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)):	10.400	Start Date: 25/10/2017
				Sheet: 1 of 4

SAMPLES & TESTS			Water	STRATA			
Depth	Type No	Test Result		Reduced Level	Legend	Depth (Thickness)	DESCRIPTION
0.05	J1			10.300		(0.10) 0.10	MADE GROUND (Dark brown silty gravelly topsoil with some rootlets).
0.50	J2						MADE GROUND (Brown grey to grey slightly clayey sandy gravel with medium to high cobble and boulder content. Gravel is fine to coarse angular to subangular and includes slag and brick. Cobbles and boulders angular to subangular and include slag and brick).
0.50	ES3						at c.0.30-0.50m BGL ... macadam, Face C and D.
1.00	PID	<0.1ppm				(1.90)	
1.00	B4						
1.50	J5			8.400		2.00	
1.50	ES6			8.200		(0.20) 2.20	Firm to stiff brown mottled grey slightly sandy CLAY with occasional organic carbonaceous material.
2.20	PID	<0.1ppm					at c.2.20m BGL ... clay is of high plasticity.
2.20	HSV	69					Trial pit complete at 2.20m BGL.
2.20	J7	(31)kPa					
2.20	B9						
2.20	ES8						



GROUNDWATER
No groundwater inflow observed.

STABILITY
Pit sides stable throughout excavation.

GENERAL REMARKS

ADDITIONAL INFORMATION		
Sketch Diagram:	No Sketch Taken	
Photographs:	Yes	See additional sheets.

UNDERGROUND SERVICES				
Depth	Orientation	Type	Diameter (mm)	Condition

All dimensions in metres
Scale 1:50

For explanation of symbols and
abbreviations see Key Sheets

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P. Jansson

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TRIAL PIT RECORD

Status:-

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Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPB54	
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455279.185 N:521278.344		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 10.400	Start Date: 25/10/2017	Sheet: 2 of 4



Figure S3-TPB54.1
S3-TPB54 Before investigation works.



Figure S3-TPB54.2
S3-TPB54.



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Status:-

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Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No.	
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455279.185 N:521278.344		S3-TPB54
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 10.400	Start Date: 25/10/2017	Sheet: 3 of 4



Figure S3-TPB54.3
S3-TPB54 (2).



Figure S3-TPB54.4
S3-TPB54 Spoil.



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Status:-

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Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPB54	
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455279.185 N:521278.344		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 10.400	Start Date: 25/10/2017	Sheet: 4 of 4



Figure S3-TPB54.5
S3-TPB54 Spoil (2).



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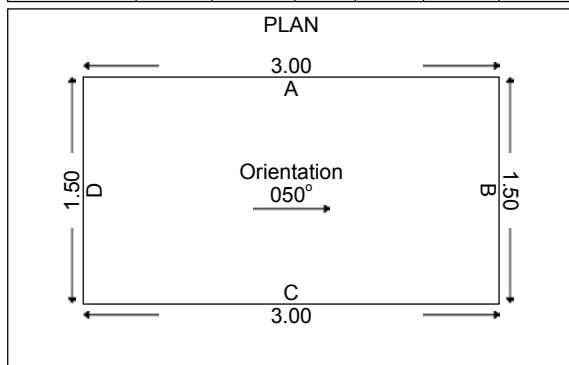
TRIAL PIT RECORD

Status:-

FINAL

Project:	The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3			Exploratory Hole No.
Client:	South Tees Site Company Ltd	Location:	Redcar Steel Works E:455361.989 N:521314.579	
Method (Equipment):	Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)):	9.511	Start Date: 26/10/2017
				Sheet: 1 of 4

SAMPLES & TESTS			Water	STRATA			
Depth	Type No	Test Result		Reduced Level	Legend	Depth (Thickness)	DESCRIPTION
0.10	J1			9.311		(0.20) 0.20	MADE GROUND (Dark grey sandy gravel. Gravel is fine to coarse angular to subangular and includes slag and limestone).
0.50	J2						MADE GROUND (Brown grey sandy gravel with high cobble and boulder content. Gravel is fine to coarse angular to subangular and includes slag and brick. Cobbles and boulder are angular to subangular and include slag and brick).
0.50	ES3					(1.40)	at c.0.50m BGL ... 25mm diameter disused plastic water pipe running 140 degrees.
1.00	PID	<0.1ppm					
1.00	LB4			7.911		1.60	
1.60	J5						MADE GROUND (Dark red brown sand and gravel with low to medium cobble content. Gravel is fine to coarse angular to subangular and includes slag, brick and concrete. Cobbles are angular to subangular and include slag and brick).
1.60	ES6					(0.60)	
2.00	B7	<0.1ppm		7.311		2.20	
2.00	PID						Stiff brown mottled grey slightly sandy slightly gravelly CLAY with occasional organic carbonaceous material. Gravel is fine subrounded and includes sandstone and mudstone.
2.60	PID	<0.1ppm		6.911		2.60	at c.2.60m BGL ... clay is of high plasticity.
2.60	HSV	83					Trial pit complete at 2.60m BGL.
2.60	J8	(36)kPa					
2.60	B10						
2.60	ES9						



GROUNDWATER
Water seepage at 2.20m BGL - moderate inflow.

STABILITY
Pit sides stable throughout excavation.

GENERAL REMARKS

ADDITIONAL INFORMATION			UNDERGROUND SERVICES				
Sketch Diagram:	No Sketch Taken		Depth	Orientation	Type	Diameter (mm)	Condition
Photographs:	Yes	See additional sheets.	0.50	001	Plastic Pipe	25	Damaged

All dimensions in metres
Scale 1:50

For explanation of symbols and
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TRIAL PIT RECORD

Status:-

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Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPB55
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455361.989 N:521314.579	
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 9.511	Start Date: 26/10/2017
		Sheet: 2 of 4



Figure S3-TPB55.1
S3-TPB55 Before investigation works.



Figure S3-TPB55.2
S3-TPB55.



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TRIAL PIT RECORD

Status:-

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Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPB55
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455361.989 N:521314.579	
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 9.511	Start Date: 26/10/2017
		Sheet: 3 of 4



Figure S3-TPB55.3
S3-TPB55 (2).



Figure S3-TPB55.4
S3-TPB55 Spoil.



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TRIAL PIT RECORD

Status:-

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Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPB55	
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455361.989 N:521314.579		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 9.511	Start Date: 26/10/2017	Sheet: 4 of 4



Figure S3-TPB55.5
S3-TPB55 Spoil (2).



Figure S3-TPB55.6
S3-TPB55 Reinstatement.



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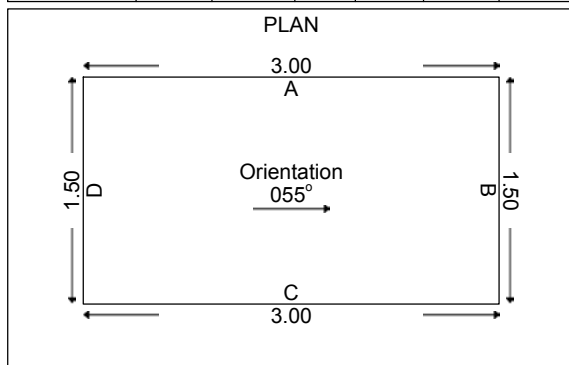
TRIAL PIT RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3			Exploratory Hole No. S3-TPB56
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455391.715 N:521304.392		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)		Ground Level (m(AOD)): 9.431	Start Date: 26/10/2017
			Sheet: 1 of 4

SAMPLES & TESTS			Water	STRATA			
Depth	Type No	Test Result		Reduced Level	Legend	Depth (Thickness)	DESCRIPTION
0.50 0.50	J1 ES2					(1.50)	MADE GROUND (Brown grey to grey slightly clayey sandy gravel with high cobble and boulder content. Gravel is fine to coarse angular to subangular and includes slag, brick and concrete. Cobbles and boulders are angular to subangular and include slag and brick).
1.00 1.00	PID B3	<0.1ppm		7.931		1.50	
1.50 1.50	J4 ES5					(0.60)	MADE GROUND (Dark red brown sand and gravel with medium cobble and low boulder content. Gravel is fine to coarse angular to subangular and includes slag and brick. Cobbles and boulders are angular to subangular and include slag and brick).
2.00 2.00	B6 PID	<0.1ppm		7.331		2.10	
2.40 2.40 2.40 2.40 2.40	PID HSV J7 B9 ES8	<0.1ppm 61 (27)kPa		7.031		(0.30) 2.40	Firm dark grey brown slightly sandy slightly gravelly CLAY with some organic carbonaceous material and plant remains. Gravel is fine subrounded and includes sandstone and mudstone. at c.2.40m BGL ... clay is of high plasticity. Trial pit complete at 2.40m BGL.



GROUNDWATER
No groundwater inflow observed.

STABILITY
Pit sides stable throughout excavation.

GENERAL REMARKS

ADDITIONAL INFORMATION			UNDERGROUND SERVICES				
Sketch Diagram:	No Sketch Taken		Depth	Orientation	Type	Diameter (mm)	Condition
Photographs:	Yes	See additional sheets.					

All dimensions in metres
Scale 1:50

For explanation of symbols and
abbreviations see Key Sheets

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P. Jansson

Contract No.
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TRIAL PIT RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPB56	
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455391.715 N:521304.392		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 9.431	Start Date: 26/10/2017	Sheet: 2 of 4



Figure S3-TPB56.1
S3-TPB56 Before investigation works.



Figure S3-TPB56.2
S3-TPB56.



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Status:-

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Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPB56	
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455391.715 N:521304.392		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 9.431	Start Date: 26/10/2017	Sheet: 3 of 4



Figure S3-TPB56.3
S3-TPB56 (2).



Figure S3-TPB56.4
S3-TPB56 Spoil.



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TRIAL PIT RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPB56
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455391.715 N:521304.392	
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 9.431	Start Date: 26/10/2017
		Sheet: 4 of 4



Figure S3-TPB56.5
S3-TPB56 Spoil (2).



Figure S3-TPB56.6
S3-TPB56 Reinstatement.



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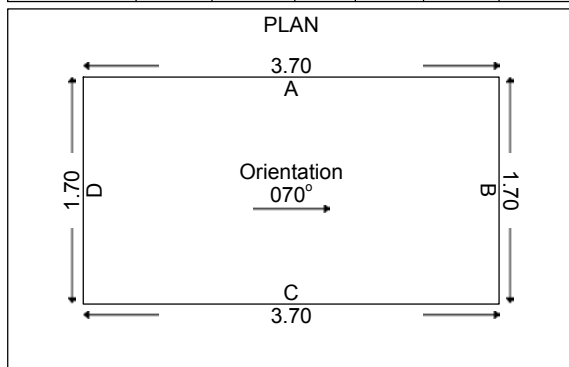
TRIAL PIT RECORD

Status:-

FINAL

Project:	The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3			Exploratory Hole No.
Client:	South Tees Site Company Ltd	Location:	Redcar Steel Works E:455431.554 N:521300.308	
Method (Equipment):	Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)):	9.769	Start Date: 19/10/2017
				Sheet: 1 of 4

SAMPLES & TESTS			Water	STRATA			
Depth	Type No	Test Result		Reduced Level	Legend	Depth (Thickness)	DESCRIPTION
0.50 0.50	J1 ES2			9.669		(0.10) 0.10	MADE GROUND (Macadam).
1.00 1.00	PID LB3	<0.1ppm				(2.20)	MADE GROUND (Grey brown slightly clayey sandy gravel with high cobble and boulder content and occasional fragments of metal, wood and plastic. Gravel is fine to coarse angular to subangular and includes slag, brick and concrete. Cobbles and boulders are angular to subangular and include slag, brick and concrete).
1.50 1.50	J4 ES5						
2.00 2.00	PID B6	<0.1ppm		7.469		2.30	
2.40 2.40	PID HSV	<0.1ppm		7.369		(0.10) 2.40	Dark grey slightly sandy SILT with some plant remains.
2.40 2.40	J7	35					2.40m BGL ... silt is of very high plasticity.
2.40 2.40	B9	(16)kPa					Trial pit terminated at 2.40m BGL - due to groundwater ingress.
2.40 2.40	ES8						



GROUNDWATER
Water strike at 2.20m BGL - heavy inflow.

STABILITY
Pit sides stable throughout excavation.

GENERAL REMARKS

ADDITIONAL INFORMATION		
Sketch Diagram:	No Sketch Taken	
Photographs:	Yes	See additional sheets.

UNDERGROUND SERVICES				
Depth	Orientation	Type	Diameter (mm)	Condition

All dimensions in metres
Scale 1:50

For explanation of symbols and
abbreviations see Key Sheets

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TRIAL PIT RECORD

Status:-

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Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPB57
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455431.554 N:521300.308	
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 9.769	Start Date: 19/10/2017
		Sheet: 2 of 4



Figure S3-TPB57.1
S3-TPB57 Before investigation works.



Figure S3-TPB57.2
S3-TPB57.



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TRIAL PIT RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPB57	
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455431.554 N:521300.308		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 9.769	Start Date: 19/10/2017	Sheet: 3 of 4



Figure S3-TPB57.3
S3-TPB57 (2).



Figure S3-TPB57.4
S3-TPB57 Spoil.



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Regional Office: Unit 20, Business Development Centre, Eanam Wharf, Blackburn, BB1 5BL

Tel: 0191 387 4700 Fax: 0191 387 4710
Tel: 01772 735 300 Fax: 01772 735 999

TRIAL PIT RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPB57	
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455431.554 N:521300.308		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 9.769	Start Date: 19/10/2017	Sheet: 4 of 4



Figure S3-TPB57.5
S3-TPB57 Spoil (2).



Figure S3-TPB57.6
S3-TPB57 Reinstatement.



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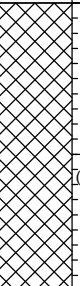

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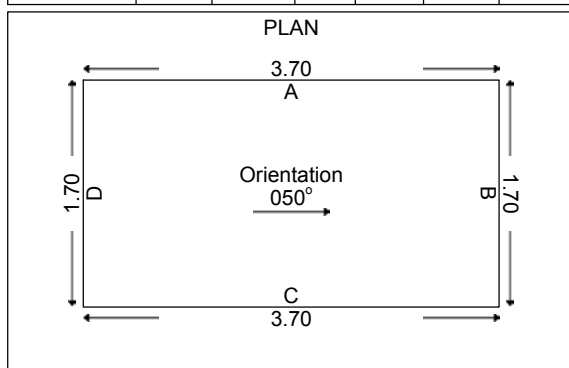
TRIAL PIT RECORD

Status:-

FINAL

Project:	The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3			Exploratory Hole No.
Client:	South Tees Site Company Ltd	Location:	Redcar Steel Works E:455489.298 N:521299.036	
Method (Equipment):	Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)):	9.513	Start Date: 19/10/2017
				Sheet: 1 of 4

SAMPLES & TESTS			Water	STRATA			
Depth	Type No	Test Result		Reduced Level	Legend	Depth (Thickness)	DESCRIPTION
0.50 0.50	J1 ES2						MADE GROUND (Grey brown slightly clayey sandy gravel with high cobble and boulder content. Gravel is fine to coarse angular to subangular and includes slag and brick. Cobbles and boulders are angular to subangular and include slag).
1.00 1.00	PID LB3	<0.1ppm				(2.30)	
1.50 1.50	J4 ES5						
2.00 2.00	PID B6	<0.1ppm		7.213		2.30	
2.40 2.40	PID HSV	<0.1ppm >111		7.113		(0.10) 2.40	
2.40 2.40	J7	(39)kPa					Stiff brown and grey brown slightly sandy slightly gravelly CLAY with organic carbonaceous material. Gravel is fine subrounded and includes sandstone and mudstone. at c.2.40m BGL ... clay is of intermediate plasticity. Trial pit terminated at 2.40m BGL - due to groundwater ingress.
2.40 2.40	B9						
2.40 2.40	ES8						



GROUNDWATER
Water strike at 2.10m BGL - heavy inflow.

STABILITY
Pit sides stable throughout excavation.

GENERAL REMARKS

ADDITIONAL INFORMATION		
Sketch Diagram:	No Sketch Taken	
Photographs:	Yes	See additional sheets.

UNDERGROUND SERVICES				
Depth	Orientation	Type	Diameter (mm)	Condition

All dimensions in metres
Scale 1:50

For explanation of symbols and
abbreviations see Key Sheets

Checked by:
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Logged by:
P. Jansson

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TRIAL PIT RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3			Exploratory Hole No. S3-TPB58
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455489.298 N:521299.036		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 9.513	Start Date: 19/10/2017	Sheet: 2 of 4



Figure S3-TPB58.1
S3-TPB58 Before investigation works.



Figure S3-TPB58.2
S3-TPB58.



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TRIAL PIT RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No.	
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455489.298 N:521299.036		S3-TPB58
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 9.513	Start Date: 19/10/2017	Sheet: 3 of 4



Figure S3-TPB58.3
S3-TPB58 (2).



Figure S3-TPB58.4
S3-TPB58 Spoil.



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Tel: 01772 735 300 Fax: 01772 735 999

TRIAL PIT RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPB58	
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455489.298 N:521299.036		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 9.513	Start Date: 19/10/2017	Sheet: 4 of 4



Figure S3-TPB58.5
S3-TPB58 Spoil (2).



Figure S3-TPB58.6
S3-TPB58 Reinstatement.



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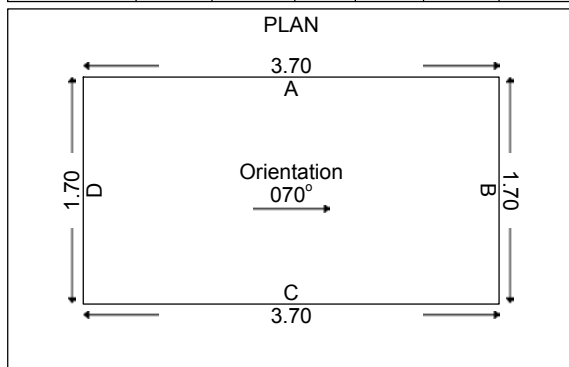
TRIAL PIT RECORD

Status:-

FINAL

Project:	The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3			Exploratory Hole No.
Client:	South Tees Site Company Ltd	Location:	Redcar Steel Works E:455555.454 N:521277.064	
Method (Equipment):	Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)):	11.784	Start Date: 19/10/2017
				Sheet: 1 of 4

SAMPLES & TESTS			Water	STRATA			
Depth	Type No	Test Result		Reduced Level	Legend	Depth (Thickness)	DESCRIPTION
0.05	J1			11.684		(0.10) 0.10	MADE GROUND (Dark brown sandy gravelly topsoil with occasional rootlets).
0.50	J2						MADE GROUND (Grey brown clayey sandy gravel with high cobble and boulder content and occasional fragments of metal and wood. Gravel is fine to coarse angular to subangular and includes slag, brick and concrete. Cobbles and boulders are angular to subangular and include slag, brick and concrete).
0.50	ES3						
1.00	PID	<0.1ppm				(2.30)	
1.00	LB4						
1.50	J5						
1.50	ES6						
2.00	PID	<0.1ppm					
2.00	B7			9.384		2.40	at c.2.20-2.40m BGL ... black tar like substance covering soil material (sample ES8).
2.30	ES8						
				8.984		(0.40) 2.80	Firm to stiff brown mottled grey slightly sandy slightly gravelly CLAY with organic carbonaceous material. Gravel is fine subrounded and includes sandstone and mudstone.
2.80	PID	<0.1ppm					
2.80	HSV	68					
2.80	J9	(29)kPa					
2.80	B11						
2.80	ES10						Trial pit terminated at 2.80m BGL - due to groundwater ingress.



GROUNDWATER
Water strike at 2.40m BGL - slight inflow.

STABILITY
Pit sides stable throughout excavation.

GENERAL REMARKS

ADDITIONAL INFORMATION		
Sketch Diagram:	No Sketch Taken	
Photographs:	Yes	See additional sheets.

UNDERGROUND SERVICES				
Depth	Orientation	Type	Diameter (mm)	Condition

All dimensions in metres
Scale 1:50

For explanation of symbols and
abbreviations see Key Sheets

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Logged by:
P. Jansson

Contract No.
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Tel: 01772 735 300 Fax: 01772 735 999

TRIAL PIT RECORD

Status:-

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Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPB59	
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455555.454 N:521277.064		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 11.784	Start Date: 19/10/2017	Sheet: 2 of 4



Figure S3-TPB59.1
S3-TPB59 Before investigation works.



Figure S3-TPB59.2
S3-TPB59.



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TRIAL PIT RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPB59	
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455555.454 N:521277.064		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 11.784	Start Date: 19/10/2017	Sheet: 3 of 4



Figure S3-TPB59.3
S3-TPB59 (2).



Figure S3-TPB59.4
S3-TPB59 Spoil.



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TRIAL PIT RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPB59	
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455555.454 N:521277.064		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 11.784	Start Date: 19/10/2017	Sheet: 4 of 4



Figure S3-TPB59.5
S3-TPB59 Spoil (2).



Figure S3-TPB59.6
S3-TPB59 Reinstatement.



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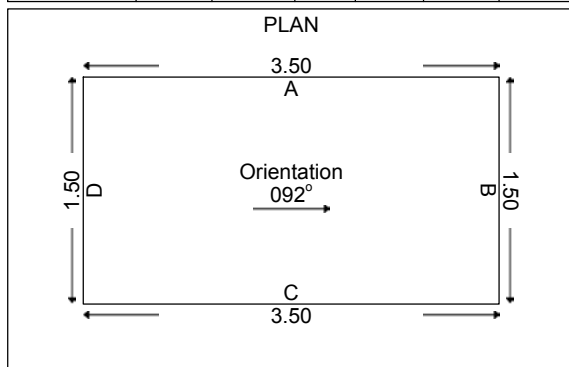
TRIAL PIT RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3			Exploratory Hole No. S3-TPB60
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455188.211 N:521233.179		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 10.175	Start Date: 25/10/2017	Sheet: 1 of 4

SAMPLES & TESTS			Water	STRATA			
Depth	Type No	Test Result		Reduced Level	Legend	Depth (Thickness)	DESCRIPTION
0.10	J1			9.975		(0.20) 0.20	MADE GROUND (Grey brown sandy gravelly topsoil with occasional rootlets).
				9.775		(0.20) 0.40	MADE GROUND (Macadam).
0.50 0.50	J2 ES3					(0.90)	MADE GROUND (Grey brown clayey sandy gravel with high cobble and boulder content. Gravel is fine to coarse angular to subangular and includes slag, brick and concrete. Cobbles and boulders are angular to subangular and include slag and brick).
1.00 1.00	PID B4	16.8ppm		8.875		1.30	at c.0.50m BGL ... disused clay drain (silted up) running 078 degrees.
1.50 1.50 1.50 1.50	PID HSV J5 B7 ES6	0.5ppm 106 (45)kPa		8.575		(0.30) 1.60	Stiff brown mottled grey slightly sandy to sandy slightly gravelly CLAY with occasional organic carbonaceous material. Gravel is fine subrounded and includes sandstone and mudstone.
							at c.1.50m BGL ... clay is of high plasticity.
							Trial pit complete at 1.60m BGL.



GROUNDWATER
No groundwater inflow observed.

STABILITY
Pit sides stable throughout excavation.

GENERAL REMARKS

ADDITIONAL INFORMATION			UNDERGROUND SERVICES				
Sketch Diagram:	No Sketch Taken		Depth	Orientation	Type	Diameter (mm)	Condition
Photographs:	Yes	See additional sheets.	0.50	078	disused clay drain (silted up)		Damaged

All dimensions in metres
Scale 1:50

For explanation of symbols and
abbreviations see Key Sheets

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P. Jansson

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TRIAL PIT RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPB60	
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455188.211 N:521233.179		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 10.175	Start Date: 25/10/2017	Sheet: 2 of 4



Figure S3-TPB60.1
S3-TPB60 Before investigation works.



Figure S3-TPB60.2
S3-TPB60.



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TRIAL PIT RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPB60	
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455188.211 N:521233.179		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 10.175	Start Date: 25/10/2017	Sheet: 3 of 4



Figure S3-TPB60.3
S3-TPB60 (2).



Figure S3-TPB60.4
S3-TPB60 Spoil.



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TRIAL PIT RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPB60	
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455188.211 N:521233.179		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 10.175	Start Date: 25/10/2017	Sheet: 4 of 4



Figure S3-TPB60.5
S3-TPB60 Reinstatement.



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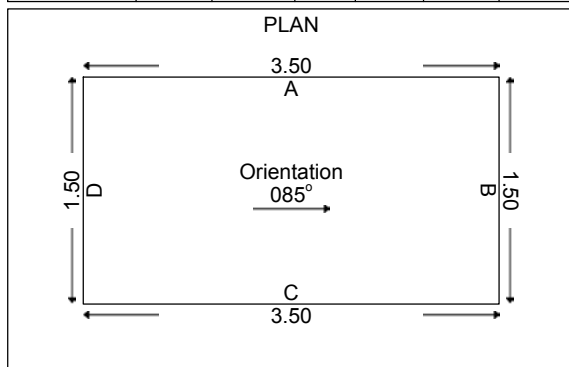
TRIAL PIT RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3			Exploratory Hole No. S3-TPB61
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455235.066 N:521236.367		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)		Ground Level (m(AOD)): 10.675	Start Date: 25/10/2017
			Sheet: 1 of 4

SAMPLES & TESTS			Water	STRATA			
Depth	Type No	Test Result		Reduced Level	Legend	Depth (Thickness)	DESCRIPTION
0.50 0.50	J1 ES2	0.1ppm		10.475		(0.20) 0.20	MADE GROUND (Macadam).
1.00 1.00	PID LB3					(1.50)	MADE GROUND (Brown grey slightly clayey sandy gravel with medium cobble and boulder content and fragments of metal. Gravel is fine to coarse angular to subangular and includes slag, concrete and brick. Cobbles and boulders are angular to subangular and include slag and concrete).
1.50 1.50	J4 ES5			8.975		1.70	
2.00 2.00 2.00 2.00	PID HSV J6 B8 ES7	0.4ppm 93 (37)kPa		8.675		(0.30) 2.00	



GROUNDWATER
Water strike at 1.70m BGL - moderate inflow.

STABILITY
Pit sides stable throughout excavation.

GENERAL REMARKS

ADDITIONAL INFORMATION		
Sketch Diagram:	No Sketch Taken	
Photographs:	Yes	See additional sheets.

UNDERGROUND SERVICES				
Depth	Orientation	Type	Diameter (mm)	Condition

All dimensions in metres
Scale 1:50

For explanation of symbols and
abbreviations see Key Sheets

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TRIAL PIT RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPB61	
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455235.066 N:521236.367		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 10.675	Start Date: 25/10/2017	Sheet: 2 of 4



Figure S3-TPB61.1
S3-TPB61 Before investigation works.



Figure S3-TPB61.2
S3-TPB61.



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TRIAL PIT RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPB61
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455235.066 N:521236.367	
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 10.675	Start Date: 25/10/2017
		Sheet: 3 of 4



Figure S3-TPB61.3
S3-TPB61 (2).



Figure S3-TPB61.4
S3-TPB61 Spoil.



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TRIAL PIT RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPB61	
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455235.066 N:521236.367		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 10.675	Start Date: 25/10/2017	Sheet: 4 of 4



Figure S3-TPB61.5
S3-TPB61 Spoil (2).



Figure S3-TPB61.6
S3-TPB61 Reinstatement.



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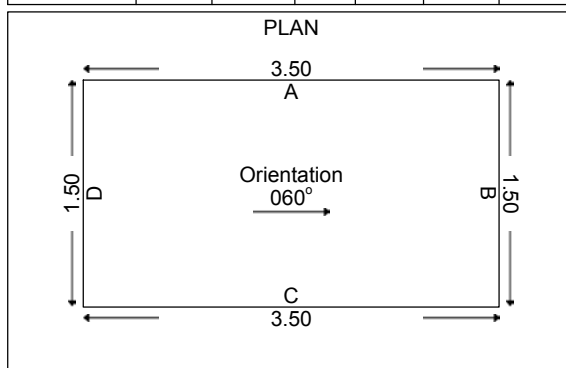
TRIAL PIT RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPB62
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455257.154 N:521248.611	
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 10.456	Start Date: 25/10/2017
		Sheet: 1 of 4

SAMPLES & TESTS			Water	STRATA			
Depth	Type No	Test Result		Reduced Level	Legend	Depth (Thickness)	DESCRIPTION
0.50 0.50	J1 ES2			10.156		(0.30) 0.30	MADE GROUND (Macadam).
1.00 1.00	PID LB3	1.3ppm				(1.30)	MADE GROUND (Brown grey to grey sandy gravel with high cobble and boulder content. Gravel is fine to coarse angular to subangular and includes slag and brick. Cobbles and boulders are angular to subangular and include slag and brick).
1.50 1.50	J4 ES5			8.856		1.60	
1.70 1.70	PID HSV	0.3ppm 39 (18)kPa		8.756		(0.10) 1.70	MADE GROUND (Soft to firm dark brown grey slightly sandy slightly gravelly clay with some organic carbonaceous material and plant remains. Fragments of tile. Gravel is fine to coarse angular to subangular and includes slag).
1.70 1.70	J6 B8 ES7						Trial pit complete at 1.70m BGL - due to groundwater ingress.



GROUNDWATER Water strike at 1.50m BGL - heavy inflow.
STABILITY Pit sides stable throughout excavation.
GENERAL REMARKS

ADDITIONAL INFORMATION			UNDERGROUND SERVICES				
Sketch Diagram:	No Sketch Taken		Depth	Orientation	Type	Diameter (mm)	Condition
Photographs:	Yes	See additional sheets.					

All dimensions in metres Scale 1:50	For explanation of symbols and abbreviations see Key Sheets	Checked by: <i>K.W.</i>	Logged by: P. Jansson	Contract No. 4155
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TRIAL PIT RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3			Exploratory Hole No. S3-TPB62
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455257.154 N:521248.611		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 10.456	Start Date: 25/10/2017	Sheet: 2 of 4



Figure S3-TPB62.1
S3-TPB62 Before investigation works.



Figure S3-TPB62.2
S3-TPB62.



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Tel: 0191 387 4700 Fax: 0191 387 4710
Tel: 01772 735 300 Fax: 01772 735 999

TRIAL PIT RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3			Exploratory Hole No. S3-TPB62
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455257.154 N:521248.611		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 10.456	Start Date: 25/10/2017	Sheet: 3 of 4



Figure S3-TPB62.3
S3-TPB62 (2).



Figure S3-TPB62.4
S3-TPB62 Spoil.



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TRIAL PIT RECORD

Status:-

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Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPB62	
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455257.154 N:521248.611		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 10.456	Start Date: 25/10/2017	Sheet: 4 of 4



Figure S3-TPB62.5
S3-TPB62 Spoil (2).



Figure S3-TPB62.6
S3-TPB62 Reinstatement.



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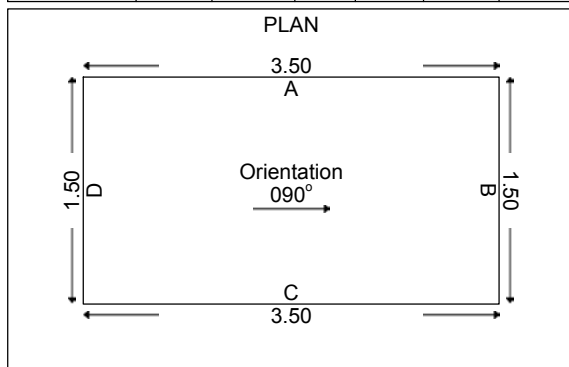
TRIAL PIT RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3			Exploratory Hole No. S3-TPB63	
Client: South Tees Site Company Ltd		Location: Redcar Steel Works E:455351.668 N:521271.964		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)		Ground Level (m(AOD)):	Start Date:	Sheet:
		9.782	24/10/2017	1 of 4

SAMPLES & TESTS			Water	STRATA			
Depth	Type No	Test Result		Reduced Level	Legend	Depth (Thickness)	DESCRIPTION
0.50 0.50	J1 ES2			9.742		(0.07) 0.67	MADE GROUND (Grey brown gravelly sandy topsoil with some rootlets).
1.00 1.00	PID LB3	<0.1ppm				(2.03)	MADE GROUND (Brown grey to grey sandy gravel with medium to high cobble and boulder content. Gravel is fine to coarse angular to subangular and includes slag, brick and concrete. Cobbles and boulders are angular to subangular and include slag, brick and concrete).
1.50 1.50	J4 ES5						
2.00 2.00	PID B6	<0.1ppm		7.682		2.10	at c.1.80-2.10m BGL ... dark brown.
2.40 2.40 2.40 2.50 2.50	J7 B9 ES8 PID HSV	<0.1ppm 83 (37)kPa		7.382		(0.30) 2.40	Firm to stiff brown mottled grey slightly sandy slightly gravelly CLAY with organic carbonaceous material. Gravel is fine subrounded and includes sandstone and mudstone. 2.40m BGL ... clay is of high plasticity. Trial pit complete at 2.40m BGL.



GROUNDWATER
No groundwater inflow observed.

STABILITY
Pit sides stable throughout excavation.

GENERAL REMARKS

ADDITIONAL INFORMATION			UNDERGROUND SERVICES				
Sketch Diagram:	No Sketch Taken		Depth	Orientation	Type	Diameter (mm)	Condition
Photographs:	Yes	See additional sheets.					

All dimensions in metres
Scale 1:50

For explanation of symbols and
abbreviations see Key Sheets

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K.W.

Logged by:
P. Jansson

Contract No.
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TRIAL PIT RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPB63	
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455351.668 N:521271.964		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 9.782	Start Date: 24/10/2017	Sheet: 2 of 4



Figure S3-TPB63.1
S3-TPB63 Before investigation works.



Figure S3-TPB63.2
S3-TPB63.



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TRIAL PIT RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPB63
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455351.668 N:521271.964	
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 9.782	Start Date: 24/10/2017
		Sheet: 3 of 4



Figure S3-TPB63.3
S3-TPB63 (2).



Figure S3-TPB63.4
S3-TPB63 Spoil.



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TRIAL PIT RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPB63	
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455351.668 N:521271.964		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 9.782	Start Date: 24/10/2017	Sheet: 4 of 4



Figure S3-TPB63.5
S3-TPB63 Spoil (2).



Figure S3-TPB63.6
S3-TPB63 Reinstatement.



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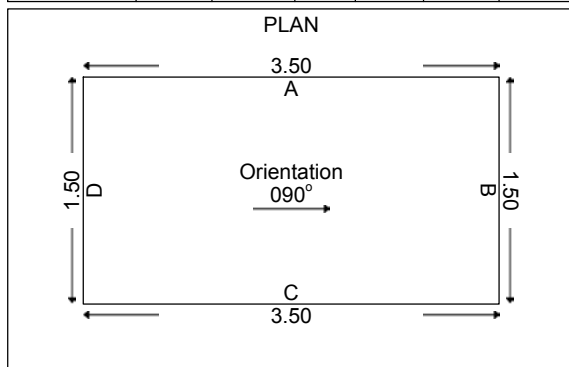
TRIAL PIT RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3			Exploratory Hole No. S3-TPB64	
Client: South Tees Site Company Ltd		Location: Redcar Steel Works E:455393.868 N:521269.637		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)		Ground Level (m(AOD)): 9.703	Start Date: 24/10/2017	Sheet: 1 of 4

SAMPLES & TESTS			Water	STRATA			
Depth	Type No	Test Result		Reduced Level	Legend	Depth (Thickness)	DESCRIPTION
0.50 0.50	J1 ES2			9.633		(0.07) 0.67	MADE GROUND (Grey brown gravelly sandy topsoil with some rootlets).
1.00 1.00	PID LB3	<0.1ppm				(2.43)	MADE GROUND (Brown grey to grey slightly clayey very sandy gravel with high cobble and boulder content. Gravel is fine to coarse angular to subangular and includes slag and concrete. Cobbles and boulders are angular to subangular and include slag, brick and concrete). between c.0.07-0.50m BGL ... brown.
1.50 1.50	J4 ES5						
2.00 2.00	PID B6	<0.1ppm					between c.2.00-2.50m BGL ... dark brown.
2.50 2.50 2.50 2.50 2.50	PID HSV J7 B9 ES8	<0.1ppm 101 (44)kPa		7.203 6.903		2.50 (0.30) 2.80	Stiff brown mottled grey slightly sandy slightly gravelly CLAY with organic carbonaceous material. Gravel is fine subrounded and includes sandstone and mudstone. at c.2.50m BGL ... clay is of high plasticity. Trial pit complete at 2.40m BGL.



GROUNDWATER
Water strike at 2.50m BGL - moderate inflow.

STABILITY
Pit sides stable throughout excavation.

GENERAL REMARKS

ADDITIONAL INFORMATION		
Sketch Diagram:	No Sketch Taken	
Photographs:	Yes	See additional sheets.

UNDERGROUND SERVICES				
Depth	Orientation	Type	Diameter (mm)	Condition

All dimensions in metres
Scale 1:50

For explanation of symbols and
abbreviations see Key Sheets

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K.W.

Logged by:
P. Jansson

Contract No.
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TRIAL PIT RECORD

Status:-

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Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPB64	
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455393.868 N:521269.637		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 9.703	Start Date: 24/10/2017	Sheet: 2 of 4



Figure S3-TPB64.1
S3-TPB64 Before investigation works.



Figure S3-TPB64.2
S3-TPB64.



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TRIAL PIT RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPB64	
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455393.868 N:521269.637		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 9.703	Start Date: 24/10/2017	Sheet: 3 of 4



Figure S3-TPB64.3
S3-TPB64 (2).



Figure S3-TPB64.4
S3-TPB64 Spoil.



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TRIAL PIT RECORD

Status:-

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Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPB64	
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455393.868 N:521269.637		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 9.703	Start Date: 24/10/2017	Sheet: 4 of 4



Figure S3-TPB64.5
S3-TPB64 Spoil (2).



Figure S3-TPB64.6
S3-TPB64 Reinstatement.



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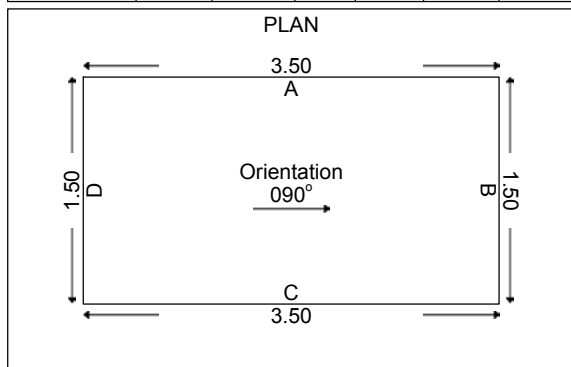
TRIAL PIT RECORD

Status:-

FINAL

Project:	The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3			Exploratory Hole No.
Client:	South Tees Site Company Ltd	Location:	Redcar Steel Works E:455410.479 N:521258.514	
Method (Equipment):	Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)):	9.770	Start Date: 24/10/2017
				Sheet: 1 of 4

SAMPLES & TESTS			Water	STRATA			
Depth	Type No	Test Result		Reduced Level	Legend	Depth (Thickness)	DESCRIPTION
0.05	J1			9.670		(0.10) 0.10	MADE GROUND (Grey brown gravelly sandy topsoil with some rootlets).
0.50	J2						MADE GROUND (Brown grey to grey sandy gravel with high cobble and boulder content and occasional fragments of plastic. Gravel is fine to coarse angular to subangular and includes slag, brick and concrete. Cobbles and boulders are angular to subangular and include slag and concrete).
0.50	J2 ES3						
1.00	PID B4	5.3ppm				(2.20)	
1.00	J5 ES6						
1.50							
1.50	J5 ES6						
2.00	PID B7	10.3ppm		7.470		2.30	
2.00							
2.50	PID HSV 85	16.9ppm		7.170		(0.30) 2.60	Stiff brown mottled grey slightly sandy slightly gravelly CLAY with organic carbonaceous material. Gravel is fine subrounded and includes sandstone and mudstone.
2.50	J9 ES8	(37)kPa					Trial pit complete at 2.60m BGL.
2.50	J9 ES8						
2.50	B10						



GROUNDWATER
No groundwater inflow observed.

STABILITY
Pit sides stable throughout excavation.

GENERAL REMARKS

ADDITIONAL INFORMATION			UNDERGROUND SERVICES				
Sketch Diagram:	No Sketch Taken		Depth	Orientation	Type	Diameter (mm)	Condition
Photographs:	Yes	See additional sheets.					

All dimensions in metres
Scale 1:50

For explanation of symbols and abbreviations see Key Sheets

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K.W.

Logged by:
P. Jansson

Contract No.
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TRIAL PIT RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPB65
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455410.479 N:521258.514	
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 9.770	Start Date: 24/10/2017
		Sheet: 2 of 4



Figure S3-TPB65.1
S3-TPB65 Before investigation works.



Figure S3-TPB65.2
S3-TPB65.



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TRIAL PIT RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPB65
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455410.479 N:521258.514	
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 9.770	Start Date: 24/10/2017
		Sheet: 3 of 4



Figure S3-TPB65.3
S3-TPB65 (2).



Figure S3-TPB65.4
S3-TPB65 Spoil.



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TRIAL PIT RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPB65	
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455410.479 N:521258.514		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 9.770	Start Date: 24/10/2017	Sheet: 4 of 4



Figure S3-TPB65.5
S3-TPB65 Spoil (2).



Figure S3-TPB65.6
S3-TPB65 Reinstatement.



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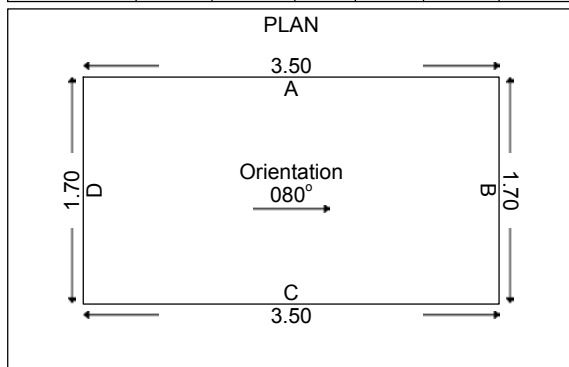
TRIAL PIT RECORD

Status:-

FINAL

Project:	The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3			Exploratory Hole No.
Client:	South Tees Site Company Ltd		Location:	Redcar Steel Works E:455468.160 N:521246.402
Method (Equipment):	Machine Excavated (JCB 360 Tracked Excavator)		Ground Level (m(AOD)):	9.667
			Start Date:	23/10/2017
			Sheet:	1 of 4

SAMPLES & TESTS			Water	STRATA			
Depth	Type No	Test Result		Reduced Level	Legend	Depth (Thickness)	DESCRIPTION
0.10	J1			9.467		(0.20) 0.20	MADE GROUND (Brown sandy gravelly topsoil with some rootlets).
0.50	ES2						MADE GROUND (Grey brown slightly clayey very sandy gravel with medium to high cobble and boulder content. Gravel is fine to coarse angular to subangular and includes slag, brick and concrete. Cobbles and boulders are angular to subangular and include slag). between c.0.20-1.80m BGL ... reinforced concrete structure Face C.
0.50	J3						
1.00	PID	0.3ppm					
1.00	LB4					(2.20)	
1.50	J5						
1.50	ES6						
2.00	PID	0.5ppm					
2.00	B7			7.267		2.40	Trial pit complete at 2.40m BGL.



GROUNDWATER
No groundwater inflow observed.

STABILITY
Pit sides moderately stable throughout excavation.

GENERAL REMARKS

ADDITIONAL INFORMATION		
Sketch Diagram:	No Sketch Taken	
Photographs:	Yes	See additional sheets.

UNDERGROUND SERVICES				
Depth	Orientation	Type	Diameter (mm)	Condition

All dimensions in metres
Scale 1:50

For explanation of symbols and
abbreviations see Key Sheets

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Logged by:
P. Jansson

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TRIAL PIT RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPB66	
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455468.160 N:521246.402		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 9.667	Start Date: 23/10/2017	Sheet: 2 of 4



Figure S3-TPB66.1
S3-TPB66 Before investigation works.



Figure S3-TPB66.2
S3-TPB66.



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TRIAL PIT RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPB66	
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455468.160 N:521246.402		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 9.667	Start Date: 23/10/2017	Sheet: 3 of 4



Figure S3-TPB66.3
S3-TPB66 (2).



Figure S3-TPB66.4
S3-TPB66 Spoil.



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TRIAL PIT RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPB66	
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455468.160 N:521246.402		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 9.667	Start Date: 23/10/2017	Sheet: 4 of 4



Figure S3-TPB66.5
S3-TPB66 Reinstatement.



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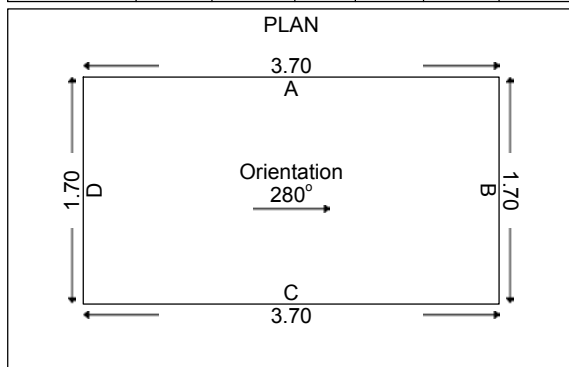
TRIAL PIT RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3			Exploratory Hole No. S3-TPB67	
Client: South Tees Site Company Ltd		Location: Redcar Steel Works E:455513.185 N:521238.859		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)		Ground Level (m(AOD)): 10.064	Start Date: 19/10/2017	Sheet: 1 of 4

SAMPLES & TESTS			Water	STRATA			
Depth	Type No	Test Result		Reduced Level	Legend	Depth (Thickness)	DESCRIPTION
0.20 0.20 0.50	J1 J2 ES3			9.664		(0.40) 0.40	MADE GROUND (Brown sandy clayey topsoil with many rootlets).
				9.364		(0.30) 0.70	MADE GROUND (Brown grey slightly sandy gravel. Gravel is fine to coarse angular and includes limestone).
1.00 1.00	PID LB4	<0.1ppm					MADE GROUND (Light grey to grey sandy gravel with high cobble and boulder content. Gravel is fine to coarse angular to subangular and includes slag, brick and concrete. Cobbles and boulders are angular to subangular and include slag).
1.50 1.50	J5 ES6					(1.70)	
2.00 2.00	PID B7	<0.1ppm		7.664		2.40	at c.2.00m BGL .. clay is of high plasticity.
2.80 2.80 2.80 2.80 2.80	PID HSV ES8 ES10 J9	<0.1ppm 94 (40)kPa		7.264		(0.40) 2.80	Stiff brown mottled grey slightly sandy slightly gravelly CLAY with organic carbonaceous material. Gravel is fine subrounded and includes sandstone and mudstone. at c.2.80m BGL ... clay is of high plasticity. Trial pit terminated at 2.80m BGL - due to groundwater ingress.



GROUNDWATER Water strike at 2.40m BGL - slight inflow.

STABILITY Pit sides stable throughout excavation.
--

GENERAL REMARKS

ADDITIONAL INFORMATION		
Sketch Diagram:	No Sketch Taken	
Photographs:	Yes	See additional sheets.

UNDERGROUND SERVICES				
Depth	Orientation	Type	Diameter (mm)	Condition

All dimensions in metres Scale 1:50	For explanation of symbols and abbreviations see Key Sheets	Checked by: <i>K.W.</i>	Logged by: P. Jansson	Contract No. 4155
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Tel: 01772 735 300 Fax: 01772 735 999

TRIAL PIT RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPB67	
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455513.185 N:521238.859		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 10.064	Start Date: 19/10/2017	Sheet: 2 of 4



Figure S3-TPB67.1
S3-TPB67 Before investigation works.



Figure S3-TPB67.2
S3-TPB67.



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Status:-

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Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPB67	
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455513.185 N:521238.859		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 10.064	Start Date: 19/10/2017	Sheet: 3 of 4



Figure S3-TPB67.3
S3-TPB67 (2).



Figure S3-TPB67.4
S3-TPB67 Spoil.



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TRIAL PIT RECORD

Status:-

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Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPB67	
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455513.185 N:521238.859		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 10.064	Start Date: 19/10/2017	Sheet: 4 of 4



Figure S3-TPB67.5
S3-TPB67 Spoil (2).



Figure S3-TPB67.6
S3-TPB67 Reinstatement.



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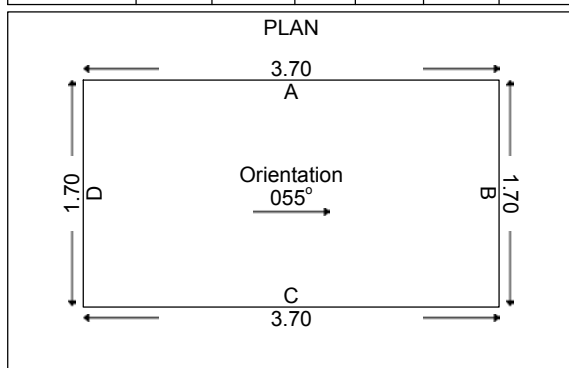
TRIAL PIT RECORD

Status:-

FINAL

Project:	The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3			Exploratory Hole No.
Client:	South Tees Site Company Ltd	Location:	Redcar Steel Works E:455566.690 N:521226.340	
Method (Equipment):	Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)):	9.915	Start Date: 20/10/2017
				Sheet: 1 of 4

SAMPLES & TESTS			Water	STRATA			
Depth	Type No	Test Result		Reduced Level	Legend	Depth (Thickness)	DESCRIPTION
0.20	J1			9.515		(0.40) 0.40	MADE GROUND (Brown sandy clayey topsoil with many rootlets).
0.20	ES2						
0.50	J3			9.215		(0.30) 0.70	MADE GROUND (Brown grey slightly sandy gravel. Gravel is fine to coarse angular and includes limestone).
1.00	PID	<0.1ppm					
1.00	LB4						
1.00	ES5					(1.20)	MADE GROUND (Light grey to grey sandy gravel with medium to high cobble and boulder content. Gravel is fine to coarse angular to subangular and includes slag and brick. Cobbles and boulders are angular to subangular and include slag).
1.50	J6			8.015		1.90	
2.00	HSV	94					
2.00	J7	(45)kPa		7.615		(0.40) 2.30	Stiff brown mottled grey slightly sandy slightly gravelly CLAY with organic carbonaceous material. Gravel is fine subrounded and includes sandstone and mudstone.
2.00	B9	<0.1ppm					at c.2.00m BGL ... clay is of high plasticity.
2.00	PID						Trial pit terminated at 2.30m BGL - due to groundwater ingress.
2.00	ES8						



GROUNDWATER
Water strike at 1.90m BGL - slight inflow.

STABILITY
Pit sides stable throughout excavation.

GENERAL REMARKS

ADDITIONAL INFORMATION		
Sketch Diagram:	No Sketch Taken	
Photographs:	Yes	See additional sheets.

UNDERGROUND SERVICES				
Depth	Orientation	Type	Diameter (mm)	Condition

All dimensions in metres
Scale 1:50

For explanation of symbols and
abbreviations see Key Sheets

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K.W.

Logged by:
P. Jansson

Contract No.
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TRIAL PIT RECORD

Status:-

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Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPB68	
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455566.690 N:521226.340		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 9.915	Start Date: 20/10/2017	Sheet: 2 of 4



Figure S3-TPB68.1
S3-TPB68 Before investigation works.



Figure S3-TPB68.2
S3-TPB68.



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TRIAL PIT RECORD

Status:-

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Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPB68
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455566.690 N:521226.340	
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 9.915	Start Date: 20/10/2017
		Sheet: 3 of 4



Figure S3-TPB68.3
S3-TPB68 (2).



Figure S3-TPB68.4
S3-TPB68 Spoil.



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Status:-

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Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPB68	
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455566.690 N:521226.340		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 9.915	Start Date: 20/10/2017	Sheet: 4 of 4



Figure S3-TPB68.5
S3-TPB68 Spoil (2).



Figure S3-TPB68.6
S3-TPB68 Reinstatement.



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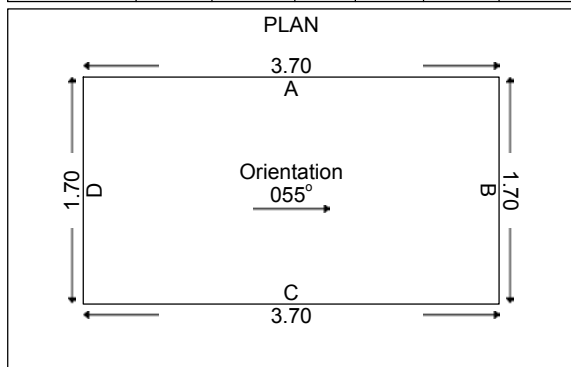
TRIAL PIT RECORD

Status:-

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Project:	The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3			Exploratory Hole No.
Client:	South Tees Site Company Ltd	Location:	Redcar Steel Works E:455626.197 N:521221.858	
Method (Equipment):	Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)):	10.152	Start Date: 20/10/2017
				Sheet: 1 of 4

SAMPLES & TESTS			Water	STRATA			
Depth	Type No	Test Result		Reduced Level	Legend	Depth (Thickness)	DESCRIPTION
0.20	J1			9.752		(0.40) 0.40	MADE GROUND (Brown sandy clayey topsoil with many rootlets).
0.20	ES2						
0.50	J3					(0.90)	MADE GROUND (Brown grey to grey slightly clayey sandy gravel with high cobble and boulder content. Gravel is fine to coarse angular to subangular and includes slag and brick. Cobbles and boulders are angular to subangular and include slag).
1.00	PID B4	<0.1ppm		8.852		1.30	
1.00	ES5						
1.50	J6			8.252		(0.60) 1.90	Soft to firm brown mottled grey slightly sandy to sandy slightly gravelly CLAY. Gravel is fine subrounded and includes sandstone and mudstone.
1.90	PID HSV B8	<0.1ppm 43 (20)kPa					at c.1.90m BGL .. clay is of high plasticity.
1.90	ES7						Trial pit complete at 1.90m BGL.
1.90							



GROUNDWATER
No groundwater inflow observed.

STABILITY
Pit sides stable throughout excavation.

GENERAL REMARKS

ADDITIONAL INFORMATION		
Sketch Diagram:	No Sketch Taken	
Photographs:	Yes	See additional sheets.

UNDERGROUND SERVICES				
Depth	Orientation	Type	Diameter (mm)	Condition

All dimensions in metres Scale 1:50	For explanation of symbols and abbreviations see Key Sheets	Checked by: <i>K.W.</i>	Logged by: P. Jansson	Contract No. 4155
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TRIAL PIT RECORD

Status:-

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Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPB69	
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455626.197 N:521221.858		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 10.152	Start Date: 20/10/2017	Sheet: 2 of 4



Figure S3-TPB69.1
S3-TPB69 Before investigation works.



Figure S3-TPB69.2
S3-TPB69.



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TRIAL PIT RECORD

Status:-

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Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPB69
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455626.197 N:521221.858	
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 10.152	Start Date: 20/10/2017
		Sheet: 3 of 4



Figure S3-TPB69.3
S3-TPB69 (2).



Figure S3-TPB69.4
S3-TPB69 Spoil.



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TRIAL PIT RECORD

Status:-

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Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPB69
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455626.197 N:521221.858	
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 10.152	Start Date: 20/10/2017
		Sheet: 4 of 4



Figure S3-TPB69.5
S3-TPB69 Spoil (2).



Figure S3-TPB69.6
S3-TPB69 Reinstatement.



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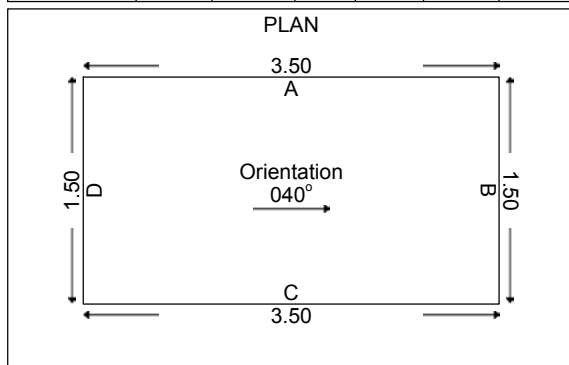
TRIAL PIT RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3			Exploratory Hole No. S3-TPB70
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455367.515 N:521207.236		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)		Ground Level (m(AOD)): 10.079	Start Date: 24/10/2017
			Sheet: 1 of 4

SAMPLES & TESTS			Water	STRATA			
Depth	Type No	Test Result		Reduced Level	Legend	Depth (Thickness)	DESCRIPTION
0.20	J1			10.029		(0.05) 0.05	MADE GROUND (Macadam).
0.50	J2			9.779		(0.25) 0.30	MADE GROUND (Brown sandy gravel. Gravel is fine to medium angular to subangular and includes slag).
0.50	ES3						MADE GROUND (Light grey to brown grey slightly clayey sandy gravel with medium to high cobble and boulder content. Gravel is fine to coarse angular to subangular and includes slag. Cobbles and boulders are angular to subangular and include slag).
1.00	PID	0.5ppm				(1.80)	
1.00	LB4						
1.50	J5						
1.50	ES6						
2.00	PID	0.7ppm		7.979		2.10	
2.00	B7			7.779		(0.20) 2.30	Firm grey brown slightly sandy CLAY with some organic carbonaceous material.
2.30	PID	1.4ppm					at c.2.30m BGL ... clay is of high plasticity.
2.30	HSV	61					
2.30	J8	(25)kPa					
2.30	B10						
2.30	ES9						Trial pit terminated at 2.30m BGL - due to groundwater ingress.



GROUNDWATER
Water strike at 2.00m BGL - heavy inflow.

STABILITY
Pit sides stable throughout excavation.

GENERAL REMARKS

ADDITIONAL INFORMATION		
Sketch Diagram:	No Sketch Taken	
Photographs:	Yes	See additional sheets.

UNDERGROUND SERVICES				
Depth	Orientation	Type	Diameter (mm)	Condition

All dimensions in metres
Scale 1:50

For explanation of symbols and
abbreviations see Key Sheets

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P. Jansson

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Status:-

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TRIAL PIT RECORD

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3			Exploratory Hole No. S3-TPB70
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455367.515 N:521207.236		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 10.079	Start Date: 24/10/2017	
			Sheet: 2 of 4



Figure S3-TPB70.1
S3-TPB70 Before investigation works.



Figure S3-TPB70.2
S3-TPB70.



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Status:-

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Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455367.515 N:521207.236		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 10.079	Start Date: 24/10/2017	Sheet: 3 of 4



Figure S3-TPB70.3
S3-TPB70 (2).



Figure S3-TPB70.4
S3-TPB70 Spoil.



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TRIAL PIT RECORD

Status:-

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Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3			Exploratory Hole No. S3-TPB70
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455367.515 N:521207.236		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 10.079	Start Date: 24/10/2017	Sheet: 4 of 4



Figure S3-TPB70.5
S3-TPB70 Reinstatement.



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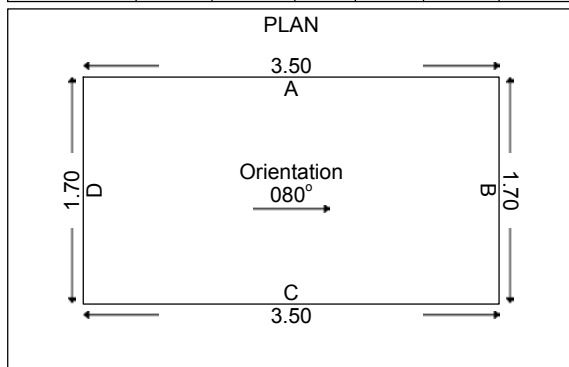
TRIAL PIT RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3			Exploratory Hole No. S3-TPB71
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455430.810 N:521206.159		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)		Ground Level (m(AOD)): 9.844	Start Date: 23/10/2017
			Sheet: 1 of 4

SAMPLES & TESTS			Water	STRATA			
Depth	Type No	Test Result		Reduced Level	Legend	Depth (Thickness)	DESCRIPTION
0.10	J1	0.1ppm		9.644		(0.20) 0.20	MADE GROUND (Dark brown sandy gravelly topsoil with some rootlets).
0.50	ES2						MADE GROUND (Grey brown slightly clayey sandy gravel with medium to high cobble and boulder content. Gravel is fine to coarse angular to subangular and includes slag, brick and concrete. Cobbles and boulders are angular to subangular and include slag).
0.50	J3						
1.00	PID						
1.00	B4	0.1ppm				(1.80)	
1.50	J5						
1.50	ES6						
				7.844		2.00	
2.20	PID	0.1ppm 71 (33)kPa		7.644		(0.20) 2.20	Firm to stiff brown slightly sandy slightly gravelly CLAY with organic carbonaceous material. Gravel is fine subrounded and includes sandstone and mudstone. at c.2.20m BGL ... clay is of high plasticity.
2.20	HSV						Trial pit complete at 2.20m BGL.
2.20	J8						
2.20	B7						
2.20	ES9						



GROUNDWATER
No groundwater inflow observed.

STABILITY
Pit sides stable throughout excavation.

GENERAL REMARKS

ADDITIONAL INFORMATION		
Sketch Diagram:	No Sketch Taken	
Photographs:	Yes	See additional sheets.

UNDERGROUND SERVICES				
Depth	Orientation	Type	Diameter (mm)	Condition

All dimensions in metres
Scale 1:50

For explanation of symbols and
abbreviations see Key Sheets

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TRIAL PIT RECORD

Status:-

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Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPB71	
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455430.810 N:521206.159		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 9.844	Start Date: 23/10/2017	Sheet: 2 of 4



Figure S3-TPB71.1
S3-TPB71 Before investigation works.



Figure S3-TPB71.2
S3-TPB71.



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TRIAL PIT RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPB71	
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455430.810 N:521206.159		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 9.844	Start Date: 23/10/2017	Sheet: 3 of 4



Figure S3-TPB71.3
S3-TPB71 (2).



Figure S3-TPB71.4
S3-TPB71 Spoil.



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TRIAL PIT RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPB71	
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455430.810 N:521206.159		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 9.844	Start Date: 23/10/2017	Sheet: 4 of 4



Figure S3-TPB71.5
S3-TPB71 Spoil (2).



Figure S3-TPB71.6
S3-TPB71 Reinstatement.



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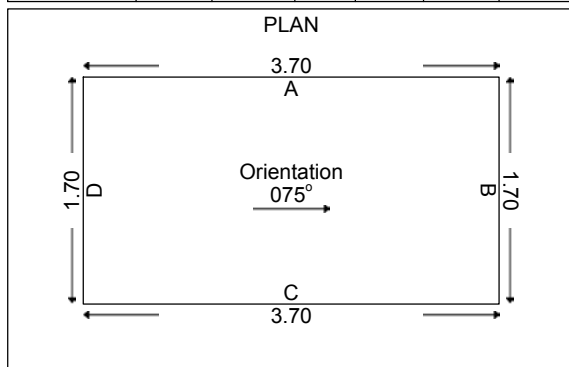
TRIAL PIT RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3			Exploratory Hole No. S3-TPB72	
Client: South Tees Site Company Ltd		Location: Redcar Steel Works E:455456.363 N:521207.395		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)		Ground Level (m(AOD)):	Start Date:	Sheet:
		9.751	23/10/2017	1 of 4

SAMPLES & TESTS			Water	STRATA			
Depth	Type No	Test Result		Reduced Level	Legend	Depth (Thickness)	DESCRIPTION
0.20	J1			9.451		(0.30) 0.30	MADE GROUND (Brown sandy gravelly topsoil with some rootlets).
0.50	ES2						MADE GROUND (Brown grey slightly clayey very sandy gravel with medium to high cobble and boulder content. Gravel is fine to coarse angular to subangular and includes slag, brick and concrete. Cobbles and boulders are angular to subangular and include slag).
0.50	J3						
1.00	PID B4	<0.1ppm				(1.80)	
1.50	J5						Firm to stiff brown mottled grey slightly sandy slightly gravelly CLAY/SILT with organic carbonaceous material. Gravel is fine subrounded and includes sandstone and mudstone. at c.2.50m BGL ... clay/silt of high plasticity. Trial pit complete at 2.50m BGL.
1.50	ES6						
2.00	PID B7	<0.1ppm		7.651		2.10	
2.00						(0.40)	
2.50	PID HSV J8 B10 ES9	<0.1ppm 78 (35)kPa		7.251		2.50	



GROUNDWATER No groundwater inflow observed.	
STABILITY Pit sides moderately stable throughout excavation.	
GENERAL REMARKS	

ADDITIONAL INFORMATION			UNDERGROUND SERVICES				
Sketch Diagram:	No Sketch Taken		Depth	Orientation	Type	Diameter (mm)	Condition
Photographs:	Yes	See additional sheets.					

All dimensions in metres Scale 1:50	For explanation of symbols and abbreviations see Key Sheets	Checked by: <i>K.W.</i>	Logged by: P. Jansson	Contract No. 4155
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Tel: 0191 387 4700 Fax: 0191 387 4710
Tel: 01772 735 300 Fax: 01772 735 999

TRIAL PIT RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPB72	
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455456.363 N:521207.395		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 9.751	Start Date: 23/10/2017	Sheet: 2 of 4



Figure S3-TPB72.1
S3-TPB72 Before investigation works.



Figure S3-TPB72.2
S3-TPB72.



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TRIAL PIT RECORD

Status:-

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Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPB72	
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455456.363 N:521207.395		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 9.751	Start Date: 23/10/2017	Sheet: 3 of 4



Figure S3-TPB72.3
S3-TPB72 (2).



Figure S3-TPB72.4
S3-TPB72 Spoil.



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TRIAL PIT RECORD

Status:-

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Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPB72	
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455456.363 N:521207.395		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 9.751	Start Date: 23/10/2017	Sheet: 4 of 4



Figure S3-TPB72.5
S3-TPB72 Spoil (2).



Figure S3-TPB72.6
S3-TPB72 Reinstatement.



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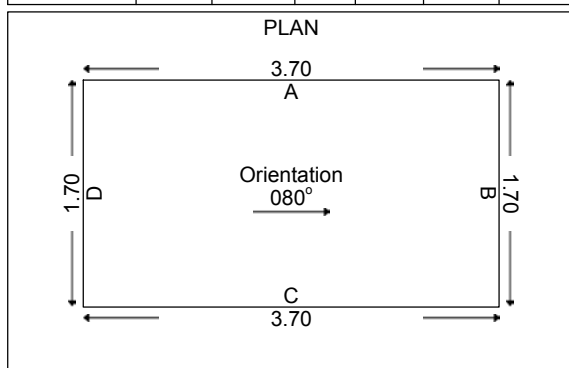
TRIAL PIT RECORD

Status:-

FINAL

Project:	The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3			Exploratory Hole No.
Client:	South Tees Site Company Ltd	Location:	Redcar Steel Works E:455499.559 N:521201.732	
Method (Equipment):	Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)):	9.751	Start Date: 23/10/2017
				Sheet: 1 of 4

SAMPLES & TESTS			Water	STRATA			
Depth	Type No	Test Result		Reduced Level	Legend	Depth (Thickness)	DESCRIPTION
0.20	J1			9.351	(0.40)	0.40	MADE GROUND (Dark brown sandy gravelly topsoil with some rootlets).
0.50	ES2						MADE GROUND (Brown grey to grey sandy gravel with high cobble and boulder content. Gravel is fine to coarse angular to subangular and includes slag and concrete. Cobbles and boulders are angular to subangular and include slag).
0.50	J3						
1.00	PID	<0.1ppm					
1.00	LB4					(1.90)	
1.50	J5						at c.1.50m BGL ... clay is of intermediate plasticity.
1.50	ES6						
2.00	PID	<0.1ppm		7.451		2.30	
2.00	B7			7.251		(0.20)	2.50
2.50	HSV	90 (35)kPa					Stiff brown mottled grey slightly sandy to sandy slightly gravelly CLAY with organic carbonaceous material. Gravel is fine subrounded and includes sandstone and mudstone.
2.50	J8						at c.2.50m BGL ... clay is of intermediate plasticity.
2.50	B10						Trial pit terminated at 2.50m BGL - due to groundwater ingress.
2.50	ES9						



GROUNDWATER Water strike at 2.30m BGL - moderate inflow.
STABILITY Pit sides stable throughout excavation.
GENERAL REMARKS

ADDITIONAL INFORMATION			UNDERGROUND SERVICES				
Sketch Diagram:	No Sketch Taken		Depth	Orientation	Type	Diameter (mm)	Condition
Photographs:	Yes	See additional sheets.					

All dimensions in metres Scale 1:50	For explanation of symbols and abbreviations see Key Sheets	Checked by: K.W.	Logged by: P. Jansson	Contract No. 4155
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TRIAL PIT RECORD

Status:-

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Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPB73	
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455499.559 N:521201.732		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 9.751	Start Date: 23/10/2017	Sheet: 2 of 4



Figure S3-TPB73.1
S3-TPB73 Before investigation works.



Figure S3-TPB73.2
S3-TPB73.



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TRIAL PIT RECORD

Status:-

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Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPB73
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455499.559 N:521201.732	
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 9.751	Start Date: 23/10/2017
		Sheet: 3 of 4



Figure S3-TPB73.3
S3-TPB73 (2).



Figure S3-TPB73.4
S3-TPB73 Spoil.



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Status:-

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Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPB73	
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455499.559 N:521201.732		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 9.751	Start Date: 23/10/2017	Sheet: 4 of 4



Figure S3-TPB73.5
S3-TPB73 Spoil (2).



Figure S3-TPB73.6
S3-TPB73 Reinstatement.



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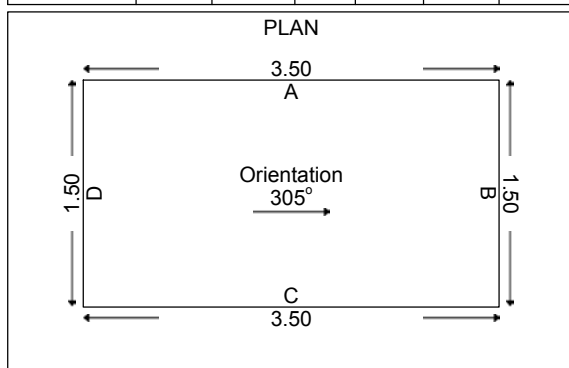
TRIAL PIT RECORD

Status:-

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Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3			Exploratory Hole No. S3-TPB74
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455541.498 N:521201.882		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)		Ground Level (m(AOD)): 9.787	Start Date: 20/10/2017
			Sheet: 1 of 4

SAMPLES & TESTS			Water	STRATA			
Depth	Type No	Test Result		Reduced Level	Legend	Depth (Thickness)	DESCRIPTION
0.20	J1			9.587		(0.20) 0.20	MADE GROUND (Dark brown silty sandy topsoil with many rootlets).
0.50	ES2			9.387		(0.20) 0.40	MADE GROUND (Brown grey slightly sandy gravel. Gravel is fine to medium angular to subangular and includes limestone and slag).
1.00	PID	<0.1ppm				(0.90)	MADE GROUND (Brown grey to grey sandy gravel with medium cobble and boulder content. Gravel is fine to coarse angular to subangular and includes slag and brick. Cobbles and boulders are angular to subangular and include slag).
1.00	J4			8.487		1.30	
1.00	B3			8.187		(0.30) 1.60	Stiff brown mottled grey slightly sandy slightly gravelly CLAY with occasional organic carbonaceous material. Gravel is fine subrounded and includes sandstone and mudstone.
1.50	PID	<0.1ppm					at c.1.50m BGL ... clay is of intermediate plasticity.
1.50	HSV	95					Trial pit terminated at 1.60m BGL - due to groundwater ingress.
1.50	J7	(38)kPa					
1.50	B6						
1.50	ES5						



GROUNDWATER Water strike at 1.20m BGL - moderate inflow.
STABILITY Pit sides stable throughout excavation.
GENERAL REMARKS

ADDITIONAL INFORMATION			UNDERGROUND SERVICES				
Sketch Diagram:	No Sketch Taken		Depth	Orientation	Type	Diameter (mm)	Condition
Photographs:	Yes	See additional sheets.					

All dimensions in metres Scale 1:50	For explanation of symbols and abbreviations see Key Sheets	Checked by: K.W.	Logged by: P. Jansson	Contract No. 4155
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TRIAL PIT RECORD

Status:-

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Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPB74	
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455541.498 N:521201.882		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 9.787	Start Date: 20/10/2017	Sheet: 2 of 4



Figure S3-TPB74.1
S3-TPB74 Before investigation works.



Figure S3-TPB74.2
S3-TPB74.



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TRIAL PIT RECORD

Status:-

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Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455541.498 N:521201.882		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 9.787	Start Date: 20/10/2017	Sheet: 3 of 4



Figure S3-TPB74.3
S3-TPB74 (2).



Figure S3-TPB74.4
S3-TPB74 Spoil.



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TRIAL PIT RECORD

Status:-

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Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPB74
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455541.498 N:521201.882	
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 9.787	Start Date: 20/10/2017
		Sheet: 4 of 4



Figure S3-TPB74.5
S3-TPB74 Spoil (2).



Figure S3-TPB74.6
S3-TPB74 Reinstatement.



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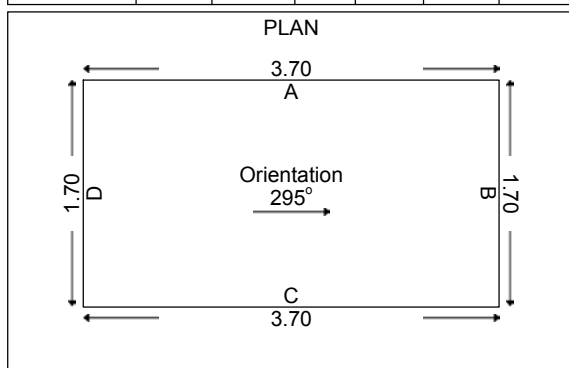
TRIAL PIT RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3			Exploratory Hole No. S3-TPB75
Client: South Tees Site Company Ltd		Location: Redcar Steel Works E:455586.475 N:521197.103	
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)		Ground Level (m(AOD)): 9.839	Start Date: 20/10/2017 Sheet: 1 of 4

SAMPLES & TESTS			Water	STRATA			
Depth	Type No	Test Result		Reduced Level	Legend	Depth (Thickness)	DESCRIPTION
0.20	J1			9.539		(0.30) 0.30	MADE GROUND (Dark brown silty sandy topsoil with many rootlets).
0.50	ES2					(0.90)	MADE GROUND (Brown grey to grey sandy gravel with medium cobble and low boulder content. Gravel is fine to coarse angular to subangular and includes slag and brick. Cobbles and boulders are angular to subangular and include slag).
1.00	PID	<0.1ppm		8.639		1.20	Stiff brown mottled grey slightly sandy slightly gravelly CLAY. Gravel is fine subrounded and includes sandstone and mudstone. Trial pit terminated at 1.60m BGL - due to groundwater ingress.
1.00	J4					(0.40)	
1.00	LB3			8.239		1.60	
1.50	PID	<0.1ppm					
1.50	HSV	92					
1.50	J7	(36)kPa					
1.50	B6						
1.50	ES5						



GROUNDWATER
Water strike at 1.20m BGL - slight inflow.

STABILITY
Pit sides stable throughout excavation.

GENERAL REMARKS

ADDITIONAL INFORMATION		
Sketch Diagram:	No Sketch Taken	
Photographs:	Yes	See additional sheets.

UNDERGROUND SERVICES				
Depth	Orientation	Type	Diameter (mm)	Condition

All dimensions in metres
Scale 1:50

For explanation of symbols and
abbreviations see Key Sheets

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K.W.

Logged by:
P. Jansson

Contract No.
4155



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TRIAL PIT RECORD

Status:-

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Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPB75	
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455586.475 N:521197.103		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 9.839	Start Date: 20/10/2017	Sheet: 2 of 4



Figure S3-TPB75.1
S3-TPB75 Before investigation works.



Figure S3-TPB75.2
S3-TPB75.



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TRIAL PIT RECORD

Status:-

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Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPB75	
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455586.475 N:521197.103		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 9.839	Start Date: 20/10/2017	Sheet: 3 of 4



Figure S3-TPB75.3
S3-TPB75 (2).



Figure S3-TPB75.4
S3-TPB75 Spoil.



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TRIAL PIT RECORD

Status:-

FINAL

Project: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Exploratory Hole No. S3-TPB75	
Client: South Tees Site Company Ltd	Location: Redcar Steel Works E:455586.475 N:521197.103		
Method (Equipment): Machine Excavated (JCB 360 Tracked Excavator)	Ground Level (m(AOD)): 9.839	Start Date: 20/10/2017	Sheet: 4 of 4



Figure S3-TPB75.5
S3-TPB75 Spoil (2).



Figure S3-TPB75.6
S3-TPB75 Reinstatement.

Groundwater Observations Made at the Time of Site Works







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GROUNDWATER OBSERVATIONS MADE AT THE TIME OF SITE WORKS

Explanatory Hole No.	Date	Time (hh:mm)	Depth of Water (m BGL)	Depth of Casing (m BGL)	Depth Sealed (m BGL)	Final Depth (m BGL)	Total Time (mins)	Depth (m BGL) After 5 mins	Depth (m BGL) After 10 mins	Depth (m BGL) After 15 mins	Depth (m BGL) After 20 mins	Remarks
S3-BHB01	08/11/2017		11.00									Water strike (Slow inflow).
S3-BHB03	09/11/2017		2.70									Water seepage.
S3-TPA05	24/10/2017		2.50									Water seepage (Moderate inflow).
S3-TPA07	01/11/2017		3.00									Water strike (Moderate inflow).
S3-TPA09	13/10/2017		2.00									Water seepage (slight inflow).
S3-TPA10	13/10/2017		2.00									Water seepage (slight inflow).
S3-TPA16	12/10/2017		1.20									Water seepage (slow inflow).
S3-TPA21	12/10/2017		0.70									Water strike (Moderate inflow).
S3-TPA23	10/10/2017		1.70									Water strike (Slow to moderate inflow).
S3-TPA24	10/10/2017		1.60									Water strike (Moderate inflow).
S3-TPA28	18/10/2017		3.70									Water strike (Moderate inflow).
S3-TPA29	13/10/2017		0.60									Water strike (Moderate inflow).
S3-TPA32	13/10/2017		1.20									Water strike (Moderate inflow).
S3-TPA33	16/10/2017		0.80									Water seepage (Slight inflow).
S3-TPA33	16/10/2017		1.80									Water seepage (Slight inflow).
S3-TPB01	26/10/2017		2.00									Water strike (Moderate inflow).
S3-TPB02	26/10/2017		1.20									Water seepage (Slight inflow).
S3-TPB06	27/10/2017		0.70									Water strike (Heavy inflow).
S3-TPB12	25/10/2017		0.70									Water seepage (Slow inflow).
S3-TPB13	31/10/2017		2.50									Water seepage (Slow inflow).
S3-TPB15	31/10/2017		2.30									Water strike (Heavy inflow).
S3-TPB16	25/10/2017		1.50									Water seepage (Slow inflow).
S3-TPB17	31/10/2017		1.70									Water seepage (Slow inflow).
S3-TPB18	31/10/2017		1.70									Water strike (Heavy inflow).
S3-TPB19	13/10/2017		1.50									Water strike (Moderate inflow).
S3-TPB21	01/11/2017		1.70									Water seepage (Slow inflow).
S3-TPB22	01/11/2017		1.70									Water strike (Heavy inflow).

Contract Title :- The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Client :- South Tees Site Company Ltd		AEG Contract No :- 4155	
Date of Issue :- 11/06/2018	Page No. :- 1 of 3	Checked By :- 	Approved By :- 	Certificate No. :- GWO/4155/1	



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GROUNDWATER OBSERVATIONS MADE AT THE TIME OF SITE WORKS

Exploratory Hole No.	Date	Time (hh:mm)	Depth of Water (m BGL)	Depth of Casing (m BGL)	Depth Sealed (m BGL)	Final Depth (m BGL)	Total Time (mins)	Depth (m BGL) After 5 mins	Depth (m BGL) After 10 mins	Depth (m BGL) After 15 mins	Depth (m BGL) After 20 mins	Remarks
S3-TPB23	01/11/2017		2.30									Water strike (Moderate inflow).
S3-TPB24	16/10/2017		3.10									Water strike (Slight inflow).
S3-TPB25	01/11/2017		2.20									Water seepage (Slight inflow).
S3-TPB26	30/10/2017		1.60									Water strike (Moderate inflow).
S3-TPB27	01/11/2017		1.70									Water strike (Moderate inflow).
S3-TPB28	13/10/2017		2.70									Water seepage (Slight inflow).
S3-TPB28	13/10/2017		3.40									Water strike (Slight inflow).
S3-TPB29	31/10/2017		1.60									Water seepage (Slight inflow).
S3-TPB30	31/10/2017		1.70									Water strike (Heavy inflow).
S3-TPB31	31/10/2017		1.60									Water strike (Heavy inflow).
S3-TPB32	12/10/2017		3.20									Water strike (Moderate inflow).
S3-TPB36	31/10/2017		1.90									Water strike (Heavy inflow).
S3-TPB37	27/10/2017		2.70									Water seepage (Slight inflow).
S3-TPB38	17/10/2017		2.10									Water strike (Heavy inflow).
S3-TPB40	16/10/2017		2.00									Water strike (Heavy inflow).
S3-TPB42	27/10/2017		2.80									Water strike (Moderate inflow).
S3-TPB44	18/10/2017		2.40									Water strike (Moderate inflow).
S3-TPB45	18/10/2017		2.20									Water seepage (Slight inflow).
S3-TPB49	17/10/2017		2.10									Water strike (Moderate inflow).
S3-TPB50	18/10/2017		2.50									Water strike (Heavy inflow).
S3-TPB52	26/10/2017		1.60									Water seepage (Slight inflow).
S3-TPB53	25/10/2017		1.10									Water strike (Moderate inflow).
S3-TPB55	26/10/2017		2.20									Water seepage (Moderate inflow).
S3-TPB57	19/10/2017		2.20									Water strike (Heavy inflow).
S3-TPB58	19/10/2017		2.10									Water strike (Heavy inflow).
S3-TPB59	19/10/2017		2.40									Water strike (Slight inflow).
S3-TPB61	25/10/2017		1.70									Water strike (Moderate inflow).

	Contract Title :- The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Client :- South Tees Site Company Ltd		AEG Contract No :- 4155	
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ALLIED EXPLORATION & GEOTECHNICS LIMITED

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GROUNDWATER OBSERVATIONS MADE AT THE TIME OF SITE WORKS

Exploratory Hole No.	Date	Time (hh:mm)	Depth of Water (m BGL)	Depth of Casing (m BGL)	Depth Sealed (m BGL)	Final Depth (m BGL)	Total Time (mins)	Depth (m BGL) After 5 mins	Depth (m BGL) After 10 mins	Depth (m BGL) After 15 mins	Depth (m BGL) After 20 mins	Remarks
S3-TPB62	25/10/2017		1.50									Water strike (Heavy inflow).
S3-TPB64	24/10/2017		2.50									Water seepage (Moderate inflow).
S3-TPB67	19/10/2017		2.40									Water strike (Slight inflow).
S3-TPB68	20/10/2017		1.90									Water strike (Slight inflow).
S3-TPB70	24/10/2017		2.00									Water strike (Heavy inflow).
S3-TPB73	23/10/2017		2.30									Water strike (Moderate inflow).
S3-TPB74	20/10/2017		1.20									Water strike (Moderate inflow).
S3-TPB75	20/10/2017		1.20									Water strike (Slight inflow).



Contract Title :-

The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3

Client :-

South Tees Site Company Ltd

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Groundwater Monitoring Results



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GROUNDWATER MONITORING RESULTS

Exploratory Hole No.	Date	Time	Water Depth m BGL (Reduced Level) (m AOD)	Tip Depth m BGL (Type)	Remarks
S3-BHA01	13/11/2017	15:30	See Remarks	4.00 (50mm SP)	Dry
S3-BHA01	21/11/2017	11:25	0.70 (9.58)	4.00 (50mm SP)	
S3-BHA01	22/12/2017	09:10	0.65 (9.63)	4.00 (50mm SP)	
S3-BHA01	21/02/2018	15:55	1.10 (9.18)	4.00 (50mm SP)	
S3-BHA01	02/05/2018	10:38	0.83 (9.45)	4.00 (50mm SP)	

SPIE = Standpipe Piezometer, SP = Gas/Water Standpipe, Dry* = wet at tip

Contract Title :-
The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract
3

Client :-
South Tees Site Company Ltd

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GROUNDWATER MONITORING RESULTS

Exploratory Hole No.	Date	Time	Water Depth m BGL (Reduced Level) (m AOD)	Tip Depth m BGL (Type)	Remarks
S3-BHA02	13/11/2017	15:35	See Remarks	5.00 (50mm SP)	Dry
S3-BHA02	21/11/2017	10:45	1.30 (9.86)	5.00 (50mm SP)	
S3-BHA02	18/12/2017	09:00	1.47 (9.69)	5.00 (50mm SP)	
S3-BHA02	03/01/2018	09:00	1.47 (9.69)	5.00 (50mm SP)	
S3-BHA02	21/02/2018	15:50	1.73 (9.43)	5.00 (50mm SP)	
S3-BHA02	02/05/2018	10:24	1.65 (9.51)	5.00 (50mm SP)	

SPIE = Standpipe Piezometer, SP = Gas/Water Standpipe, Dry* = wet at tip

Contract Title :-
The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract
3

Client :-
South Tees Site Company Ltd

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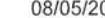
GROUNDWATER MONITORING RESULTS

Exploratory Hole No.	Date	Time	Water Depth m BGL (Reduced Level) (m AOD)	Tip Depth m BGL (Type)	Remarks
S3-BHB01	13/11/2017	15:25	2.20 (7.56)	4.00 (50mm SP)	
S3-BHB01	24/11/2017	11:00	1.60 (8.16)	4.00 (50mm SP)	
S3-BHB01	22/12/2017	11:03	1.56 (8.20)	4.00 (50mm SP)	
S3-BHB01	21/02/2018	15:22	1.59 (8.17)	4.00 (50mm SP)	
S3-BHB01	02/05/2018	16:13	1.64 (8.12)	4.00 (50mm SP)	

SPIE = Standpipe Piezometer, SP = Gas/Water Standpipe, Dry* = wet at tip

Contract Title :-
The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract
3

Client :-
South Tees Site Company Ltd

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GROUNDWATER MONITORING RESULTS

Exploratory Hole No.	Date	Time	Water Depth m BGL (Reduced Level) (m AOD)	Tip Depth m BGL (Type)	Remarks
S3-BHB02	13/11/2017	15:15	1.40 (8.44)	4.00 (50mm SP)	
S3-BHB02	24/11/2017	12:00	1.40 (8.44)	4.00 (50mm SP)	
S3-BHB02	22/12/2017	11:19	1.50 (8.34)	4.00 (50mm SP)	
S3-BHB02	21/02/2018	15:30	1.37 (8.47)	4.00 (50mm SP)	
S3-BHB02	02/05/2018	15:51	1.65 (8.19)	4.00 (50mm SP)	

SPIE = Standpipe Piezometer, SP = Gas/Water Standpipe, Dry* = wet at tip

Contract Title :-
The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract
3

Client :-
South Tees Site Company Ltd

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GROUNDWATER MONITORING RESULTS

Exploratory Hole No.	Date	Time	Water Depth m BGL (Reduced Level) (m AOD)	Tip Depth m BGL (Type)	Remarks
S3-BHB03	13/11/2017	15:20	2.00 (7.96)	3.00 (50mm SP)	
S3-BHB03	24/11/2017	14:15	3.50 (6.46)	3.00 (50mm SP)	
S3-BHB03	22/12/2017	09:25	1.92 (8.04)	3.00 (50mm SP)	
S3-BHB03	21/02/2018	15:45	2.00 (7.96)	3.00 (50mm SP)	
S3-BHB03	02/05/2018	09:48	1.80 (8.16)	3.00 (50mm SP)	

SPIE = Standpipe Piezometer, SP = Gas/Water Standpipe, Dry* = wet at tip

Contract Title :-
The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract
3

Client :-
South Tees Site Company Ltd

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GROUNDWATER MONITORING RESULTS

Exploratory Hole No.	Date	Time	Water Depth m BGL (Reduced Level) (m AOD)	Tip Depth m BGL (Type)	Remarks
S3-BHB04	10/11/2017	12:35	1.00 (8.90)	1.50 (50mm SP)	
S3-BHB04	13/11/2017	15:00	1.00 (8.90)	1.50 (50mm SP)	
S3-BHB04	24/11/2017	13:00	1.00 (8.90)	1.50 (50mm SP)	
S3-BHB04	22/12/2017	10:42	1.00 (8.90)	1.50 (50mm SP)	
S3-BHB04	21/02/2018	15:35	1.30 (8.60)	1.50 (50mm SP)	
S3-BHB04	02/05/2018	09:32	1.12 (8.78)	1.50 (50mm SP)	

SPIE = Standpipe Piezometer, SP = Gas/Water Standpipe, Dry* = wet at tip

Contract Title :-
The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract
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Client :-
South Tees Site Company Ltd

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Regional Office: Unit 20, Business Development Centre, Eanam Wharf, Blackburn, BB1 5BL Tel: 01772 735 300 Fax: 01772 735 999


GROUNDWATER MONITORING RESULTS

Exploratory Hole No.	Date	Time	Water Depth m BGL (Reduced Level) (m AOD)	Tip Depth m BGL (Type)	Remarks
S3-BHB04	10/11/2017	12:35	1.00 (8.90)	5.00 (50mm SP)	
S3-BHB04	13/11/2017	15:10	1.00 (8.90)	5.00 (50mm SP)	
S3-BHB04	24/11/2017	13:00	1.00 (8.90)	5.00 (50mm SP)	
S3-BHB04	22/12/2017	10:50	1.00 (8.90)	5.00 (50mm SP)	
S3-BHB04	21/02/2018	15:35	1.50 (8.40)	5.00 (50mm SP)	
S3-BHB04	02/05/2018	09:14	1.10 (8.80)	5.00 (50mm SP)	

SPIE = Standpipe Piezometer, SP = Gas/Water Standpipe, Dry* = wet at tip

Contract Title :-
The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract
3

Client :-
South Tees Site Company Ltd

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Gas Monitoring Results






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Head Office: Unit 25 Stella Gill Industrial Estate, Pelton Fell, Chester-le-Street, Co. Durham, DH2 2RG
Regional Office: Unit 20, Business Development Centre, Eram, Wharfedale, Bradford, BB1 1BL
Tel: 0191 387 4700 Fax: 0191 387 4710
Tel: 01772 735 500 Fax: 01772 735 598

GAS MONITORING RESULTS

Monitoring Point	Date and Time	Weather Condition and Temperature	Depth and Dia of Well (m)	Ground Level (m(AOD))	Water Depth (mBGL)	Reduced Water Level (m(AOD))	Volume of Gas in Well (m ³)	Flow Range (l/hr)	Diff Pressure (mbar)	ATM Pressure Range (mbar)	Methane % v/v	Methane % LEL	Carbon Dioxide % v/v	Oxygen % v/v	Hydrogen Sulphide (ppm)	Carbon Monoxide (ppm)	Remarks
S3-BHA01	21/11/2017 11:25	SH (13°C)	4.00 0.050	10.28	0.70	9.58	0.0014	0.0	-1.3	1004	(P) <0.1 (S) <0.1	(P) <2.0 (S) <2.0	(P) <0.1 (S) <0.1	(D) 20.9 (S) 20.9	<1.0	<1.0	
S3-BHA01	22/12/2017 09:10	OC (7°C)	4.00 0.050	10.28	0.65	9.63	0.0013	0.0	-0.1	1034	(P) <0.1 (S) <0.1	(P) <2.0 (S) <2.0	(P) <0.1 (S) <0.1	(D) 20.8 (S) 20.8	<1.0	<1.0	
S3-BHA01	21/02/2018 15:55	FR (8°C)	4.00 0.050	10.28	1.10	9.18	0.0022	0.0	-1.3	1028	(P) <0.1 (S) <0.1	(P) <2.0 (S) <2.0	(P) <0.1 (S) <0.1	(D) 21.0 (S) 21.0	<1.0	<1.0	
S3-BHA01	02/05/2018 10:38	SH (9°C)	4.00 0.050	10.28	0.83	9.45	0.0016										Unable to monitor gas - gas tap missing

See attached Calibration Certificate for Model No. and any other details. (P) = Peak - (S) = Steady - (D) = Decline. Dry* = wet at tip.

		Contract Title :- The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Client :- South Tees Site Company Ltd		AEG Contract No :- 4155		Weather Conditions Key :- Humid - HU Frosty - FT Fair - FR Cold - CD Overcast - OC Sunny - SU Showers - SH Heavy Rainfall - HR Breezy - BZ Strong Wind - SW Foggy - FG Snowing - SN	
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Regional Office: Unit 20, Business Development Centre, Eram Wharf, Bladon, BB1 5BL
Tel: 0191 387 4700 Fax: 0191 387 4710
Tel: 01772 756 300 Fax: 01772 756 699

GAS MONITORING RESULTS

Monitoring Point	Date and Time	Weather Condition and Temperature	Depth and Dia of Well (m)	Ground Level (m(AOD))	Water Depth (mBGL)	Reduced Water Level (m(AOD))	Volume of Gas in Well (m ³)	Flow Range (l/hr)	Diff Pressure (mbar)	ATM Pressure Range (mbar)	Methane % v/v	Methane % LEL	Carbon Dioxide % v/v	Oxygen % v/v	Hydrogen Sulphide (ppm)	Carbon Monoxide (ppm)	Remarks
S3-BHA02	21/11/2017 10:45	SH (13°C)	5.00 0.050	11.16	1.30	9.86	0.0026	0.0	-1.2	1004	(P) <0.1 (S) <0.1	(P) <2.0 (S) <2.0	(P) <0.1 (S) <0.1	(D) 20.8 (S) 20.8	<1.0	<1.0	
S3-BHA02	03/01/2018 09:00	OC (8°C)	5.00 0.050	11.16	1.47	9.69	0.0029	0.0	-0.2	1033	(P) <0.1 (S) <0.1	(P) <2.0 (S) <2.0	(P) 0.2 (S) 0.1	(D) 20.8 (S) 20.8	<1.0	<1.0	
S3-BHA02	18/12/2017 09:00	OC (4°C)	5.00 0.050	11.16	1.47	9.69	0.0029	0.0	-0.2	1033	(P) <0.1 (S) <0.1	(P) <2.0 (S) <2.0	(P) 0.2 (S) 0.2	(D) 20.8 (S) 20.8	<1.0	<1.0	
S3-BHA02	21/02/2018 15:50	FR (8°C)	5.00 0.050	11.16	1.73	9.43	0.0034	0.0	-1.2	1028	(P) <0.1 (S) <0.1	(P) <2.0 (S) <2.0	(P) 0.1 (S) 0.1	(D) 21.1 (S) 21.1	<1.0	<1.0	
S3-BHA02	02/05/2018 10:24	SH (9°C)	5.00 0.050	11.16	1.65	9.51	0.0032	0.0	-1.9	996	(P) 0.2 (S) 0.2	(P) 4.0 (S) 4.0	(P) 0.1 (S) 0.1	(D) 20.7 (S) 20.7	<1.0	<1.0	

See attached Calibration Certificate for Model No. and any other details. (P) = Peak - (S) = Steady - (D) = Decline. Dry* = wet at tip.

Contract Title :- The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Client :- South Tees Site Company Ltd		AEG Contract No :- 4155		Weather Conditions Key :- Humid - HU Frosty - FT Fair - FR Cold - CD Overcast - OC Sunny - SU Showers - SH Heavy Rainfall - HR Breezy - BZ Strong Wind - SW Foggy - FG Snowing - SN	
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GAS MONITORING RESULTS

Monitoring Point	Date and Time	Weather Condition and Temperature	Depth and Dia of Well (m)	Ground Level (m(AOD))	Water Depth (mBGL)	Reduced Water Level (m(AOD))	Volume of Gas in Well (m ³)	Flow Range (l/hr)	Diff Pressure (mbar)	ATM Pressure Range (mbar)	Methane % v/v	Methane % LEL	Carbon Dioxide % v/v	Oxygen % v/v	Hydrogen Sulphide (ppm)	Carbon Monoxide (ppm)	Remarks
S3-BHB01	24/11/2017 11:00	SU (5°C)	4.00 0.050	9.76	1.60	8.16	0.0031	0.0	-1.5	1008	(P) <0.1 (S) <0.1	(P) <2.0 (S) <2.0	(P) <0.1 (S) <0.1	(D) 20.4 (S) 20.4	<1.0	<1.0	
S3-BHB01	22/12/2017 11:03	OC (7°C)	4.00 0.050	9.76	1.56	8.20	0.0031	0.0	0.0	1034	(P) <0.1 (S) <0.1	(P) <2.0 (S) <2.0	(P) <0.1 (S) <0.1	(D) 20.0 (S) 20.0	<1.0	<1.0	
S3-BHB01	21/02/2018 15:22	FR (8°C)	4.00 0.050	9.76	1.59	8.17	0.0031	0.0	-1.3	1028	(P) <0.1 (S) <0.1	(P) <2.0 (S) <2.0	(P) <0.1 (S) <0.1	(D) 20.9 (S) 20.9	<1.0	<1.0	
S3-BHB01	02/05/2018 16:13	SH (9°C)	4.00 0.050	9.76	1.64	8.12	0.0032	0.0	-0.5	1003	(P) 0.2 (S) 0.2	(P) 4.0 (S) 4.0	(P) <0.1 (S) <0.1	(D) 20.5 (S) 20.5	<1.0	9.0	

See attached Calibration Certificate for Model No. and any other details. (P) = Peak - (S) = Steady - (D) = Decline. Dry* = wet at tip.

Contract Title :- The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Client :- South Tees Site Company Ltd		AEG Contract No :- 4155		Weather Conditions Key :- Humid - HU Frosty - FT Fair - FR Cold - CD Overcast - OC Sunny - SU Showers - SH Heavy Rainfall - HR Breezy - BZ Strong Wind - SW Foggy - FG Snowing - SN	
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Regional Office: Unit 20, Business Development Centre, Eldon Wharf, Blackburn, BB1 9BL
Tel: 0191 387 4700 Fax: 0191 387 4710
Tel: 01772 755 500 Fax: 01772 755 999

GAS MONITORING RESULTS

Monitoring Point	Date and Time	Weather Condition and Temperature	Depth and Dia of Well (m)	Ground Level (m(AOD))	Water Depth (mBGL)	Reduced Water Level (m(AOD))	Volume of Gas in Well (m ³)	Flow Range (l/hr)	Diff Pressure (mbar)	ATM Pressure Range (mbar)	Methane % v/v	Methane % LEL	Carbon Dioxide % v/v	Oxygen % v/v	Hydrogen Sulphide (ppm)	Carbon Monoxide (ppm)	Remarks
S3-BHB02	24/11/2017 12:00	SU (5°C)	4.00 0.050	9.84	1.40	8.44	0.0027	0.0	-1.7	1008	(P) <0.1 (S) <0.1	(P) <2.0 (S) <2.0	(P) <0.1 (S) <0.1	(D) 21.0 (S) 21.0	<1.0	<1.0	
S3-BHB02	22/12/2017 11:19	OC (7°C)	4.00 0.050	9.84	1.50	8.34	0.0029	0.0	0.0	1034	(P) <0.1 (S) <0.1	(P) <2.0 (S) <2.0	(P) 0.2 (S) 0.1	(D) 19.2 (S) 19.2	<1.0	<1.0	
S3-BHB02	21/02/2018 15:30	FR (8°C)	4.00 0.050	9.84	1.37	8.47	0.0027	0.0	-1.3	1028	(P) <0.1 (S) <0.1	(P) <2.0 (S) <2.0	(P) 0.1 (S) 0.1	(D) 20.7 (S) 20.7	<1.0	<1.0	
S3-BHB02	02/05/2018 15:51	SH (9°C)	4.00 0.050	9.84	1.65	8.19	0.0032	0.0	-1.5	1003	(P) 0.2 (S) 0.2	(P) 4.0 (S) 4.0	(P) 0.1 (S) 0.1	(D) 20.5 (S) 20.5	<1.0	32.0	

See attached Calibration Certificate for Model No. and any other details. (P) = Peak - (S) = Steady - (D) = Decline. Dry* = wet at tip.

Contract Title :- The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Client :- South Tees Site Company Ltd		AEG Contract No :- 4155		Weather Conditions Key :- Humid - HU Frosty - FT Fair - FR Cold - CD Overcast - OC Sunny - SU Showers - SH Heavy Rainfall - HR Breezy - BZ Strong Wind - SW Foggy - FG Snowing - SN	
Date of Issue :- 08/05/2018		Page No. :- 4 of 6		Checked By :- 		Approved By :- 	



ALLIED EXPLORATION & GEOTECHNICS LIMITED

Head Office: Unit 25 Stella Cill Industrial Estate, Pelton Fell, Chester-le-Street, Co. Durham, DH2 2RG Tel: 0191 387 4700 Fax: 0191 387 4710
Regional Office: Unit 20, Business Development Centre, Etnam Wharf, Bladon, BB1 1BL Tel: 01772 735 300 Fax: 01772 735 698

GAS MONITORING RESULTS

Monitoring Point	Date and Time	Weather Condition and Temperature	Depth and Dia of Well (m)	Ground Level (m(AOD))	Water Depth (mBGL)	Reduced Water Level (m(AOD))	Volume of Gas in Well (m ³)	Flow Range (l/hr)	Diff Pressure (mbar)	ATM Pressure Range (mbar)	Methane % v/v	Methane % LEL	Carbon Dioxide % v/v	Oxygen % v/v	Hydrogen Sulphide (ppm)	Carbon Monoxide (ppm)	Remarks
S3-BHB03	24/11/2017 14:15	SU (5°C)	3.00 0.050	9.96	1.80	8.16	0.0035	0.0	-1.5	1008	(P) <0.1 (S) <0.1	(P) <2.0 (S) <2.0	(P) 0.7 (S) 0.7	(D) 19.0 (S) 19.0	<1.0	<1.0	
S3-BHB03	22/12/2017 09:25	OC (7°C)	3.00 0.050	9.96	1.92	8.04	0.0038	0.0	-0.2	1033	(P) <0.1 (S) <0.1	(P) <2.0 (S) <2.0	(P) 0.9 (S) 0.9	(D) 17.4 (S) 17.4	<1.0	<1.0	
S3-BHB03	21/02/2018 15:45	FR (8°C)	3.00 0.050	9.96	2.00	7.96	0.0039	0.0	-1.2	1028	(P) <0.1 (S) <0.1	(P) <2.0 (S) <2.0	(P) 0.2 (S) 0.2	(D) 21.0 (S) 21.0	<1.0	<1.0	
S3-BHB03	02/05/2018 09:48	SH (9°C)	3.00 0.050	9.96	1.80	8.16	0.0035	0.0	0.3	1002	(P) 0.2 (S) 0.2	(P) 4.0 (S) 4.0	(P) 0.2 (S) 0.2	(D) 20.1 (S) 20.1	<1.0	<1.0	

See attached Calibration Certificate for Model No. and any other details. (P) = Peak - (S) = Steady - (D) = Decline. Dry* = wet at tip.

Contract Title :- The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Client :- South Tees Site Company Ltd		AEG Contract No :- 4155		Weather Conditions Key :- Humid - HU Frosty - FT Fair - FR Cold - CD Overcast - OC Sunny - SU Showers - SH Heavy Rainfall - HR Breezy - BZ Strong Wind - SW Foggy - FG Snowing - SN	
Date of Issue :- 08/05/2018		Page No. :- 5 of 6		Checked By :- 		Approved By :- 	



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Head Office: Unit 25 Stella Oil Industrial Estate, Pelton Fall, Chester-le-Street, Co. Durham, DH2 2RG Tel: 0191 397 4700 Fax: 0191 397 4710
Regional Office: Unit 20, Business Development Centre, Easing Wharf, Blackburn, BB1 5BL Tel: 01772 735 500 Fax: 01772 735 599

GAS MONITORING RESULTS

Monitoring Point	Date and Time	Weather Condition and Temperature	Depth and Dia of Well (m)	Ground Level (m(AOD))	Water Depth (mBGL)	Reduced Water Level (m(AOD))	Volume of Gas in Well (m³)	Flow Range (l/hr)	Diff Pressure (mbar)	ATM Pressure Range (mbar)	Methane % v/v	Methane % LEL	Carbon Dioxide % v/v	Oxygen % v/v	Hydrogen Sulphide (ppm)	Carbon Monoxide (ppm)	Remarks
S3-BHB04	24/11/2017 13:00	SU (5°C)	1.50 0.050	9.90	1.00	8.90	0.0020	0.0	-1.6	1008	(P) <0.1 (S) <0.1	(P) <2.0 (S) <2.0	(P) <0.1 (S) <0.1	(D) 20.6 (S) 20.6	<1.0	<1.0	
S3-BHB04	22/12/2017 10:42	OC (7°C)	1.50 0.050	9.90	1.00	8.90	0.0020	0.0	-0.2	1034	(P) <0.1 (S) <0.1	(P) <2.0 (S) <2.0	(P) <0.1 (S) <0.1	(D) 20.2 (S) 20.2	<1.0	<1.0	
S3-BHB04	21/02/2018 15:35	FR (8°C)	1.50 0.050	9.90	1.30	8.60	0.0026	0.0	-1.4	1028	(P) <0.1 (S) <0.1	(P) <2.0 (S) <2.0	(P) <0.1 (S) <0.1	(D) 20.5 (S) 20.5	<1.0	<1.0	
S3-BHB04	02/05/2018 09:32	SH (9°C)	1.50 0.050	9.90	1.12	8.78	0.0022	0.0	-1.8	1002	(P) 0.2 (S) 0.2	(P) 4.0 (S) 4.0	(P) <0.1 (S) <0.1	(D) 20.4 (S) 20.4	<1.0	<1.0	
S3-BHB04	24/11/2017 13:00	SU (5°C)	5.00 0.050	9.90	1.00	8.90	0.0020	0.0	-1.7	1008	(P) <0.1 (S) <0.1	(P) <2.0 (S) <2.0	(P) <0.1 (S) <0.1	(D) 20.8 (S) 20.8	<1.0	<1.0	
S3-BHB04	22/12/2017 10:50	OC (7°C)	5.00 0.050	9.90	1.00	8.90	0.0020	0.0	0.0	1034	(P) <0.1 (S) <0.1	(P) <2.0 (S) <2.0	(P) 0.1 (S) 0.1	(D) 20.8 (S) 20.8	<1.0	<1.0	
S3-BHB04	21/02/2018 15:35	FR (8°C)	5.00 0.050	9.90	1.50	8.40	0.0029	0.0	-1.4	1028	(P) <0.1 (S) <0.1	(P) <2.0 (S) <2.0	(P) 0.1 (S) 0.1	(D) 21.1 (S) 21.1	<1.0	<1.0	
S3-BHB04	02/05/2018 09:14	SH (9°C)	5.00 0.050	9.90	1.10	8.80	0.0022	0.0	-1.8	1002	(P) 0.2 (S) 0.2	(P) 4.0 (S) 4.0	(P) <0.1 (S) <0.1	(D) 20.5 (S) 20.5	<1.0	2.0	

See attached Calibration Certificate for Model No. and any other details. (P) = Peak - (S) = Steady - (D) = Decline. Dry* = wet at tip.

Contract Title :- The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Client :- South Tees Site Company Ltd		AEG Contract No :- 4155		Weather Conditions Key :- Humid - HU Frosty - FT Fair - FR Cold - CD Overcast - OC Sunny - SU Showers - SH Heavy Rainfall - HR Breezy - BZ Strong Wind - SW Foggy - FG Snowing - SN	
Date of Issue :- 08/05/2018	Page No. :- 6 of 6	Checked By :- 	Approved By :- 				

CERTIFICATION OF CALIBRATION

Date Of Calibration: 07-Nov-2017 Certificate Number: GA12205_2/19457



Geotech

ISSUED BY: GEOTECHNICAL INSTRUMENTS (UK) LTD

Customer: Allied Exploration & Geotechnics Ltd
25 Stella Gill Industrial Estate Pelton Fell Chester Le Street
County Durham DH2 2RG UNITED KINGDOM

Description: Gas Analyser

Model: GA2000Plus

Serial Number: GA12205

UKAS Accredited results:

Results after adjustment :

Methane (CH ₄)		
Certified Gas (%)	Instrument Reading (%)	Uncertainty (%)
5.0	5.0	0.41
15.0	15.0	0.64
50.0	49.4	0.94

Carbon Dioxide (CO ₂)		
Certified Gas (%)	Instrument Reading (%)	Uncertainty (%)
5.0	4.7	0.43
15.0	14.6	0.70
50.0	49.7	1.1

Oxygen (O ₂)		
Certified Gas (%)	Instrument Reading (%)	Uncertainty (%)
21.1	21.1	0.31

The Inwards assessment was carried out 31-Oct-2017.

The maximum adjustment was less than the inwards assessment uncertainty.

Inwards assessment data is available if requested.

All concentrations are molar.

CH₄, CO₂ readings recorded at : 31.0 °C ± 1.5 °C

O₂ reading recorded at : 22.2 °C ± 1.5 °C

Barometric Pressure : 1007 mbar ± 3 mbar

Method of Test : The analyser is calibrated in a temperature controlled chamber using a series of reference gases, in compliance with procedure LP004.

This certificate is issued in accordance with the laboratory accreditation requirements of the United Kingdom Accreditation Service. It provides traceability of measurement to the SI system of units and/or to units of measurement realised at the National Physical Laboratory or other recognised national metrology institutes. This certificate may not be reproduced other than in full, except with the prior written approval of the issuing laboratory.

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CERTIFICATION OF CALIBRATION

Date Of Calibration: 07-Nov-2017 Certificate Number: GA12205_2/19457



Geotech

ISSUED BY: GEOTECHNICAL INSTRUMENTS (UK) LTD

The reported expanded uncertainty is based on a standard uncertainty multiplied by a coverage factor of $k=2$, providing a level of confidence of approximately 95%. The uncertainty evaluation has been carried out in accordance with UKAS requirements.

Calibrations marked 'Non-UKAS Accredited results' on this certificate have been included for completeness.

Non-UKAS Accredited results:

Barometer (mbar)	
Reference	Instrument Reading
1007	1007

Additional Gas Cells		
Gas	Certified Gas (ppm)	Instrument Reading (ppm)
CO	496	500.3
H ₂ S	242	242.1

Internal Flow	
Applied (l/hr)	Instrument Reading (l/hr)
5.00	5.16
10.00	10.25

Approved by Signatory

Dawn Hemings

Laboratory Inspection

This certificate is issued in accordance with the laboratory accreditation requirements of the United Kingdom Accreditation Service. It provides traceability of measurement to the SI system of units and/or to units of measurement realised at the National Physical Laboratory or other recognised national metrology institutes. This certificate may not be reproduced other than in full, except with the prior written approval of the issuing laboratory.

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CERTIFICATION OF CALIBRATION

Date Of Calibration: 26-Jul-2017 Certificate Number: GA12206_2/18832



Geotech

ISSUED BY: GEOTECHNICAL INSTRUMENTS (UK) LTD

Customer: Allied Exploration & Geotechnics Ltd
25 Stella Gill Industrial Estate Pelton Fell Chester Le Street
County Durham DH2 2RG UNITED KINGDOM

Description: Gas Analyser

Model: GA2000Plus

Serial Number: GA12206

UKAS Accredited results:

Results after adjustment :

Methane (CH ₄)		
Certified Gas (%)	Instrument Reading (%)	Uncertainty (%)
5.1	5.1	0.41
15.0	15.2	0.64
50.0	49.7	0.94

Carbon Dioxide (CO ₂)		
Certified Gas (%)	Instrument Reading (%)	Uncertainty (%)
5.1	4.9	0.43
15.0	14.8	0.70
50.0	50.2	1.1

Oxygen (O ₂)		
Certified Gas (%)	Instrument Reading (%)	Uncertainty (%)
20.9	21.0	0.31

The inwards assessment was carried out 20-Jul-2017.

The maximum adjustment is larger than the inwards assessment uncertainty.

Inwards assessment data is available if requested.

All concentrations are molar.

CH₄, CO₂ readings recorded at : 33.4 °C ± 1.5 °C

O₂ reading recorded at : 23.1 °C ± 1.5 °C

Barometric Pressure : 1000 mbar ± 3 mbar

Method of Test : The analyser is calibrated in a temperature controlled chamber using a series of reference gases, in compliance with procedure LP004.

This certificate is issued in accordance with the laboratory accreditation requirements of the United Kingdom Accreditation Service. It provides traceability of measurement to the SI system of units and/or to units of measurement realised at the National Physical Laboratory or other recognised national metrology institutes. This certificate may not be reproduced other than in full, except with the prior written approval of the issuing laboratory.

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CERTIFICATION OF CALIBRATION

Date Of Calibration: 26-Jul-2017 Certificate Number: GA12206_2/18832



ISSUED BY: GEOTECHNICAL INSTRUMENTS (UK) LTD

The reported expanded uncertainty is based on a standard uncertainty multiplied by a coverage factor of $k=2$, providing a level of confidence of approximately 95%. The uncertainty evaluation has been carried out in accordance with UKAS requirements.

Calibrations marked 'Non-UKAS Accredited results' on this certificate have been included for completeness.

Non-UKAS Accredited results:

Barometer (mbar)	
Reference	Instrument Reading
1000	1000

Additional Gas Cells		
Gas	Certified Gas (ppm)	Instrument Reading (ppm)
CO	502	509.8
H ₂ S	242	242.2

Internal Flow	
Applied (l/hr)	Instrument Reading (l/hr)
5	5.2
10	10.2

Approved by Signatory

Dawn Hemings

Laboratory Inspection

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Geotechnical Instruments (UK) Ltd

Sovereign House, Queensway, Leamington Spa, Warwickshire, CV31 3JR



geotechuk.com



service@geotech.co.uk



+44 (0)1926 338111

***In-situ* Test Report Certificate**



ALLIED EXPLORATION & GEOTECHNICS LIMITED

Head Office: Unit 25 Stella Gill Industrial Estate, Pelton Fell, Chester-le-Street, Co. Durham, DH2 2RG - Tel: 0191 3874700 Fax: 0191 3874710
Regional Office: Unit 20 Business Development Centre, Eanam Wharf, Blackburn, BB1 5BL - Tel: 01254 503 200 Fax: 01254 662 590



IN-SITU TESTING REPORT CERTIFICATE



Contract Title: The Former SSI Steelworks, Redcar – Ground Investigation Contract – Priority Areas Within SSI Landholdings Contract 3 **AEG Reference:** 4155

Client Address: South Tees Site Company Ltd
1 Victoria Street
London
SW1H 0ET

I certify that *In-situ* testing was carried out on the above contract in accordance with techniques outlined in BS 1377: 1990: Part 9 or other appropriate standards as quoted, and the following results, given on the attached enclosures, were obtained.

The tests carried out are indicated in the attached table showing the enclosure number and the total number of pages.

For and on behalf of Allied Exploration & Geotechnics Limited

- ☒ Nick Vater (Technical Director)
☐ Kevin Warriner (HSE & Quality Director)

Signed

Date: 11 June 2018

Tests marked not UKAS accredited in this certificate are not included in the UKAS accreditation schedule for our laboratory. Any opinions and interpretations expressed herein are outside the scope of the laboratory's UKAS accreditation

IN-SITU TESTING REPORT CERTIFICATE

ENCLOSURES

Enclosure Number	Description	UKAS Accredited	Reference	No. of Pages
0	Test Report Certificate	N/A		2
1	Standard Penetration Test Results (SPT)	Yes	BS 1377 Part 9 1990	11
2	Hand Shear Vane Test Results	No		4
3	Photo-ionisation Detector Test Results	No	BS 5930 1999:Section 4	10
-	<i>In-situ</i> Water Quality Parameter Test Results	No		-
-	Density by Sand Replacement Method	Yes	BS 1377 Part 9 1990	-
-	Density by Core Cutter Method	Yes	BS 1377 Part 9 1990	-
-	Determination of the Vane Shear Strength (Down the Hole)	Yes	BS 1377 Part 9 1990	-
-	Shallow Pad (skip) Load Test Results	No	BS 1377 Part 9 1990	-
-	Determination of the California Bearing Ratio	Yes	BS 1377 Part 9 1990	-
-	Plate Loading Test Results	No	BS 1377 Part 9 1990	-
-	Apparent Resistivity of Soil	No	BS 1377 Part 9 1990	-
-	Redox Potential of Soil	No	BS 1377 Part 9 1990	-
-	Determination of the Soil Infiltration Rate for Soakaway Design	No	BRE Digest 365:1991	-

Standard Penetration Test Results



ALLIED EXPLORATION & GEOTECHNICS LIMITED




Head Office: Unit 25 Stella Gill Industrial Estate, Pelton Fell, Chester-le-Street, Co. Durham, DH2 2RG
Regional Office: Unit 20, Business Development Centre, Easingham Wharf, Blackburn, BB1 5BL

Tel: 0191 387 4700 Fax: 0191 387 4710
Tel: 01772 735 300 Fax: 01772 735 599

STANDARD PENETRATION TEST RESULTS (BS EN ISO 22476-3: 2005)

Exploratory Hole No.	Test Depth (Reduced Level)	Water Depth (Casing)	Rod Length	SPT Hammer Ref.	Energy Ratio E _s	SEATING DRIVE					TEST DRIVE										Rod Length Corr. C _R	Energy Ratio Corr. C _e	Pen (mm)/Blow	SPT'N Value	SPT'N Value (Corr.) N ₆₀	Shoe or Cone	Remarks	
						Pen	Blows	Pen	Blows	Total Pen	Total Blows	Pen	Blows	Pen	Blows	Pen	Blows	Total Pen	Total Blows									
																				mm						No.		mm
S3-BHA01	3.00 (7.28)	(3.00)	3.00	ATH03	0.63	75	3	75	3	150	6	75	3	75	4	75	4	75	4	300	15	0.72	1.05	20.00	15	11	S	Water depth = Damp
S3-BHA01	4.00 (6.28)	(4.00)	4.00	ATH03	0.63	75	1	75	1	150	2	75	3	75	4	75	4	75	4	300	15	0.76	1.05	20.00	15	12	S	Water depth = Damp
S3-BHA01	6.40 (3.88)	(6.40)	6.40	ATH03	0.63	75	33			75	33	75	27						75	27	0.86	1.05	2.78	-	-	S	Water depth = Damp	
S3-BHA01	6.50 (3.78)	(6.40)	6.50	ATH03	0.63	20	50			20	50	35	100						35	100	0.86	1.05	0.35	-	-	C	Water depth = Damp	
S3-BHA02	3.00 (8.16)	(2.10)	3.00	ATH07	0.70	75	2	75	1	150	3	75	2	75	2	75	2	75	2	300	8	0.72	1.17	37.50	8	7	S	Water depth = Dry
S3-BHA02	5.50 (5.66)	(5.40)	5.50	ATH07	0.70							47	50						47	50	0.82	1.17	0.94	-	-	S	Water depth = Dry	
S3-BHA02	6.90 (4.26)	(5.40)	6.90	ATH07	0.70	75	21			75	21	61	50						61	50	0.88	1.17	1.22	-	-	S	Water depth = Dry	
S3-BHA02	7.30 (3.86)	(5.40)	7.30	ATH07	0.70	75	4	75	3	150	7	75	4	75	5	75	6	75	4	300	19	0.89	1.17	15.79	19	20	S	Water depth = Dry
S3-BHB01	3.00 (6.76)	(3.00)	3.00	ATH03	0.63	75	1	75	3	150	4	75	4	75	5	75	5	75	5	300	19	0.72	1.05	15.79	19	14	S	Water depth = Dry
S3-BHB01	4.00 (5.76)	(4.00)	4.00	ATH03	0.63	75	2	75	2	150	4	75	3	75	5	75	5	75	5	300	18	0.76	1.05	16.67	18	14	S	Water depth = Dry
S3-BHB01	5.00 (4.76)	(5.00)	5.00	ATH03	0.63	75	2	75	3	150	5	75	3	75	5	75	5	75	6	300	19	0.80	1.05	15.79	19	16	S	Water depth = Dry
S3-BHB01	6.00 (3.76)	(6.00)	6.00	ATH03	0.63	75	2	75	3	150	5	75	4	75	6	75	6	75	6	300	22	0.84	1.05	13.64	22	19	S	Water depth = Dry

NOTE: Please refer to calibration certificate for additional information and corresponding Exploratory Hole record for sampling details. Uncorrected and corrected SPT'N values are presented on the attached graphical plot relative to each Exploratory Hole.

	Contract Title :- The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Client :- South Tees Site Company Ltd		AEG Contract No :- 4155	
	Date of Issue :- 11/06/2018		Page No. :- 1 of 3		Certificate No. :- SPT/4155/1	
Approved By :- 			Approved By :- 			

ALLIED EXPLORATION & GEOTECHNICS LIMITED





Head Office: Unit 25 Stella Oil Industrial Estate, Pelton Fell, Chester-le-Street, Co. Durham, DH2 2RG Tel: 0191 387 4700 Fax: 0191 387 4710
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STANDARD PENETRATION TEST RESULTS

(BS EN ISO 22476-3: 2005)

Exploratory Hole No.	Test Depth (Reduced Level)	Water Depth (Casing)	Rod Length	SPT Hammer Ref.	Energy Ratio E _m	SEATING DRIVE					TEST DRIVE									Rod Length Corr. C _R	Energy Ratio Corr. C _E	Pen (mm)/Blow	SPT'N Value	SPT'N Value (Corr.) N ₆₀	Shoe or Cone	Remarks		
						Pen	Blows	Pen	Blows	Total Pen	Total Blows	Pen	Blows	Pen	Blows	Pen	Blows	Pen	Blows								Total Pen	Total Blows
	m	No.	No.	mm	mm	No.	mm	No.	mm	No.	mm	No.	mm	No.	mm	No.	mm	No.	mm	No.	mm	No.	mm					
S3-BH001	7.00 (2.76)	(7.00)	6.80	ATH03	0.63	75	6	75	6	150	12	75	10	75	17	75	16	75	19	300	62	0.87	1.05	4.84	62	57	S	Water depth = Dry.
S3-BH001	9.00 (0.76)	(9.00)	9.00	ATH03	0.63	25	50			25	50									32	100	0.96	1.05	0.32	-	-	S	Water depth = Dry.
S3-BH001	10.50 (-0.74)	(10.50)	10.50	ATH03	0.63								10	50						10	50	1.00	1.05	0.20	-	-	C	Water depth = Dry.
S3-BH001	11.70 (-1.94)	(11.70)	11.70	ATH03	0.63	75	27			75	27									20	50	1.00	1.05	0.40	-	-	C	
S3-BH002	2.50 (7.34)	(2.50)	2.50	ATH03	0.63	75	4	75	3	150	7	75	4	75	4	75	4	75	6	300	18	0.70	1.05	16.67	18	13	S	
S3-BH002	4.50 (5.34)	(4.50)	4.50	ATH03	0.63	75	1	75	1	150	2	75	2	75	2	75	2	75	2	300	8	0.78	1.05	37.50	8	7	S	
S3-BH002	5.50 (4.34)	(5.50)	5.50	ATH03	0.63	75	1	75	1	150	2	75	1	75	2	75	2	75	2	300	7	0.82	1.05	42.86	7	6	S	
S3-BH002	7.50 (2.34)	(7.50)	7.50	ATH03	0.63	75	2	75	2	150	4	75	3	75	3	75	3	75	3	300	12	0.90	1.05	25.00	12	11	S	
S3-BH002	8.50 (1.34)	(8.50)	8.50	ATH03	0.63	75	2	75	3	150	5	75	7	75	7	75	8	75	11	300	33	0.94	1.05	9.09	33	33	S	
S3-BH003	2.50 (7.46)	(2.40)	2.50	ATH07	0.63	75	2	75	3	150	5	75	3	75	2	75	3	75	3	300	11	0.70	1.05	27.27	11	8	C	Water depth = Damp.
S3-BH003	3.50 (6.46)	(3.00)	3.50	ATH07	0.63	75	2	75	2	150	4	75	2	75	3	75	2	75	2	300	9	0.74	1.05	33.33	9	7	S	Water depth = Damp.
S3-BH003	6.00 (3.96)	(5.60)	6.00	ATH07	0.63	75	2	75	3	150	5	75	2	75	3	75	3	75	3	300	11	0.84	1.05	27.27	11	10	S	Water depth = Dry.

NOTE: Please refer to calibration certificate for additional information and corresponding Exploratory Hole record for sampling details. Uncorrected and corrected SPT'N values are presented on the attached graphical plot relative to each Exploratory Hole.

	Contract Title :- The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Client :- South Tees Site Company Ltd		AEG Contract No. :- 4155	
	Date of issue :- 11/06/2018	Page No. :- 2 of 3	Checked By :- 	Approved By :- 	Certificate No. :- SPT/4155/2	
						

ALLIED EXPLORATION & GEOTECHNICS LIMITED




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STANDARD PENETRATION TEST RESULTS

(BS EN ISO 22476-3: 2005)

Exploratory Hole No.	Test Depth (Reduced Level)	Water Depth (Casing)	Rod Length	SPT Hammer Ref.	Energy Ratio E_m	SEATING DRIVE					TEST DRIVE										Rod Length Corr. C_R	Energy Ratio Corr. C_E	Pen (mm)/Blow	SPT'N Value	SPT'N Value (Corr.) N_{60}	Shoe or Cone		Remarks				
						Pen	Blows	Pen	Blows	Total Pen	Total Blows	Pen	Blows	Pen	Blows	Pen	Blows	Pen	Blows	Total Pen									Total Blows	No.	mm	
	m	m	m	m	m	m	No.	No.	mm	mm	No.	No.	mm	mm	No.	No.	mm	mm	No.	No.	mm	mm	No.									
S3-BH03	8.00 (1.96)	(5.60)	8.00	ATH07	0.63	75	3	75	3	150	6	75	4	75	2	75	3	75	3	300	12	0.92	1.05	25.00	12	12	S	S	Water depth = Dry.			
S3-BH03	10.00 (-0.04)	(5.60)	10.00	ATH07	0.63	75	6	75	7	150	13	75	9	49	50					124	59	1.00	1.05	2.10	-	-	S	S	Water depth = Dry.			
S3-BH04	2.50 (7.40)	(2.40)	2.50	ATH07	0.63	75	1	75	1	150	2	75	1	75	2	75	2	75	1	300	6	0.70	1.05	50.00	6	4	S	S	Water depth = Dry.			
S3-BH04	3.50 (6.40)	(2.40)	3.50	ATH07	0.63	75	1	75	2	150	3	75	2	75	1	75	2	75	1	300	6	0.74	1.05	50.00	6	5	S	S	Water depth = Dry.			
S3-BH04	6.00 (3.90)	(5.60)	6.00	ATH07	0.63	75	3	75	4	150	7	75	4	75	5	75	4	75	4	300	17	0.84	1.05	17.65	17	15	S	S	Water depth = Dry.			
S3-BH04	8.00 (1.90)	(5.60)	8.00	ATH07	0.63	75	4	75	3	150	7	75	4	75	4	75	5	75	4	300	17	0.92	1.05	17.65	17	16	S	S	Water depth = Dry.			
S3-BH04	10.00 (-0.10)	(5.60)	10.00	ATH07	0.63	75	21			75	21	47	50						47	50	1.00	1.05	0.94	-	-	S	S	Water depth = Dry.				

NOTE: Please refer to calibration certificate for additional information and corresponding Exploratory Hole record for sampling details. Uncorrected and corrected SPT'N values are presented on the attached graphical plot relative to each Exploratory Hole.

	Contract Title :- The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Client :- South Tees Site Company Ltd		AEG Contract No :- 4155	
	Date of Issue :- 11/06/2018		Page No. :- 3 of 3		Certificate No. :- SPT/4155/3	
Approved By :- 		Checked By :- 				

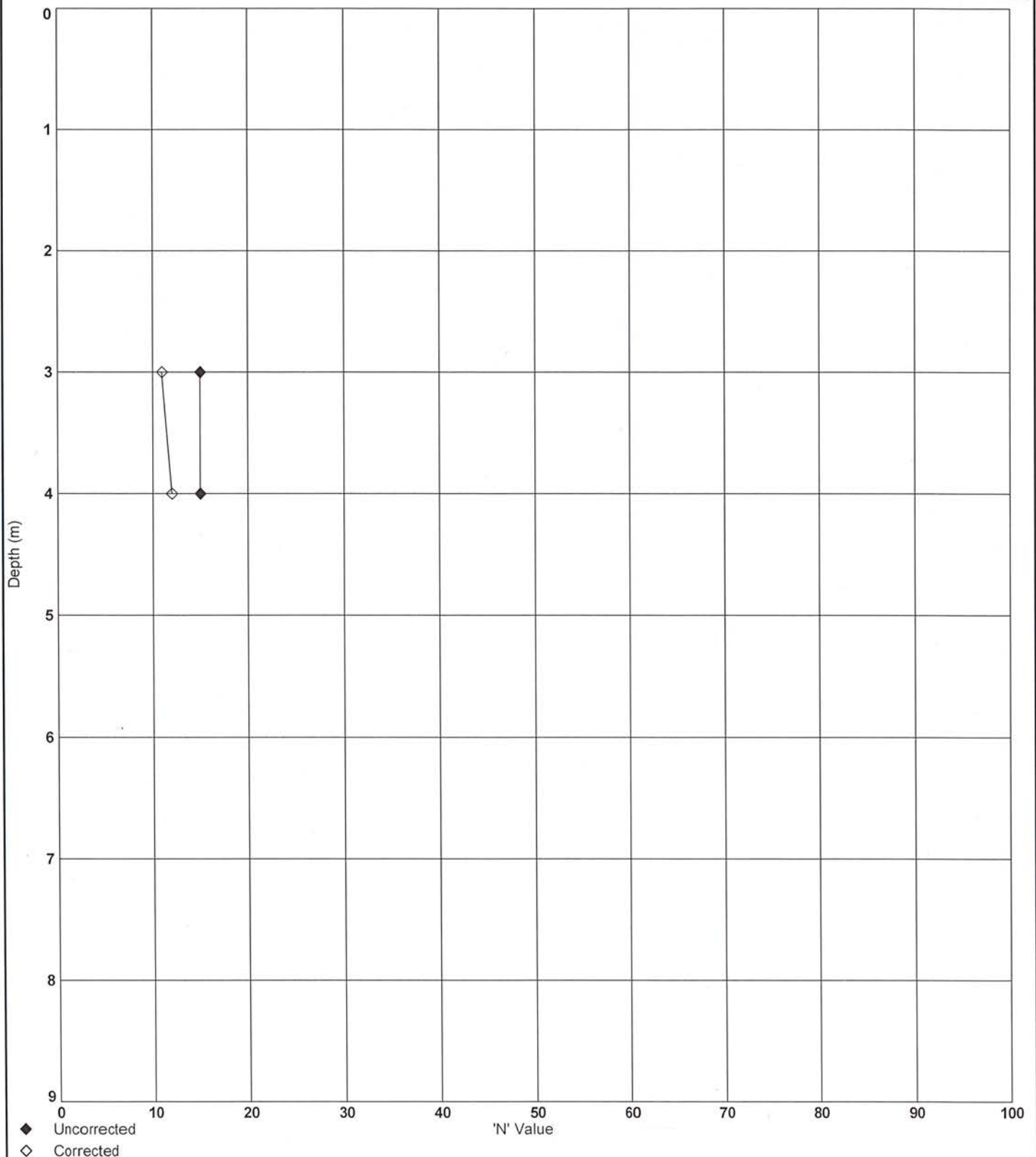
ALLIED EXPLORATION & GEOTECHNICS LIMITED

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STANDARD PENETRATION TEST RESULTS (BS EN ISO 22476-3: 2005)

Exploratory Hole No

S3-BHA01



Contract Title :-
The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract
3

Client :-
South Tees Site Company Ltd



Date of issue :-
11/06/2018

Certificate No :-
SPT/4155/Graph/S3-BHA01

Operator :-
M. Lennox

Checked By :-
LC

Approved By :-
[Signature]

AEG Contract No. :-
4155



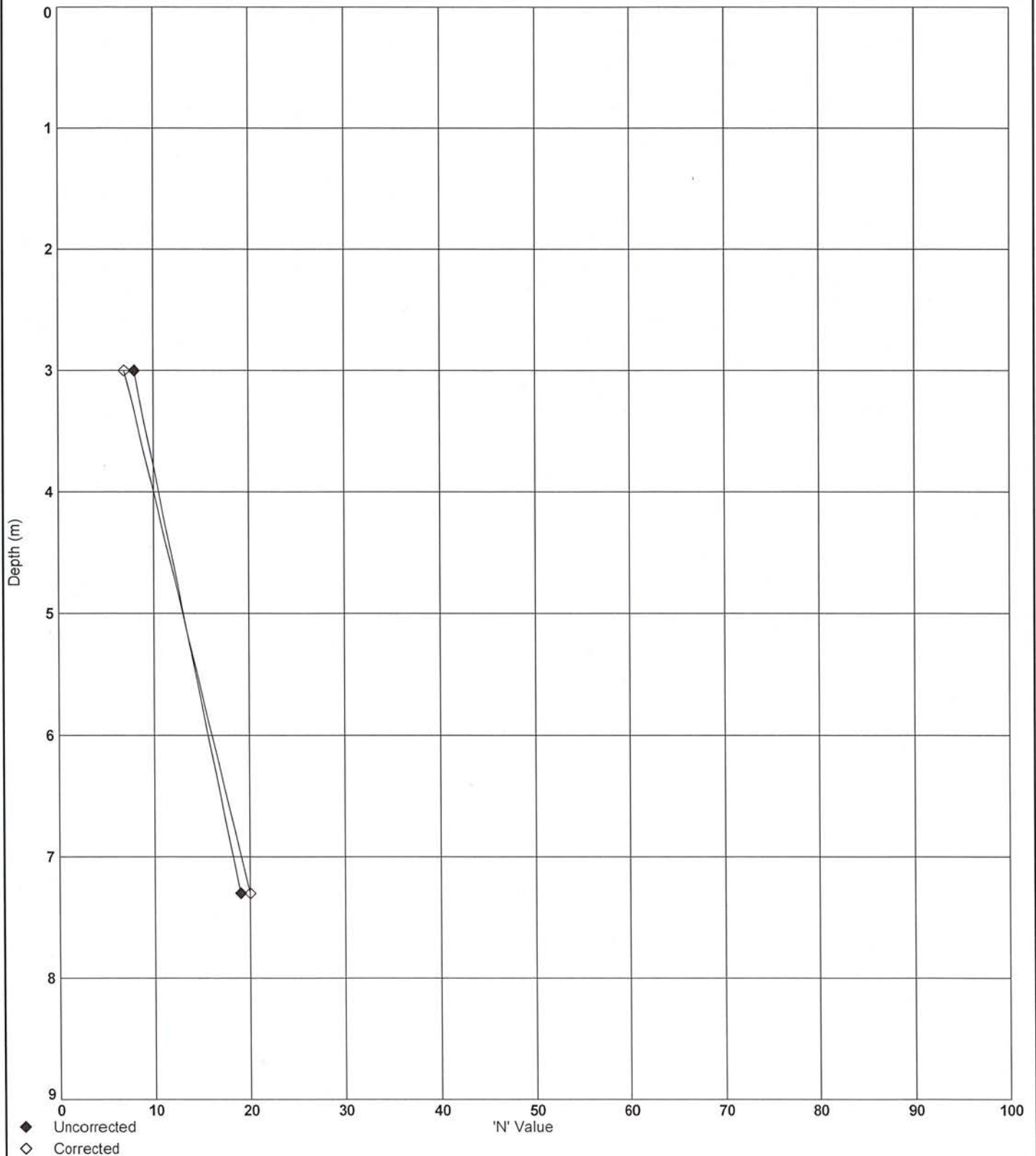
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STANDARD PENETRATION TEST RESULTS (BS EN ISO 22476-3: 2005)

Exploratory Hole No

S3-BHA02



Contract Title :-
The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract
3

Client :-
South Tees Site Company Ltd



Date of issue :-
11/06/2018

Checked By :-
LC

Certificate No :-
SPT/4155/Graph/S3-BHA02

Approved By :-
NW

Operator :-
E. Bacon

AEG Contract No. :-
4155



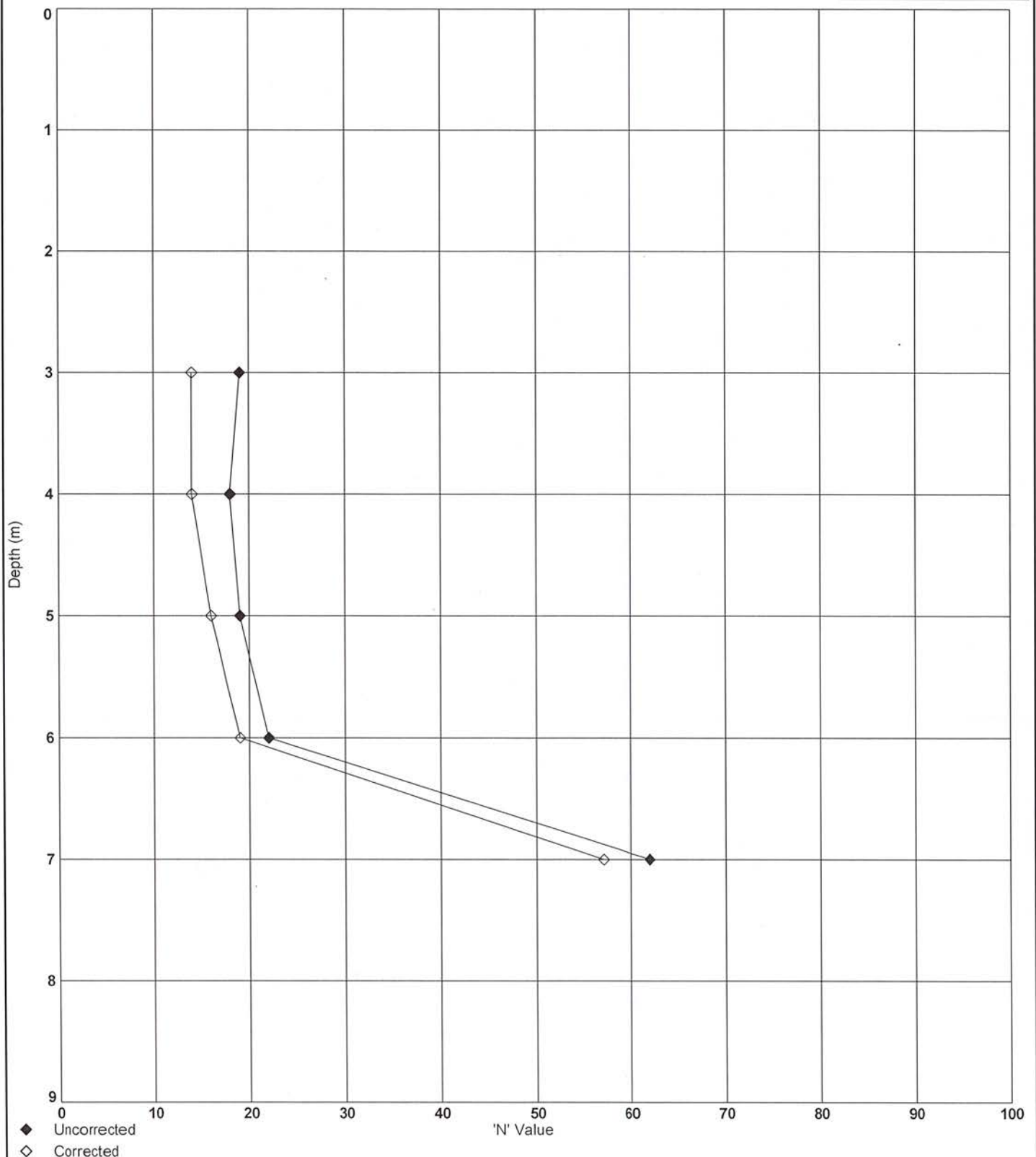
ALLIED EXPLORATION & GEOTECHNICS LIMITED

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STANDARD PENETRATION TEST RESULTS (BS EN ISO 22476-3: 2005)

Exploratory Hole No

S3-BHB01



Contract Title :-
The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract
3

Client :-
South Tees Site Company Ltd



Date of issue :-
11/06/2018

Certificate No :-
SPT/4155/Graph/S3-BHB01

Operator :-
M.L.I.F

Checked By :-
LC

Approved By :-
SMW

AEG Contract No. :-
4155



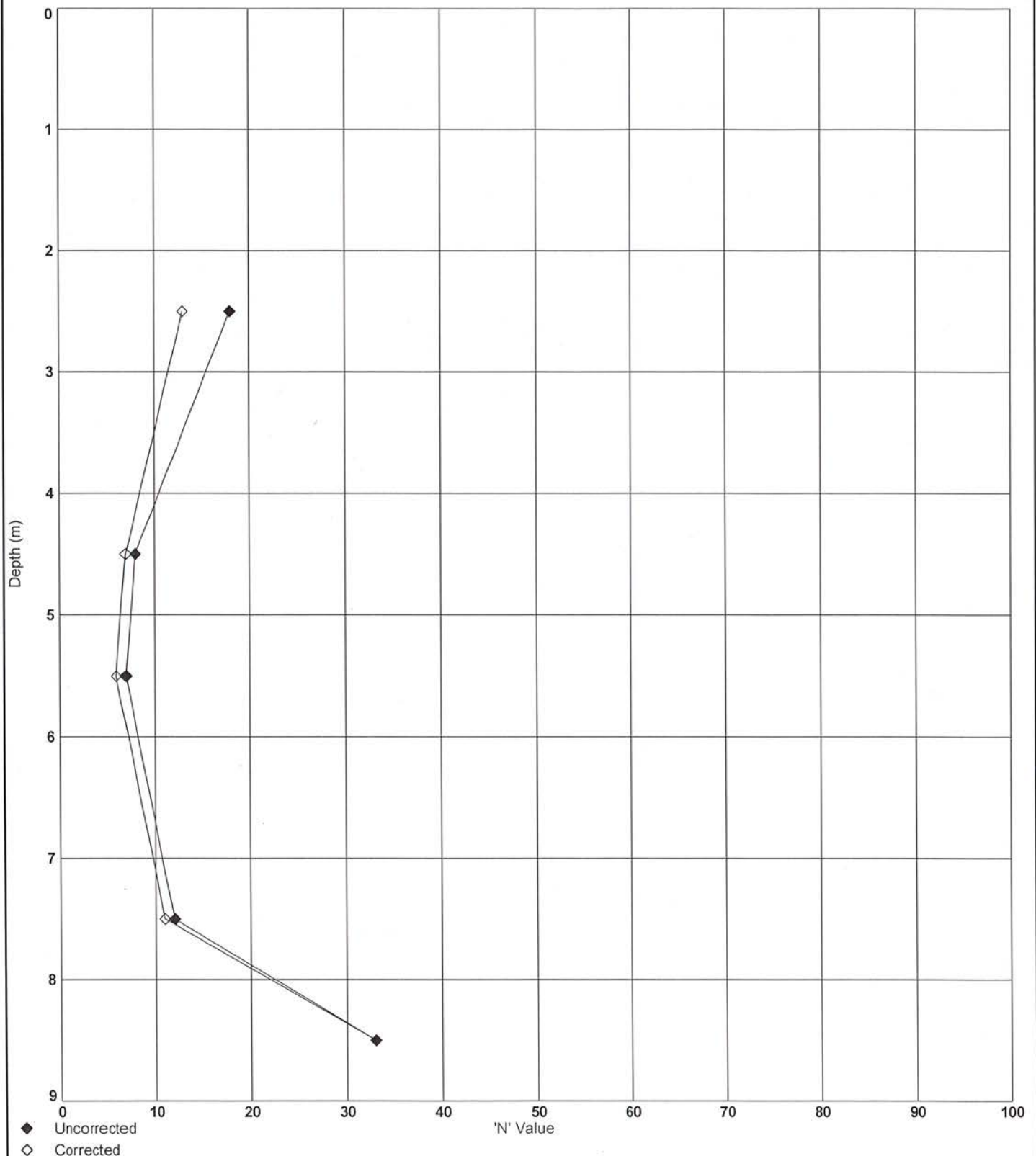
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STANDARD PENETRATION TEST RESULTS (BS EN ISO 22476-3: 2005)

Exploratory Hole No

S3-BHB02



Contract Title :-
The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract
3

Client :-
South Tees Site Company Ltd



Date of issue :-
11/06/2018

Certificate No :-
SPT/4155/Graph/S3-BHB02

Operator :-
M. Lennox

Checked By :-
LC

Approved By :-
JW

AEG Contract No. :-
4155



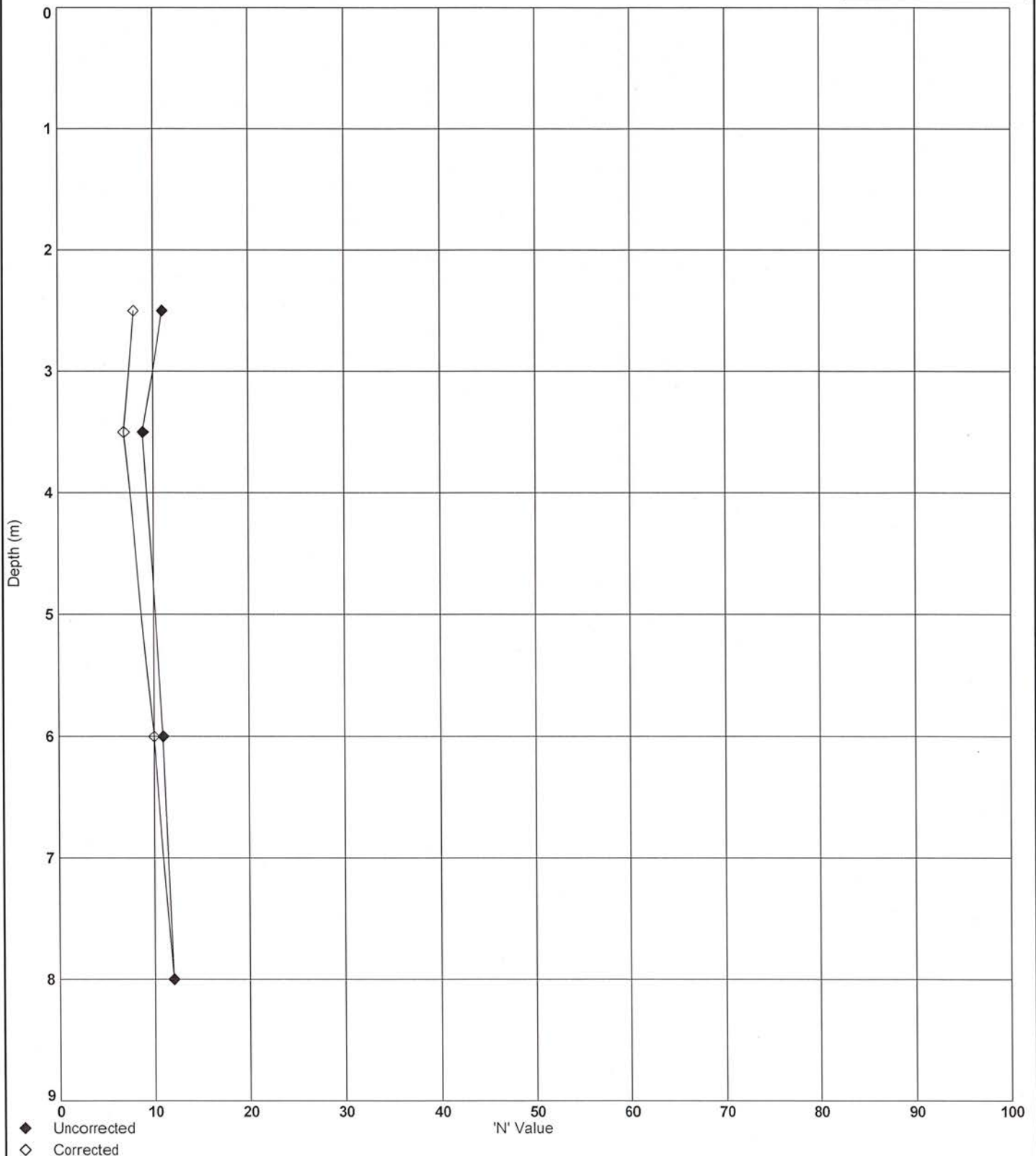
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Regional Office: Unit 20, Business Development Centre, Eanam Wharf, Blackburn, BB1 5BL Tel: 01772 735 300 Fax: 01772 735 999

STANDARD PENETRATION TEST RESULTS (BS EN ISO 22476-3: 2005)

Exploratory Hole No

S3-BHB03



Contract Title :-
The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract
3

Client :-
South Tees Site Company Ltd



Date of issue :-
11/06/2018

Certificate No :-
SPT/4155/Graph/S3-BHB03

Operator :-
E. Bacon

Checked By :-
LC

Approved By :-
NMW

AEG Contract No. :-
4155



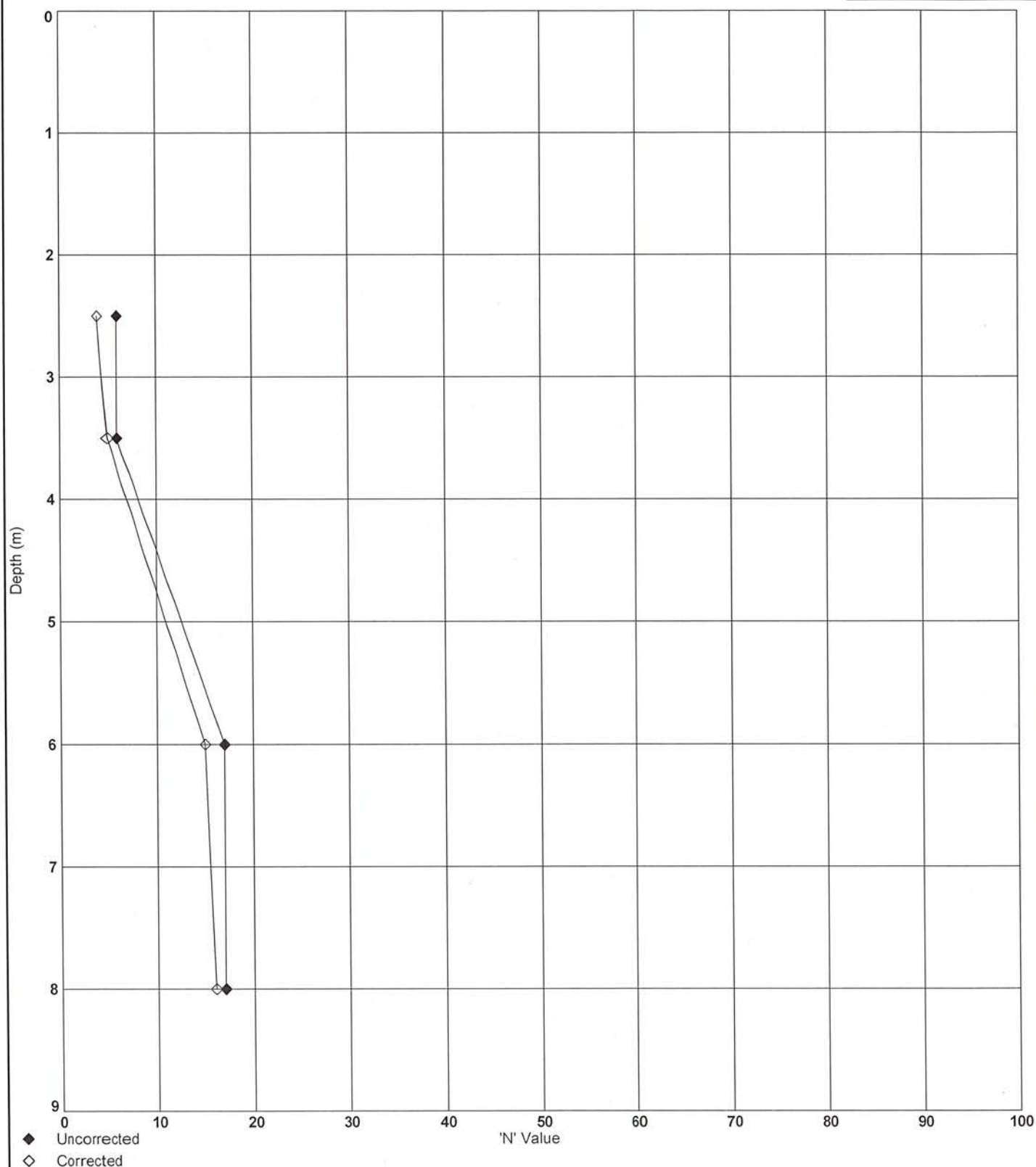
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STANDARD PENETRATION TEST RESULTS (BS EN ISO 22476-3: 2005)

Exploratory Hole No

S3-BHB04



Contract Title :-
The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract
3

Client :-
South Tees Site Company Ltd



Date of issue :-
11/06/2018

Certificate No :-
SPT/4155/Graph/S3-BHB04

Operator :-
E. Bacon

Checked By :-
LC

Approved By :-
NW

AEG Contract No. :-
4155



Unit 25 Stella Gill Industrial Estate
Pelton Fell
Chester-le-Street
DH2 2RG

SPT Hammer Energy Test Report

in accordance with BSEN ISO 22476-3:2005

SPT Hammer Ref: ATH03
Test Date: 22/08/2017
Report Date: 22/08/2017
File Name: ATH03.spt
Test Operator: BP

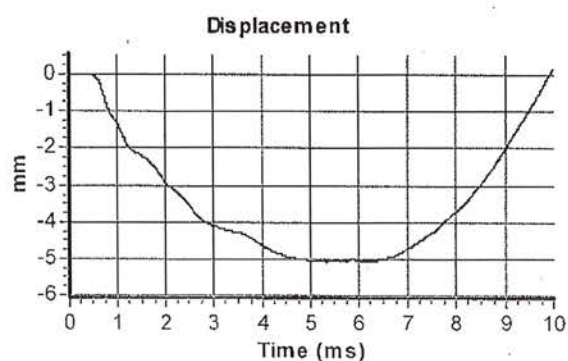
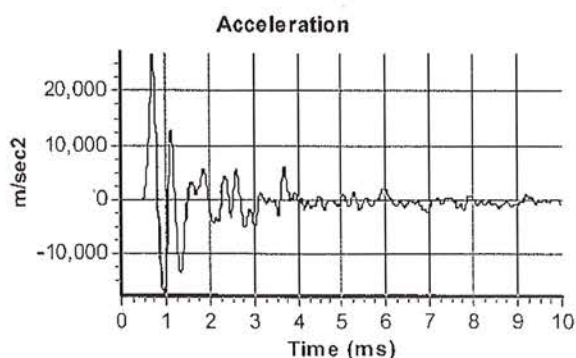
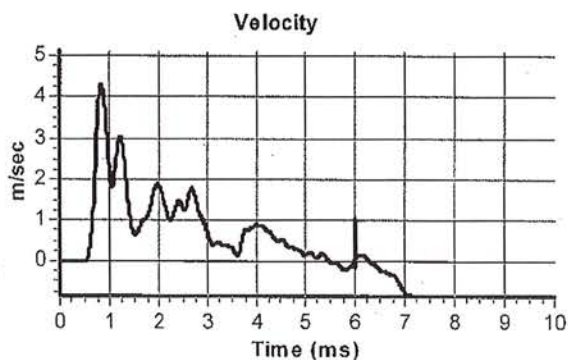
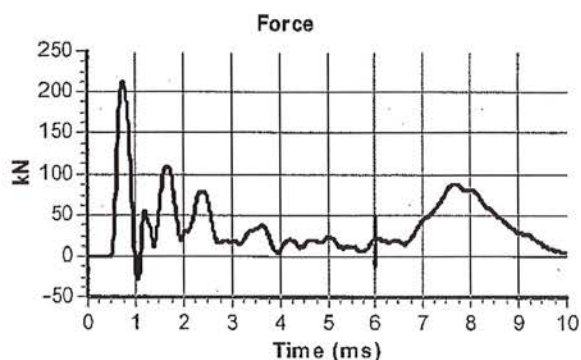
Instrumented Rod Data

Diameter d_r (mm): 67
Wall Thickness t_r (mm): 8.7
Assumed Modulus E_a (GPa): 208
Accelerometer No.1: 6469
Accelerometer No.2: 11406

SPT Hammer Information

Hammer Mass m (kg): 63.3
Falling Height h (mm): 755
SPT String Length L (m): 14.1

Comments / Location



Calculations

Area of Rod A (mm^2): 1593
Theoretical Energy E_{theor} (J): 473
Measured Energy E_{meas} (J): 300

Energy Ratio E_r (%):

63

Signed: Brian Proctor
Title: Technician

The recommended calibration interval is 12 months

Unit 25 Stella Gill Industrial Estate
Pelton Fell
Chester-le-Street
DH2 2RG

SPT Hammer Energy Test Report

in accordance with BSEN ISO 22476-3:2005

SPT Hammer Ref: ATH07
Test Date: 29/09/2017
Report Date: 29/09/2017
File Name: ATH07.spt
Test Operator: BP

QUALITY CONTROL
CHECKED

02 OCT 2017

[Signature]

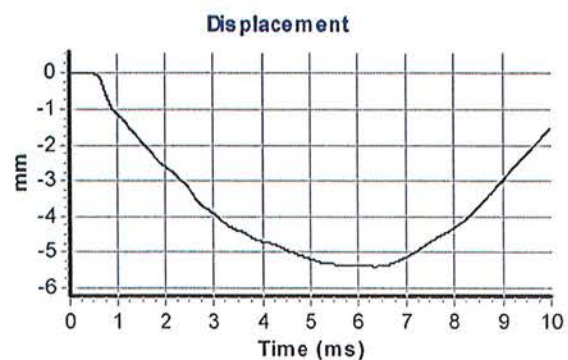
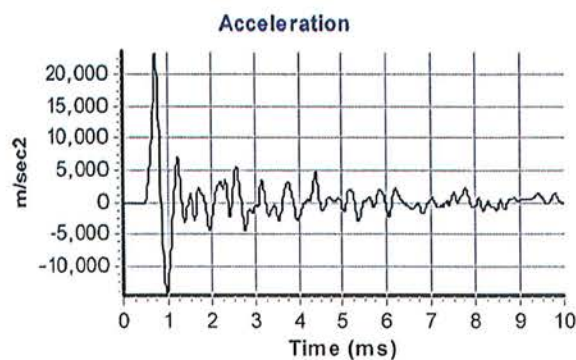
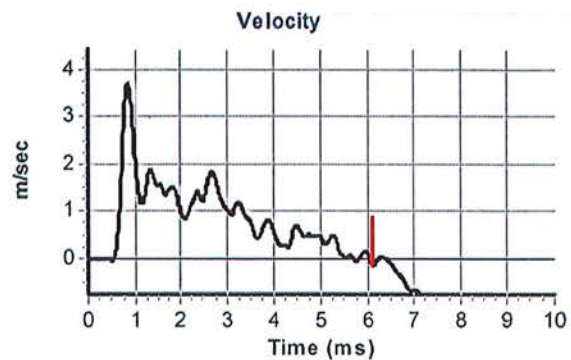
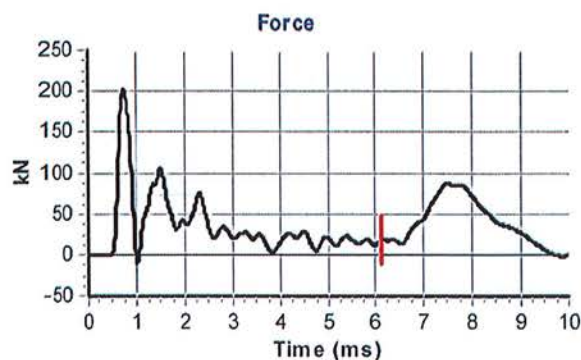
Instrumented Rod Data

Diameter d_r (mm): 67
Wall Thickness t_r (mm): 8.7
Assumed Modulus E_a (GPa): 208
Accelerometer No.1: 6469
Accelerometer No.2: 11406

SPT Hammer Information

Hammer Mass m (kg): 63.2
Falling Height h (mm): 758
SPT String Length L (m): 14.1

Comments / Location



Calculations

Area of Rod A (mm²): 1593
Theoretical Energy E_{theor} (J): 473
Measured Energy E_{meas} (J): 329

Energy Ratio E_r (%):

70

[Signature]
Signed: Brian Proctor
Title: Technician

The recommended calibration interval is 12 months

Hand Shear Vane Test Results



ALLIED EXPLORATION GEOTECHNICS LIMITED

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HAND SHEAR VANE TEST RESULTS

TRIAL PIT No.	DEPTH (mBGL)		1st RESULT (kPa)	2nd RESULT (kPa)	3rd RESULT (kPa)	AVERAGE (kPa)
S3-TPA35	0.60	P	69	105	110	95
		R	30	23	25	26
S3-TPA38	0.80	P	82	80	79	80
		R	23	26	21	23
S3-TPA39	0.80	P	111	110	108	110
		R	62	57	59	59
S3-TPA40	0.80	P	119	109	>120	>116
		R	14	15	-	15
S3-TPB06	1.30	P	115	81	85	94
		R	19	20	19	19
S3-TPB12	0.80	P	110	62	118	97
		R	40	22	32	31
S3-TPB12	1.50	P	61	97	70	76
		R	17	23	19	20
S3-TPB14	1.20	P	98	50	99	82
		R	16	18	19	18
S3-TPB18	2.00	P	86	60	78	75
		R	22	18	23	21
S3-TPB20	1.70	P	56	42	52	50
		R	22	18	20	20
S3-TPB20	2.50	P	72	68	60	67
		R	32	26	24	27
S3-TPB21	2.00	P	94	85	105	95
		R	44	20	32	32
S3-TPB22	2.20	P	85	79	69	78
		R	21	23	15	20
S3-TPB23	2.00	P	66	52	30	49
		R	28	20	18	22
S3-TPB24	2.00	P	46	52	44	47
		R	16	12	16	15

P = PEAK R = RESIDUAL

Contract Title:
The Former SSI Steelworks, Redcar - Ground Investigation Contract
- Priority Areas Within SSI Landholdings Contract 3

Client:
South Tees Site Company Ltd



Checked By: *LC*

Approved By: *NW*

Date of issue
11/06/2018

Page No. :
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AEG Contract No. :
4155



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HAND SHEAR VANE TEST RESULTS

TRIAL PIT No.	DEPTH (mBGL)		1st RESULT (kPa)	2nd RESULT (kPa)	3rd RESULT (kPa)	AVERAGE (kPa)
S3-TPB24	3.30	P	100	76	82	86
		R	34	28	26	29
S3-TPB25	1.00	P	62	72	102	79
		R	36	34	44	38
S3-TPB25	2.60	P	98	110	104	104
		R	44	50	48	47
S3-TPB28	3.00	P	58	46	32	45
		R	20	16	10	15
S3-TPB29	1.90	P	58	60	56	58
		R	32	36	34	34
S3-TPB32	2.50	P	42	32	26	33
		R	18	12	12	14
S3-TPB33	2.00	P	64	52	48	55
		R	28	22	22	24
S3-TPB33	3.00	P	66	92	70	76
		R	30	32	28	30
S3-TPB34	2.00	P	102	58	86	82
		R	34	22	30	29
S3-TPB35	1.50	P	86	90	82	86
		R	38	40	36	38
S3-TPB37	2.00	P	HSV test failed - too disturbed.			-
S3-TPB37	2.70	P	82	80	84	82
		R	38	34	34	35
S3-TPB41	1.50	P	98	88	100	95
		R	46	42	48	45
S3-TPB43	3.50	P	68	72	84	75
		R	24	30	32	29
S3-TPB45	2.50	P	106	106	102	105
		R	44	42	36	41

P = PEAK R = RESIDUAL

Contract Title:
The Former SSI Steelworks, Redcar - Ground Investigation Contract
- Priority Areas Within SSI Landholdings Contract 3

Client:
South Tees Site Company Ltd



Checked By:

LC

Approved By:

NW

Date of issue

11/06/2018

Page No. :

2

AEG Contract No. :

4155



ALLIED EXPLORATION GEOTECHNICS LIMITED

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HAND SHEAR VANE TEST RESULTS

TRIAL PIT No.	DEPTH (mBGL)		1st RESULT (kPa)	2nd RESULT (kPa)	3rd RESULT (kPa)	AVERAGE (kPa)
S3-TPB47	2.50	P	50	88	76	71
		R	20	32	30	27
S3-TPB48	2.50	P	70	82	66	73
		R	34	36	34	35
S3-TPB49	2.20	P	32	40	58	43
		R	18	20	22	20
S3-TPB51	2.50	P	84	72	90	82
		R	36	30	34	33
S3-TPB52	2.00	P	92	84	90	89
		R	40	38	40	39
S3-TPB53	1.00	P	HSV test failed - too disturbed.			-
S3-TPB54	2.20	P	70	82	56	69
		R	32	36	26	31
S3-TPB55	2.60	P	74	90	84	83
		R	32	40	36	36
S3-TPB56	2.40	P	62	56	64	61
		R	28	24	28	27
S3-TPB57	2.40	P	32	44	30	35
		R	16	18	14	16
S3-TPB58	2.40	P	>120	116	96	>111
		R	48	38	32	39
S3-TPB59	2.80	P	68	80	56	68
		R	30	34	24	29
S3-TPB60	1.50	P	110	106	102	106
		R	48	42	46	45
S3-TPB61	2.00	P	100	98	82	93
		R	42	36	32	37
S3-TPB62	1.70	P	32	58	26	39
		R	18	24	12	18

P = PEAK R = RESIDUAL

Contract Title:
The Former SSI Steelworks, Redcar - Ground Investigation Contract
- Priority Areas Within SSI Landholdings Contract 3

Client:
South Tees Site Company Ltd



Checked By: *LC*

Approved By: *SW*

Date of issue
11/06/2018

Page No. :
3

AEG Contract No. :
4155



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[illegible]

Photo-ionisation Detector Test Results



ALLIED EXPLORATION & GEOTECHNICS LIMITED

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PHOTO-IONISATION DETECTOR

Exploratory Hole No.	Depth (m)	PID (ppm)	Date Tested	Remarks
S3-BHA01	1.00	3.2	13/11/2017	
S3-BHA01	3.00	0.5	13/11/2017	
S3-BHA01	4.00	0.5	13/11/2017	
S3-BHA02	0.50	2.4	14/11/2017	
S3-BHA02	1.60	0.5	14/11/2017	
S3-BHA02	2.00	0.5	14/11/2017	
S3-BHA02	3.00		14/11/2017	<0.1ppm
S3-BHB01	2.80	2.0	09/11/2017	
S3-BHB01	3.00	1.2	09/11/2017	
S3-BHB01	4.00	0.5	09/11/2017	
S3-BHB02	1.00	4.8	10/11/2017	
S3-BHB02	2.50	2.6	10/11/2017	
S3-BHB02	4.50	0.3	10/11/2017	
S3-BHB03	1.00	1.0	13/11/2017	
S3-BHB03	1.90	0.5	13/11/2017	
S3-BHB03	2.50	0.5	13/11/2017	
S3-BHB03	3.80	0.5	13/11/2017	
S3-BHB04	0.90	1.2	13/11/2017	
S3-BHB04	1.90	0.5	13/11/2017	
S3-BHB04	3.00	0.5	13/11/2017	
S3-BHB04	4.00	0.5	13/11/2017	
S3-TPA02	0.60	3.2	23/10/2017	
S3-TPA02	1.80	0.5	23/10/2017	
S3-TPA03	0.80	5.8	23/10/2017	
S3-TPA03	2.20	3.8	23/10/2017	
S3-TPA03	2.90	4.0	23/10/2017	
S3-TPA03	3.80	2.9	23/10/2017	
S3-TPA06	0.70	8.1	23/10/2017	
S3-TPA06	2.50	3.5	23/10/2017	
S3-TPA06	2.75	2.7	23/10/2017	
S3-TPA08	1.10	4.6	20/10/2017	
S3-TPA08	2.20	6.7	20/10/2017	
S3-TPA08	2.50	0.2	20/10/2017	
S3-TPA09	0.90	1.2	13/10/2017	
S3-TPA09	2.00	1.5	13/10/2017	
S3-TPA09	3.50	1.3	13/10/2017	
S3-TPA10	1.20	3.2	13/10/2017	
S3-TPA10	1.60	4.7	13/10/2017	
S3-TPA10	3.50	2.3	13/10/2017	
S3-TPA11	1.20	1.7	20/10/2017	

See attached Calibration Certificate for Model No. and any other details

Contract Title :-
The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract
3

Client :-
South Tees Site Company Ltd



Calibration Compliant :-
YES

Date of Issue :-
19/12/2017

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JW

AEG Contract No. :-
4155



ALLIED EXPLORATION & GEOTECHNICS LIMITED

Head Office: Unit 25 Stella Gill Industrial Estate, Pelton Fell, Chester-le-Street, Co. Durham, DH2 2RG Tel: 0191 387 4700 Fax: 0191 387 4710
Regional Office: Unit 20, Business Development Centre, Eanam Wharf, Blackburn, BB1 5BL Tel: 01772 735 300 Fax: 01772 735 999

PHOTO-IONISATION DETECTOR

Exploratory Hole No.	Depth (m)	PID (ppm)	Date Tested	Remarks
S3-TPA11	1.50	3.2	20/10/2017	
S3-TPA11	2.30	0.5	20/10/2017	
S3-TPA11	2.90		20/10/2017	<0.1ppm
S3-TPA12	1.70	5.4	20/10/2017	
S3-TPA13	0.50	3.0	20/10/2017	
S3-TPA13	1.50	3.5	20/10/2017	
S3-TPA13	2.30	0.8	20/10/2017	
S3-TPA13	3.20	0.4	20/10/2017	
S3-TPA14	0.50	5.3	12/10/2017	
S3-TPA15	0.50	3.6	19/10/2017	
S3-TPA15	1.30	3.5	19/10/2017	
S3-TPA15	1.60	2.9	19/10/2017	
S3-TPA15	2.70	4.1	19/10/2017	
S3-TPA16	1.00	0.5	12/10/2017	
S3-TPA16	1.60	8.7	12/10/2017	
S3-TPA17	0.80	2.8	19/10/2017	
S3-TPA17	1.40	1.5	19/10/2017	
S3-TPA17	2.10	8.3	19/10/2017	
S3-TPA17	3.20	4.5	19/10/2017	
S3-TPA18	1.20	1.1	19/10/2017	
S3-TPA18	3.00	0.1	19/10/2017	
S3-TPA19	0.70	25.3	12/10/2017	
S3-TPA19	1.60	1.4	12/10/2017	
S3-TPA20	1.50	10.3	19/10/2017	
S3-TPA20	1.80	6.6	19/10/2017	
S3-TPA20	2.80	0.3	19/10/2017	
S3-TPA21	0.70	2.6	12/10/2017	
S3-TPA21	1.60		12/10/2017	<0.1ppm
S3-TPA22	0.80	1.4	19/10/2017	
S3-TPA22	2.20	0.7	19/10/2017	
S3-TPA22	3.00	0.3	19/10/2017	
S3-TPA23	1.00		10/10/2017	<0.1ppm
S3-TPA23	1.70		10/10/2017	<0.1ppm
S3-TPA24	1.20	0.8	10/10/2017	
S3-TPA24	1.70	2.3	10/10/2017	
S3-TPA25	1.20	3.2	19/10/2017	
S3-TPA25	2.30	0.3	19/10/2017	
S3-TPA26	0.25	1.1	18/10/2017	
S3-TPA26	1.00	2.3	18/10/2017	
S3-TPA26	2.20	2.5	18/10/2017	

See attached Calibration Certificate for Model No. and any other details

Contract Title :- The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3	Client :- South Tees Site Company Ltd
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PHOTO-IONISATION DETECTOR

Exploratory Hole No.	Depth (m)	PID (ppm)	Date Tested	Remarks
S3-TPA26	3.50	0.2	18/10/2017	
S3-TPA27	1.00		10/10/2017	<0.1ppm
S3-TPA27	1.50		10/10/2017	<0.1ppm
S3-TPA28	0.30	0.2	18/10/2017	
S3-TPA28	1.40	2.4	18/10/2017	
S3-TPA28	2.50	3.9	18/10/2017	
S3-TPA28	4.00	0.1	18/10/2017	
S3-TPA29	0.70	2.9	13/10/2017	
S3-TPA29	2.20	2.4	13/10/2017	
S3-TPA29	3.20	1.8	13/10/2017	
S3-TPA30	1.20	2.3	10/10/2017	
S3-TPA30	2.20		10/10/2017	<0.1ppm
S3-TPA31	0.40	0.3	18/10/2017	
S3-TPA31	1.00	1.5	18/10/2017	
S3-TPA31	2.50	0.8	18/10/2017	
S3-TPA32	1.20	12.0	13/10/2017	
S3-TPA32	2.80	11.8	13/10/2017	
S3-TPA33	0.70	6.7	16/10/2017	
S3-TPA33	1.50	4.4	16/10/2017	
S3-TPA33	2.50		16/10/2017	<0.1ppm
S3-TPA34	1.20	5.6	17/10/2017	
S3-TPA34	2.00	3.4	17/10/2017	
S3-TPA34	3.00		17/10/2017	<0.1ppm
S3-TPA35	0.60	3.8	16/10/2017	
S3-TPA35	1.50	3.2	16/10/2017	
S3-TPA35	2.50	0.2	16/10/2017	
S3-TPA36	0.60	4.0	17/10/2017	
S3-TPA36	0.80	2.6	17/10/2017	
S3-TPA36	1.20	3.1	17/10/2017	
S3-TPA36	2.50		17/10/2017	<0.1ppm
S3-TPA37	0.50	1.7	17/10/2017	
S3-TPA38	0.70	7.0	16/10/2017	
S3-TPA38	1.50	0.5	16/10/2017	
S3-TPA39	0.40	2.7	17/10/2017	
S3-TPA39	0.90	3.3	17/10/2017	
S3-TPA39	2.00	0.2	17/10/2017	
S3-TPA40	0.50	10.3	16/10/2017	
S3-TPA40	0.70	5.4	16/10/2017	
S3-TPA40	1.50	0.3	16/10/2017	
S3-TPA41	0.50	0.8	17/10/2017	

See attached Calibration Certificate for Model No. and any other details

Contract Title :-
The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract
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Client :-
South Tees Site Company Ltd



Calibration Compliant :-
YES

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PHOTO-IONISATION DETECTOR

Exploratory Hole No.	Depth (m)	PID (ppm)	Date Tested	Remarks
S3-TPA42	1.00	0.2	18/10/2017	
S3-TPB01	0.20	3.5	26/10/2017	
S3-TPB01	0.70	0.7	26/10/2017	
S3-TPB01	1.80	2.3	26/10/2017	
S3-TPB01	2.60	0.2	26/10/2017	
S3-TPB02	0.50	0.4	26/10/2017	
S3-TPB03	1.00	0.5	27/10/2017	
S3-TPB03	1.80	1.0	27/10/2017	
S3-TPB03	3.20	0.1	27/10/2017	
S3-TPB04	0.80	1.2	27/10/2017	
S3-TPB04	1.40	1.1	27/10/2017	
S3-TPB04	3.00	0.4	27/10/2017	
S3-TPB05	0.30	0.5	27/10/2017	
S3-TPB05	0.75	0.2	27/10/2017	
S3-TPB05	2.50		27/10/2017	<0.1ppm
S3-TPB05	3.40		27/10/2017	<0.1ppm
S3-TPB06	0.70	2.6	25/10/2017	
S3-TPB06	1.70	0.6	25/10/2017	
S3-TPB07	0.60	0.5	27/10/2017	
S3-TPB07	1.00	0.1	27/10/2017	
S3-TPB07	1.50	0.2	27/10/2017	
S3-TPB07	3.00	0.1	27/10/2017	
S3-TPB08	0.50	0.1	30/10/2017	
S3-TPB08	1.00	0.3	30/10/2017	
S3-TPB08	1.50	0.1	30/10/2017	
S3-TPB10	0.40	10.3	30/10/2017	
S3-TPB10	1.50	3.2	30/10/2017	
S3-TPB10	2.50	1.7	30/10/2017	
S3-TPB10	3.50	1.5	30/10/2017	
S3-TPB12	0.40	0.2	25/10/2017	
S3-TPB12	0.90	1.1	25/10/2017	
S3-TPB14	0.30	0.8	25/10/2017	
S3-TPB14	0.80	1.8	25/10/2017	
S3-TPB14	2.20		25/10/2017	<0.1ppm
S3-TPB16	0.40	1.5	25/10/2017	
S3-TPB16	0.80	0.9	25/10/2017	
S3-TPB16	2.00	0.2	25/10/2017	
S3-TPB16	3.50	0.2	25/10/2017	
S3-TPB17	0.60	0.5	31/10/2017	
S3-TPB17	1.20	1.3	31/10/2017	

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PHOTO-IONISATION DETECTOR

Exploratory Hole No.	Depth (m)	PID (ppm)	Date Tested	Remarks
S3-TPB18	1.50	0.4	31/10/2017	
S3-TPB18	1.80		31/10/2017	<0.1ppm
S3-TPB19	1.00	5.3	13/10/2017	
S3-TPB20	1.00	2.1	13/10/2017	
S3-TPB20	2.00	1.9	13/10/2017	
S3-TPB20	3.00	0.2	13/10/2017	
S3-TPB23	1.00	12.2	13/10/2017	
S3-TPB23	2.00	9.8	13/10/2017	
S3-TPB24	1.00	26.3	16/10/2017	
S3-TPB24	2.00	5.5	16/10/2017	
S3-TPB24	3.00	9.2	16/10/2017	
S3-TPB25	1.00	1.9	01/11/2017	
S3-TPB25	2.00	0.7	01/11/2017	
S3-TPB25	2.60		01/11/2017	<0.1ppm
S3-TPB26	1.00	0.6	30/10/2017	
S3-TPB26	1.70	0.2	30/10/2017	
S3-TPB27	1.00	0.7	01/11/2017	
S3-TPB27	1.90	2.0	01/11/2017	
S3-TPB28	1.00	0.7	13/10/2017	
S3-TPB28	2.00	7.3	13/10/2017	
S3-TPB28	3.00	6.8	13/10/2017	
S3-TPB29	1.00	0.4	31/10/2017	
S3-TPB29	1.90	0.2	31/10/2017	
S3-TPB30	1.00	0.4	31/10/2017	
S3-TPB30	2.00	0.5	31/10/2017	
S3-TPB31	1.00		31/10/2017	<0.1ppm
S3-TPB31	1.90		31/10/2017	<0.1ppm
S3-TPB32	0.50		12/10/2017	<0.1ppm
S3-TPB32	1.50	2.2	12/10/2017	
S3-TPB32	2.50	1.4	12/10/2017	
S3-TPB32	3.30	3.0	12/10/2017	
S3-TPB33	0.80	5.3	16/10/2017	
S3-TPB33	2.00	33.6	16/10/2017	
S3-TPB33	3.00	20.2	16/10/2017	
S3-TPB34	1.00	21.8	16/10/2017	
S3-TPB34	2.00	19.4	16/10/2017	
S3-TPB35	1.00	0.6	30/10/2017	
S3-TPB35	1.50	0.2	30/10/2017	
S3-TPB36	1.00		31/10/2017	<0.1ppm
S3-TPB36	2.00	0.1	31/10/2017	

See attached Calibration Certificate for Model No. and any other details

Contract Title :-

The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract

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Client :-

South Tees Site Company Ltd



Calibration Compliant :-
YES

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ALLIED EXPLORATION & GEOTECHNICS LIMITED

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PHOTO-IONISATION DETECTOR

Exploratory Hole No.	Depth (m)	PID (ppm)	Date Tested	Remarks
S3-TPB37	1.00	0.1	27/10/2017	
S3-TPB37	2.00	0.3	27/10/2017	
S3-TPB37	2.70		27/10/2017	<0.1ppm
S3-TPB38	1.00		17/10/2017	<0.1ppm
S3-TPB38	2.00		17/10/2017	<0.1ppm
S3-TPB40	1.00	7.1	16/10/2017	
S3-TPB40	2.00	17.7	16/10/2017	
S3-TPB41	1.00	2.6	30/10/2017	
S3-TPB41	1.50	16.9	30/10/2017	
S3-TPB42	1.00		27/10/2017	<0.1ppm
S3-TPB42	2.00	0.5	27/10/2017	
S3-TPB42	3.00		27/10/2017	<0.1ppm
S3-TPB43	1.00		17/10/2017	<0.1ppm
S3-TPB43	2.00	2.2	17/10/2017	
S3-TPB43	3.50	4.9	17/10/2017	
S3-TPB44	1.00	0.5	18/10/2017	
S3-TPB44	2.00	0.9	18/10/2017	
S3-TPB45	1.00	18.7	18/10/2017	
S3-TPB45	2.00	0.2	18/10/2017	
S3-TPB45	2.50	2.3	18/10/2017	
S3-TPB46	0.40	0.3	30/10/2017	
S3-TPB47	1.00	0.3	27/10/2017	
S3-TPB47	2.00	0.5	27/10/2017	
S3-TPB47	2.50		27/10/2017	<0.1ppm
S3-TPB48	1.00		27/10/2017	<0.1ppm
S3-TPB48	2.00		27/10/2017	<0.1ppm
S3-TPB48	2.50		27/10/2017	<0.1ppm
S3-TPB49	1.00		17/10/2017	<0.1ppm
S3-TPB49	2.20		17/10/2017	<0.1ppm
S3-TPB50	1.00	2.4	18/10/2017	
S3-TPB50	2.00	2.8	18/10/2017	
S3-TPB51	1.00	10.1	18/10/2017	
S3-TPB51	2.00	4.3	18/10/2017	
S3-TPB51	2.50	3.3	18/10/2017	
S3-TPB52	1.00	1.9	26/10/2017	
S3-TPB52	2.00	12.6	26/10/2017	
S3-TPB53	1.00	2.8	25/10/2017	
S3-TPB53	1.10	5.3	25/10/2017	
S3-TPB54	1.00		25/10/2017	<0.1ppm
S3-TPB54	2.20		25/10/2017	<0.1ppm

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Contract Title :-
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Client :-
South Tees Site Company Ltd



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ALLIED EXPLORATION & GEOTECHNICS LIMITED

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PHOTO-IONISATION DETECTOR

Exploratory Hole No.	Depth (m)	PID (ppm)	Date Tested	Remarks
S3-TPB55	1.00		26/10/2017	<0.1ppm
S3-TPB55	2.00		26/10/2017	<0.1ppm
S3-TPB55	2.60		26/10/2017	<0.1ppm
S3-TPB56	1.00		26/10/2017	<0.1ppm
S3-TPB56	2.00		26/10/2017	<0.1ppm
S3-TPB56	2.40		26/10/2017	<0.1ppm
S3-TPB57	1.00		19/10/2017	<0.1ppm
S3-TPB57	2.00		19/10/2017	<0.1ppm
S3-TPB57	2.40		19/10/2017	<0.1ppm
S3-TPB58	1.00		19/10/2017	<0.1ppm
S3-TPB58	2.00		19/10/2017	<0.1ppm
S3-TPB58	2.40		19/10/2017	<0.1ppm
S3-TPB59	1.00		19/10/2017	<0.1ppm
S3-TPB59	2.00		19/10/2017	<0.1ppm
S3-TPB59	2.80		19/10/2017	<0.1ppm
S3-TPB60	1.00	16.8	25/10/2017	
S3-TPB60	1.50	0.5	25/10/2017	
S3-TPB61	1.00	0.1	25/10/2017	
S3-TPB61	2.00	0.4	25/10/2017	
S3-TPB62	1.00	1.3	25/10/2017	
S3-TPB62	1.70	0.3	25/10/2017	
S3-TPB63	1.00		24/10/2017	<0.1ppm
S3-TPB63	2.00		24/10/2017	<0.1ppm
S3-TPB63	2.40		24/10/2017	<0.1ppm
S3-TPB64	1.00		24/10/2017	<0.1ppm
S3-TPB64	2.00		24/10/2017	<0.1ppm
S3-TPB64	2.50		24/10/2017	<0.1ppm
S3-TPB65	1.00	5.3	24/10/2017	
S3-TPB65	2.00	10.3	24/10/2017	
S3-TPB65	2.50	16.9	24/10/2017	
S3-TPB66	1.00	0.3	23/10/2017	
S3-TPB66	2.00	0.5	23/10/2017	
S3-TPB67	1.00		19/10/2017	<0.1ppm
S3-TPB67	2.00		19/10/2017	<0.1ppm
S3-TPB67	2.80		19/10/2017	<0.1ppm
S3-TPB68	1.00		20/10/2017	<0.1ppm
S3-TPB68	2.00		20/10/2017	<0.1ppm
S3-TPB69	1.00		20/10/2017	<0.1ppm
S3-TPB69	1.90		20/10/2017	<0.1ppm
S3-TPB70	1.00	0.5	24/10/2017	

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South Tees Site Company Ltd



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PHOTO-IONISATION DETECTOR

Exploratory Hole No.	Depth (m)	PID (ppm)	Date Tested	Remarks
S3-TPB70	2.00	0.7	24/10/2017	
S3-TPB70	2.30	1.4	24/10/2017	
S3-TPB71	1.00	0.1	23/10/2017	
S3-TPB71	2.20	0.1	23/10/2017	
S3-TPB72	1.00		23/10/2017	<0.1ppm
S3-TPB72	2.00		23/10/2017	<0.1ppm
S3-TPB72	2.50		23/10/2017	<0.1ppm
S3-TPB73	1.00		23/10/2017	<0.1ppm
S3-TPB73	2.00		23/10/2017	<0.1ppm
S3-TPB74	1.00		20/10/2017	<0.1ppm
S3-TPB74	1.50		20/10/2017	<0.1ppm
S3-TPB75	1.00		20/10/2017	<0.1ppm
S3-TPB75	1.50		20/10/2017	<0.1ppm

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...everything gas detection

Certificate of Calibration

Customer: Ribble Enviro Hire Fleet

Instrument: MiniRAE 2000

Job: Pre-hire Service, Test & Calibration

Serial number: 110-009180

Fleet Number: R32136

Certificate no: 009180 / 021017

Next calibration due date: 02 Oct. 2018

Tested on: 02 Oct. 2017

Calibrated for: Isobutylene

<u>Applied Gas Concentration:</u>	<u>Cylinder Reference:</u>	<u>Initial Sensor Reading</u>	<u>Final Sensor Reading</u>	<u>Accuracy Limits</u>
Isobutylene: 100 ppm	AGG1481-4-1	101 ppm	100 ppm	±5%

The Instrument has been calibrated after Re-Zeroing & Introducing Span Calibration Gas, using gas that is traceable to national standards and has been prepared in accordance with BS EN ISO 6145-6:2008

Calibration Engineer: Lesley Bainbridge

Sign:

Quality Assessed by (Print):	C.Shillitoe	Sign:	
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Certificate of Calibration

Customer: **Ribble Enviro Hire Fleet**

Instrument: MiniRAE 2000

Job: Pre-Hire Service, Test and Calibration

Serial number: 110-009056

Fleet number: R32135

Certificate no: 009056 / 021017

Next calibration due date: 02 Oct. 2018

Tested on: 02 Oct. 2017

Calibrated for: Isobutylene

<u>Applied Gas Concentration:</u>	<u>Cylinder Reference:</u>	<u>Initial Sensor Reading</u>	<u>Final Sensor Reading</u>	<u>Accuracy Limits</u>
Isobutylene: 100 ppm	AGG1481-1-1	102 ppm	101 ppm	± 5%

The Instrument has been calibrated after Re-Zeroing & Introducing Span Calibration Gas, using gas that is traceable to national standards and has been prepared in accordance with BS EN ISO6145-6:2008

Calibration Engineer: Lesley Bainbridge

Sign:

Quality Assessed by (Print):	C.Shilitoe	Sign:	
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Laboratory Report Certificate



LABORATORY TESTING ENCLOSURES

ALLIED EXPLORATION & GEOTECHNICS LIMITED

Head Office: Unit 25 Stella Gill Industrial Estate, Pelton Fell, Chester-le-Street, Co. Durham, DH2 2RG - Tel: 0191 3874700 Fax: 0191 3874710
Regional Office: Unit 20 Business Development Centre, Eanam Wharf, Blackburn, BB1 5BL - Tel: 01722 735 300 Fax: 01722 735 999



LABORATORY REPORT CERTIFICATE



Contract Title: The Former SSI Steelworks, Redcar – **AEG Reference:** 4155
Ground Investigation Contract – Priority
Areas Within SSI Landholdings Contract 3

Client Address: South Tees Site Company Ltd
1 Victoria Street
London
SW11H 0ET

We certify that Laboratory testing was carried out on samples from the above contract in accordance with techniques outlined in BS 1377: 1990, BS EN ISO 17892:2014 or other appropriate standards as quoted. The samples were received from October 2017 and the following results, given on the attached enclosures, were obtained.

The tests carried out are indicated in the attached table showing the enclosure number and the total number of pages.

For and on behalf of Allied Exploration & Geotechnics Limited

- ☐ Nick Vater (Technical Director)
- ☐ Kevin Warriner (HSE & Quality Director)
- ☒ Michelle Selkirk (Laboratory Manager)

Signed

Date: 07 March 2018

Tests marked not UKAS accredited in this certificate are not included in the UKAS accreditation schedule for our laboratory. Any opinions and interpretations expressed herein are outside the scope of the laboratory's UKAS accreditation.

Please note the material was derived from samples taken outside the control of the laboratory.

LABORATORY REPORT CERTIFICATE

ENCLOSURES

Enclosure Number	Description	UKAS Accredited	Reference	No. of Pages
0	Laboratory Report Certificate	N/A		3
1	Sample Description Sheets	N/A		10
2	Moisture Content	Yes	BS 1377 Part 2 1990 (BS EN ISO 17892-1:2014)	5
2	Plasticity Index and Moisture Content	Yes	BS 1377 Part 2 1990 (BS EN ISO 17892-1:2014)	9
-	Determination of Density by Linear Measurement	Yes	BS 1377 Part 2 1990 (BS EN ISO 17892-2:2014)	-
3	Determination of Particle Density	Yes	BS 1377 Part 2 1990	1
4	Particle Size Distribution Sieving	Yes	BS 1377 Part 2 1990	91
4	Particle Size Distribution Sedimentation	No	BS 1377 Part 2 1990	11
-	Determination of Total Sulphur, Sulphate and pH (Tested externally)	No	See DETS certificates	-
5	Determination of Dry Density/Moisture Content Relationship	Yes	BS 1377 Part 4 1990	5
-	Determination of Dry Density/Moisture/CBR Relationship	Yes	BS 1377 Part 4 1990	-
-	Determination of Moisture Condition Value	Yes	BS 1377 Part 4 1990	-
-	Determination of MCV / Moisture Relationship	Yes	BS 1377 Part 4 1990	-
-	Determination of California Bearing Ratio	Yes	BS 1377 Part 4 1990	-
6	Determination of One Dimensional Consolidation Properties	Yes	BS 1377 Part 5 1990	14
-	Shear Strength by Hand Vane	No		-
-	Shear Strength by Direct Shear	Yes	BS 1377 Part 7 1990	-
7	Undrained Shear Strength in Triaxial Cell without Pore Water Pressure Measurement	Yes	BS 1377 Part 7 1990	1
-	Consolidated Undrained Shear Strength in Triaxial Cell with Measurement of Pore Pressure	No	BS 1377 Part 8 1990	-
-	Consolidated Drained Shear Strength in Triaxial Cell with Measurement of Volume Change	No	BS 1377 Part 8 1990	-
8	Determination of Point Load Index	Yes	ISRM 1985	1
9	Determination of Unconfined Compressive Strength (Tested externally)	No	ISRM 1985	2
10	XRF Analysis using Thermo Scientific Niton XL2 980 Gold XRF Analyser			18
11	Slag Analysis carried out by Thomas Research Services Limited			20

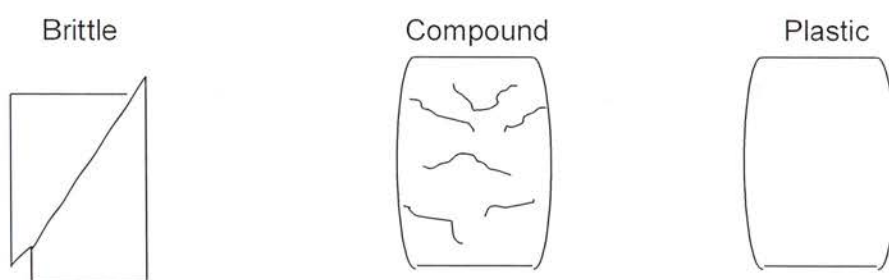
LABORATORY REPORT CERTIFICATE

ABBREVIATIONS

All the abbreviations used on the laboratory certificates are given below:

Br	Brittle	PSD	Particle Size Distribution by sieve analysis
C	Compound	SB	Shear Box
CBR	California Bearing Ratio	SED	Sedimentation Analysis
CDT	Consolidated Drained Triaxial	SO4	Sulphate (total, water extract, groundwater)
CL	Chloride content (water or soil)	CP2	Dry Density/Moisture Content 2.5kg rammer
US	Unsuitable sample for test	CP4	As above using 4.5kg rammer
UUT	Undrained Unconsolidated Triaxial	CPV	As above using vibrating hammer
HSV	Vane Test	CUT	Consolidated Undrained Triaxial
IS	Insufficient sample for test	R	Remoulded
LOI	Loss On Ignition	U	Undisturbed
M	Multi-stage testing	MC	Moisture Content
MCV	Moisture Content Value	PL	Point Load
NAT	Natural preparation method	NMC	Natural (or as received) moisture content
P	Plastic	PFH	Permeability Falling Head Method
OED	Oedometer	PTXL	Permeability in Triaxial Cell
OMC	Optimum Moisture Content	ORG	Organic content
B	Large disturbed (bulk) sample	PD	Particle Density (SG)
J	Small disturbed (jar) sample	PI	Liquid limit, plastic limit and plasticity index

Typical Mode of Failure for Triaxial Testing



Sample Description Sheets



ALLIED EXPLORATION & GEOTECHNICS LIMITED

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Regional Office: Unit 20, Business Development Centre, Eanam Wharf, Blackburn, BB1 5BL - Tel: 01772 735 300 Fax: 01772 735 999

LABORATORY SAMPLE DESCRIPTION SHEET

Exploratory Hole No.	Sample Depth	ID	Description	Laboratory Tests/Remarks
S3-BHA01	5.00	B8	Brown sandy slightly gravelly CLAY of low to intermediate plasticity.	MC PI
S3-BHA01	6.50	J10	Grey slightly sandy GRAVEL of mudstone.	IS for MC and PI pH SO4
S3-BHA02	1.60	B3	Brown grey orange mottling slightly sandy CLAY of high plasticity.	MC PI
S3-BHA02	2.00	B4	Laminated brown sandy CLAY of intermediate plasticity with silt dustings on laminae.	MC PI
S3-BHA02	2.10	U5	Medium strength brown slightly sandy CLAY.	UUT OED
S3-BHA02	3.50	B8	Fissured brown sandy silty CLAY of intermediate plasticity with silt dustings.	MC PI
S3-BHA02	4.00	U9	Medium strength laminated brown silty CLAY.	UUT OED
S3-BHA02	4.50	J10	Laminated brown CLAY of high plasticity with silt dustings on laminae.	MC PI
S3-BHA02	5.50	B11	Brown slightly sandy slightly gravelly CLAY of intermediate plasticity.	MC PI
S3-BHB01	2.80	B3	Brown slightly sandy slightly gravelly CLAY of high plasticity.	MC PI
S3-BHB01	4.00	B9	Brown sandy gravelly CLAY of intermediate plasticity.	MC PI
S3-BHB01	6.00	B13	Brown sandy slightly gravelly CLAY of intermediate plasticity.	MC PI
S3-BHB01	7.00	B16	Brown sandy gravelly CLAY of low plasticity.	MC PI
S3-BHB02	2.50	B5	Brown sandy slightly gravelly CLAY of intermediate plasticity.	MC PI
S3-BHB02	3.50	B6	Brown slightly sandy CLAY of intermediate plasticity.	MC PI pH SO4
S3-BHB02	4.50	B8	Brown sandy CLAY of intermediate plasticity.	MC PI
S3-BHB02	5.50	B10	Brown sandy slightly gravelly CLAY of intermediate plasticity.	MC PI
S3-BHB02	6.50	B11	Brown slightly sandy slightly gravelly CLAY of intermediate plasticity.	MC PI pH SO4
S3-BHB03	2.50	B5	Brown grey mottling sandy slightly gravelly CLAY of intermediate plasticity.	MC PI pH SO4
S3-BHB03	4.50	B8	Brown silty sandy CLAY of intermediate plasticity.	MC PI pH SO4
S3-BHB03	5.00	U9	Low strength laminated brown silty CLAY.	UUT OED

Contract Title :-

The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract
3

Client :-

South Tees Site Company Ltd



Signed :-

[Handwritten signature]

Name :-

M. SELKIRK

Page 1 of 10

Date of issue :-

07/03/2018

Certificate No :-

SD/4155/1

AEG Contract No. :-

4155



ALLIED EXPLORATION & GEOTECHNICS LIMITED

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LABORATORY SAMPLE DESCRIPTION SHEET

Exploratory Hole No.	Sample Depth ID	Description	Laboratory Tests/Remarks
S3-BHB03	7.00 U12	High strength brown slightly sandy slightly gravelly CLAY.	UUT OED
S3-BHB03	8.00 B14	Brown slightly sandy slightly gravelly CLAY of low to intermediate plasticity.	MC PI pH SO4
S3-BHB03	9.00 U15	High strength brown slightly sandy slightly gravelly CLAY.	UUT OED
S3-BHB04	3.00 B5	Brown with grey veining silty CLAY of intermediate plasticity.	MC PI
S3-BHB04	4.00 B7	Brown silty sandy CLAY of intermediate plasticity.	MC PI pH SO4
S3-BHB04	5.00 U9	High strength brown slightly gravelly CLAY.	OED UUT
S3-BHB04	6.50 B12	Brown sandy gravelly CLAY of intermediate plasticity.	MC PI pH SO4
S3-BHB04	7.00 U13	High strength brown slightly gravelly CLAY.	OED UUT
S3-BHB04	9.00 B17	Brown sandy slightly gravelly CLAY of low plasticity.	MC PI
S3-TPA01	1.60 B7	MADE GROUND (Brown slightly clayey sandy gravel including ash, slag, clinker and brick fragments).	ORG LOI BRE
S3-TPA01	2.70 B11	MADE GROUND (Dark grey very clayey very gravelly sand. Gravel includes slag, concrete and brick fragments).	MC PSD ORG LOI BRE
S3-TPA01	3.70 B13	Light brown slightly sandy CLAY/SILT of extremely high plasticity.	MC PI pH SO4
S3-TPA02	1.80 B6	MADE GROUND (Brown clayey sandy gravel and cobbles including slag, clinker and brick fragments).	MC PSD SED ORG BRE
S3-TPA03	2.20 B6	MADE GROUND (Brown clayey sandy gravel including concrete and brick fragments).	MC PSD PD ORG BRE US for CP4
S3-TPA04	0.70 B3	MADE GROUND (Dark grey clayey very sandy gravel including burnt shale, clinker and slag).	MC PSD ORG BRE
S3-TPA04	2.40 B9	MADE GROUND (Dark grey sandy gravel with a low cobble content. Gravel includes slag, ash and clinker).	ORG LOI BRE
S3-TPA04	2.70 J10	Brown CLAY of very high plasticity.	MC PI
S3-TPA05	2.20 B6	MADE GROUND (Grey slightly sandy gravel and cobbles including slag, clinker and brick fragments).	MC PSD ORG LOI BRE
S3-TPA06	0.70 B3	MADE GROUND (Dark grey clayey very sandy gravel including ash, metal and slag).	MC PSD ORG BRE
S3-TPA07	1.70 B7	MADE GROUND (Black brown slightly clayey very sandy gravel with a medium cobble content).	MC PSD PD LOI BRE US for CP4
S3-TPA09	2.50 J11	Fissured brown slightly sandy CLAY of high plasticity.	MC PI

Contract Title :-

The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract

3

Client :-

South Tees Site Company Ltd



Signed :-

[Handwritten signature]

Name :-

[Handwritten signature: M. SELKIRK]

Page 2 of 10

Date of issue :-

07/03/2018

Certificate No :-

SD/4155/2

AEG Contract No. :-

4155



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LABORATORY SAMPLE DESCRIPTION SHEET

Exploratory Hole No.	Sample Depth ID	Description	Laboratory Tests/Remarks
S3-TPA10	2.50 J11	Brown with grey veining slightly sandy CLAY of high plasticity.	MC PI
S3-TPA11	1.20 B4	MADE GROUND (Dark grey clayey very sandy gravel including slag).	MC PSD ORG BRE
S3-TPA11	2.30 B8	MADE GROUND (Grey sandy gravel including slag).	ORG LOI BRE
S3-TPA11	2.90 B10	Brown with grey mottling slightly sandy CLAY of intermediate plasticity.	MC PI pH SO4
S3-TPA12	1.70 B6	MADE GROUND (Brown clayey very sandy gravel including slag and brick fragments).	MC PSD ORG BRE
S3-TPA13	2.30 B7	MADE GROUND (Dark brown clayey sandy gravel including metal, slag and brick fragments).	MC PSD ORG LOI BRE
S3-TPA13	3.20 B10	Brown with grey veining slightly sandy CLAY of intermediate plasticity.	MC PI
S3-TPA14	0.50 B3	MADE GROUND (Grey clayey very sandy gravel including slag).	MC PSD ORG BRE
S3-TPA15	1.30 B4	MADE GROUND (Black clayey very sandy gravel including ash, slag, coal and brick fragments).	MC PSD ORG LOI BRE
S3-TPA15	2.70 B9	Brown with grey mottling slightly sandy CLAY of intermediate to high plasticity.	MC PI
S3-TPA16	1.00 B5	MADE GROUND (Dark brown clayey very sandy gravel including slag, coal and brick fragments).	MC PSD PD ORG BRE US for CP4
S3-TPA17	3.20 B12	Brown with grey veining slightly sandy CLAY of intermediate plasticity.	MC PI
S3-TPA18	1.50 J6	MADE GROUND (White grey slightly clayey slightly sandy gravel).	ORG BRE
S3-TPA18	3.00 B9	Brown with grey veining slightly sandy CLAY of high plasticity.	MC PI
S3-TPA19	1.60 B7	Brown slightly sandy CLAY of high plasticity.	MC PI ORG BRE
S3-TPA20	1.50 LB5	MADE GROUND (Brown grey cobbles with some brown grey sandy gravel including concrete and brick fragments).	MC PSD PD ORG BRE US for CP4
S3-TPA20	2.80 B8	Brown slightly sandy CLAY of intermediate plasticity.	MC PI
S3-TPA21	0.70 B3	MADE GROUND (Dark grey clayey very sandy gravel including slag).	MC PSD ORG BRE
S3-TPA21	1.60 B6	Friable brown CLAY of intermediate to high plasticity.	MC PI
S3-TPA22	2.20 B7	MADE GROUND (Dark brown clayey very sandy gravel including glass, slag and brick fragments).	MC PSD PD ORG LOI BRE US for CP4
S3-TPA22	3.00 B9	Laminated brown silty CLAY of high plasticity.	MC PI

Contract Title :-
The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract
3

Client :-
South Tees Site Company Ltd



Signed :- *MSero*

Name :- *M. SELKIRK*

Page 3 of 10

Date of issue :-
07/03/2018

Certificate No. :-
SD/4155/3

AEG Contract No. :-
4155



ALLIED EXPLORATION & GEOTECHNICS LIMITED

Head Office: Unit 25 Stella Gill Industrial Estate, Pelton Fell, Chester-le-Street, Co. Durham, DH2 2RG - Tel: 0191 387 4700 Fax: 0191 387 4710
Regional Office: Unit 20, Business Development Centre, Eanam Wharf, Blackburn, BB1 5BL - Tel: 01772 735 300 Fax: 01772 735 999

LABORATORY SAMPLE DESCRIPTION SHEET

Exploratory Hole No.	Sample Depth	ID	Description	Laboratory Tests/Remarks
S3-TPA23	1.00	B3	MADE GROUND (Grey slightly clayey very sandy gravel including slag and metal fragments).	MC PSD ORG BRE
S3-TPA23	1.70	B6	Brown with grey veining slightly sandy CLAY of intermediate plasticity.	MC PI
S3-TPA24	1.70	B8	MADE GROUND (Brown slightly clayey very sandy gravel including slag).	MC PSD ORG BRE
S3-TPA25	1.20	B3	MADE GROUND (Grey slightly clayey sandy gravel with a medium cobble content. Gravel includes slag, tarmac and brick fragments).	MC PSD ORG BRE
S3-TPA26	2.20	B9	MADE GROUND (Brown black clayey very sandy gravel with a medium cobble content. Gravel includes concrete, glass and brick fragments).	MC PSD ORG BRE
S3-TPA26	3.50	B12	Brown silty sandy CLAY of high plasticity.	MC PI
S3-TPA27	0.70	LB3	MADE GROUND (Brown cobbles with some brown sandy gravel).	MC PSD ORG BRE
S3-TPA27	1.50	B6	Brown slightly sandy CLAY of intermediate plasticity.	MC PI
S3-TPA28	0.30	B3	MADE GROUND (Brown slightly clayey sandy gravel including grass and brick fragments).	ORG BRE
S3-TPA28	4.00	B12	MADE GROUND (Brown slightly sandy slightly gravelly clay. Gravel includes brick fragments).	MC PSD SED
S3-TPA29	2.20	B6	Brown with grey veining slightly sandy slightly gravelly CLAY of intermediate plasticity.	MC PI
S3-TPA30	1.20	B5	MADE GROUND (Brown clayey very sandy gravel with occasional clay pockets).	MC PSD PD ORG LOI BRE CP4
S3-TPA30	2.20	B8	Brown with orange mottling slightly sandy CLAY of high plasticity.	MC PI
S3-TPA31	1.00	B6	MADE GROUND (Grey clayey very sandy gravel including slag, ash, clinker, glass and brick fragments).	MC PSD ORG BRE
S3-TPA31	2.50	B9	Brown slightly sandy CLAY of high plasticity.	MC PI pH SO4
S3-TPA32	1.50	J6	Fissured brown sandy CLAY of intermediate plasticity.	MC PI
S3-TPA33	0.70	B3	MADE GROUND (Black brown clayey sandy gravel with a medium cobble content. Gravel includes slag and concrete).	MC PSD ORG BRE
S3-TPA33	1.50	B6	Brown with grey mottling slightly sandy CLAY of high plasticity.	MC PI
S3-TPA34	1.20	B3	MADE GROUND (Brown clayey very sandy gravel with a medium cobble content. Gravel includes slag, metal, glass and brick fragments).	MC PSD ORG LOI BRE
S3-TPA34	2.00	B6	Brown with grey mottling slightly sandy CLAY of intermediate plasticity.	MC PI
S3-TPA35	0.60	B3	MADE GROUND (Grey sand and gravel including ash, slag and metal fragments).	ORG BRE

Contract Title :-
The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract
3

Client :-
South Tees Site Company Ltd



Signed :- *msaw*
Date of issue :-
07/03/2018

Name :- *M. SELKIRK*
Certificate No :-
SD/4155/4

Page 4 of 10
AEG Contract No. :-
4155



ALLIED EXPLORATION & GEOTECHNICS LIMITED





Head Office: Unit 25 Stella Gill Industrial Estate, Pelton Fell, Chester-le-Street, Co. Durham, DH2 2RG - Tel: 0191 387 4700 Fax: 0191 387 4710
Regional Office: Unit 20, Business Development Centre, Eanam Wharf, Blackburn, BB1 5BL - Tel: 01772 735 300 Fax: 01772 735 999

LABORATORY SAMPLE DESCRIPTION SHEET

Exploratory Hole No.	Sample Depth	ID	Description	Laboratory Tests/Remarks
S3-TPA35	1.50	B6	Brown slightly silty CLAY of intermediate plasticity.	MC PI
S3-TPA36	0.60	B3	MADE GROUND (Brown clayey sandy gravel with a medium cobble content. Gravel includes concrete and brick fragments).	MC PSD PD ORG BRE US for CP4
S3-TPA36	2.00	B7	Brown with grey veining slightly sandy CLAY of intermediate plasticity.	MC PI
S3-TPA37	0.50	LB1	MADE GROUND (Brown gravel with a high cobble content).	MC PSD ORG BRE
S3-TPA38	1.50	B6	Brown with grey veining slightly sandy CLAY of intermediate plasticity.	MC PI
S3-TPA39	0.90	B6	Brown silty slightly sandy slightly gravelly CLAY.	MC PSD PED PD ORG BRE CP2
S3-TPA39	2.00	B8	Brown with grey and orange mottling CLAY of intermediate plasticity.	MC PI
S3-TPA40	0.70	B4	MADE GROUND (Grey very sandy gravel with occasional clay pockets. Gravel includes slag).	MC PSD ORG BRE
S3-TPA40	1.50	B7	Brown slightly sandy CLAY of intermediate plasticity.	MC PI
S3-TPA41	0.50	LB1	MADE GROUND (Brown slightly sandy gravel and cobbles including slag).	MC PSD ORG LOI BRE US for PD and CP4
S3-TPA42	1.00	B3	MADE GROUND (Grey sandy gravel including slag, clinker and brick fragments).	MC PSD ORG BRE US for CP4
S3-TPB01	1.80	B7	MADE GROUND (Grey brown clayey very sandy gravel including slag, metal, concrete and brick fragments).	MC PSD PD ORG BRE US for CP4
S3-TPB01	2.60	B10	Brown with grey veining slightly sandy CLAY of high plasticity.	MC PI pH SO4
S3-TPB04	0.80	B5	MADE GROUND (Brown black clayey sandy gravel including concrete and brick fragments).	MC PSD PD BRE US for CP4
S3-TPB05	2.50	B7	MADE GROUND (Grey clayey very sandy gravel including slag, clinker and brick fragments).	MC PSD PD BRE US for CP4
S3-TPB06	0.70	B3	MADE GROUND (Brown clayey very sandy gravel).	MC PSD PD ORG BRE US for CP4
S3-TPB06	1.70	B7	Brown sandy CLAY of intermediate plasticity.	MC PI
S3-TPB07	1.50	LB6	MADE GROUND (Brown cobbles with much brown clayey sandy gravel including brick fragments).	MC PSD BRE US for CP4
S3-TPB08	1.00	B3	MADE GROUND (Brown sandy gravel including slag, wood, concrete and brick fragments).	BRE
S3-TPB10	2.50	B9	MADE GROUND (Brown clayey very gravelly sand with a high cobble content. Gravel includes slag and brick fragments).	PSD SED LOI BRE
S3-TPB12	0.90	B7	Brown with grey veining slightly sandy slightly gravelly CLAY of intermediate plasticity.	MC PI

Contract Title :-
The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract
3

Client :-
South Tees Site Company Ltd

	Signed : 	Name :- 	Page 5 of 10	
	Date of issue :- 07/03/2018	Certificate No :- SD/4155/5	AEG Contract No. :- 4155	

ALLIED EXPLORATION & GEOTECHNICS LIMITED

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LABORATORY SAMPLE DESCRIPTION SHEET

Exploratory Hole No.	Sample Depth	ID	Description	Laboratory Tests/Remarks
S3-TPB13	0.70	B5	MADE GROUND (Grey slightly clayey sandy gravel including slag).	LOI BRE
S3-TPB13	2.80	B15	Grey with brown and orange mottling CLAY of high to very high plasticity.	MC PI
S3-TPB14	0.80	B6	MADE GROUND (Brown sandy gravel with occasional clay pockets. Gravel includes slag).	MC PSD ORG BRE
S3-TPB14	2.20	B9	Brown with grey veining CLAY of intermediate plasticity.	MC PI pH SO4
S3-TPB15	2.00	B9	MADE GROUND (Brown slightly sandy slightly gravelly clay).	MC PSD SED PD ORG BRE CP2
S3-TPB16	2.00	B9	MADE GROUND (Dark brown slightly sandy gravelly clay. Gravel includes slag and brick fragments).	MC PSD PD ORG BRE CP4
S3-TPB17	0.60	B5	MADE GROUND (Grey sandy gravel including slag).	BRE
S3-TPB18	0.50	J2	MADE GROUND (Grey slightly sandy gravel including slag).	BRE
S3-TPB18	2.00	J9	Brown with grey mottling slightly sandy CLAY of high plasticity.	MC PI
S3-TPB19	1.00	LB4	MADE GROUND (Brown slightly clayey sandy gravel with a high cobble content).	MC PSD ORG BRE
S3-TPB20	2.00	B7	MADE GROUND (Brown silty slightly sandy slightly gravelly clay of intermediate plasticity. Gravel includes brick fragments).	MC PI PSD SED PD ORG BRE CP2
S3-TPB20	3.00	B10	Brown with grey mottling slightly sandy CLAY of high plasticity.	MC PI
S3-TPB21	1.10	B6	MADE GROUND (Brown clayey very sandy gravel including slag).	MC PSD BRE US for CP4
S3-TPB21	2.00	J10	Grey with brown mottling slightly sandy slightly gravelly CLAY of intermediate plasticity.	MC PI
S3-TPB22	1.00	B3	MADE GROUND (Brown grey slightly clayey sandy gravel with a medium cobble content. Gravel includes slag and clinker).	PSD BRE
S3-TPB22	2.20	B10	Brown with grey mottling slightly sandy CLAY of high plasticity.	MC PI
S3-TPB23	1.00	B4	MADE GROUND (Brown slightly clayey very sandy gravel with a high cobble content. Gravel includes brick fragments).	MC PSD ORG BRE
S3-TPB23	2.00	B7	Brown slightly sandy slightly gravelly CLAY.	MC PSD SED
S3-TPB24	2.00	B7	MADE GROUND (Brown silty slightly sandy slightly gravelly clay. Gravel includes brick fragments).	MC PSD SED ORG BRE
S3-TPB24	3.30	B10	Brown with grey and orange mottling CLAY of high plasticity.	MC PI
S3-TPB25	1.00	B4	MADE GROUND (Brown with grey mottling slightly sandy slightly gravelly clay with a high cobble content. Gravel includes wood, concrete and slag).	MC PSD SED US for CP2

Contract Title :-
The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract
3

Client :-
South Tees Site Company Ltd



Signed :- *mserle*

Name :-

M. SELKIRK

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Date of issue :-
07/03/2018

Certificate No :-
SD/4155/6

AEG Contract No. :-
4155



ALLIED EXPLORATION & GEOTECHNICS LIMITED

Head Office: Unit 25 Stella Gill Industrial Estate, Pelton Fell, Chester-le-Street, Co. Durham, DH2 2RG - Tel: 0191 387 4700 Fax: 0191 387 4710
Regional Office: Unit 20, Business Development Centre, Eanam Wharf, Blackburn, BB1 5BL - Tel: 01772 735 300 Fax: 01772 735 999

LABORATORY SAMPLE DESCRIPTION SHEET

Exploratory Hole No.	Sample Depth	ID	Description	Laboratory Tests/Remarks
S3-TPB26	1.00	LB3	MADE GROUND (Brown black sandy gravel including slag, concrete and brick fragments).	MC PSD ORG BRE
S3-TPB26	1.70	B6	Black brown clayey slightly sandy slightly gravelly SILT of high plasticity.	MC PI pH SO4 ORG LOI
S3-TPB28	1.00	B4	MADE GROUND (Grey gravelly sand with a low cobble content. Gravel includes slag).	BRE
S3-TPB29	1.00	LB3	MADE GROUND (Grey slightly clayey sandy gravel with a medium cobble content. Gravel includes slag, ash and brick fragments).	MC PSD ORG LOI BRE
S3-TPB29	1.90	B8	Brown with grey veining slightly sandy CLAY of high plasticity.	MC PI
S3-TPB30	1.00	B3	MADE GROUND (Black slightly clayey very sandy gravel including plastic, concrete and brick fragments).	MC PSD ORG BRE
S3-TPB31	1.00	B3	MADE GROUND (Grey sandy gravel with a high cobble content. Gravel includes slag, ash and clinker).	MC PSD ORG LOI BRE
S3-TPB32	0.50	B2	MADE GROUND (Brown slightly clayey sandy gravel with a medium cobble content. Gravel includes slag).	MC PSD ORG BRE
S3-TPB33	2.00	B7	MADE GROUND (Brown slightly sandy slightly gravelly clay. Gravel includes brick fragments).	MC PSD SED ORG BRE
S3-TPB34	1.00	LB4	MADE GROUND (Brown clayey sandy gravel including metal, slag, glass and brick fragments).	MC PSD ORG BRE
S3-TPB34	2.00	B7	Brown with grey and orange mottling CLAY of high plasticity.	MC PI
S3-TPB35	1.00	LB3	MADE GROUND (Grey slightly clayey sandy gravel with a high cobble content. Gravel includes ash, slag and clinker).	MC PSD ORG BRE
S3-TPB35	1.50	B6	Brown with orange mottling and grey veining slightly sandy CLAY of high plasticity.	MC PI
S3-TPB36	2.00	B7	MADE GROUND (Black clayey sandy gravel with a medium cobble content. Gravel includes concrete. (Sample has a hydrocarbon odour)).	MC PSD ORG BRE
S3-TPB37	2.00	B6	MADE GROUND (Brown slightly sandy slightly gravelly clay. Gravel includes brick fragments).	MC PSD SED ORG BRE
S3-TPB37	2.70	B9	Brown with grey veining slightly sandy CLAY of high to very high plasticity.	MC PI pH SO4
S3-TPB38	1.00	B4	MADE GROUND (Brown sandy gravel with a medium cobble content. Gravel includes ash, slag and brick fragments).	MC PSD ORG LOI BRE
S3-TPB41	1.00	LB3	MADE GROUND (Grey clayey very sandy gravel with a medium cobble content. Gravel includes slag, clinker and concrete).	MC PSD ORG BRE
S3-TPB41	1.50	B6	Brown with grey and orange mottling CLAY of high plasticity.	MC PI
S3-TPB42	2.00	B6	MADE GROUND (Grey slightly clayey sandy gravel with a medium cobble content. Gravel includes slag, concrete and tarmacadam).	MC PSD ORG LOI BRE
S3-TPB43	2.00	LB6	MADE GROUND (Brown slightly clayey sandy gravel with a high cobble content. Gravel includes slag).	MC PSD PD ORG BRE US for CP4

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Client :-

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LABORATORY SAMPLE DESCRIPTION SHEET

Exploratory Hole No.	Sample Depth	ID	Description	Laboratory Tests/Remarks
S3-TPB43	3.50	B9	Brown with grey mottling CLAY of high plasticity.	MC PI
S3-TPB44	1.00	B3	MADE GROUND (Brown sandy gravel with a medium cobble content. Gravel includes slag, concrete and brick fragments).	MC PSD ORG LOI BRE
S3-TPB45	1.00	B3	MADE GROUND (Grey clayey sandy gravel with a high cobble content. Gravel includes slag, plastic bag and brick fragments).	MC PSD ORG BRE
S3-TPB46	0.40	B4	MADE GROUND (Dark grey sandy gravel including slag).	ORG BRE
S3-TPB47	1.00	LB3	MADE GROUND (Grey slightly clayey sandy gravel and cobbles including slag and ash).	MC PSD ORG BRE
S3-TPB47	2.50	B8	Brown with grey and orange mottling slightly sandy CLAY of high plasticity.	MC PI
S3-TPB48	2.00	B6	MADE GROUND (Brown slightly clayey very sandy gravel and cobbles including slag, clinker and brick fragments).	MC PSD ORG BRE
S3-TPB48	2.50	B9	Brown with orange veining slightly sandy CLAY of high plasticity.	MC PI
S3-TPB50	1.00	B3	MADE GROUND (Dark grey clayey sandy gravel with a medium cobble content. Gravel includes slag, clinker and concrete).	MC PSD ORG LOI BRE
S3-TPB51	2.00	B6	MADE GROUND (Brown grey slightly clayey sandy gravel with a high cobble content. Gravel includes slag and clinker).	MC PSD ORG BRE
S3-TPB51	2.50	B9	Brown with grey mottling slightly sandy CLAY of high plasticity.	MC PI pH SO4
S3-TPB52	1.00	LB3	MADE GROUND (Dark grey slightly clayey very sandy gravel with a high cobble content. Gravel includes slag).	MC PSD
S3-TPB52	2.00	B8	Brown slightly sandy CLAY of intermediate plasticity.	MC PI pH SO4
S3-TPB53	1.00	B3	MADE GROUND (Brown cobbles with much brown clayey sandy gravel including slag).	MC PSD ORG BRE
S3-TPB53	1.10	B6	Grey brown slightly sandy CLAY of intermediate plasticity.	MC PI
S3-TPB54	1.00	B4	MADE GROUND (Brown grey slightly clayey sandy gravel with a high cobble content. Gravel includes slag).	MC PSD ORG BRE
S3-TPB54	2.20	B9	Brown with grey mottling CLAY of high plasticity.	MC PI
S3-TPB55	1.00	LB4	MADE GROUND (Grey cobbles with much grey sandy gravel including slag and clinker).	MC PSD ORG BRE
S3-TPB55	2.60	B10	Brown CLAY of high plasticity.	MC PI
S3-TPB56	1.00	B3	MADE GROUND (Brown slightly clayey sandy gravel with a high cobble content. Gravel includes slag, concrete and brick fragments).	MC PSD ORG BRE
S3-TPB56	2.40	B9	Grey slightly sandy CLAY of high plasticity.	MC PI

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LABORATORY SAMPLE DESCRIPTION SHEET

Exploratory Hole No.	Sample Depth	ID	Description	Laboratory Tests/Remarks
S3-TPB57	2.00	B6	MADE GROUND (Brown slightly clayey sandy gravel with a high cobble content. Gravel includes slag, plastic, concrete and brick fragments).	MC PSD ORG LOI BRE
S3-TPB57	2.40	B9	Brown clayey slightly sandy SILT of very high plasticity.	MC PI pH SO4
S3-TPB58	1.00	LB3	MADE GROUND (Brown slightly clayey sandy gravel with a high cobble content. Gravel includes slag).	MC PSD ORG BRE
S3-TPB58	2.40	B9	Brown slightly sandy CLAY of intermediate plasticity.	MC PI
S3-TPB59	2.00	B7	MADE GROUND (Dark grey clayey sandy gravel with a high cobble content. Gravel includes slag, clinker and brick fragments).	MC PSD ORG BRE
S3-TPB60	1.00	B4	MADE GROUND (Brown clayey sandy gravel with a high cobble content. Gravel includes slag, clinker and brick fragments).	MC PSD ORG BRE
S3-TPB60	1.50	B7	Grey with brown mottling CLAY of high plasticity.	MC PI
S3-TPB61	1.00	LB3	MADE GROUND (Grey slightly clayey sandy gravel with a high cobble content. Gravel includes slag and concrete).	MC PSD ORG BRE
S3-TPB61	2.00	B8	Brown with grey and orange veining CLAY of high plasticity.	MC PI pH SO4 ORG
S3-TPB62	1.00	LB3	MADE GROUND (Brown cobbles with much brown sandy gravel including slag).	MC PSD ORG BRE
S3-TPB63	2.40	B9	Brown with grey mottling slightly sandy CLAY of high plasticity with occasional rootlets.	MC PI
S3-TPB64	2.00	B6	MADE GROUND (Brown slightly clayey very sandy gravel with a high cobble content. Gravel includes slag).	MC PSD ORG BRE
S3-TPB64	2.50	B9	Friable brown slightly sandy CLAY of high plasticity.	MC PI
S3-TPB65	1.00	B4	MADE GROUND (Grey sandy gravel with a high cobble content. Gravel includes slag and clinker).	MC PSD ORG LOI BRE
S3-TPB65	2.00	B7	MADE GROUND (Grey slightly clayey sandy gravel with a low cobble content. Gravel includes clinker and slag).	MC pH SO4 US for PI
S3-TPB66	1.00	LB4	MADE GROUND (Brown slightly clayey very sandy gravel including slag).	MC PSD ORG BRE
S3-TPB67	2.00	B7	MADE GROUND (Grey sandy gravel with a high cobble content. Gravel includes slag and clinker).	MC PSD ORG BRE
S3-TPB67	2.80	J9	Brown with grey veining slightly sandy CLAY of high plasticity.	MC PI
S3-TPB68	2.00	B9	Brown with grey mottling slightly sandy CLAY of high plasticity.	MC PI
S3-TPB69	1.00	B4	MADE GROUND (Grey brown slightly clayey sandy gravel with a high cobble content. Gravel includes slag and clinker).	MC PSD ORG BRE
S3-TPB69	1.90	B8	Brown with grey mottling slightly sandy CLAY of high plasticity.	MC PI

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LABORATORY SAMPLE DESCRIPTION SHEET

Exploratory Hole No.	Sample Depth ID	Description	Laboratory Tests/Remarks
S3-TPB70	2.00 B7	MADE GROUND (Grey slightly clayey sandy gravel with a medium cobble content. Gravel includes slag).	MC PSD ORG BRE
S3-TPB70	2.30 B10	Grey with brown mottling CLAY of high plasticity.	MC PI pH SO4
S3-TPB71	1.00 B4	MADE GROUND (Brown grey slightly clayey sandy gravel with a high cobble content. Gravel includes slag, clinker and brick fragments).	MC PSD ORG BRE
S3-TPB71	2.20 B7	Brown with grey veining slightly sandy CLAY of high plasticity.	MC PI
S3-TPB72	1.00 B4	MADE GROUND (Black brown slightly clayey very sandy gravel including slag, concrete and ceramic fragments).	MC PSD ORG BRE
S3-TPB72	2.50 B10	Brown slightly sandy CLAY/SILT of high plasticity.	MC PI
S3-TPB73	1.00 LB4	MADE GROUND (Grey sandy gravel with a high cobble content. Gravel includes slag, concrete and brick fragments).	MC PSD ORG BRE
S3-TPB73	2.50 B10	Brown with grey veining slightly sandy CLAY of intermediate plasticity.	MC PI
S3-TPB74	1.00 B3	MADE GROUND (Grey sandy gravel and cobbles including slag).	MC PSD ORG BRE
S3-TPB74	1.50 B6	Brown with grey veining slightly sandy CLAY of intermediate plasticity.	MC PI pH SO3
S3-TPB75	1.00 LB3	MADE GROUND (Brown grey sandy gravel including slag with occasional rootlets).	MC PSD ORG BRE
S3-TPB75	1.50 B6	Brown with grey veining slightly sandy CLAY of intermediate plasticity.	MC PI

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Moisture Content/Plasticity Index and Moisture Content



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MOISTURE CONTENT CERTIFICATE

BS 1377 : Part 2 : Clause 3.2 (BS EN ISO 17892-1:2014)

Exploratory Hole No.	Sample Depth (m)	Sample ID	Moisture Content (%)	Date Tested	Remarks
S3-TPA01	2.70	B11	24.7	28/11/2017	
S3-TPA02	1.80	B6	11.4	12/12/2017	
S3-TPA03	2.20	B6	18.0	10/01/2018	
S3-TPA04	0.70	B3	9.9	28/11/2017	
S3-TPA05	2.20	B6	8.4	29/11/2017	
S3-TPA06	0.70	B3	11.0	30/11/2017	
S3-TPA07	1.70	B7	16.2	29/11/2017	
S3-TPA11	1.20	B4	13.5	30/11/2017	
S3-TPA12	1.70	B6	13.1	30/11/2017	
S3-TPA13	2.30	B7	13.7	23/01/2018	
S3-TPA14	0.50	B3	20.4	10/11/2017	
S3-TPA15	1.30	B4	16.6	28/11/2017	
S3-TPA16	1.00	B5	18.2	30/11/2017	
S3-TPA20	1.50	LB5	12.8	29/11/2017	
S3-TPA21	0.70	B3	26.4	13/11/2017	
S3-TPA22	2.20	B7	17.2	23/01/2018	
S3-TPA23	1.00	B3	11.4	13/11/2017	
S3-TPA24	1.70	B8	16.6	13/11/2017	
S3-TPA26	2.20	B9	21.1	27/11/2017	
S3-TPA27	0.70	LB3	9.4	13/11/2017	

For description of sample please refer to the Laboratory Sample Description Sheet

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M. SELKIRK

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MOISTURE CONTENT CERTIFICATE

BS 1377 : Part 2 : Clause 3.2 (BS EN ISO 17892-1:2014)

Exploratory Hole No.	Sample Depth (m)	Sample ID	Moisture Content (%)	Date Tested	Remarks
S3-TPA28	4.00	B12	32.8	27/11/2017	
S3-TPA30	1.20	B5	20.0	13/11/2017	
S3-TPA31	1.00	B6	22.0	09/01/2018	
S3-TPA33	0.70	B3	17.3	09/11/2017	
S3-TPA34	1.20	B3	11.6	13/11/2017	
S3-TPA36	0.60	B3	15.4	13/11/2017	
S3-TPA37	0.50	LB1	6.2	10/11/2017	
S3-TPA39	0.90	B6	25.2	13/01/2017	
S3-TPA40	0.70	B4	14.9	10/11/2017	
S3-TPA41	0.50	LB1	8.2	13/11/2017	
S3-TPA42	1.00	B3	6.1	29/11/2017	
S3-TPB01	1.80	B7	11.6	27/11/2017	
S3-TPB04	0.80	B5	15.6	29/11/2017	
S3-TPB05	2.50	B7	15.0	28/11/2017	
S3-TPB06	0.70	B3	8.8	29/11/2017	
S3-TPB07	1.50	LB6	11.9	28/11/2017	
S3-TPB14	0.80	B6	8.6	30/11/2017	
S3-TPB15	2.00	B9	27.9	29/11/2017	
S3-TPB16	2.00	B9	26.0	23/01/2018	
S3-TPB19	1.00	LB4	9.4	13/11/2017	

For description of sample please refer to the Laboratory Sample Description Sheet

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M. Selkirk

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BS 1377 : Part 2 : Clause 3.2 (BS EN ISO 17892-1:2014)

Exploratory Hole No.	Sample Depth (m)	Sample ID	Moisture Content (%)	Date Tested	Remarks
S3-TPB21	1.10	B6	16.7	29/11/2017	
S3-TPB22	1.00	B3	15.5	30/11/2017	
S3-TPB23	1.00	B4	14.1	10/11/2017	
S3-TPB23	2.00	B7	30.7	09/11/2017	
S3-TPB24	2.00	B7	25.1	10/11/2017	
S3-TPB25	1.00	B4	18.0	29/11/2017	
S3-TPB26	1.00	LB3	14.5	30/11/2017	
S3-TPB29	1.00	LB3	13.7	29/11/2017	
S3-TPB30	1.00	B3	12.1	30/11/2017	
S3-TPB31	1.00	B3	4.2	29/11/2017	
S3-TPB32	0.50	B2	15.7	10/11/2017	
S3-TPB33	2.00	B7	27.3	10/11/2017	
S3-TPB34	1.00	LB4	14.5	12/12/2017	
S3-TPB35	1.00	LB3	12.8	29/11/2017	
S3-TPB36	2.00	B7	17.2	29/11/2017	
S3-TPB37	2.00	B6	22.4	29/11/2017	
S3-TPB38	1.00	B4	11.5	12/12/2017	
S3-TPB41	1.00	LB3	14.5	30/11/2017	
S3-TPB42	2.00	B6	20.3	29/11/2017	
S3-TPB43	2.00	LB6	7.6	13/11/2017	

For description of sample please refer to the Laboratory Sample Description Sheet

Contract Title :-
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Exploratory Hole No.	Sample Depth (m)	Sample ID	Moisture Content (%)	Date Tested	Remarks
S3-TPB44	1.00	B3	9.8	28/11/2017	
S3-TPB45	1.00	B3	6.1	29/11/2017	
S3-TPB47	1.00	LB3	15.9	29/11/2017	
S3-TPB48	2.00	B6	13.3	28/11/2017	
S3-TPB50	1.00	B3	8.8	30/11/2017	
S3-TPB51	2.00	B6	8.6	30/11/2017	
S3-TPB52	1.00	LB3	10.1	30/11/2017	
S3-TPB53	1.00	B3	7.6	27/11/2017	
S3-TPB54	1.00	B4	17.5	28/11/2017	
S3-TPB55	1.00	LB4	7.7	09/01/2018	
S3-TPB56	1.00	B3	11.9	28/11/2017	
S3-TPB57	2.00	B6	12.3	28/11/2017	
S3-TPB58	1.00	LB3	10.2	28/11/2017	
S3-TPB59	2.00	B7	17.0	28/11/2017	
S3-TPB60	1.00	B4	14.7	28/11/2017	
S3-TPB61	1.00	LB3	11.9	29/11/2017	
S3-TPB62	1.00	LB3	14.2	28/11/2017	
S3-TPB64	2.00	B6	15.9	28/11/2017	
S3-TPB65	1.00	B4	17.5	28/11/2017	
S3-TPB65	2.00	B7	11.9	28/11/2017	

For description of sample please refer to the Laboratory Sample Description Sheet

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BS 1377 : Part 2 : Clause 3.2 (BS EN ISO 17892-1:2014)

Exploratory Hole No.	Sample Depth (m)	Sample ID	Moisture Content (%)	Date Tested	Remarks
S3-TPB66	1.00	LB4	11.8	30/11/2017	
S3-TPB67	2.00	B7	14.9	28/11/2017	
S3-TPB69	1.00	B4	9.9	30/11/2017	
S3-TPB70	2.00	B7	19.3	29/11/2017	
S3-TPB71	1.00	B4	9.7	30/11/2017	
S3-TPB72	1.00	B4	11.2	30/11/2017	
S3-TPB73	1.00	LB4	12.5	30/11/2017	
S3-TPB74	1.00	B3	12.7	30/11/2017	
S3-TPB75	1.00	LB3	25.8	30/11/2017	

For description of sample please refer to the Laboratory Sample Description Sheet

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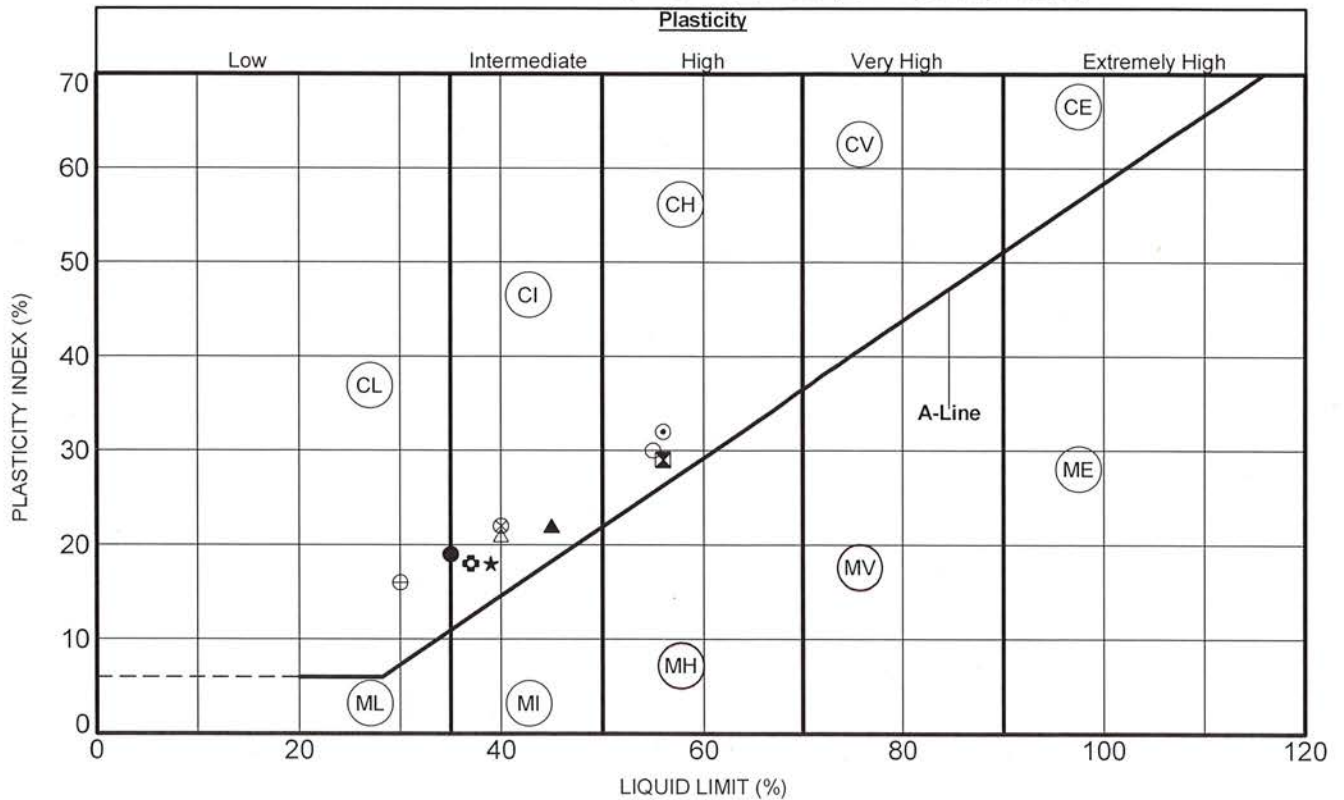


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ATTERBERG LIMITS & NATURAL MOISTURE CONTENT

Test Method :- BS 1377 : Part 2 : Clause 3.2, 4.1 to 4.4 & 5 : 1990 (BS EN ISO 17892-1:2014)



Specimen Identification	LL	PL	PI	I _c	<0.425mm (%)	m/c (%)	Date Tested
● S3-BHA01 5.00 B8	35	16	19	0.82	NAT	19.5	13/12/2017
⊠ S3-BHA02 1.60 B3	56	27	29	0.84	NAT	31.6	13/12/2017
▲ S3-BHA02 2.00 B4	45	23	22	0.91	NAT	24.9	13/12/2017
★ S3-BHA02 3.50 B8	39	21	18	0.76	NAT	25.3	13/12/2017
⊙ S3-BHA02 4.50 J10	56	24	32	0.83	NAT	29.4	12/12/2017
⊕ S3-BHA02 5.50 B11	37	19	18	0.76	53	23.3	13/12/2017 #
○ S3-BHB01 2.80 B3	55	25	30	1.00	NAT	25.1	13/12/2017
△ S3-BHB01 4.00 B9	40	19	21	0.93	NAT	20.5	13/12/2017
⊗ S3-BHB01 6.00 B13	40	18	22	0.82	NAT	21.9	13/12/2017
⊕ S3-BHB01 7.00 B16	30	14	16	0.56	NAT	21.1	13/12/2017

For description of sample please refer to the Laboratory Sample Description Sheet. # = Insufficient for 4 point PI
NAT = Sample prepared in the natural state therefore we are unable to determine % retained on the 0.425mm test sieve.

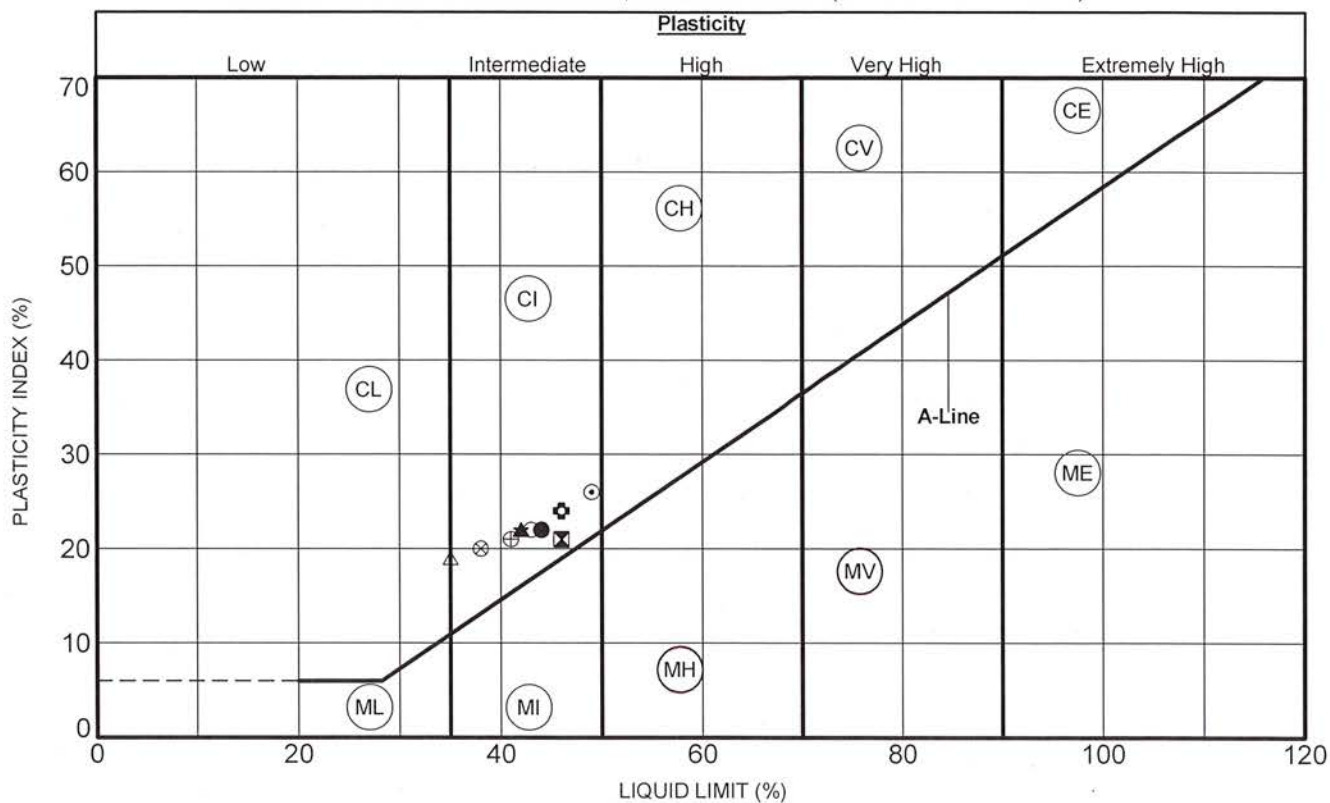
Contract Title :- The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Client :- South Tees Site Company Ltd	
	Signed :- <i>msere</i>	Name :- <i>M. SELKIRK</i>	
	Date of issue :- 07/03/2018	Certificate No :- PI/4155/1	AEG Contract No :- 4155
			

ALLIED EXPLORATION & GEOTECHNICS LIMITED

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ATTERBERG LIMITS & NATURAL MOISTURE CONTENT

Test Method :- BS 1377 : Part 2 : Clause 3.2, 4.1 to 4.4 & 5 : 1990 (BS EN ISO 17892-1:2014)



Specimen Identification	LL	PL	PI	I _c	<0.425mm (%)	m/c (%)	Date Tested
● S3-BHB02 2.50 B5	44	22	22	0.95	NAT	23.0	13/12/2017
⊗ S3-BHB02 3.50 B6	46	25	21	1.33	NAT	18.0	13/12/2017
▲ S3-BHB02 4.50 B8	42	20	22	0.19	NAT	37.9	13/12/2017
★ S3-BHB02 5.50 B10	42	20	22	0.53	NAT	30.4	13/12/2017
⊙ S3-BHB02 6.50 B11	49	23	26	0.59	NAT	33.6	13/12/2017
⊕ S3-BHB03 2.50 B5	46	22	24	0.75	NAT	28.1	13/12/2017
○ S3-BHB03 4.50 B8	43	21	22	0.72	NAT	27.1	13/12/2017
△ S3-BHB03 8.00 B14	35	16	19	0.89	NAT	18.0	13/12/2017
⊗ S3-BHB04 3.00 B5	38	18	20	0.40	NAT	30.1	12/12/2017
⊕ S3-BHB04 4.00 B7	41	20	21	0.66	NAT	27.1	13/12/2017

For description of sample please refer to the Laboratory Sample Description Sheet. # = Insufficient for 4 point PI
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Contract Title :-
The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract

Client :-

South Tees Site Company Ltd

3



Signed :- *msore*

Name :-

M. SELKIRK

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Date of issue :-
07/03/2018

Certificate No :-
PI/4155/2

AEG Contract No. :-
4155

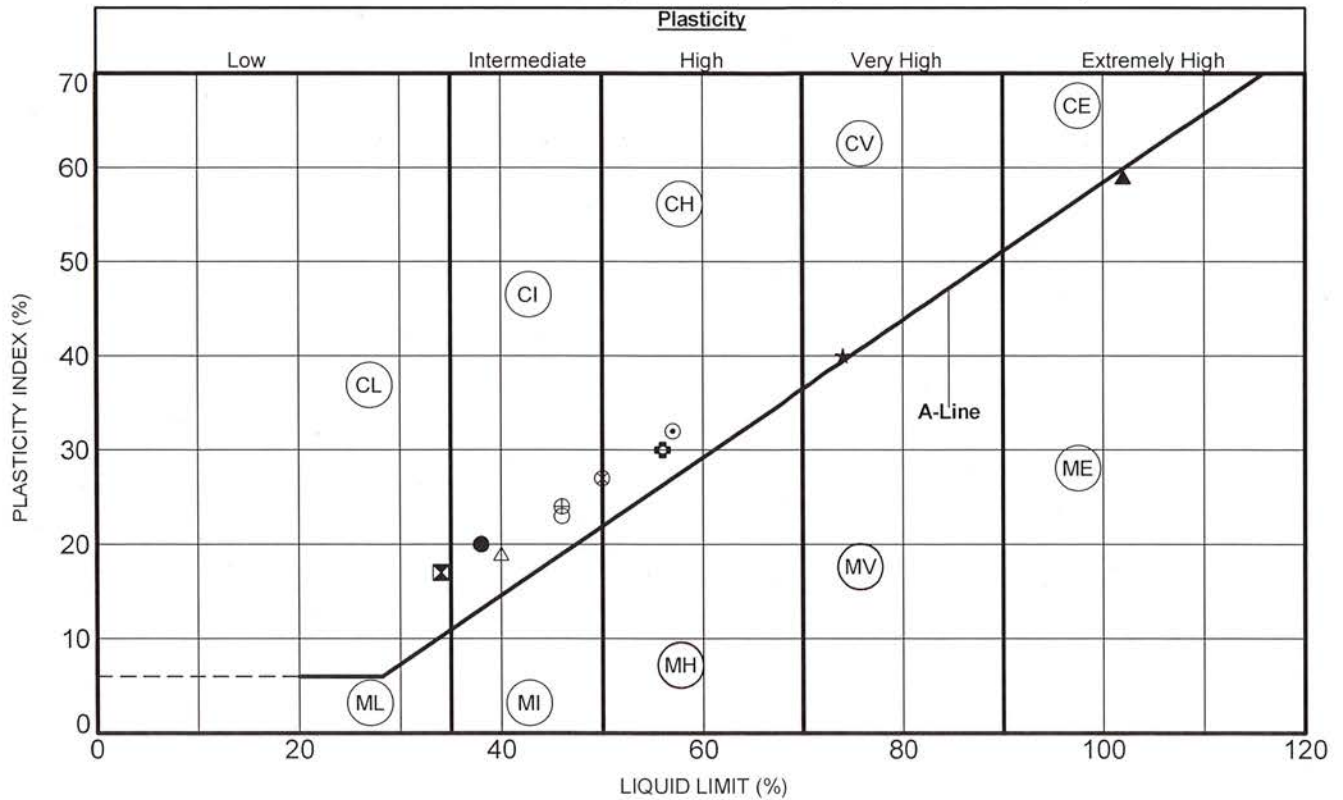


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ATTERBERG LIMITS & NATURAL MOISTURE CONTENT

Test Method :- BS 1377 : Part 2 : Clause 3.2, 4.1 to 4.4 & 5 : 1990 (BS EN ISO 17892-1:2014)



Specimen Identification	LL	PL	PI	I _c	<0.425mm (%)	m/c (%)	Date Tested
● S3-BHB04 6.50 B12	38	18	20	1.00	49	18.1	13/12/2017 #
⊠ S3-BHB04 9.00 B17	34	17	17	0.66	NAT	22.7	13/12/2017
▲ S3-TPA01 3.70 B13	102	43	59	0.90	NAT	49.1	28/11/2017
★ S3-TPA04 2.70 J10	74	34	40	1.20	NAT	25.9	28/11/2017
⊙ S3-TPA09 2.50 J11	57	25	32	0.85	NAT	29.7	12/12/2017
⊕ S3-TPA10 2.50 J11	56	26	30	0.97	NAT	27.0	12/12/2017
○ S3-TPA11 2.90 B10	46	23	23	0.82	NAT	27.1	30/11/2017
△ S3-TPA13 3.20 B10	40	21	19	0.72	NAT	26.3	29/11/2017
⊗ S3-TPA15 2.70 B9	50	23	27	0.87	NAT	26.5	28/11/2017
⊕ S3-TPA17 3.20 B12	46	22	24	0.92	NAT	24.0	28/11/2017

For description of sample please refer to the Laboratory Sample Description Sheet. # = Insufficient for 4 point PI
NAT = Sample prepared in the natural state therefore we are unable to determine % retained on the 0.425mm test sieve.

Contract Title :-
The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract
3

Client :-
South Tees Site Company Ltd



Signed :- *msore*

Name :-

M. SELKIRK

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Date of issue :-
07/03/2018

Certificate No :-
PI/4155/3

AEG Contract No. :-
4155

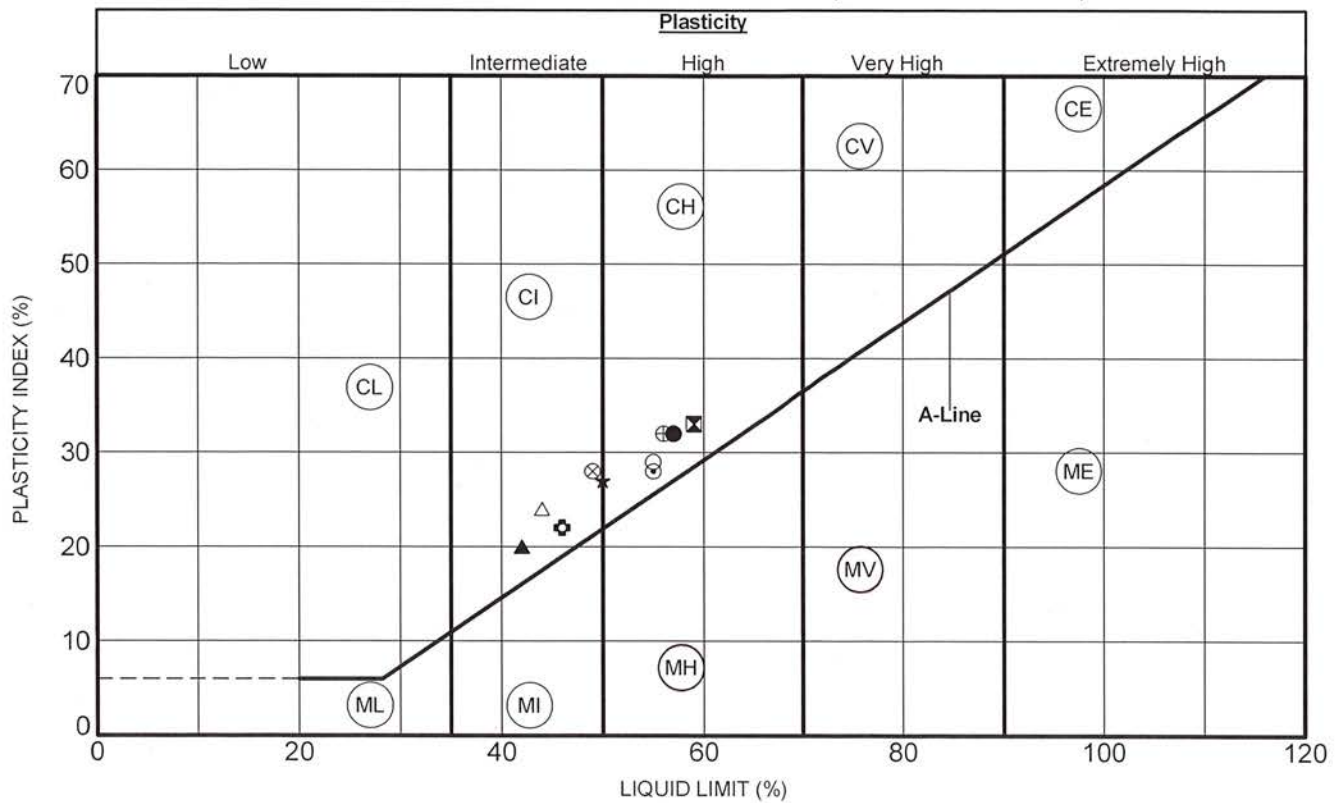


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ATTERBERG LIMITS & NATURAL MOISTURE CONTENT

Test Method :- BS 1377 : Part 2 : Clause 3.2, 4.1 to 4.4 & 5 : 1990 (BS EN ISO 17892-1:2014)



Specimen Identification	LL	PL	PI	I _c	<0.425mm (%)	m/c (%)	Date Tested
● S3-TPA18 3.00 B9	57	25	32	0.96	NAT	26.3	28/11/2017
⊠ S3-TPA19 1.60 B7	59	26	33	1.00	NAT	25.9	10/11/2017
▲ S3-TPA20 2.80 B8	42	22	20	0.85	NAT	25.1	28/11/2017
★ S3-TPA21 1.60 B6	50	23	27	0.88	NAT	26.3	30/11/2017
⊙ S3-TPA22 3.00 B9	55	27	28	0.93	NAT	28.9	27/11/2017
⊕ S3-TPA23 1.70 B6	46	24	22	0.95	NAT	25.1	30/11/2017
○ S3-TPA26 3.50 B12	55	26	29	0.93	NAT	28.0	28/11/2017
△ S3-TPA27 1.50 B6	44	20	24	1.03	NAT	19.2	30/11/2017
⊗ S3-TPA29 2.20 B6	49	21	28	0.92	NAT	23.2	13/12/2017
⊕ S3-TPA30 2.20 B8	56	24	32	0.97	NAT	24.9	30/11/2017

For description of sample please refer to the Laboratory Sample Description Sheet. # = Insufficient for 4 point PI
NAT = Sample prepared in the natural state therefore we are unable to determine % retained on the 0.425mm test sieve.

Contract Title :-
The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract
3

Client :-
South Tees Site Company Ltd



Signed :- *mseno*

Name :- *M. SELKIRK*

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Date of issue :-
07/03/2018

Certificate No :-
PI/4155/4

AEG Contract No :-
4155

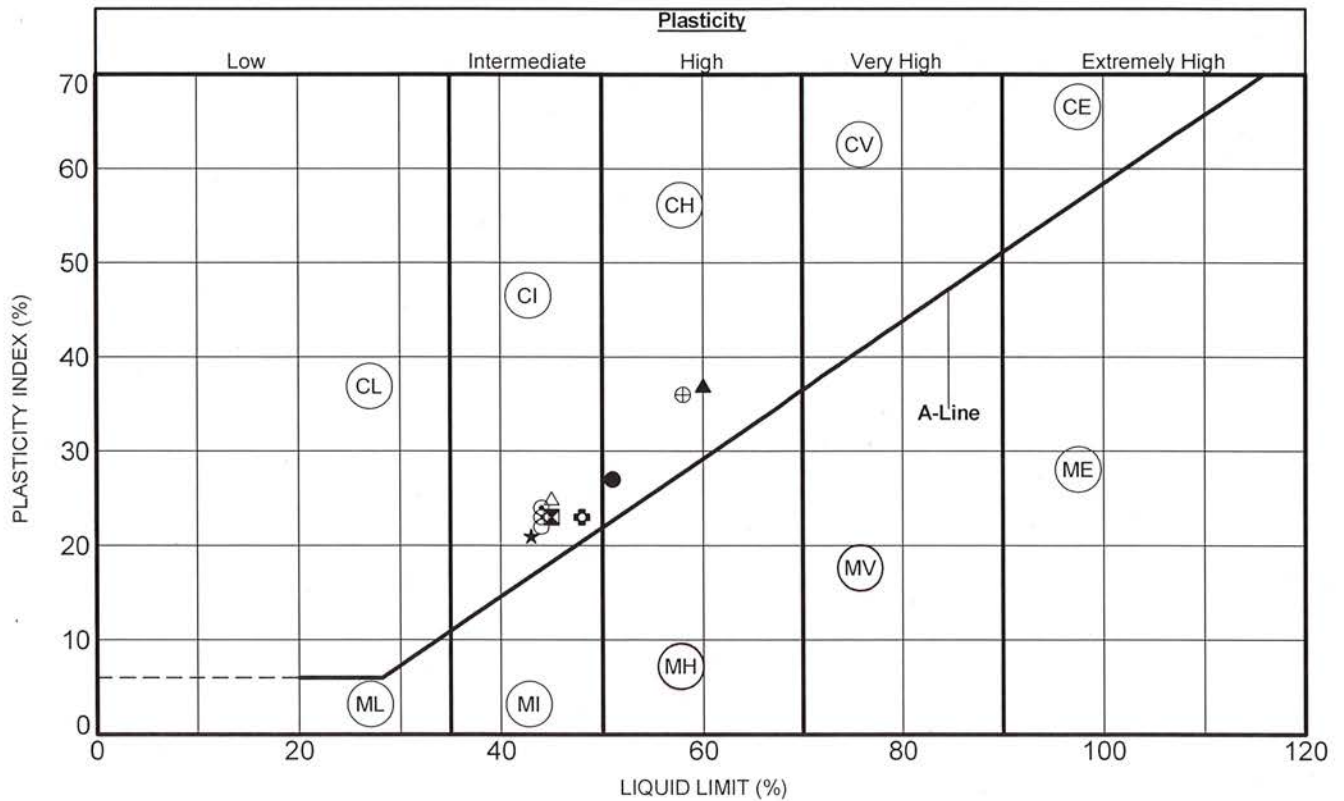


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ATTERBERG LIMITS & NATURAL MOISTURE CONTENT

Test Method :- BS 1377 : Part 2 : Clause 3.2, 4.1 to 4.4 & 5 : 1990 (BS EN ISO 17892-1:2014)



Specimen Identification	LL	PL	PI	I _c	<0.425mm (%)	m/c (%)	Date Tested
● S3-TPA31 2.50 B9	51	24	27	0.93	NAT	25.8	28/11/2017
⊗ S3-TPA32 1.50 J6	45	22	23	0.96	NAT	22.9	12/12/2017
▲ S3-TPA33 1.50 B6	60	23	37	0.89	NAT	27.1	10/11/2017
★ S3-TPA34 2.00 B6	43	22	21	0.86	NAT	24.9	28/11/2017
⊙ S3-TPA35 1.50 B6	44	20	24	0.91	NAT	22.1	10/11/2017
⊕ S3-TPA36 2.00 B7	48	25	23	1.07	NAT	23.3	28/11/2017
○ S3-TPA38 1.50 B6	44	22	22	0.84	NAT	25.6	30/11/2017
△ S3-TPA39 2.00 B8	45	20	25	0.89	NAT	22.8	28/11/2017
⊗ S3-TPA40 1.50 B7	44	21	23	0.91	NAT	23.1	10/11/2017
⊕ S3-TPB01 2.60 B10	58	22	36	0.99	NAT	22.2	28/11/2017

For description of sample please refer to the Laboratory Sample Description Sheet. # = Insufficient for 4 point PI
NAT = Sample prepared in the natural state therefore we are unable to determine % retained on the 0.425mm test sieve.

Contract Title :-
The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract
3

Client :-
South Tees Site Company Ltd



Signed :- *M. Selkirk*

Name :- *M. SELKIRK*

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Date of issue :-
07/03/2018

Certificate No :-
PI/4155/5

AEG Contract No :-
4155

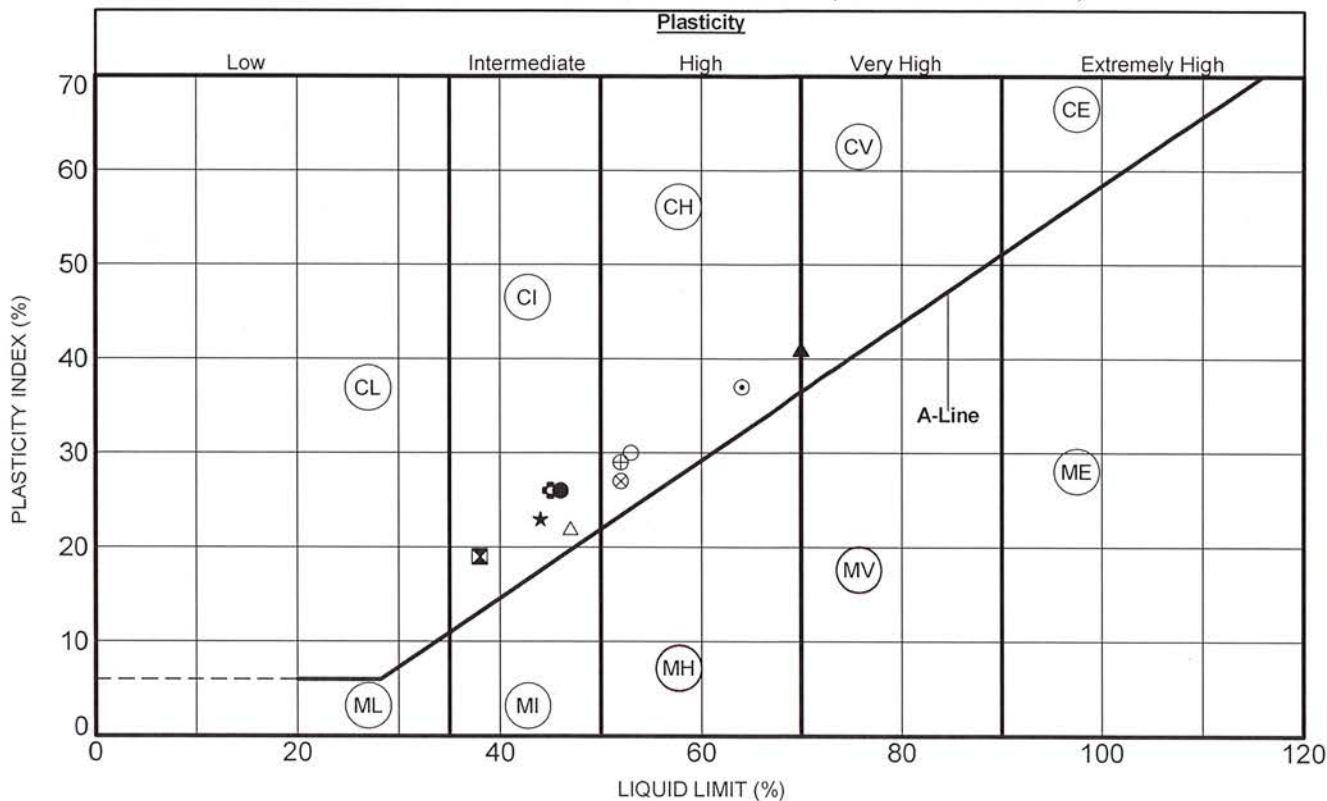


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ATTERBERG LIMITS & NATURAL MOISTURE CONTENT

Test Method :- BS 1377 : Part 2 : Clause 3.2, 4.1 to 4.4 & 5 : 1990 (BS EN ISO 17892-1:2014)



Specimen Identification	LL	PL	PI	I _c	<0.425mm (%)	m/c (%)	Date Tested
● S3-TPB06 1.70 B7	46	20	26	0.92	NAT	22.1	30/11/2017
⊠ S3-TPB12 0.90 B7	38	19	19	0.93	NAT	20.3	28/11/2017
▲ S3-TPB13 2.80 B15	70	29	41	0.88	NAT	33.8	29/11/2017
★ S3-TPB14 2.20 B9	44	21	23	0.92	NAT	22.9	28/11/2017
⊙ S3-TPB18 2.00 J9	64	27	37	0.88	NAT	31.3	01/12/2017
⊕ S3-TPB20 2.00 B7	45	19	26	0.88	NAT	22.2	10/11/2017
○ S3-TPB20 3.00 B10	53	23	30	0.90	NAT	26.1	28/11/2017
△ S3-TPB21 2.00 J10	47	25	22	0.87	NAT	27.9	28/11/2017
⊗ S3-TPB22 2.20 B10	52	25	27	0.97	NAT	25.8	28/11/2017
⊕ S3-TPB24 3.30 B10	52	23	29	0.94	NAT	24.8	28/11/2017

For description of sample please refer to the Laboratory Sample Description Sheet. # = Insufficient for 4 point PI
NAT = Sample prepared in the natural state therefore we are unable to determine % retained on the 0.425mm test sieve.

Contract Title :-
The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract
3

Client :-
South Tees Site Company Ltd



Signed :- *msore*

Name :- *M. SELKIRK*

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Date of issue :-
07/03/2018

Certificate No :-
PI/4155/6

AEG Contract No :-
4155

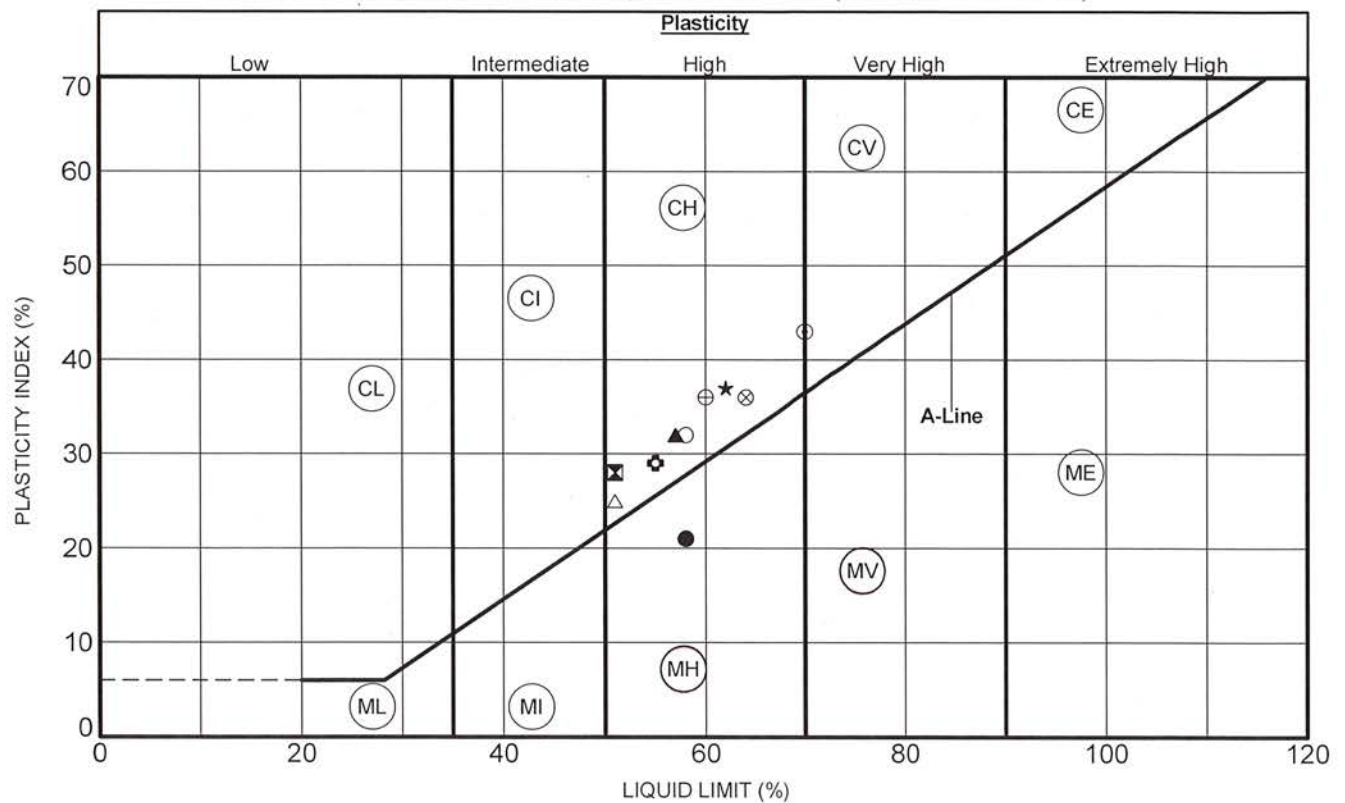


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ATTERBERG LIMITS & NATURAL MOISTURE CONTENT

Test Method :- BS 1377 : Part 2 : Clause 3.2, 4.1 to 4.4 & 5 : 1990 (BS EN ISO 17892-1:2014)



Specimen Identification	LL	PL	PI	I _c	<0.425mm (%)	m/c (%)	Date Tested
● S3-TPB26 1.70 B6	58	37	21	0.53	NAT	46.9	29/11/2017
⊠ S3-TPB29 1.90 B8	51	23	28	0.95	NAT	24.5	28/11/2017
▲ S3-TPB34 2.00 B7	57	25	32	1.02	NAT	24.4	28/11/2017
★ S3-TPB35 1.50 B6	62	25	37	0.89	NAT	29.2	28/11/2017
⊙ S3-TPB37 2.70 B9	70	27	43	0.93	NAT	29.9	29/11/2017
⊗ S3-TPB41 1.50 B6	55	26	29	0.88	NAT	29.6	30/11/2017
○ S3-TPB43 3.50 B9	58	26	32	0.87	NAT	30.2	28/11/2017
△ S3-TPB47 2.50 B8	51	26	25	0.83	NAT	30.3	29/11/2017
⊗ S3-TPB48 2.50 B9	64	28	36	0.92	NAT	30.8	29/11/2017
⊕ S3-TPB51 2.50 B9	60	24	36	0.95	NAT	25.9	28/11/2017

For description of sample please refer to the Laboratory Sample Description Sheet. # = Insufficient for 4 point PI
NAT = Sample prepared in the natural state therefore we are unable to determine % retained on the 0.425mm test sieve.

Contract Title :-
The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract

Client :-
South Tees Site Company Ltd

3



Signed :- *msero*

Name :-

M. SELKIRK

Page 7 of 9

Date of issue :-
07/03/2018

Certificate No :-
PI/4155/7

AEG Contract No :-
4155

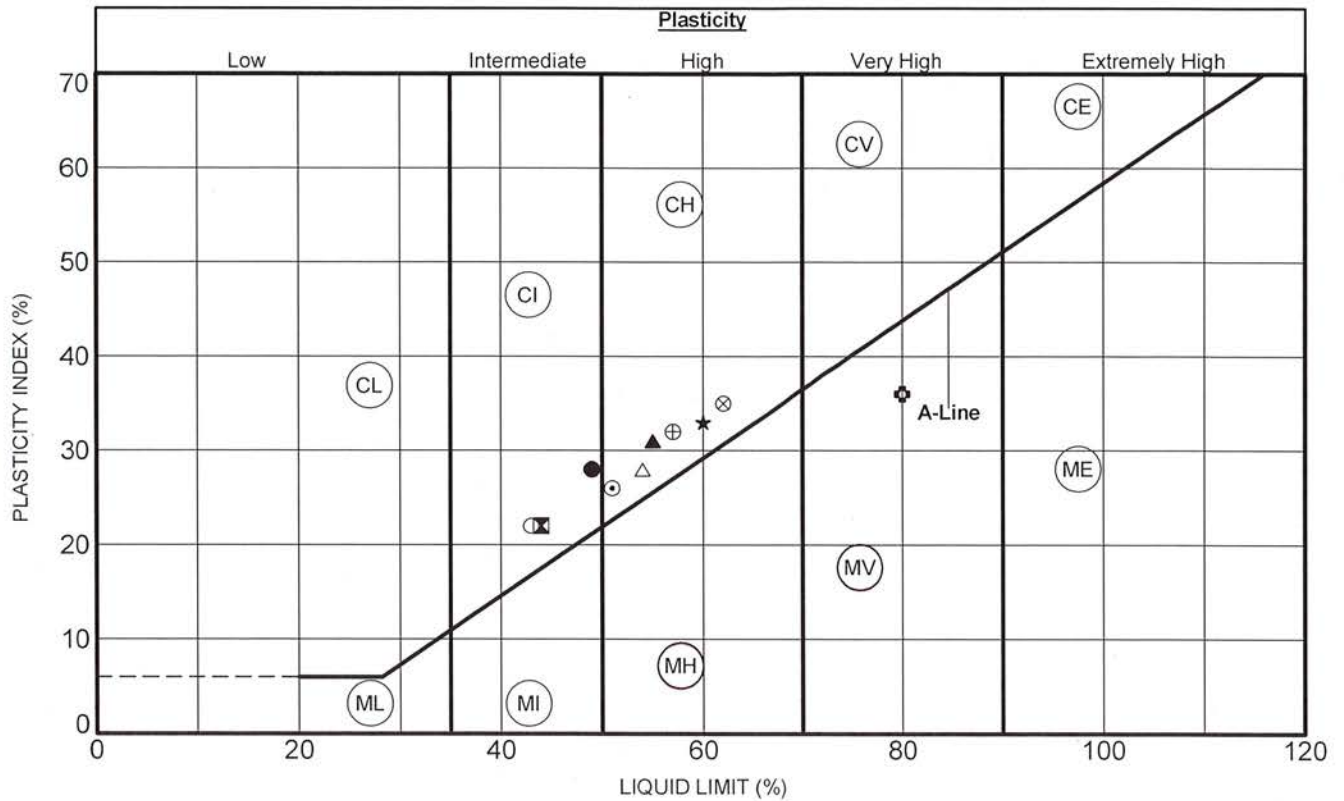


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ATTERBERG LIMITS & NATURAL MOISTURE CONTENT

Test Method :- BS 1377 : Part 2 : Clause 3.2, 4.1 to 4.4 & 5 : 1990 (BS EN ISO 17892-1:2014)



Specimen Identification	LL	PL	PI	I _c	<0.425mm (%)	m/c (%)	Date Tested
● S3-TPB52 2.00 B8	49	21	28	0.86	NAT	24.9	28/11/2017
⊗ S3-TPB53 1.10 B6	44	22	22	0.91	NAT	24.0	27/11/2017
▲ S3-TPB54 2.20 B9	55	24	31	0.85	NAT	28.6	29/11/2017
★ S3-TPB55 2.60 B10	60	27	33	0.99	NAT	27.4	12/12/2017
⊙ S3-TPB56 2.40 B9	51	25	26	0.88	NAT	28.1	30/11/2017
⊕ S3-TPB57 2.40 B9	80	44	36	0.83	NAT	50.3	28/11/2017
○ S3-TPB58 2.40 B9	43	21	22	0.90	NAT	23.1	27/11/2017
△ S3-TPB60 1.50 B7	54	26	28	0.94	NAT	27.7	28/11/2017
⊗ S3-TPB61 2.00 B8	62	27	35	0.92	NAT	29.7	28/11/2017
⊕ S3-TPB63 2.40 B9	57	25	32	0.92	NAT	27.6	28/11/2017

For description of sample please refer to the Laboratory Sample Description Sheet. # = Insufficient for 4 point PI
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Contract Title :-
The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract
3

Client :-
South Tees Site Company Ltd



Signed :- *msole*

Name :-

M. SELKIRK

Page 8 of 9

Date of issue :-
07/03/2018

Certificate No :-
PI/4155/8

AEG Contract No. :-
4155

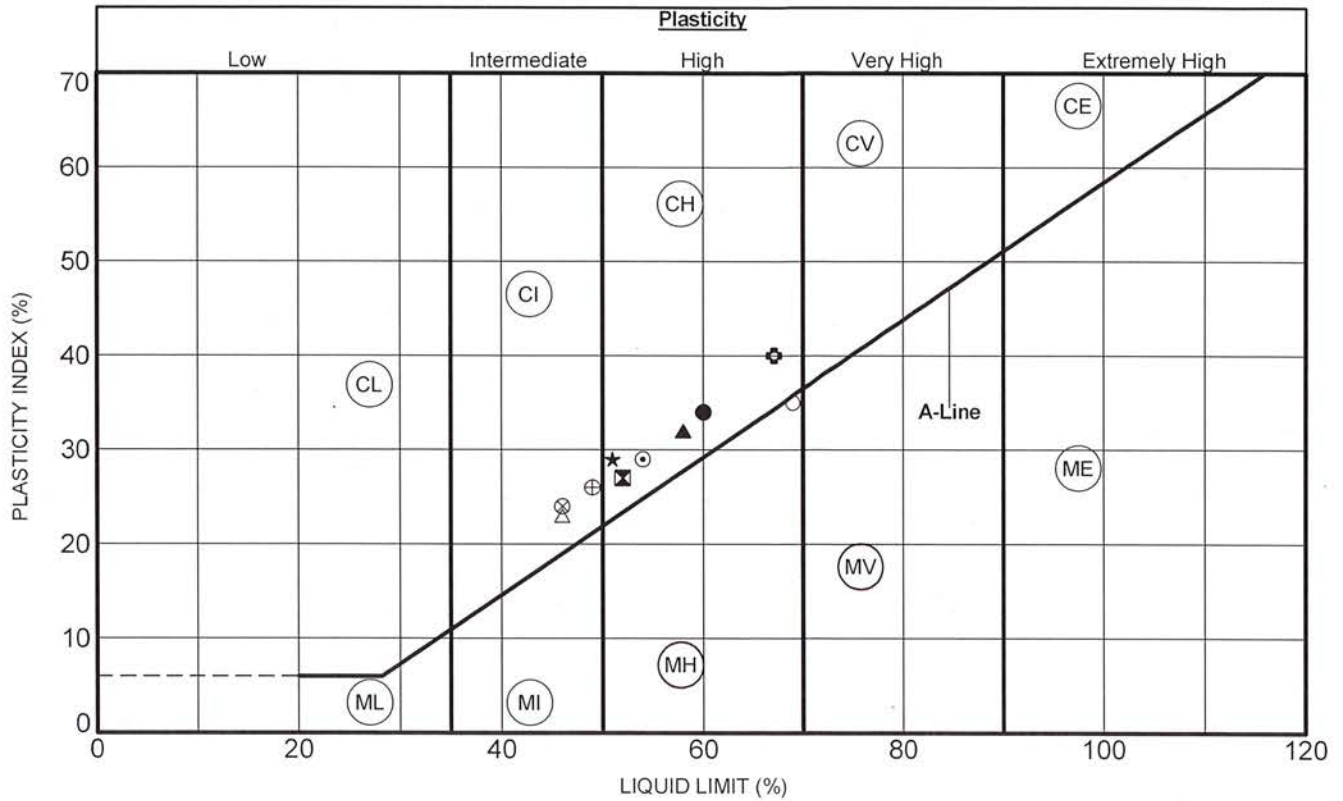


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ATTERBERG LIMITS & NATURAL MOISTURE CONTENT

Test Method :- BS 1377 : Part 2 : Clause 3.2, 4.1 to 4.4 & 5 : 1990 (BS EN ISO 17892-1:2014)



Specimen Identification	LL	PL	PI	I _c	<0.425mm (%)	m/c (%)	Date Tested
● S3-TPB64 2.50 B9	60	26	34	1.05	NAT	24.3	28/11/2017
⊠ S3-TPB67 2.80 J9	52	25	27	0.90	NAT	27.7	01/12/2017
▲ S3-TPB68 2.00 B9	58	26	32	0.87	NAT	30.2	30/11/2017
★ S3-TPB69 1.90 B8	51	22	29	0.83	NAT	26.9	30/11/2017
⊙ S3-TPB70 2.30 B10	54	25	29	1.03	NAT	24.2	28/11/2017
⊕ S3-TPB71 2.20 B7	67	27	40	0.91	NAT	30.8	30/11/2017
○ S3-TPB72 2.50 B10	69	34	35	0.93	NAT	36.5	30/11/2017
△ S3-TPB73 2.50 B10	46	23	23	1.12	NAT	20.3	30/11/2017
⊗ S3-TPB74 1.50 B6	46	22	24	0.96	NAT	23.0	30/11/2017
⊕ S3-TPB75 1.50 B6	49	23	26	1.03	NAT	22.3	30/11/2017

For description of sample please refer to the Laboratory Sample Description Sheet. # = Insufficient for 4 point PI
NAT = Sample prepared in the natural state therefore we are unable to determine % retained on the 0.425mm test sieve.

Contract Title :-
The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract
3

Client :-
South Tees Site Company Ltd



Signed :- *mson*

Name :- *M. SELKIRK*

Page 9 of 9

Date of issue :-
07/03/2018

Certificate No :-
PI/4155/9

AEG Contract No. :-
4155



Determination of Particle Density



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DETERMINATION OF PARTICLE DENSITY

BS1377 : Part 2 : Clause 8.2 : 1990

Exploratory Hole No.	Depth (m)	Sample Type & No.	Particle Density (Mg/m ³)	Date Tested
S3-TPA03	2.20	B6	2.73	09/02/2018
S3-TPA06	0.70	B3	2.87	07/12/2017
S3-TPA07	1.70	B7	2.67	07/12/2017
S3-TPA16	1.00	B5	2.39	07/12/2017
S3-TPA22	2.20	B7	2.48	09/02/2018
S3-TPA30	1.20	B5	2.67	28/11/2017
S3-TPA36	0.60	B3	2.55	14/11/2017
S3-TPA39	0.90	B6	2.60	14/11/2017
S3-TPB01	1.80	B7	2.67	06/12/2017
S3-TPB04	0.80	B5	2.59	06/12/2017
S3-TPB05	2.50	B7	2.82	06/12/2017
S3-TPB15	2.00	B9	2.67	07/12/2017
S3-TPB16	2.00	B9	2.61	09/02/2018
S3-TPB20	2.00	B7	2.66	28/11/2017
S3-TPB25	1.00	B4	2.66	06/12/2017
S3-TPB43	2.00	LB6	2.58	14/11/2017

For description of sample please refer to the Laboratory Sample Description Sheet

Contract Title :- The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Client :- South Tees Site Company Ltd	
	Signed :- <i>msone</i>	Name :- M. SELKIRK	
	Date of issue :- 22/02/2018	Certificate No :- PD/4155/1	AEG Contract No. :- 4155
			

Particle Size Distribution Sieving and Sedimentation



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Regional Office: Unit E2 Archorage Business Park, Chain Caul Way, Riverside Docklands, Preston, PR2 2YL - Tel: 01772 735 300 Fax: 01772 735 999

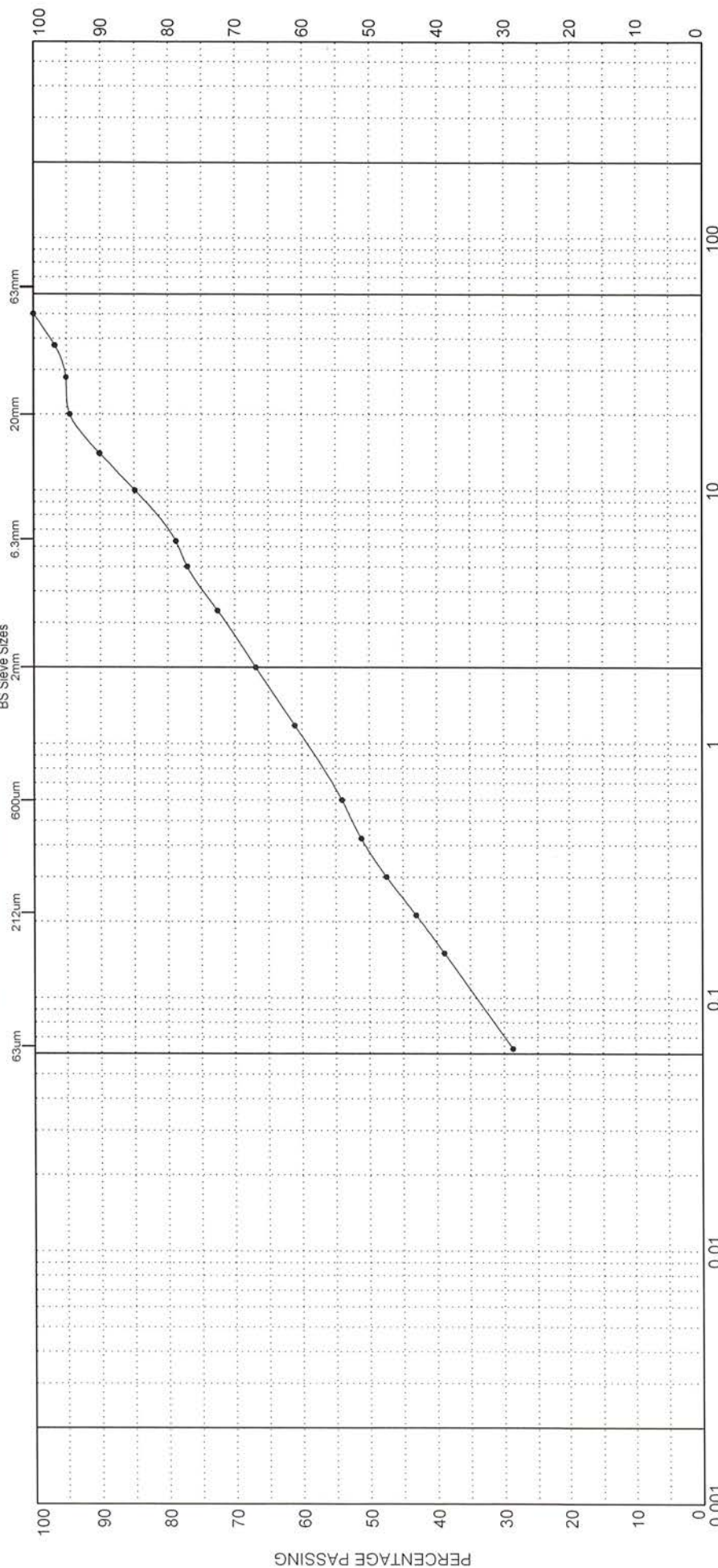
Test Method :- BS1377 : Part 2 : Clause 9.2 & 9.4 : 1990 Exploratory Hole No :- S3-TPA01

Sample Type & No :- B11

Date Tested :- 28/11/2017

Depth :- 2.70

PARTICLE SIZE DISTRIBUTION CURVE



CLAY	SILT			SAND			GRAVEL			COBBLES	BOULDERS
	Fine	Medium	Coarse	Fine	Medium	Coarse	Fine	Medium	Coarse		

For description of sample please refer to the Laboratory Sample Description Sheet

	Date of issue :- 12/12/2017	Certificate No :- PSD/4155/S3-TPA01/B11/2.70	Signed :- <i>msone</i>	Name :- M. S. S. S.	Page 1 of 1
	Client :- South Tees Site Company Ltd	Contract Title :- The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3	AEG Contract No :- 4155		



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Test Method :- Not To BS 1377

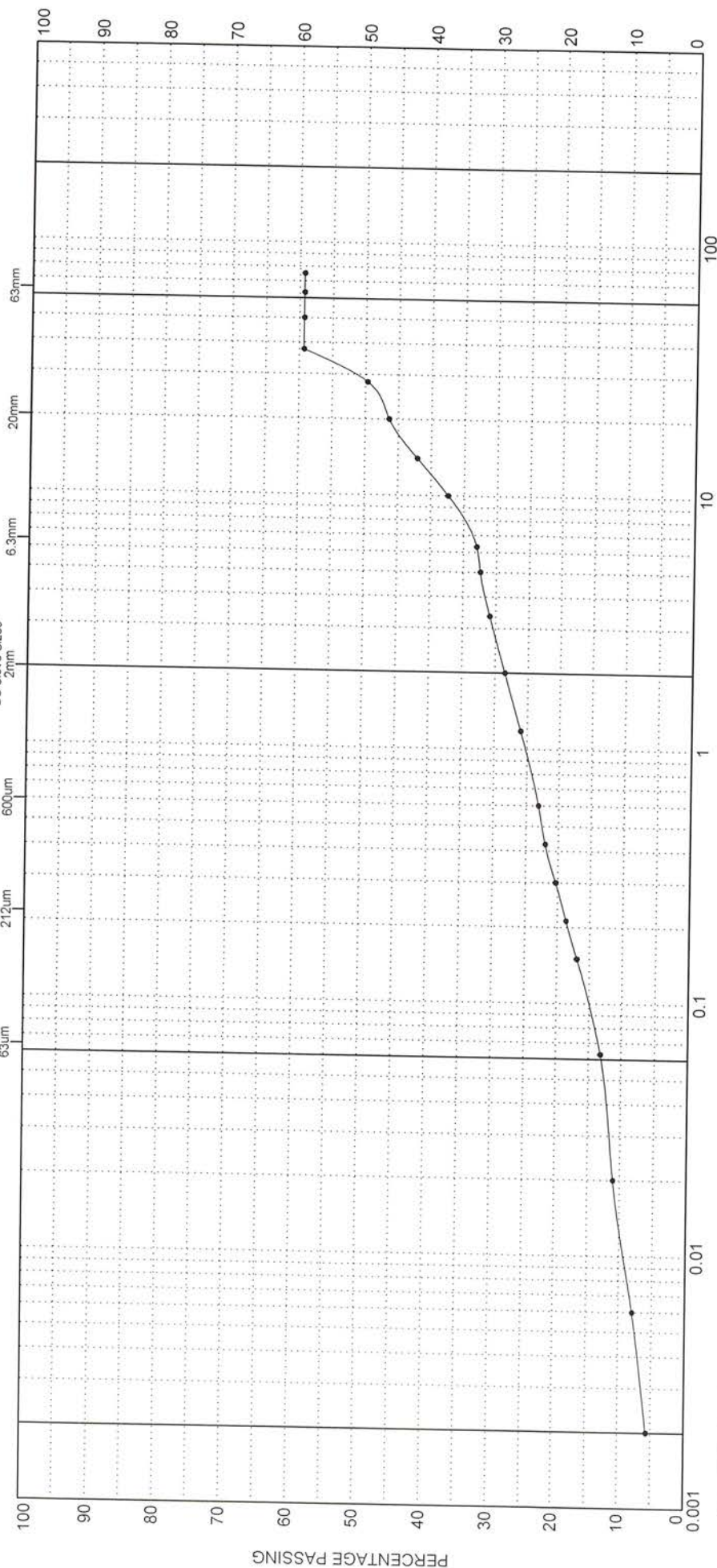
Exploratory Hole No :- S3-TPA02

Depth :- 1.80

Sample Type & No :- B6

Date Tested :- 12/12/2017

PARTICLE SIZE DISTRIBUTION CURVE



CLAY			SILT			SAND			GRAVEL			BOULDERS		
Fine	Medium	Coarse	Fine	Medium	Coarse	Fine	Medium	Coarse	Fine	Medium	Coarse	COBBLES	BOULDERS	

For description of sample please refer to the Laboratory Sample Description Sheet. # Denotes method deviates from standard due to insufficient sample mass.

Date of issue :- 19/01/2018	Certificate No :- PSD/4155/S3-TPA02/B6/1.80	Signed :- <i>MS</i>	Name :- <i>M. SELKIRK</i>
Client :- South Tees Site Company Ltd		Contract Title :- The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3	
		AEG Contract No :- 4155	
		Page 1 of 1	

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Test Method :- BS1377 : Part 2 : Clause 9.2 & 9.4 : 1990

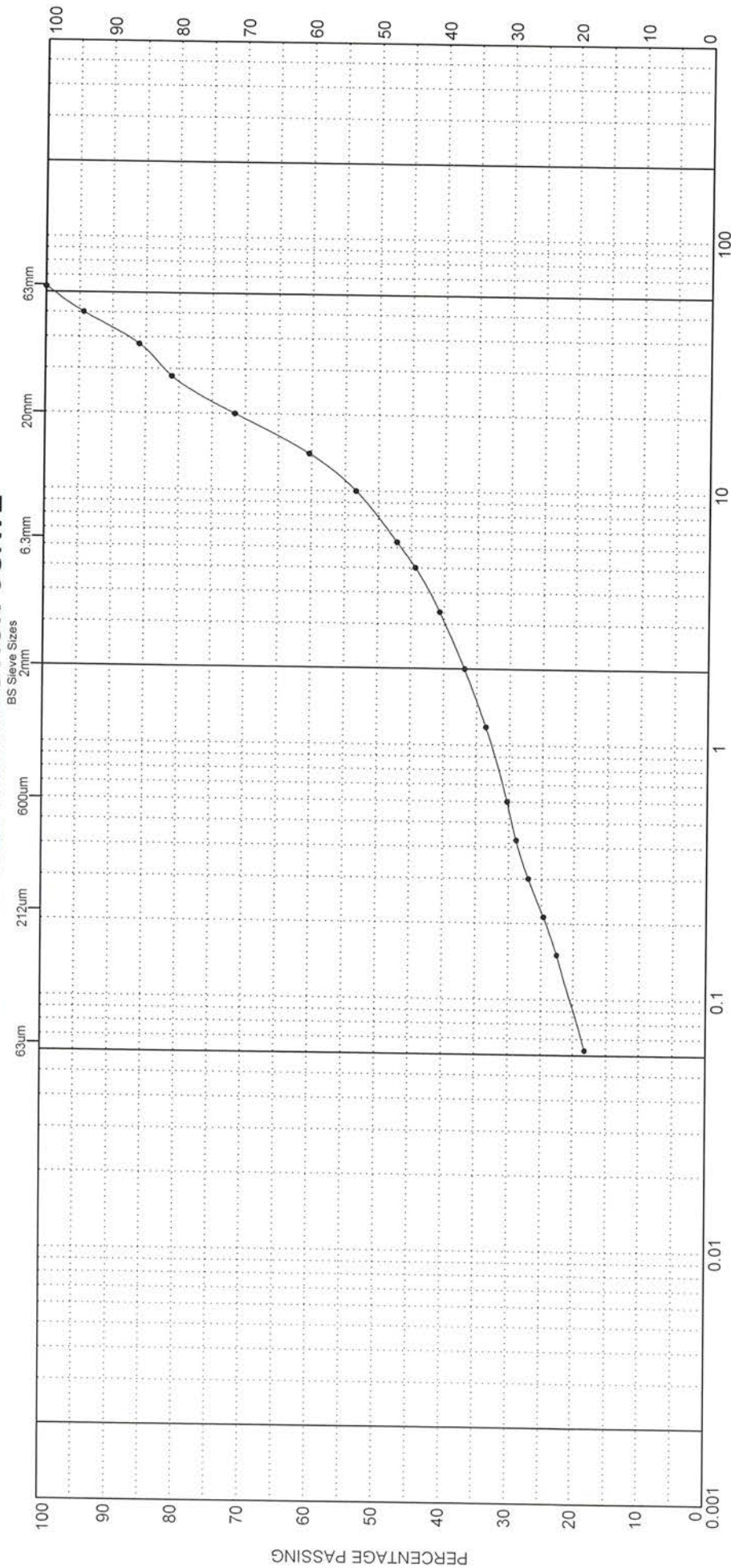
Exploratory Hole No :- S3-TPA03

Depth :- 2.20

Sample Type & No :- B6

Date Tested :- 10/01/2018

PARTICLE SIZE DISTRIBUTION CURVE



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Test Method :- Not To BS 1377

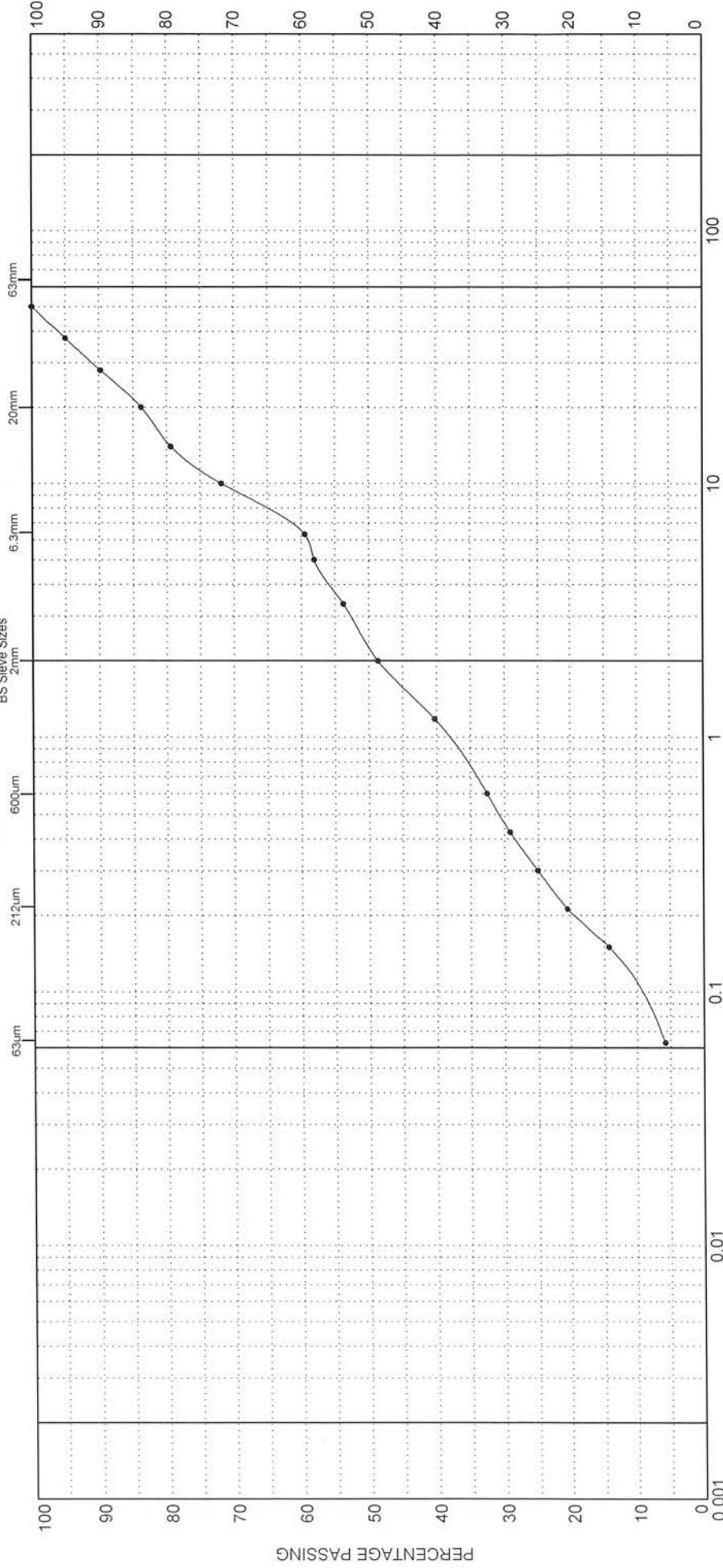
Exploratory Hole No :- S3-TPA04

Depth :- 0.70

Sample Type & No :- B3

Date Tested :- 28/11/2017

PARTICLE SIZE DISTRIBUTION CURVE



CLAY	SILT			SAND			GRAVEL			COBBLES	BOULDERS
	Fine	Medium	Coarse	Fine	Coarse	Medium	Fine	Medium	Coarse		

For description of sample please refer to the Laboratory Sample Description Sheet

	Date of issue :- 12/12/2017	Certificate No :- PSD/4155/S3-TPA04/B3/0.70	Signed :- <i>msaw</i>	Name :-	Page 1 of 1
Client :- South Tees Site Company Ltd	Contract Title :- The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3	AEG Contract No :- 4155	UKAS TESTING 1367	1367	1367

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Test Method :- Not To BS 1377

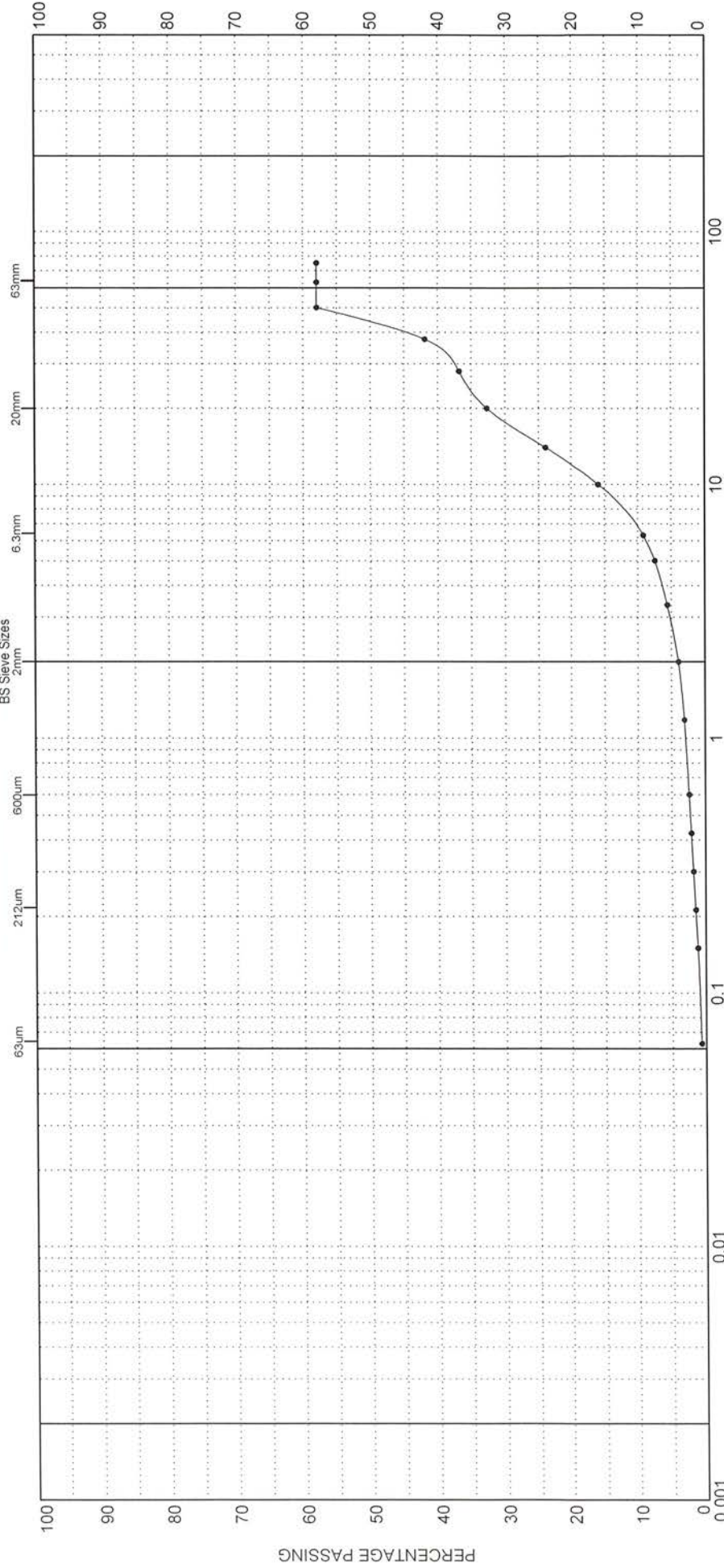
Exploratory Hole No :- S3-TPA05

Depth :- 2.20

Sample Type & No :- B6

Date Tested :- 29/11/2017

PARTICLE SIZE DISTRIBUTION CURVE



CLAY	SILT			SAND			GRAVEL			COBBLES	BOULDERS
	Fine	Medium	Coarse	Fine	Coarse	Medium	Fine	Medium	Coarse		

For description of sample please refer to the Laboratory Sample Description Sheet

	Date of Issue :- 12/12/2017	Certificate No :- PSD/4155/S3-TPA05/B6/2.20	Signed :- <i>MSD</i>	Name :- M. S. D.	Page 1 of 1
	Client :- South Tees Site Company Ltd	Contract Title :- The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3	AEG Contract No :- 4155		



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Test Method :- Not To BS 1377

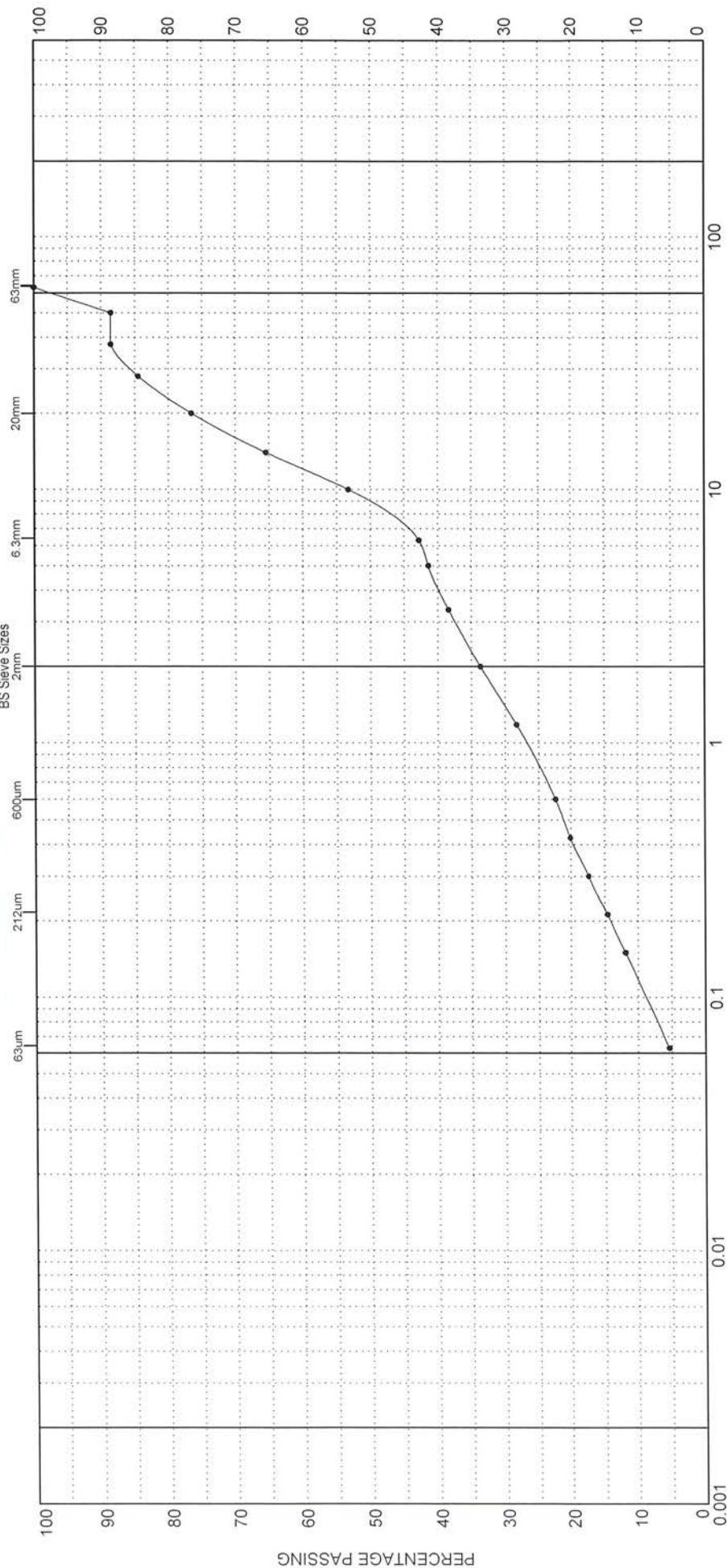
Exploratory Hole No :- S3-TPA06

Depth :- 0.70

Sample Type & No :- B3

Date Tested :- 30/11/2017

PARTICLE SIZE DISTRIBUTION CURVE



CLAY			SILT			SAND			GRAVEL			COBBLES			BOULDERS		
Fine	Medium	Coarse	Fine	Medium	Coarse	Fine	Medium	Coarse	Fine	Medium	Coarse	Fine	Medium	Coarse	Fine	Medium	Coarse

For description of sample please refer to the Laboratory Sample Description Sheet

	Date of issue :- 12/12/2017	Certificate No :- PSD/4155/S3-TPA06/B3/0.70	Signed :- <i>msone</i>	Name :- M. C. C. C.	Page 1 of 1
	Client :- South Tees Site Company Ltd	Contract Title :- The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3	AEG Contract No :- 4155		



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Test Method :- Not To BS 1377

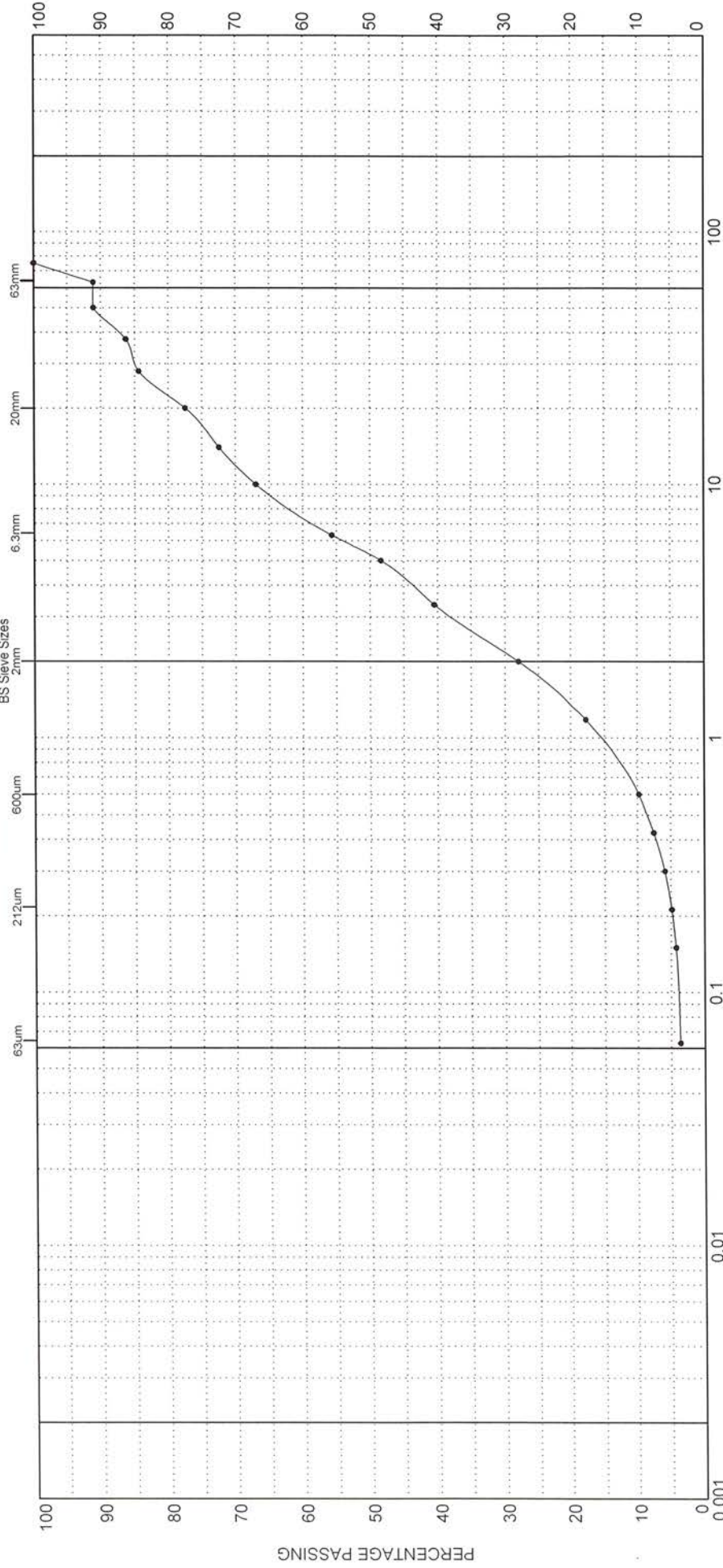
Exploratory Hole No :- S3-TPA07

Depth :- 1.70

Sample Type & No :- B7

Date Tested :- 29/11/2017

PARTICLE SIZE DISTRIBUTION CURVE



CLAY	SILT			SAND			GRAVEL			COBBLES	BOULDERS
	Fine	Medium	Coarse	Fine	Medium	Coarse	Fine	Medium	Coarse		

For description of sample please refer to the Laboratory Sample Description Sheet

Date of issue :-

12/12/2017

Certificate No :-

PSD/4155/S3-TPA07/B7/1.70

Signed :-

msore

Name :-

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AEG Contract No :-

4155

Client :-

South Tees Site Company Ltd

Contract Title :-

The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3



1367

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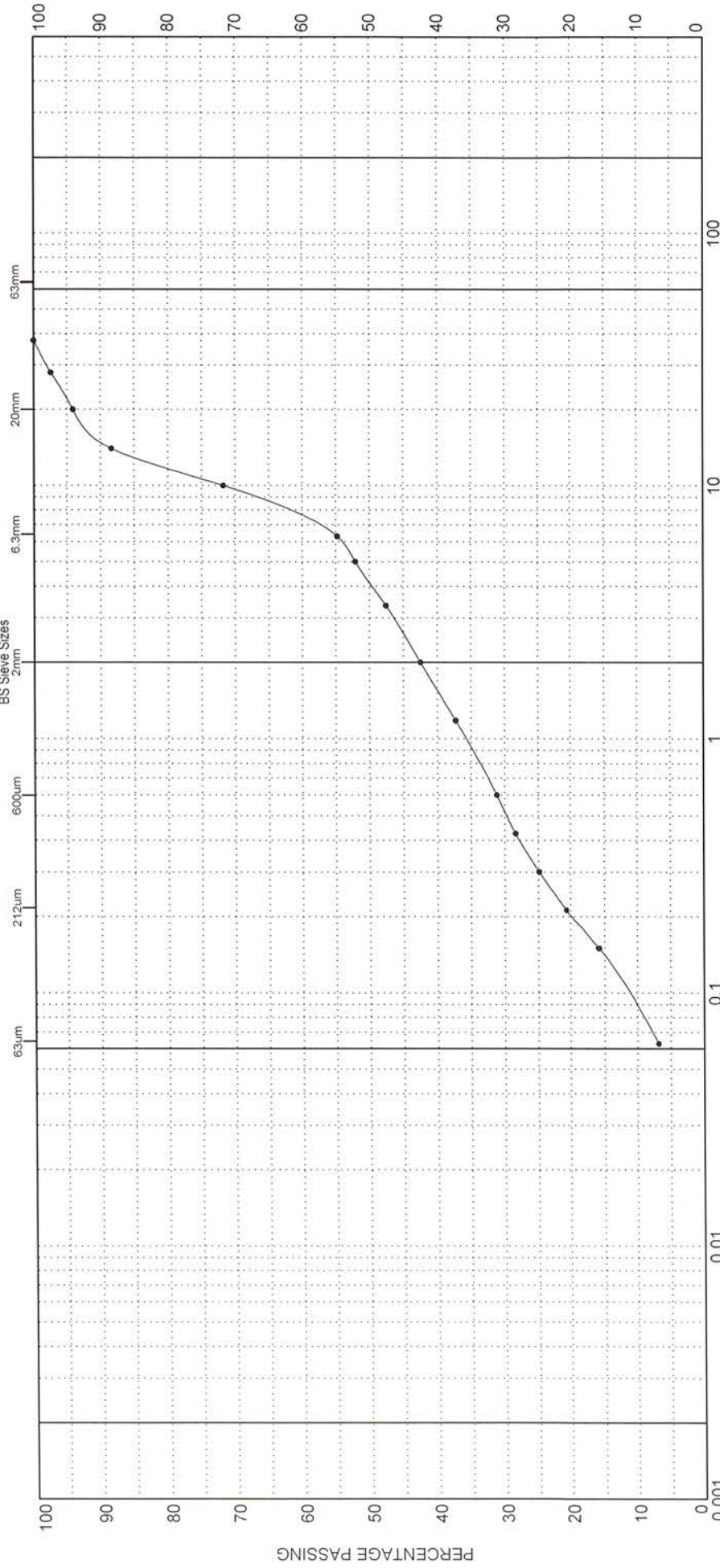
Test Method :- BS1377 : Part 2 : Clause 9.2 & 9.4 : 1990 Exploratory Hole No :- S3-TPA11

Depth :- 1.20

Sample Type & No :- B4

Date Tested :- 30/11/2017

PARTICLE SIZE DISTRIBUTION CURVE



CLAY	SILT			SAND			GRAVEL			COBBLES	BOULDERS
	Fine	Medium	Coarse	Fine	Medium	Coarse	Fine	Medium	Coarse		

For description of sample please refer to the Laboratory Sample Description Sheet

	Date of issue :- 12/12/2017	Certificate No :- PSD/4155/S3-TPA11/B4/1.20	Signed :- <i>msore</i>	Name :-	Page 1 of 1
	Client :- South Tees Site Company Ltd	Contract Title :- The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3	AEG Contract No :- 4155		

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Test Method :- BS1377 : Part 2 : Clause 9.2 & 9.4 : 1990

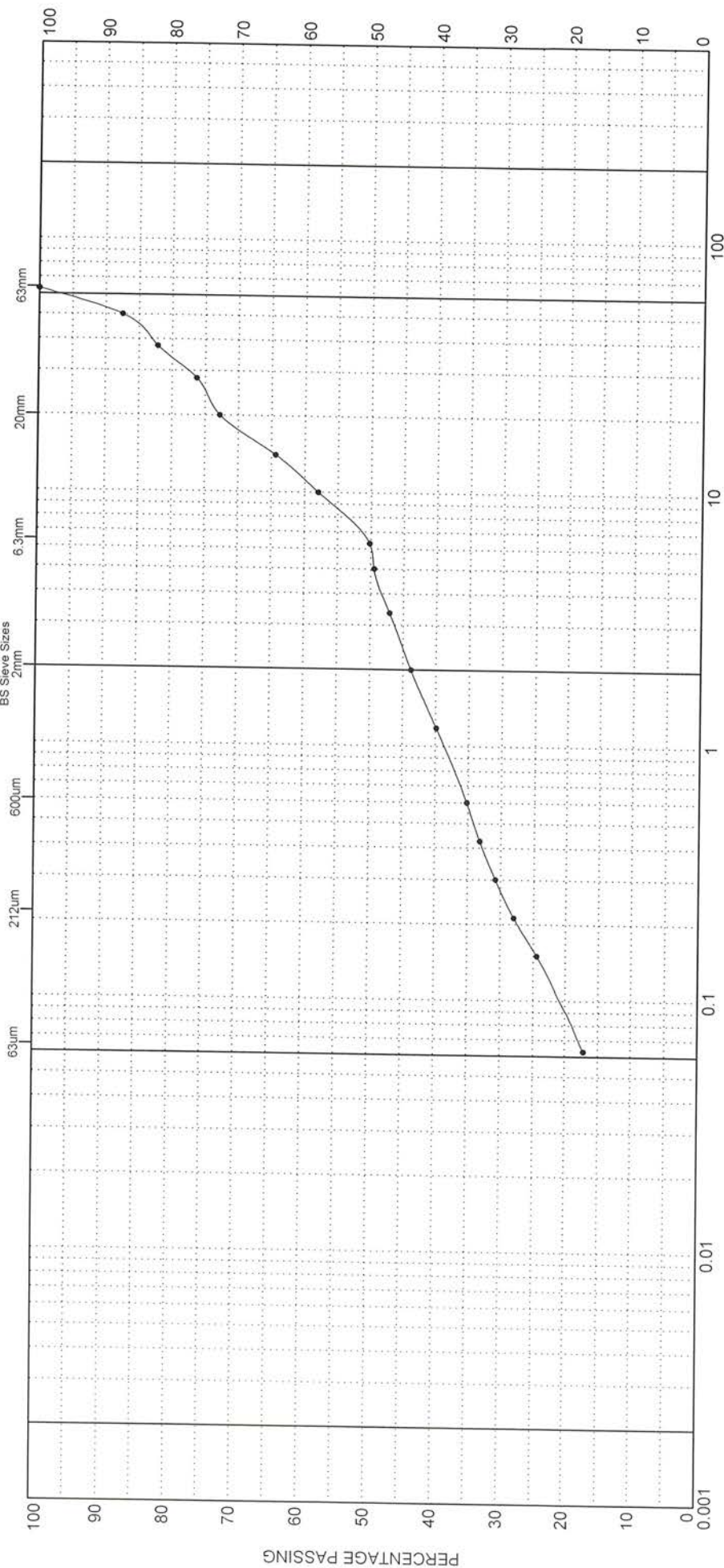
Exploratory Hole No :- S3-TPA12

Depth :- 1.70

Sample Type & No :- B6

Date Tested :- 30/11/2017

PARTICLE SIZE DISTRIBUTION CURVE



CLAY	SILT			SAND			GRAVEL			COBBLES	BOULDERS
	Fine	Medium	Coarse	Fine	Medium	Coarse	Fine	Medium	Coarse		

For description of sample please refer to the Laboratory Sample Description Sheet. # Denotes method deviates from standard due to insufficient sample mass.

Date of issue :- 19/01/2018

Certificate No :- PSD/4155/S3-TPA12/B6/1.70

Signed :- *msore*

Name :- M. SELKIRK

Client :-

South Tees Site Company Ltd

Contract Title :-

The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3

AEG Contract No :- 4155

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Test Method :- BS1377 : Part 2 : Clause 9.2 & 9.4 : 1990

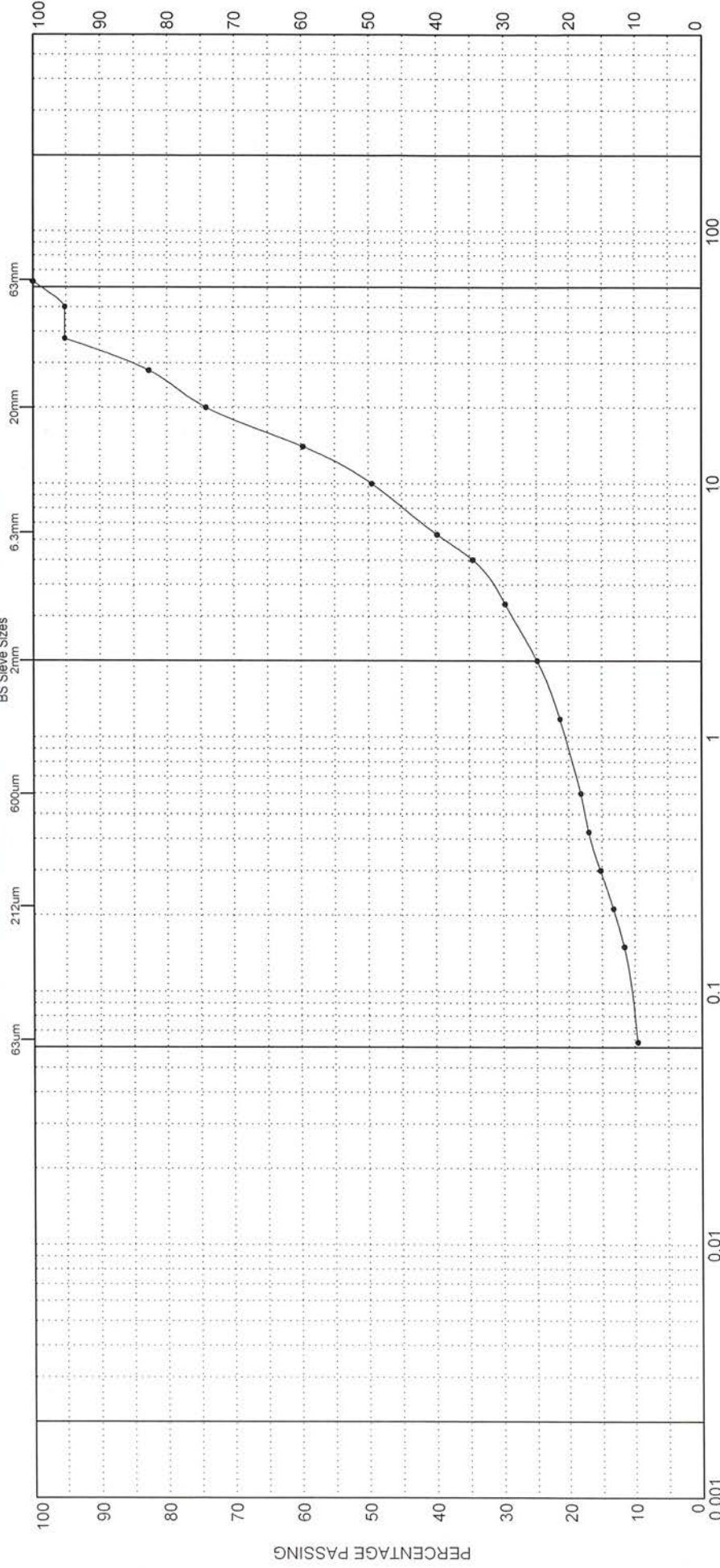
Exploratory Hole No :- S3-TPA13

Depth :- 2.30

Sample Type & No :- B7

Date Tested :- 23/01/2018

PARTICLE SIZE DISTRIBUTION CURVE



CLAY			SILT			SAND			GRAVEL			COBBLES	BOULDERS
Fine	Medium	Coarse	Fine	Medium	Coarse	Fine	Medium	Coarse	Fine	Medium	Coarse		

For description of sample please refer to the Laboratory Sample Description Sheet. # Denotes method deviates from standard due to insufficient sample mass.

Date of issue :-

22/02/2018

Certificate No :-

PSD/4155/S3-TPA13/B7/2.30

Contract Title :-

The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3

Signed :-

M. Selkirk

Name :-

M. SELKIRK

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AEG Contract No :-

4155



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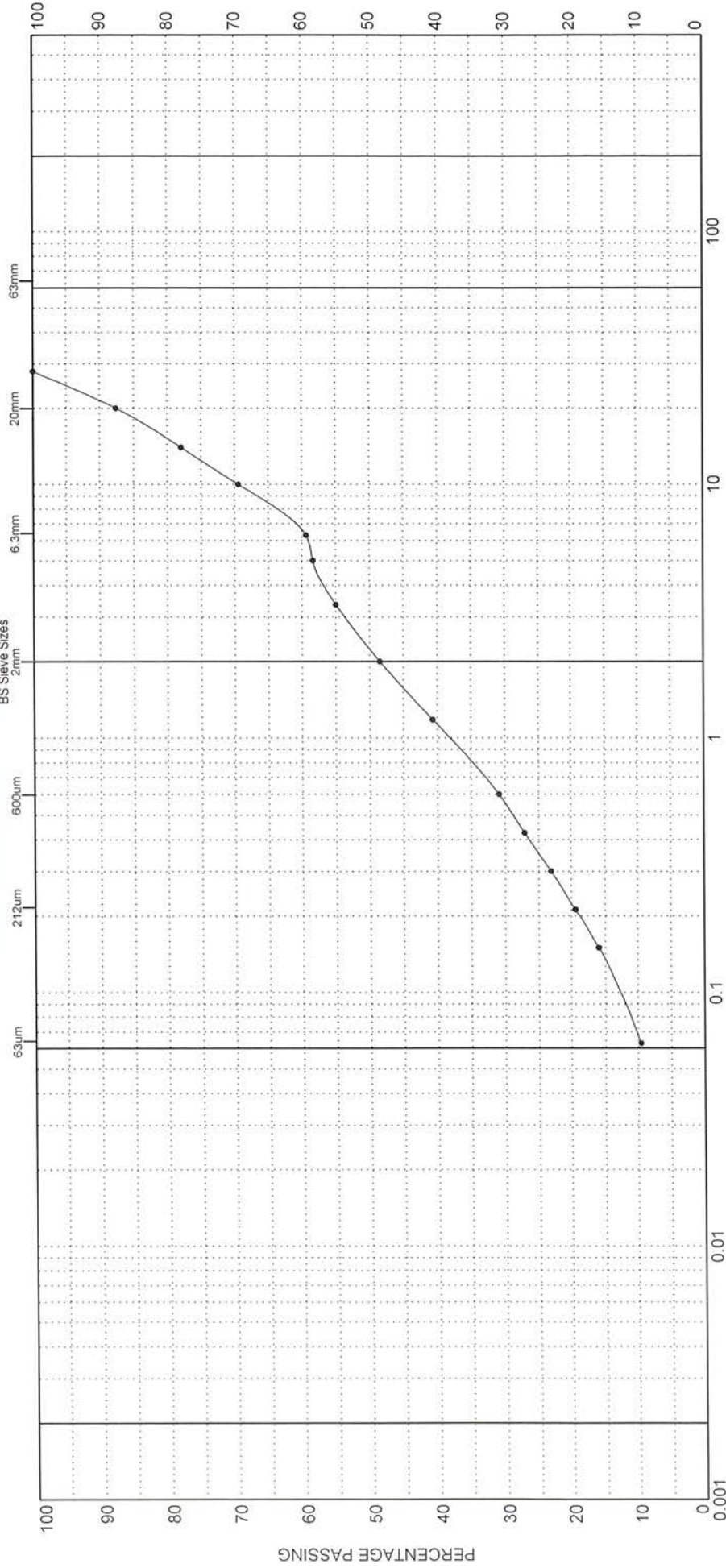
Test Method :- BS1377 : Part 2 : Clause 9.2 & 9.4 : 1990 Exploratory Hole No :- S3-TPA14

Depth :- 0.50

Sample Type & No :- B3

Date Tested :- 10/11/2017

PARTICLE SIZE DISTRIBUTION CURVE



CLAY	SILT			SAND			GRAVEL			BOULDERS
	Fine	Medium	Coarse	Fine	Coarse	Medium	Fine	Coarse	Medium	

For description of sample please refer to the Laboratory Sample Description Sheet

	Date of issue :- 01/12/2017	Certificate No :- PSD/4155/S3-TPA14/B3/0.50	Signed :- <i>msore</i>	Name :- <i>M. SELKIRK</i>	Page 1 of 1
	Client :- South Tees Site Company Ltd	Contract Title :- The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3	AEG Contract No :- 4155		



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Date Tested :- 28/11/2017

The graph illustrates the particle size distribution of an aggregate sample. The y-axis represents the percentage of material passing through a given sieve size, ranging from 0 to 100. The x-axis represents the sieve size in millimeters, with major ticks at 0.075, 0.15, 0.3, 0.6, 1.18, 2.0, 3.75, 7.5, 15, 30, and 60 mm. The curve starts at 100% passing for the 0.075 mm sieve and decreases as the sieve size increases, reaching approximately 5% passing for the 60 mm sieve.

Sieve Size (mm)	Percentage Passing (%)
0.075	100
0.15	95
0.3	85
0.6	75
1.18	65
2.0	55
3.75	45
7.5	35
15	25
30	15
60	5

CLAY	Fine	Medium	Coarse	Fine	Medium	Coarse	Fine	Medium	Coarse	BOULDERS	
	SILT			SAND			GRAVEL				COBBLES

For description of sample please refer to the Laboratory Sample Description Sheet

	Date of issue :- 12/12/2017	Certificate No :- PSD/4155/S3-TPA15/B4/1.30	Signed :- 	Name :- M. S. S. S.	Page 1 of 1
	Client :- South Tees Site Company Ltd	Contract Title :- The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		AEG Contract No :- 4155	

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Test Method :- Not To BS 1377

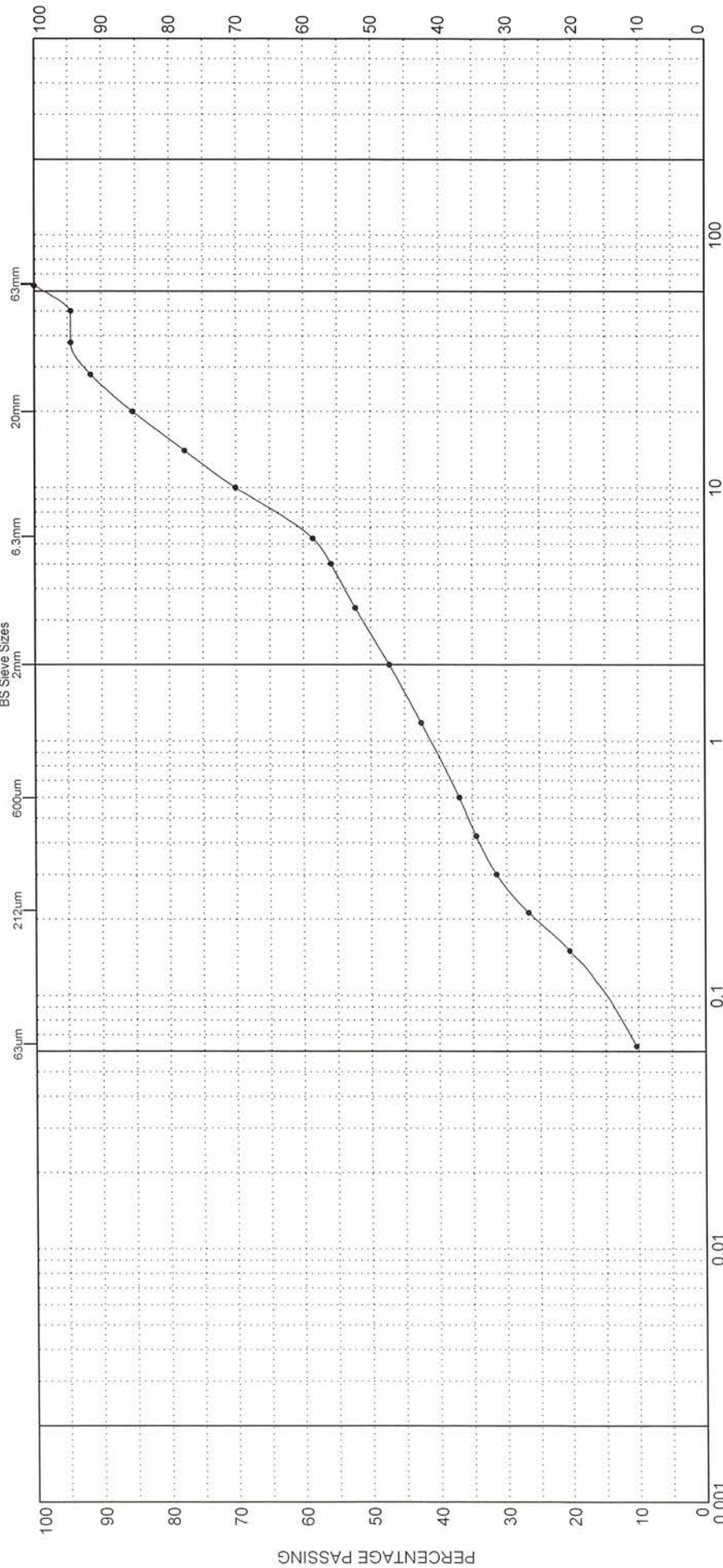
Exploratory Hole No :- S3-TPA16

Depth :- 1.00

Sample Type & No :- B5



Date Tested :- 30/11/2017

PARTICLE SIZE DISTRIBUTION CURVE



CLAY			SILT			SAND			GRAVEL			COBBLES			BOULDERS		
Fine	Medium	Coarse	Fine	Medium	Coarse	Fine	Medium	Coarse	Fine	Medium	Coarse	Fine	Medium	Coarse	Fine	Medium	Coarse

For description of sample please refer to the Laboratory Sample Description Sheet

		Date of issue :- 12/12/2017		Certificate No :- PSD/4155/S3-TPA16/B5/1.00		Signed :- <i>msore</i>		Name :-		Page 1 of 1	
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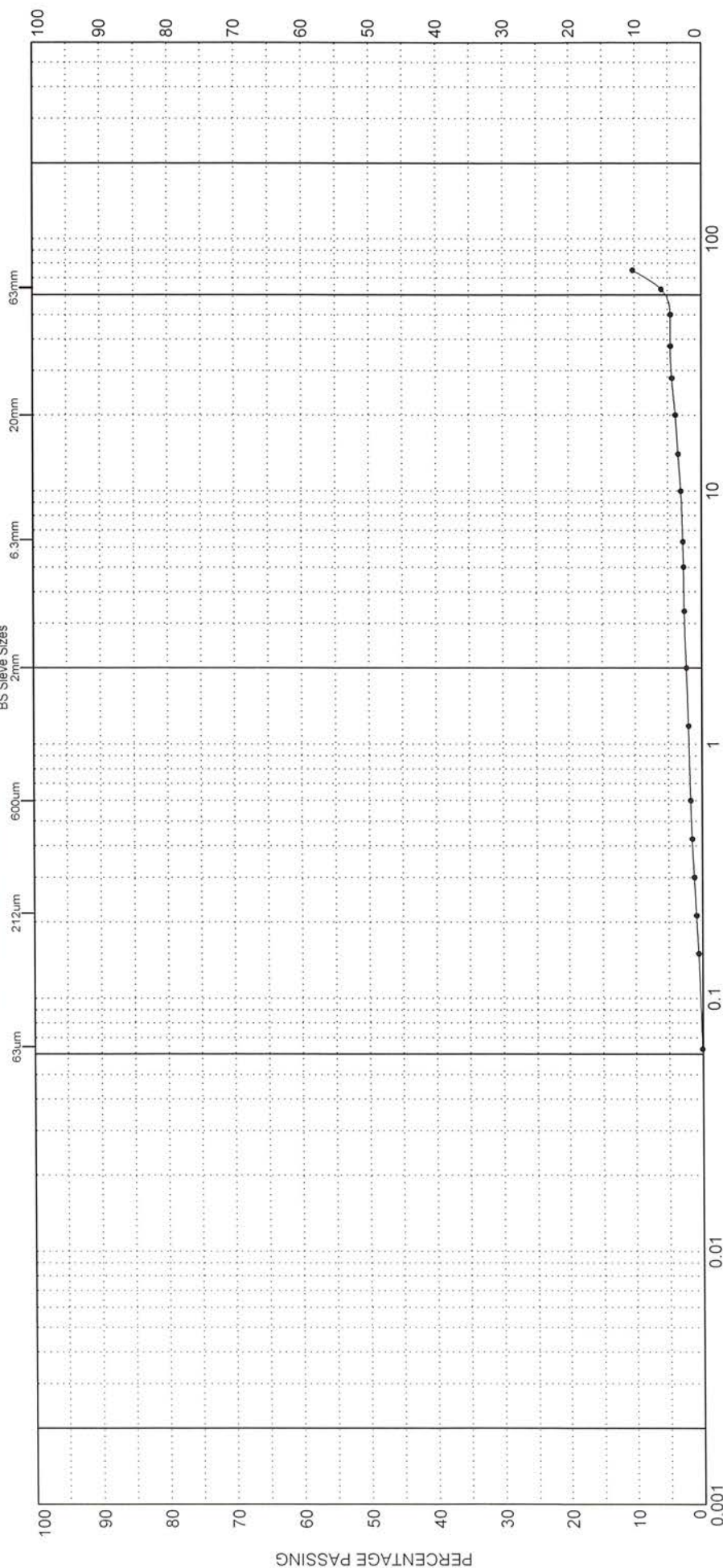
Test Method :- BS1377 : Part 2 : Clause 9.2 & 9.4 : 1990 Exploratory Hole No :- S3-TPA20

Depth :- 1.50

Sample Type & No :- LB5

Date Tested :- 29/11/2017

PARTICLE SIZE DISTRIBUTION CURVE



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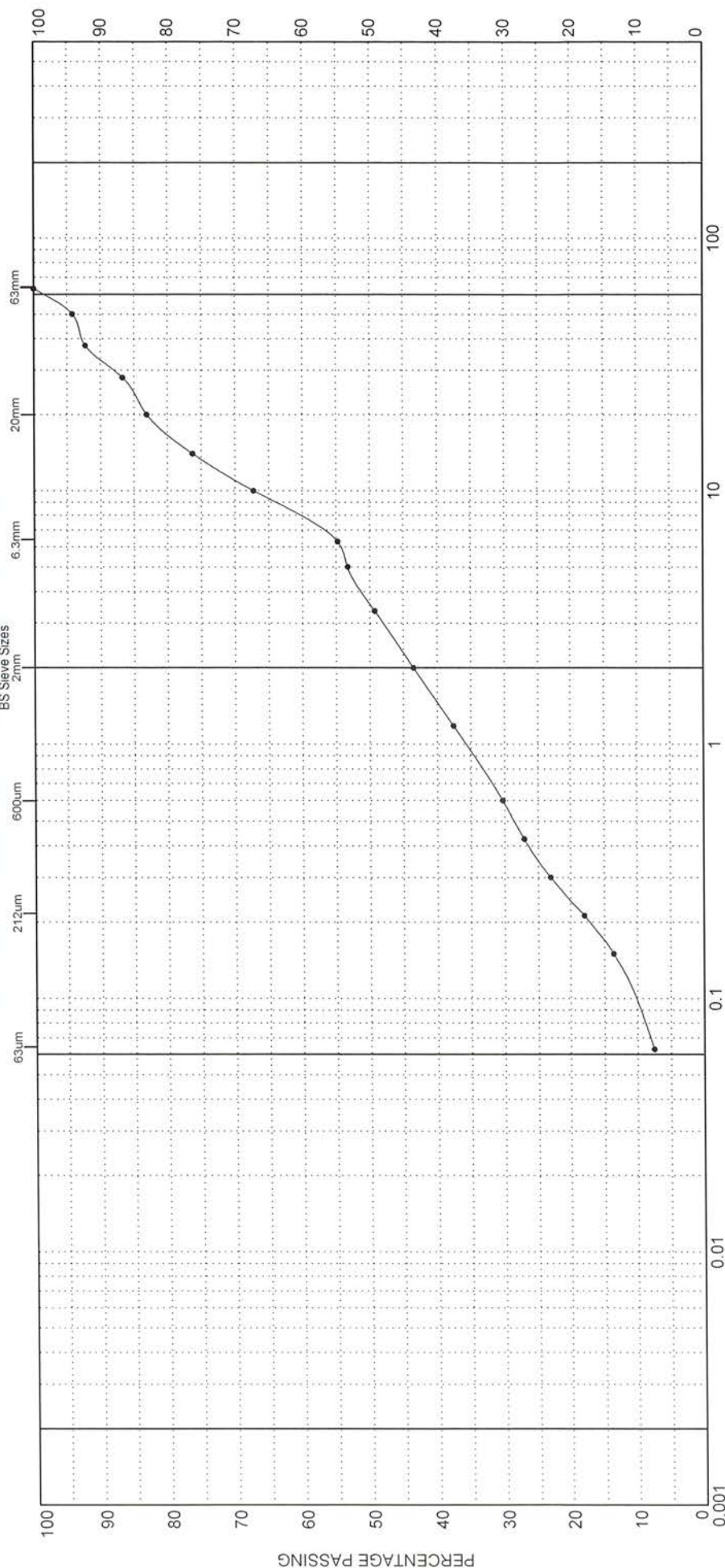
Test Method :- BS1377 : Part 2 : Clause 9.2 & 9.4 : 1990 Exploratory Hole No :- S3-TPA21

Depth :- 0.70

Sample Type & No :- B3

Date Tested :- 13/11/2017

PARTICLE SIZE DISTRIBUTION CURVE



CLAY			SILT			SAND			GRAVEL			COBBLES			BOULDERS		
Fine	Medium	Coarse	Fine	Medium	Coarse	Fine	Medium	Coarse	Fine	Medium	Coarse	Fine	Medium	Coarse	Fine	Medium	Coarse

For description of sample please refer to the Laboratory Sample Description Sheet

	Date of issue :- 01/12/2017	Certificate No :- PSD/4155/S3-TPA21/B3/0.70	Signed :- <i>msano</i>	Name :- M. SELKIRK	Page 1 of 1
	Client :- South Tees Site Company Ltd	Contract Title :- The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3	AEG Contract No :- 4155		



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Test Method :- BS1377 : Part 2 : Clause 9.2 & 9.4 : 1990

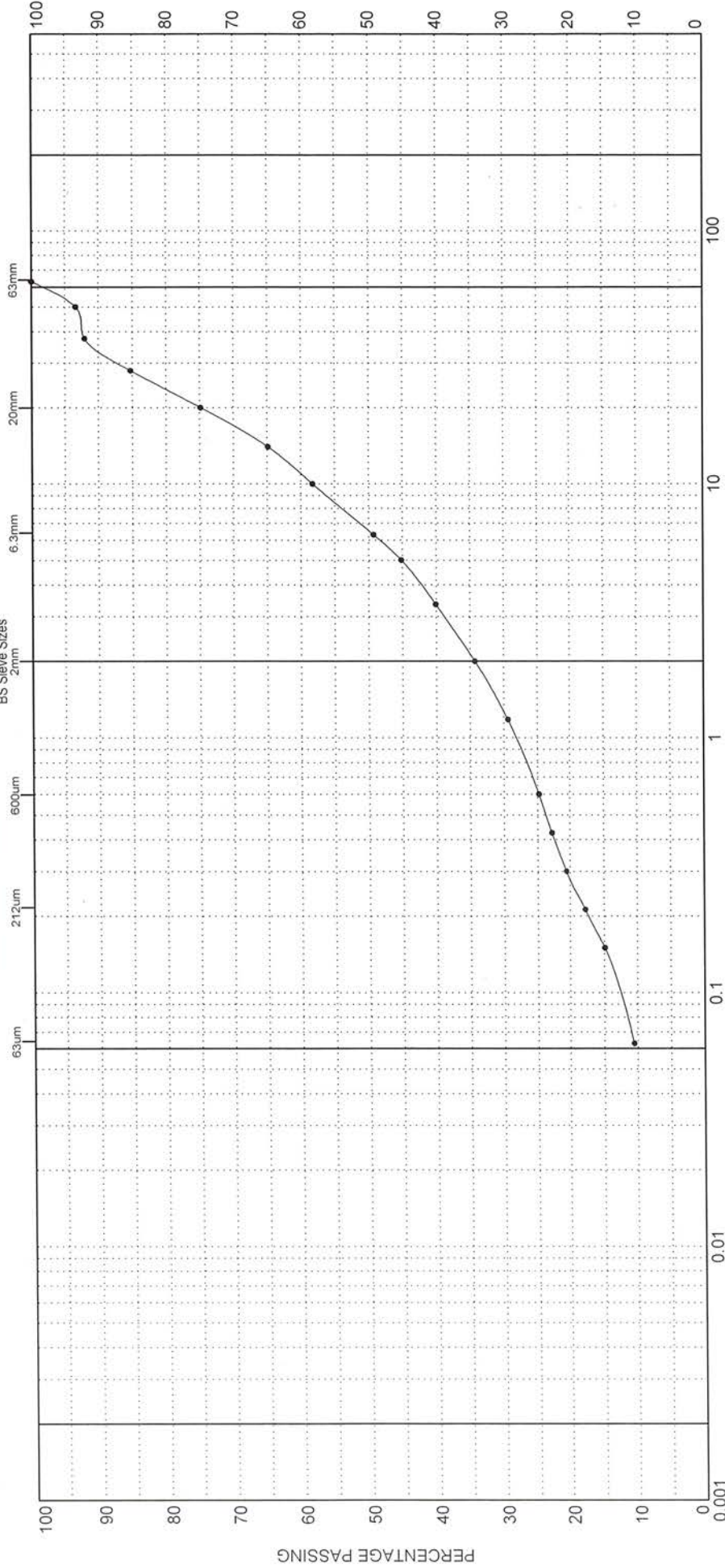
Exploratory Hole No :- S3-TPA22

Depth :- 2.20

Sample Type & No :- B7

Date Tested :- 23/01/2018

PARTICLE SIZE DISTRIBUTION CURVE



CLAY			SILT			SAND			GRAVEL			COBBLES			BOULDERS		
Fine	Medium	Coarse	Fine	Medium	Coarse	Fine	Medium	Coarse	Fine	Medium	Coarse	COBBLES	COBBLES	COBBLES	BOULDERS	BOULDERS	BOULDERS

For description of sample please refer to the Laboratory Sample Description Sheet. # Denotes method deviates from standard due to insufficient sample mass.

Date of issue :-

22/02/2018

Certificate No :-

PSD/4155/S3-TPA22/B7/2.20

Contract Title :-

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Signed :-

MSore

Name :-

M. SELKIRK

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AEG Contract No :-

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Date Tested :- 13/11/2017

The graph illustrates the gradation of an aggregate sample. The percentage of material passing through each sieve size is plotted on a semi-logarithmic scale. The data points are as follows:

Sieve Size	Percentage Passing (%)
63mm	100
20mm	95
6.3mm	85
2mm	70
600µm	55
212µm	40
63µm	25

	Fine	Medium	Coarse	Fine	Medium	Coarse	Fine	Medium	Coarse	
CLAY	SILT						SAND			COBBLES
							GRAVEL			
										BOULDERS

For description of sample please refer to the Laboratory Sample Description Sheet

	Date of issue :- 01/12/2017	Certificate No. :- PSD/4155/S3-TPA23/B3/1.00	Signed :- 	Name :-	Page 1 of 1
	Client :- South Tees Site Company Ltd	Contract Title :- The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3			AEG Contract No :- 4155

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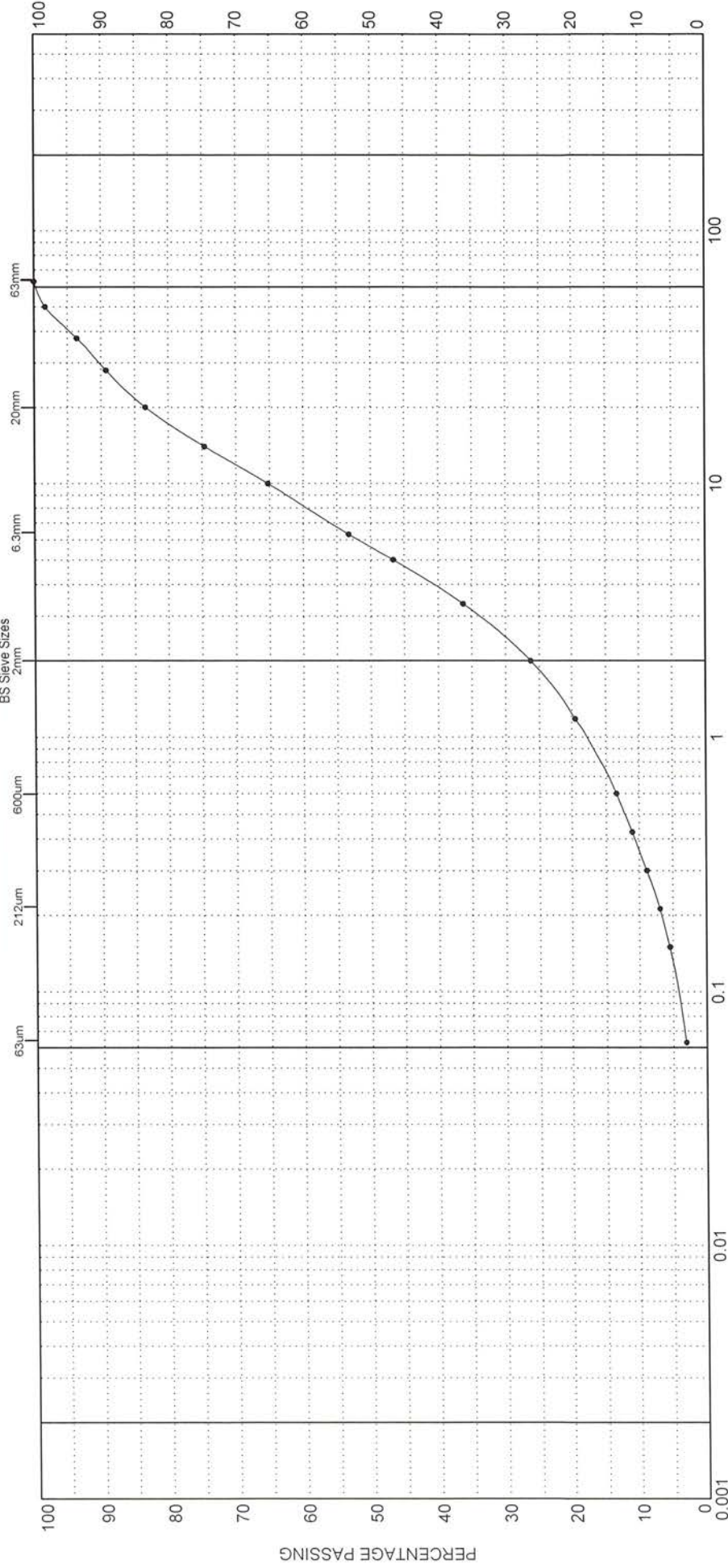
Test Method :- BS1377 : Part 2 : Clause 9.2 & 9.4 : 1990 Exploratory Hole No :- S3-TPA24

Depth :- 1.70

Sample Type & No :- B8

Date Tested :- 13/11/2017

PARTICLE SIZE DISTRIBUTION CURVE



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Test Method :- BS1377 : Part 2 : Clause 9.2 & 9.4 : 1990 #

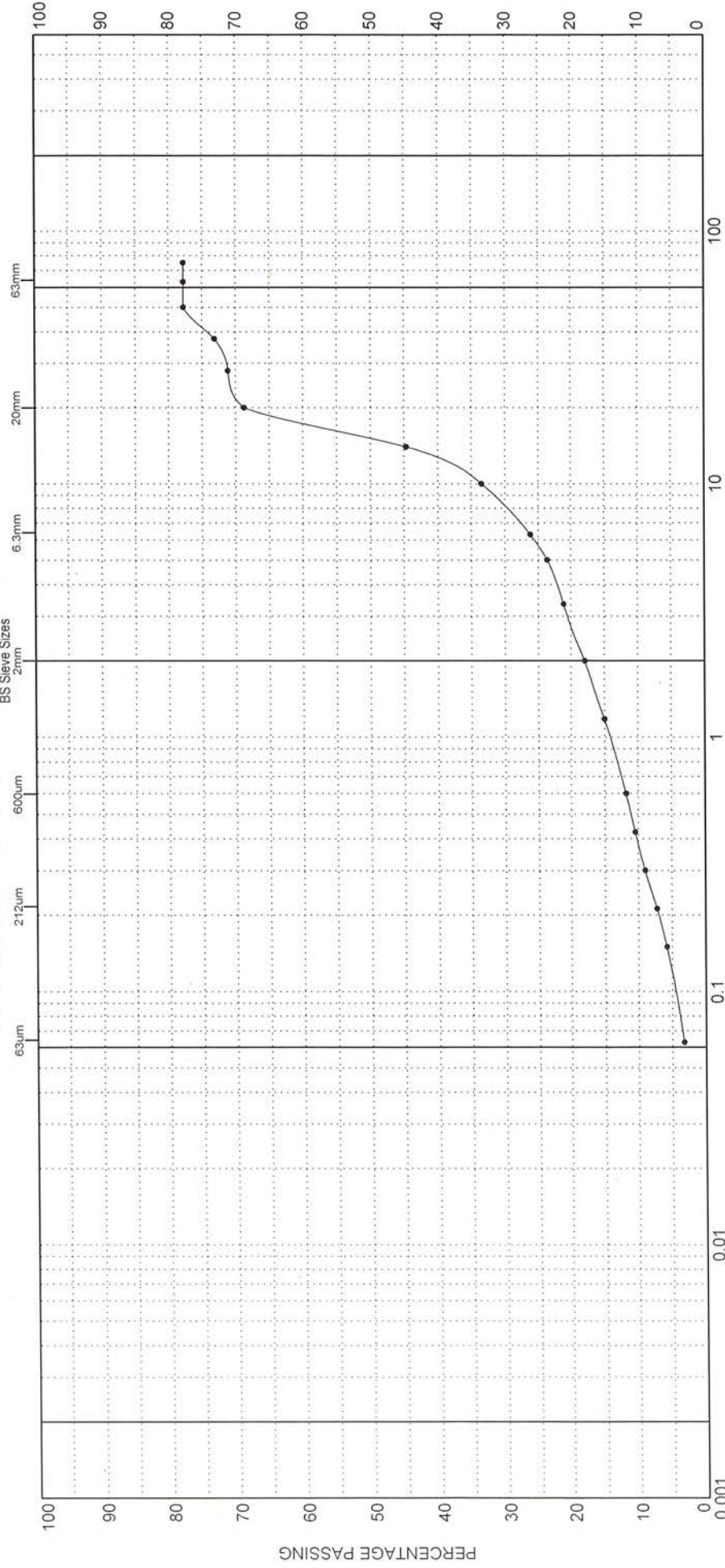
Exploratory Hole No :- S3-TPA25

Depth :- 1.20

Sample Type & No :- B3

Date Tested :- 09/01/2018

PARTICLE SIZE DISTRIBUTION CURVE



CLAY			SILT			SAND			GRAVEL			COBBLES			BOULDERS		
Fine	Medium	Coarse	Fine	Medium	Coarse	Fine	Medium	Coarse	Fine	Medium	Coarse	Coarse	Coarse	Coarse	Coarse	Coarse	Coarse

For description of sample please refer to the Laboratory Sample Description Sheet. # Denotes method deviates from standard due to insufficient sample mass.

Date of issue :-

22/02/2018

Certificate No :-

PSD/4155/S3-TPA25/B3/1.20

Contract Title :-

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Signed :-

MSR

Name :-

M. SELKIRK

Page 1 of 1

AEG Contract No :-

4155



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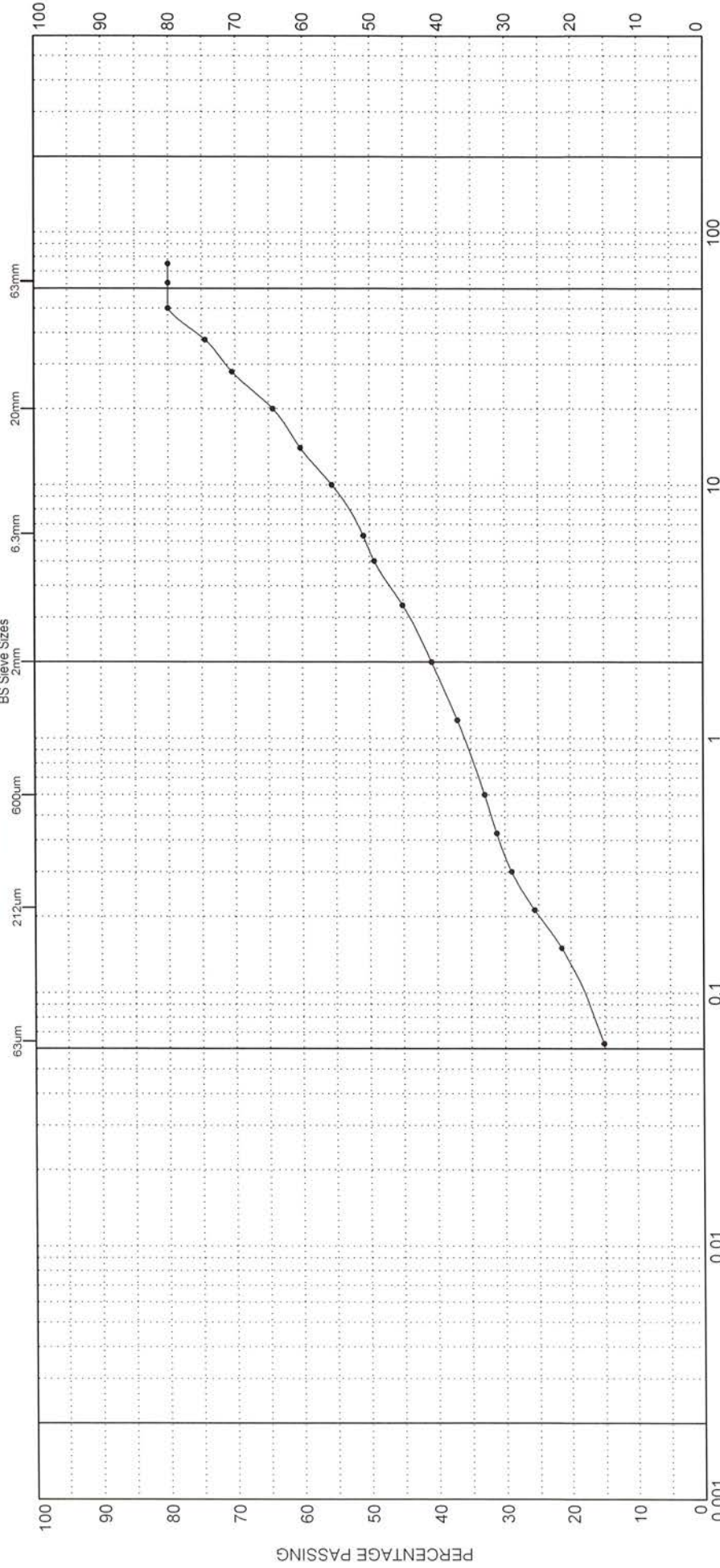
Test Method :- BS1377 : Part 2 : Clause 9.2 & 9.4 : 1990 Exploratory Hole No :- S3-TPA26

Depth :- 2.20

Sample Type & No :- B9




Date Tested :- 27/11/2017

PARTICLE SIZE DISTRIBUTION CURVE



CLAY	SILT			SAND			GRAVEL			COBBLES	BOULDERS
	Fine	Medium	Coarse	Fine	Medium	Coarse	Fine	Medium	Coarse		

For description of sample please refer to the Laboratory Sample Description Sheet

	Date of issue :- 12/12/2017	Certificate No :- PSD/4155/S3-TPA26/B9/2.20	Signed :- 	Name :- 	Page 1 of 1
	Client :- South Tees Site Company Ltd	Contract Title :- The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3	AEG Contract No :- 4155		



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Regional Office: Unit 32 Anchorage Business Park, Chalmers Way, Riverside Docklands, Preston, PR2 2YL. Tel: 01772 735 300 Fax: 01772 735 999

Date Tested :- 13/11/2017

The graph displays the cumulative percentage of aggregate passing through different sieve sizes. The y-axis represents the percentage passing, ranging from 0 to 100. The x-axis represents the sieve size in millimeters (mm) and micrometers (μm). The curve shows that approximately 25% of the aggregate passes through a 75mm sieve, and the percentage decreases as the sieve size decreases, reaching 0% for a 63μm sieve.

Sieve Size (mm / μm)	Percentage Passing (%)
75 mm	100
63 mm	25
50 mm	22
40 mm	18
30 mm	15
25 mm	12
20 mm	10
15 mm	8
12.5 mm	5
10 mm	3
7.5 mm	2
6.3 mm	1
5 mm	0.5
4.75 mm	0.2
4.25 mm	0.1
3.75 mm	0.05
3.0 mm	0.02
2.5 mm	0.01
2.0 mm	0.005
1.5 mm	0.002
1.18 mm	0.001
0.85 mm	0.0005
0.6 mm	0.0002
0.425 mm	0.0001
0.3 mm	0.00005
0.25 mm	0.00002
0.15 mm	0.00001
0.075 mm	0.000005
0.063 mm	0.000002

For description of sample please refer to the Laboratory Sample Description Sheet

CLAY	Fine	Medium	Coarse	Fine	Medium	Coarse	GRAVEL	COBBLES	BOULDERS
	SILT			SAND					

Date of issue :-


01/12/2017

Certificate No :-

PSD/4155/S3-TPA27/LB3/0.70

Signed :-

Name :-

Signed :-	Name :-
	
Title :- The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3	

Page 1 of 1

Client :-

South Tees Site Company Ltd

Contract Title :-

The Former SSL Steelworks, Redcar - Priority Areas Within SSL Landholdings Contract 3

AEG Contract No :-



1367

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Head Office: Unit 25 Stella Gill Industrial Estate, Pulton Fell, Chester-le-Street, Co. Durham, DH2 3BG. Tel: 0191 387 4700 Fax: 0191 387 4710
Regional Office: Unit B2 Anchorage Business Park, Chain Caul Way, Riverside Docklands, Preston, PR2 2YL. Tel: 01772 735 300 Fax: 01772 735 999

Test Method :- Not To BS 1377

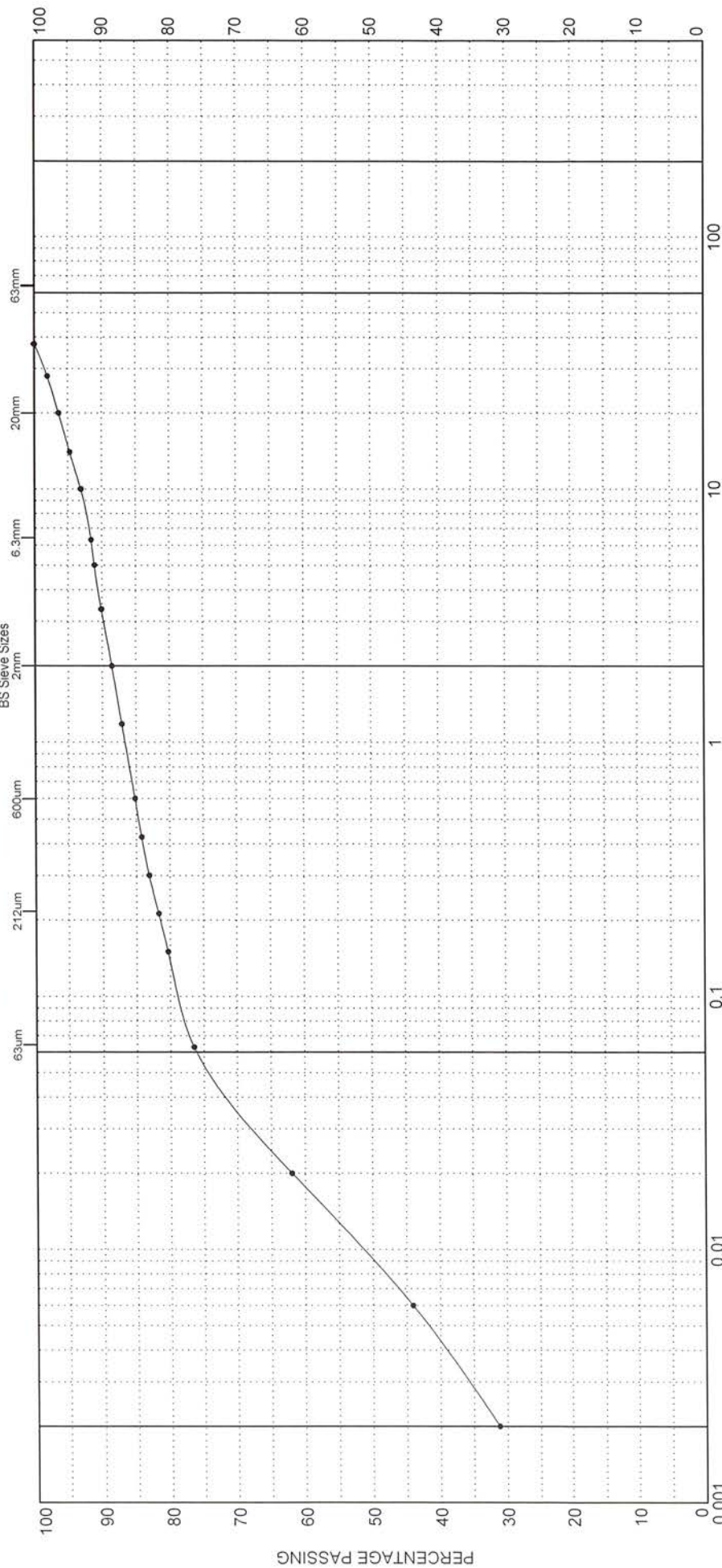
Exploratory Hole No :- S3-TPA28

Depth :- 4.00

Sample Type & No :- B12

Date Tested :- 27/11/2017

PARTICLE SIZE DISTRIBUTION CURVE



CLAY	SILT			SAND			GRAVEL			COBBLES	BOULDERS
	Fine	Medium	Coarse	Fine	Coarse	Medium	Fine	Medium	Coarse		

For description of sample please refer to the Laboratory Sample Description Sheet

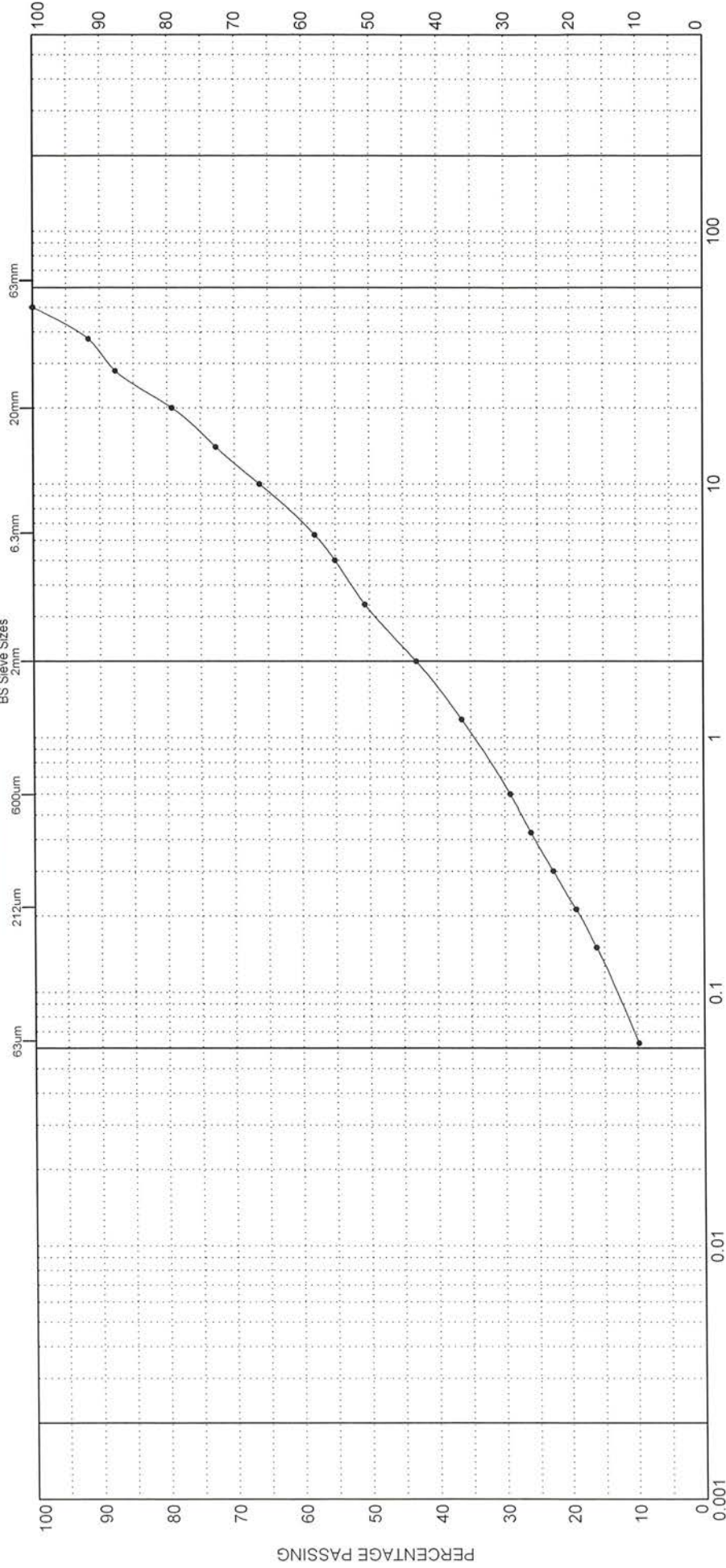
	Date of issue :- 12/12/2017	Certificate No :- PSD/4155/S3-TPA28/B12/4.00	Signed :- <i>MSO</i>	Name :-	Page 1 of 1	
Client :- South Tees Site Company Ltd	Contract Title :- The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3	AEG Contract No :- 4155	1367			

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Regional Office: Unit B2 Anchorage Business Park, Chain Caul Way, Riverside Docklands, Preston, PR2 2YL. Tel: 01772 735 300 Fax: 01772 735 999

Test Method :- Not To BS 1377	Exploratory Hole No :- S3-TPA30	Depth :- 1.20	Sample Type & No :- B5	Date Tested :- 13/11/2017
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PARTICLE SIZE DISTRIBUTION CURVE



CLAY			SILT			SAND			GRAVEL			COBBLES	BOULDERS
Fine	Medium	Coarse	Fine	Medium	Coarse	Fine	Medium	Coarse	Fine	Medium	Coarse		

For description of sample please refer to the Laboratory Sample Description Sheet

	Date of issue :- 01/12/2017	Certificate No :- PSD/4155/S3-TPA30/B5/1.20	Signed :- <i>M800</i>	Name :- M SELKIRK	Page 1 of 1
	Client :- South Tees Site Company Ltd	Contract Title :- The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3	AEG Contract No :- 4155		

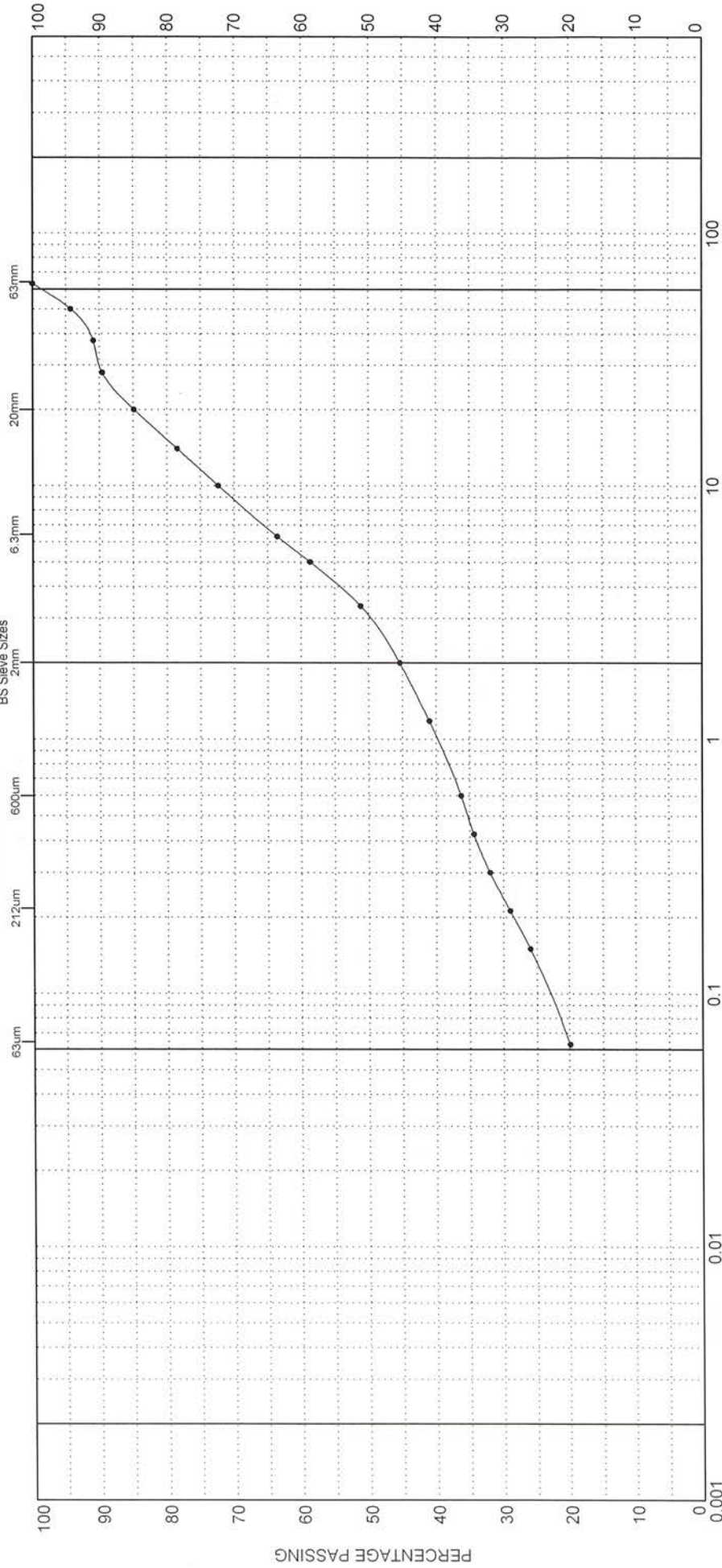


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Head Office: Unit 25 Stella Gill Industrial Estate, Pelton Fold, Chester-le-Street, Co. Durham, DH2 2RG - Tel: 0191 387 4700 Fax: 0191 387 4710
Regional Office: Unit 20, Business Development Centre, Easing Wharf, Blackburn, BB1 5BL - Tel: 01772 735 300 Fax: 01772 735 999

Test Method :- BS1377 : Part 2 : Clause 9.2 & 9.4 : 1990	Exploratory Hole No :- S3-TPA31	Depth :- 1.00
Sample Type & No :- B6		Date Tested :- 09/01/2018

PARTICLE SIZE DISTRIBUTION CURVE



CLAY			SILT			SAND			GRAVEL			COBBLES	BOULDERS
Fine	Medium	Coarse	Fine	Medium	Coarse	Fine	Medium	Coarse	Fine	Medium	Coarse		

For description of sample please refer to the Laboratory Sample Description Sheet. # Denotes method deviates from standard due to insufficient sample mass.

	Date of issue :- 22/02/2018	Certificate No :- PSD/4155/S3-TPA31/B6/1.00	Signed :- <i>msore</i>	Name :- <i>M. SELKIRK</i>	Page 1 of 1
	Client :- South Tees Site Company Ltd		Contract Title :- The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		AEG Contract No :- 4155



ALLIED EXPLORATION & GEOTECHNICS LIMITED

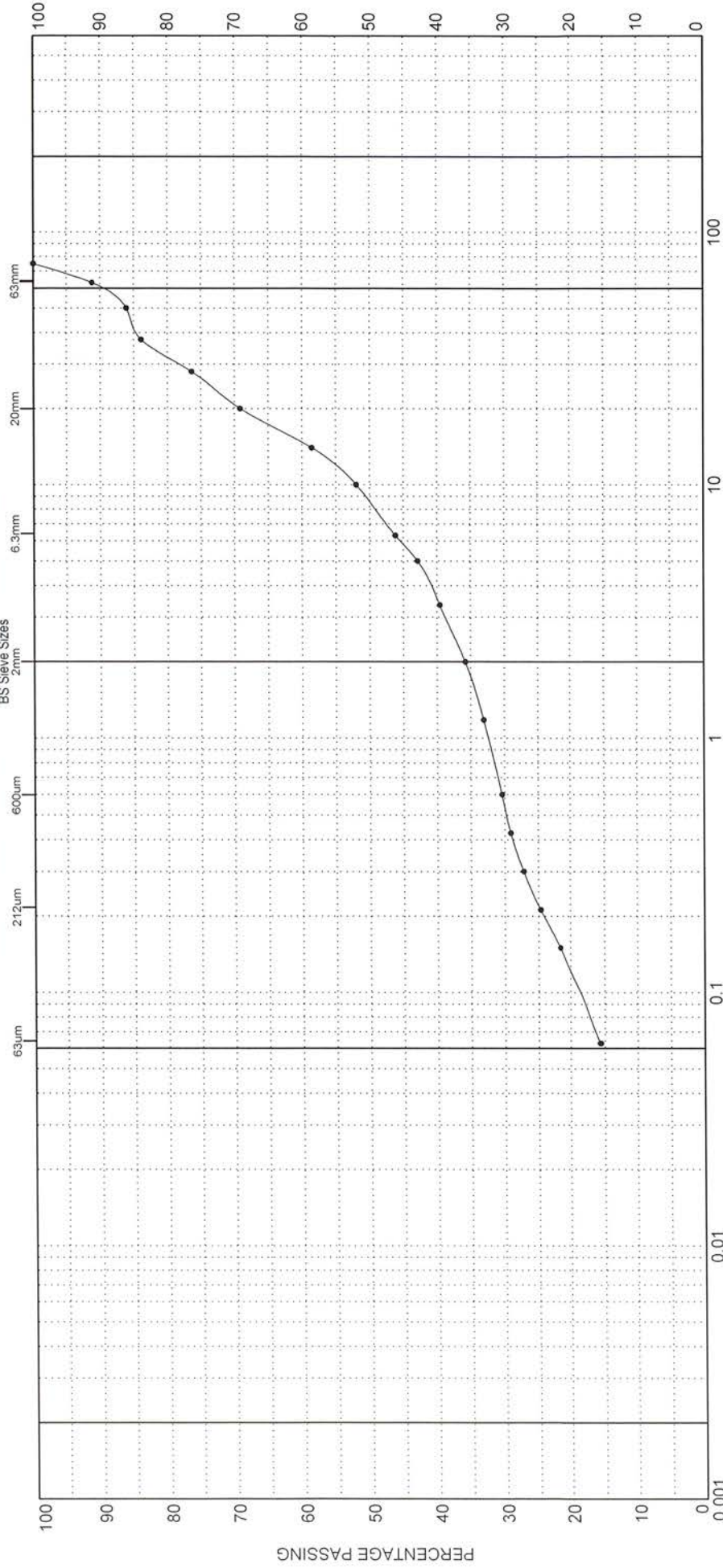
Head Office: Unit 25 Stella Gill Industrial Estate, Pelton Fell, Chester-le-Street, Co. Durham, DH9 3BG. Tel: 0191 387 4700 Fax: 0191 387 4710
Regional Office: Unit B2 Anchorage Business Park, Charn Caul Way, Riverside Docklands, Preston, PR2 2YL. Tel: 01772 735 500 Fax: 01772 735 999

Test Method :- BS1377 : Part 2 : Clause 9.2 & 9.4 : 1990 Exploratory Hole No :- S3-TPA33

Sample Type & No :- B3

Date Tested :- 09/11/2017

PARTICLE SIZE DISTRIBUTION CURVE



CLAY			SILT			SAND			GRAVEL			COBBLES	BOULDERS
Fine	Medium	Coarse	Fine	Medium	Coarse	Fine	Medium	Coarse	Fine	Medium	Coarse		

For description of sample please refer to the Laboratory Sample Description Sheet

	Date of issue :- 14/12/2017	Certificate No :- PSD/4155/S3-TPA33/B3/0.70	Signed :- <i>msere</i>	Name :-	Page 1 of 1
	Client :- South Tees Site Company Ltd	Contract Title :- The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3	AEG Contract No :- 4155		

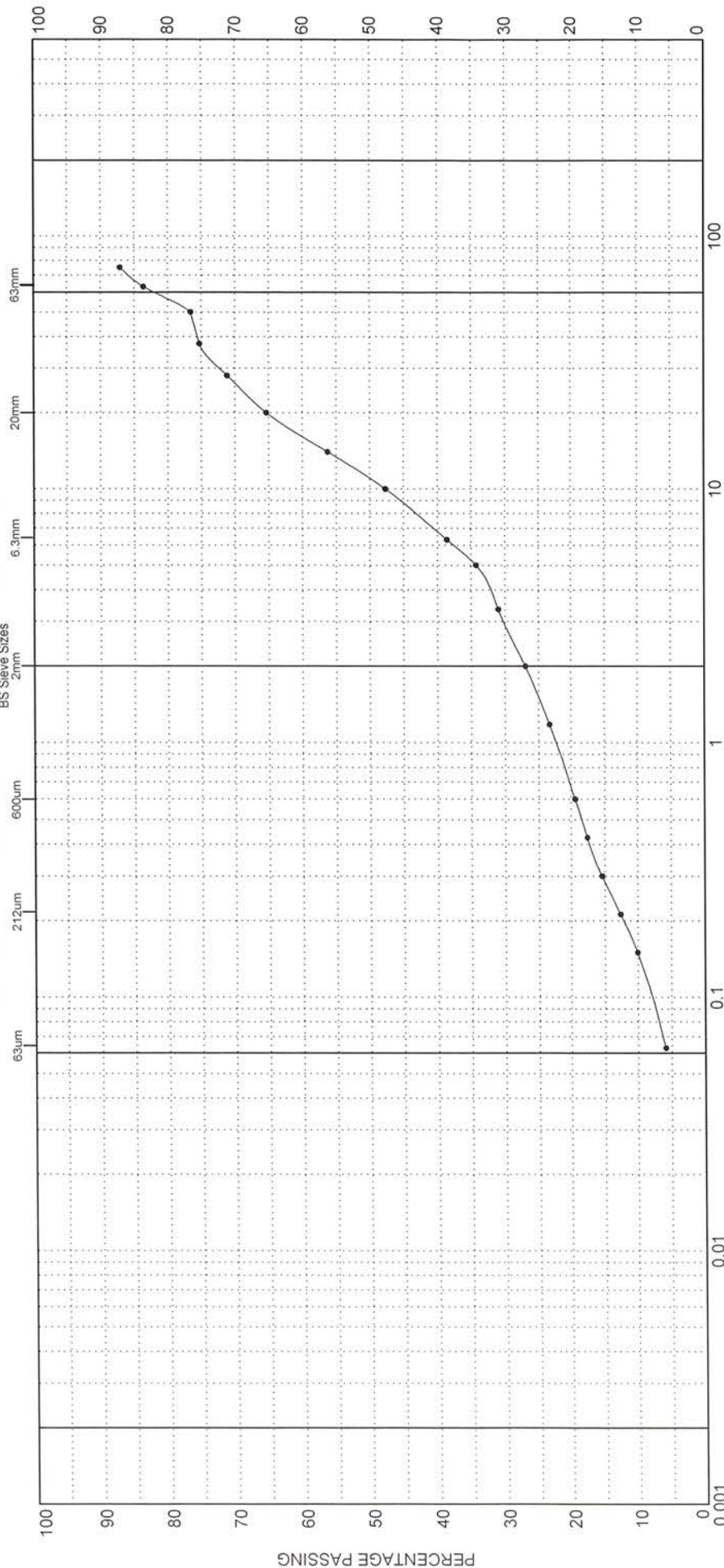


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Head Office: Unit 25 Stella Gill Industrial Estate, Pelton Fell, Chester-le-Street, Co. Durham, DH2 2BG. Tel: 0191 387 4700 Fax: 0191 387 4710
Regional Office: Unit B2 Anchorage Business Park, Chain Cowl Way, Riverside Docklands, Preston, PR2 2YL. Tel: 01772 735 300 Fax: 01772 735 999

Test Method :- Not To BS 1377	Exploratory Hole No :- S3-TPA34	Depth :- 1.20	Sample Type & No :- B3	Date Tested :- 13/11/2017
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PARTICLE SIZE DISTRIBUTION CURVE



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Head Office: Unit 25 Stella Gill Industrial Estate, Bolton Fall, Chester-le-Street, Co. Durham, DH2 2BG - Tel: 0191 387 4700 Fax: 0191 387 4710
Regional Office: Unit 62 Anchorage Business Park, Chain Caul Way, Riverside Docklands, Preston, PR2 2YL - Tel: 01772 735 300 Fax: 01772 735 999

Test Method :- Not To BS 1377

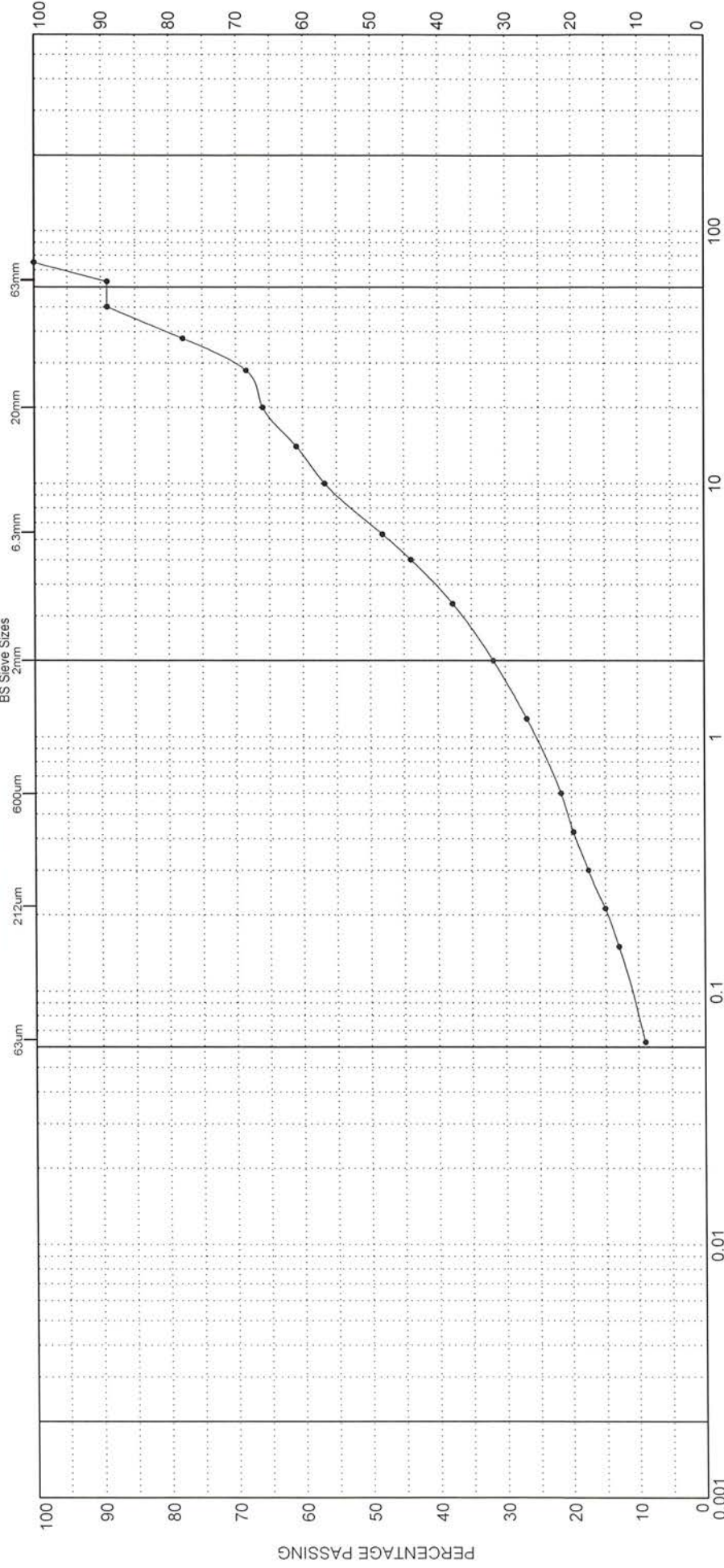
Exploratory Hole No :- S3-TPA36

Depth :- 0.60

Sample Type & No :- B3

Date Tested :- 13/11/2017

PARTICLE SIZE DISTRIBUTION CURVE



CLAY	SILT			SAND			GRAVEL			COBBLES	BOULDERS
	Fine	Medium	Coarse	Fine	Medium	Coarse	Fine	Medium	Coarse		

For description of sample please refer to the Laboratory Sample Description Sheet

	Date of issue :- 01/12/2017	Certificate No :- PSD/4155/S3-TPA36/B3/0.60	Signed :- <i>MSB</i>	Name :- <i>M SELVARAJ</i>	Page 1 of 1	
Client :- South Tees Site Company Ltd	Contract Title :- The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3	AEG Contract No :- 4155	1367			

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Regional Office: Unit B2 Anchorage Business Park, Chain Caul Way, Riverside Docklands, Preston, PR2 2YL - Tel: 01772 735 300 Fax: 01772 735 999

Test Method :- Not To BS 1377

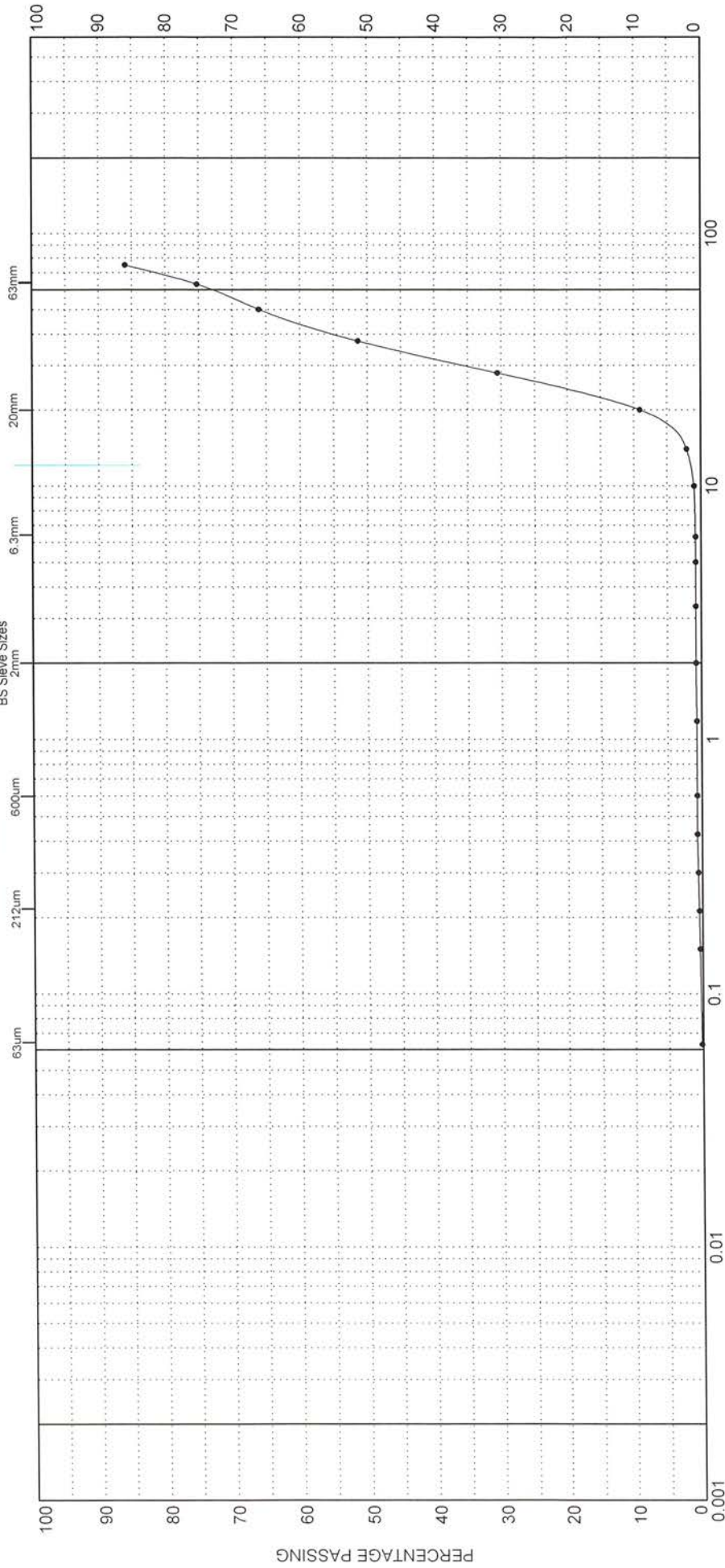
Exploratory Hole No :- S3-TPA37

Depth :- 0.50

Sample Type & No :- LB1

Date Tested :- 10/11/2017

PARTICLE SIZE DISTRIBUTION CURVE



CLAY			SILT			SAND			GRAVEL			COBBLES			BOULDERS		
Fine	Medium	Coarse	Fine	Medium	Coarse	Fine	Medium	Coarse	Fine	Medium	Coarse	COBBLES	COBBLES	COBBLES	BOULDERS	BOULDERS	BOULDERS

For description of sample please refer to the Laboratory Sample Description Sheet

	Date of issue :- 01/12/2017	Certificate No :- PSD/4155/S3-TPA37/LB1/0.50	Signed :- <i>MSD</i>	Name :- <i>VA 17 1738</i>	Page 1 of 1
	Client :- South Tees Site Company Ltd	Contract Title :- The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3	AEG Contract No :- 4155		



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Regional Office: Unit B2 Anchorage Business Park, Chain Cull Way, Riverside Docklands, Preston, PR2 2YL. Tel: 01772 735 300 Fax: 01772 735 999

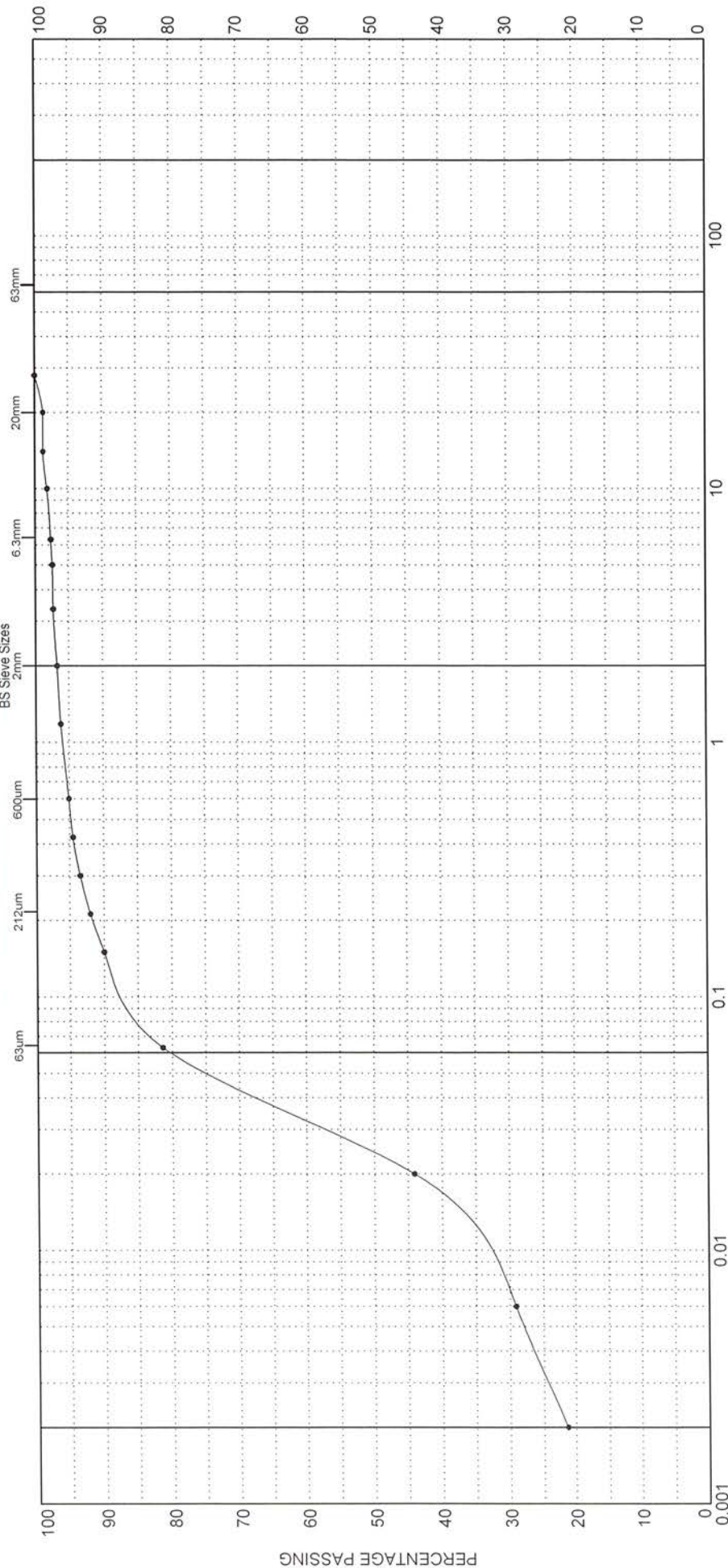
Test Method :- BS1377 : Part 2 : Clause 9.2 & 9.4 : 1990 Exploratory Hole No :- S3-TPA39

Depth :- 0.90

Sample Type & No :- B6

Date Tested :- 13/11/2017

PARTICLE SIZE DISTRIBUTION CURVE



CLAY			SILT			SAND			GRAVEL			COBBLES			BOULDERS		
Fine	Medium	Coarse	Fine	Medium	Coarse	Fine	Medium	Coarse	Fine	Medium	Coarse	Fine	Medium	Coarse	Fine	Medium	Coarse

For description of sample please refer to the Laboratory Sample Description Sheet

	Date of issue :- 01/12/2017	Certificate No :- PSD/4155/S3-TPA39/B6/0.90	Signed :- <i>MSD</i>	Name :- <i>MSD</i>	Page 1 of 1
	Client :- South Tees Site Company Ltd	Contract Title :- The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3	AEG Contract No :- 4155		



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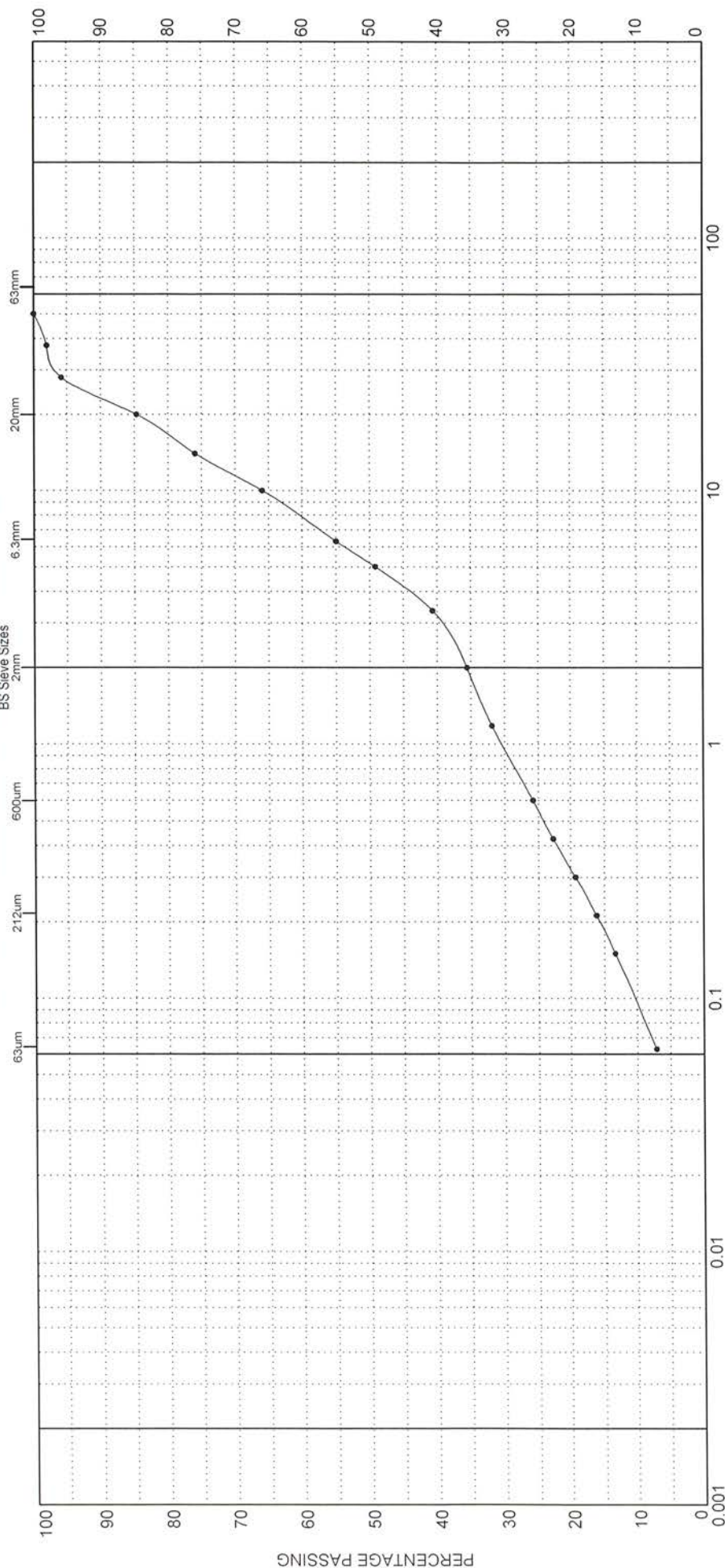
Test Method :- BS1377 : Part 2 : Clause 9.2 & 9.4 : 1990 Exploratory Hole No :- S3-TPA40

Depth :- 0.70

Sample Type & No :- B4

Date Tested :- 10/11/2017

PARTICLE SIZE DISTRIBUTION CURVE



CLAY	SILT			SAND			GRAVEL			COBBLES	BOULDERS
	Fine	Medium	Coarse	Fine	Medium	Coarse	Fine	Medium	Coarse		

For description of sample please refer to the Laboratory Sample Description Sheet

	Date of issue :- 01/12/2017	Certificate No :- PSD/4155/S3-TPA40/B4/0.70		Signed :- 	Name :- 	Page 1 of 1
	Client :- South Tees Site Company Ltd	Contract Title :- The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3				

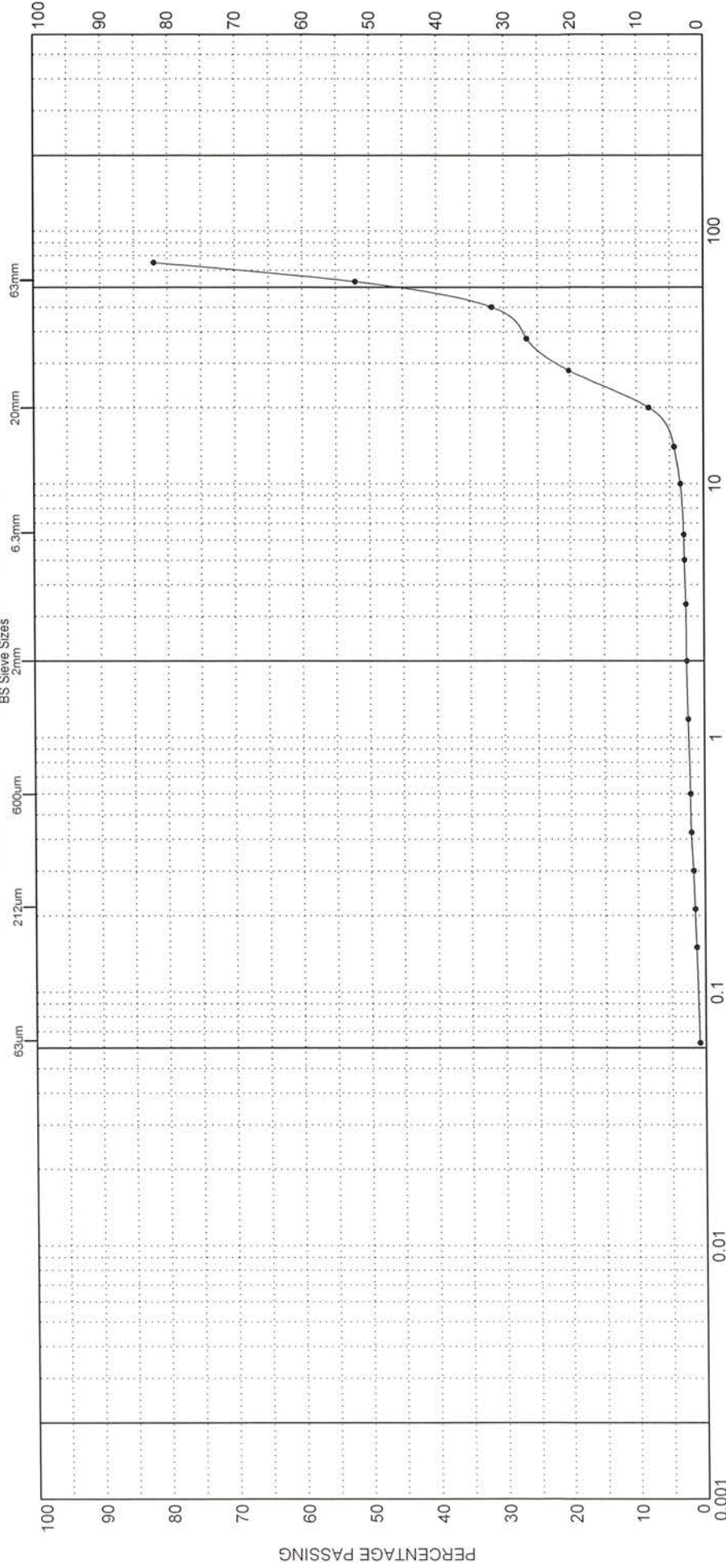


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Regional Office: Unit 52 Anchorage Business Park, Chain Caul Way, Riverside Docklands, Preston, PR2 2YL. Tel: 01772 735 300 Fax: 01772 735 999

Test Method :- Not To BS 1377	Exploratory Hole No :- S3-TPA41	Depth :- 0.50	Sample Type & No :- LB1	Date Tested :- 13/11/2017
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PARTICLE SIZE DISTRIBUTION CURVE



CLAY			SILT			SAND			GRAVEL			COBBLES	BOULDERS
Fine	Medium	Coarse	Fine	Medium	Coarse	Fine	Medium	Coarse					

For description of sample please refer to the Laboratory Sample Description Sheet

	Date of issue :- 01/12/2017	Certificate No :- PSD/4155/S3-TPA41/LB1/0.50	Signed :- <i>msoro</i>	Name :-	Page 1 of 1
	Client :- South Tees Site Company Ltd	Contract Title :- The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3	AEG Contract No :- 4155		1367

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Head Office: Unit 25 Sella Cill Industrial Estate, Pelton Fell, Chester-le-Street, Co. Durham, DH2 2EG - Tel: 0191 387 4700 Fax: 0191 387 4710
Regional Office: Unit B2 Archrope Business Park, Chain Caul Way, Riverside Docklands, Preston, PR2 2YL - Tel: 01772 735 300 Fax: 01772 735 999

Test Method :- Not To BS 1377

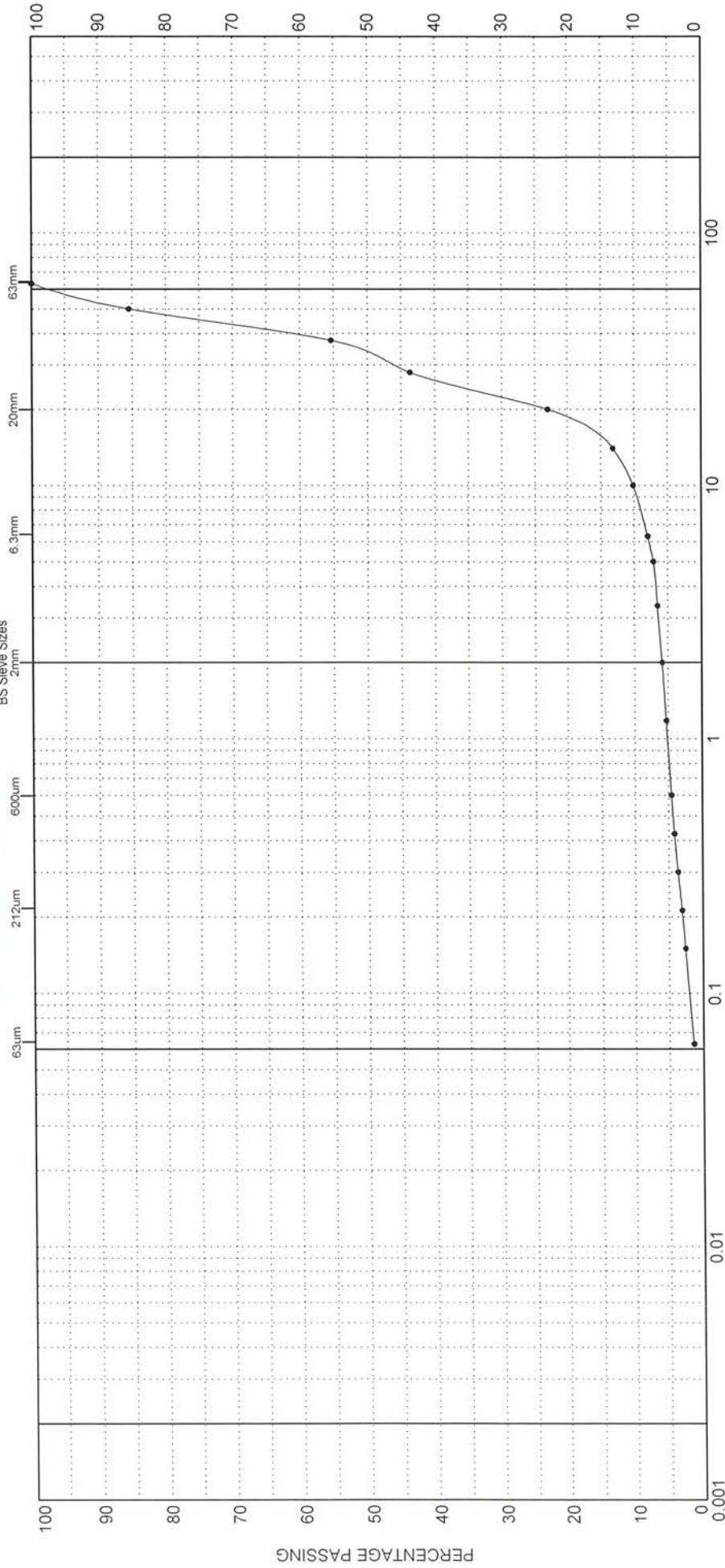
Exploratory Hole No :- S3-TPA42

Depth :- 1.00

Sample Type & No :- B3

Date Tested :- 29/11/2017

PARTICLE SIZE DISTRIBUTION CURVE



CLAY			SILT			SAND			GRAVEL			COBBLES			BOULDERS		
Fine	Medium	Coarse	Fine	Medium	Coarse	Fine	Medium	Coarse	Fine	Medium	Coarse	Fine	Medium	Coarse	Fine	Medium	Coarse

For description of sample please refer to the Laboratory Sample Description Sheet



Date of issue :- 12/12/2017

Certificate No :- PSD/4155/S3-TPA42/B3/1.00

Signed :- *msore*

Name :-

Page 1 of 1

AEG Contract No :- 4155

Client :- South Tees Site Company Ltd

Contract Title :- The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3

UKAS TESTING

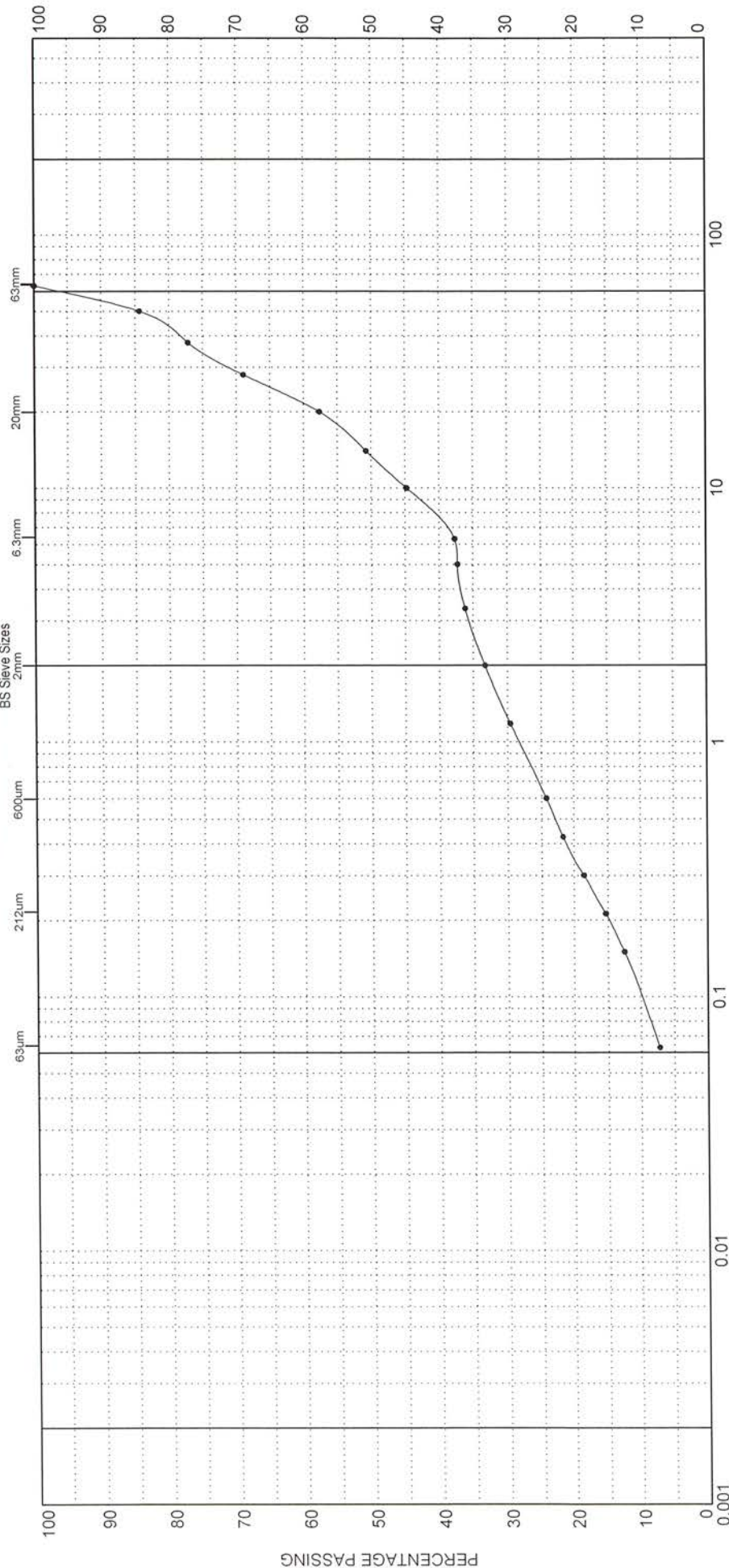
1367

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Regional Office: Unit B2 Anchorage Business Park, Chain Cowl Way, Rotherham Dodlands, Preston, PR2 2YL. Tel: 01772 735 300 Fax: 01772 735 999

Test Method :- Not To BS 1377	Exploratory Hole No :- S3-TPB01	Depth :- 1.80	Sample Type & No :- B7	Date Tested :- 27/11/2017
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PARTICLE SIZE DISTRIBUTION CURVE



CLAY		SILT		SAND		GRAVEL		COBBLES	BOULDERS
Fine	Medium	Coarse	Fine	Medium	Coarse	Fine	Medium	Coarse	

For description of sample please refer to the Laboratory Sample Description Sheet

	Date of issue :- 12/12/2017	Certificate No :- PSD/4155/S3-TPB01/B7/1.80	Signed :- <i>msore</i>	Name :-	Page 1 of 1
	Client :- South Tees Site Company Ltd	Contract Title :- The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3	AEG Contract No :- 4155		

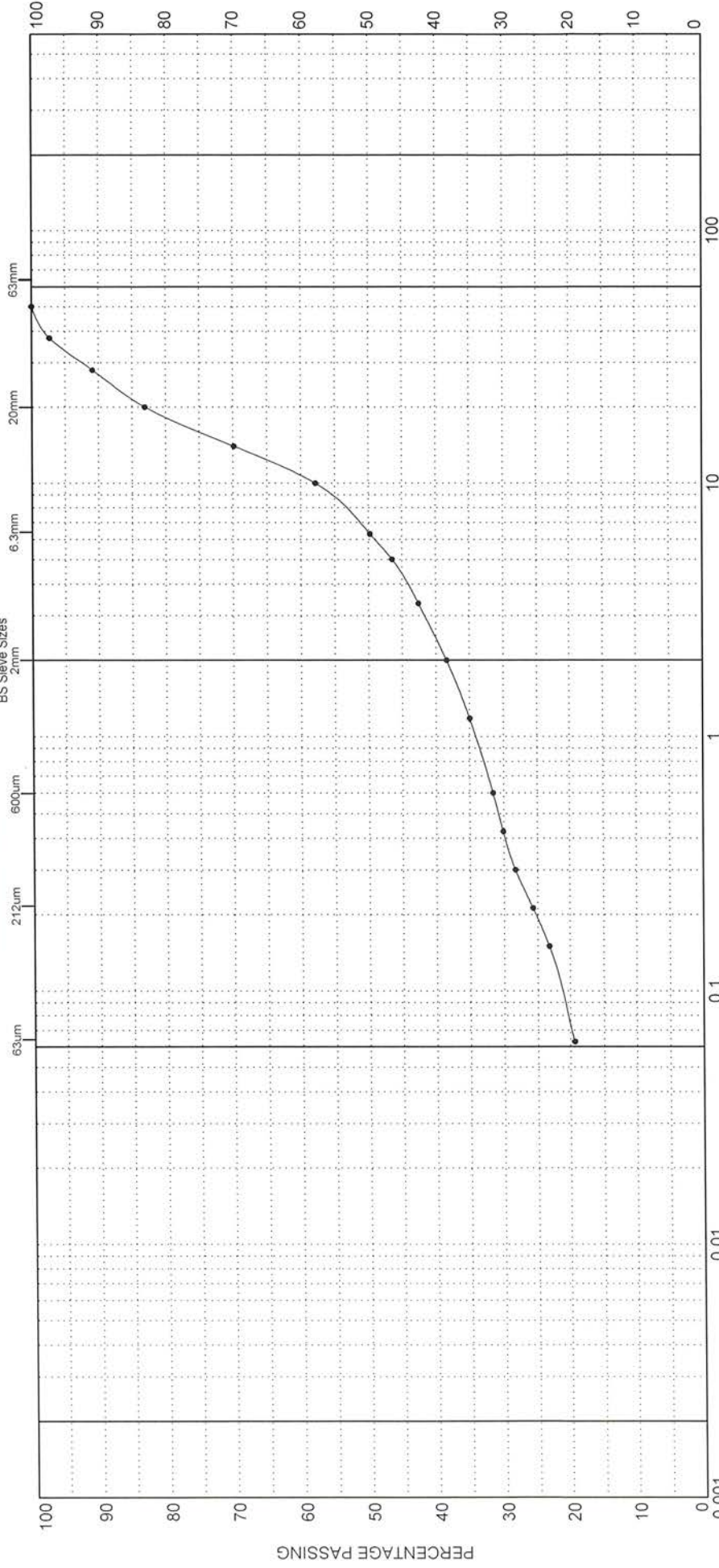


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Regional Office: Unit E2 Archbridge Business Park, Chain Caut Way, Riverside Docklands, Preston, PR2 2YL - Tel: 01772 735 300 Fax: 01772 735 999

Test Method :- Not To BS 1377	Exploratory Hole No :- S3-TPB04	Depth :- 0.80	Sample Type & No :- B5	Date Tested :- 29/11/2017
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PARTICLE SIZE DISTRIBUTION CURVE



CLAY	SILT			SAND			GRAVEL			COBBLES	BOULDERS
	Fine	Medium	Coarse	Fine	Medium	Coarse	Fine	Medium	Coarse		

For description of sample please refer to the Laboratory Sample Description Sheet

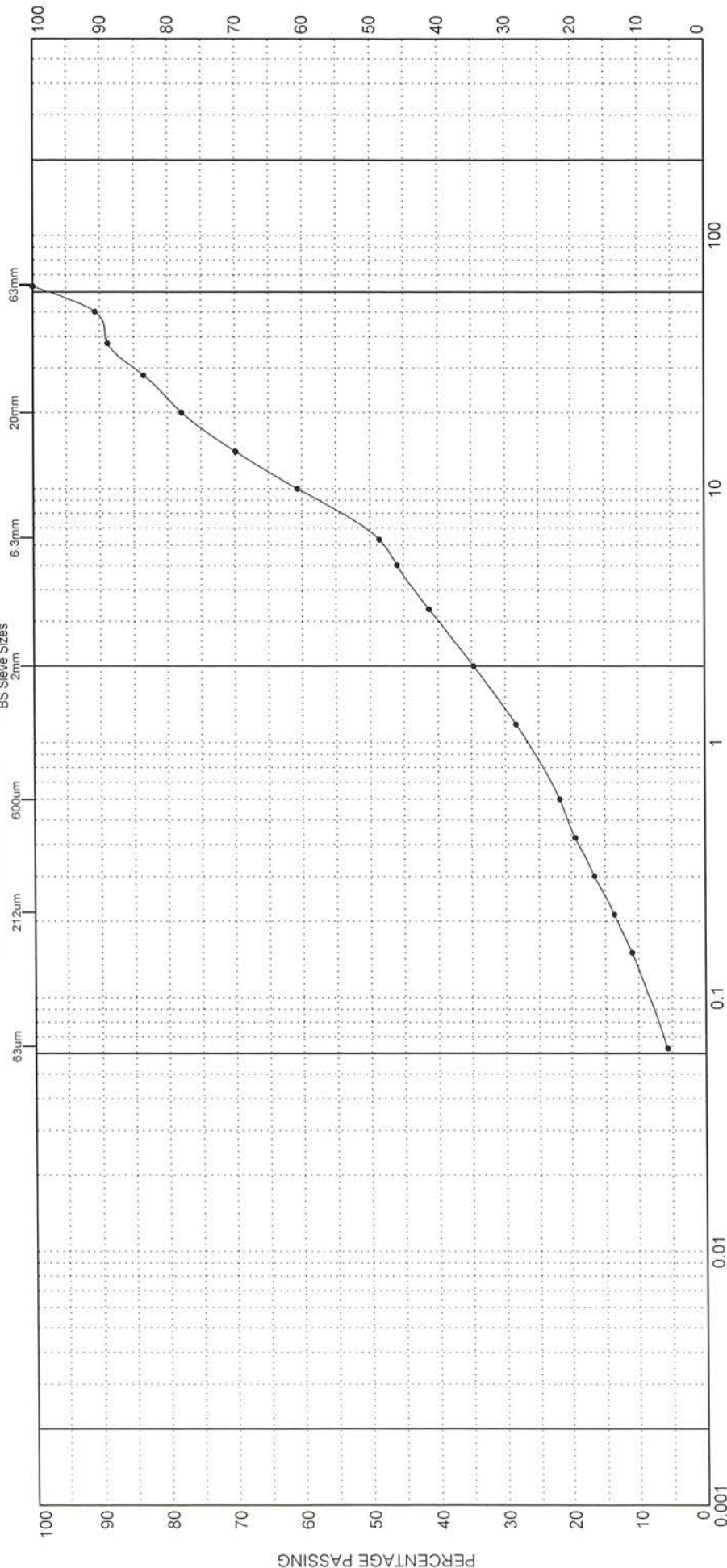
	Date of issue :- 12/12/2017	Certificate No :- PSD/4155/S3-TPB04/B5/0.80	Signed :- <i>msore</i>	Name :-	Page 1 of 1	
	Client :- South Tees Site Company Ltd	Contract Title :- The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3	AEG Contract No :- 4155		UKAS TESTING 1367	

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Regional Office: Unit B2 Anchorage Business Park, Chain Caul Way, Riverside Docklands, Preston, PR2 2YL - Tel: 01772 735 300 Fax: 01772 735 999

Test Method :- Not To BS 1377	Exploratory Hole No :- S3-TPB05	Depth :- 2.50	Sample Type & No :- B7	Date Tested :- 28/11/2017
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PARTICLE SIZE DISTRIBUTION CURVE



CLAY	SILT			SAND			GRAVEL			COBBLES	BOULDERS
	Fine	Medium	Coarse	Fine	Medium	Coarse	Fine	Medium	Coarse		

For description of sample please refer to the Laboratory Sample Description Sheet

	Date of issue :- 12/12/2017	Certificate No :- PSD/4155/S3-TPB05/B7/2.50	Signed :- <i>msw</i>	Name :- AEG	Page 1 of 1
	Client :- South Tees Site Company Ltd	Contract Title :- The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3	AEG Contract No :- 4155		



Head Office: Unit 25 Stella Gill Industrial Estate, Pelton Fell Chester-le-Street, Co. Durham, DH2 2RG. Tel: 0191 387 4700 Fax: 0191 387 4710.
Regional Office: Unit B2 Anchorage Business Park, Chain Caul Way, Riversway Docklands, Preston, PR2 2YL. Tel: 01772 735 300 Fax: 01772 735 999

Date Tested :- 29/11/2017

The graph illustrates the gradation of an aggregate sample. The y-axis represents the percentage of material passing through a given sieve size, ranging from 0 to 100. The x-axis represents the sieve size in millimeters, with major ticks at 0.075, 0.15, 0.3, 0.6, 1.18, 2.0, 4.75, 7.5, 15, 30, 60, and 75 mm. The curve starts at 100% for the 0.075 mm sieve and decreases as the sieve size increases, reaching approximately 10% for the 75 mm sieve.

Sieve Size (mm)	Percentage Passing (%)
0.075	100
0.15	100
0.3	100
0.6	100
1.18	100
2.0	100
4.75	100
7.5	100
15	100
30	100
60	100
75	100

	Fine	Medium	Coarse	Fine	Medium	Coarse	Fine	Medium	Coarse		
CLAY				SILT				SAND			GRAVEL
	Fine										
											COBBLES
											BOULDERS

For description of sample please refer to the Laboratory Sample Description Sheet

	Date of issue :- 12/12/2017	Certificate No :- PSD/4155/S3-TPB06/B3/0.70	Signed :- 	Name :-	Page 1 of 1
	Client :- South Tees Site Company Ltd	Contract Title :- The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3			AEG Contract No :- 4155

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Regional Office: Unit 52 Anchorage Business Park, Chain Caul Way, Riversway Docklands, Preston, PR2 2YL - Tel: 01772 735 300 Fax: 01772 735 999

Date Tested :- 28/11/2017

Sieve Size	Percentage Passing (%)
63mm	45
20mm	20
6.3mm	10
2mm	5
600µm	2
212µm	1
63µm	0.5

CLAY	Fine	Medium	Coarse	Fine	Medium	Coarse	COBBLES	BOULDERS
	SILT			SAND				
				Fine	Medium	Coarse	GRAVEL	

4155



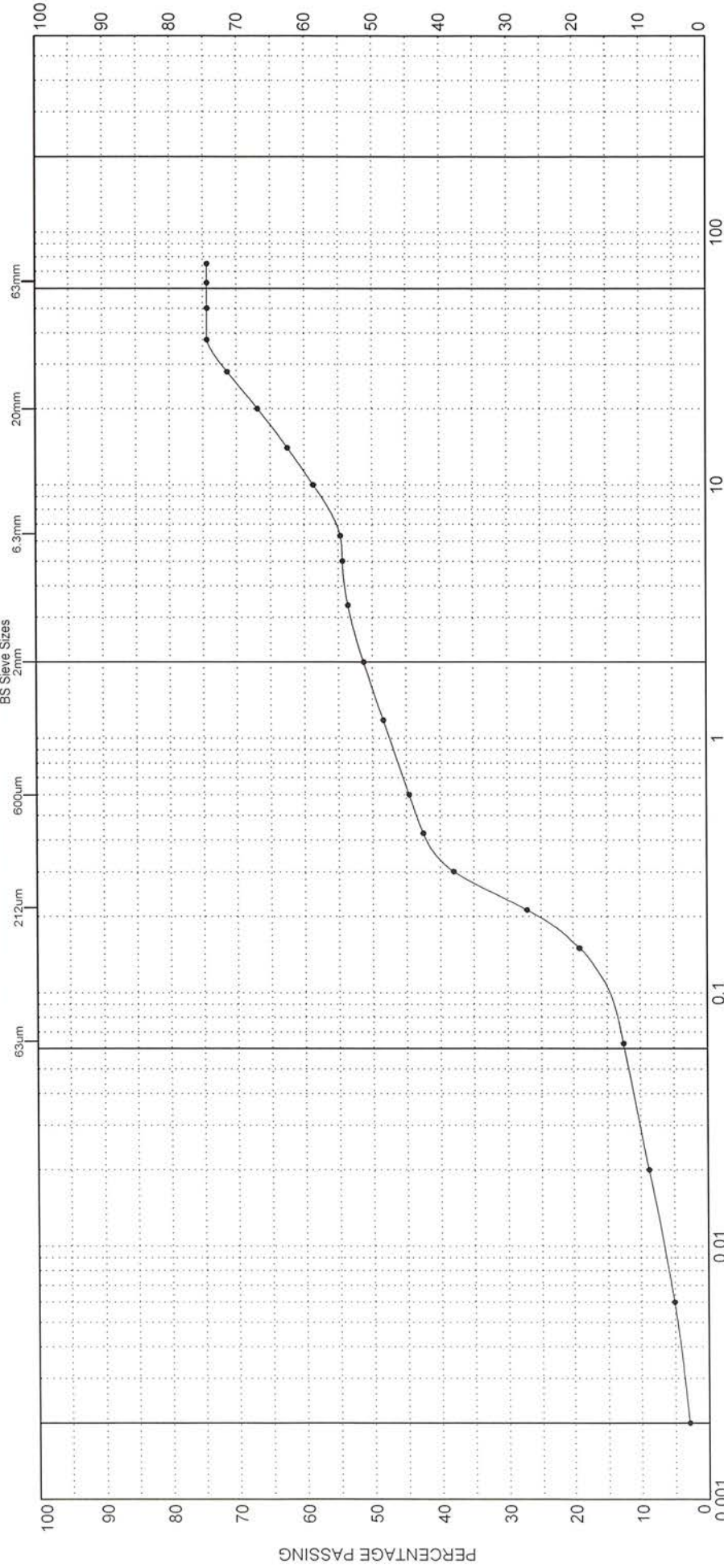
1367

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Head Office: Unit 25 Stella Gill Industrial Estate, Pelton Fell, Chester-le-Street, Co. Durham, DH2 2RG. Tel: 0191 387 4700 Fax: 0191 387 4710
Regional Office: Unit B2 Anchorage Business Park, Chain Caul Way, Roverswaite Dodmonds, Preston, PR2 2YL. Tel: 01772 735 300 Fax: 01772 735 999



Test Method :- Not To BS 1377 Explanatory Hole No :- S3-TPB10 Depth :- 2.50 Sample Type & No :- B9 Date Tested :- 29/11/2017

PARTICLE SIZE DISTRIBUTION CURVE



CLAY			SILT			SAND			GRAVEL			COBBLES		BOULDERS	
Fine	Medium	Coarse	Fine	Medium	Coarse	Fine	Medium	Coarse	Fine	Medium	Coarse				

For description of sample please refer to the Laboratory Sample Description Sheet

		Date of issue :- 12/12/2017	Certificate No :- PSD/4155/S3-TPB10/B9/2.50		Signed :- 	Name :-	Page 1 of 1	
Client :- South Tees Site Company Ltd		Contract Title :- The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		AEG Contract No :- 4155		UKAS TESTING 1367		

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Regional Office: Unit E2 Anchorage Business Park, Chant Caul Way, Riverside Docklands, Preston, PR2 2YL. Tel: 01772 735 300 Fax: 01772 735 999

Test Method :- Not To BS 1377

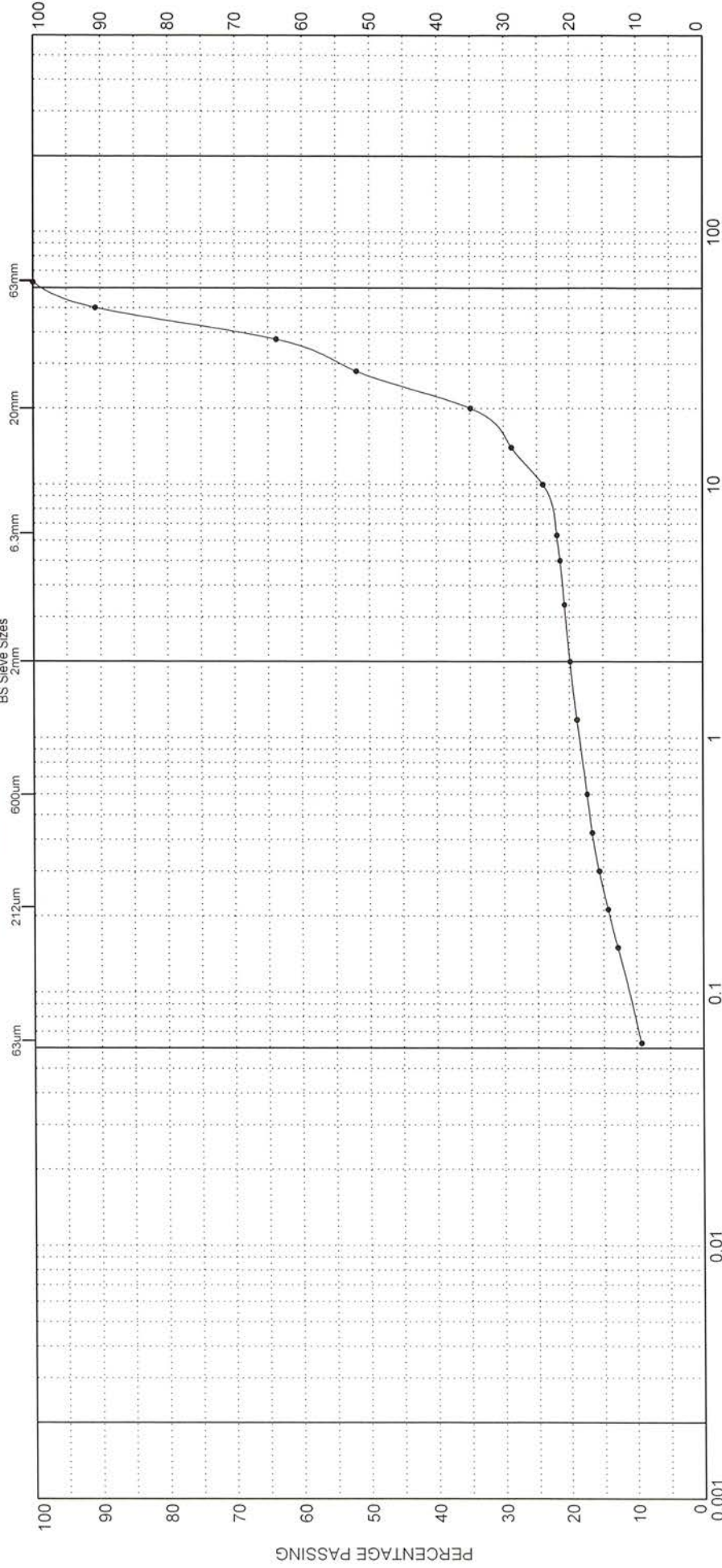
Exploratory Hole No :- S3-TPB14

Depth :- 0.80

Sample Type & No :- B6

Date Tested :- 30/11/2017

PARTICLE SIZE DISTRIBUTION CURVE



CLAY	SILT			SAND			GRAVEL			COBBLES	BOULDERS
	Fine	Medium	Coarse	Fine	Medium	Coarse	Fine	Medium	Coarse		

For description of sample please refer to the Laboratory Sample Description Sheet

	Date of issue :- 12/12/2017	Certificate No :- PSD/4155/S3-TPB14/B6/0.80	Signed :- <i>msa</i>	Name :-	Page 1 of 1
	Client :- South Tees Site Company Ltd	Contract Title :- The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3	AEG Contract No :- 4155		

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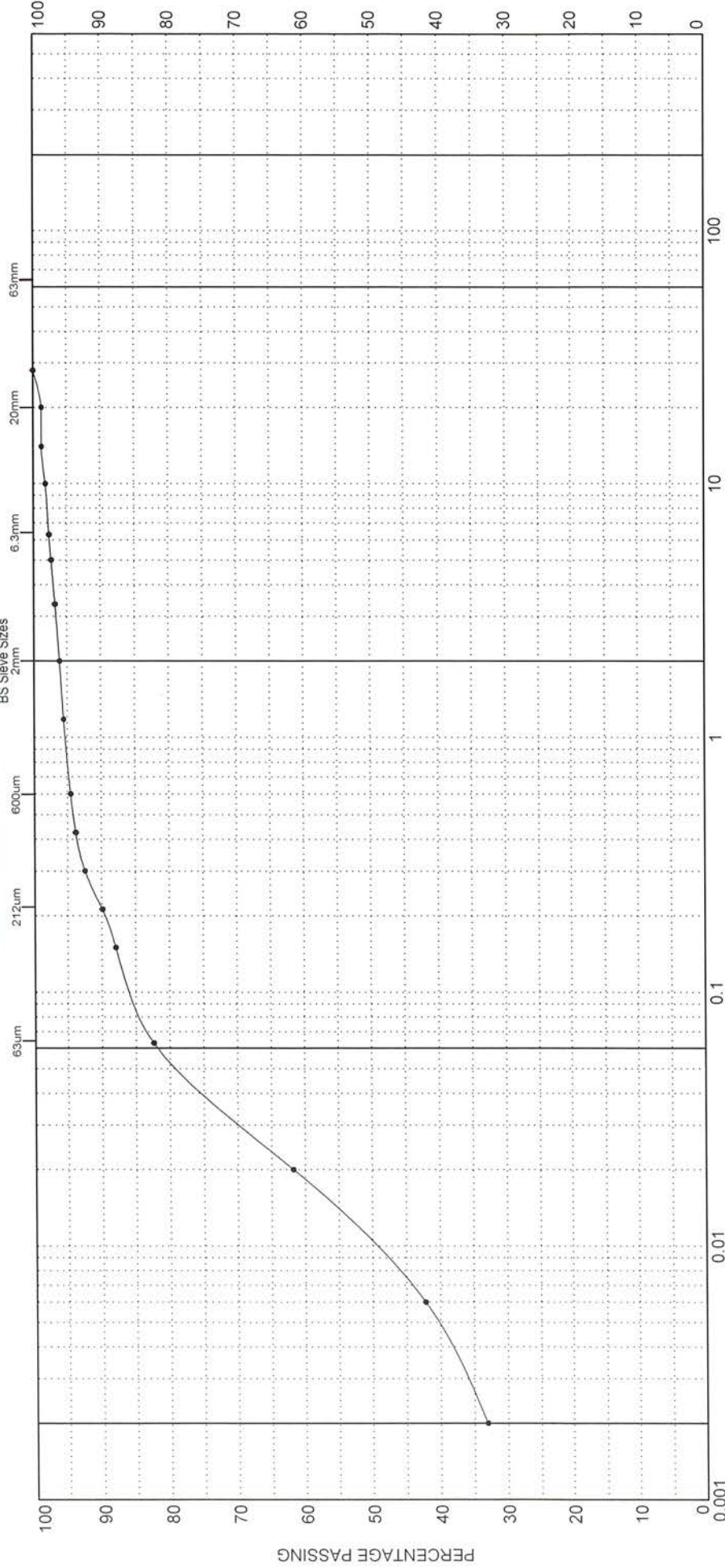
Test Method :- BS1377 : Part 2 : Clause 9.2 & 9.4 : 1990 Exploratory Hole No :- S3-TPB15

Depth :- 2.00

Sample Type & No :- B9

Date Tested :- 29/11/2017

PARTICLE SIZE DISTRIBUTION CURVE



CLAY			SILT			SAND			GRAVEL			COBBLES		BOULDERS	
Fine	Medium	Coarse	Fine	Medium	Coarse	Fine	Medium	Coarse	Fine	Medium	Coarse				

For description of sample please refer to the Laboratory Sample Description Sheet

	Date of issue :- 12/12/2017	Certificate No :- PSD/4155/S3-TPB15/B9/2.00	Signed :- <i>MSD</i>	Name :- [Redacted]	Page 1 of 1
	Client :- South Tees Site Company Ltd	Contract Title :- The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3	AEG Contract No :- 4155		

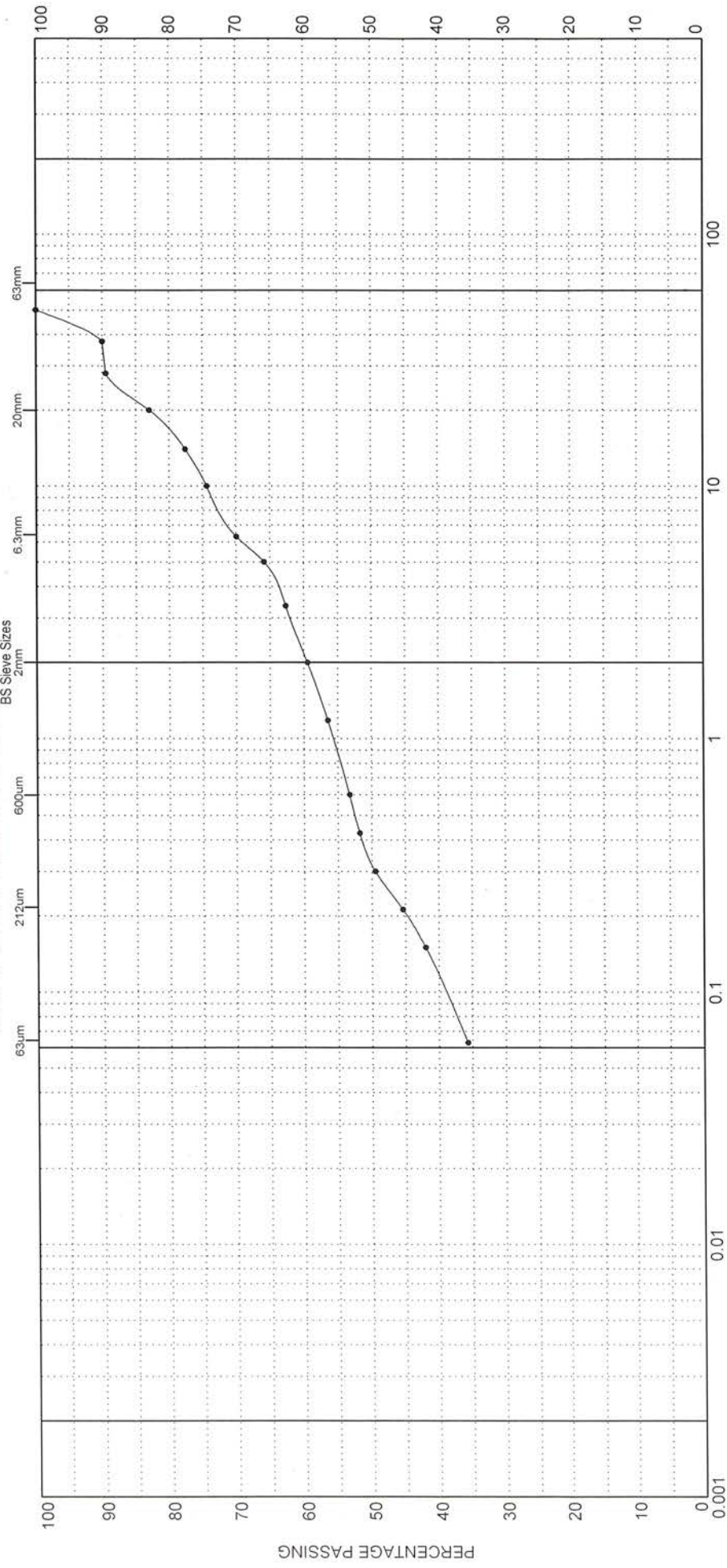


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Test Method :- BS1377 : Part 2 : Clause 9.2 & 9.4 : 1990	Exploratory Hole No :- S3-TPB16	Depth :- 2.00
	Sample Type & No :- B9	Date Tested :- 23/01/2018

PARTICLE SIZE DISTRIBUTION CURVE



CLAY	SILT			SAND			GRAVEL			COBBLES	BOULDERS
	Fine	Medium	Coarse	Fine	Medium	Coarse	Fine	Medium	Coarse		

For description of sample please refer to the Laboratory Sample Description Sheet. # Denotes method deviates from standard due to insufficient sample mass.

	Date of issue :- 22/02/2018	Certificate No :- PSD/4155/S3-TPB16/B9/2.00	Signed :- <i>msw</i>	Name :- <i>M SELKIRK</i>	Page 1 of 1
	Client :- South Tees Site Company Ltd		Contract Title :- The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		



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Test Method :- Not To BS 1377

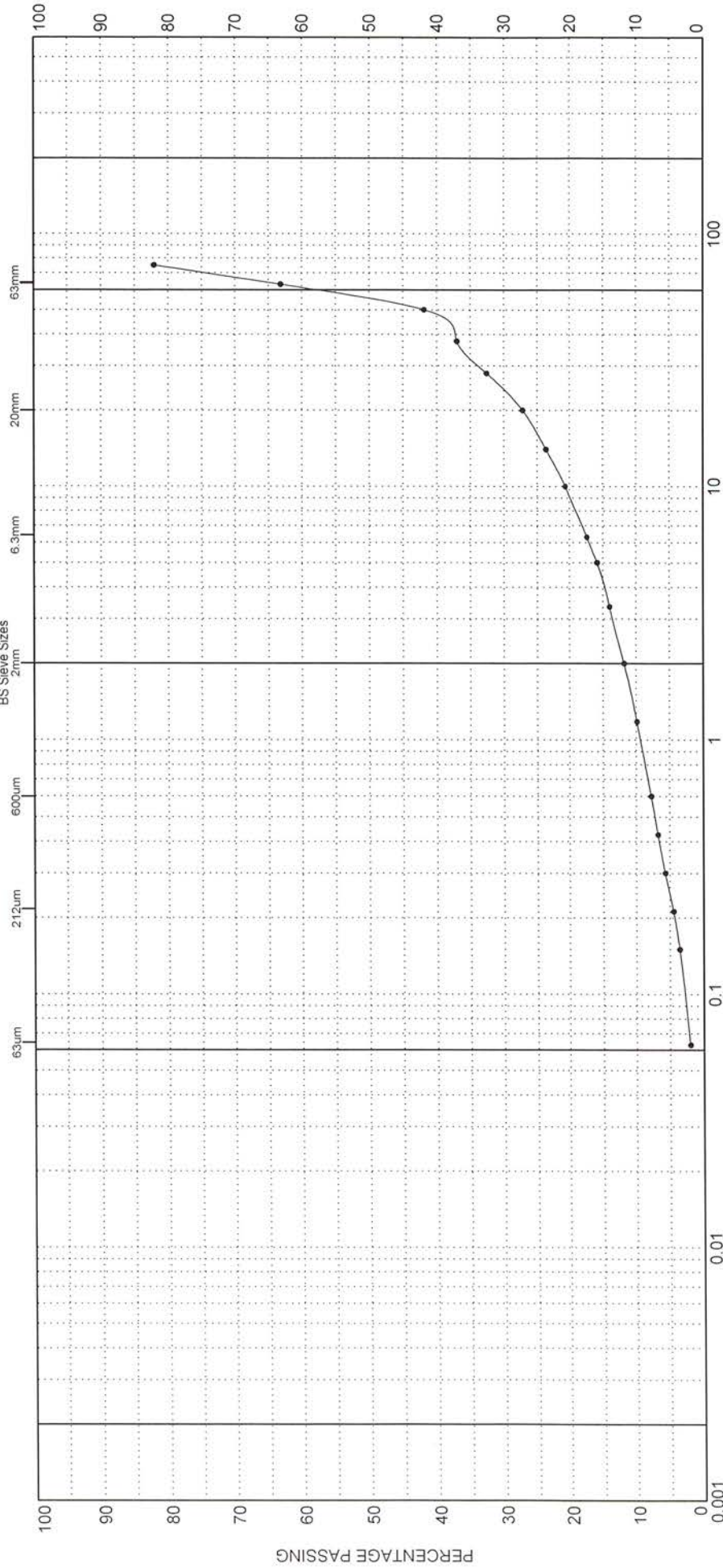
Exploratory Hole No :- S3-TPB19

Depth :- 1.00

Sample Type & No :- LB4


Date Tested :- 13/11/2017

PARTICLE SIZE DISTRIBUTION CURVE



CLAY			SILT			SAND			GRAVEL			COBBLES	BOULDERS
Fine	Medium	Coarse	Fine	Medium	Coarse	Fine	Medium	Coarse	Fine	Medium	Coarse	COBBLES	

For description of sample please refer to the Laboratory Sample Description Sheet

		Date of issue :- 01/12/2017		Certificate No :- PSD/4155/S3-TPB19/LB4/1.00		Signed :- <i>msae</i>		Name :-		Page 1 of 1	
Client :- South Tees Site Company Ltd		Contract Title :- The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		AEG Contract No :- 4155		UKAS TESTING 1367					

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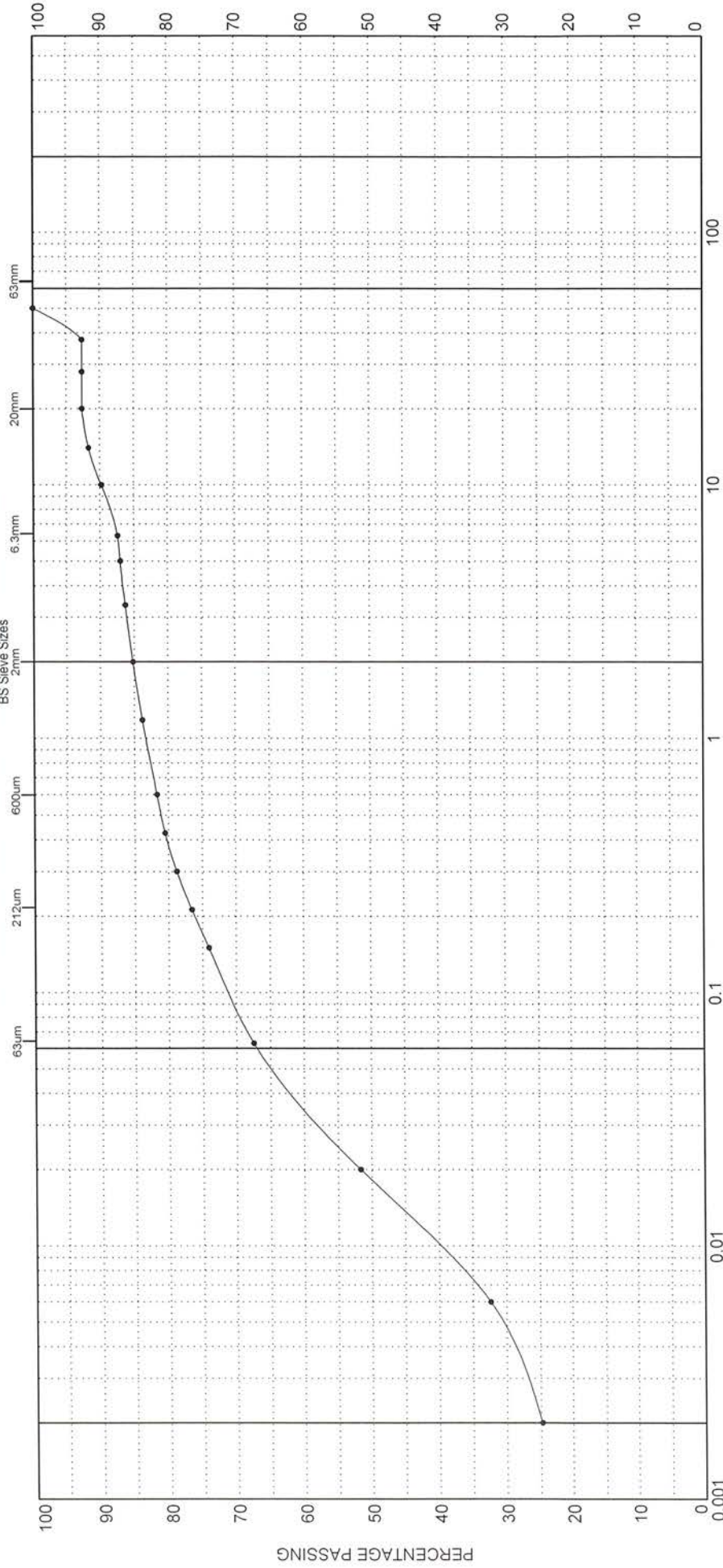
Test Method :- BS1377 : Part 2 : Clause 9.2 & 9.4 : 1990 Exploratory Hole No :- S3-TPB20

Sample Type & No :- B7

Date Tested :- 10/11/2017

Depth :- 2.00

PARTICLE SIZE DISTRIBUTION CURVE



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Date Tested :- 29/11/2017

Figure 1 is a semi-logarithmic graph showing the percentage of aggregate passing through various sieve sizes. The y-axis is labeled 'PERCENTAGE PASSING' and ranges from 0 to 100. The x-axis is labeled 'BS Sieve Sizes' and includes values 63mm, 20mm, 6.3mm, 2mm, 600µm, 212µm, and 63µm. The curve shows a typical aggregate gradation, starting at 100% passing for the 63mm sieve and decreasing to approximately 5% passing for the 63µm sieve.

BS Sieve Size	Percentage Passing (%)
63mm	100
20mm	~85
6.3mm	~70
2mm	~55
600µm	~35
212µm	~20
63µm	~5

CLAY	Fine	Medium	Coarse	Fine	Medium	Coarse	GRAVEL	COBBLES	BOULDERS
	SILT								

For description of sample please refer to the Laboratory Sample Description Sheet

	Date of issue :- 12/12/2017	Certificate No :- PSD/4155/S3-TPB21/B6/1.10	Signed :- 	Name :-	Page 1 of 1
	Client :- South Tees Site Company Ltd	Contract Title :- The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3			AEG Contract No :- 4155

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Date Tested :- 30/11/2017

Figure 1 is a semi-logarithmic graph showing the percentage of aggregate passing through various sieve sizes. The y-axis is labeled 'PERCENTAGE PASSING' and ranges from 0 to 100. The x-axis is labeled 'SIEVE SIZE' and has two scales: millimeters (mm) and micrometers (μm). The mm scale includes 63mm, 20mm, 6.3mm, and 2mm. The μm scale includes 600μm, 212μm, and 63μm. The curve starts at 100% passing for sieve sizes larger than 63mm and decreases as the sieve size decreases, reaching 0% passing at 63μm.

Sieve Size (mm)	Sieve Size (μm)	Percentage Passing (%)
63	600	100
20	212	100
6.3	63	100
2		100
	600	100
	212	100
	63	100
	47.5	100
	30	100
	25	100
	20	100
	15	100
	12.5	100
	10	100
	7.5	100
	6.3	100
	5.0	100
	4.75	100
	4.25	100
	3.75	100
	3.35	100
	3.0	100
	2.8	100
	2.5	100
	2.2	100
	2.0	100
	1.8	100
	1.6	100
	1.4	100
	1.25	100
	1.18	100
	1.06	100
	0.85	100
	0.75	100
	0.6	100
	0.5	100
	0.425	100
	0.375	100
	0.3	100
	0.25	100
	0.2	100
	0.15	100
	0.125	100
	0.106	100
	0.085	100
	0.075	100
	0.06	100
	0.05	100
	0.0425	100
	0.0375	100
	0.03	100
	0.025	100
	0.02	100
	0.015	100
	0.0125	100
	0.0106	100
	0.0085	100
	0.0075	100
	0.006	100
	0.005	100
	0.00425	100
	0.00375	100
	0.003	100
	0.0025	100
	0.002	100
	0.0015	100
	0.00125	100
	0.00106	100
	0.00085	100
	0.00075	100
	0.0006	100
	0.0005	100
	0.000425	100
	0.000375	100
	0.0003	100
	0.00025	100
	0.0002	100
	0.00015	100
	0.000125	100
	0.000106	100
	0.000085	100
	0.000075	100
	0.00006	100
	0.00005	100
	0.0000425	100
	0.0000375	100
	0.00003	100
	0.000025	100
	0.00002	100
	0.000015	100
	0.0000125	100
	0.0000106	100
	0.0000085	100
	0.0000075	100
	0.000006	100
	0.000005	100
	0.00000425	100
	0.00000375	100
	0.000003	100
	0.0000025	100
	0.000002	100
	0.0000015	100
	0.00000125	100
	0.00000106	100
	0.00000085	100
	0.00000075	100
	0.0000006	100
	0.0000005	100
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[illegible]

For description of sample please refer to the Laboratory Sample Description Sheet

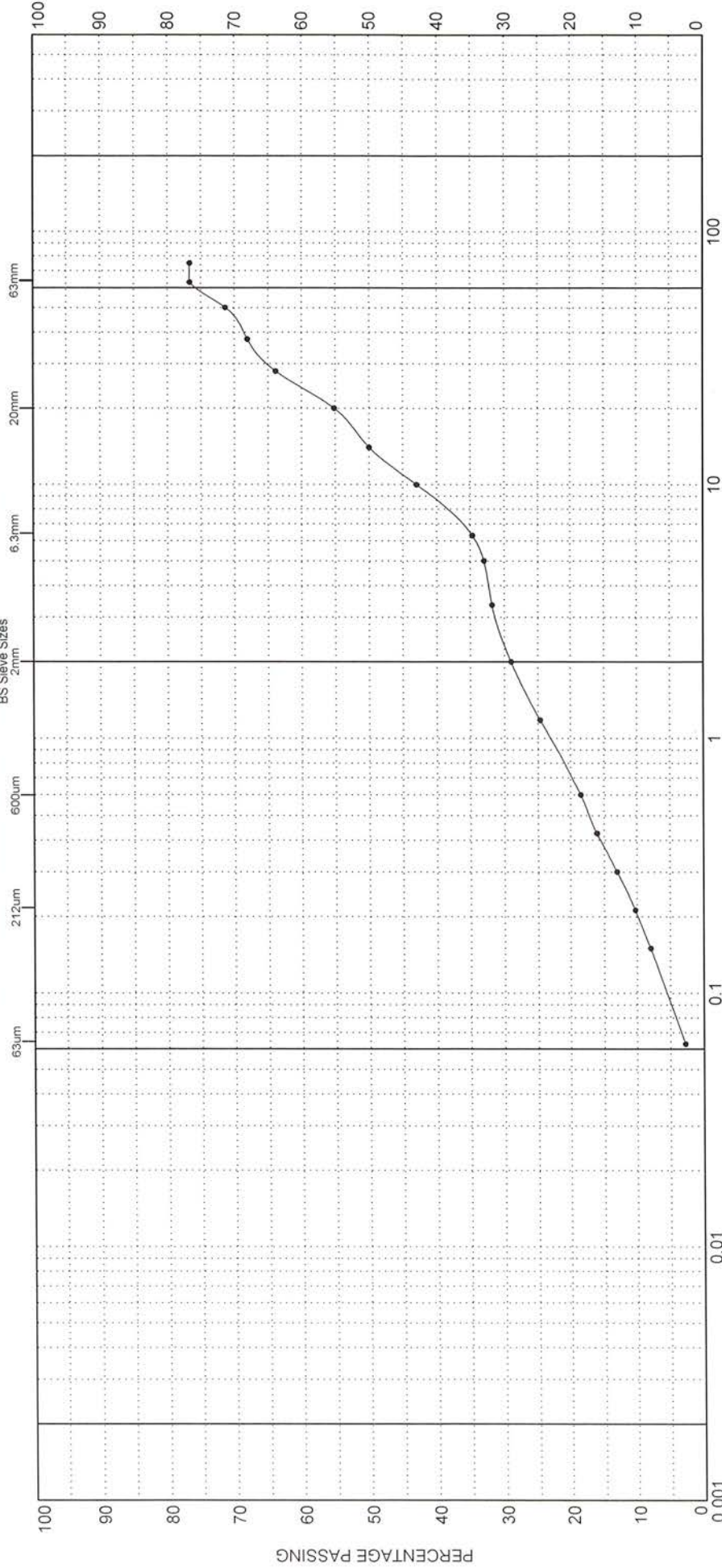
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Date of issue :- 12/12/2017		Certificate No :- PSD/4155/S3-TPB22/B3/1.00	
Client :- South Tees Site Company Ltd		Contract Title :- The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3	
Signed :- 		Name :-	
AEG		AEG Contract No :- 4155	

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Test Method :- Not To BS 1377 Exploratory Hole No :- S3-TPB23 Depth :- 1.00 Sample Type & No :- B4 Date Tested :- 10/11/2017

PARTICLE SIZE DISTRIBUTION CURVE



CLAY			SILT			SAND			GRAVEL			COBBLES		BOULDERS	
Fine	Medium	Coarse	Fine	Medium	Coarse	Fine	Medium	Coarse	Fine	Medium	Coarse				

For description of sample please refer to the Laboratory Sample Description Sheet

	Date of issue :- 01/12/2017	Certificate No :- PSD/4155/S3-TPB23/B4/1.00	Signed :- 	Name :- M. SELKIRK	Page 1 of 1
	Client :- South Tees Site Company Ltd	Contract Title :- The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3	AEG Contract No :- 4155		



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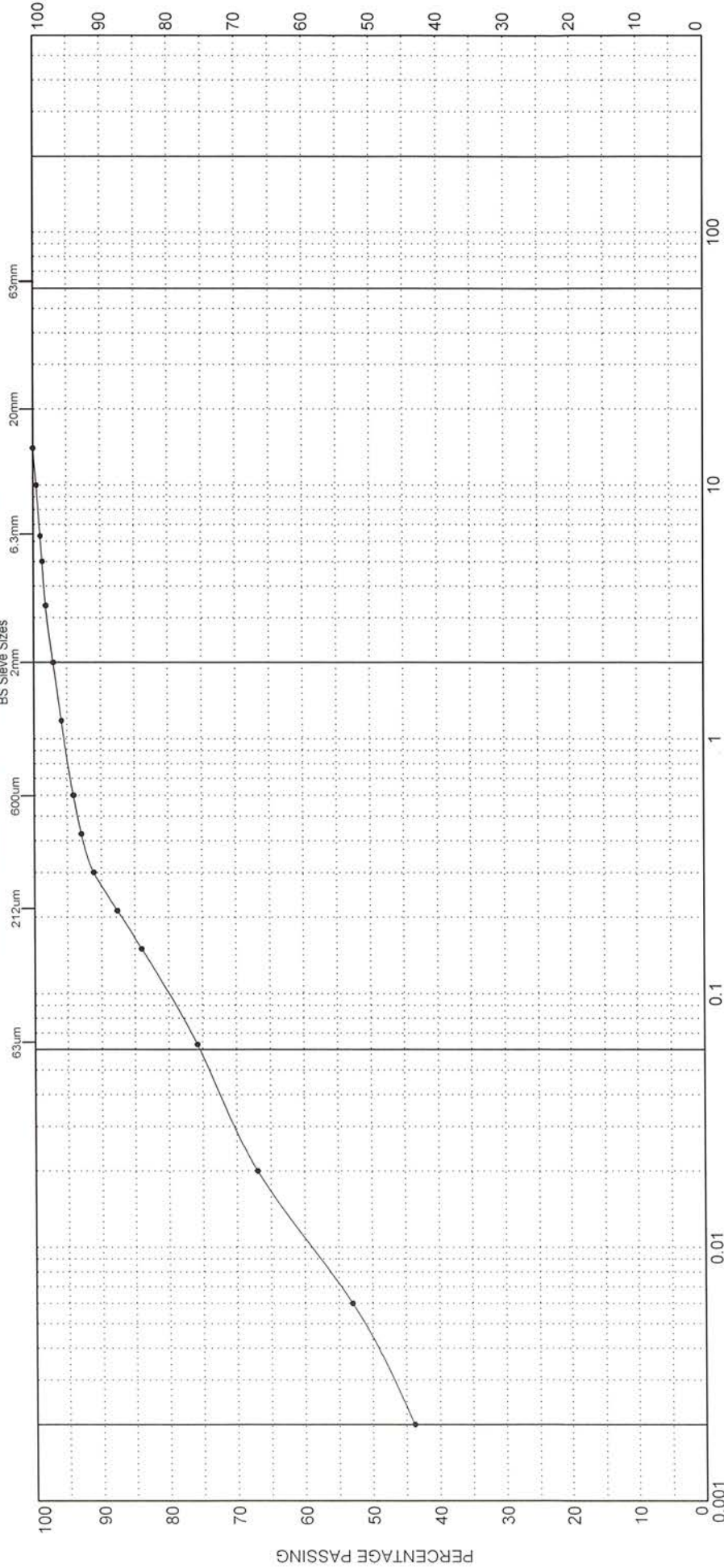
Test Method :- BS1377 : Part 2 : Clause 9.2 & 9.4 : 1990 Exploratory Hole No :- S3-TPB23

Depth :- 2.00

Sample Type & No :- B7

Date Tested :- 09/11/2017

PARTICLE SIZE DISTRIBUTION CURVE



CLAY	SILT			SAND			GRAVEL			COBBLES	BOULDERS
	Fine	Medium	Coarse	Fine	Medium	Coarse	Fine	Medium	Coarse		

For description of sample please refer to the Laboratory Sample Description Sheet

	Date of issue :- 01/12/2017	Certificate No :- PSD/4155/S3-TPB23/B7/2.00	Signed :- <i>MSO</i>	Name :- A. C. C. C.	Page 1 of 1
	Client :- South Tees Site Company Ltd	Contract Title :- The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3	AEG Contract No :- 4155		

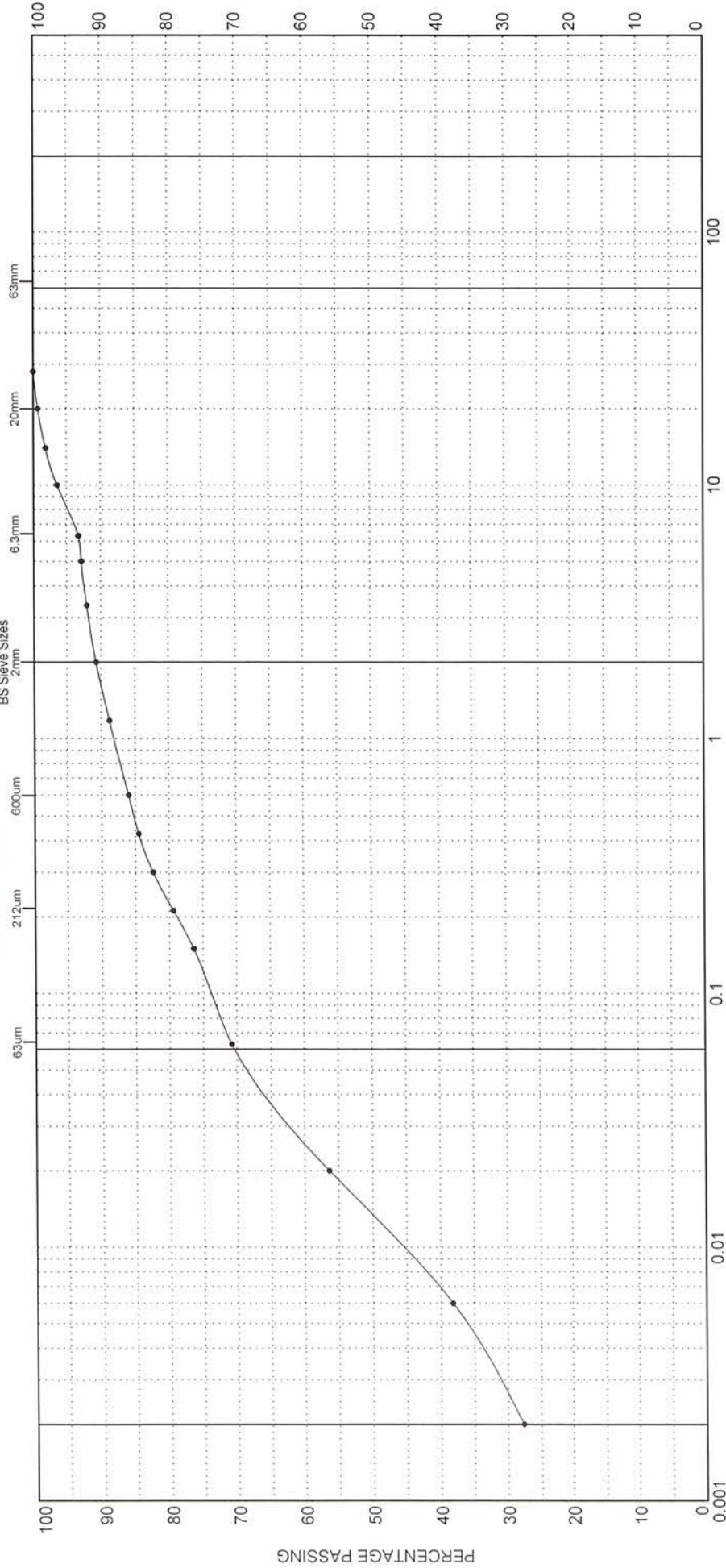


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Test Method :- Not To BS 1377	Exploratory Hole No :- S3-TPB24	Depth :- 2.00	Sample Type & No :- B7	Date Tested :- 10/11/2017
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PARTICLE SIZE DISTRIBUTION CURVE



CLAY	SILT			SAND			GRAVEL			COBBLES	BOULDERS
	Fine	Medium	Coarse	Fine	Medium	Coarse	Fine	Medium	Coarse		

For description of sample please refer to the Laboratory Sample Description Sheet

	Date of issue :- 01/12/2017	Certificate No :- PSD/4155/S3-TPB24/B7/2.00	Signed :- <i>msore</i>	Name :-	Page 1 of 1	
	Client :- South Tees Site Company Ltd	Contract Title :- The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3	AEG Contract No :- 4155		UKAS TESTING 1367	

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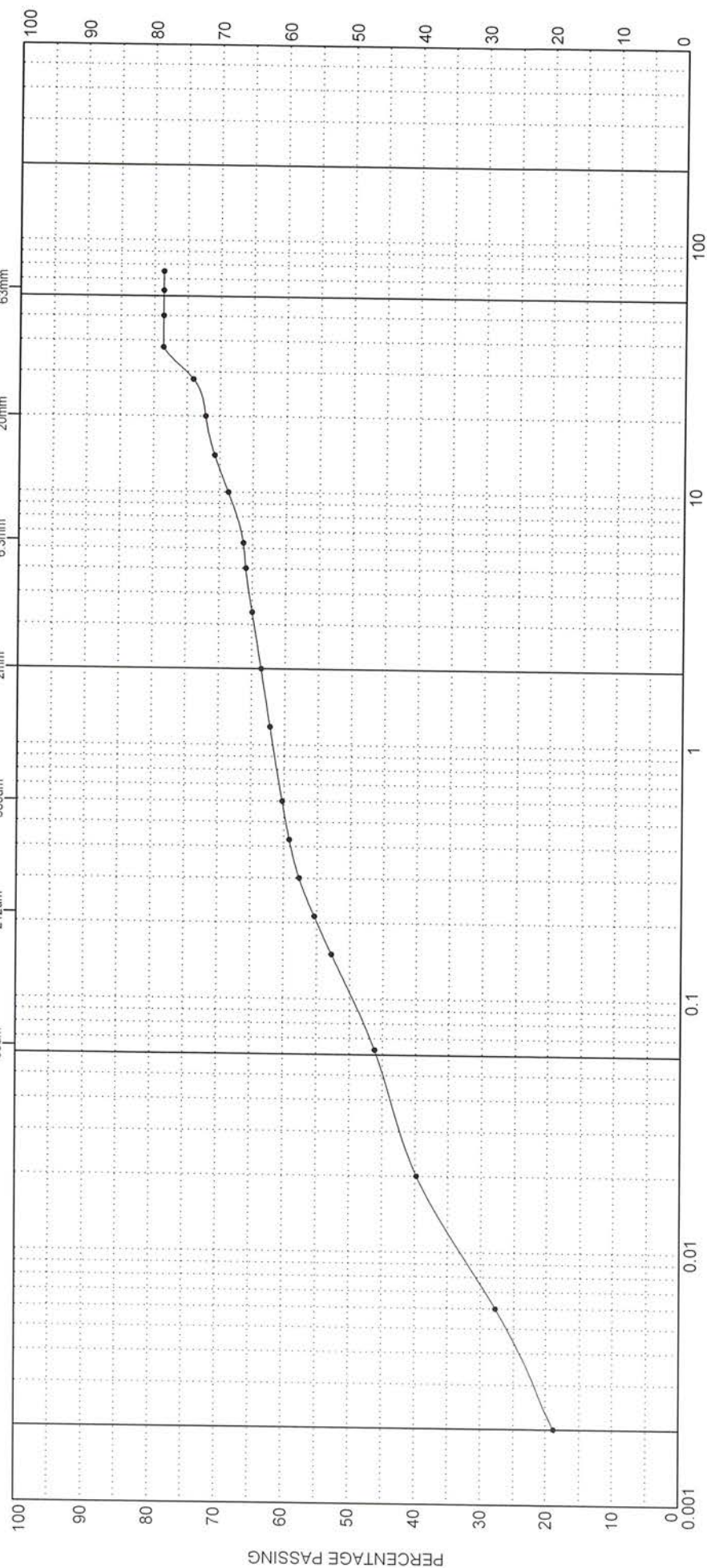
Exploratory Hole No :- S3-TPB25

Depth :- 1.00

Sample Type & No :- B4

Date Tested :- 29/11/2017

PARTICLE SIZE DISTRIBUTION CURVE



	Fine	Medium	Coarse	Fine	Medium	Coarse	Fine	Medium	Coarse		
CLAY	SILT			SAND			GRAVEL			COBBLES	BOULDERS

For description of sample please refer to the Laboratory Sample Description Sheet	# Denotes method deviates from standard due to insufficient sample mass.

Date of issue :-

19/01/2018

Certificate No :-

PSD/4155/S3-TPB25/B4/1.00

Signed :- 

Name :-

Page 1 of 1

Client :-

South Tees Site Company Ltd

Contract Title :-

The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3

AEG Contract No :-
4155



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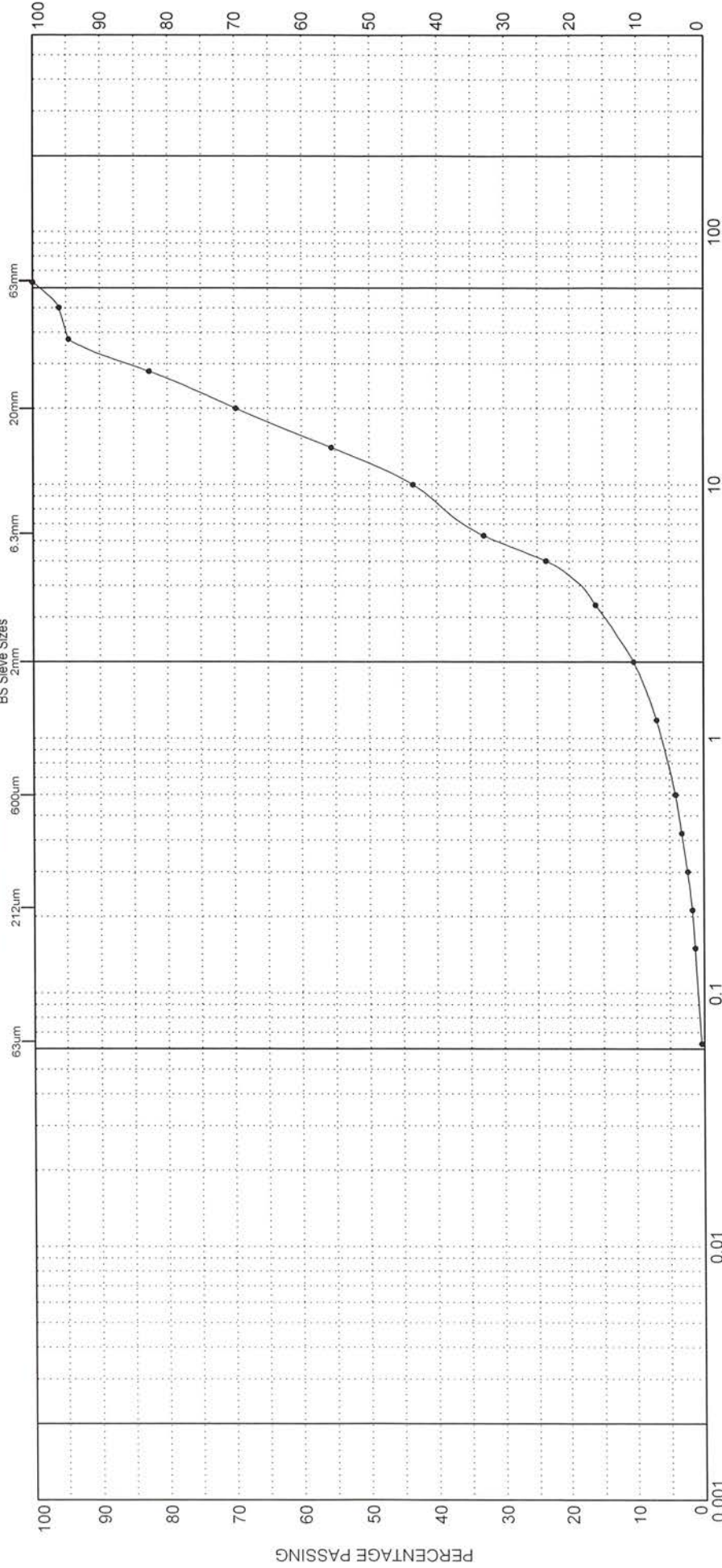
Test Method :- BS1377 : Part 2 : Clause 9.2 & 9.4 : 1990 Exploratory Hole No :- S3-TPB26

Depth :- 1.00

Sample Type & No :- LB3

Date Tested :- 30/11/2017

PARTICLE SIZE DISTRIBUTION CURVE



CLAY	SILT			SAND			GRAVEL			COBBLES	BOULDERS
	Fine	Medium	Coarse	Fine	Medium	Coarse	Fine	Medium	Coarse		

For description of sample please refer to the Laboratory Sample Description Sheet

	Date of issue :- 12/12/2017	Certificate No :- PSD/4155/S3-TPB26/LB3/1.00	Signed :-	Name :-	Page 1 of 1
	Client :- South Tees Site Company Ltd	Contract Title :- The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3	AEG Contract No :- 4155		





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Date Tested :- 29/11/2017

[illegible]

For description of sample please refer to the Laboratory Sample Description Sheet

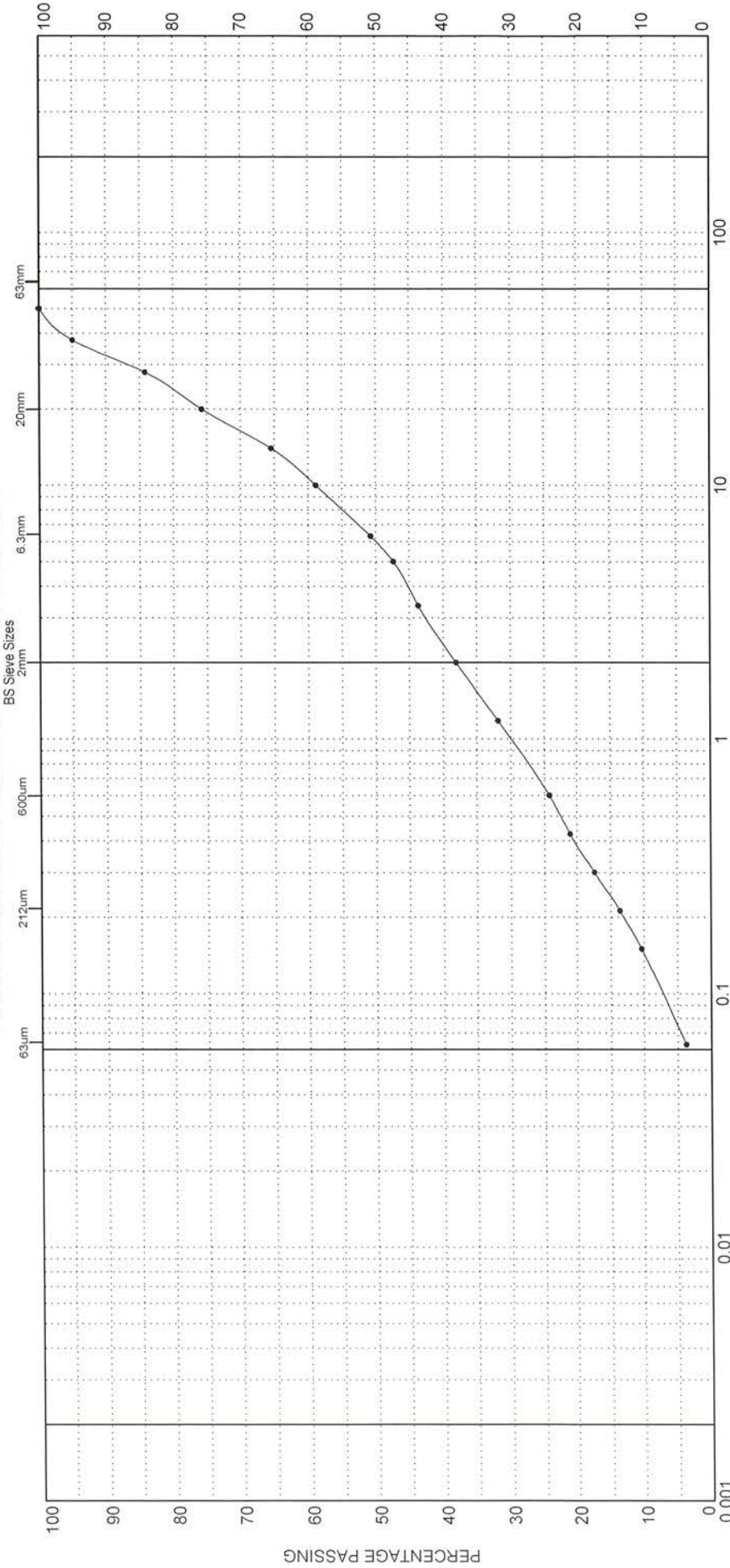
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Date of issue :- 12/12/2017	Certificate No :- PSD/4155/S3-TPB29/LB3/1.00	Signed :- 	Name :-
Client :- South Tees Site Company Ltd	Contract Title :- The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		
AEG		AEG Contract No :- 4155	

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Test Method :- Not To BS 1377	Exploratory Hole No :- S3-TPB30	Depth :- 1.00	Sample Type & No :- B3	Date Tested :- 30/11/2017
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PARTICLE SIZE DISTRIBUTION CURVE



CLAY	SILT			SAND			GRAVEL			COBBLES	BOULDERS
	Fine	Medium	Coarse	Fine	Medium	Coarse	Fine	Medium	Coarse		

For description of sample please refer to the Laboratory Sample Description Sheet

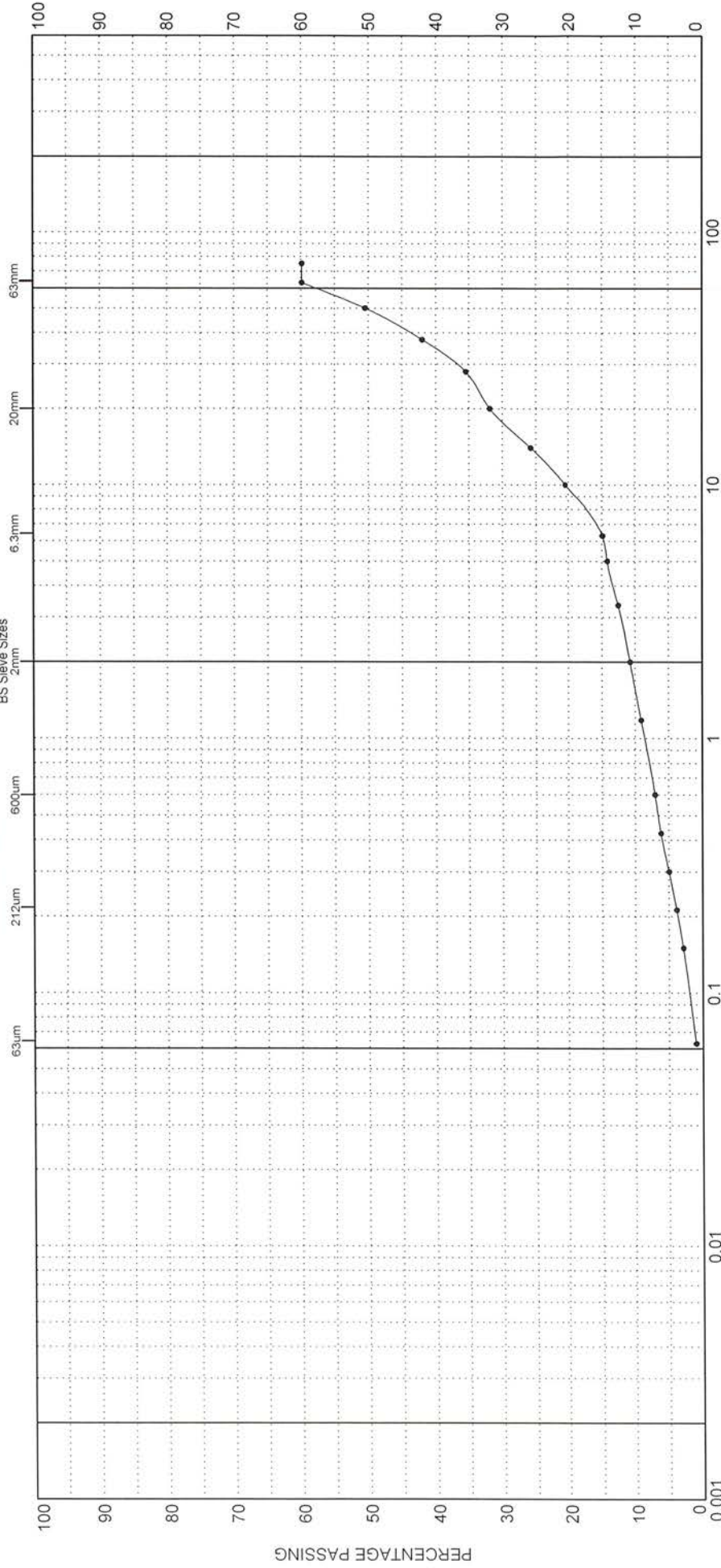
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	Client :- South Tees Site Company Ltd	Contract Title :- The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3	AEG Contract No :- 4155			

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Test Method :- Not To BS 1377 Exploratory Hole No :- S3-TPB31 Depth :- 1.00 Sample Type & No :- B3 Date Tested :- 29/11/2017

PARTICLE SIZE DISTRIBUTION CURVE



CLAY	SILT			SAND			GRAVEL			COBBLES	BOULDERS
	Fine	Medium	Coarse	Fine	Medium	Coarse	Fine	Medium	Coarse		

For description of sample please refer to the Laboratory Sample Description Sheet

	Date of issue :- 12/12/2017	Certificate No :- PSD/4155/S3-TPB31/B3/1.00	Signed :- <i>msore</i>	Name :-	Page 1 of 1
	Client :- South Tees Site Company Ltd	Contract Title :- The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3	AEG Contract No :- 4155		1367

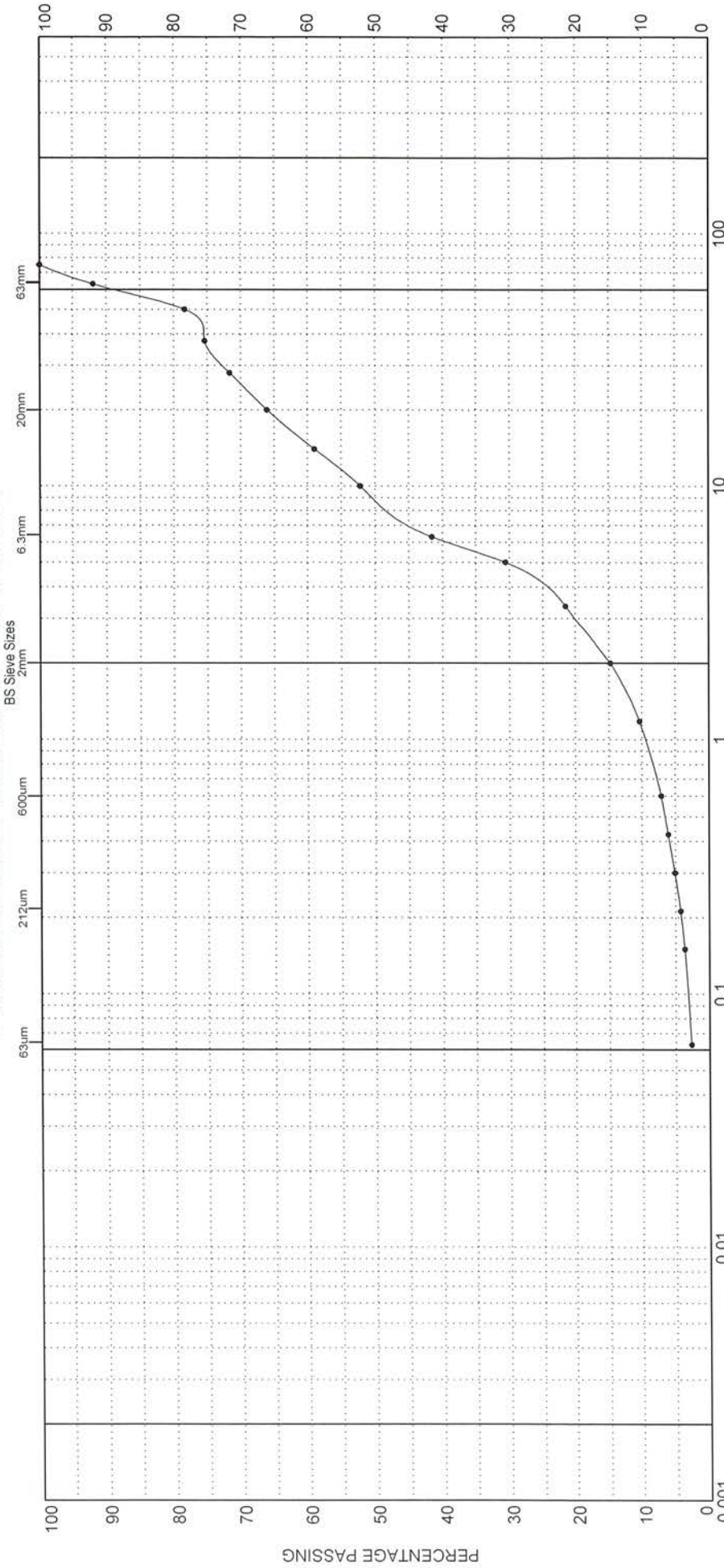


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Test Method :- Not To BS 1377	Exploratory Hole No :- S3-TPB32	Date Tested :- 10/11/2017
Sample Type & No :- B2		

PARTICLE SIZE DISTRIBUTION CURVE



CLAY		SILT		SAND		GRAVEL		COBBLES	BOULDERS
Fine	Medium	Fine	Medium	Fine	Medium	Coarse	Fine		

For description of sample please refer to the Laboratory Sample Description Sheet

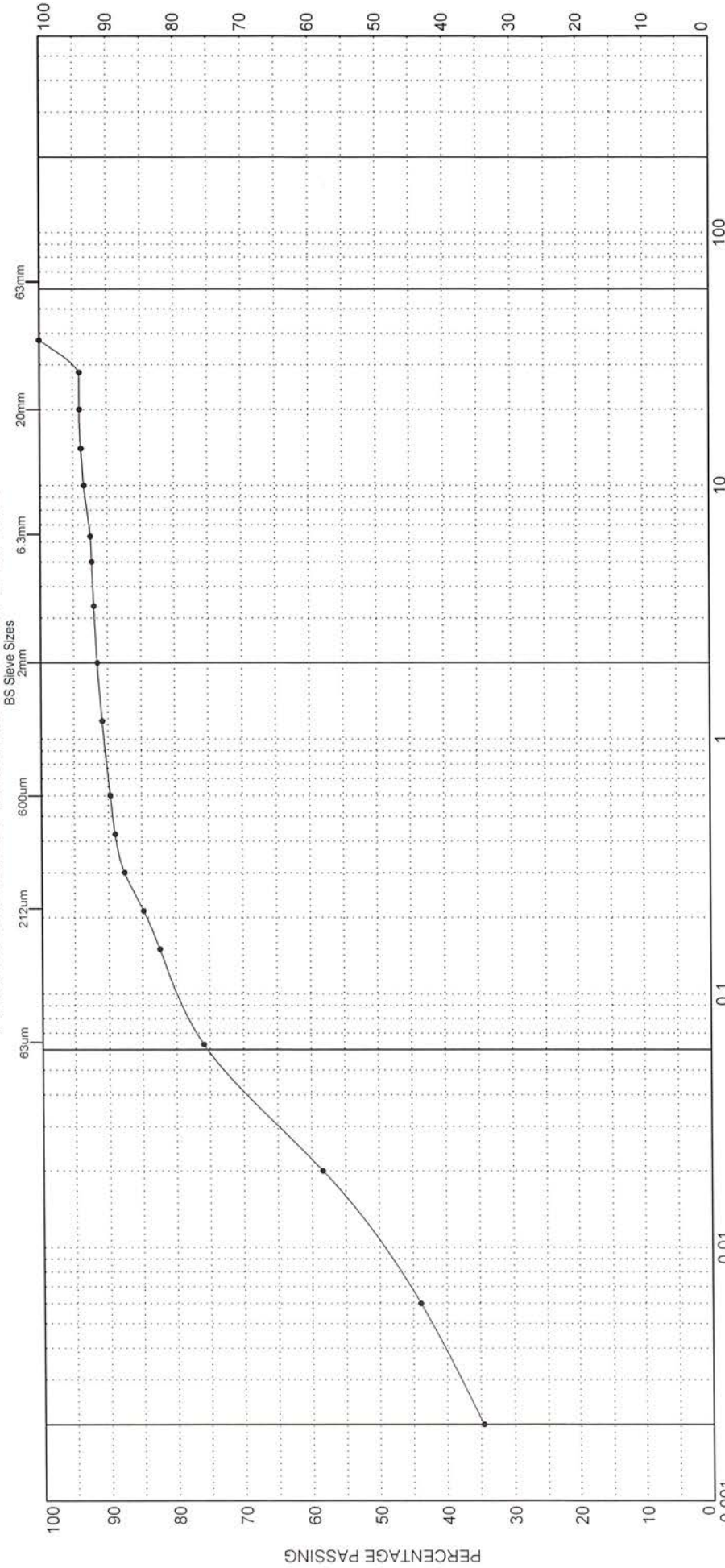
	Date of issue :- 01/12/2017	Certificate No :- PSD/4155/S3-TPB32/B2/0.50	Signed :- 	Name :- M. S. S. S.		Page 1 of 1
	Client :- South Tees Site Company Ltd	Contract Title :- The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3			AEG Contract No :- 4155	

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Test Method :- Not To BS 1377	Exploratory Hole No :- S3-TPB33	Depth :- 2.00	Sample Type & No :- B7	Date Tested :- 10/11/2017
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PARTICLE SIZE DISTRIBUTION CURVE



CLAY	SILT			SAND			GRAVEL			BOULDERS
	Fine	Medium	Coarse	Fine	Medium	Coarse	Fine	Medium	Coarse	

For description of sample please refer to the Laboratory Sample Description Sheet

	Date of issue :- 01/12/2017	Certificate No :- PSD/4155/S3-TPB33/B7/2.00	Signed :- <i>msoro</i>	Name :- <i>msoro</i>	Page 1 of 1
	Client :- South Tees Site Company Ltd	Contract Title :- The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3	AEG Contract No :- 4155		



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Test Method :- BS1377 : Part 2 : Clause 9.2 & 9.4 : 1990

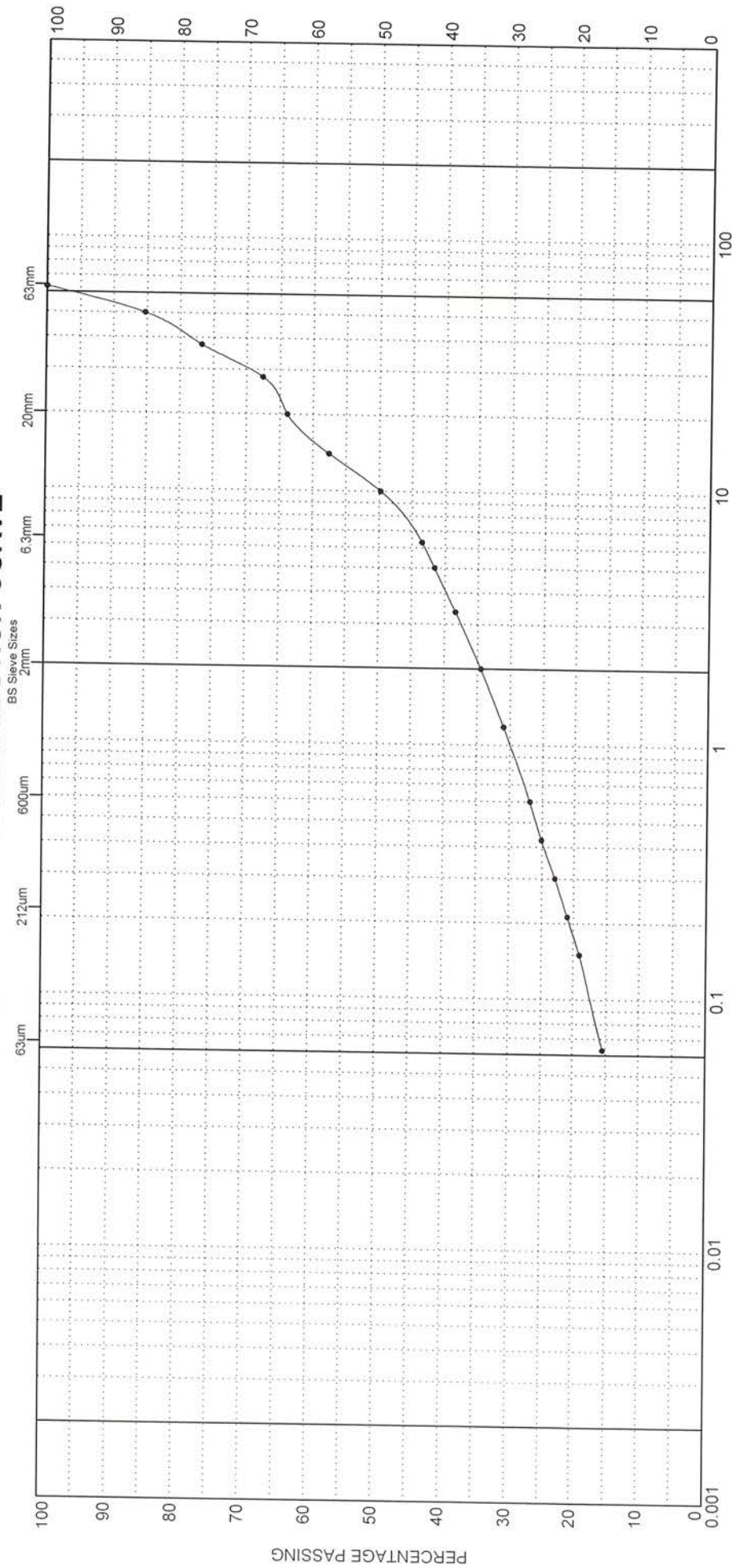
Exploratory Hole No :- S3-TPB34

Depth :- 1.00

Sample Type & No :- LB4

Date Tested :- 12/12/2017

PARTICLE SIZE DISTRIBUTION CURVE



CLAY			SILT			SAND			GRAVEL			COBBLES		BOULDERS	
Fine	Medium	Coarse	Fine	Medium	Coarse	Fine	Medium	Coarse	Fine	Medium	Coarse				

For description of sample please refer to the Laboratory Sample Description Sheet. # Denotes method deviates from standard due to insufficient sample mass.

Date of issue :- 19/01/2018

Certificate No :- PSD/4155/S3-TPB34/LB4/1.00

Signed :- *msong*

Name :- M. SELKIRK

Page 1 of 1

AEG Contract No :- 4155

Client :- South Tees Site Company Ltd

Contract Title :- The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3



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Test Method :- Not To BS 1377

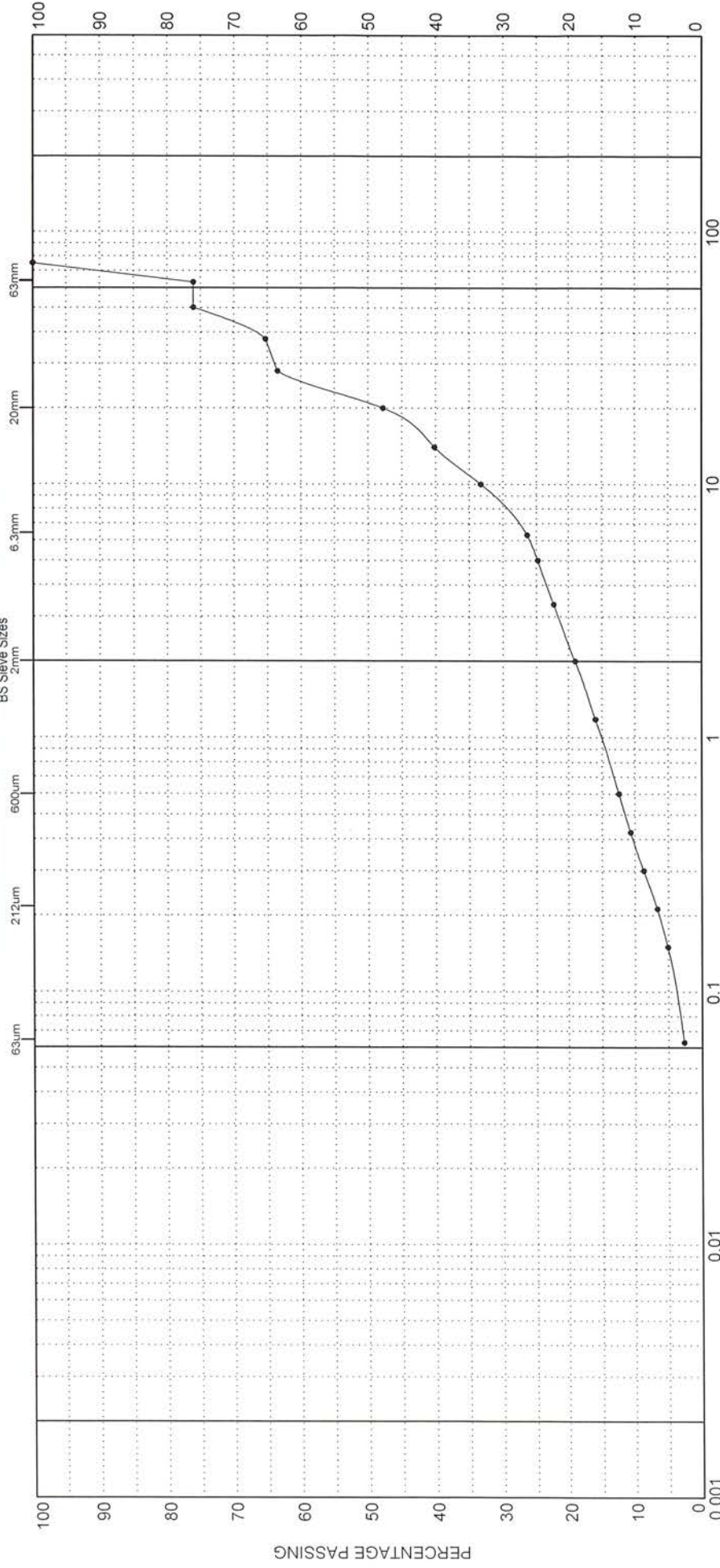
Exploratory Hole No :- S3-TPB35

Depth :- 1.00

Sample Type & No :- LB3

Date Tested :- 29/11/2017

PARTICLE SIZE DISTRIBUTION CURVE



CLAY	SILT			SAND			GRAVEL			COBBLES	BOULDERS
	Fine	Medium	Coarse	Fine	Medium	Coarse	Fine	Medium	Coarse		

For description of sample please refer to the Laboratory Sample Description Sheet

	Date of issue :- 12/12/2017	Certificate No :- PSD/4155/S3-TPB35/LB3/1.00	Signed :- <i>msore</i>	Name :-	Page 1 of 1
	Client :- South Tees Site Company Ltd	Contract Title :- The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		AEG Contract No :- 4155	



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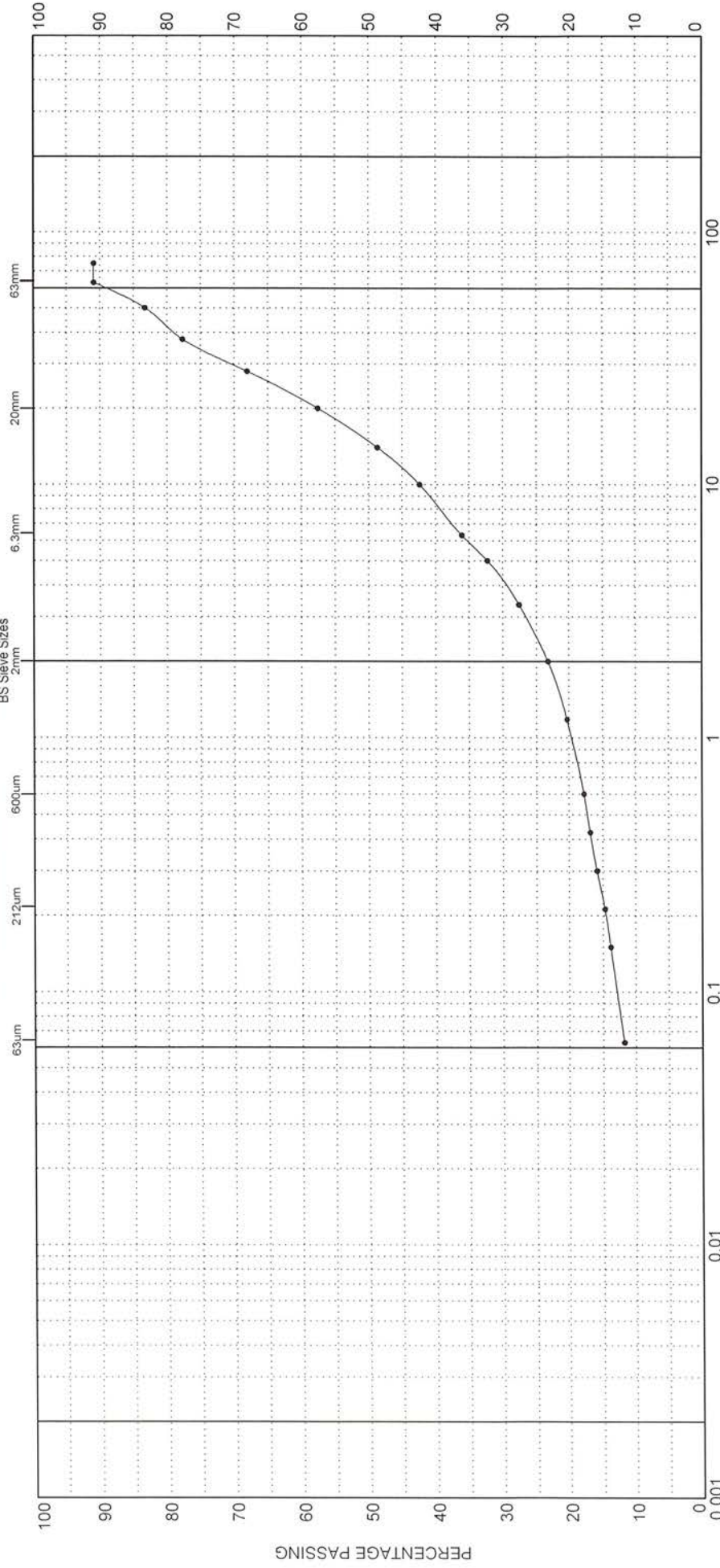
Test Method :- BS1377 : Part 2 : Clause 9.2 & 9.4 : 1990 Exploratory Hole No :- S3-TPB36

Depth :- 2.00

Sample Type & No :- B7

Date Tested :- 29/11/2017

PARTICLE SIZE DISTRIBUTION CURVE



CLAY	SILT			SAND			GRAVEL			COBBLES	BOULDERS
	Fine	Medium	Coarse	Fine	Medium	Coarse	Fine	Medium	Coarse		

For description of sample please refer to the Laboratory Sample Description Sheet

	Date of issue :- 12/12/2017	Certificate No :- PSD/4155/S3-TPB36/B7/2.00	Signed :- <i>msone</i>	Name :- <i>msone</i>	Page 1 of 1
	Client :- South Tees Site Company Ltd	Contract Title :- The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3	AEG Contract No :- 4155		

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Test Method :- BS1377 : Part 2 : Clause 9.2 & 9.4 : 1990

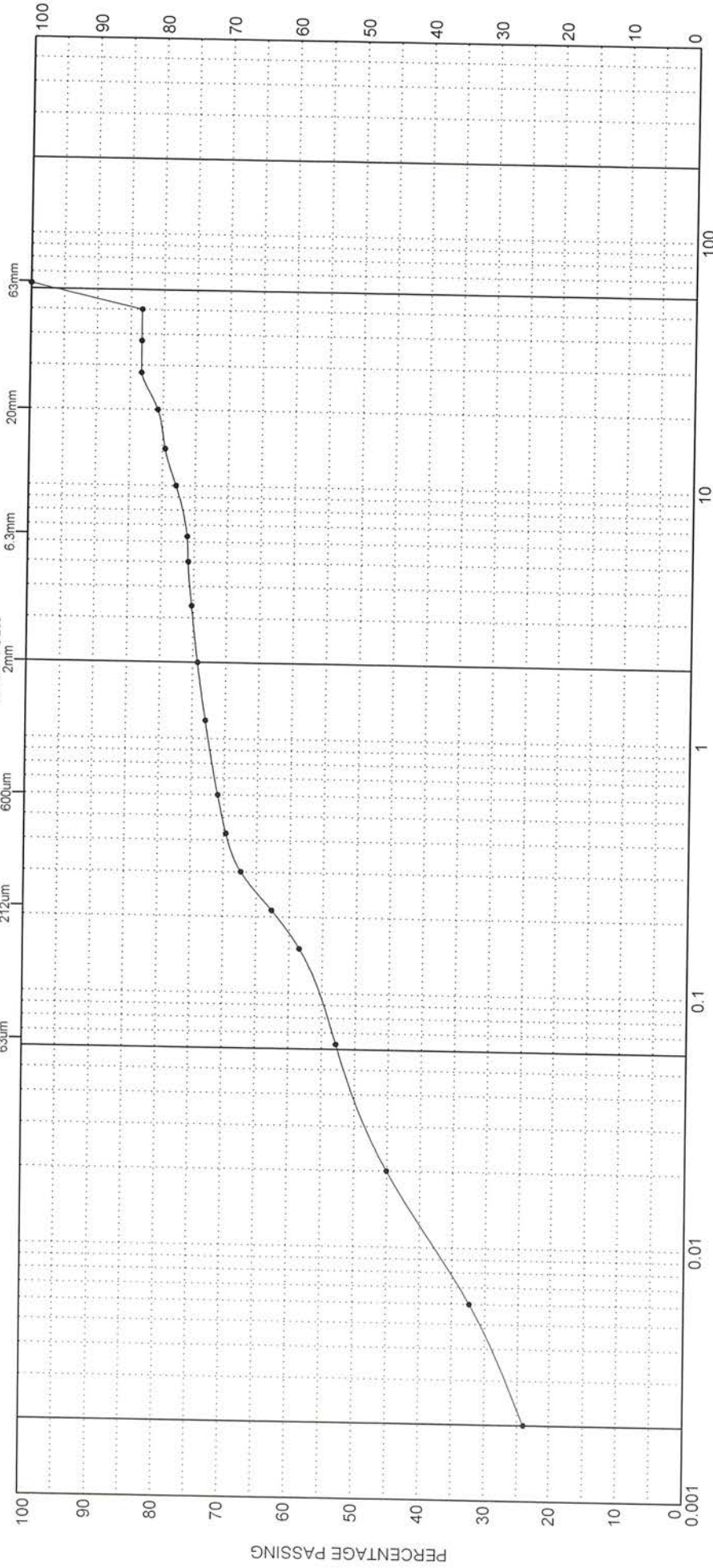
Exploratory Hole No :- S3-TPB37

Depth :- 2.00

Sample Type & No :- B6

Date Tested :- 29/11/2017

PARTICLE SIZE DISTRIBUTION CURVE



CLAY	Fine	Medium	Coarse	Fine	Medium	Coarse	Fine	Medium	Coarse	BOULDERS	
	SILT			SAND			GRAVEL				COBBLES

For description of sample please refer to the Laboratory Sample Description Sheet. # Denotes method deviates from standard due to insufficient sample mass.

Date of issue :- 19/01/2018

Certificate No :- PSD/4155/S3-TPB37/B6/2.00

Signed :-

Name :-

Page 1 of 1

Contract Title :- The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3

AEG Contract No :- 4155

Client :- South Tees Site Company Ltd



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Test Method :- Not To BS 1377

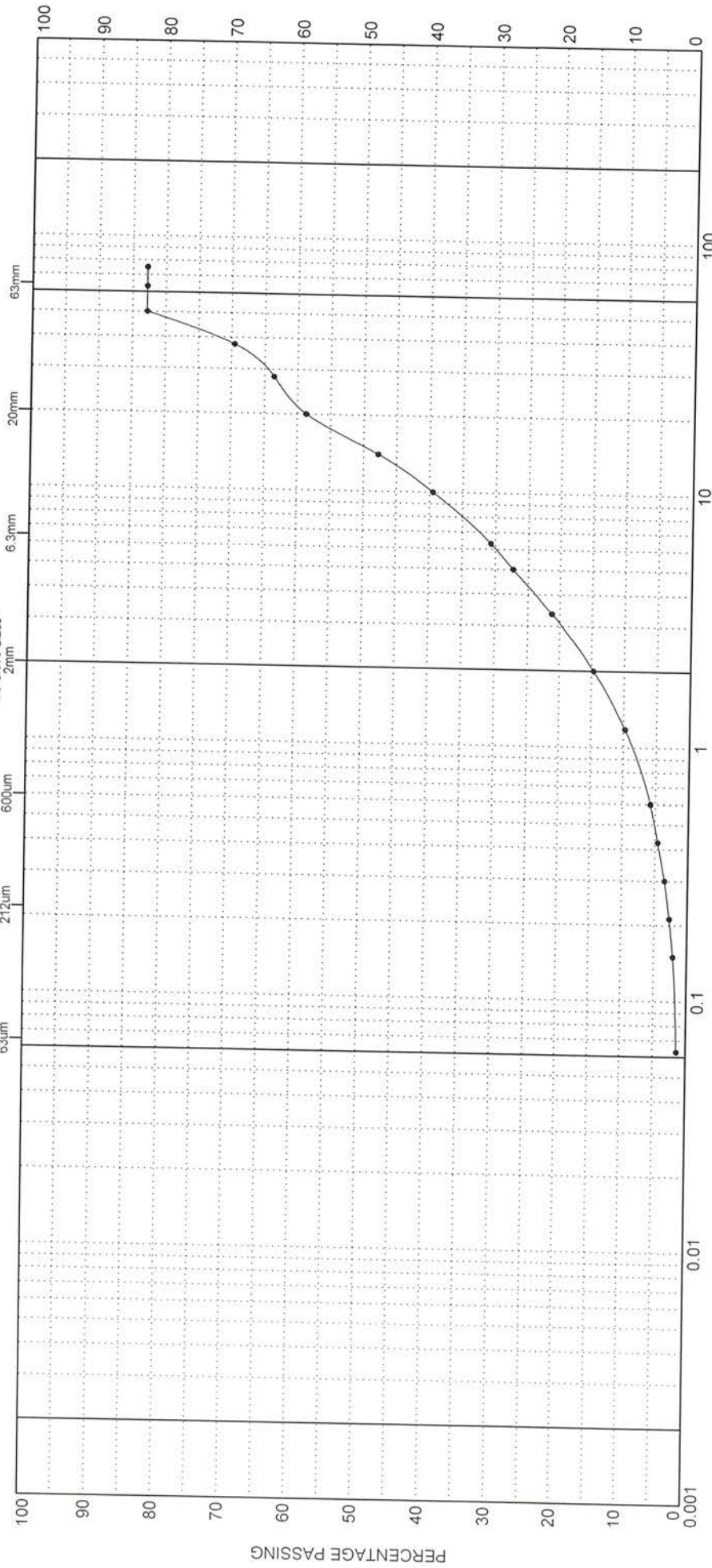
Exploratory Hole No :- S3-TPB38

Depth :- 1.00

Sample Type & No :- B4

Date Tested :- 12/12/2017

PARTICLE SIZE DISTRIBUTION CURVE



CLAY			SILT			SAND			GRAVEL			COBBLES		BOULDERS	
Fine	Medium	Coarse	Fine	Medium	Coarse	Fine	Medium	Coarse	Fine	Medium	Coarse				

For description of sample please refer to the Laboratory Sample Description Sheet. # Denotes method deviates from standard due to insufficient sample mass.

Date of issue :-

19/01/2018

Certificate No :-

PSD/4155/S3-TPB38/B4/1.00

Signed :-

Name :-

Page 1 of 1

Client :-

South Tees Site Company Ltd

Contract Title :-

The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3

AEG Contract No :-

4155



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Test Method :- Not To BS 1377

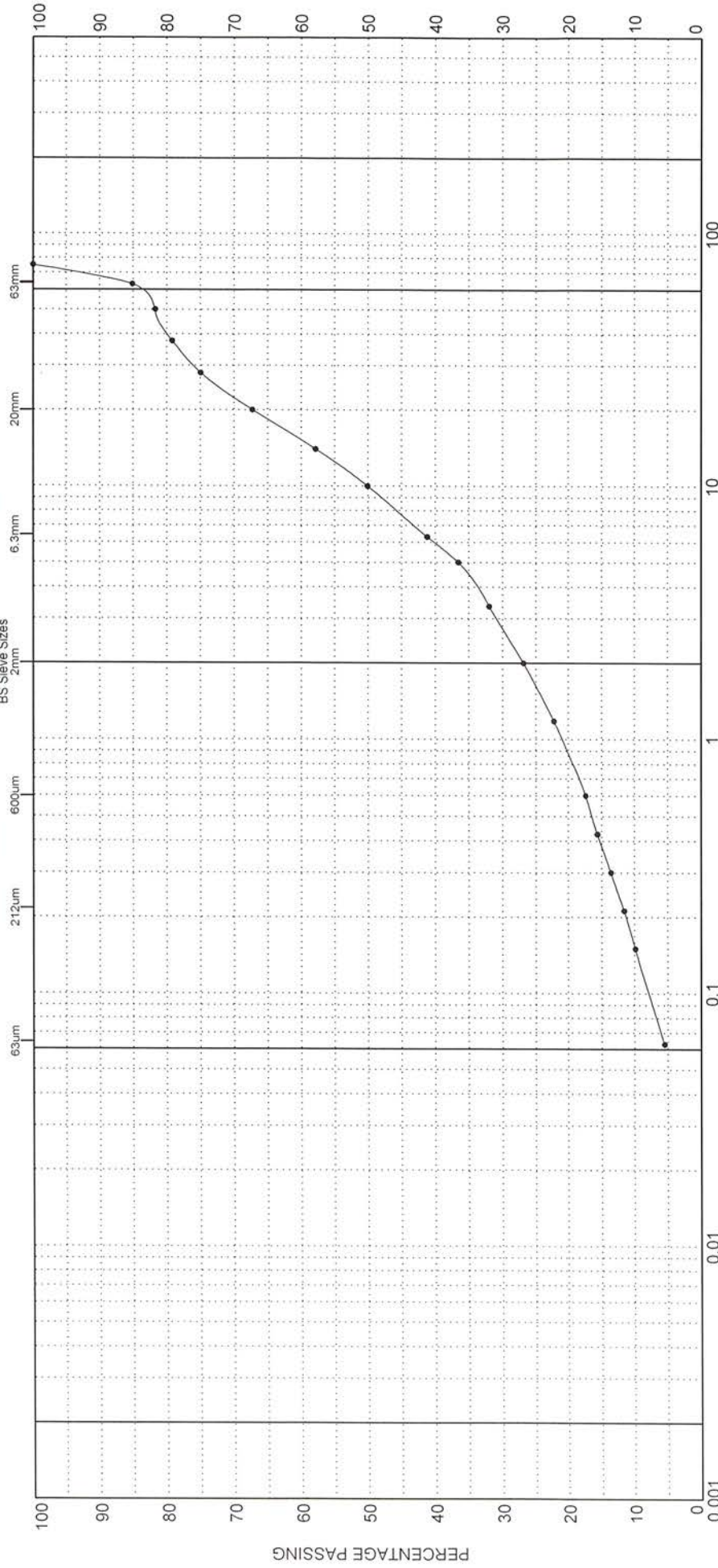
Exploratory Hole No :- S3-TPB41

Depth :- 1.00

Sample Type & No :- LB3

Date Tested :- 30/11/2017

PARTICLE SIZE DISTRIBUTION CURVE



CLAY	SILT			SAND			GRAVEL			COBBLES	BOULDERS
	Fine	Medium	Coarse	Fine	Medium	Coarse	Fine	Medium	Coarse		

For description of sample please refer to the Laboratory Sample Description Sheet

	Date of issue :- 12/12/2017	Certificate No :- PSD/4155/S3-TPB41/LB3/1.00	Signed :- 	Name :-	Page 1 of 1
	Client :- South Tees Site Company Ltd	Contract Title :- The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3	AEG Contract No :- 4155		



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Test Method :- Not To BS 1377

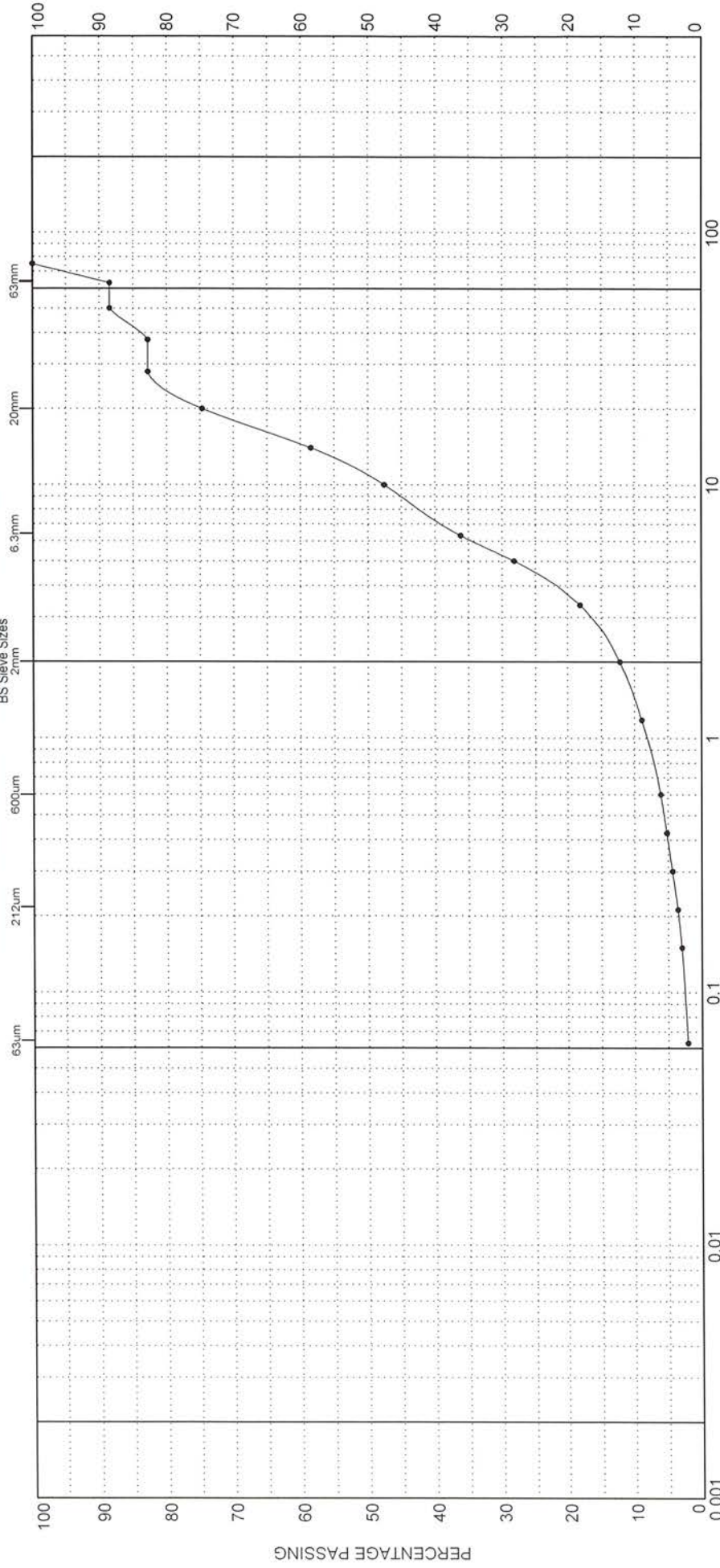
Exploratory Hole No :- S3-TPB42

Depth :- 2.00

Sample Type & No :- B6

Date Tested :- 29/11/2017

PARTICLE SIZE DISTRIBUTION CURVE



CLAY	SILT			SAND			GRAVEL			COBBLES	BOULDERS
	Fine	Medium	Coarse	Fine	Medium	Coarse	Fine	Medium	Coarse		

For description of sample please refer to the Laboratory Sample Description Sheet

	Date of issue :- 12/12/2017	Certificate No :- PSD/4155/S3-TPB42/B6/2.00	Signed :- <i>[Signature]</i>	Name :- <i>[Name]</i>	Page 1 of 1
	Client :- South Tees Site Company Ltd	Contract Title :- The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3	AEG Contract No :- 4155		



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Test Method :- Not To BS 1377

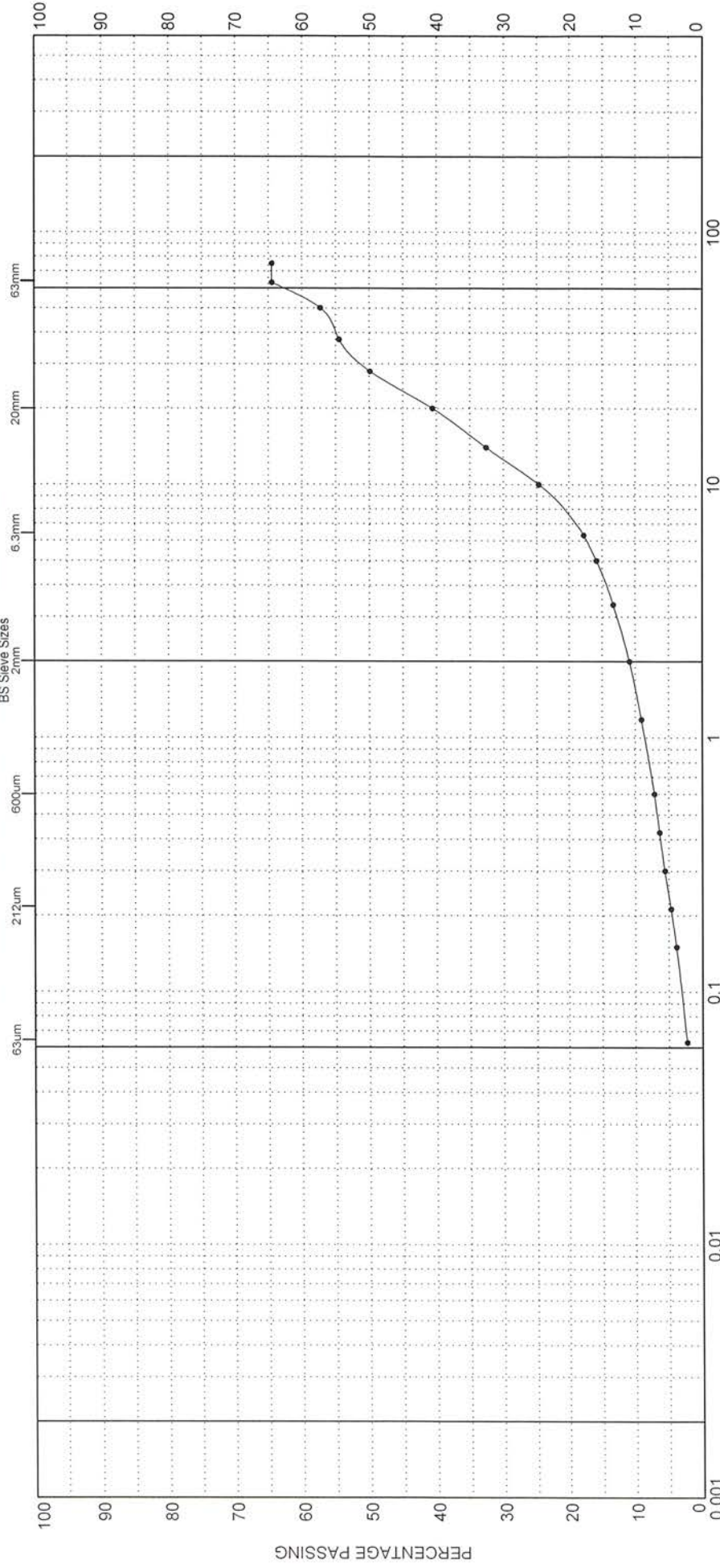
Exploratory Hole No :- S3-TPB43

Depth :- 2.00

Sample Type & No :- LB6

Date Tested :- 13/11/2017

PARTICLE SIZE DISTRIBUTION CURVE



CLAY	Fine	Medium	Coarse	Fine	Medium	Coarse	Fine	Medium	Coarse	COBBLES	BOULDERS
	SILT			SAND			GRAVEL				

For description of sample please refer to the Laboratory Sample Description Sheet

	Date of issue :- 01/12/2017	Certificate No :- PSD/4155/S3-TPB43/LB6/2.00	Signed :- <i>msone</i>	Name :- msone	Page 1 of 1
	Client :- South Tees Site Company Ltd	Contract Title :- The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3	AEG Contract No :- 4155		

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Date Tested :- 28/11/2017

Graph of Percentages of Material Passing versus Sieve Size for a sample of fine aggregate. The x-axis shows sieve sizes from 63µm to 100mm. The y-axis shows the percentage of material passing from 0 to 100. The curve shows that approximately 95% of the material passes through a 63µm sieve, and the percentage decreases as the sieve size increases, reaching 100% at 100mm.

Sieve Size	Percentage of Material Passing
63µm	95
75µm	92
90µm	88
106µm	85
125µm	82
150µm	78
175µm	75
200µm	72
250µm	68
300µm	65
350µm	62
425µm	58
500µm	55
600µm	52
750µm	48
900µm	45
1060µm	42
1250µm	38
1500µm	35
1750µm	32
2000µm	30
2500µm	28
3000µm	25
3500µm	22
4250µm	20
5000µm	18
6000µm	15
7500µm	12
9000µm	10
10600µm	8
12500µm	6
15000µm	5
17500µm	4
20000µm	3
25000µm	2
30000µm	1
35000µm	1
42500µm	1
50000µm	1
60000µm	1
75000µm	1
90000µm	1
106000µm	1
125000µm	1
150000µm	1
175000µm	1
200000µm	1
250000µm	1
300000µm	1
350000µm	1
425000µm	1
500000µm	1
600000µm	1
750000µm	1
900000µm	1
1060000µm	1
1250000µm	1
1500000µm	1
1750000µm	1
2000000µm	1
2500000µm	1
3000000µm	1
3500000µm	1
4250000µm	1
5000000µm	1
6000000µm	1
7500000µm	1
9000000µm	1
10600000µm	1
12500000µm	1
15000000µm	1
17500000µm	1
20000000µm	1
25000000µm	1
30000000µm	1
35000000µm	1
42500000µm	1
50000000µm	1
60000000µm	1
75000000µm	1
90000000µm	1
106000000µm	1
125000000µm	1
150000000µm	1
175000000µm	1
200000000µm	1
250000000µm	1
300000000µm	1
350000000µm	1
425000000µm	1
500000000µm	1
600000000µm	1
750000000µm	1
900000000µm	1
1060000000µm	1
1250000000µm	1
1500000000µm	1
1750000000µm	1
2000000000µm	1
2500000000µm	1
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150000000000µm	1
175000000000µm	1
200000000000µm	1
250000000000µm	1
300000000000µm	1
350000000000µm	1
425000000000µm	1
500000000000µm	1
600000	

[illegible]

For description of sample please refer to the Laboratory Sample Description Sheet

	Date of issue :- 12/12/2017	Certificate No :- PSD/4155/S3-TPB44/B3/1.00	Signed :- 	Name :- 	Page 1 of 1
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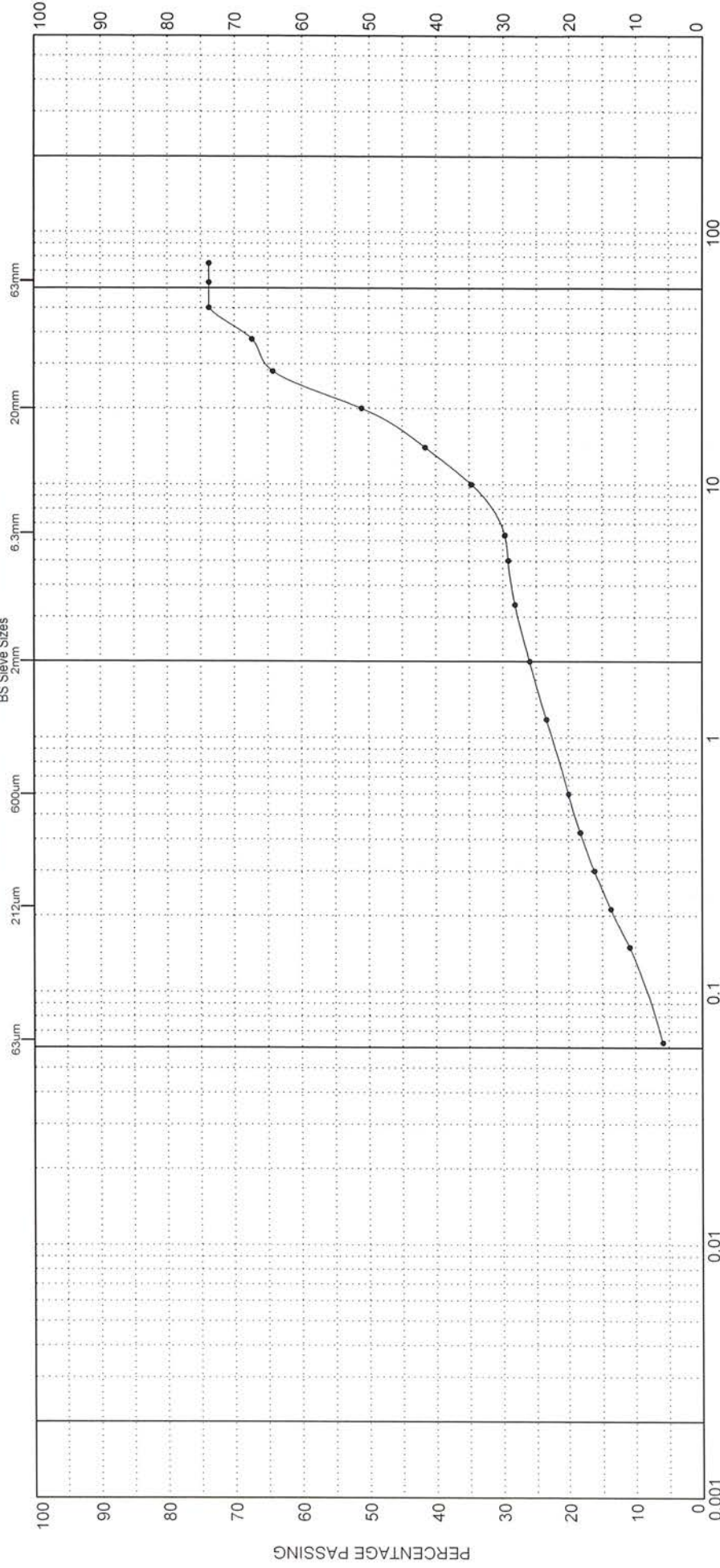
Test Method :- BS1377 : Part 2 : Clause 9.2 & 9.4 : 1990 Exploratory Hole No :- S3-TPB45

Depth :- 1.00

Sample Type & No :- B3

Date Tested :- 29/11/2017

PARTICLE SIZE DISTRIBUTION CURVE



CLAY			SILT			SAND			GRAVEL			COBBLES		BOULDERS	
Fine	Medium	Coarse	Fine	Medium	Coarse	Fine	Medium	Coarse	Fine	Medium	Coarse				

For description of sample please refer to the Laboratory Sample Description Sheet

		Date of issue :- 12/12/2017		Certificate No :- PSD/4155/S3-TPB45/B3/1.00		Signed :- <i>MSD</i>		Name :-		Page 1 of 1	
Client :- South Tees Site Company Ltd		Contract Title :- The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		AEG Contract No :- 4155							

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Test Method :- Not To BS 1377

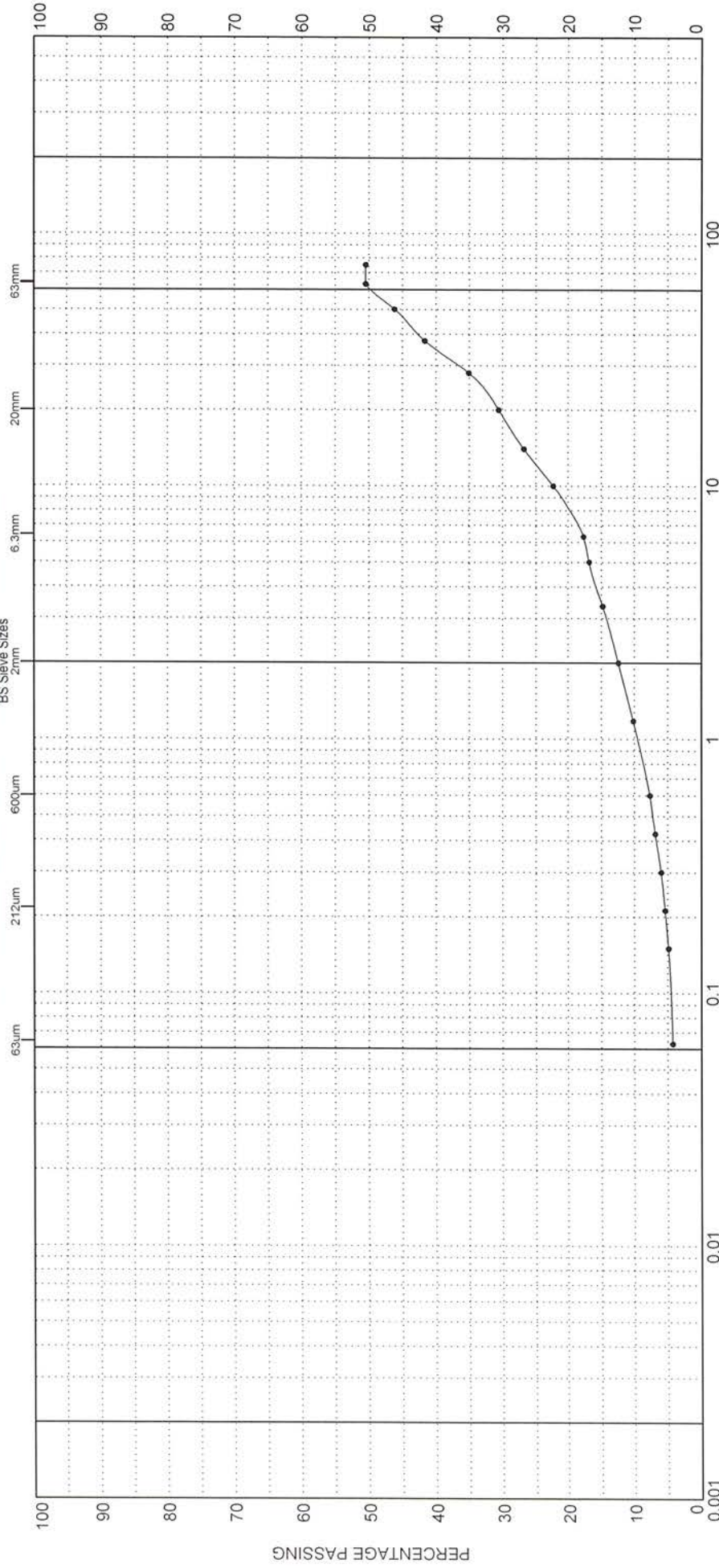
Exploratory Hole No :- S3-TPB47

Depth :- 1.00

Sample Type & No :- LB3

Date Tested :- 29/11/2017

PARTICLE SIZE DISTRIBUTION CURVE



CLAY	SILT			SAND			GRAVEL			COBBLES	BOULDERS
	Fine	Medium	Coarse	Fine	Medium	Coarse	Fine	Medium	Coarse		

For description of sample please refer to the Laboratory Sample Description Sheet

	Date of issue :- 12/12/2017	Certificate No :- PSD/4155/S3-TPB47/LB3/1.00	Signed :- <i>MSore</i>	Name :-	Page 1 of 1
	Client :- South Tees Site Company Ltd	Contract Title :- The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3	AEG Contract No :- 4155		



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Test Method :- Not To BS 1377

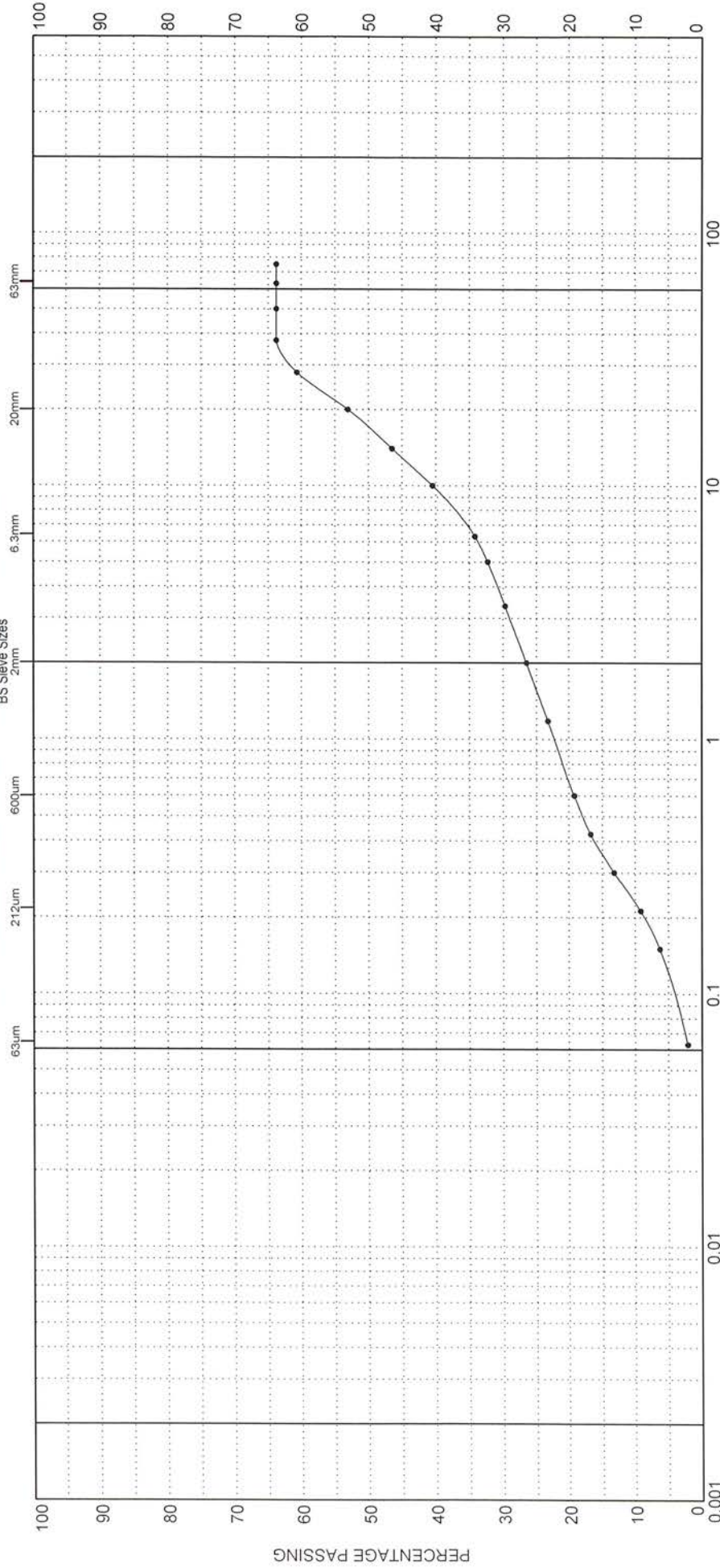
Exploratory Hole No :- S3-TPB48

Depth :- 2.00

Sample Type & No :- B6

Date Tested :- 28/11/2017

PARTICLE SIZE DISTRIBUTION CURVE



CLAY			SILT			SAND			GRAVEL			COBBLES		BOULDERS	
Fine	Medium	Coarse	Fine	Medium	Coarse	Fine	Medium	Coarse	Fine	Medium	Coarse				

For description of sample please refer to the Laboratory Sample Description Sheet

	Date of issue :- 12/12/2017	Certificate No :- PSD/4155/S3-TPB48/B6/2.00	Signed :- 	Name :- Name :-	Page 1 of 1
	Client :- South Tees Site Company Ltd	Contract Title :- The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3	AEG Contract No :- 4155		



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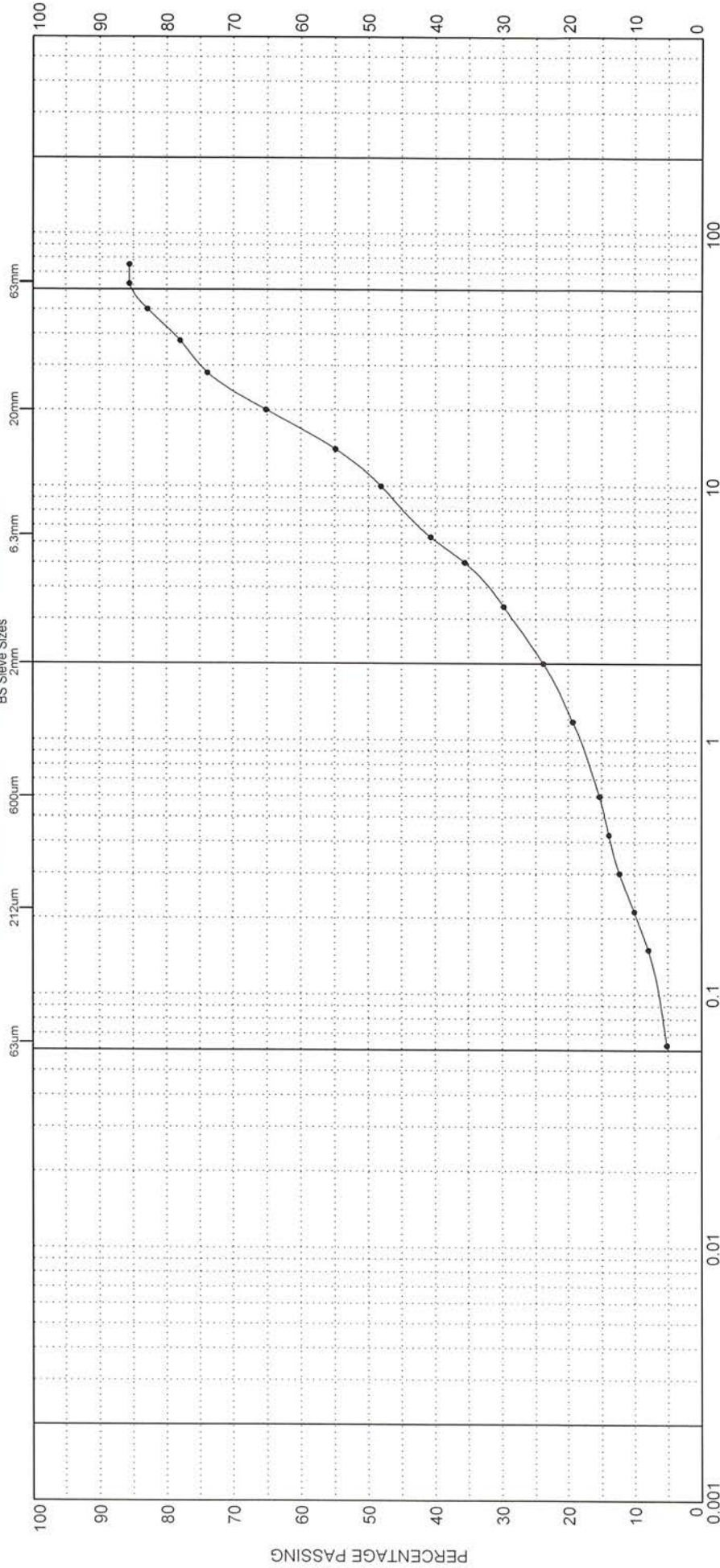
Test Method :- BS1377 : Part 2 : Clause 9.2 & 9.4 : 1990 Exploratory Hole No :- S3-TPB50

Depth :- 1.00

Sample Type & No :- B3

Date Tested :- 30/11/2017

PARTICLE SIZE DISTRIBUTION CURVE



CLAY	SILT			SAND			GRAVEL			COBBLES	BOULDERS
	Fine	Medium	Coarse	Fine	Medium	Coarse	Fine	Medium	Coarse		

For description of sample please refer to the Laboratory Sample Description Sheet

	Date of issue :- 12/12/2017	Certificate No :- PSD/4155/S3-TPB50/B3/1.00	Signed :- 	Name :- M. CLARK	Page 1 of 1
	Client :- South Tees Site Company Ltd	Contract Title :- The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3	AEG Contract No :- 4155		



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Test Method :- Not To BS 1377

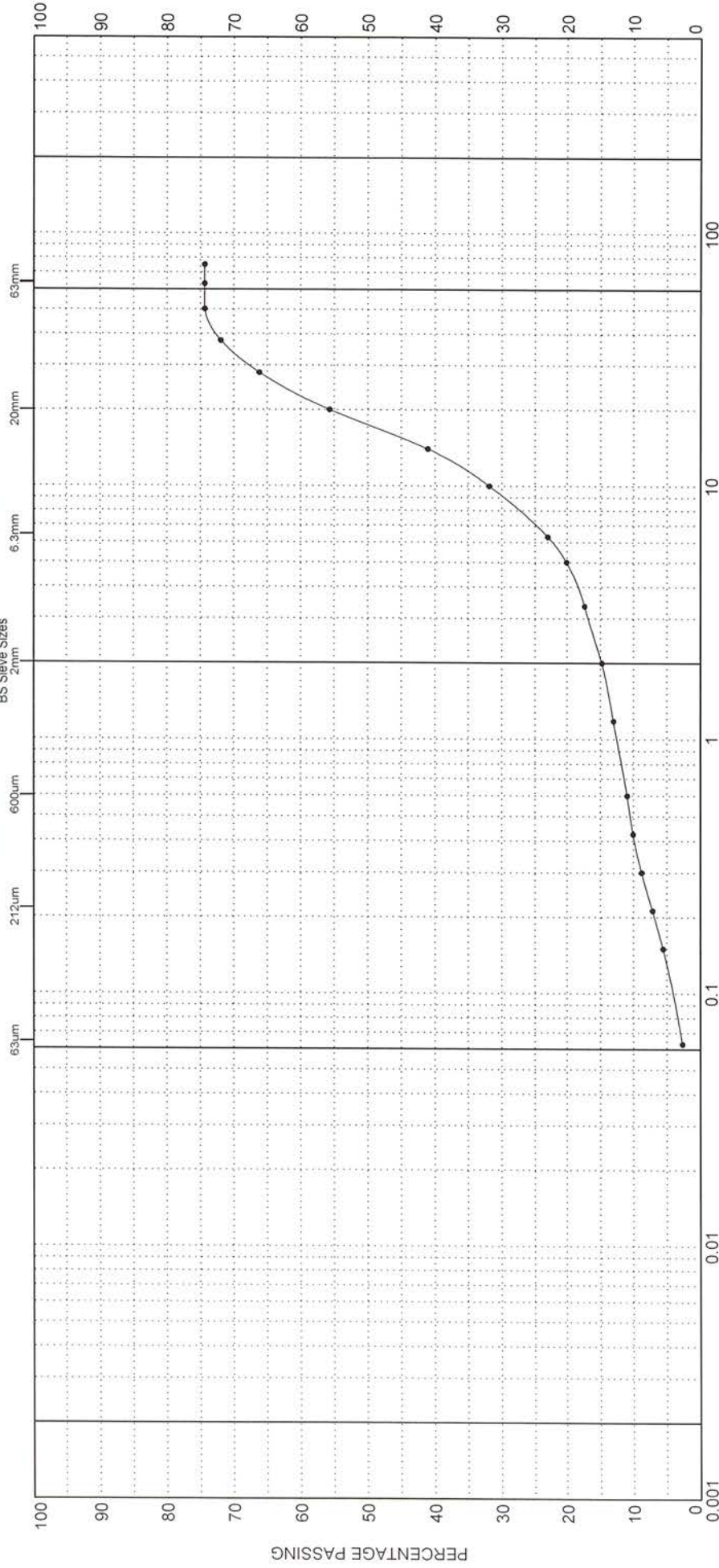
Exploratory Hole No :- S3-TPB51

Depth :- 2.00

Sample Type & No :- B6

Date Tested :- 30/11/2017

PARTICLE SIZE DISTRIBUTION CURVE



CLAY	SILT			SAND			GRAVEL			COBBLES	BOULDERS
	Fine	Medium	Coarse	Fine	Coarse	Medium	Fine	Medium	Coarse		

For description of sample please refer to the Laboratory Sample Description Sheet

	Date of issue :- 12/12/2017	Certificate No :- PSD/4155/S3-TPB51/B6/2.00		Signed :-	Name :-		Page 1 of 1
	Client :- South Tees Site Company Ltd	Contract Title :- The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3					AEG Contract No :- 4155



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Test Method :- Not To BS 1377

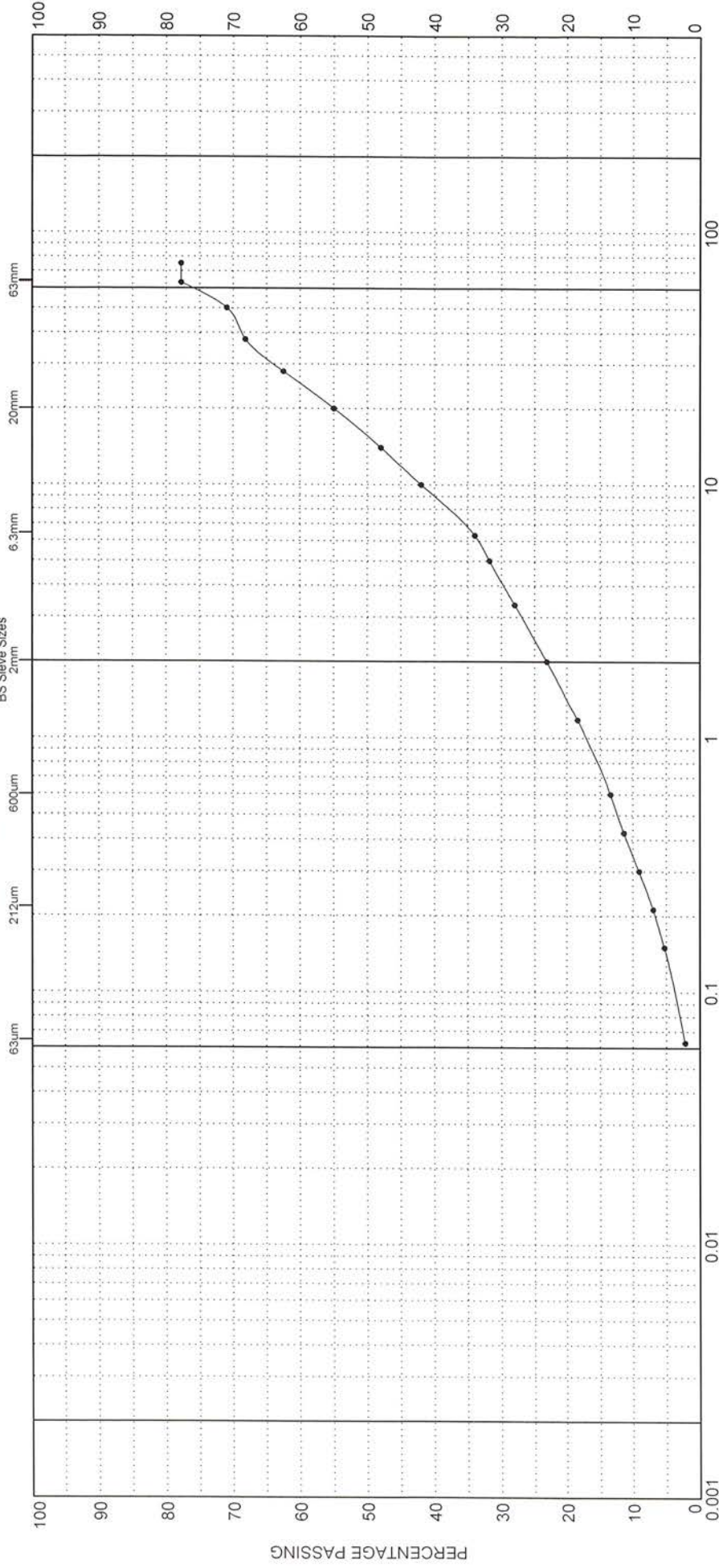
Exploratory Hole No :- S3-TPB52

Depth :- 1.00

Sample Type & No :- LB3

Date Tested :- 30/11/2017

PARTICLE SIZE DISTRIBUTION CURVE



CLAY	SILT			SAND			GRAVEL			COBBLES	BOULDERS
	Fine	Medium	Coarse	Fine	Medium	Coarse	Fine	Medium	Coarse		

For description of sample please refer to the Laboratory Sample Description Sheet

	Date of issue :- 12/12/2017	Certificate No :- PSD/4155/S3-TPB52/LB3/1.00	Signed :- 	Name :-	Page 1 of 1
	Client :- South Tees Site Company Ltd	Contract Title :- The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3	AEG Contract No :- 4155		



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Test Method :- Not To BS 1377

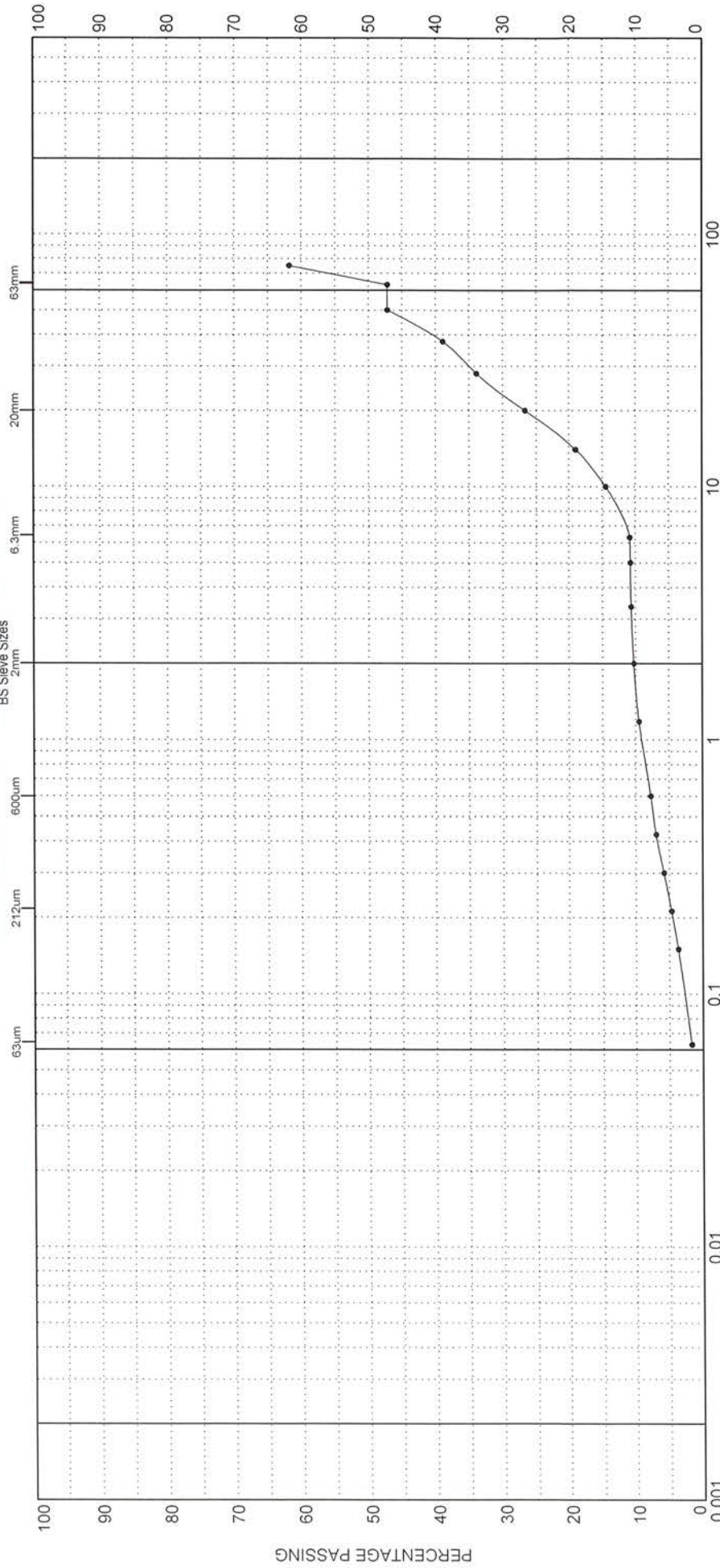
Exploratory Hole No :- S3-TPB53

Depth :- 1.00

Sample Type & No :- B3

Date Tested :- 27/11/2017

PARTICLE SIZE DISTRIBUTION CURVE



CLAY			SILT			SAND			GRAVEL			COBBLES		BOULDERS	
Fine	Medium	Coarse	Fine	Medium	Coarse	Fine	Medium	Coarse	Fine	Medium	Coarse				

For description of sample please refer to the Laboratory Sample Description Sheet

	Date of issue :- 12/12/2017	Certificate No :- PSD/4155/S3-TPB53/B3/1.00	Signed :- <i>msore</i>	Name :- M. Sore	Page 1 of 1
	Client :- South Tees Site Company Ltd	Contract Title :- The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3	AEG Contract No :- 4155		UKAS TESTING 1367




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Date Tested :- 28/11/2017

Sieve Size	Percentage Passing (%)
60mm	65
20mm	45
7.5mm	35
4.75mm	25
2.5mm	15
1.18mm	5
600μm	0

CLAY	Fine	Medium	Coarse	Fine	Medium	Coarse	GRAVEL	COBBLES	BOULDERS
	SILT			Fine	Medium	Coarse			

For description of sample please refer to the Laboratory Sample Description Sheet

	Date of issue :- 12/12/2017	Certificate No :- PSD/4155/S3-TPB54/B4/1.00	Signed :- 	Name :-	Page 1 of 1
	Client :- South Tees Site Company Ltd	Contract Title :- The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		AEG Contract No :- 4155	
					
1367					

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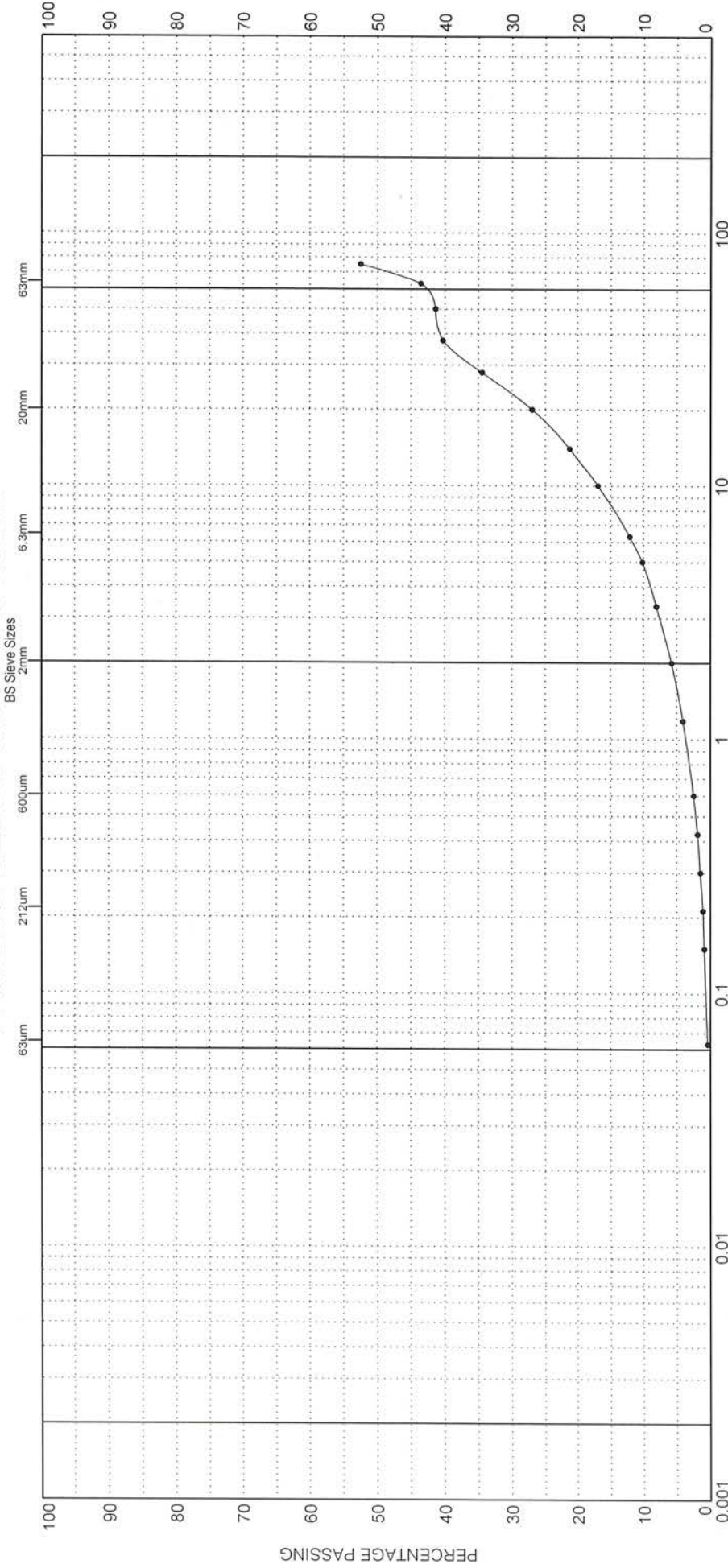
Head Office: Unit 25 Stella Gull Industrial Estate, Pelton Fell, Chester-le-Street, Co. Durham, DH2 3BG - Tel: 0191 387 4700 Fax: 0191 387 4710
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Test Method :- BS1377 : Part 2 : Clause 9.2 & 9.4 : 1990 # Exploratory Hole No :- S3-TPB55

Sample Type & No :- LB4

Date Tested :- 09/01/2018

PARTICLE SIZE DISTRIBUTION CURVE



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Test Method :- Not To BS 1377

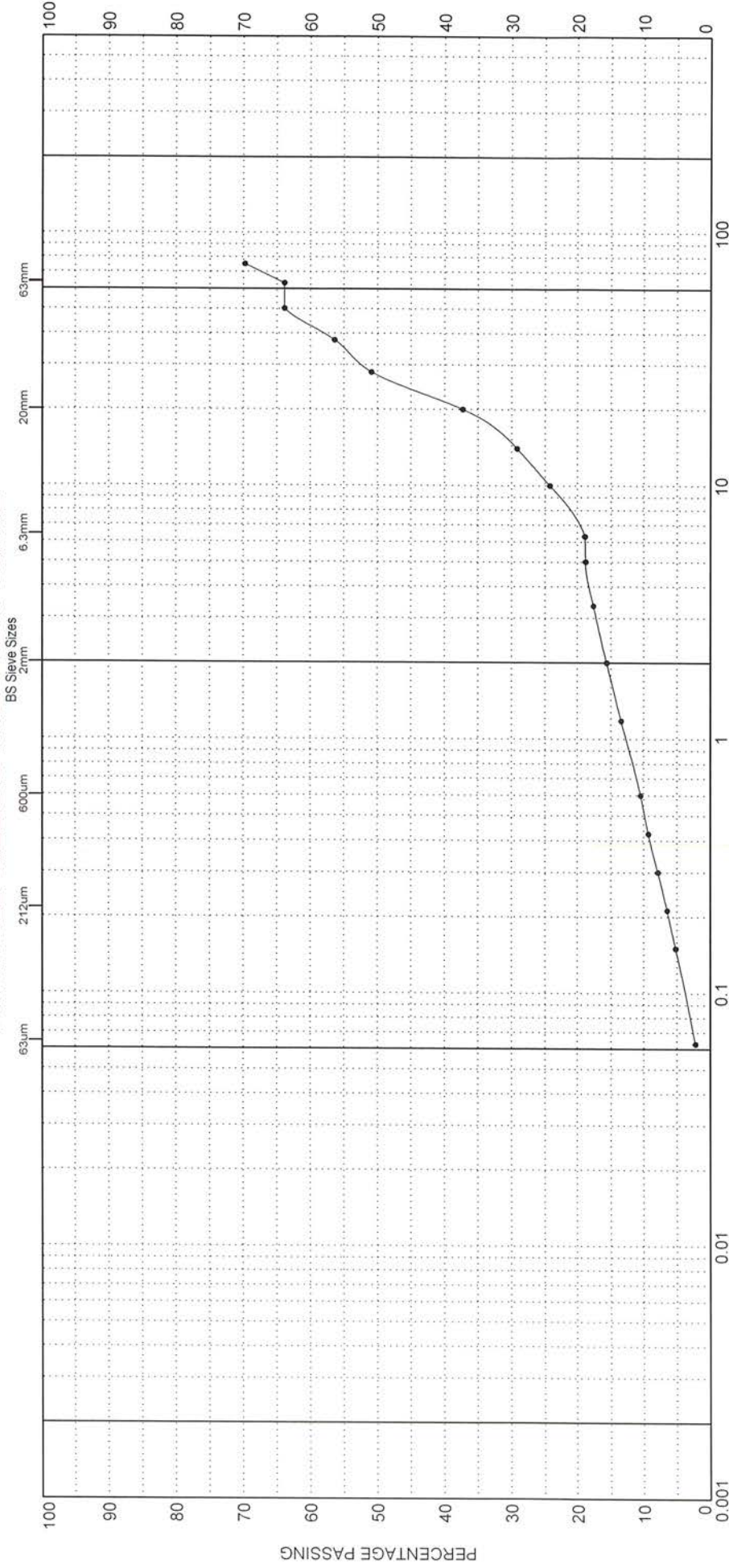
Exploratory Hole No :- S3-TPB56

Depth :- 1.00

Sample Type & No :- B3

Date Tested :- 28/11/2017

PARTICLE SIZE DISTRIBUTION CURVE



CLAY	SILT			SAND			GRAVEL			COBBLES	BOULDERS
	Fine	Medium	Coarse	Fine	Medium	Coarse	Fine	Medium	Coarse		

For description of sample please refer to the Laboratory Sample Description Sheet

	Date of issue :- 12/12/2017	Certificate No :- PSD/4155/S3-TPB56/B3/1.00	Signed :- <i>msore</i>	Name :-	Page 1 of 1
	Client :- South Tees Site Company Ltd	Contract Title :- The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3	AEG Contract No :- 4155		



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Date Tested :- 28/11/2017

The graph illustrates the particle size distribution of a material. The percentage of material passing through the sieves is plotted against the sieve size. The data points are as follows:

Sieve Size	Percentage Passing
63μm	~5
212μm	~10
600μm	~20
2mm	~30
6.3mm	~35
20mm	~45
63mm	~55

CLAY	Fine	Medium	Coarse	Fine	Medium	Coarse	GRAVEL	COBBLES	BOULDERS
	SILT			SAND					

For description of sample please refer to the Laboratory Sample Description Sheet

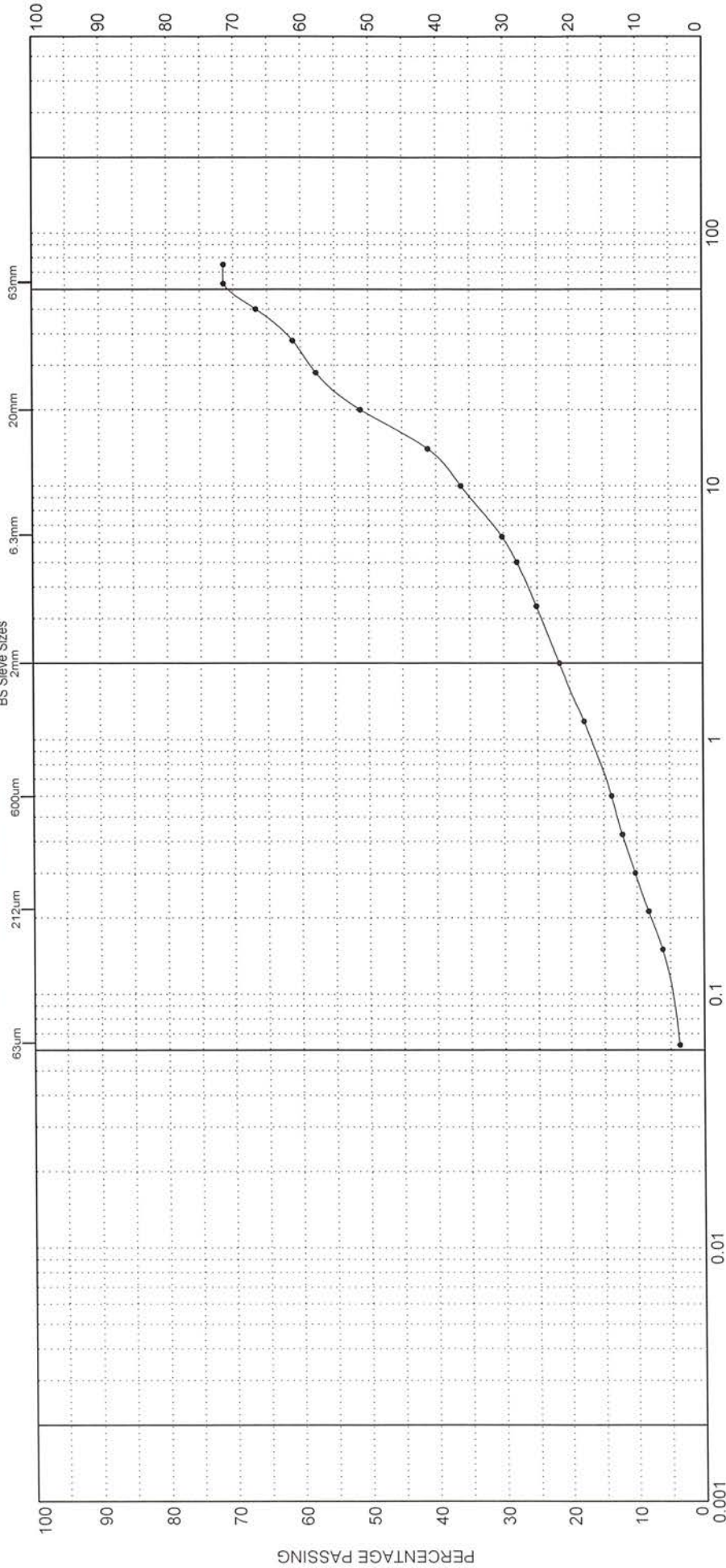
		Page 1 of 1	
Date of issue :- 12/12/2017		Certificate No :- PSD/4155/S3-TPB57/B6/2.00	
Client :- South Tees Site Company Ltd		Contract Title :- The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3	
Signed :- 		Name :-	
AEG		AEG Contract No :- 4155	

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Test Method :- Not To BS 1377	Exploratory Hole No :- S3-TPB58	Depth :- 1.00	Sample Type & No :- LB3	Date Tested :- 28/11/2017
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PARTICLE SIZE DISTRIBUTION CURVE



CLAY			SILT			SAND			GRAVEL			COBBLES		BOULDERS	
Fine	Medium	Coarse	Fine	Medium	Coarse	Fine	Medium	Coarse	Fine	Medium	Coarse				

For description of sample please refer to the Laboratory Sample Description Sheet

	Date of issue :- 12/12/2017	Certificate No :- PSD/4155/S3-TPB58/LB3/1.00	Signed :- <i>msore</i>	Name :-	Page 1 of 1
	Client :- South Tees Site Company Ltd	Contract Title :- The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3	AEG Contract No :- 4155		



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Test Method :- Not To BS 1377

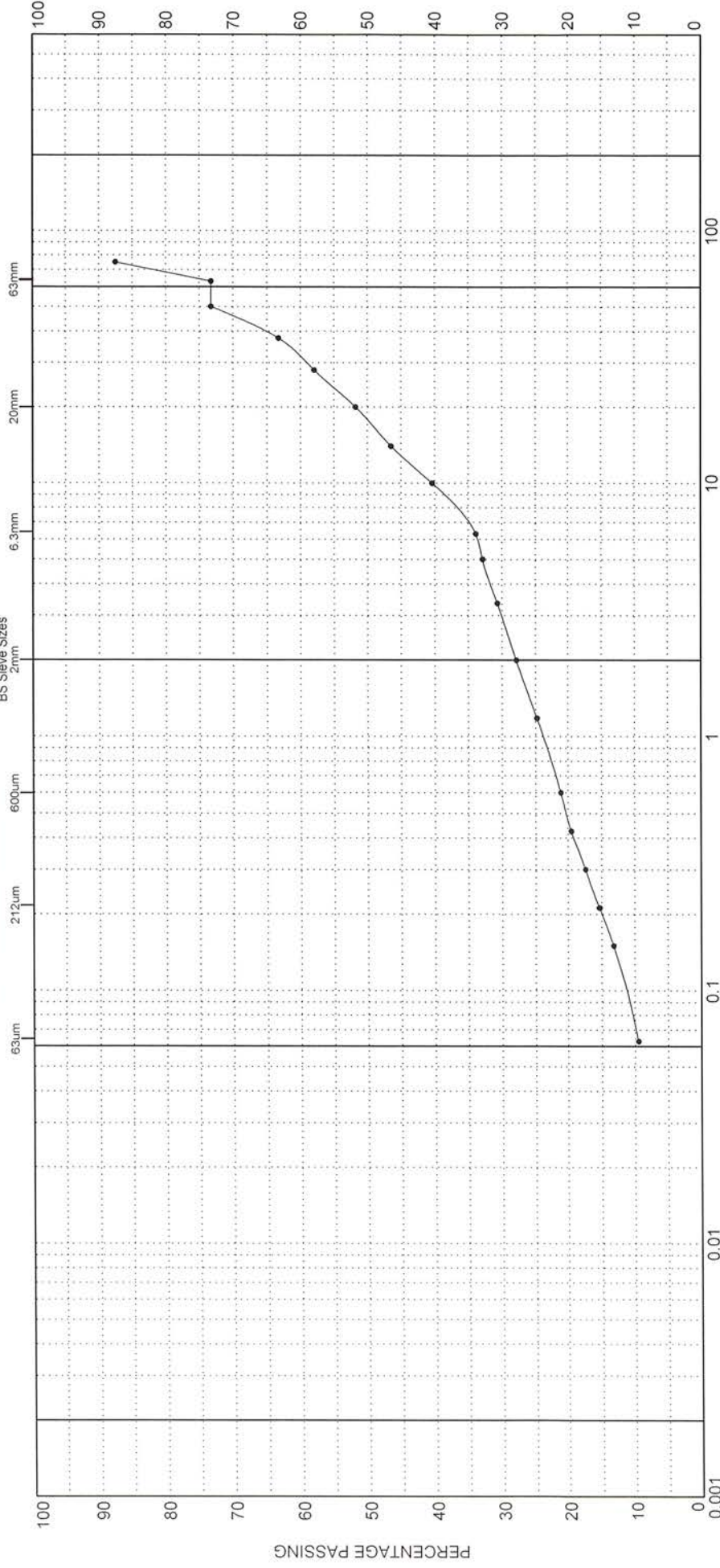
Exploratory Hole No :- S3-TPB59

Depth :- 2.00

Sample Type & No :- B7

Date Tested :- 28/11/2017

PARTICLE SIZE DISTRIBUTION CURVE



CLAY			SILT			SAND			GRAVEL			COBBLES		BOULDERS	
Fine	Medium	Coarse	Fine	Medium	Coarse	Fine	Medium	Coarse	Fine	Medium	Coarse				

For description of sample please refer to the Laboratory Sample Description Sheet

	Date of issue :- 12/12/2017	Certificate No :- PSD/4155/S3-TPB59/B7/2.00	Signed :- 	Name :- ms	Page 1 of 1
	Client :- South Tees Site Company Ltd	Contract Title :- The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3	AEG Contract No :- 4155		



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Test Method :- Not To BS 1377

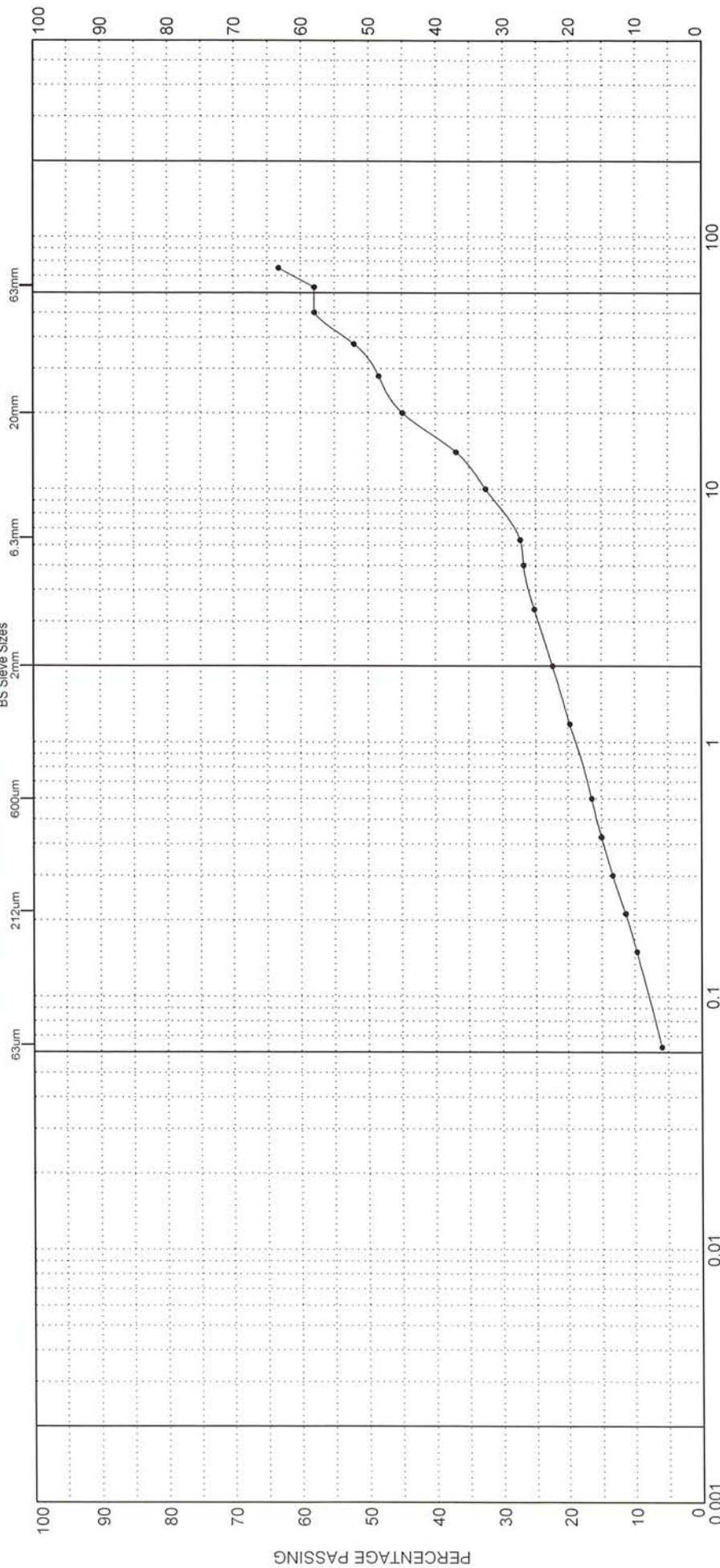
Exploratory Hole No :- S3-TPB60

Depth :- 1.00

Sample Type & No :- B4

Date Tested :- 28/11/2017

PARTICLE SIZE DISTRIBUTION CURVE



CLAY	SILT			SAND			GRAVEL			COBBLES	BOULDERS
	Fine	Medium	Coarse	Fine	Medium	Coarse	Fine	Medium	Coarse		

For description of sample please refer to the Laboratory Sample Description Sheet

	Date of issue :- 12/12/2017	Certificate No :- PSD/4155/S3-TPB60/B4/1.00	Signed :- 	Name :- [Redacted]	Page 1 of 1
	Client :- South Tees Site Company Ltd	Contract Title :- The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3	AEG Contract No :- 4155		

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Date Tested :- 29/11/2017

Figure 1 is a semi-logarithmic graph showing the percentage of aggregate passing through various sieve sizes. The y-axis is labeled 'PERCENTAGE PASSING' and ranges from 0 to 100. The x-axis is labeled 'SIEVE SIZES' and includes both millimeter (mm) and micrometer (μm) scales. The curve represents the gradation of the aggregate, showing a typical distribution where the percentage passing increases as the sieve size increases.

Sieve Size (mm)	Sieve Size (μm)	Percentage Passing (%)
63	630	82
75	750	78
90	900	72
106	1060	68
125	1250	62
150	1500	55
180	1800	48
212	2120	42
250	2500	38
300	3000	32
354	3540	28
425	4250	22
500	5000	18
600	6000	12
750	7500	8
900	9000	5
1060	10600	3
1250	12500	2
1500	15000	1
1800	18000	0.5
2120	21200	0.2
2500	25000	0.1
3000	30000	0.05
3540	35400	0.02
4250	42500	0.01

CLAY	Fine	Medium	Coarse	Fine	Medium	Coarse	COBBLES	BOULDERS
	SILT			SAND				
				GRAVEL				

Page 1 of 1
AEG Contract No :-
4155



Date Tested :- 28/11/2017

Figure 1 is a semi-logarithmic plot showing the percentage of particles passing versus particle size (microns) for a sample of 100% polyethylene. The y-axis is labeled 'PERCENTAGE PASSING' and ranges from 0 to 100. The x-axis is labeled 'MICRONS' and is on a logarithmic scale, ranging from 0.001 to 100. The curve shows a sharp increase in the percentage of particles passing as the particle size increases, starting around 10 microns and reaching 100% at approximately 100 microns.

Microns	Percentage Passing
0.001	0
0.002	0
0.005	0
0.01	0
0.02	0
0.05	0
0.1	0
0.2	0
0.5	0
1	0
2	0
5	0
10	0
20	0
30	0
40	0
50	0
60	0
70	0
80	0
90	0
100	0

	Fine	Medium	Coarse	Fine	Medium	Coarse	Fine	Medium	Coarse		BOULDERS
CLAY	Fine	Medium	Coarse	Fine	Medium	Coarse	Fine	Medium	Coarse		COBBLES
	SILT			SAND			GRAVEL				

For description of sample please refer to the Laboratory Sample Description Sheet

	Date of issue :- 12/12/2017	Certificate No :- PSD/4155/S3-TPB62/LB3/1.00	Signed :- 	Name :-	Page 1 of 1 AEG Contract No :- 4155
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Test Method :- Not To BS 1377

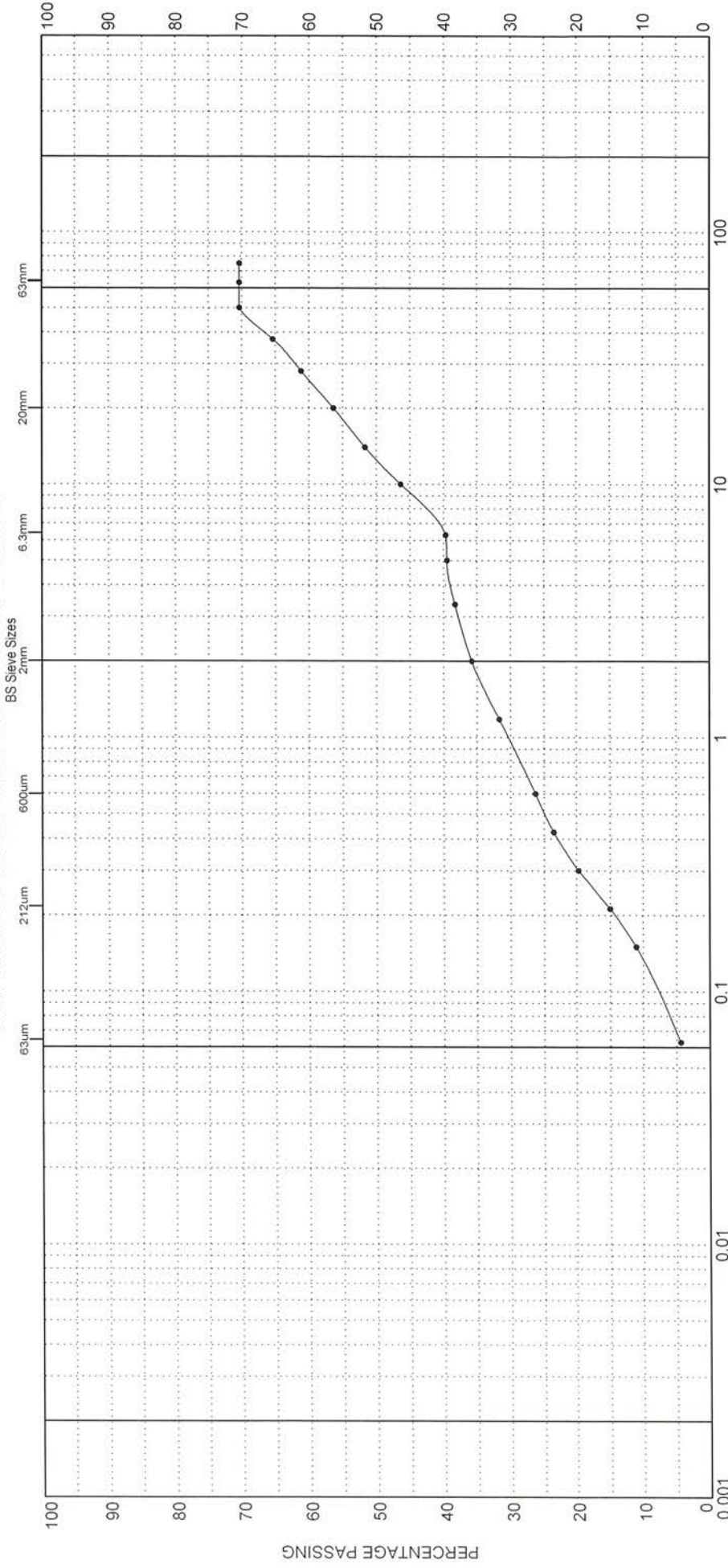
Exploratory Hole No :- S3-TPB64

Depth :- 2.00

Sample Type & No :- B6

Date Tested :- 28/11/2017

PARTICLE SIZE DISTRIBUTION CURVE



CLAY			SILT			SAND			GRAVEL			COBBLES		BOULDERS	
Fine	Medium	Coarse	Fine	Medium	Coarse	Fine	Medium	Coarse	Fine	Medium	Coarse				

For description of sample please refer to the Laboratory Sample Description Sheet

Date of issue :-
12/12/2017

Certificate No :-
PSD/4155/S3-TPB64/B6/2.00

Signed :-

[Signature]

Name :-

Page 1 of 1

Client :-

South Tees Site Company Ltd

Contract Title :-

The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3

AEG Contract No :-

4155



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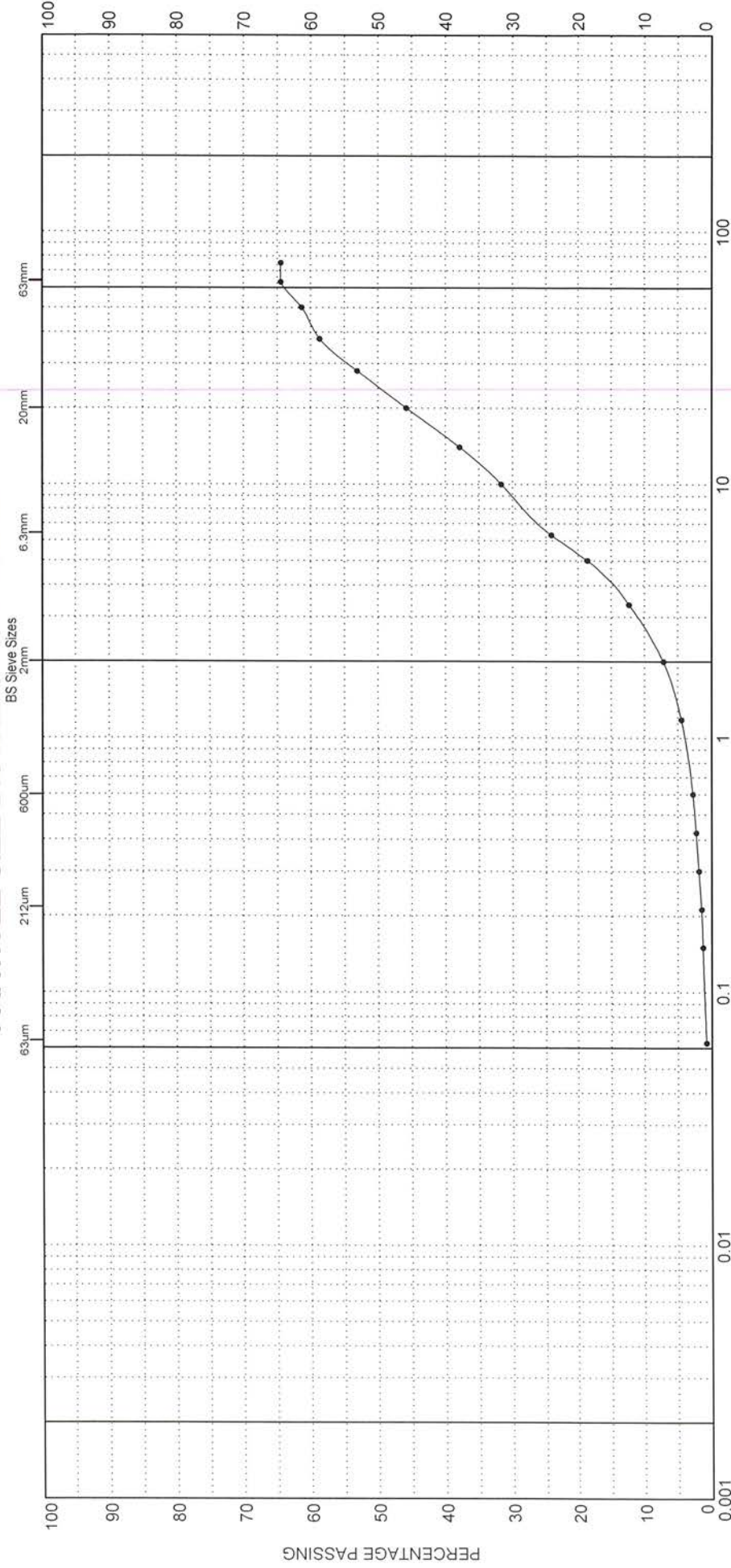
Test Method :- BS1377 : Part 2 : Clause 9.2 & 9.4 : 1990 Exploratory Hole No :- S3-TPB65

Depth :- 1.00

Sample Type & No :- B4

Date Tested :- 28/11/2017

PARTICLE SIZE DISTRIBUTION CURVE



CLAY			SILT			SAND			GRAVEL			COBBLES		BOULDERS	
Fine	Medium	Coarse	Fine	Medium	Coarse	Fine	Medium	Coarse	Fine	Medium	Coarse				

For description of sample please refer to the Laboratory Sample Description Sheet

Date of issue :- 12/12/2017		Certificate No :- PSD/4155/S3-TPB65/B4/1.00		Signed :- <i>msore</i>		Name :-		Page 1 of 1	
Client :- South Tees Site Company Ltd		Contract Title :- The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		AEG Contract No :- 4155		UKAS TESTING 1367			

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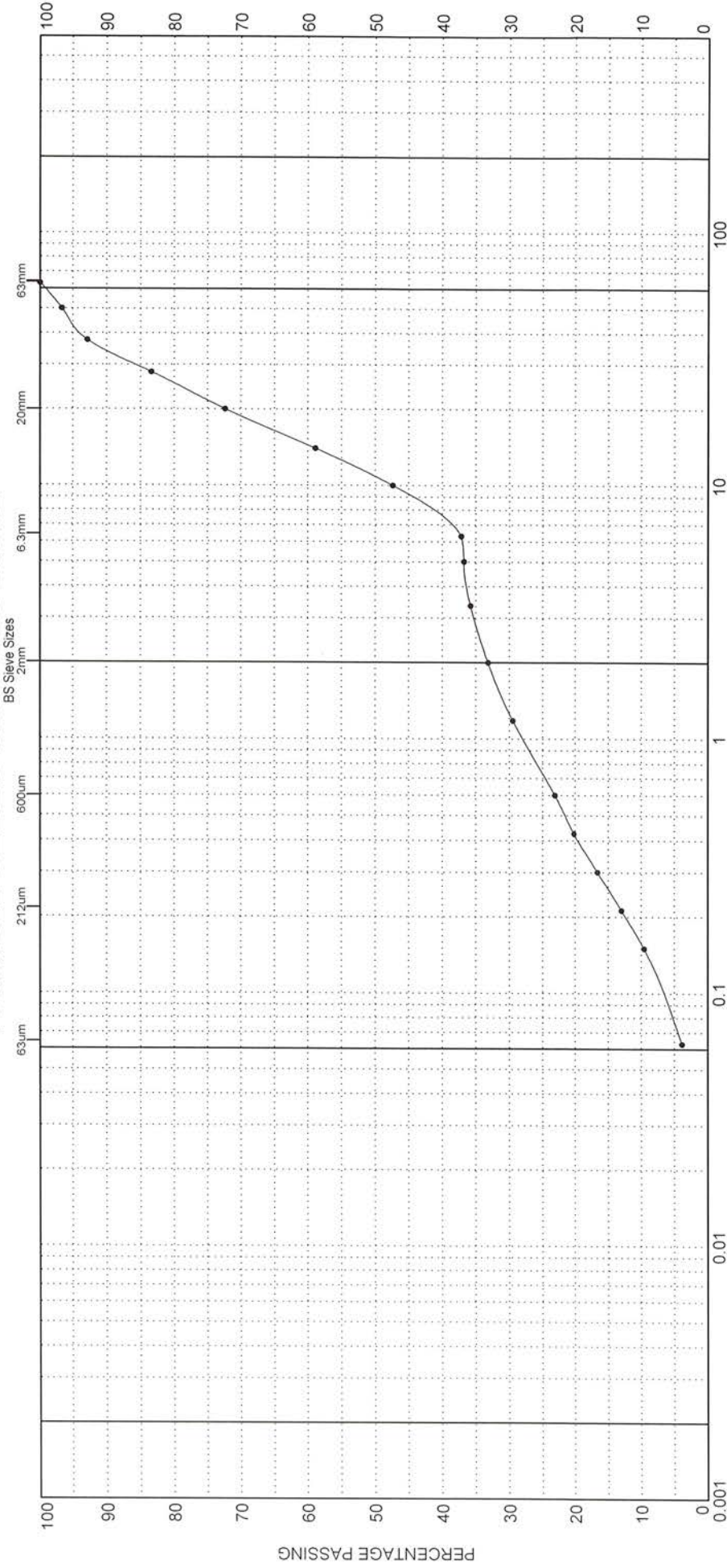
Test Method :- BS1377 : Part 2 : Clause 9.2 & 9.4 : 1990 Exploratory Hole No :- S3-TPB66

Depth :- 1.00

Sample Type & No :- LB4

Date Tested :- 30/11/2017

PARTICLE SIZE DISTRIBUTION CURVE



CLAY	SILT			SAND			GRAVEL			COBBLES	BOULDERS
	Fine	Medium	Coarse	Fine	Medium	Coarse	Fine	Medium	Coarse		

For description of sample please refer to the Laboratory Sample Description Sheet

	Date of issue :- 12/12/2017	Certificate No :- PSD/4155/S3-TPB66/LB4/1.00	Signed :- <i>MSD</i>	Name :- <i>MSD</i>	Page 1 of 1
	Client :- South Tees Site Company Ltd	Contract Title :- The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3	AEG Contract No :- 4155		



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Test Method :- Not To BS 1377

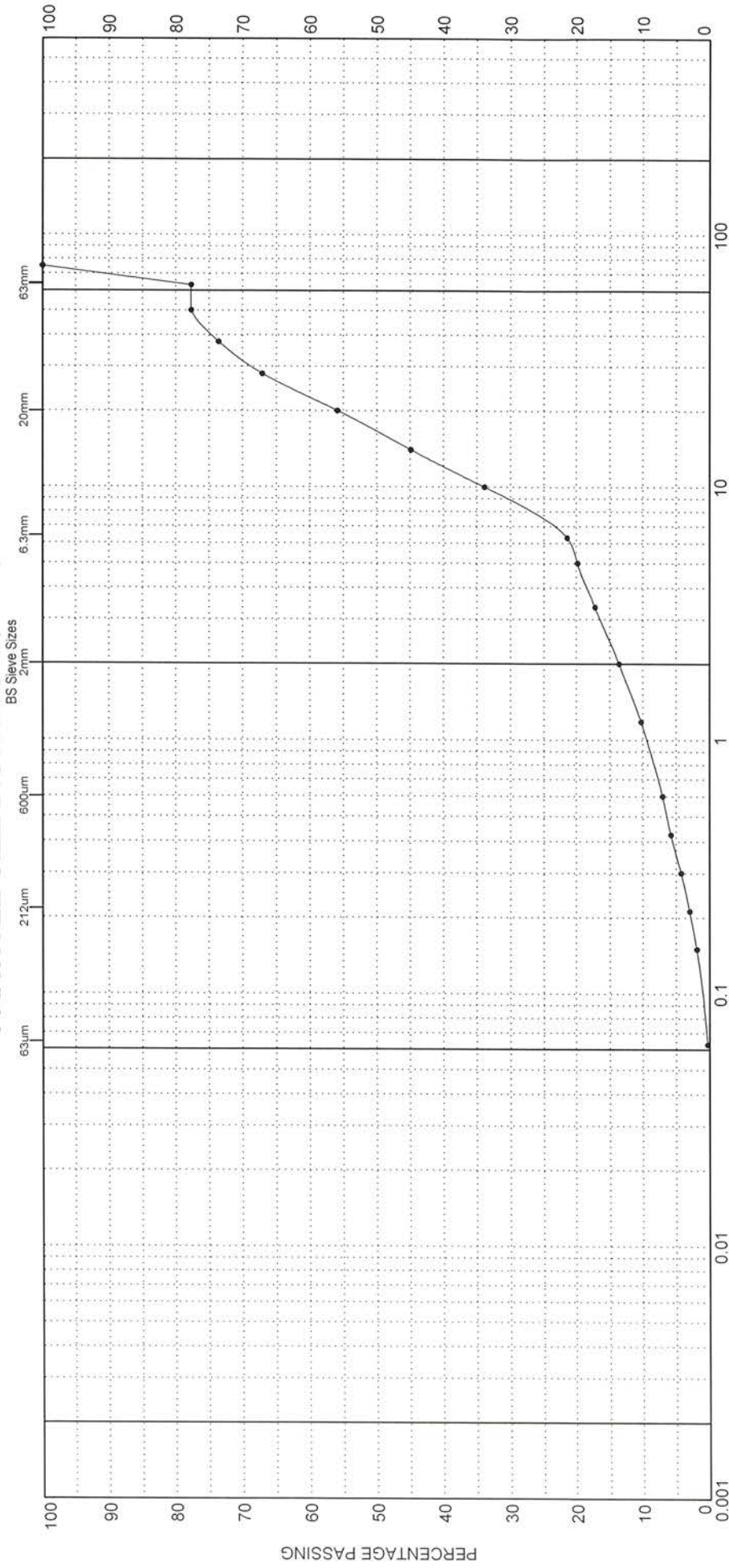
Exploratory Hole No :- S3-TPB67

Depth :- 2.00

Sample Type & No :- B7

Date Tested :- 28/11/2017

PARTICLE SIZE DISTRIBUTION CURVE



CLAY			SILT			SAND			GRAVEL			COBBLES		BOULDERS	
Fine	Medium	Coarse	Fine	Medium	Coarse	Fine	Medium	Coarse	Fine	Medium	Coarse				

For description of sample please refer to the Laboratory Sample Description Sheet

Date of issue :- 12/12/2017		Certificate No :- PSD/4155/S3-TPB67/B7/2.00		Signed :- <i>msore</i>		Name :-		Page 1 of 1	
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Test Method :- Not To BS 1377

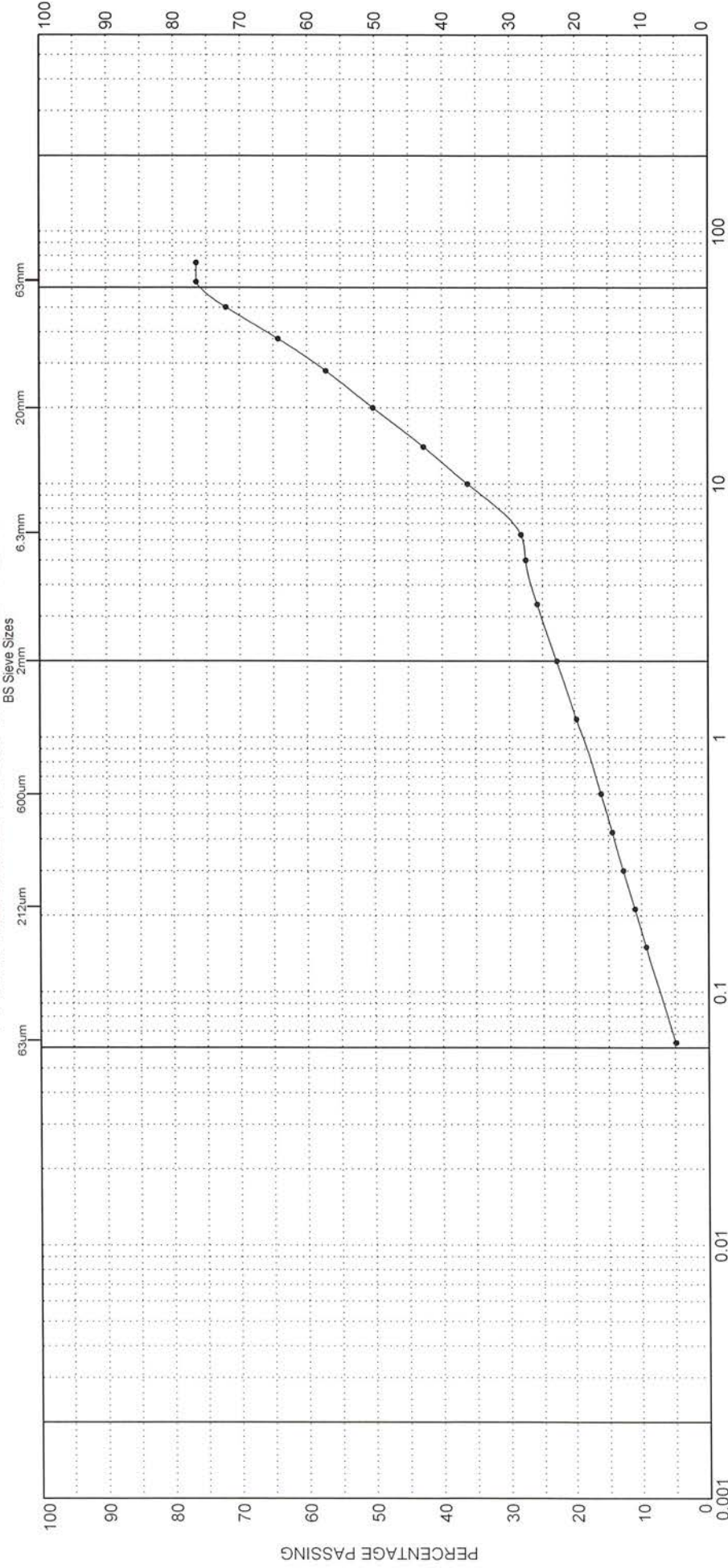
Exploratory Hole No :- S3-TPB69

Depth :- 1.00

Sample Type & No :- B4

Date Tested :- 30/11/2017

PARTICLE SIZE DISTRIBUTION CURVE



CLAY			SILT			SAND			GRAVEL			COBBLES		BOULDERS	
Fine	Medium	Coarse	Fine	Medium	Coarse	Fine	Medium	Coarse	Fine	Medium	Coarse				

For description of sample please refer to the Laboratory Sample Description Sheet

Date of issue :- 12/12/2017		Certificate No :- PSD/4155/S3-TPB69/B4/1.00		Signed :- <i>msore</i>		Name :- <i>msore</i>		Page 1 of 1	
Client :- South Tees Site Company Ltd		Contract Title :- The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		AEG Contract No :- 4155		UKAS TESTING 1367			

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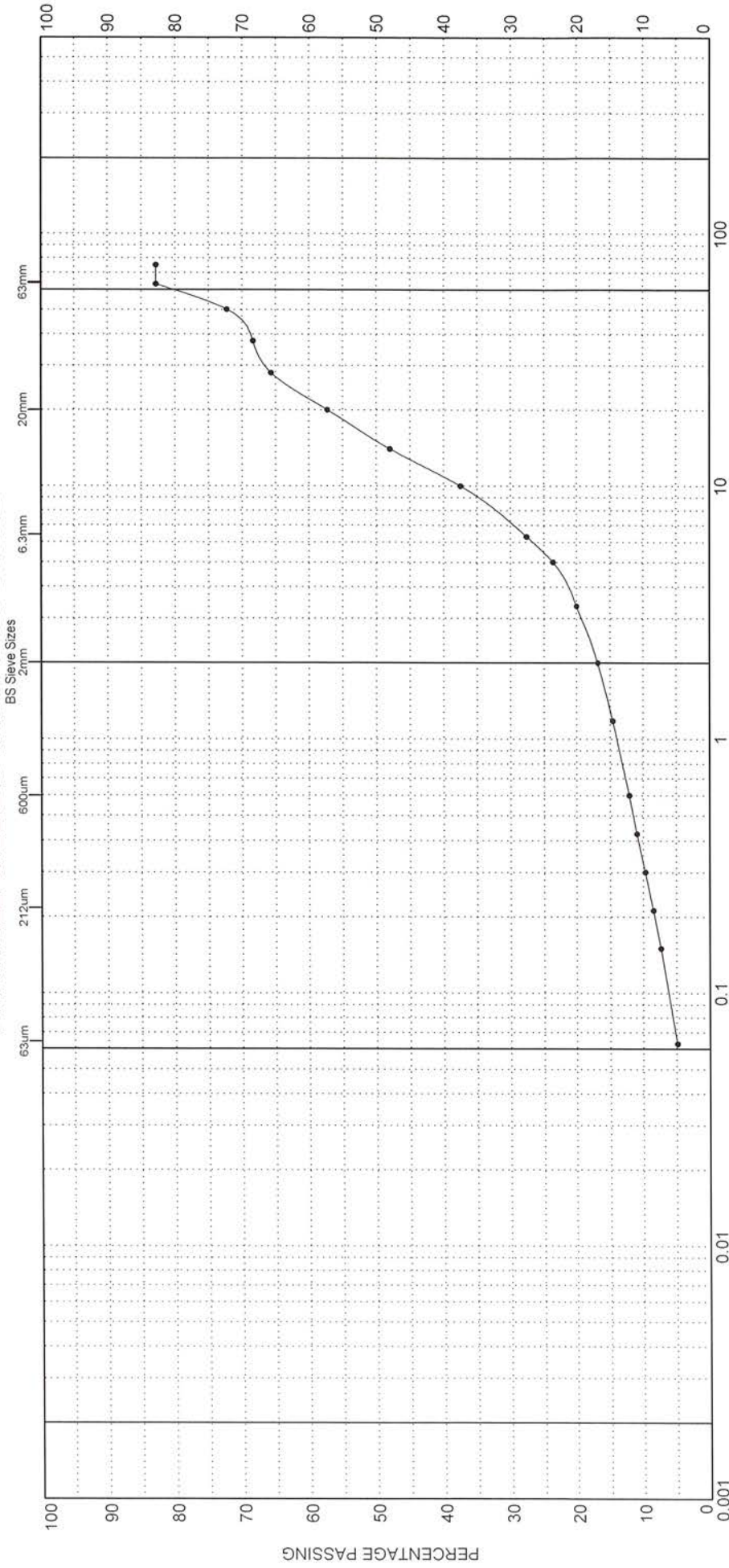
Test Method :- BS1377 : Part 2 : Clause 9.2 & 9.4 : 1990 Exploratory Hole No :- S3-TPB70

Depth :- 2.00

Sample Type & No :- B7

Date Tested :- 29/11/2017

PARTICLE SIZE DISTRIBUTION CURVE



CLAY			SILT			SAND			GRAVEL			COBBLES			BOULDERS		
Fine	Medium	Coarse	Fine	Medium	Coarse	Fine	Medium	Coarse	Fine	Medium	Coarse	Fine	Medium	Coarse	Fine	Medium	Coarse

For description of sample please refer to the Laboratory Sample Description Sheet

	Date of issue :- 12/12/2017	Certificate No :- PSD/4155/S3-TPB70/B7/2.00	Signed :- <i>msore</i>	Name :- M. Sore	Page 1 of 1
	Client :- South Tees Site Company Ltd	Contract Title :- The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3	AEG Contract No :- 4155		



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Test Method :- Not To BS 1377

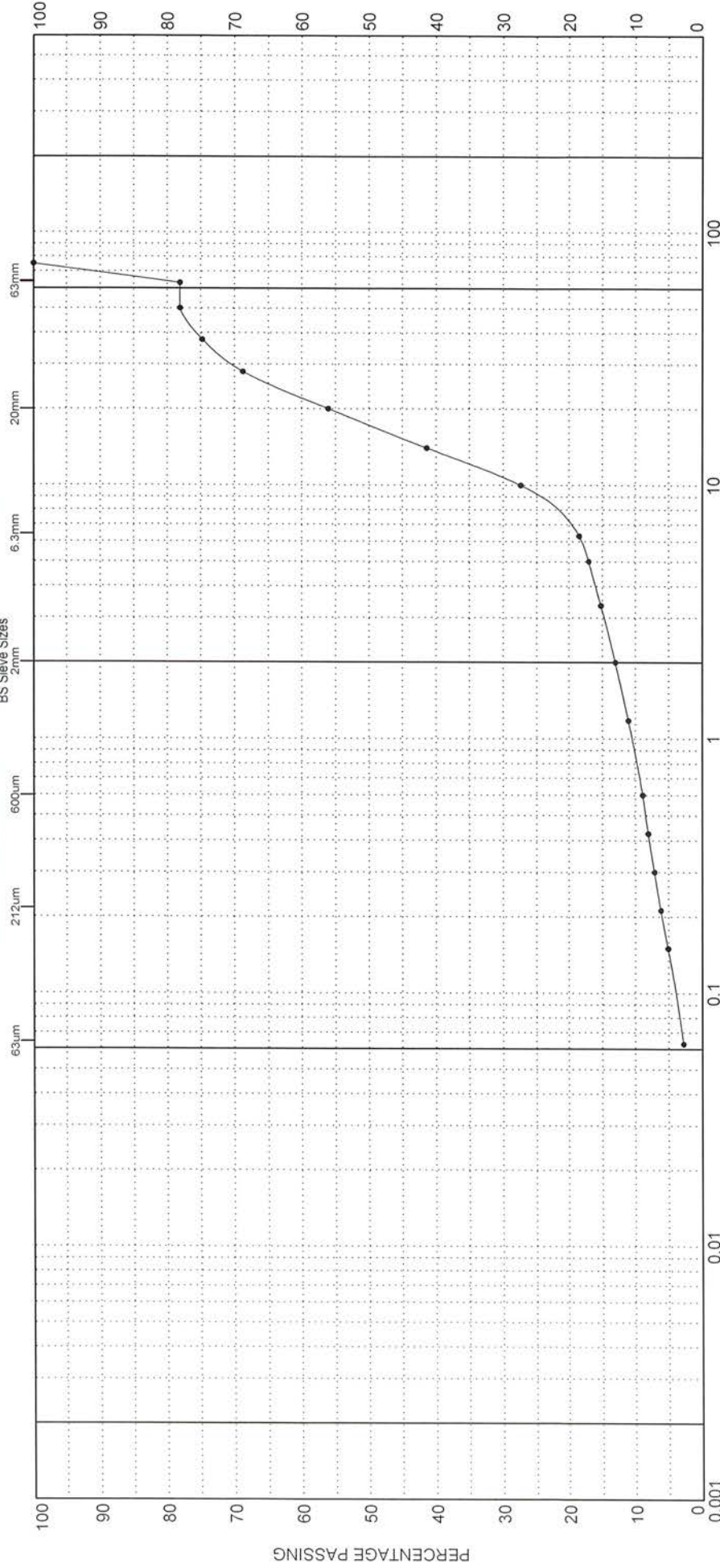
Exploratory Hole No :- S3-TPB71

Depth :- 1.00

Sample Type & No :- B4

Date Tested :- 30/11/2017

PARTICLE SIZE DISTRIBUTION CURVE



CLAY	SILT			SAND			GRAVEL			COBBLES	BOULDERS
	Fine	Medium	Coarse	Fine	Medium	Coarse	Fine	Medium	Coarse		

For description of sample please refer to the Laboratory Sample Description Sheet

	Date of issue :- 12/12/2017	Certificate No :- PSD/4155/S3-TPB71/B4/1.00	Signed :- <i>msop</i>	Name :- M. SELLARS	Page 1 of 1
	Client :- South Tees Site Company Ltd	Contract Title :- The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3	AEG Contract No :- 4155		

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Test Method :- Not To BS 1377

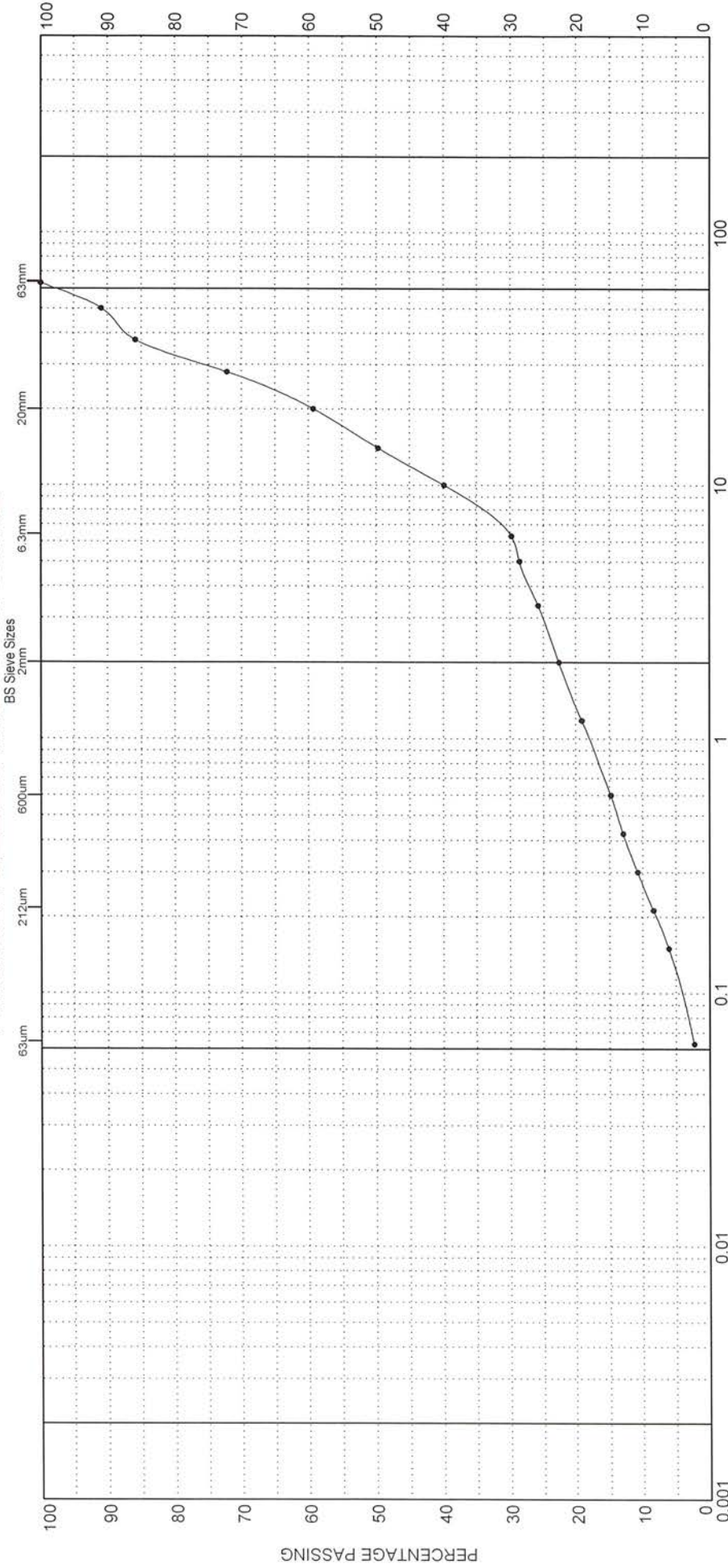
Exploratory Hole No :- S3-TPB72

Depth :- 1.00

Sample Type & No :- B4

Date Tested :- 30/11/2017

PARTICLE SIZE DISTRIBUTION CURVE



CLAY			SILT			SAND			GRAVEL			COBBLES		BOULDERS	
Fine	Medium	Coarse	Fine	Medium	Coarse	Fine	Medium	Coarse	Fine	Medium	Coarse				

For description of sample please refer to the Laboratory Sample Description Sheet

	Date of issue :- 12/12/2017	Certificate No :- PSD/4155/S3-TPB72/B4/1.00	Signed :- <i>MSO</i>	Name :- <i>M. SELLERS</i>	Page 1 of 1
	Client :- South Tees Site Company Ltd	Contract Title :- The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3	AEG Contract No :- 4155		

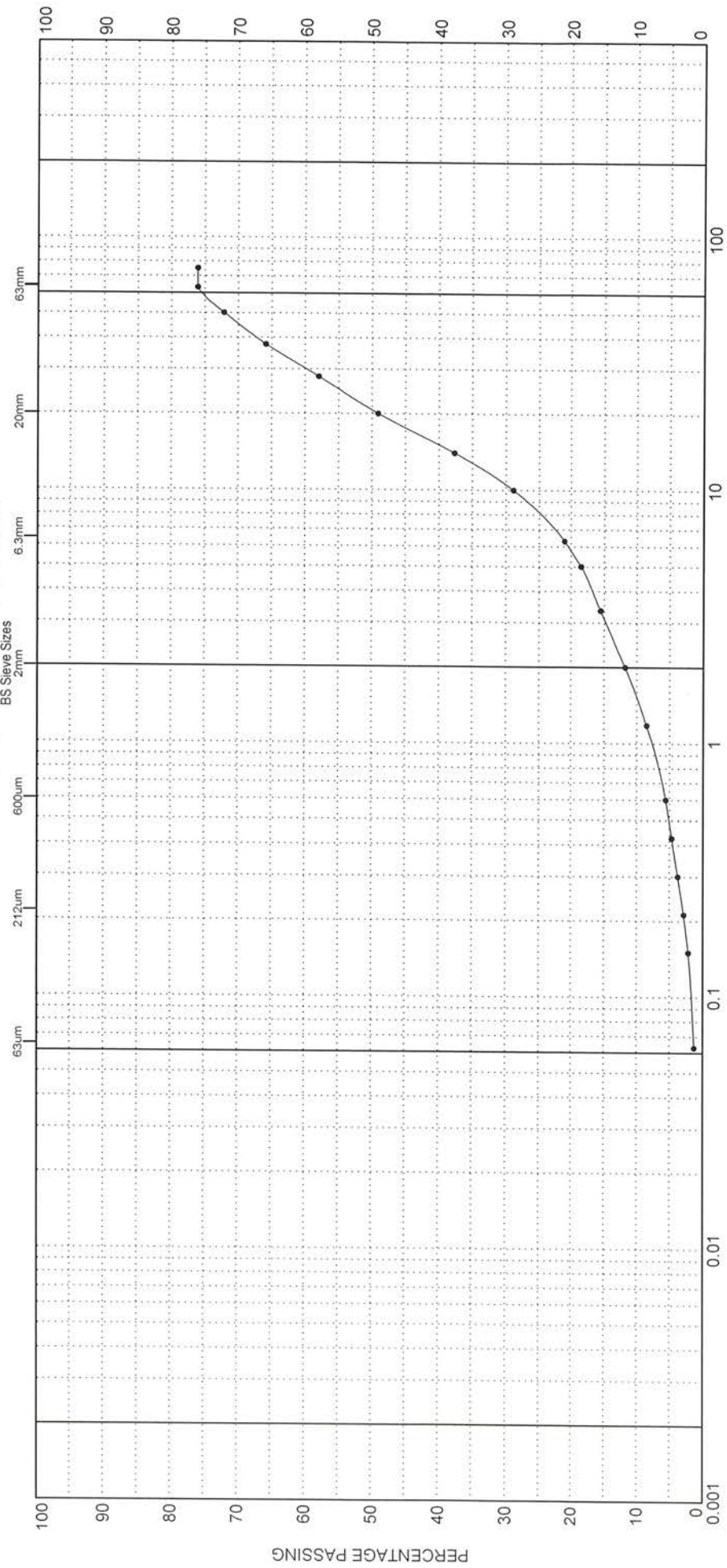


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Test Method :- Not To BS 1377	Exploratory Hole No :- S3-TPB73	Depth :- 1.00	Sample Type & No :- LB4	Date Tested :- 30/11/2017
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PARTICLE SIZE DISTRIBUTION CURVE



CLAY	SILT			SAND			GRAVEL			COBBLES	BOULDERS
	Fine	Medium	Coarse	Fine	Coarse	Medium	Fine	Coarse	Medium	Coarse	

For description of sample please refer to the Laboratory Sample Description Sheet

	Date of issue :- 12/12/2017	Certificate No :- PSD/4155/S3-TPB73/LB4/1.00	Signed :-	Name :-	Page 1 of 1
	Client :- South Tees Site Company Ltd	Contract Title :- The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3	AEG Contract No :- 4155		



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Test Method :- Not To BS 1377

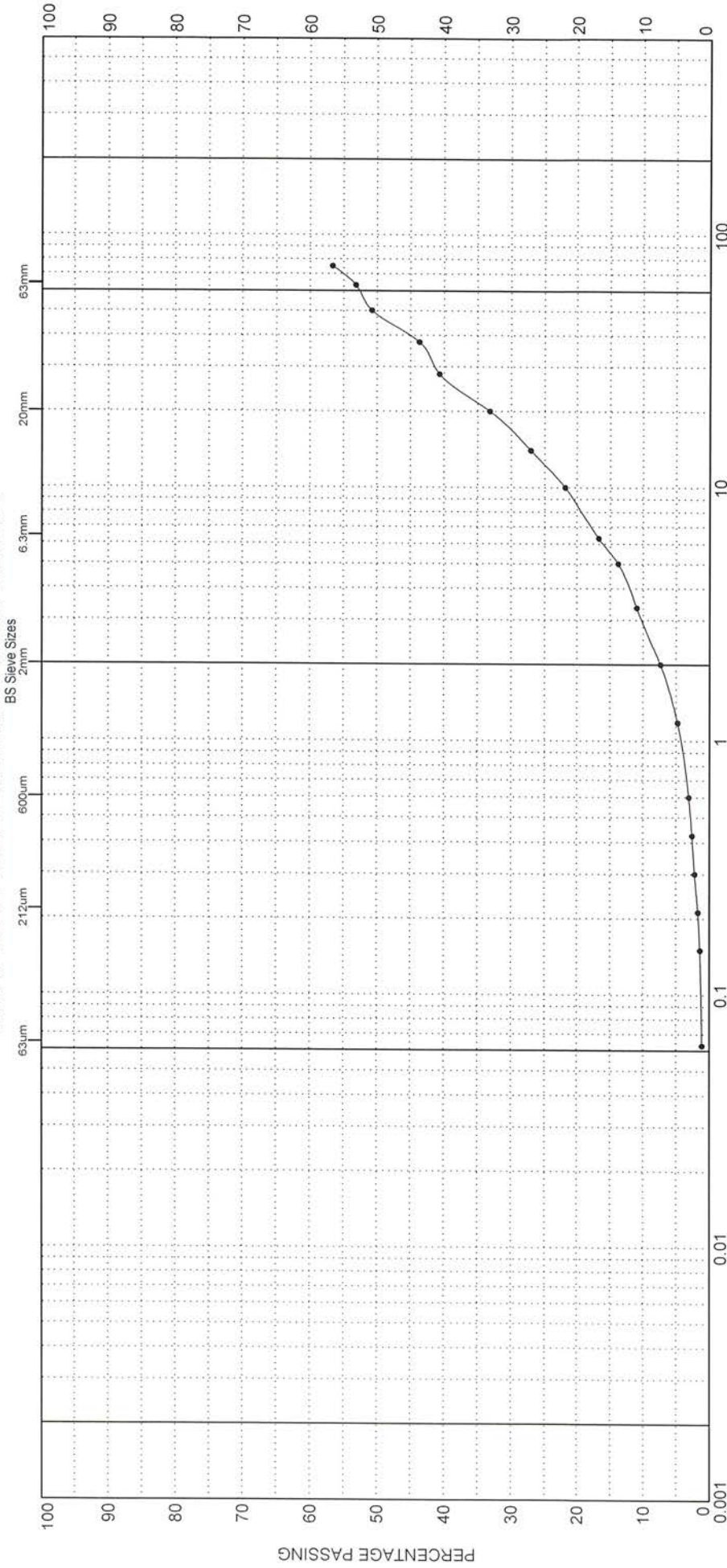
Exploratory Hole No :- S3-TPB74

Depth :- 1.00

Sample Type & No :- B3

Date Tested :- 30/11/2017

PARTICLE SIZE DISTRIBUTION CURVE



CLAY	SILT			SAND			GRAVEL			COBBLES	BOULDERS
	Fine	Medium	Coarse	Fine	Medium	Coarse	Fine	Medium	Coarse		

For description of sample please refer to the Laboratory Sample Description Sheet

	Date of issue :- 12/12/2017	Certificate No :- PSD/4155/S3-TPB74/B3/1.00		Name :- M. SELVARAJ	Page 1 of 1
	Client :- South Tees Site Company Ltd	Contract Title :- The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3			AEG Contract No :- 4155



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Test Method :- Not To BS 1377

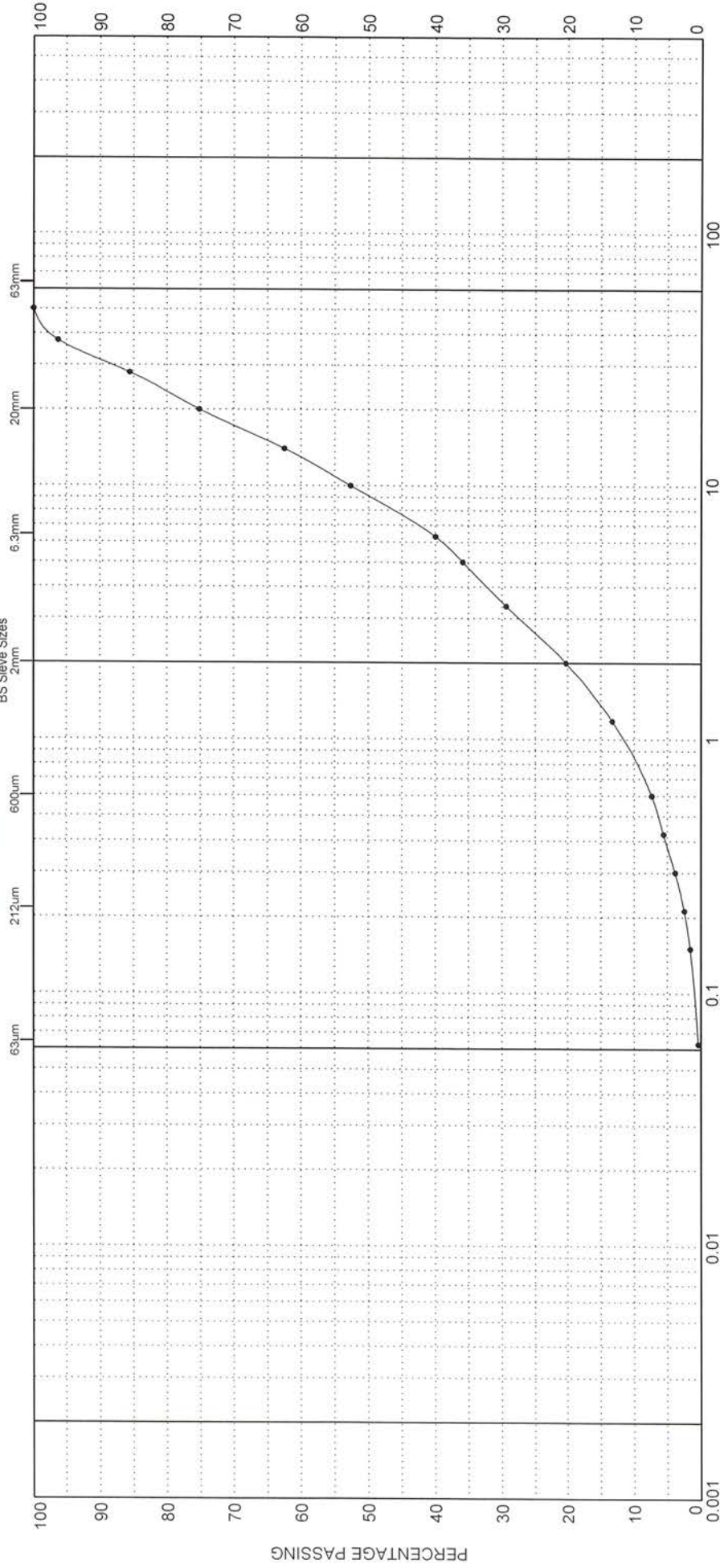
Exploratory Hole No :- S3-TPB75

Depth :- 1.00

Sample Type & No :- LB3

Date Tested :- 30/11/2017

PARTICLE SIZE DISTRIBUTION CURVE



CLAY			SILT			SAND			GRAVEL			COBBLES			BOULDERS		
Fine	Medium	Coarse	Fine	Medium	Coarse	Fine	Medium	Coarse	Fine	Medium	Coarse	Coarse	Coarse	Coarse	Coarse	Coarse	Coarse

For description of sample please refer to the Laboratory Sample Description Sheet

	Date of issue :- 12/12/2017	Certificate No :- PSD/4155/S3-TPB75/LB3/1.00	Signed :- 	Name :- W. CELKIRK	Page 1 of 1
	Client :- South Tees Site Company Ltd	Contract Title :- The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3	AEG Contract No :- 4155		



Determination of Dry Density/Moisture Content Relationship



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MOISTURE CONTENT/DRY DENSITY RELATIONSHIP

BS 1377 : Part 4 : 1990

Specimen Identification

Exploratory Hole No :- S3-TPA30

Depth (mBGL) :- 1.20

Sample Type & No :- B5

Test Method

4.5kg Compaction

Single Sample

Test Results

Optimum Moisture Content (%) = 15.0

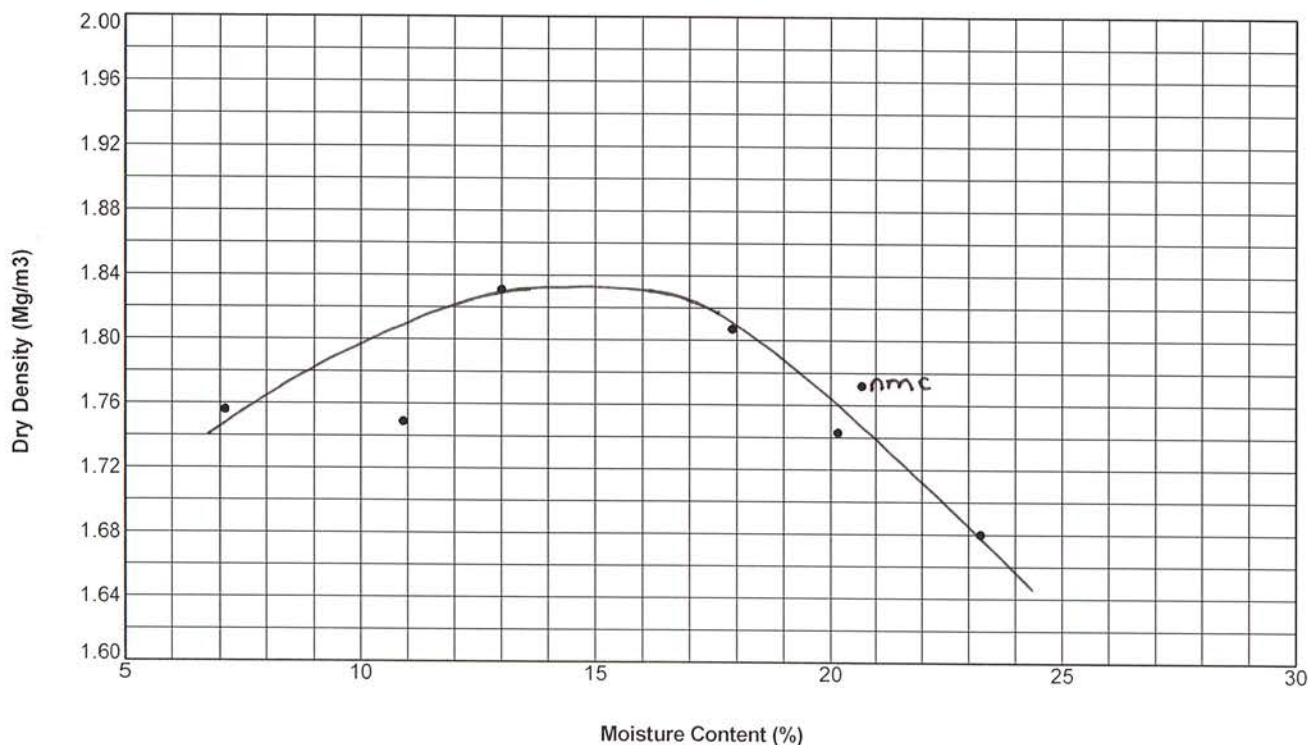
Particle Density (Measured) = 2.67

Maximum Dry Density (Mg/m³) = 1.83

Retained on 20mm Sieve (%) = 17.3

Date Tested = 24/11/2017

Retained on 37.5mm Sieve (%) = 9.7



For description of sample please refer to the Laboratory Sample Description Sheet

Contract Title :-
The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract

Client :-
South Tees Site Company Ltd



Signed :- *msen*

Name :-

Page 1 of 1

Date of issue :-
01/12/2017

Certificate No :-
COMP/4155/1

AEG Contract No. :-
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MOISTURE CONTENT/DRY DENSITY RELATIONSHIP

BS 1377 : Part 4 : 1990

Specimen Identification

Exploratory Hole No :- S3-TPA39

Depth (mBGL) :- 0.90

Sample Type & No :- B6

Test Method

2.5kg Compaction

Single Sample

Test Results

Optimum Moisture Content (%) = 20.7

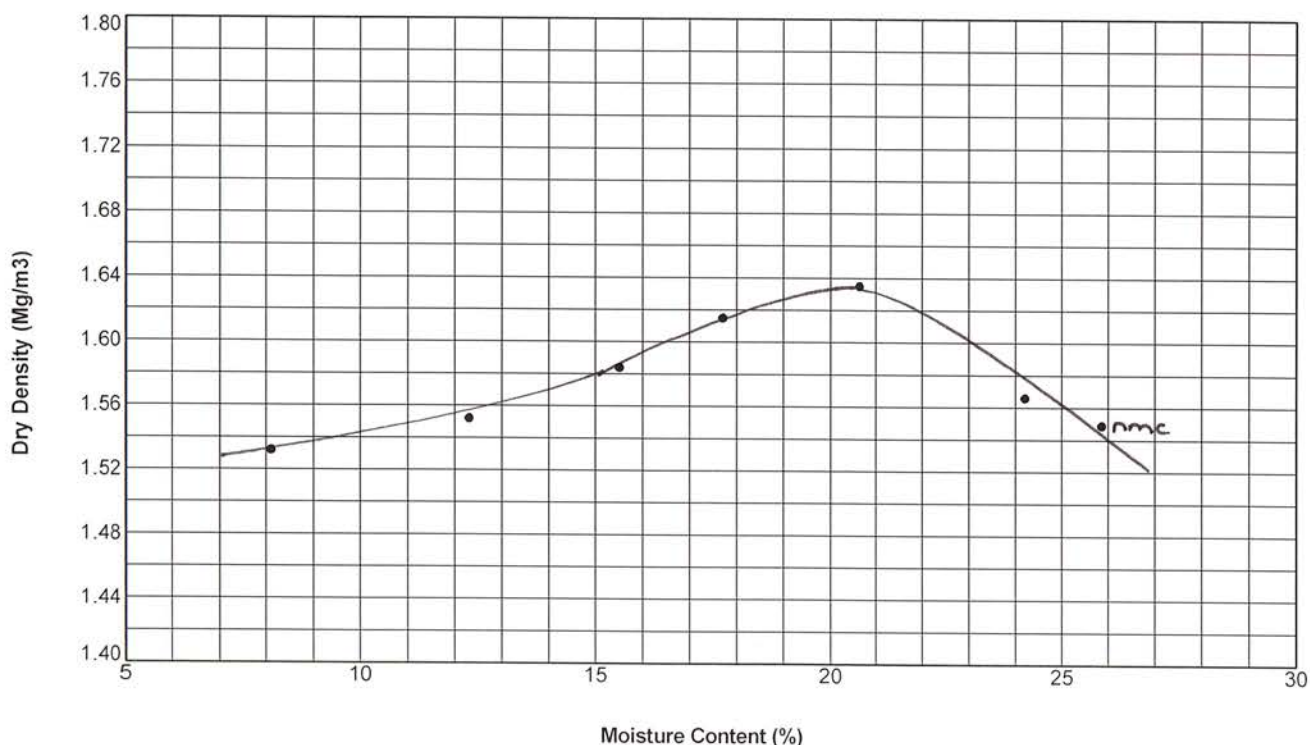
Particle Density (Measured) = 2.60

Maximum Dry Density (Mg/m³) = 1.64

Retained on 20mm Sieve (%) = 5.2

Date Tested = 27/11/2017

Retained on 37.5mm Sieve (%) = 4.7



For description of sample please refer to the Laboratory Sample Description Sheet

Contract Title :-
The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract
3

Client :-
South Tees Site Company Ltd



Signed :- *[Signature]*

Name :-

Page 1 of 1

Date of issue :-
01/12/2017

Certificate No :-
COMP/4155/1

AEG Contract No. :-
4155



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Head Office: Unit 25 Stella Gill Industrial Estate, Pelton Fell, Chester-le-Street, Co. Durham, DH2 2RG - Tel: 0191 387 4700 Fax: 0191 387 4710
Regional Office: Unit 20, Business Development Centre, Eanam Wharf, Blackburn, BB1 5BL - Tel: 01772 735 300 Fax: 01772 735 999

MOISTURE CONTENT/DRY DENSITY RELATIONSHIP BS 1377 : Part 4 : 1990

Specimen Identification

Exploratory Hole No :- **S3-TPB15**

Depth (mBGL) :- **2.00**

Sample Type & No :- **B9**

Test Method

2.5kg Compaction

Single Sample

Test Results

Optimum Moisture Content (%) = **19.5**

Particle Density (Measured) = **2.67**

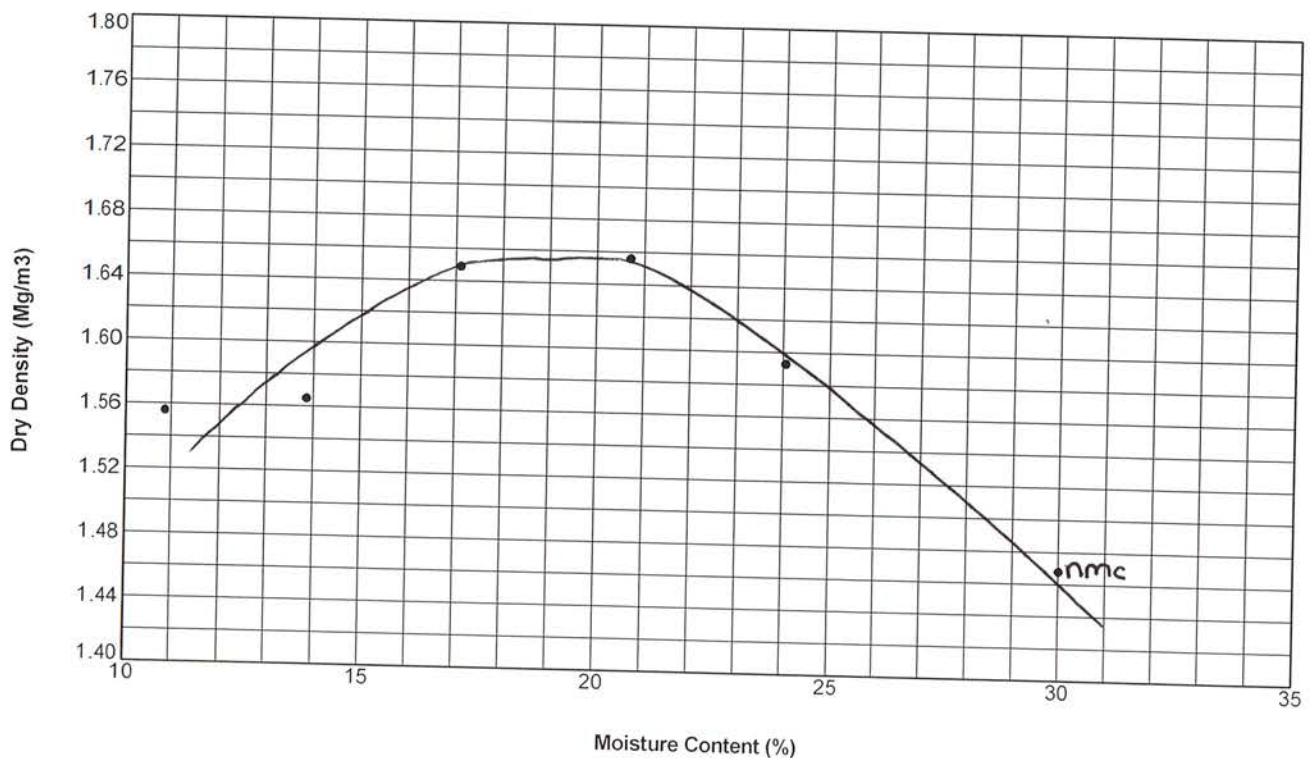
Maximum Dry Density (Mg/m³) = **1.65**

Retained on 20mm Sieve (%) = **1.2**

Date Tested = **02/01/2018**

Retained on 37.5mm Sieve (%) = **0.0**

Remarks:



For description of sample please refer to the Laboratory Sample Description Sheet

Contract Title :-

The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract

Client :-

South Tees Site Company Ltd



Signed :- *msene*

Name :-

M. SELKIRK

Date of issue :-

19/01/2018

Certificate No :-

COMP/4155/1

AEG Contract No. :-

4155

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MOISTURE CONTENT/DRY DENSITY RELATIONSHIP

BS 1377 : Part 4 : 1990

Specimen Identification

Exploratory Hole No :- S3-TPB16

Depth (mBGL) :- 2.00

Sample Type & No :- B9

Test Method

2.5kg Compaction

Single Sample

Test Results

Optimum Moisture Content (%) = 16.3

Particle Density (Assumed) = 2.55

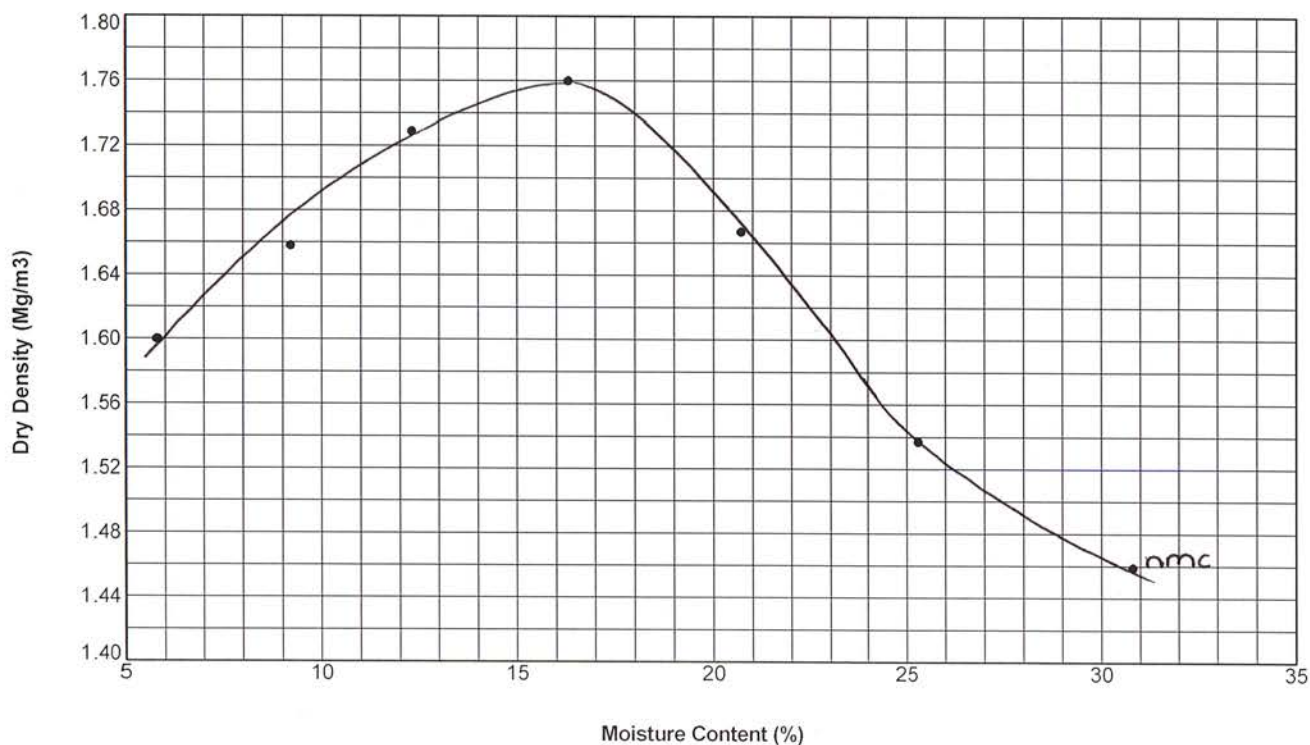
Maximum Dry Density (Mg/m³) = 1.76

Retained on 20mm Sieve (%) = 17.1

Date Tested = 29/01/2018

Retained on 37.5mm Sieve (%) = 8.6

Remarks:



For description of sample please refer to the Laboratory Sample Description Sheet

Contract Title :-
The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract
3

Client :-
South Tees Site Company Ltd



Signed :- *msene*

Name :- *M. SELKIRK*

Page 1 of 1

Date of issue :-
22/02/2018

Certificate No :-
COMP/4155/1

AEG Contract No. :-
4155



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MOISTURE CONTENT/DRY DENSITY RELATIONSHIP

BS 1377 : Part 4 : 1990

Specimen Identification

Exploratory Hole No :- S3-TPB20

Depth (mBGL) :- 2.00

Sample Type & No :- B7

Test Method

2.5kg Compaction

Single Sample

Test Results

Optimum Moisture Content (%) = 15.1

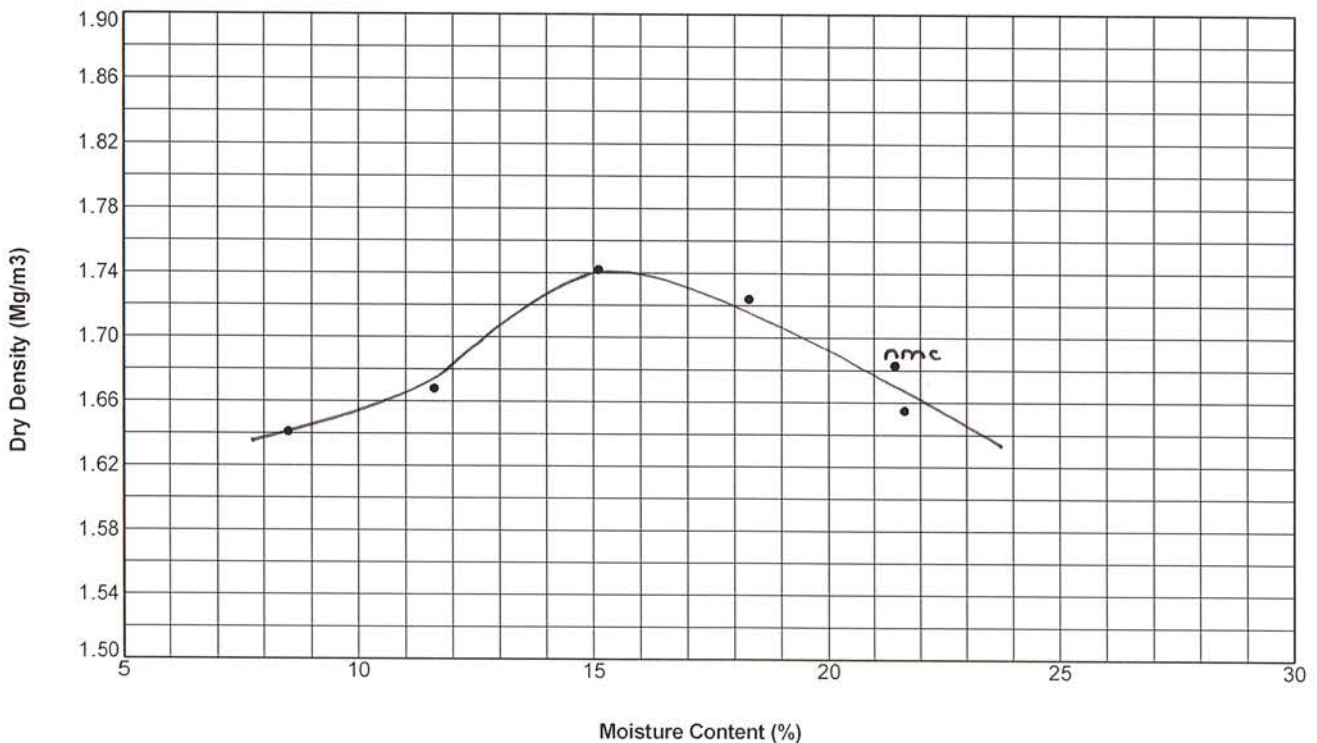
Particle Density (Measured) = 2.66

Maximum Dry Density (Mg/m³) = 1.74

Retained on 20mm Sieve (%) = 7.3

Date Tested = 24/11/2017

Retained on 37.5mm Sieve (%) = 7.3



For description of sample please refer to the Laboratory Sample Description Sheet

Contract Title :-
The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract
3

Client :-
South Tees Site Company Ltd



Signed :- *msene*
Date of issue :-
01/12/2017

Name :- *M. KELKIRK*
Certificate No :-
COMP/4155/1

AEG Contract No. :-
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Determination of One Dimensional Consolidation Properties



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ONE DIMENSIONAL CONSOLIDATION PROPERTIES

BS 1377 : PART 5 : 1990 : CLAUSE 3

Exploratory Hole No **S3-BHA02** Sample **U9** Depth **4.00m**

Specimen Type **Undisturbed** Orientation **Vertical** Specific Depth **4.23m**

	INITIAL	FINAL			
Height	18.9	16.7	mm	Particle Density (Assumed)	2.70
Diameter	74.3	74.3	mm	Degree of Saturation (%)	99.9
Moisture Content	28.7	25.2	%	Test Duration (Days)	6
Wet Density	1.96	2.12	Mg/m ³		
Dry Density	1.52	1.70	Mg/m ³		

Date Tested 02/01/2018

Square Root of Time Fitting Method

Pressure Range kN/m2	Mv m2/MN	Cv m2/yr	Temp C	Voids Ratio
Initial				0.776
0 - 100	0.339	.	15	0.716
100 - 200	0.208	5.32	15	0.680
200 - 100	0.055	Swelling	17	0.690
100 - 200	0.072	6.38	16	0.677
200 - 400	0.135	6.17	16	0.632
400 - 800	0.097	4.48	17	0.569

For sample description please refer to the Laboratory Sample Description Sheet.

Contract Title:

**The Former SSI Steelworks, Redcar - Priority Areas
Within SSI Landholdings Contract 3**

Client:

South Tees Site Company Ltd



Signed:

mserle

Name:

M. SELKIRK

Page 1 of 2

Date of Issue:

12/01/2018

Certificate No:

4155/A

AEG Contract No:

4155



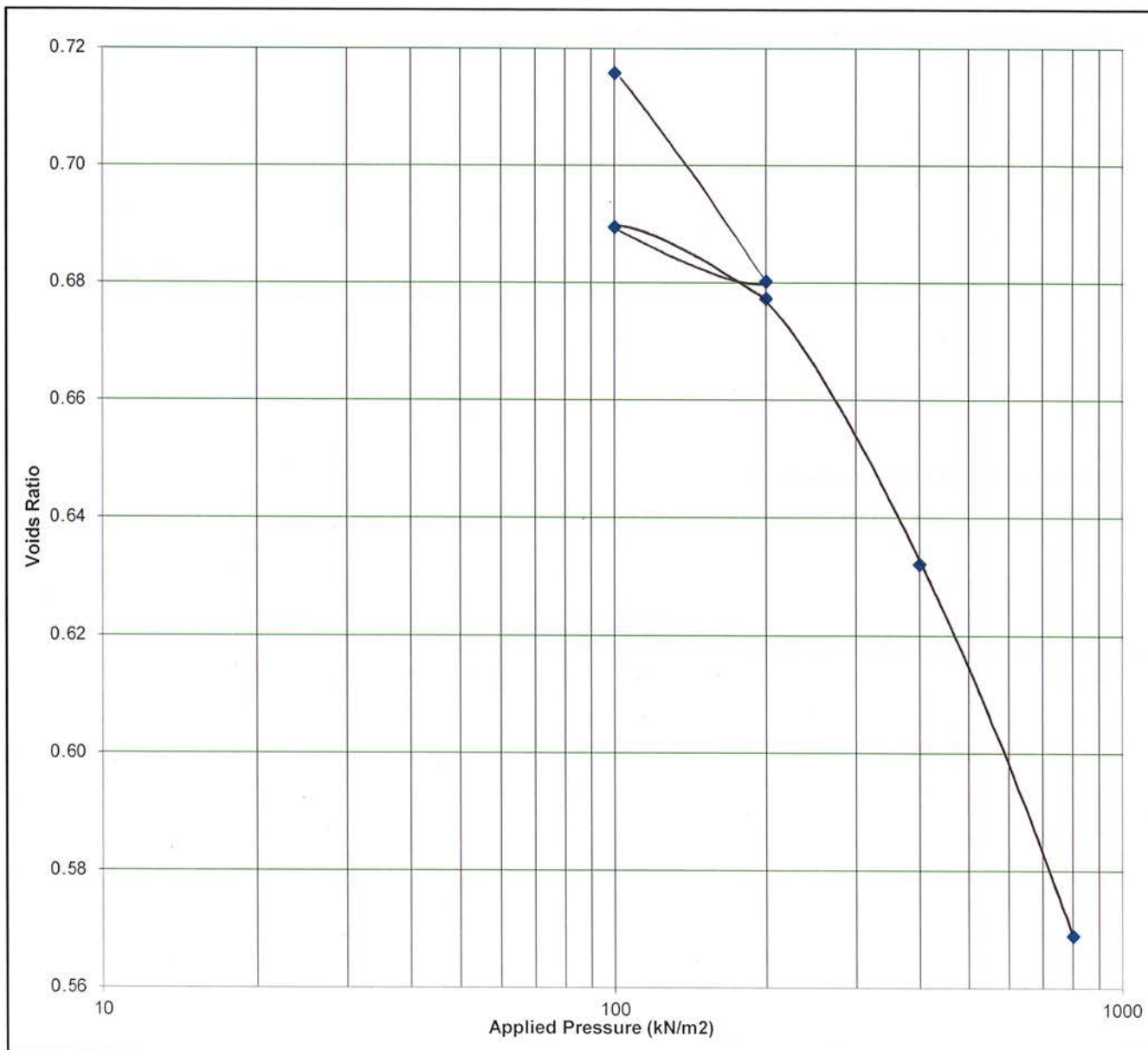
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ONE DIMENSIONAL CONSOLIDATION PROPERTIES BS 1377 : PART 5 : 1990 : CLAUSE 3

Exploratory Hole No	S3-BHA02	Sample	U9	Depth	4.00m
Specimen Type	Undisturbed	Orientation	Vertical	Specific Depth	4.23m



Contract Title:

The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3

Client:

South Tees Site Company Ltd



Signed:

M. Selkirk

Name:

M. SELKIRK

Page 2 of 2

Date of Issue:

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Certificate No:

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ONE DIMENSIONAL CONSOLIDATION PROPERTIES BS 1377 : PART 5 : 1990 : CLAUSE 3

Exploratory Hole No	S3-BHA02		Sample	U5	Depth	2.10m
Specimen Type	Undisturbed		Orientation	Vertical	Specific Depth	2.33m
	INITIAL	FINAL				
Height	18.7	17.6	mm		Particle Density (Assumed)	2.70
Diameter	74.5	74.5	mm			
Moisture Content	26.2	25.2	%		Degree of Saturation (%)	99.1
Wet Density	1.99	2.11	Mg/m ³			
Dry Density	1.58	1.69	Mg/m ³		Test Duration (Days)	6
Date Tested					02/01/2018	

Square Root of Time Fitting Method				
Pressure Range kN/m ²	Mv m ² /MN	Cv m ² /yr	Temp C	Voids Ratio
Initial				0.714
0 - 50	0.356	.	15	0.683
50 - 100	0.192	14.76	15	0.667
100 - 50	0.031	Swelling	17	0.669
50 - 100	0.038	24.37	16	0.666
100 - 200	0.131	15.85	16	0.644
200 - 400	0.103	11.78	17	0.610

For sample description please refer to the Laboratory Sample Description Sheet.

Contract Title: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Client: South Tees Site Company Ltd	
	Signed: 	Name: M. SELKIRK	
	Date of Issue: 12/01/2018	Certificate No: 4155/B	AEG Contract No: 4155 Page 1 of 2 

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ALLIED EXPLORATION & GEOTECHNICS LIMITED

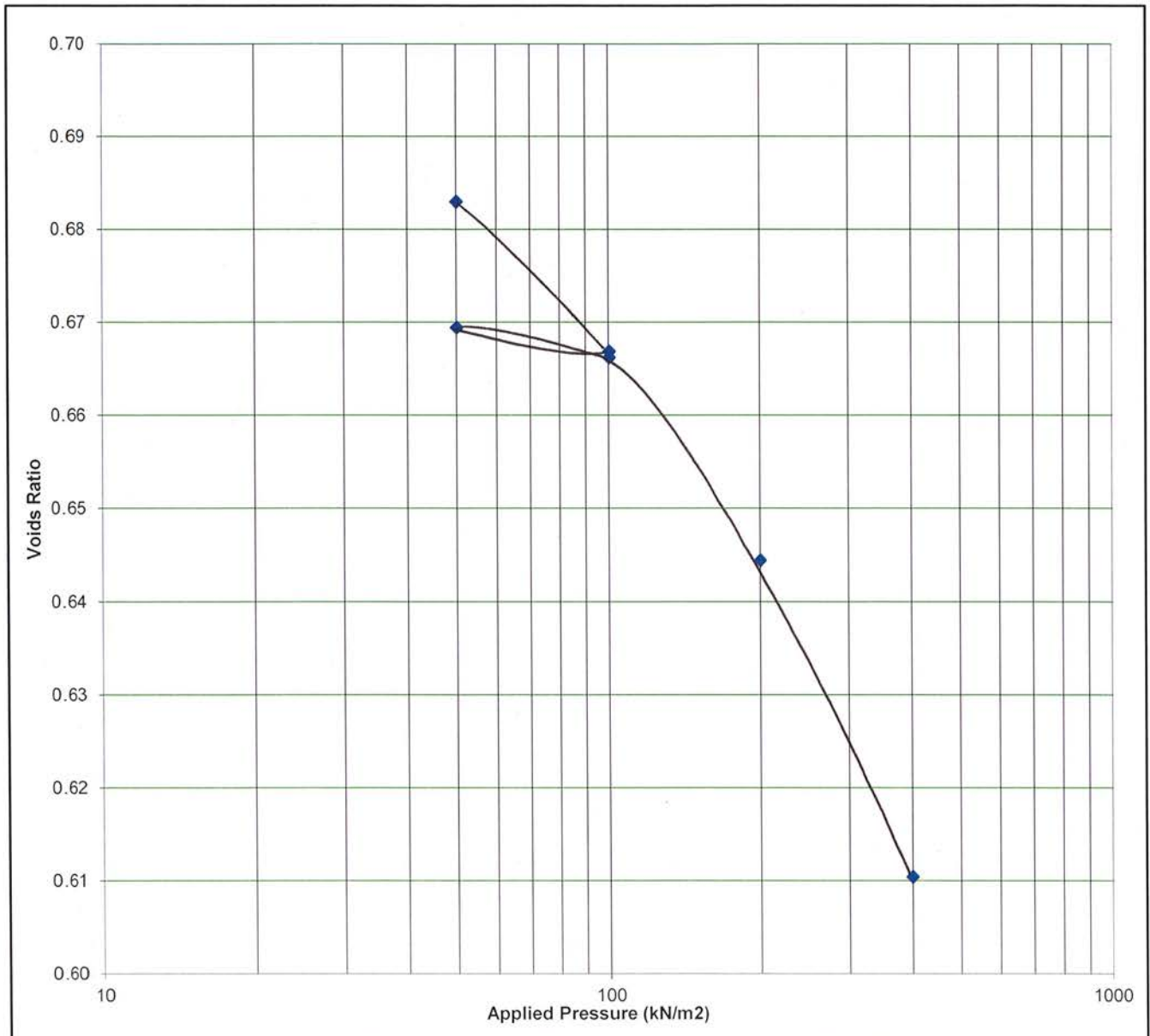
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ONE DIMENSIONAL CONSOLIDATION PROPERTIES

BS 1377 : PART 5 : 1990 : CLAUSE 3

Exploratory Hole No **S3-BHA02** Sample **U5** Depth **2.10m**

Specimen Type **Undisturbed** Orientation **Vertical** Specific Depth **2.33m**



Contract Title:

The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3

Client:

South Tees Site Company Ltd



Signed:

msore

Name:

M. SELKIRK

Page 2 of 2

Date of Issue:

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ONE DIMENSIONAL CONSOLIDATION PROPERTIES BS 1377 : PART 5 : 1990 : CLAUSE 3

Exploratory Hole No	S3-BHB03	Sample	U9	Depth	5.00m
Specimen Type	Undisturbed	Orientation	Vertical	Specific Depth	5.22m
	INITIAL	FINAL			
Height	18.9	16.9	mm	Particle Density (Assumed)	2.70
Diameter	74.7	74.7	mm	Degree of Saturation (%)	99.1
Moisture Content	26.9	23.4	%	Test Duration (Days)	6
Wet Density	1.98	2.13	Mg/m ³		
Dry Density	1.56	1.73	Mg/m ³		
Date Tested					02/01/2018

Square Root of Time Fitting Method				
Pressure Range kN/m ²	Mv m ² /MN	Cv m ² /yr	Temp C	Voids Ratio
Initial				0.733
0 - 100	0.438	.	15	0.657
100 - 200	0.164	12.66	15	0.630
200 - 100	0.030	Swelling	17	0.635
100 - 200	0.047	20.07	16	0.627
200 - 400	0.102	13.27	16	0.594
400 - 800	0.073	12.29	17	0.548

For sample description please refer to the Laboratory Sample Description Sheet.

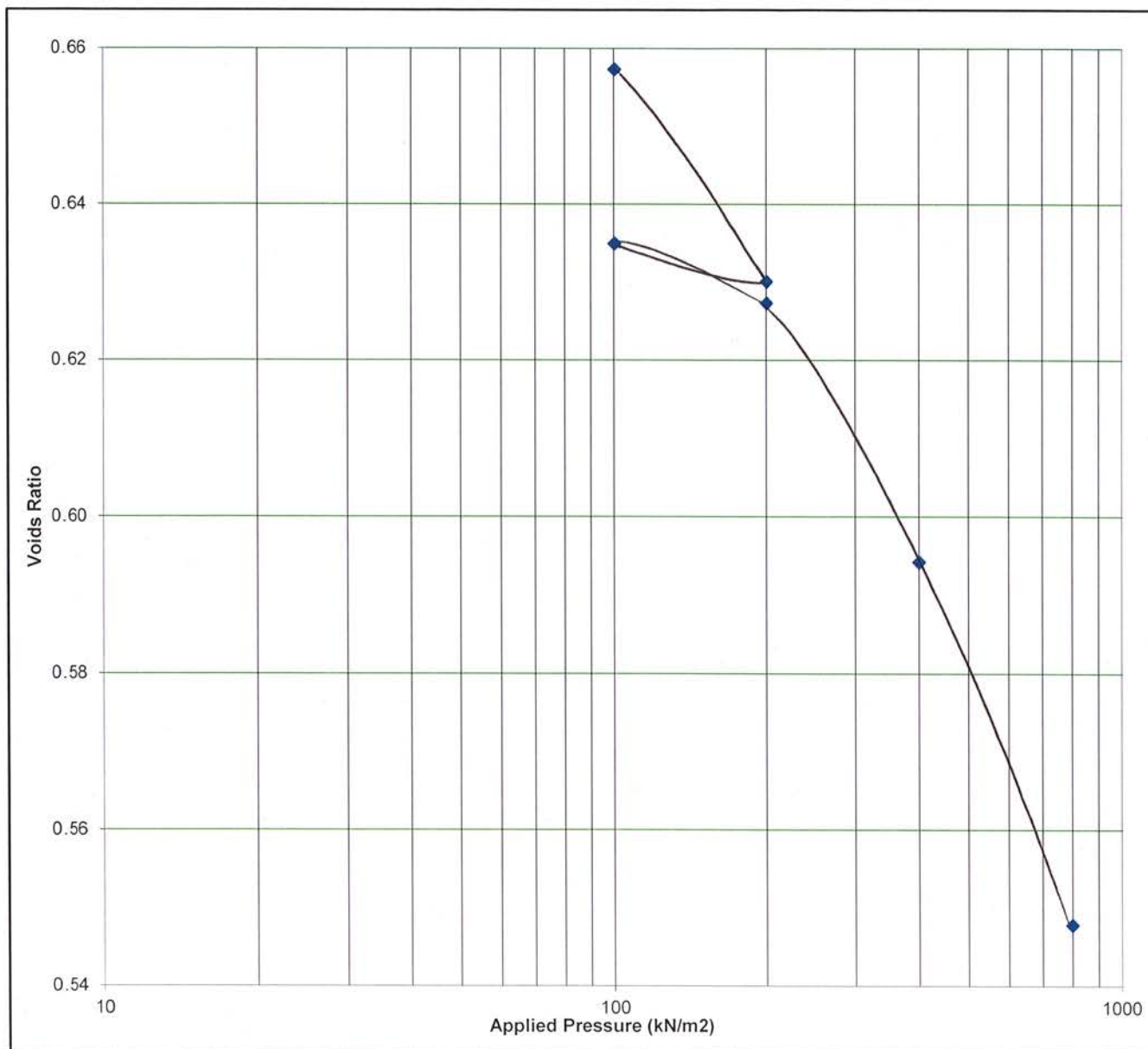
Contract Title: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Client: South Tees Site Company Ltd	
	Signed: 	Name: M. SELKIRK	Page 1 of 2
	Date of Issue: 12/01/2018	Certificate No: 4155/C	AEG Contract No: 4155
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ONE DIMENSIONAL CONSOLIDATION PROPERTIES BS 1377 : PART 5 : 1990 : CLAUSE 3

Exploratory Hole No	S3-BHB03	Sample	U9	Depth	5.00m
Specimen Type	Undisturbed	Orientation	Vertical	Specific Depth	5.22m



Contract Title:

The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3

Client:

South Tees Site Company Ltd



Signed:

mson

Name:

M. SELKIRK

Page 2 of 2

Date of Issue:

12/01/2018

Certificate No:

4155/C

AEG Contract No:

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ONE DIMENSIONAL CONSOLIDATION PROPERTIES BS 1377 : PART 5 : 1990 : CLAUSE 3

Exploratory Hole No	S3-BHB03	Sample	U12	Depth	7.00m
Specimen Type	Undisturbed	Orientation	Vertical	Specific Depth	7.23m
	INITIAL	FINAL			
Height	18.6	17.2	mm	Particle Density (Assumed)	2.70
Diameter	74.6	74.6	mm	Degree of Saturation (%)	97.2
Moisture Content	15.8	14.7	%	Test Duration (Days)	6
Wet Density	2.17	2.31	Mg/m ³	Date Tested	02/01/2018
Dry Density	1.88	2.02	Mg/m ³		

Square Root of Time Fitting Method				
Pressure Range kN/m ²	Mv m ² /MN	Cv m ² /yr	Temp C	Voids Ratio
Initial				0.439
0 - 100	0.317	.	15	0.393
100 - 200	0.122	5.22	15	0.376
200 - 100	0.013	Swelling	17	0.378
100 - 200	0.020	13.63	16	0.375
200 - 400	0.072	6.20	16	0.355
400 - 800	0.049	6.32	17	0.329

For sample description please refer to the Laboratory Sample Description Sheet.

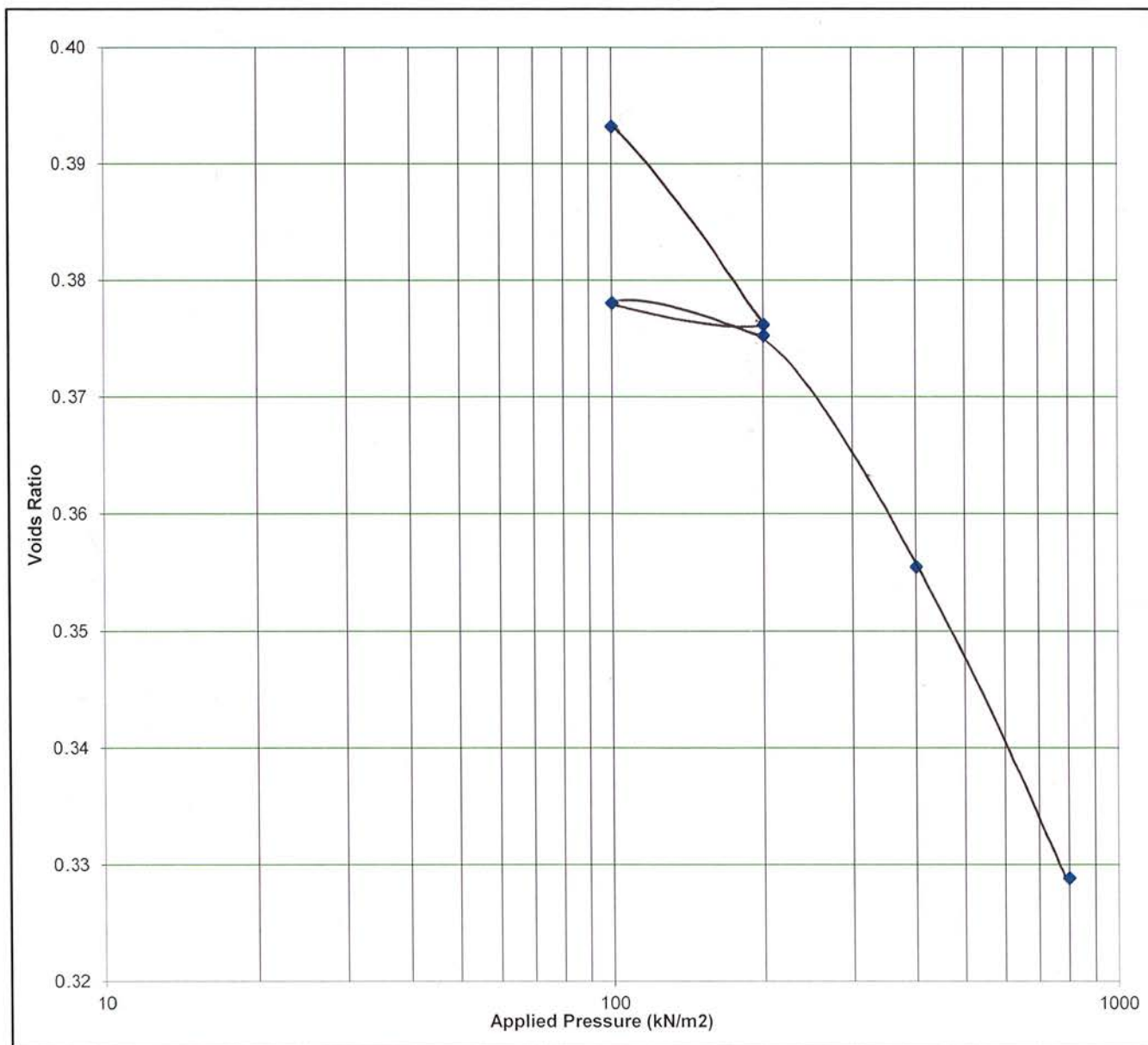
Contract Title: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		Client: South Tees Site Company Ltd	
	Signed: 	Name: M. SELKIRK	Page 1 of 2
	Date of Issue: 12/01/2018	Certificate No: 4155/D	AEG Contract No: 4155
			 1367

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Regional Office: Unit B2 Anchorage Business Park, Chain Caul Way, Riversway, Docklands, Preston, PR2 2YL - Tel: 01772 735 300 Kax: 01772 735 999

ONE DIMENSIONAL CONSOLIDATION PROPERTIES BS 1377 : PART 5 : 1990 : CLAUSE 3

Exploratory Hole No	S3-BHB03	Sample	U12	Depth	7.00m
Specimen Type	Undisturbed	Orientation	Vertical	Specific Depth	7.23m



Contract Title:

The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3

Client:

South Tees Site Company Ltd



Signed:

M. Selkirk

Name:

M. SELKIRK

Page 2 of 2

Date of Issue:

12/01/2018

Certificate No:

4155/D

AEG Contract No:

4155



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ONE DIMENSIONAL CONSOLIDATION PROPERTIES

BS 1377 : PART 5 : 1990 : CLAUSE 3

Exploratory Hole No **S3-BHB03** Sample **U15** Depth **9.00m**

Specimen Type **Undisturbed** Orientation **Vertical** Specific Depth **9.21m**

	INITIAL	FINAL			
Height	19.0	17.5	mm	Particle Density (Assumed)	2.70
Diameter	74.3	74.3	mm		
Moisture Content	16.4	13.8	%	Degree of Saturation (%)	98.4
Wet Density	2.17	2.31	Mg/m ³		
Dry Density	1.86	2.03	Mg/m ³	Test Duration (Days)	6

Date Tested 02/01/2018

Square Root of Time Fitting Method

Pressure Range kN/m2	Mv m2/MN	Cv m2/yr	Temp C	Voids Ratio
Initial				0.450
0 - 100	0.280	.	15	0.409
100 - 200	0.127	6.88	15	0.391
200 - 100	0.008	Swelling	17	0.392
100 - 200	0.017	21.09	16	0.390
200 - 400	0.079	7.68	16	0.368
400 - 800	0.054	6.61	17	0.338

For sample description please refer to the Laboratory Sample Description Sheet.

Contract Title:

**The Former SSI Steelworks, Redcar - Priority Areas Within
SSI Landholdings Contract 3**

Client:

South Tees Site Company Ltd



Signed:

msone

Name:

M. SELKIRK

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Date of Issue:

12/01/2018

Certificate No:

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AEG Contract No:

4155



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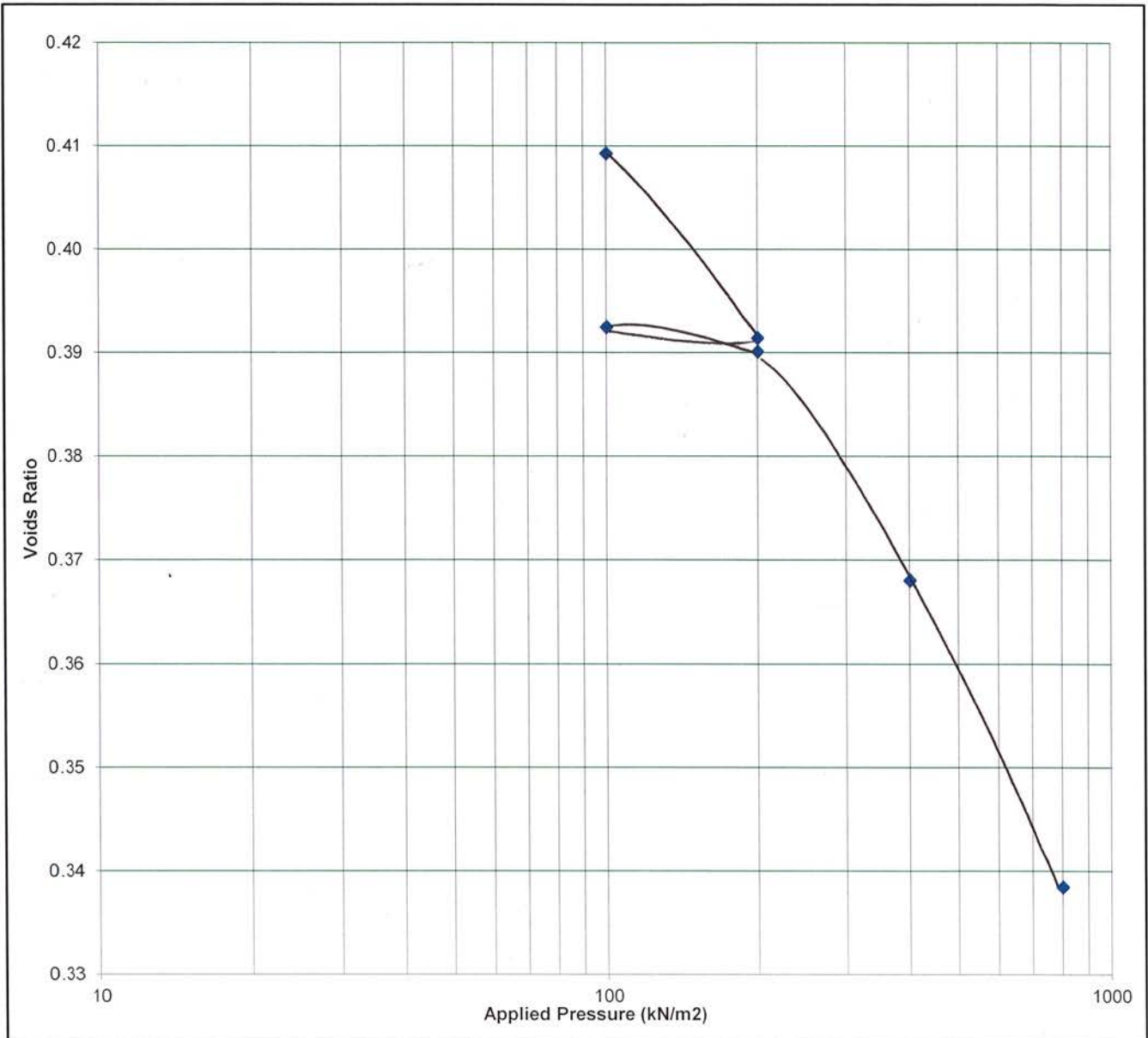
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ONE DIMENSIONAL CONSOLIDATION PROPERTIES

BS 1377 : PART 5 : 1990 : CLAUSE 3

Exploratory Hole No	S3-BHB03	Sample	U15	Depth	9.00m
Specimen Type	Undisturbed	Orientation	Vertical	Specific Depth	9.21m



Contract Title:

The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3

Client:

South Tees Site Company Ltd



Signed:

M. Selkirk

Name:

M. SELKIRK

Page 2 of 2

Date of Issue:

12/01/2018

Certificate No:

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AEG Contract No:

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ONE DIMENSIONAL CONSOLIDATION PROPERTIES

BS 1377 : PART 5 : 1990 : CLAUSE 3

Exploratory Hole No	S3-BHB04	Sample	U9	Depth	5.00m
Specimen Type	Undisturbed	Orientation	Vertical	Specific Depth	5.20m
	INITIAL	FINAL			
Height	19.1	17.7	mm	Particle Density (Assumed)	2.70
Diameter	74.5	74.5	mm	Degree of Saturation (%)	99.6
Moisture Content	17.4	15.6	%	Test Duration (Days)	6
Wet Density	2.15	2.28	Mg/m ³	Date Tested	02/01/2018
Dry Density	1.83	1.97	Mg/m ³		

Square Root of Time Fitting Method				
Pressure Range kN/m ²	Mv m ² /MN	Cv m ² /yr	Temp C	Voids Ratio
Initial				0.472
0 - 100	0.172	.	15	0.447
100 - 200	0.127	5.67	15	0.428
200 - 100	0.019	Swelling	17	0.431
100 - 200	0.028	6.84	16	0.427
200 - 400	0.087	3.42	16	0.402
400 - 800	0.065	2.85	17	0.366

For sample description please refer to the Laboratory Sample Description Sheet.

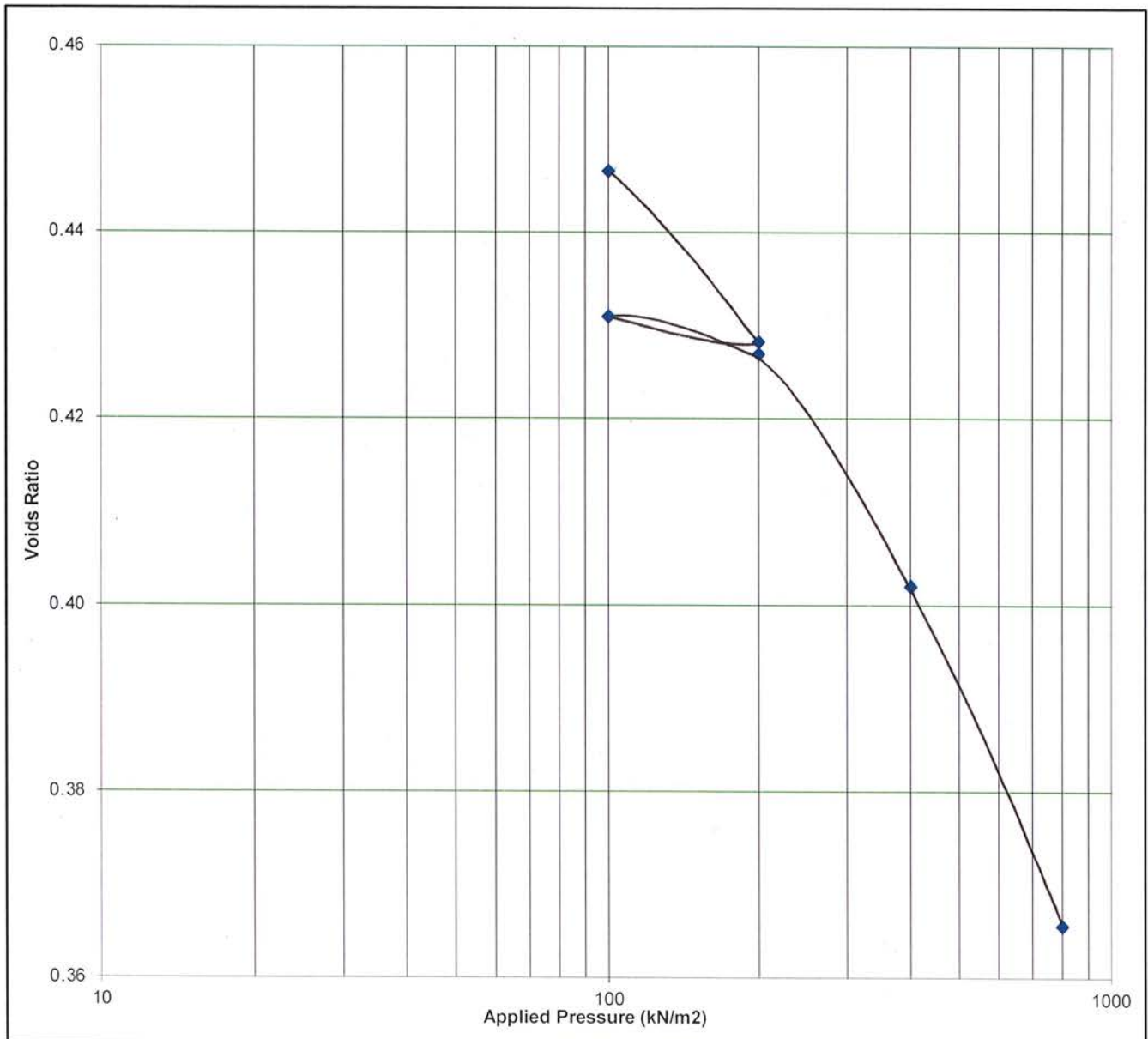
Contract Title:		Client:	
The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		South Tees Site Company Ltd	
	Signed:	Name:	Page 1 of 2 
		M. SELKIRK	
Date of Issue:	Certificate No:	AEG Contract No:	
12/01/2018	4155/F	4155	1367

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ONE DIMENSIONAL CONSOLIDATION PROPERTIES BS 1377 : PART 5 : 1990 : CLAUSE 3

Exploratory Hole No	S3-BHB04	Sample	U9	Depth	5.00m
Specimen Type	Undisturbed	Orientation	Vertical	Specific Depth	5.20m



Contract Title:

The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3

Client:

South Tees Site Company Ltd



Signed:

M. Selkirk

Name:

M. SELKIRK

Page 2 of 2

Date of Issue:

12/01/2018

Certificate No:

4155/F

AEG Contract No:

4155



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ONE DIMENSIONAL CONSOLIDATION PROPERTIES BS 1377 : PART 5 : 1990 : CLAUSE 3

Exploratory Hole No	S3-BHB04	Sample	U13	Depth	7.00m
Specimen Type	Undisturbed	Orientation	Vertical	Specific Depth	7.05m
	INITIAL	FINAL			
Height	19.1	17.7	mm	Particle Density (Assumed)	2.70
Diameter	74.4	74.4	mm	Degree of Saturation (%)	98.8
Moisture Content	24.6	23.4	%	Test Duration (Days)	6
Wet Density	2.01	2.13	Mg/m ³	Date Tested	02/01/2018
Dry Density	1.61	1.73	Mg/m ³		

Square Root of Time Fitting Method				
Pressure Range kN/m ²	Mv m ² /MN	Cv m ² /yr	Temp C	Voids Ratio
Initial				0.672
0 - 100	0.208	.	15	0.638
100 - 200	0.105	2.50	15	0.620
200 - 100	0.045	Swelling	17	0.628
100 - 200	0.053	2.96	16	0.619
200 - 400	0.083	2.61	16	0.592
400 - 800	0.065	2.56	17	0.551

For sample description please refer to the Laboratory Sample Description Sheet.

Contract Title:		Client:	
The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		South Tees Site Company Ltd	
	Signed:	Name:	Page 1 of 2 
		M. SELKIRK	
Date of Issue:	Certificate No:	AEG Contract No:	
12/01/2018	4155/G	4155	
		1367	

ALLIED EXPLORATION & GEOTECHNICS LIMITED

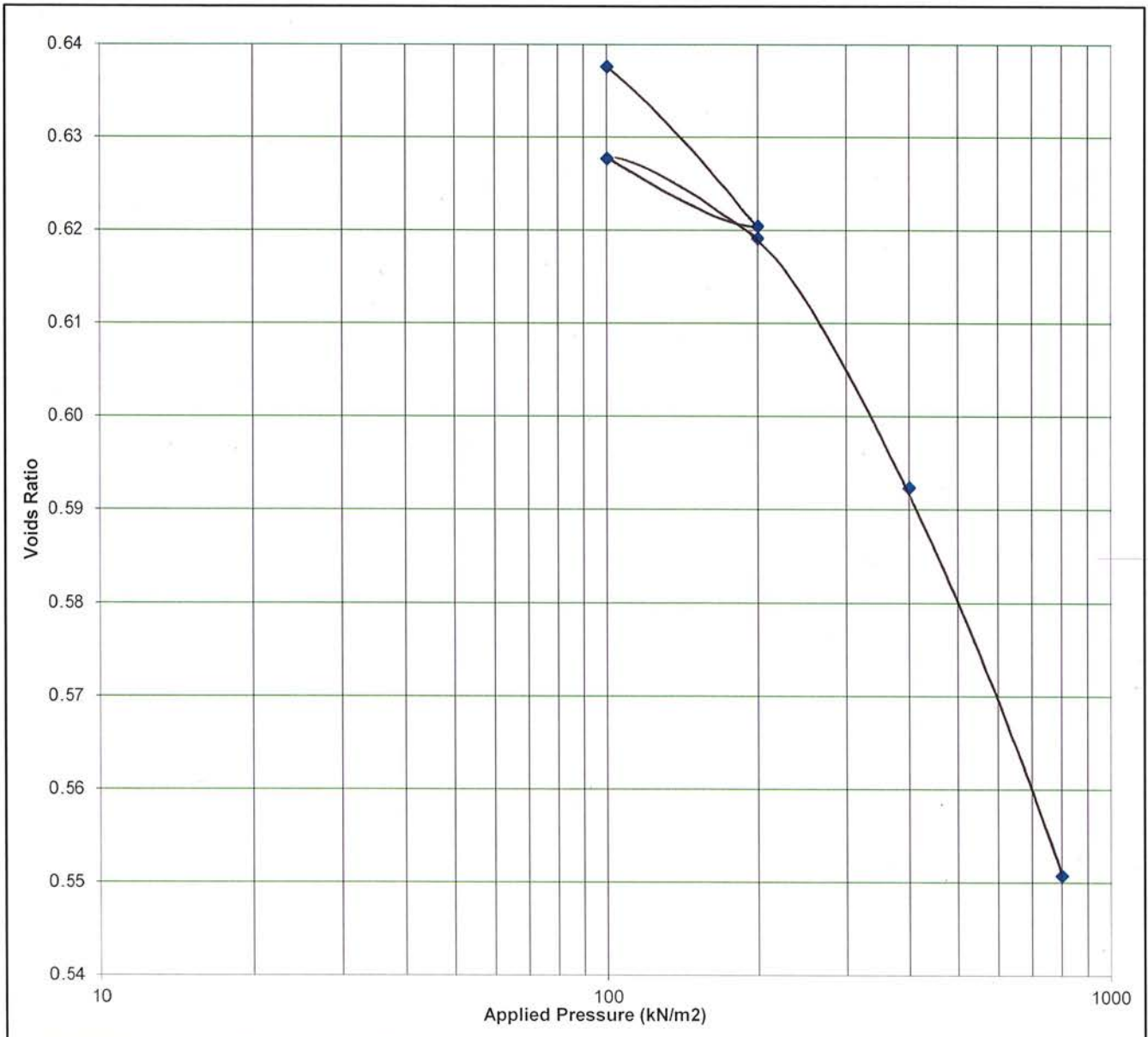
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ONE DIMENSIONAL CONSOLIDATION PROPERTIES

BS 1377 : PART 5 : 1990 : CLAUSE 3

Exploratory Hole No **S3-BHB04** Sample **U13** Depth **7.00m**

Specimen Type **Undisturbed** Orientation **Vertical** Specific Depth **7.05m**



Contract Title:

The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3

Client:

South Tees Site Company Ltd



Signed:

M. Selkirk

Name:

M. SELKIRK

Page 2 of 2

Date of Issue:

12/01/2018

Certificate No:

4155/G

AEG Contract No:

4155



1367

**Undrained Shear Strength in Triaxial Cell
without Pore Water Pressure Measurement**



ALLIED EXPLORATION & GEOTECHNICS LIMITED


Head Office: Unit 25 Spalla Gill Industrial Estate, Pelton Fell, Chester-le-Street, Co. Durham, DH2 2RG - Tel: 0191 387 4700 Fax: 0191 387 4710
Regional Office: Unit 20, Business Development Centre, Easingham Wharf, Blackburn, BB1 5BL - Tel: 01772 735 300 Fax: 01772 735 999

UNDRAINED SHEAR STRENGTH IN TRIAXIAL COMPRESSION WITHOUT MEASUREMENT OF PORE PRESSURE

BS 1377 : Part 7 : Clauses 8 & 9 : 1990 Part 2 Clause 3.2 (BS EN ISO 17892-1:2014)

Exploratory Hole	Sample ID Depth (m)	Specific Depth (m)	Diameter (mm)	Length (mm)	Prep. Method	Stage No.	Initial Moisture Content (%)	Bulk Density (Mg/m ³)	Dry Density (Mg/m ³)	Membrane Thickness (mm)	Membrane Correction (kPa)	Cell Pressure (kPa)	Corrected Deviator Stress (kPa)	Failure Strain (%)	Mode of Failure	cu (kPa)	Date Tested
S3-BHA02	2.10 U5	2.10	103.4	191.2	U	1	29.7	1.93	1.49	0.30	0.43	40	87.0	6.0	BR	43	02/01/2018
S3-BHA02	4.00 U9	4.00	102.2	211.4	U	1	28.3	1.96	1.53	0.30	0.61	80	99.2	9.0	BR	50	02/01/2018
S3-BHB03	5.00 U9	5.00	102.8	211.1	U	1	29.2	1.97	1.52	0.40	0.58	90	66.8	6.0	BR	33	02/01/2018
S3-BHB03	7.00 U12	7.00	102.7	211.0	U	1	16.7	2.19	1.88	0.40	1.42	110	195.5	19.0	C	98	02/01/2018
S3-BHB03	9.00 U15	9.00	102.8	192.0	U	1	20.3	2.05	1.70	0.40	1.07	130	185.0	13.0	BR	92	02/01/2018
S3-BHB04	5.00 U9	5.29	102.5	211.2	U	1	17.1	2.19	1.87	0.40	1.27	90	222.4	16.5	C	111	02/01/2018
S3-BHB04	7.00 U13	7.11	102.9	211.3	U	1	22.2	2.07	1.69	0.30	0.67	110	247.1	12.0	BR	124	02/01/2018

For description of sample please refer to the Laboratory Sample Description Sheet. Please note the rate of strain was 2% per minute and the orientation of the test specimen was vertical. Latex membrane used.

	Date of issue :- 19/01/2018	Certificate No :- TXL/4155/1	Signed :- <i>msore</i>	Name :- <i>M. Sore</i>	Page 1 of 1
	Client :- South Tees Site Company Ltd	Contract Title :- The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		AEG Contract No :- 4155	



Determination of Point Load Index

ALLIED EXPLORATION & GEOTECHNICS LIMITED



Head Office: Unit 25 Stella Gill Industrial Estate, Pelton Fell, Chester-le-Street, Co. Durham, DH2 2RG - Tel: 0191 387 4700 Fax: 0191 387 4710
Regional Office: Unit 62 Anchorage Business Park, Chain Caul Way, Riverside Docklands, Preston, PR2 2YL - Tel: 01772 735 300 Fax: 01772 735 999

POINT LOAD STRENGTH INDEX

ISRM : 1985

Exploratory Hole No	Depth (m)	Type/Orientation	Width (mm)	Platen Separation (mm)+	Failure Load (kN)*	De ² (mm ²)	Point Load (IS) (MN/m ²)	Size Factor	Point Load Index (IS50) (MN/m ²)	Type	Date Tested
S3-BHB01	12.50	Diametrical	222.4	84.1	0.1	7072.8	0.01	1.26	0.018	Mudstone/Gypsum	13/12/2017
S3-BHB01	15.20	Diametrical	117.2	85.4	0.1	7293.2	0.01	1.27	0.017	Mudstone/Gypsum	13/12/2017
S3-BHB01	15.20	Axial	85.6	48.9	1.1	5329.6	0.21	1.19	0.245	Mudstone/Gypsum	13/12/2017
S3-BHB01	18.45	Diametrical	171.6	79.9	0.9	6384.0	0.14	1.23	0.174	Mudstone/Gypsum	13/12/2017
S3-BHB01	18.45	Axial	86.2	71.5	0.8	7847.4	0.10	1.29	0.132	Mudstone/Gypsum#	13/12/2017
S3-BHB01	21.35	Diametrical	186.3	81.7	1.5	6674.9	0.22	1.25	0.280	Mudstone/Gypsum#	13/12/2017
S3-BHB01	24.00	Diametrical	152.9	86.0	0.1	7396.0	0.01	1.28	0.017	Mudstone/Gypsum#	13/12/2017
S3-BHB01	26.60	Diametrical	179.9	82.4	0.1	6789.8	0.01	1.25	0.018	Mudstone/Gypsum	13/12/2017
S3-BHB01	26.60	Axial	86.1	48.7	2.0	5338.8	0.37	1.19	0.444	Mudstone/Gypsum	13/12/2017
S3-BHB01	29.30	Diametrical	133.0	80.4	0.6	6464.2	0.09	1.24	0.115	Mudstone/Siltstone	13/12/2017
S3-BHB01	29.30	Axial	86.1	40.2	8.7	4407.0	1.97	1.14	2.243	Mudstone/Gypsum	13/12/2017
S3-BHB01	32.00	Diametrical	124.7	86.2	0.7	7430.4	0.09	1.28	0.120	Mudstone/Gypsum	13/12/2017
S3-BHB01	36.20	Diametrical	160.5	72.6	5.2	5270.8	0.99	1.18	1.167	Mudstone/Gypsum	13/12/2017
S3-BHB01	36.20	Axial	86.2	51.3	5.4	5630.3	0.96	1.20	1.151	Mudstone/Gypsum	13/12/2017

NOTE - +Tested specimen measured using calibrated vernier calipers *Loads of less than 10kN Outside of UKAS accreditation # - Invalid Failure (Did not pass through both points)

	Date of issue :- 18/12/2017	Certificate No :- PL/4155/1	Signed :- 	Name :- M. S. LARAK	Page 1 of 1
	Client :- South Tees Site Company Ltd	Contract Title :- The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3		AEG Contract No :- 4155	



**Determination of Unconfined Compressive Strength
(Tested Externally)**





Laboratory Report



GEO Site & Testing Services Ltd

Contract Number: 37549

Client Ref: **4155**

Report Date: **19-12-2017**

Client PO: **1934**

Client **Allied Exploration & Geotechnics Limited**
Allied Exploration & Geotechnics Limited
Unit 25 Stella Gill Industrial Estate,
Pelton Fell,
Chester-le-Street
DH2 2RG

Contract Title: **The Former SSI Steelworks, Redcar**
For the attention of: **Michelle Selkirk**

Date Received: **07-12-2017**
Date Commenced: **07-12-2017**
Date Completed: **19-12-2017**

Test Description	Qty
Uniaxial Compressive Strength of Rock incl sample prep 54-165mm diameter cores ISRM Part 1 Methods For Rock Characterisation 1974-2006 - @ Non Accredited Test	2
Disposal of Samples on Project	1

Notes: Observations and Interpretations are outside the UKAS Accreditation
* - denotes test included in laboratory scope of accreditation
- denotes test carried out by approved contractor
@ - denotes non accredited tests

This certificate is issued in accordance with the accreditation requirements of the United Kingdom Accreditation Service. The results reported herein relate only to the material supplied to the laboratory. This certificate shall not be reproduced except in full, without the prior written approval of the laboratory.

Approved Signatories:

Alex Wynn (Associate Director) - Ben Sharp (Contracts Manager) - Emma Sharp (Office Manager)
Paul Evans (Quality/Technical Manager) - Richard John (Advanced Testing Manager) - Sean Penn (Administrative Assistant)
Vaughan Edwards (Managing Director) - Wayne Honey (Administrative/Quality Assistant)

**XRF Analysis using Thermo Scientific Niton XL2 980 Goldd
XRF Anaylser**





ALLIED EXPLORATION & GEOTECHNICS LIMITED

Head Office: Unit 25 Stella Gill Industrial Estate, Pelton Fell, Chester-le-Street, Co. Durham, DH2 2RG - Tel: 0191 387 4700 Fax: 0191 387 4710
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X-Ray Fluorescence (XRF) Analysis

Tested using a Nilon XL2T 980 GOLDD XRF Analyser

Title: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3

Job No.: 4155

Client: South Tees Site Company Ltd

Hole No.	Depth	Sample State	Chromium (Cr)	Error	Vanadium (V)	Error	Magnesium (Mg)	Error	Manganese (Mn)	Error	Aluminium (Al)	Error	Iron (Fe)	Error
	(m)		%	%	%	%	%	%	%	%	%	%	%	%
S3-BH03	2.20	weathered 1	0.107	0.026	< LOD	0.092	< LOD	1.781	0.755	0.044	6.002	0.422	7.576	0.243
S3-BH03	2.20	weathered 2	0.098	0.024	< LOD	0.089	< LOD	2.144	0.691	0.041	4.452	0.365	7.174	0.227
S3-BH03	2.20	weathered 3	0.118	0.025	< LOD	0.087	2.305	1.21	0.829	0.043	5.413	0.401	8.174	0.246
S3-BH03	2.20	non weathered 1	0.355	0.038	< LOD	0.099	< LOD	2.435	2.005	0.085	2.297	0.377	13.769	0.443
S3-BH03	2.20	non weathered 2	0.382	0.038	< LOD	0.092	< LOD	3.277	2.052	0.084	2.028	0.352	13.933	0.438
S3-BH03	2.20	non weathered 3	0.35	0.037	< LOD	0.095	< LOD	2.738	1.97	0.082	2.061	0.358	13.872	0.437
S3-BH07a	2.50	weathered 1	0.211	0.031	0.202	0.065	< LOD	2.932	2.581	0.095	0.849	0.251	6.58	0.203
S3-BH07a	2.50	weathered 2	0.255	0.029	0.221	0.055	< LOD	1.569	2.529	0.082	1.957	0.255	8.25	0.219
S3-BH07a	2.50	weathered 3	0.22	0.027	0.081	0.053	< LOD	2.165	2.009	0.068	1.992	0.243	8.495	0.221
S3-BH07a	2.50	non weathered 1	0.291	0.035	0.382	0.069	< LOD	1.861	3.159	0.113	1.107	0.274	6.709	0.21
S3-BH07a	2.50	non weathered 2	0.273	0.035	0.267	0.068	< LOD	1.936	2.979	0.11	0.823	0.272	6.61	0.211
S3-BH07a	2.50	non weathered 3	0.344	0.038	0.396	0.07	< LOD	2.716	3.714	0.129	1.205	0.303	7.108	0.223
S3-BH16	0.30	weathered 1	< LOD	0.024	< LOD	0.07	1.64	0.674	0.321	0.021	3.779	0.227	5.161	0.13
S3-BH16	0.30	weathered 2	< LOD	0.04	< LOD	0.086	1.55	0.728	0.315	0.023	7.462	0.355	1.758	0.059
S3-BH16	0.30	weathered 3	< LOD	0.024	< LOD	0.072	2.249	0.72	0.333	0.022	4.614	0.259	4.901	0.124
S3-BH16	0.30	non weathered 1	< LOD	0.027	< LOD	0.086	< LOD	1.082	0.294	0.022	6.544	0.324	1.064	0.041
S3-BH16	0.30	non weathered 2	< LOD	0.039	< LOD	0.087	1.196	0.752	0.309	0.022	7.425	0.356	0.413	0.022
S3-BH16	0.30	non weathered 3	< LOD	0.028	< LOD	0.092	< LOD	1.129	0.279	0.022	8.048	0.376	0.313	0.02
S3-BH16	1.20	weathered 1	< LOD	0.023	< LOD	0.052	0.994	0.53	0.391	0.02	2.707	0.169	11.561	0.235
S3-BH16	1.20	weathered 2	< LOD	0.02	< LOD	0.057	1.961	0.6	0.402	0.021	3.619	0.205	9.166	0.191
S3-BH16	1.20	weathered 3	< LOD	0.021	< LOD	0.055	1.118	0.576	0.402	0.021	3.004	0.188	9.845	0.207
S3-BH16	1.20	non weathered 1	< LOD	0.036	< LOD	0.085	< LOD	1.202	0.356	0.024	2.929	0.203	0.576	0.027
S3-BH16	1.20	non weathered 2	< LOD	0.024	< LOD	0.085	< LOD	1.011	0.367	0.025	2.132	0.187	0.662	0.03
S3-BH16	1.20	non weathered 3	< LOD	0.038	< LOD	0.087	< LOD	1.294	0.321	0.023	2.43	0.185	0.336	0.02
S3-TPA01	1.60	weathered 1	0.077	0.018	< LOD	0.062	1.414	0.539	0.43	0.025	3.657	0.212	7.99	0.184
S3-TPA01	1.60	weathered 2	0.065	0.018	< LOD	0.065	1.79	0.542	0.467	0.026	2.596	0.183	6.4	0.153
S3-TPA01	1.60	weathered 3	0.048	0.017	< LOD	0.062	< LOD	0.843	0.46	0.026	4.122	0.233	9.664	0.224
S3-TPA01	1.60	non weathered 1	0.043	0.018	< LOD	0.071	< LOD	0.756	0.252	0.021	0.195	0.125	5.279	0.135
S3-TPA01	1.60	non weathered 2	0.027	0.017	< LOD	0.068	< LOD	0.763	0.328	0.023	0.288	0.131	6.821	0.169



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X-Ray Fluorescence (XRF) Analysis

Tested using a Nilon XL2T 980 GOLDD XRF Analyser

Title: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3

Job No.: 4155

Client: South Tees Site Company Ltd

Hole No.	Depth	Sample State	Molybdenum (Mo)	Error	Arsenic (As)	Error	Antimony (Sb)	Error	Copper (Cu)	Error	Sulphur (S)	Error
	(m)		%	%	%	%	%	%	%	%	%	%
S3-BH03	2.20	weathered 1	0.065	0.005	0.003	0.002	< LOD	0.007	< LOD	0.006	1.461	0.032
S3-BH03	2.20	weathered 2	0.066	0.005	0.003	0.002	< LOD	0.008	< LOD	0.006	1.609	0.034
S3-BH03	2.20	weathered 3	0.062	0.005	< LOD	0.002	< LOD	0.005	0.011	0.004	1.583	0.032
S3-BH03	2.20	non weathered 1	0.052	0.006	< LOD	0.002	< LOD	0.008	0.007	0.005	0.497	0.017
S3-BH03	2.20	non weathered 2	< LOD	0.054	< LOD	0.002	< LOD	0.009	< LOD	0.007	0.436	0.015
S3-BH03	2.20	non weathered 3	0.053	0.005	< LOD	0.002	< LOD	0.007	< LOD	0.006	0.434	0.015
S3-BH07a	2.50	weathered 1	< LOD	0.044	< LOD	0.002	< LOD	0.005	< LOD	0.006	0.374	0.014
S3-BH07a	2.50	weathered 2	< LOD	0.044	0.002	0.001	< LOD	0.006	0.006	0.003	0.509	0.015
S3-BH07a	2.50	weathered 3	< LOD	0.042	0.002	0.001	< LOD	0.004	< LOD	0.006	0.416	0.014
S3-BH07a	2.50	non weathered 1	< LOD	0.047	< LOD	0.002	< LOD	0.005	< LOD	0.005	0.32	0.014
S3-BH07a	2.50	non weathered 2	< LOD	0.045	< LOD	0.002	< LOD	0.008	< LOD	0.007	0.339	0.014
S3-BH07a	2.50	non weathered 3	< LOD	0.047	< LOD	0.002	< LOD	0.006	< LOD	0.006	0.333	0.014
S3-BH16	0.30	weathered 1	< LOD	0.016	< LOD	0.002	< LOD	0.005	< LOD	0.004	1.439	0.029
S3-BH16	0.30	weathered 2	< LOD	0.024	< LOD	0.002	< LOD	0.006	< LOD	0.004	0.497	0.015
S3-BH16	0.30	weathered 3	< LOD	0.021	0.002	0.001	< LOD	0.005	< LOD	0.005	1.514	0.03
S3-BH16	0.30	non weathered 1	< LOD	0.024	< LOD	0.002	< LOD	0.004	< LOD	0.006	1.41	0.03
S3-BH16	0.30	non weathered 2	< LOD	0.024	< LOD	0.002	< LOD	0.005	< LOD	0.004	1.572	0.032
S3-BH16	0.30	non weathered 3	< LOD	0.021	< LOD	0.002	< LOD	0.006	0.005	0.003	2.374	0.047
S3-BH16	1.20	weathered 1	< LOD	0.007	0.003	0.001	< LOD	0.005	< LOD	0.004	0.38	0.01
S3-BH16	1.20	weathered 2	< LOD	0.013	0.002	0.001	< LOD	0.004	< LOD	0.005	0.342	0.01
S3-BH16	1.20	weathered 3	< LOD	0.013	0.002	0.001	0.004	0.003	< LOD	0.006	0.334	0.01
S3-BH16	1.20	non weathered 1	< LOD	0.019	< LOD	0.002	< LOD	0.004	< LOD	0.004	1.51	0.032
S3-BH16	1.20	non weathered 2	< LOD	0.015	< LOD	0.002	< LOD	0.005	< LOD	0.004	2.126	0.045
S3-BH16	1.20	non weathered 3	< LOD	0.014	< LOD	0.002	< LOD	0.004	< LOD	0.004	1.613	0.034
S3-TPA01	1.60	weathered 1	< LOD	0.025	< LOD	0.004	< LOD	0.007	0.021	0.004	0.151	0.008
S3-TPA01	1.60	weathered 2	< LOD	0.025	< LOD	0.005	< LOD	0.004	0.022	0.004	0.142	0.008
S3-TPA01	1.60	weathered 3	< LOD	0.031	< LOD	0.006	< LOD	0.004	0.025	0.004	0.15	0.007
S3-TPA01	1.60	non weathered 1	< LOD	0.018	< LOD	0.004	< LOD	0.007	0.015	0.004	0.018	0.007
S3-TPA01	1.60	non weathered 2	< LOD	0.019	< LOD	0.005	< LOD	0.006	0.019	0.004	0.021	0.007



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X-Ray Fluorescence (XRF) Analysis

Tested using a Nilon XL2T 980 GOLDD XRF Analyser

Title: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3

Job No.: 4155

Client: South Tees Site Company Ltd

Hole No.	Depth	Sample State	Chromium (Cr)	Error	Vanadium (V)	Error	Magnesium (Mg)	Error	Manganese (Mn)	Error	Aluminium (Al)	Error	Iron (Fe)	Error
	(m)		%	%	%	%	%	%	%	%	%	%	%	%
S3-TPA01	1.60	non weathered 3	0.069	0.019	< LOD	0.07	< LOD	0.772	0.304	0.022	0.354	0.132	5.847	0.145
S3-TPA04	0.70	weathered 1	0.061	0.019	< LOD	0.097	4.777	0.815	0.672	0.034	8.956	0.417	0.359	0.022
S3-TPA04	0.70	weathered 2	0.072	0.02	< LOD	0.1	4.852	0.791	0.689	0.035	9.142	0.414	0.349	0.021
S3-TPA04	0.70	weathered 3	0.063	0.02	< LOD	0.097	5.317	0.821	0.685	0.034	9.073	0.419	0.357	0.021
S3-TPA04	0.70	non weathered 1	0.034	0.021	< LOD	0.11	1.82	0.767	0.623	0.036	3.49	0.25	0.184	0.018
S3-TPA04	0.70	non weathered 2	0.042	0.021	< LOD	0.108	1.948	0.754	0.65	0.037	3.443	0.244	0.16	0.017
S3-TPA04	0.70	non weathered 3	0.039	0.021	< LOD	0.11	1.82	0.752	0.629	0.037	3.261	0.239	0.163	0.018
S3-TPA05	2.20	weathered 1	< LOD	0.024	< LOD	0.097	0.643	0.282	0.299	0.016	7.332	0.217	2.327	0.051
S3-TPA05	2.20	weathered 2	< LOD	0.019	< LOD	0.077	0.498	0.306	0.235	0.015	6.804	0.221	2.017	0.049
S3-TPA05	2.20	weathered 3	< LOD	0.02	< LOD	0.069	< LOD	0.412	0.032	0.008	10.49	0.311	1.256	0.036
S3-TPA05	2.20	non weathered 1	< LOD	0.02	0.098	0.046	< LOD	0.56	0.016	0.007	12.513	0.362	1.15	0.033
S3-TPA05	2.20	non weathered 2	< LOD	0.021	< LOD	0.066	< LOD	0.589	0.028	0.008	12.32	0.355	1.238	0.034
S3-TPA05	2.20	non weathered 3	< LOD	0.032	< LOD	0.101	< LOD	0.358	0.04	0.008	14.022	0.355	1.626	0.04
S3-TPA06	0.70	weathered 1	0.055	0.017	< LOD	0.087	1.284	0.371	0.633	0.029	4.129	0.16	1.266	0.04
S3-TPA06	0.70	weathered 2	< LOD	0.038	< LOD	0.084	0.854	0.404	0.676	0.033	2.22	0.129	4.312	0.116
S3-TPA06	0.70	weathered 3	0.05	0.018	< LOD	0.09	1.198	0.394	0.691	0.033	3.69	0.157	1.538	0.049
S3-TPA06	0.70	non weathered 1	< LOD	0.04	< LOD	0.112	< LOD	0.684	0.522	0.034	0.729	0.106	0.158	0.018
S3-TPA06	0.70	non weathered 2	< LOD	0.049	< LOD	0.114	< LOD	0.821	0.41	0.031	0.719	0.106	0.13	0.017
S3-TPA06	0.70	non weathered 3	< LOD	0.031	< LOD	0.11	< LOD	0.71	0.409	0.031	1.126	0.119	0.125	0.016
S3-TPA07	0.60	weathered 1	0.077	0.023	< LOD	0.11	1.504	0.895	7.212	0.204	2.658	0.247	0.114	0.03
S3-TPA07	0.60	weathered 2	0.057	0.025	< LOD	0.128	< LOD	1.306	7.789	0.235	0.664	0.186	0.395	0.039
S3-TPA07	0.60	weathered 3	0.048	0.02	< LOD	0.104	< LOD	1.094	4.056	0.127	0.503	0.161	0.486	0.033
S3-TPA07	0.60	non weathered 1	0.054	0.026	< LOD	0.125	< LOD	1.218	9.02	0.277	0.423	0.167	< LOD	0.081
S3-TPA07	0.60	non weathered 2	0.047	0.026	< LOD	0.13	< LOD	1.276	8.247	0.257	0.517	0.171	< LOD	0.052
S3-TPA07	0.60	non weathered 3	0.057	0.025	< LOD	0.12	< LOD	1.493	8.167	0.255	0.32	0.168	< LOD	0.069
S3-TPA07	0.80	weathered 1	0.116	0.032	< LOD	0.13	< LOD	2.272	1.878	0.089	0.606	0.306	6.994	0.254
S3-TPA07	0.80	weathered 2	< LOD	0.036	< LOD	0.106	< LOD	2.456	0.504	0.038	< LOD	0.34	3.392	0.131
S3-TPA07	0.80	weathered 3	< LOD	0.033	< LOD	0.098	< LOD	2.21	0.361	0.031	0.511	0.199	5.084	0.175
S3-TPA07	0.80	non weathered 1	0.098	0.031	< LOD	0.126	< LOD	2.109	1.149	0.064	0.441	0.282	4.235	0.164



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Head Office: Unit 25 Stella Gill Industrial Estate, Pelton Fell, Chester-le-Street, Co. Durham, DH2 2RG - Tel: 0191 387 4700 Fax: 0191 387 4710
Regional Office: Unit 20, Business Development Centre, Eanam Wharf, Blackburn, BB1 5BL - Tel: 01772 735 300 Fax: 01772 735 999



X-Ray Fluorescence (XRF) Analysis

Tested using a Nilon XL2T 980 GOLDD XRF Analyser

Title: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3

Job No.: 4155

Client: South Tees Site Company Ltd

Hole No.	Depth	Sample State	Molybdenum (Mo)	Error	Arsenic (As)	Error	Antimony (Sb)	Error	Copper (Cu)	Error	Sulphur (S)	Error
	(m)		%	%	%	%	%	%	%	%	%	%
S3-TPA01	1.60	non weathered 3	< LOD	0.022	< LOD	0.005	< LOD	0.004	0.018	0.004	0.023	0.007
S3-TPA04	0.70	weathered 1	< LOD	0.024	< LOD	0.002	< LOD	0.005	< LOD	0.004	0.513	0.015
S3-TPA04	0.70	weathered 2	< LOD	0.022	< LOD	0.002	< LOD	0.004	< LOD	0.005	0.51	0.015
S3-TPA04	0.70	weathered 3	< LOD	0.023	< LOD	0.002	< LOD	0.005	< LOD	0.005	0.509	0.015
S3-TPA04	0.70	non weathered 1	< LOD	0.021	< LOD	0.002	< LOD	0.004	< LOD	0.004	0.896	0.024
S3-TPA04	0.70	non weathered 2	< LOD	0.017	< LOD	0.002	< LOD	0.005	< LOD	0.004	0.889	0.023
S3-TPA04	0.70	non weathered 3	< LOD	0.02	< LOD	0.002	< LOD	0.006	< LOD	0.005	0.904	0.024
S3-TPA05	2.20	weathered 1	< LOD	0.003	< LOD	0.002	0.003	0.002	< LOD	0.002	0.162	0.006
S3-TPA05	2.20	weathered 2	< LOD	0.004	< LOD	0.002	0.003	0.002	< LOD	0.003	0.162	0.007
S3-TPA05	2.20	weathered 3	< LOD	0.004	< LOD	0.002	< LOD	0.003	< LOD	0.003	0.031	0.005
S3-TPA05	2.20	non weathered 1	< LOD	0.005	< LOD	0.002	< LOD	0.003	< LOD	0.003	0.025	0.004
S3-TPA05	2.20	non weathered 2	< LOD	0.004	< LOD	0.002	< LOD	0.003	< LOD	0.002	0.024	0.004
S3-TPA05	2.20	non weathered 3	< LOD	0.003	< LOD	0.002	0.004	0.002	< LOD	0.002	0.037	0.004
S3-TPA06	0.70	weathered 1	< LOD	0.005	< LOD	0.002	< LOD	0.003	< LOD	0.004	0.269	0.008
S3-TPA06	0.70	weathered 2	< LOD	0.013	< LOD	0.002	< LOD	0.006	< LOD	0.005	0.243	0.008
S3-TPA06	0.70	weathered 3	< LOD	0.014	< LOD	0.002	< LOD	0.003	< LOD	0.004	0.247	0.008
S3-TPA06	0.70	non weathered 1	< LOD	0.011	< LOD	0.002	< LOD	0.006	< LOD	0.006	1.093	0.028
S3-TPA06	0.70	non weathered 2	< LOD	0.01	< LOD	0.002	< LOD	0.006	< LOD	0.005	0.774	0.022
S3-TPA06	0.70	non weathered 3	< LOD	0.01	< LOD	0.002	< LOD	0.004	< LOD	0.005	0.948	0.024
S3-TPA07	0.60	weathered 1	< LOD	0.021	< LOD	0.002	< LOD	0.006	< LOD	0.005	1.088	0.025
S3-TPA07	0.60	weathered 2	< LOD	0.012	< LOD	0.002	< LOD	0.006	< LOD	0.005	0.463	0.015
S3-TPA07	0.60	weathered 3	< LOD	0.027	< LOD	0.002	< LOD	0.007	< LOD	0.004	0.176	0.01
S3-TPA07	0.60	non weathered 1	< LOD	0.013	< LOD	0.002	< LOD	0.006	< LOD	0.007	0.347	0.015
S3-TPA07	0.60	non weathered 2	< LOD	0.015	< LOD	0.002	< LOD	0.005	< LOD	0.008	0.544	0.019
S3-TPA07	0.60	non weathered 3	< LOD	0.018	< LOD	0.002	< LOD	0.005	< LOD	0.006	0.342	0.014
S3-TPA07	0.80	weathered 1	< LOD	0.052	< LOD	0.002	< LOD	0.007	< LOD	0.009	0.826	0.023
S3-TPA07	0.80	weathered 2	< LOD	0.042	< LOD	0.002	< LOD	0.005	< LOD	0.007	0.268	0.013
S3-TPA07	0.80	weathered 3	< LOD	0.035	< LOD	0.002	< LOD	0.005	0.007	0.004	0.439	0.016
S3-TPA07	0.80	non weathered 1	< LOD	0.049	< LOD	0.002	< LOD	0.008	< LOD	0.009	0.388	0.015



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Head Office: Unit 25 Stella Gill Industrial Estate, Pelton Fell, Chester-le-Street, Co. Durham, DH2 2RG - Tel: 0191 387 4700 Fax: 0191 387 4710
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X-Ray Fluorescence (XRF) Analysis

Tested using a Nilon XL2T 980 GOLDD XRF Analyser

Title: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3

Job No.: 4155

Client: South Tees Site Company Ltd

Hole No.	Depth (m)	Sample State	Chromium (Cr)	Error	Vanadium (V)	Error	Magnesium (Mg)	Error	Manganese (Mn)	Error	Aluminium (Al)	Error	Iron (Fe)	Error
			%	%	%	%	%	%	%	%	%	%	%	%
S3-TPA07	0.80	non weathered 2	0.156	0.034	0.175	0.084	< LOD	2.548	2.338	0.101	0.752	0.309	8.556	0.298
S3-TPA07	0.80	non weathered 3	0.053	0.028	< LOD	0.126	< LOD	2.205	1.455	0.077	< LOD	0.438	5.324	0.204
S3-TPA07	1.70	weathered 1	0.037	0.015	< LOD	0.063	1.046	0.46	0.08	0.012	4.288	0.204	12.874	0.269
S3-TPA07	1.70	weathered 2	< LOD	0.029	< LOD	0.059	< LOD	0.87	0.072	0.011	3.582	0.175	12.228	0.243
S3-TPA07	1.70	weathered 3	0.041	0.016	< LOD	0.062	0.979	0.602	0.125	0.016	6.733	0.317	18.756	0.43
S3-TPA07	1.70	non weathered 1	< LOD	0.025	< LOD	0.077	< LOD	1.114	0.096	0.014	4.829	0.247	5.051	0.131
S3-TPA07	1.70	non weathered 2	< LOD	0.029	< LOD	0.082	0.944	0.509	0.109	0.015	5.735	0.268	3.786	0.107
S3-TPA07	1.70	non weathered 3	< LOD	0.025	< LOD	0.077	< LOD	0.988	0.138	0.016	5.669	0.264	4.943	0.127
S3-TPA07	2.70	weathered 1	< LOD	0.02	< LOD	0.065	0.826	0.379	0.207	0.015	6.963	0.238	5.093	0.106
S3-TPA07	2.70	weathered 2	< LOD	0.019	< LOD	0.057	0.984	0.376	0.091	0.011	7.716	0.261	6.771	0.136
S3-TPA07	2.70	weathered 3	< LOD	0.022	< LOD	0.062	0.732	0.391	0.121	0.012	7.175	0.252	5.203	0.111
S3-TPA07	2.70	non weathered 1	0.026	0.014	< LOD	0.06	< LOD	0.74	0.027	0.009	9.57	0.318	5.809	0.12
S3-TPA07	2.70	non weathered 2	< LOD	0.019	< LOD	0.066	< LOD	0.518	0.03	0.008	9.227	0.289	3.146	0.072
S3-TPA07	2.70	non weathered 3	< LOD	0.014	< LOD	0.064	< LOD	0.77	0.018	0.009	7.739	0.28	5.053	0.11
S3-TPA09	0.90	weathered 1	0.05	0.015	< LOD	0.066	< LOD	0.477	0.016	0.008	12.493	0.359	4.536	0.094
S3-TPA09	0.90	weathered 2	0.042	0.015	< LOD	0.068	0.533	0.319	0.017	0.008	12.782	0.367	4.555	0.096
S3-TPA09	0.90	weathered 3	0.035	0.015	< LOD	0.067	0.778	0.322	0.021	0.008	12.743	0.366	4.538	0.096
S3-TPA09	0.90	non weathered 1	0.033	0.015	< LOD	0.069	0.786	0.306	< LOD	0.015	8.809	0.268	2.599	0.06
S3-TPA09	0.90	non weathered 2	0.033	0.014	< LOD	0.068	< LOD	0.689	< LOD	0.01	8.889	0.285	2.623	0.06
S3-TPA09	0.90	non weathered 3	< LOD	0.02	< LOD	0.068	< LOD	0.674	< LOD	0.012	8.656	0.277	2.611	0.06
S3-TPA09	2.00	weathered 1	< LOD	0.023	< LOD	0.074	< LOD	0.721	0.473	0.025	3.508	0.189	4.571	0.11
S3-TPA09	2.00	weathered 2	< LOD	0.023	< LOD	0.075	< LOD	0.725	0.471	0.025	3.331	0.182	4.536	0.111
S3-TPA09	2.00	weathered 3	< LOD	0.023	< LOD	0.075	< LOD	0.898	0.457	0.025	3.281	0.181	4.58	0.112
S3-TPA09	2.00	non weathered 1	0.468	0.034	< LOD	0.113	2.317	1.244	2.186	0.073	1.312	0.272	16.699	0.431
S3-TPA09	2.00	non weathered 2	0.507	0.035	< LOD	0.075	2.556	1.234	2.272	0.077	1.524	0.275	17.083	0.452
S3-TPA09	2.00	non weathered 3	0.488	0.034	< LOD	0.085	2.511	1.208	2.233	0.075	1.382	0.266	16.731	0.436
S3-TPA10	1.60	weathered 1	< LOD	0.034	< LOD	0.083	< LOD	1.158	1.206	0.047	1.974	0.201	0.584	0.028
S3-TPA10	1.60	weathered 2	< LOD	0.039	< LOD	0.083	< LOD	1.578	1.194	0.047	1.895	0.197	0.56	0.027
S3-TPA10	1.60	weathered 3	< LOD	0.03	< LOD	0.08	< LOD	1.974	1.331	0.051	1.358	0.254	0.326	0.021



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Head Office: Unit 25 Stella Gill Industrial Estate, Pelton Fell, Chester-le-Street, Co. Durham, DH2 2RG - Tel: 0191 387 4700 Fax: 0191 387 4710
Regional Office: Unit 20, Business Development Centre, Eanam Wharf, Blackburn, BB1 5BL - Tel: 01772 735 300 Fax: 01772 735 999



X-Ray Fluorescence (XRF) Analysis

Tested using a Nilon XL2T 980 GOLDD XRF Analyser

Title: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3

Job No.: 4155

Client: South Tees Site Company Ltd

Hole No.	Depth	Sample State	Molybdenum (Mo)	Error	Arsenic (As)	Error	Antimony (Sb)	Error	Copper (Cu)	Error	Sulphur (S)	Error
	(m)		%	%	%	%	%	%	%	%	%	%
S3-TPA07	0.80	non weathered 2	< LOD	0.047	< LOD	0.002	< LOD	0.007	< LOD	0.011	0.666	0.02
S3-TPA07	0.80	non weathered 3	< LOD	0.045	< LOD	0.002	< LOD	0.006	< LOD	0.007	0.668	0.021
S3-TPA07	1.70	weathered 1	< LOD	0.005	< LOD	0.002	< LOD	0.004	0.032	0.004	0.107	0.006
S3-TPA07	1.70	weathered 2	< LOD	0.004	< LOD	0.002	< LOD	0.004	0.031	0.004	0.099	0.006
S3-TPA07	1.70	weathered 3	< LOD	0.014	< LOD	0.002	< LOD	0.005	0.032	0.005	0.111	0.007
S3-TPA07	1.70	non weathered 1	< LOD	0.014	< LOD	0.002	< LOD	0.006	0.024	0.004	0.119	0.008
S3-TPA07	1.70	non weathered 2	< LOD	0.011	0.002	0.001	< LOD	0.005	0.013	0.004	0.073	0.008
S3-TPA07	1.70	non weathered 3	< LOD	0.02	< LOD	0.002	< LOD	0.004	0.013	0.003	0.131	0.008
S3-TPA07	2.70	weathered 1	< LOD	0.009	0.002	0.001	< LOD	0.003	0.006	0.002	0.168	0.007
S3-TPA07	2.70	weathered 2	< LOD	0.004	< LOD	0.002	< LOD	0.004	0.012	0.003	0.298	0.009
S3-TPA07	2.70	weathered 3	< LOD	0.007	0.002	0.001	< LOD	0.003	0.006	0.002	0.159	0.007
S3-TPA07	2.70	non weathered 1	< LOD	0.009	0.003	0.001	< LOD	0.003	0.01	0.003	1.18	0.025
S3-TPA07	2.70	non weathered 2	< LOD	0.007	< LOD	0.002	0.004	0.002	< LOD	0.003	0.691	0.017
S3-TPA07	2.70	non weathered 3	< LOD	0.011	0.002	0.001	< LOD	0.005	0.009	0.003	0.909	0.021
S3-TPA09	0.90	weathered 1	< LOD	0.005	< LOD	0.002	< LOD	0.003	0.006	0.002	0.14	0.007
S3-TPA09	0.90	weathered 2	< LOD	0.006	< LOD	0.002	< LOD	0.005	0.004	0.002	0.141	0.007
S3-TPA09	0.90	weathered 3	< LOD	0.006	< LOD	0.002	< LOD	0.003	0.004	0.002	0.141	0.006
S3-TPA09	0.90	non weathered 1	< LOD	0.004	< LOD	0.002	< LOD	0.003	0.008	0.002	0.076	0.005
S3-TPA09	0.90	non weathered 2	< LOD	0.007	< LOD	0.002	0.003	0.002	0.008	0.002	0.077	0.005
S3-TPA09	0.90	non weathered 3	< LOD	0.005	< LOD	0.002	0.004	0.002	0.009	0.002	0.076	0.005
S3-TPA09	2.00	weathered 1	< LOD	0.034	< LOD	0.002	0.005	0.003	0.013	0.003	0.559	0.019
S3-TPA09	2.00	weathered 2	< LOD	0.034	< LOD	0.002	< LOD	0.006	0.012	0.003	0.564	0.018
S3-TPA09	2.00	weathered 3	< LOD	0.033	< LOD	0.002	< LOD	0.004	0.017	0.003	0.552	0.018
S3-TPA09	2.00	non weathered 1	< LOD	0.035	0.002	0.001	< LOD	0.005	0.011	0.004	0.839	0.02
S3-TPA09	2.00	non weathered 2	< LOD	0.042	0.003	0.001	< LOD	0.006	0.01	0.004	0.841	0.02
S3-TPA09	2.00	non weathered 3	< LOD	0.032	0.002	0.001	< LOD	0.007	0.009	0.004	0.824	0.019
S3-TPA10	1.60	weathered 1	< LOD	0.027	< LOD	0.002	< LOD	0.004	< LOD	0.004	1.888	0.037
S3-TPA10	1.60	weathered 2	< LOD	0.027	< LOD	0.002	< LOD	0.004	< LOD	0.004	1.877	0.037
S3-TPA10	1.60	weathered 3	< LOD	0.026	< LOD	0.002	< LOD	0.006	< LOD	0.003	11.223	0.163

Note: < LOD = Below the limits of detection.



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X-Ray Fluorescence (XRF) Analysis

Tested using a Niton XL2T 980 GOLDD XRF Analyser

Title: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3

Job No.: 4155

Client: South Tees Site Company Ltd

Hole No.	Depth	Sample State	Chromium (Cr)	Error	Vanadium (V)	Error	Magnesium (Mg)	Error	Manganese (Mn)	Error	Aluminium (Al)	Error	Iron (Fe)	Error
	(m)		%	%	%	%	%	%	%	%	%	%	%	%
S3-TPA10	1.60	non weathered 1	< LOD	0.027	< LOD	0.091	2.603	0.763	0.196	0.018	6.521	0.33	0.28	0.018
S3-TPA10	1.60	non weathered 2	0.032	0.019	< LOD	0.093	2.514	0.744	0.169	0.017	6.096	0.313	0.294	0.018
S3-TPA10	1.60	non weathered 3	0.039	0.019	< LOD	0.093	2.563	0.749	0.211	0.019	6.303	0.319	0.298	0.019
S3-TPA10	1.20	weathered 1	< LOD	0.015	0.276	0.034	0.484	0.295	0.034	0.007	1.034	0.079	2.05	0.043
S3-TPA10	1.20	weathered 2	< LOD	0.016	0.25	0.033	< LOD	0.382	0.035	0.007	1.239	0.078	2.164	0.045
S3-TPA10	1.20	weathered 3	< LOD	0.016	0.262	0.034	< LOD	0.426	0.043	0.007	1.415	0.087	2.225	0.046
S3-TPA10	1.20	non weathered 1	< LOD	0.014	0.264	0.033	< LOD	0.436	0.01	0.005	0.225	0.044	0.625	0.018
S3-TPA10	1.20	non weathered 2	< LOD	0.013	0.224	0.031	< LOD	0.416	0.012	0.005	0.916	0.058	1.725	0.034
S3-TPA10	1.20	non weathered 3	< LOD	0.015	0.28	0.037	0.516	0.27	0.029	0.007	0.744	0.069	1.643	0.039
S3-TPA11	1.20	weathered 1	0.08	0.017	< LOD	0.061	1.749	0.546	0.466	0.023	3.797	0.2	6.814	0.146
S3-TPA11	1.20	weathered 2	0.086	0.018	< LOD	0.07	< LOD	0.714	0.441	0.024	3.863	0.193	4.306	0.103
S3-TPA11	1.20	weathered 3	0.04	0.016	< LOD	0.07	< LOD	0.789	0.44	0.024	3.265	0.189	4.385	0.106
S3-TPA11	1.20	non weathered 1	< LOD	0.036	< LOD	0.076	1.606	0.6	0.153	0.015	5.958	0.271	1.312	0.043
S3-TPA11	1.20	non weathered 2	< LOD	0.024	< LOD	0.078	1.101	0.608	0.153	0.015	5.647	0.266	1.381	0.045
S3-TPA11	1.20	non weathered 3	< LOD	0.036	< LOD	0.079	2.223	0.622	0.144	0.015	5.426	0.264	1.397	0.045
S3-TPA12	1.70	weathered 1	0.046	0.019	< LOD	0.084	3.23	0.739	0.162	0.016	13.2	0.517	1.552	0.05
S3-TPA12	1.70	weathered 2	0.049	0.019	< LOD	0.085	3.101	0.76	0.176	0.017	13.525	0.536	1.544	0.051
S3-TPA12	1.70	weathered 3	0.059	0.019	< LOD	0.085	2.092	0.731	0.154	0.016	13.32	0.524	1.593	0.052
S3-TPA12	1.70	non weathered 1	< LOD	0.041	< LOD	0.108	1.851	0.743	0.395	0.026	8.917	0.402	0.416	0.023
S3-TPA12	1.70	non weathered 2	0.035	0.019	< LOD	0.09	< LOD	1.09	0.376	0.026	8.915	0.399	0.423	0.024
S3-TPA12	1.70	non weathered 3	0.042	0.02	< LOD	0.093	2.554	0.747	0.394	0.027	9.234	0.411	0.41	0.024
S3-TPA13	2.30	weathered 1	0.061	0.022	< LOD	0.096	2.052	0.768	1.316	0.056	5.066	0.297	0.324	0.024
S3-TPA13	2.30	weathered 2	0.045	0.021	< LOD	0.098	1.626	0.738	1.3	0.055	5.023	0.289	0.297	0.023
S3-TPA13	2.30	weathered 3	0.041	0.021	< LOD	0.098	1.455	0.718	1.278	0.055	4.969	0.282	0.3	0.023
S3-TPA13	2.30	non weathered 1	0.057	0.022	< LOD	0.101	1.488	0.738	1.18	0.053	6.469	0.336	0.245	0.022
S3-TPA13	2.30	non weathered 2	0.073	0.023	< LOD	0.098	2.156	0.767	1.176	0.052	6.813	0.353	0.233	0.021
S3-TPA13	2.30	non weathered 3	0.043	0.021	< LOD	0.097	2.42	0.752	1.114	0.05	6.308	0.331	0.229	0.021
S3-TPA14	0.50	weathered 1	< LOD	0.036	< LOD	0.08	< LOD	1.987	0.129	0.015	1.238	0.247	0.662	0.03
S3-TPA14	0.50	weathered 2	< LOD	0.031	< LOD	0.112	< LOD	1.485	0.097	0.013	2.137	0.258	0.818	0.034



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Head Office: Unit 25 Stella Gill Industrial Estate, Pelton Fell, Chester-le-Street, Co. Durham, DH2 2RG - Tel: 0191 387 4700 Fax: 0191 387 4710
Regional Office: Unit 20, Business Development Centre, Eanam Wharf, Blackburn, BB1 5BL - Tel: 01772 735 300 Fax: 01772 735 999



X-Ray Fluorescence (XRF) Analysis

Tested using a Nilon XL2T 980 GOLDD XRF Analyser

Title: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3

Job No.: 4155

Client: South Tees Site Company Ltd

Hole No.	Depth	Sample State	Molybdenum (Mo)	Error	Arsenic (As)	Error	Antimony (Sb)	Error	Copper (Cu)	Error	Sulphur (S)	Error
	(m)		%	%	%	%	%	%	%	%	%	%
S3-TPA10	1.60	non weathered 1	< LOD	0.02	< LOD	0.002	< LOD	0.005	< LOD	0.005	1.538	0.032
S3-TPA10	1.60	non weathered 2	< LOD	0.018	< LOD	0.002	< LOD	0.006	< LOD	0.004	1.508	0.031
S3-TPA10	1.60	non weathered 3	< LOD	0.022	< LOD	0.002	< LOD	0.004	< LOD	0.004	1.564	0.032
S3-TPA10	1.20	weathered 1	< LOD	0.052	< LOD	0.002	0.008	0.002	0.011	0.002	1.852	0.035
S3-TPA10	1.20	weathered 2	< LOD	0.052	< LOD	0.002	0.007	0.002	0.012	0.002	1.721	0.033
S3-TPA10	1.20	weathered 3	0.05	0.003	0.002	0.001	0.008	0.002	0.015	0.002	1.655	0.033
S3-TPA10	1.20	non weathered 1	< LOD	0.047	< LOD	0.002	0.006	0.002	0.005	0.002	0.933	0.02
S3-TPA10	1.20	non weathered 2	< LOD	0.034	< LOD	0.002	0.005	0.002	0.013	0.002	1.034	0.02
S3-TPA10	1.20	non weathered 3	< LOD	0.034	< LOD	0.002	0.005	0.002	0.007	0.002	1.156	0.026
S3-TPA11	1.20	weathered 1	< LOD	0.014	0.005	0.001	< LOD	0.004	0.012	0.003	0.479	0.012
S3-TPA11	1.20	weathered 2	< LOD	0.016	< LOD	0.003	< LOD	0.005	0.005	0.003	0.497	0.013
S3-TPA11	1.20	weathered 3	< LOD	0.018	0.002	0.001	< LOD	0.004	0.009	0.003	0.461	0.013
S3-TPA11	1.20	non weathered 1	< LOD	0.018	< LOD	0.002	< LOD	0.004	< LOD	0.003	0.523	0.014
S3-TPA11	1.20	non weathered 2	< LOD	0.019	< LOD	0.002	< LOD	0.004	< LOD	0.003	0.551	0.015
S3-TPA11	1.20	non weathered 3	< LOD	0.015	< LOD	0.002	< LOD	0.006	< LOD	0.003	0.5	0.014
S3-TPA12	1.70	weathered 1	< LOD	0.022	< LOD	0.002	< LOD	0.004	< LOD	0.004	0.729	0.018
S3-TPA12	1.70	weathered 2	< LOD	0.026	0.002	0.001	< LOD	0.004	< LOD	0.006	0.737	0.018
S3-TPA12	1.70	weathered 3	< LOD	0.026	< LOD	0.002	< LOD	0.005	< LOD	0.004	0.73	0.018
S3-TPA12	1.70	non weathered 1	< LOD	0.019	< LOD	0.002	< LOD	0.005	< LOD	0.004	1.226	0.027
S3-TPA12	1.70	non weathered 2	< LOD	0.02	< LOD	0.002	< LOD	0.005	< LOD	0.004	1.215	0.027
S3-TPA12	1.70	non weathered 3	< LOD	0.019	< LOD	0.002	< LOD	0.004	< LOD	0.004	1.206	0.027
S3-TPA13	2.30	weathered 1	< LOD	0.021	< LOD	0.002	< LOD	0.004	< LOD	0.004	1.242	0.029
S3-TPA13	2.30	weathered 2	< LOD	0.017	< LOD	0.002	< LOD	0.004	< LOD	0.004	1.225	0.029
S3-TPA13	2.30	weathered 3	< LOD	0.02	< LOD	0.002	< LOD	0.007	< LOD	0.004	1.219	0.029
S3-TPA13	2.30	non weathered 1	< LOD	0.031	< LOD	0.002	< LOD	0.004	< LOD	0.004	0.652	0.018
S3-TPA13	2.30	non weathered 2	< LOD	0.029	< LOD	0.002	< LOD	0.004	< LOD	0.004	0.665	0.019
S3-TPA13	2.30	non weathered 3	< LOD	0.025	< LOD	0.002	< LOD	0.004	< LOD	0.004	0.656	0.018
S3-TPA14	0.50	weathered 1	< LOD	0.033	< LOD	0.002	< LOD	0.005	< LOD	0.004	0.078	0.009
S3-TPA14	0.50	weathered 2	< LOD	0.032	< LOD	0.002	< LOD	0.004	< LOD	0.004	0.12	0.009



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X-Ray Fluorescence (XRF) Analysis

Tested using a Niton XL2T 980 GOLDD XRF Analyser

Title: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3

Job No.: 4155

Client: South Tees Site Company Ltd

Hole No.	Depth	Sample State	Chromium (Cr)	Error	Vanadium (V)	Error	Magnesium (Mg)	Error	Manganese (Mn)	Error	Aluminium (Al)	Error	Iron (Fe)	Error
	(m)		%	%	%	%	%	%	%	%	%	%	%	%
S3-TPA14	0.50	weathered 3	< LOD	0.027	< LOD	0.079	< LOD	1.693	0.138	0.016	2.014	0.258	1.529	0.053
S3-TPA14	0.50	non weathered 1	< LOD	0.022	< LOD	0.079	< LOD	1.512	0.014	0.008	0.714	0.226	0.159	0.013
S3-TPA14	0.50	non weathered 2	< LOD	0.022	< LOD	0.08	< LOD	1.671	0.021	0.009	0.722	0.238	0.25	0.017
S3-TPA14	0.50	non weathered 3	< LOD	0.022	< LOD	0.09	< LOD	1.49	0.014	0.008	0.645	0.218	0.168	0.013
S3-TPA15	1.30	weathered 1	0.257	0.031	< LOD	0.086	< LOD	1.236	0.379	0.028	1.693	0.211	0.064	0.179
S3-TPA15	1.30	weathered 2	0.229	0.03	< LOD	0.087	< LOD	1.201	0.365	0.027	1.241	0.194	3.797	0.118
S3-TPA15	1.30	weathered 3	0.209	0.029	< LOD	0.088	< LOD	2.381	0.406	0.029	0.791	0.225	3.806	0.122
S3-TPA15	1.30	non weathered 1	0.063	0.027	< LOD	0.11	< LOD	1.904	0.798	0.05	< LOD	0.389	4.264	0.16
S3-TPA15	1.30	non weathered 2	0.056	0.026	< LOD	0.114	< LOD	1.847	0.762	0.048	0.508	0.258	4.653	0.17
S3-TPA15	1.30	non weathered 3	0.074	0.027	< LOD	0.106	< LOD	2.09	0.836	0.052	0.592	0.291	4.725	0.179
S3-TPA16	1.00	weathered 1	< LOD	0.018	0.093	0.025	< LOD	1.359	0.044	0.015	1.656	0.211	43.782	1.109
S3-TPA16	1.00	weathered 2	< LOD	0.025	0.074	0.025	< LOD	1.794	0.023	0.014	1.54	0.203	43.342	1.084
S3-TPA16	1.00	weathered 3	< LOD	0.018	0.067	0.024	< LOD	1.295	0.035	0.015	1.465	0.201	43.806	1.104
S3-TPA16	1.00	non weathered 1	< LOD	0.019	< LOD	0.038	< LOD	1.225	0.313	0.023	5.782	0.361	40.878	1.064
S3-TPA16	1.00	non weathered 2	< LOD	0.028	< LOD	0.039	1.768	0.917	0.329	0.024	6	0.384	41.164	1.073
S3-TPA16	1.00	non weathered 3	< LOD	0.019	< LOD	0.065	< LOD	1.945	0.313	0.023	5.592	0.371	40.901	1.054
S3-TPA17	1.00	weathered 1	0.042	0.018	< LOD	0.107	< LOD	1.55	1.97	0.073	0.622	0.224	0.397	0.027
S3-TPA17	1.40	weathered 2	0.052	0.018	< LOD	0.102	< LOD	1.521	1.89	0.069	0.431	0.212	0.394	0.026
S3-TPA17	1.40	weathered 3	0.039	0.017	< LOD	0.103	< LOD	1.573	1.937	0.07	0.494	0.219	0.385	0.026
S3-TPA17	1.40	non weathered 1	0.081	0.025	< LOD	0.13	< LOD	1.29	4.605	0.147	2.968	0.241	0.059	0.026
S3-TPA17	1.40	non weathered 2	0.08	0.024	< LOD	0.126	< LOD	1.247	4.488	0.141	2.514	0.229	0.061	0.025
S3-TPA17	1.40	non weathered 3	0.094	0.025	< LOD	0.128	< LOD	2.034	4.566	0.144	2.875	0.252	0.068	0.026
S3-TPA17	1.40	weathered 1	0.05	0.018	< LOD	0.104	< LOD	1.709	1.335	0.056	0.429	0.232	0.246	0.021
S3-TPA17	1.40	weathered 2	0.053	0.019	< LOD	0.108	< LOD	1.547	1.652	0.068	< LOD	0.323	0.254	0.023
S3-TPA17	1.40	weathered 3	0.037	0.019	< LOD	0.111	< LOD	1.662	1.397	0.061	< LOD	0.377	0.332	0.026
S3-TPA17	1.40	non weathered 1	0.064	0.022	< LOD	0.114	< LOD	1.332	4.639	0.145	3.926	0.284	0.041	0.025
S3-TPA17	1.40	non weathered 2	0.06	0.021	< LOD	0.111	< LOD	1.386	4.749	0.142	5.919	0.353	0.056	0.024
S3-TPA17	1.40	non weathered 3	0.083	0.023	< LOD	0.116	1.743	0.956	5.379	0.162	4.142	0.302	0.044	0.026
S3-TPA17	2.10	weathered 1	0.035	0.022	< LOD	0.104	< LOD	1.301	7.556	0.223	1.064	0.192	0.903	0.048

Note: < LOD = Below the limits of detection.



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Regional Office: Unit 20, Business Development Centre, Eanam Wharf, Blackburn, BB1 5BL - Tel: 01772 735 300 Fax: 01772 735 999



X-Ray Fluorescence (XRF) Analysis

Tested using a Nilon XL2T 980 GOLDD XRF Analyser

Title: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3

Job No.: 4155

Client: South Tees Site Company Ltd

Hole No.	Depth	Sample State	Molybdenum (Mo)	Error	Arsenic (As)	Error	Antimony (Sb)	Error	Copper (Cu)	Error	Sulphur (S)	Error
	(m)		%	%	%	%	%	%	%	%	%	%
S3-TPA14	0.50	weathered 3	< LOD	0.034	< LOD	0.002	< LOD	0.006	< LOD	0.004	0.209	0.011
S3-TPA14	0.50	non weathered 1	< LOD	0.035	< LOD	0.002	< LOD	0.004	< LOD	0.004	0.057	0.008
S3-TPA14	0.50	non weathered 2	< LOD	0.037	< LOD	0.002	< LOD	0.004	< LOD	0.004	0.424	0.014
S3-TPA14	0.50	non weathered 3	< LOD	0.031	< LOD	0.002	< LOD	0.004	< LOD	0.003	0.355	0.013
S3-TPA15	1.30	weathered 1	< LOD	0.045	< LOD	0.002	< LOD	0.007	< LOD	0.005	0.254	0.012
S3-TPA15	1.30	weathered 2	< LOD	0.044	< LOD	0.002	< LOD	0.007	< LOD	0.006	0.301	0.012
S3-TPA15	1.30	weathered 3	< LOD	0.045	< LOD	0.002	< LOD	0.007	< LOD	0.006	0.442	0.015
S3-TPA15	1.30	non weathered 1	< LOD	0.047	< LOD	0.002	< LOD	0.008	< LOD	0.007	0.184	0.012
S3-TPA15	1.30	non weathered 2	< LOD	0.049	< LOD	0.002	< LOD	0.006	< LOD	0.01	0.11	0.01
S3-TPA15	1.30	non weathered 3	0.055	0.006	< LOD	0.002	< LOD	0.006	< LOD	0.01	0.102	0.011
S3-TPA16	1.00	weathered 1	< LOD	0.025	0.01	0.002	< LOD	0.009	< LOD	0.008	1.508	0.036
S3-TPA16	1.00	weathered 2	< LOD	0.025	0.01	0.002	< LOD	0.007	< LOD	0.007	1.505	0.036
S3-TPA16	1.00	weathered 3	< LOD	0.025	0.006	0.002	< LOD	0.007	< LOD	0.012	1.499	0.036
S3-TPA16	1.00	non weathered 1	< LOD	0.031	0.002	0.001	< LOD	0.006	0.015	0.006	0.79	0.021
S3-TPA16	1.00	non weathered 2	< LOD	0.03	< LOD	0.002	< LOD	0.008	0.014	0.006	0.798	0.022
S3-TPA16	1.00	non weathered 3	< LOD	0.031	0.002	0.001	< LOD	0.006	0.013	0.006	0.781	0.021
S3-TPA17	1.40	weathered 1	< LOD	0.022	< LOD	0.002	< LOD	0.007	< LOD	0.005	0.837	0.02
S3-TPA17	1.40	weathered 2	< LOD	0.021	< LOD	0.002	< LOD	0.006	< LOD	0.005	0.83	0.019
S3-TPA17	1.40	weathered 3	< LOD	0.019	< LOD	0.002	< LOD	0.006	< LOD	0.004	0.824	0.02
S3-TPA17	1.40	non weathered 1	< LOD	0.013	< LOD	0.002	< LOD	0.006	< LOD	0.005	2.013	0.042
S3-TPA17	1.40	non weathered 2	< LOD	0.011	< LOD	0.002	< LOD	0.005	< LOD	0.004	2.008	0.042
S3-TPA17	1.40	non weathered 3	< LOD	0.011	< LOD	0.002	< LOD	0.007	< LOD	0.005	2.014	0.042
S3-TPA17	1.40	weathered 1	< LOD	0.028	< LOD	0.002	< LOD	0.004	< LOD	0.004	2.628	0.043
S3-TPA17	1.40	weathered 2	< LOD	0.03	< LOD	0.002	0.006	0.003	< LOD	0.008	0.535	0.016
S3-TPA17	1.40	weathered 3	< LOD	0.022	< LOD	0.002	< LOD	0.004	< LOD	0.005	0.723	0.019
S3-TPA17	1.40	non weathered 1	< LOD	0.026	< LOD	0.002	< LOD	0.006	< LOD	0.005	1.634	0.034
S3-TPA17	1.40	non weathered 2	< LOD	0.021	< LOD	0.002	< LOD	0.004	< LOD	0.004	1.894	0.037
S3-TPA17	1.40	non weathered 3	< LOD	0.024	< LOD	0.002	< LOD	0.007	< LOD	0.006	2.252	0.043
S3-TPA17	2.10	weathered 1	< LOD	0.022	0.002	0.001	< LOD	0.007	< LOD	0.005	0.468	0.015

X-Ray Fluorescence (XRF) Analysis

Tested using a Niton XL2T 980 GOLDD XRF Analyser

Title: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3
 Job No.: 4155

Client: South Tees Site Company Ltd

Hole No.	Depth	Sample State	Chromium (Cr)	Error	Vanadium (V)	Error	Magnesium (Mg)	Error	Manganese (Mn)	Error	Aluminium (Al)	Error	Iron (Fe)	Error
	(m)		%	%	%	%	%	%	%	%	%	%	%	%
S3-TPA17	2.10	weathered 2	0.045	0.019	< LOD	0.093	< LOD	1.558	5.184	0.148	1.569	0.21	2.311	0.075
S3-TPA17	2.10	weathered 3	0.058	0.025	< LOD	0.119	< LOD	2.121	5.828	0.201	0.797	0.214	1.531	0.07
S3-TPA17	2.10	non weathered 1	0.037	0.025	< LOD	0.118	< LOD	1.789	7.74	0.248	1.346	0.207	0.108	0.036
S3-TPA17	2.10	non weathered 2	< LOD	0.036	< LOD	0.114	1.744	0.868	7.433	0.237	1.149	0.198	0.222	0.038
S3-TPA17	2.10	non weathered 3	0.035	0.023	< LOD	0.108	< LOD	1.511	6.884	0.218	1.466	0.198	0.244	0.036
S3-TPA18	1.20	weathered 1	< LOD	0.025	< LOD	0.084	< LOD	1.775	0.181	0.017	1.213	0.211	0.164	0.014
S3-TPA18	1.20	weathered 2	0.045	0.02	< LOD	0.095	< LOD	1.097	0.323	0.025	1.884	0.195	0.29	0.02
S3-TPA18	1.20	weathered 3	< LOD	0.023	< LOD	0.082	< LOD	2.188	0.129	0.015	< LOD	0.379	0.118	0.012
S3-TPA18	1.20	non weathered 1	0.028	0.018	< LOD	0.088	2.816	0.676	0.595	0.031	1.482	0.169	0.243	0.017
S3-TPA18	1.20	non weathered 2	< LOD	0.027	< LOD	0.09	2.147	0.64	0.611	0.032	1.638	0.167	0.245	0.018
S3-TPA18	1.20	non weathered 3	< LOD	0.034	< LOD	0.097	< LOD	1.121	0.396	0.027	1.856	0.201	0.195	0.017
S3-TPA19	0.70	weathered 1	0.047	0.019	< LOD	0.073	< LOD	1.427	1.803	0.065	1.565	0.194	7.879	0.211
S3-TPA19	0.70	weathered 2	0.057	0.019	< LOD	0.07	< LOD	1.567	1.693	0.061	0.719	0.161	7.71	0.203
S3-TPA19	0.70	weathered 3	< LOD	0.026	0.09	0.047	1.096	0.704	1.553	0.056	1.85	0.188	6.379	0.166
S3-TPA19	0.70	non weathered 1	0.052	0.021	< LOD	0.086	< LOD	1.062	1.734	0.066	0.688	0.159	6.259	0.178
S3-TPA19	0.70	non weathered 2	< LOD	0.028	< LOD	0.11	< LOD	1.64	1.362	0.057	0.568	0.154	5.615	0.162
S3-TPA19	0.70	non weathered 3	0.039	0.02	< LOD	0.075	< LOD	1.116	1.454	0.058	0.934	0.169	7.274	0.202
S3-TPA20	1.50	weathered 1	0.029	0.016	< LOD	0.076	2.148	0.723	0.2	0.016	2.503	0.202	0.812	0.029
S3-TPA20	1.50	weathered 2	< LOD	0.026	< LOD	0.087	< LOD	1.02	0.143	0.016	1.768	0.178	0.679	0.03
S3-TPA20	1.50	weathered 3	< LOD	0.024	< LOD	0.082	< LOD	0.961	0.164	0.016	2.609	0.191	0.942	0.034
S3-TPA20	1.50	non weathered 1	< LOD	0.028	< LOD	0.086	< LOD	0.93	0.176	0.017	1.734	0.169	0.533	0.025
S3-TPA20	1.50	non weathered 2	< LOD	0.041	< LOD	0.088	< LOD	0.984	0.168	0.017	1.772	0.173	0.682	0.029
S3-TPA20	1.50	non weathered 3	< LOD	0.031	< LOD	0.09	< LOD	1.41	0.149	0.017	1.545	0.175	0.589	0.028
S3-TPA20	1.80	weathered 1	0.038	0.022	0.092	0.055	< LOD	2.087	1.036	0.052	2.074	0.326	8.514	0.269
S3-TPA20	1.80	weathered 2	0.102	0.022	< LOD	0.1	< LOD	2.323	1.309	0.053	1.965	0.275	12.942	0.353
S3-TPA20	1.80	weathered 3	0.119	0.027	< LOD	0.113	< LOD	2.632	0.914	0.049	1.891	0.313	7.997	0.257
S3-TPA20	1.80	non weathered 1	0.115	0.025	< LOD	0.072	< LOD	2.378	1.416	0.062	1.953	0.273	13.959	0.416
S3-TPA20	1.80	non weathered 2	0.111	0.025	0.098	0.05	< LOD	2.365	1.297	0.059	1.548	0.248	12.136	0.363
S3-TPA20	1.80	non weathered 3	0.125	0.023	< LOD	0.07	< LOD	1.577	1.249	0.052	2.33	0.266	11.133	0.305

Note: < LOD = Below the limits of detection.



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Head Office: Unit 25 Stella Gill Industrial Estate, Pelton Fell, Chester-le-Street, Co. Durham, DH2 2RG - Tel: 0191 387 4700 Fax: 0191 387 4710
Regional Office: Unit 20, Business Development Centre, Eanam Wharf, Blackburn, BB1 5BL - Tel: 01772 735 300 Fax: 01772 735 999



X-Ray Fluorescence (XRF) Analysis

Tested using a Niton XL2T 980 GOLDD XRF Analyser

Title: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3

Job No.: 4155 Client: South Tees Site Company Ltd

Hole No.	Depth	Sample State	Molybdenum (Mo)	Error	Arsenic (As)	Error	Antimony (Sb)	Error	Copper (Cu)	Error	Sulphur (S)	Error
	(m)		%	%	%	%	%	%	%	%	%	%
S3-TPA17	2.10	weathered 2	< LOD	0.025	< LOD	0.002	< LOD	0.005	< LOD	0.005	0.539	0.016
S3-TPA17	2.10	weathered 3	< LOD	0.029	0.002	0.001	< LOD	0.006	< LOD	0.006	0.53	0.017
S3-TPA17	2.10	non weathered 1	< LOD	0.018	< LOD	0.002	< LOD	0.005	< LOD	0.007	0.949	0.026
S3-TPA17	2.10	non weathered 2	< LOD	0.019	< LOD	0.002	< LOD	0.006	< LOD	0.006	0.608	0.019
S3-TPA17	2.10	non weathered 3	< LOD	0.012	< LOD	0.002	< LOD	0.006	< LOD	0.005	0.593	0.019
S3-TPA18	1.20	weathered 1	< LOD	0.023	< LOD	0.002	< LOD	0.005	< LOD	0.003	0.861	0.02
S3-TPA18	1.20	weathered 2	< LOD	0.017	< LOD	0.002	< LOD	0.004	< LOD	0.006	0.371	0.013
S3-TPA18	1.20	weathered 3	< LOD	0.019	< LOD	0.002	< LOD	0.005	< LOD	0.005	0.624	0.016
S3-TPA18	1.20	non weathered 1	< LOD	0.014	< LOD	0.002	< LOD	0.003	< LOD	0.004	1.195	0.028
S3-TPA18	1.20	non weathered 2	< LOD	0.017	< LOD	0.002	< LOD	0.004	< LOD	0.004	1.122	0.026
S3-TPA18	1.20	non weathered 3	< LOD	0.023	< LOD	0.002	< LOD	0.005	< LOD	0.004	1.038	0.024
S3-TPA19	0.70	weathered 1	< LOD	0.037	0.002	0.001	< LOD	0.007	0.005	0.003	0.684	0.018
S3-TPA19	0.70	weathered 2	< LOD	0.045	< LOD	0.002	< LOD	0.005	0.007	0.003	0.899	0.022
S3-TPA19	0.70	weathered 3	< LOD	0.026	< LOD	0.002	< LOD	0.005	< LOD	0.004	0.619	0.017
S3-TPA19	0.70	non weathered 1	< LOD	0.03	< LOD	0.002	< LOD	0.007	< LOD	0.005	0.678	0.02
S3-TPA19	0.70	non weathered 2	< LOD	0.039	< LOD	0.002	0.005	0.003	< LOD	0.008	0.914	0.025
S3-TPA19	0.70	non weathered 3	< LOD	0.028	< LOD	0.002	< LOD	0.005	< LOD	0.006	0.873	0.023
S3-TPA20	1.50	weathered 1	< LOD	0.017	< LOD	0.002	< LOD	0.003	< LOD	0.003	3.077	0.054
S3-TPA20	1.50	weathered 2	< LOD	0.019	< LOD	0.002	< LOD	0.004	< LOD	0.003	2.898	0.057
S3-TPA20	1.50	weathered 3	< LOD	0.019	< LOD	0.002	< LOD	0.005	< LOD	0.003	2.499	0.047
S3-TPA20	1.50	non weathered 1	< LOD	0.014	< LOD	0.002	< LOD	0.005	< LOD	0.004	2.479	0.05
S3-TPA20	1.50	non weathered 2	< LOD	0.011	< LOD	0.002	< LOD	0.005	< LOD	0.004	2.814	0.056
S3-TPA20	1.50	non weathered 3	< LOD	0.022	< LOD	0.002	0.005	0.003	< LOD	0.004	2.803	0.06
S3-TPA20	1.80	weathered 1	< LOD	0.052	< LOD	0.002	< LOD	0.005	< LOD	0.006	0.668	0.018
S3-TPA20	1.80	weathered 2	< LOD	0.043	0.002	0.001	< LOD	0.005	< LOD	0.005	0.455	0.014
S3-TPA20	1.80	weathered 3	0.053	0.005	< LOD	0.002	< LOD	0.008	< LOD	0.008	0.424	0.015
S3-TPA20	1.80	non weathered 1	< LOD	0.05	< LOD	0.002	< LOD	0.008	< LOD	0.009	1.13	0.026
S3-TPA20	1.80	non weathered 2	< LOD	0.039	< LOD	0.002	< LOD	0.007	< LOD	0.007	1.325	0.029
S3-TPA20	1.80	non weathered 3	< LOD	0.036	< LOD	0.002	< LOD	0.005	< LOD	0.006	1.136	0.025



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Head Office: Unit 25 Stella Gill Industrial Estate, Pelton Fell, Chester-le-Street, Co. Durham, DH2 2RG - Tel: 0191 387 4700 Fax: 0191 387 4710
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X-Ray Fluorescence (XRF) Analysis

Tested using a Nilon XL2T 980 GOLDD XRF Analyser

Title: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3

Job No.: 4155 Client: South Tees Site Company Ltd

Hole No.	Depth	Sample State	Chromium (Cr)	Error	Vanadium (V)	Error	Magnesium (Mg)	Error	Manganese (Mn)	Error	Aluminium (Al)	Error	Iron (Fe)	Error
	(m)		%	%	%	%	%	%	%	%	%	%	%	%
S3-TPA21	0.70	weathered 1	< LOD	0.019	0.063	0.037	< LOD	0.538	1.079	0.037	0.769	0.093	7.081	0.149
S3-TPA21	0.70	weathered 2	< LOD	0.015	0.086	0.028	< LOD	0.464	0.085	0.01	0.467	0.074	13.01	0.234
S3-TPA21	0.70	weathered 3	< LOD	0.026	0.071	0.038	< LOD	0.547	0.773	0.031	0.829	0.099	8.206	0.175
S3-TPA21	0.70	non weathered 1	0.052	0.014	0.125	0.03	0.933	0.536	0.405	0.022	0.662	0.116	22.149	0.468
S3-TPA21	0.70	non weathered 2	0.024	0.015	< LOD	0.067	< LOD	1.625	0.133	0.018	0.354	0.139	27.197	0.697
S3-TPA21	0.70	non weathered 3	0.028	0.015	< LOD	0.041	1.306	0.772	0.12	0.018	0.532	0.151	31.591	0.823
S3-TPA22	0.80	weathered 1	0.03	0.019	< LOD	0.091	1.874	0.622	0.739	0.037	5.705	0.28	0.628	0.03
S3-TPA22	0.80	weathered 2	0.038	0.017	< LOD	0.078	2.096	0.669	0.713	0.032	6.881	0.315	1.468	0.046
S3-TPA22	0.80	weathered 3	0.034	0.018	< LOD	0.086	1.73	0.654	0.748	0.036	5.459	0.279	0.598	0.028
S3-TPA22	0.80	non weathered 1	0.036	0.018	< LOD	0.083	1.726	0.72	0.357	0.023	8.197	0.365	0.437	0.022
S3-TPA22	0.80	non weathered 2	0.027	0.018	< LOD	0.084	2.524	0.712	0.317	0.022	8.252	0.365	0.421	0.022
S3-TPA22	0.80	non weathered 3	< LOD	0.027	< LOD	0.086	1.747	0.686	0.302	0.022	5.949	0.297	0.482	0.025
S3-TPA22	2.20	weathered 1	< LOD	0.028	< LOD	0.091	< LOD	2.491	0.08	0.013	1.443	0.259	0.393	0.022
S3-TPA22	2.20	weathered 2	< LOD	0.027	< LOD	0.085	< LOD	2.271	0.069	0.013	1.474	0.26	0.331	0.021
S3-TPA22	2.20	weathered 3	< LOD	0.026	< LOD	0.087	< LOD	2.553	0.079	0.014	1.396	0.256	0.437	0.025
S3-TPA22	2.20	non weathered 1	< LOD	0.034	< LOD	0.087	< LOD	2.714	0.014	0.009	< LOD	0.402	0.074	0.011
S3-TPA22	2.20	non weathered 2	< LOD	0.024	< LOD	0.084	< LOD	1.837	< LOD	0.02	< LOD	0.519	0.067	0.01
S3-TPA22	2.20	non weathered 3	< LOD	0.025	< LOD	0.086	< LOD	1.663	< LOD	0.013	0.399	0.229	0.084	0.011
S3-TPA23	1.00	weathered 1	0.037	0.016	< LOD	0.066	< LOD	1.355	0.807	0.037	1.67	0.217	28.525	0.733
S3-TPA23	1.00	weathered 2	< LOD	0.023	< LOD	0.059	< LOD	1.362	0.841	0.037	1.681	0.206	30.609	0.782
S3-TPA23	1.00	weathered 3	< LOD	0.022	< LOD	0.053	< LOD	1.08	0.67	0.031	1.975	0.193	18.42	0.435
S3-TPA23	1.00	non weathered 1	0.068	0.023	< LOD	0.077	2.434	1.12	1.308	0.061	0.89	0.235	12.602	0.384
S3-TPA23	1.00	non weathered 2	0.066	0.019	< LOD	0.062	1.493	0.92	1.4	0.054	2.056	0.23	14.509	0.377
S3-TPA23	1.00	non weathered 3	0.047	0.018	< LOD	0.065	< LOD	1.911	1.095	0.046	1.915	0.21	10.709	0.279
S3-TPA24	1.70	weathered 1	0.288	0.034	0.132	0.057	< LOD	2.788	2.473	0.094	1.041	0.269	13.775	0.419
S3-TPA24	1.70	weathered 2	0.564	0.039	0.162	0.047	2.384	1.48	3.523	0.118	2.362	0.346	21.112	0.613
S3-TPA24	1.70	weathered 3	0.474	0.039	0.097	0.051	< LOD	3.096	3.449	0.119	2.452	0.334	16.618	0.494
S3-TPA24	1.70	non weathered 1	0.66	0.048	< LOD	0.077	< LOD	2.917	3.313	0.125	3.67	0.391	18.796	0.606
S3-TPA24	1.70	non weathered 1	0.651	0.047	< LOD	0.077	2.209	1.404	3.196	0.12	3.906	0.389	18.312	0.583



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Head Office: Unit 25 Stella Gill Industrial Estate, Pelton Fell, Chester-le-Street, Co. Durham, DH2 2RG - Tel: 0191 387 4700 Fax: 0191 387 4710
Regional Office: Unit 20, Business Development Centre, Eanam Wharf, Blackburn, BB1 5BL - Tel: 01772 735 300 Fax: 01772 735 959



X-Ray Fluorescence (XRF) Analysis

Tested using a Nilon XL2T 980 GOLDD XRF Analyser

Title: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3

Job No.: 4155

Client: South Tees Site Company Ltd

Hole No.	Depth	Sample State	Molybdenum (Mo)	Error	Arsenic (As)	Error	Antimony (Sb)	Error	Copper (Cu)	Error	Sulphur (S)	Error
	(m)		%	%	%	%	%	%	%	%	%	%
S3-TPA21	0.70	weathered 1	< LOD	0.027	0.002	0.001	< LOD	0.004	0.068	0.005	0.182	0.011
S3-TPA21	0.70	weathered 2	< LOD	0.004	< LOD	0.002	0.004	0.002	0.017	0.003	0.097	0.005
S3-TPA21	0.70	weathered 3	< LOD	0.025	0.002	0.001	0.004	0.003	0.076	0.006	0.171	0.011
S3-TPA21	0.70	non weathered 1	< LOD	0.023	0.003	0.001	< LOD	0.007	0.014	0.004	0.259	0.009
S3-TPA21	0.70	non weathered 2	< LOD	0.009	0.017	0.002	< LOD	0.009	0.126	0.011	0.166	0.009
S3-TPA21	0.70	non weathered 3	< LOD	0.011	0.017	0.002	< LOD	0.007	0.077	0.009	0.232	0.01
S3-TPA22	0.80	weathered 1	< LOD	0.018	< LOD	0.002	< LOD	0.005	< LOD	0.004	0.374	0.013
S3-TPA22	0.80	weathered 2	< LOD	0.017	< LOD	0.002	< LOD	0.004	< LOD	0.003	0.556	0.015
S3-TPA22	0.80	weathered 3	< LOD	0.022	< LOD	0.002	< LOD	0.006	< LOD	0.006	0.445	0.014
S3-TPA22	0.80	non weathered 1	< LOD	0.022	< LOD	0.002	< LOD	0.006	< LOD	0.003	1.541	0.031
S3-TPA22	0.80	non weathered 2	< LOD	0.02	< LOD	0.002	< LOD	0.005	< LOD	0.006	1.392	0.029
S3-TPA22	0.80	non weathered 3	< LOD	0.014	< LOD	0.002	< LOD	0.004	< LOD	0.004	1.403	0.03
S3-TPA22	2.20	weathered 1	< LOD	0.034	< LOD	0.002	< LOD	0.006	< LOD	0.004	0.112	0.01
S3-TPA22	2.20	weathered 2	< LOD	0.036	< LOD	0.002	< LOD	0.004	< LOD	0.007	0.11	0.01
S3-TPA22	2.20	weathered 3	< LOD	0.034	< LOD	0.002	< LOD	0.007	< LOD	0.005	0.12	0.01
S3-TPA22	2.20	non weathered 1	< LOD	0.038	< LOD	0.002	< LOD	0.004	< LOD	0.004	0.042	0.009
S3-TPA22	2.20	non weathered 2	< LOD	0.035	< LOD	0.002	< LOD	0.006	< LOD	0.004	0.045	0.009
S3-TPA22	2.20	non weathered 3	< LOD	0.035	< LOD	0.002	< LOD	0.006	< LOD	0.006	0.036	0.008
S3-TPA23	1.00	weathered 1	< LOD	0.037	0.008	0.003	< LOD	0.009	0.018	0.005	0.143	0.008
S3-TPA23	1.00	weathered 2	< LOD	0.027	< LOD	0.006	< LOD	0.006	0.018	0.005	0.166	0.008
S3-TPA23	1.00	weathered 3	< LOD	0.022	0.003	0.002	< LOD	0.007	0.01	0.004	0.147	0.008
S3-TPA23	1.00	non weathered 1	< LOD	0.049	< LOD	0.002	< LOD	0.007	< LOD	0.007	0.661	0.02
S3-TPA23	1.00	non weathered 2	< LOD	0.044	< LOD	0.002	< LOD	0.007	< LOD	0.005	0.624	0.016
S3-TPA23	1.00	non weathered 3	< LOD	0.036	< LOD	0.002	< LOD	0.006	< LOD	0.005	0.562	0.016
S3-TPA24	1.70	weathered 1	< LOD	0.043	< LOD	0.002	< LOD	0.005	0.018	0.005	1.604	0.033
S3-TPA24	1.70	weathered 2	< LOD	0.052	< LOD	0.002	< LOD	0.007	0.014	0.005	1.053	0.024
S3-TPA24	1.70	weathered 3	< LOD	0.053	< LOD	0.002	< LOD	0.009	0.009	0.005	1.183	0.026
S3-TPA24	1.70	non weathered 1	< LOD	0.053	< LOD	0.002	< LOD	0.006	< LOD	0.012	0.566	0.017
S3-TPA24	1.70	non weathered 1	< LOD	0.05	< LOD	0.002	< LOD	0.006	< LOD	0.011	0.556	0.017



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X-Ray Fluorescence (XRF) Analysis

Tested using a Niton XL2T 980 GOLDD XRF Analyser

Title: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3

Job No.: 4155

Client: South Tees Site Company Ltd

Hole No.	Depth	Sample State	Chromium (Cr)	Error	Vanadium (V)	Error	Magnesium (Mg)	Error	Manganese (Mn)	Error	Aluminium (Al)	Error	Iron (Fe)	Error
	(m)		%	%	%	%	%	%	%	%	%	%	%	%
S3-TPA24	1.70	non weathered 3	0.514	0.041	< LOD	0.073	3.042	1.565	3.427	0.122	1.56	0.341	18.463	0.563
S3-TPA25	1.20	weathered 1	< LOD	0.024	< LOD	0.082	< LOD	0.991	0.337	0.022	0.887	0.155	1.498	0.048
S3-TPA25	1.20	weathered 2	< LOD	0.025	< LOD	0.082	< LOD	0.956	0.308	0.022	0.852	0.15	1.345	0.046
S3-TPA25	1.20	weathered 3	< LOD	0.038	< LOD	0.085	< LOD	1.135	0.294	0.022	0.673	0.144	1.252	0.044
S3-TPA25	1.20	non weathered 1	< LOD	0.028	< LOD	0.098	< LOD	1.015	0.723	0.038	1.208	0.16	0.174	0.018
S3-TPA25	1.20	non weathered 2	< LOD	0.034	< LOD	0.111	< LOD	1.641	0.796	0.044	1.354	0.177	0.291	0.023
S3-TPA25	1.20	non weathered 3	0.029	0.018	< LOD	0.094	< LOD	1.075	0.814	0.039	1.1	0.17	0.337	0.022
S3-TPA25	2.30	weathered 1	0.057	0.02	< LOD	0.089	1.367	0.884	1.433	0.055	3.767	0.28	2.089	0.067
S3-TPA25	2.30	weathered 2	0.06	0.021	< LOD	0.091	< LOD	1.31	1.568	0.06	3.447	0.268	2.149	0.07
S3-TPA25	2.30	weathered 3	0.044	0.02	< LOD	0.09	< LOD	1.602	2.111	0.073	3.949	0.268	1.836	0.061
S3-TPA25	2.30	non weathered 1	< LOD	0.028	< LOD	0.095	2.643	0.902	1.198	0.051	7.3	0.389	0.214	0.02
S3-TPA25	2.00	non weathered 2	0.04	0.019	< LOD	0.091	1.794	0.864	1.196	0.049	6.014	0.341	0.394	0.024
S3-TPA25	2.30	non weathered 3	0.042	0.02	< LOD	0.097	1.551	0.853	1.333	0.055	5.937	0.34	0.779	0.036
S3-TPA26	1.00	weathered 1	0.047	0.019	< LOD	0.086	< LOD	1.167	1.203	0.048	1.888	0.201	2.147	0.067
S3-TPA26	1.00	weathered 2	0.042	0.019	< LOD	0.085	< LOD	1.182	1.231	0.048	2.267	0.21	2.25	0.069
S3-TPA26	1.00	weathered 3	0.028	0.017	< LOD	0.08	1.43	0.756	1.333	0.049	2.379	0.206	-2.242	0.066
S3-TPA26	1.00	non weathered 1	0.029	0.019	< LOD	0.094	< LOD	1.104	0.819	0.04	3.059	0.227	0.251	0.02
S3-TPA26	1.00	non weathered 2	< LOD	0.028	< LOD	0.092	< LOD	0.971	0.782	0.039	1.845	0.176	0.517	0.027
S3-TPA26	1.00	non weathered 3	< LOD	0.027	< LOD	0.092	< LOD	1.055	0.707	0.037	3.282	0.226	0.489	0.027
S3-TPA27	0.70	weathered 1	< LOD	0.028	< LOD	0.054	< LOD	1.838	0.939	0.046	2.121	0.291	30.248	0.885
S3-TPA27	0.70	weathered 2	0.029	0.019	0.102	0.05	< LOD	2.327	1.994	0.073	0.975	0.216	10.018	0.278
S3-TPA27	0.70	weathered 3	< LOD	0.028	0.143	0.047	< LOD	1.947	1.302	0.054	0.801	0.193	14.516	0.398
S3-TPA27	0.70	non weathered 1	0.032	0.02	< LOD	0.071	< LOD	2.57	1.99	0.078	1.43	0.238	15.821	0.465
S3-TPA27	0.70	non weathered 2	0.049	0.021	< LOD	0.075	< LOD	1.624	1.465	0.063	1.419	0.244	14.28	0.421
S3-TPA27	0.70	non weathered 3	0.045	0.021	< LOD	0.109	< LOD	1.362	1.946	0.076	1.177	0.207	10.579	0.311
S3-TPA31	1.00	weathered 1	< LOD	0.028	< LOD	0.095	< LOD	1.253	0.606	0.035	0.671	0.182	0.309	0.022
S3-TPA31	1.00	weathered 2	< LOD	0.032	< LOD	0.091	< LOD	0.978	0.982	0.043	1.642	0.173	0.285	0.02
S3-TPA31	1.00	weathered 3	< LOD	0.027	< LOD	0.09	< LOD	1.246	0.707	0.036	1.292	0.183	0.397	0.023
S3-TPA31	1.00	non weathered 1	< LOD	0.029	< LOD	0.101	< LOD	1.266	0.562	0.035	0.799	0.185	0.248	0.021



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Regional Office: Unit 20, Business Development Centre, Eanam Wharf, Blackburn, BB1 5BL - Tel: 01772 735 300 Fax: 01772 735 999



X-Ray Fluorescence (XRF) Analysis

Tested using a Nilon XL2T 980 GOLDD XRF Analyser

Title: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3

Job No.: 4155

Client: South Tees Site Company Ltd

Hole No.	Depth	Sample State	Molybdenum (Mo)	Error	Arsenic (As)	Error	Antimony (Sb)	Error	Copper (Cu)	Error	Sulphur (S)	Error
	(m)		%	%	%	%	%	%	%	%	%	%
S3-TPA24	1.70	non weathered 3	0.052	0.006	< LOD	0.002	< LOD	0.007	0.009	0.005	0.432	0.015
S3-TPA25	1.20	weathered 1	< LOD	0.025	< LOD	0.002	< LOD	0.004	< LOD	0.005	0.259	0.011
S3-TPA25	1.20	weathered 2	< LOD	0.022	< LOD	0.002	0.005	0.003	< LOD	0.004	0.215	0.01
S3-TPA25	1.20	weathered 3	< LOD	0.021	< LOD	0.002	< LOD	0.006	< LOD	0.004	0.218	0.01
S3-TPA25	1.20	non weathered 1	< LOD	0.017	< LOD	0.002	< LOD	0.006	< LOD	0.004	0.408	0.014
S3-TPA25	1.20	non weathered 2	< LOD	0.018	< LOD	0.002	< LOD	0.007	< LOD	0.005	0.425	0.015
S3-TPA25	1.20	non weathered 3	< LOD	0.019	< LOD	0.002	< LOD	0.006	< LOD	0.004	0.505	0.015
S3-TPA25	2.30	weathered 1	< LOD	0.032	0.004	0.002	< LOD	0.004	< LOD	0.004	0.43	0.014
S3-TPA25	2.30	weathered 2	< LOD	0.028	0.003	0.001	< LOD	0.007	0.007	0.003	0.849	0.021
S3-TPA25	2.30	weathered 3	< LOD	0.03	< LOD	0.002	< LOD	0.006	0.006	0.003	0.238	0.011
S3-TPA25	2.30	non weathered 1	< LOD	0.031	< LOD	0.002	< LOD	0.004	< LOD	0.004	1.534	0.031
S3-TPA25	2.00	non weathered 2	< LOD	0.024	< LOD	0.002	< LOD	0.004	< LOD	0.004	1.703	0.034
S3-TPA25	2.30	non weathered 3	< LOD	0.026	< LOD	0.002	< LOD	0.004	< LOD	0.004	1.324	0.029
S3-TPA26	1.00	weathered 1	< LOD	0.026	< LOD	0.002	< LOD	0.004	< LOD	0.006	2.641	0.05
S3-TPA26	1.00	weathered 2	< LOD	0.03	< LOD	0.002	< LOD	0.004	< LOD	0.004	2.661	0.049
S3-TPA26	1.00	weathered 3	< LOD	0.024	< LOD	0.002	< LOD	0.005	< LOD	0.006	2.509	0.046
S3-TPA26	1.00	non weathered 1	< LOD	0.024	< LOD	0.002	< LOD	0.004	< LOD	0.006	2.377	0.047
S3-TPA26	1.00	non weathered 2	< LOD	0.015	< LOD	0.002	< LOD	0.006	< LOD	0.004	2.055	0.043
S3-TPA26	1.00	non weathered 3	< LOD	0.018	< LOD	0.002	< LOD	0.005	< LOD	0.004	1.764	0.038
S3-TPA27	0.70	weathered 1	0.053	0.006	0.004	0.002	< LOD	0.01	0.016	0.006	0.442	0.014
S3-TPA27	0.70	weathered 2	< LOD	0.046	< LOD	0.002	< LOD	0.005	< LOD	0.005	0.794	0.02
S3-TPA27	0.70	weathered 3	< LOD	0.03	0.002	0.001	< LOD	0.008	< LOD	0.007	0.689	0.019
S3-TPA27	0.70	non weathered 1	< LOD	0.043	< LOD	0.003	< LOD	0.006	0.016	0.005	1.845	0.041
S3-TPA27	0.70	non weathered 2	< LOD	0.039	0.004	0.002	< LOD	0.009	0.009	0.005	1.84	0.041
S3-TPA27	0.70	non weathered 3	< LOD	0.036	0.002	0.001	< LOD	0.006	< LOD	0.006	1.47	0.034
S3-TPA31	1.00	weathered 1	< LOD	0.018	< LOD	0.002	< LOD	0.006	< LOD	0.004	2.532	0.048
S3-TPA31	1.00	weathered 2	< LOD	0.017	< LOD	0.002	< LOD	0.004	< LOD	0.005	0.608	0.016
S3-TPA31	1.00	weathered 3	< LOD	0.018	< LOD	0.002	< LOD	0.005	< LOD	0.004	2.304	0.044
S3-TPA31	1.00	non weathered 1	< LOD	0.019	< LOD	0.002	< LOD	0.004	< LOD	0.005	2.327	0.047



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X-Ray Fluorescence (XRF) Analysis

Tested using a Nilon XL2T 980 GOLDD XRF Analyser

Title: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3

Job No.: 4155

Client: South Tees Site Company Ltd

Hole No.	Depth	Sample State	Chromium (Cr)	Error	Vanadium (V)	Error	Magnesium (Mg)	Error	Manganese (Mn)	Error	Aluminium (Al)	Error	Iron (Fe)	Error
	(m)		%	%	%	%	%	%	%	%	%	%	%	%
S3-TPA31	1.00	non weathered 2	< LOD	0.027	< LOD	0.091	< LOD	1.327	0.733	0.037	0.831	0.191	0.383	0.024
S3-TPA31	1.00	non weathered 3	< LOD	0.038	< LOD	0.102	< LOD	1.572	0.574	0.036	1.061	0.19	0.227	0.02
S3-TPA32	1.20	weathered 1	0.042	0.016	< LOD	0.066	< LOD	1.169	0.199	0.016	1.773	0.151	3.832	0.092
S3-TPA32	1.20	weathered 2	0.036	0.015	< LOD	0.066	0.946	0.581	0.198	0.016	1.956	0.161	3.878	0.092
S3-TPA32	1.20	weathered 3	0.037	0.016	< LOD	0.067	0.86	0.555	0.207	0.016	1.791	0.151	3.778	0.091
S3-TPA32	1.20	non weathered 1	< LOD	0.02	< LOD	0.109	0.622	0.356	0.036	0.009	0.626	0.101	0.635	0.024
S3-TPA32	1.20	non weathered 2	< LOD	0.02	< LOD	0.069	< LOD	0.521	0.038	0.009	0.553	0.098	0.637	0.024
S3-TPA32	1.20	non weathered 3	< LOD	0.02	< LOD	0.108	< LOD	0.488	0.049	0.009	0.547	0.099	0.628	0.024
S3-TPA34	1.20	weathered 1	0.025	0.016	< LOD	0.073	1.337	0.551	0.417	0.025	6.086	0.276	5.45	0.135
S3-TPA34	1.20	weathered 2	0.032	0.017	< LOD	0.074	< LOD	1.251	0.41	0.025	5.256	0.275	6.4	0.16
S3-TPA34	1.20	weathered 3	0.029	0.017	< LOD	0.081	1.919	0.613	0.775	0.033	5.756	0.27	1.544	0.047
S3-TPA34	1.20	non weathered 1	0.05	0.021	< LOD	0.098	1.503	0.655	1.189	0.051	2.308	0.194	0.142	0.018
S3-TPA34	1.20	non weathered 2	< LOD	0.027	< LOD	0.091	1.394	0.602	1.301	0.049	3.124	0.201	0.164	0.017
S3-TPA34	1.20	non weathered 3	0.028	0.019	< LOD	0.091	< LOD	0.839	1.21	0.05	1.911	0.162	0.407	0.025
S3-TPA36	0.60	weathered 1	0.078	0.017	< LOD	0.061	0.862	0.46	0.226	0.016	1.246	0.128	4.697	0.103
S3-TPA36	0.60	weathered 2	0.194	0.021	< LOD	0.059	1.224	0.517	0.308	0.019	2.405	0.16	5.081	0.11
S3-TPA36	0.60	weathered 3	0.07	0.016	< LOD	0.057	< LOD	0.787	0.24	0.016	1.577	0.141	5.431	0.116
S3-TPA36	0.60	non weathered 1	< LOD	0.023	< LOD	0.109	< LOD	0.555	0.054	0.011	0.696	0.109	1.2	0.04
S3-TPA36	0.60	non weathered 2	0.025	0.015	< LOD	0.068	< LOD	0.53	0.071	0.011	1.693	0.124	1.375	0.039
S3-TPA36	0.60	non weathered 3	< LOD	0.021	< LOD	0.068	< LOD	0.555	0.07	0.011	1.002	0.115	1.621	0.045
S3-TPA37	0.50	weathered 1	< LOD	0.025	< LOD	0.087	< LOD	1.325	0.958	0.041	3.575	0.244	0.675	0.03
S3-TPA37	0.50	weathered 2	< LOD	0.026	< LOD	0.066	2.101	0.711	1.1	0.045	5.179	0.281	0.896	0.036
S3-TPA37	0.50	weathered 3	< LOD	0.038	< LOD	0.085	2.212	0.748	0.959	0.04	3.989	0.252	0.731	0.031



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X-Ray Fluorescence (XRF) Analysis

Tested using a Niton XL2T 980 GOLDD XRF Analyser

Title: The Former SSI Steelworks, Redcar - Priority Areas Within SSI Landholdings Contract 3

Job No.: 4155

Client: South Tees Site Company Ltd

Hole No.	Depth	Sample State	Molybdenum (Mo)	Error	Arsenic (As)	Error	Antimony (Sb)	Error	Copper (Cu)	Error	Sulphur (S)	Error
	(m)		%	%	%	%	%	%	%	%	%	%
S3-TPA31	1.00	non weathered 2	< LOD	0.019	< LOD	0.002	< LOD	0.006	< LOD	0.004	2.07	0.04
S3-TPA31	1.00	non weathered 3	< LOD	0.013	< LOD	0.002	< LOD	0.006	< LOD	0.004	2.156	0.045
S3-TPA32	1.20	weathered 1	< LOD	0.018	< LOD	0.002	0.004	0.002	0.016	0.003	1.637	0.031
S3-TPA32	1.20	weathered 2	< LOD	0.018	< LOD	0.002	< LOD	0.005	0.014	0.003	1.628	0.031
S3-TPA32	1.20	weathered 3	< LOD	0.017	< LOD	0.002	< LOD	0.003	0.012	0.003	1.615	0.03
S3-TPA32	1.20	non weathered 1	< LOD	0.014	< LOD	0.002	< LOD	0.003	0.008	0.002	0.074	0.006
S3-TPA32	1.20	non weathered 2	< LOD	0.015	< LOD	0.002	< LOD	0.003	0.008	0.002	0.074	0.006
S3-TPA32	1.20	non weathered 3	< LOD	0.016	< LOD	0.002	0.004	0.002	0.01	0.002	0.072	0.006
S3-TPA34	1.20	weathered 1	< LOD	0.034	< LOD	0.002	< LOD	0.004	< LOD	0.004	0.331	0.012
S3-TPA34	1.20	weathered 2	< LOD	0.03	< LOD	0.002	0.005	0.003	< LOD	0.004	0.634	0.017
S3-TPA34	1.20	weathered 3	< LOD	0.012	< LOD	0.002	< LOD	0.003	< LOD	0.003	0.618	0.016
S3-TPA34	1.20	non weathered 1	< LOD	0.015	< LOD	0.002	< LOD	0.004	< LOD	0.004	0.27	0.012
S3-TPA34	1.20	non weathered 2	< LOD	0.014	< LOD	0.002	< LOD	0.006	< LOD	0.004	0.328	0.011
S3-TPA34	1.20	non weathered 3	< LOD	0.01	< LOD	0.002	< LOD	0.004	< LOD	0.006	0.451	0.014
S3-TPA36	0.60	weathered 1	< LOD	0.01	< LOD	0.002	0.004	0.002	0.006	0.002	0.62	0.016
S3-TPA36	0.60	weathered 2	< LOD	0.015	0.003	0.001	< LOD	0.003	0.011	0.003	0.875	0.02
S3-TPA36	0.60	weathered 3	< LOD	0.008	< LOD	0.002	< LOD	0.006	0.028	0.003	0.827	0.019
S3-TPA36	0.60	non weathered 1	< LOD	0.007	< LOD	0.002	0.004	0.002	< LOD	0.005	< LOD	0.02
S3-TPA36	0.60	non weathered 2	< LOD	0.005	< LOD	0.002	< LOD	0.005	< LOD	0.003	0.064	0.009
S3-TPA36	0.60	non weathered 3	< LOD	0.012	< LOD	0.002	0.004	0.002	< LOD	0.003	0.03	0.009
S3-TPA37	0.50	weathered 1	< LOD	0.024	< LOD	0.002	< LOD	0.004	< LOD	0.003	0.308	0.012
S3-TPA37	0.50	weathered 2	< LOD	0.021	< LOD	0.002	< LOD	0.004	< LOD	0.004	0.369	0.012
S3-TPA37	0.50	weathered 3	< LOD	0.022	< LOD	0.002	< LOD	0.004	< LOD	0.003	0.286	0.011



Slag Analysis carried out by Thomas Research Services Limited

TRS REPORT

Report Ref: BG8A/AEG/R4155/TRS/05/18/RP2

Date Issued: 03 May 2018

TRS Sample Refs: BG8A01-21

Order No: LA1956

EXAMINATION OF 21 SAMPLES
FROM
JOB 4155, FORMER SSI STEELWORKS, REDCAR
(PRIORITY AREAS WITHIN SSI LANDHOLDING CONTRACT 3)
FOR
ALLIED EXPLORATION & GEOTECHNICS LTD



Thomas Research Services Ltd.

Tel: +44 (0) 1469 532 929

www.slagtest.co.uk

Unit 7, Tattershall Castle Court, Morgan Way, New Holland,
North Lincolnshire, DN19 7PZ, United Kingdom

A Limited Company registered in England. Company Registration No: 2518421

EXAMINATION OF 21 SAMPLES
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(PRIORITY AREAS WITHIN SSI LANDHOLDING CONTRACT 3)
FOR
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1. BACKGROUND

Twenty one bulk samples were received from the above site on 18th February 2018. Each sample was weighed and allocated a unique TRS reference number, the details of which are recorded below: -

<u>TRS Ref</u>	<u>Site Ref</u>	<u>Depth/m</u>	<u>Mass/kg</u>
BG8A01	S3 TPA01	1.6	11.6
BG8A02	S3 TPA03	2.2	5.3
BG8A03	S3 TPA06	0.7	9.5
BG8A04	S3 TPA11	1.2	5.7
BG8A05	S3 TPA15	1.3	4.9
BG8A06	S3 TPA25	2.3	11.5
BG8A07	S3 TPB05	2.5	5.0
BG8A08	S3 TPB08	1.0	6.8
BG8A09	S3 TPB14	0.8	13.5
BG8A10	S3 TPB21	1.1	6.6
BG8A11	S3 TPB29	1.0	16.5
BG8A12	S3 TPB31	1.0	16.2
BG8A13	S3 TPB36	2.0	9.4
BG8A14	S3 TPB42	2.0	8.7
BG8A15	S3 TPB44	1.0	7.7
BG8A16	S3 TPB50	1.0	7.4
BG8A17	S3 TPB52	1.0	15.3
BG8A18	S3 TPB54	1.0	6.3
BG8A19	S3 TPB62	1.0	16.3
BG8A20	S3 TPB70	2.0	6.1
BG8A21	S3 TPB73	1.0	18.1

The purpose of the exercise was to identify the range and relative concentrations of any iron and steelmaking slags present in the samples, and whether there was any potential for volumetric instability from the materials.

2. SAMPLE PREPARATION & PROGRAMME OF ANALYSIS

The samples were primary crushed to reduce particle size down to <50mm, portions then being selected and dried at low temperature to constant weight. The dried material was subjected to a regime of stage crushing and quartering to further reduce particle size down to <5mm. Portions of this <5mm material were made up into resin bound blocks, one face of which was ground flat and polished using diamond pastes. Further portions of the <5mm material were milled to a fine powder. Fractions of material were extraction throughout the preparation procedure to provide the materials necessary for the tests and analyses required in the programme.

A petrological examination was made of the polished blocks using reflected light microscopy, the complete findings of which are recorded in appendix A. The results of this examination were recorded and discussed in our report of 7th February 2018. On the basis of that report, further work was authorised on the samples on 28th March 2018 as follows:-

Samples BG8A 03, 04, 08, 09, 10, 11, 14, 15, 16, 18, 19, 20 & 21 were subjected to the following tests & analyses to assess the potential for expansion of the blast furnace slag:-

- Water soluble sulphate (table 1)
- Acid soluble sulphate (table 1)
- Total sulphur (table 1)
- Thermal analysis (table 3)
- TRS accelerated expansion test (table 4)

Samples BG8A 12 & 13 were subjected to the following tests & analyses to assess the potential for expansion of the basic steel slag: -

- Free CaO (table 2)
- Free MgO (table 2)
- Thermal analysis (table 3)
- TRS accelerated expansion test (table 4)

Samples BG8A 02, 07 & 17 were subjected to the following tests & analyses to assess the potential for expansion of the mixed slag.

- Water soluble sulphate (table 1)
- Acid soluble sulphate (table 1)
- Total sulphur (table 1)
- Free CaO (table 2)
- Free MgO (table 2)
- Thermal analysis (table 3)
- TRS accelerated expansion test (table 4)

3. DISCUSSION OF RESULTS

3.1 Petrology

A petrological examination was made of the 21 samples using reflected light microscopy. The complete findings of this examination are recorded in appendix A.

Blast furnace slag was present in all but one of the samples, with significant quantities present in all but samples 01, 05, 06, 12 and 13. The blast furnace slag was mostly vesicular and crystalline, with vesicular infill and particle coatings from secondary materials (products of weathering). The unaltered slag consisted predominantly of melilite, along with more minor amounts of merwinite, larnite, bredigite, wollastonite, anorthite, Ca, Mn & Fe sulphides, graphitic iron and Ca titano-silicate. Some glassy and finely ceramic material was present in minor amounts. Secondary alteration was moderate, consisting mainly of pore infill and surface rinds. Products of alteration included calcite,

gypsum and possibly ettringite. Old weathered blast furnace slag may occasionally contain pockets of potentially expansive material. This potential can only be assessed by direct expansion testing (see sections 3.2 to 3.5).

Basic steel slag was also present in all but one of the samples. Most samples contained fairly moderate amounts (small / very small), but samples 02, 07 12, 13 & 17 contained much more significant concentrations. The unaltered basic steel slag consisted mainly of dicalcium silicate, along with more minor amounts of RO & R₃O₄ phase, CaF phase, tricalcium silicate, lime phase and periclase. The slag was extensively altered due to weathering, the secondary phases being difficult to identify specifically under the microscope. The mineralogy of the basic steel slag would suggest that it may have significant potential for expansion. This potential can only be assessed by direct expansion testing (see sections 3.2 to 3.5).

Minor amounts (small / very small) of basic refractory material were seen in nine of the samples. This material, even in minor amounts, can have significant potential for expansion.

Other constituents seen in the samples, in varying concentrations, included alumino-silicate refractories, quartz (mainly as sand but also silt and sandstone), silicic slag, cinder & clinker (from heating furnaces), iron ore, fume, metallic iron, rust, clay, coal, coke and used Portland cement. A cementitious material often bound the smaller particles together. This material appeared similar to the slag alteration products.

3.2 Sulphur Species

The following range of analyses were performed on samples BG8A 02-04, 07-11, & 14-21 (These samples contained medium or more amounts of blast furnace slag). The results are recorded in table 1:-

- Water soluble sulphate
- Acid soluble sulphate
- Total sulphur

Total sulphur values were in the range 0.31 to 1.41 percent. Acid soluble sulphates were in the range 0.38 to 1.29 percent, with corresponding water soluble sulphates of 0.07 to 2.00 g/l. These sulphate and sulphur values were variable, commensurate with the variable amounts of blast furnace slag present. However, some values were high, and consequently, care should be taken when specifying concrete that may come into contact with the slag. Calculations show that between 16 and 75 percent of the available sulphur is present as sulphate.

3.3 Thermal Analysis

Simultaneous differential thermal analysis (DTA) and thermo-gravimetric analysis (TGA) were performed on samples BG8A 02-04 & 07-21. The results are recorded in table three.

Ettringite was seen in three of the samples examined, at trace levels only. Gypsum was seen in all but two of the samples, at between trace and 8.2 percent. On comparing the gypsum values with the acid soluble sulphates, some of the gypsum values were overstated. This is common in old weathered blast furnace slag, and is usually an indicator of the presence of thaumasite. The presence of ettringite and possibly thaumasite would suggest some past expansion has occurred in the blast furnace slag.

Calcium hydroxide was recorded in three of the samples, at between 0.6 and 0.8 percent. Magnesium hydroxide was measured in six of the samples, at between

trace and 0.5 percent. These values were used to correct the free CaO and free MgO analyses recorded in table 2.

Calcite was present in all of the samples examined at between 0.5 and 15.6 percent. This product is an indicator as to the weathered state of the slag, although some may have come from other components present in the samples.

3.4 Free CaO & Free MgO

Free CaO & free MgO analyses were carried out on samples BG8A 02, 07, 12, 13 & 17 (These samples contained medium or more mounts of basic steel slag). The results are recorded in table 2. Both original and corrected values are recorded. The original values include both the oxide (CaO and MgO) and the hydroxide ((Ca(OH)₂ and Mg(OH)₂)) contents. The corrected values report only the oxide content (CaO and MgO) after correction using the hydroxide values from the thermal analyses. These corrected values are the more significant, as it is only the oxides that are still free to hydrate, i.e. expand.

Free lime was recorded in the samples at between 0.6 and 4.4 percent. Free magnesia was recorded at between 0.1 and 1.3 percent. These corrected free lime and free magnesia levels record oxides that are potentially still free to hydrate (i.e. expand).

3.5 TRS Accelerated Expansion Test

The TRS accelerated expansion test was performed on samples BG8A 02-04 & 07-21. The results are recorded in table four. Note that the test measures potential for future expansion, and is not a measure of expansion that may have taken place in the past.

Samples consisting predominantly of blast furnace slag, with only minor amounts of basic steel slag recorded expansion results of between 0.04 and 0.19 percent. Samples containing mixed blast furnace slag and basic steel slag recorded expansion results of between 0.29 and 1.16 percent. Samples consisting predominantly of basic steel slag recorded expansion results of between 0.98 and 3.19 percent.

4. CONCLUSIONS & RECOMMENDATIONS

The following conclusions can be drawn: -

- Blast furnace slag was a dominant constituent in all but five of the 21 samples examined. The slag was mainly crystalline although minor amounts of glassy and ceramic material were seen. The slag showed some alteration due to weathering. Old weathered blast furnace slag may occasionally contain pockets of potentially expansive material.
- Further testing of samples consisting predominantly of blast furnace slag (with only minor amounts of basic steel slag) recorded expansion results of between 0.04 and 0.19 percent. Thermal analysis indicated some evidence of past expansion of the blast furnace slag (presence of ettringite and possibly thaumasite). Some of the sulphate values were high and should be taken into consideration when specifying concrete that may come into contact with the slag.
- Minor amounts of basic steel slag were seen in most of the samples. However, more dominant amounts were present in samples 02, 07, 12, 13 & 17. This material may present a significant risk of expansion. Minor amounts of basic refractory material were seen in nine of the 21 samples examined. This product can be a significant source of expansion.

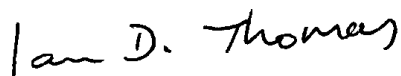
- Expansion testing of these five samples recorded expansion results of between 0.29 and 3.19 percent (The two samples consisting predominantly of basic steel slag recorded expansion values of 0.98 and 3.19 percent).
- Other products seen in the samples, in varying amounts, included alumino-silicate refractories, quartz (mainly as sand but also silt and sandstone), silicic slag, cinder & clinker (from heating furnaces), iron ore, fume, metallic iron, rust, clay, coal, coke and used Portland cement.

The following recommendations are made:-

The site contains significant proportions of iron and steel industry slag. To date, only 21 samples have been examined from this part of the site. A more significant site investigation, commensurate with the volume of material, should be undertaken. This should aim to determine the distribution of slag types across the site, and further assess the expansive properties of the slag.

Note

These conclusions apply only to the samples tested and may not represent the bulk of the material on the site from which they were taken.



Ian D Thomas BSc(Hons)

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TABLE 1

SULPHUR SPECIES ANALYSES

TRS Ref	Site Ref	Water Sol. SO ₃ (g/l)	Acid Sol. SO ₃ (%)	Total S (%)
BG8A02	S3 TPA03	0.83	0.6	0.32
BG8A03	S3 TPA06	0.65	0.55	0.56
BG8A04	S3 TPA11	0.34	0.45	0.57
BG8A07	S3 TPB05	1.20	0.80	0.92
BG8A08	S3 TPB08	1.33	0.63	0.9
BG8A09	S3 TPB14	1.93	0.94	0.79
BG8A10	S3 TPB21	1.07	0.74	0.83
BG8A11	S3 TPB29	0.49	0.38	0.94
BG8A12	S3 TPB31	-	-	-
BG8A13	S3 TPB36	-	-	-
BG8A14	S3 TPB42	2.00	1.28	1.12
BG8A15	S3 TPB44	0.07	0.58	0.31
BG8A16	S3 TPB50	1.38	0.98	0.83
BG8A17	S3 TPB52	0.35	0.42	0.86
BG8A18	S3 TPB54	1.70	1.25	1.41
BG8A19	S3 TPB62	1.43	1.14	1.15
BG8A20	S3 TPB70	0.65	1.29	0.98
BG8A21	S3 TPB73	0.34	0.76	1.31

TABLE 2

ANALYSIS FOR FREE CaO AND FREE MgO

TRS Ref	Site Ref	Free CaO	Free CaO	Free MgO	Free MgO
		Original (%)	Corrected (%)	Original (%)	Corrected (%)
BG8A02	S3 TPA03	1.3	1.3	0.1	0.1
BG8A03	S3 TPA06	-	-	-	-
BG8A04	S3 TPA11	-	-	-	-
BG8A07	S3 TPB05	0.8	0.8	0.2	0.2
BG8A08	S3 TPB08	-	-	-	-
BG8A09	S3 TPB14	-	-	-	-
BG8A10	S3 TPB21	-	-	-	-
BG8A11	S3 TPB29	-	-	-	-
BG8A12	S3 TPB31	4.2	3.6	1.6	1.3
BG8A13	S3 TPB36	4.9	4.4	0.4	0.4
BG8A14	S3 TPB42	-	-	-	-
BG8A15	S3 TPB44	-	-	-	-
BG8A16	S3 TPB50	-	-	-	-
BG8A17	S3 TPB52	0.6	0.6	0.2	0.2
BG8A18	S3 TPB54	-	-	-	-
BG8A19	S3 TPB62	-	-	-	-
BG8A20	S3 TPB70	-	-	-	-
BG8A21	S3 TPB73	-	-	-	-

TABLE 3

RESULTS FROM THERMAL ANALYSIS

TRS Ref	Site Ref	Mass % by Thermal Analysis						
		L.O.I.	Ettringite	Gypsum	Calcite	Ca(OH) ₂	Mg(OH) ₂	Others
BG8A02	S3 TPA03	7.27	0.0	2.5	3.9	0.0	0.0	quartz
BG8A03	S3 TPA06	9.43	0.0	1.7	7.3	0.0	0.0	quartz
BG8A04	S3 TPA11	6.99	trace	1.1	5.2	0.0	0.0	-
BG8A07	S3 TPB05	4.58	0.0	1.7	1.1	0.0	0.0	-
BG8A08	S3 TPB08	8.03	trace	0.7	10.1	0.0	0.0	-
BG8A09	S3 TPB14	3.84	0.0	1.2	2.2	0.0	0.0	-
BG8A10	S3 TPB21	4.88	0.0	1.9	2.8	0.0	0.0	-
BG8A11	S3 TPB29	3.20	0.0	0.7	2.3	0.0	0.0	-
BG8A12	S3 TPB31	2.27	0.0	0.0	0.5	0.8	0.5	-
BG8A13	S3 TPB36	4.69	0.0	trace	3.1	0.6	trace	-
BG8A14	S3 TPB42	4.78	0.0	1.3	1.5	0.0	0.3	-
BG8A15	S3 TPB44	14.09	0.0	0.0	15.6	0.0	0.0	quartz
BG8A16	S3 TPB50	7.38	trace	1.3	5.5	0.8	trace	-
BG8A17	S3 TPB52	5.09	0.0	0.7	4.6	0.0	0.0	-
BG8A18	S3 TPB54	5.11	0.0	2.9	0.9	0.0	0.0	-
BG8A19	S3 TPB62	3.68	0.0	1.5	0.5	0.0	0.0	-
BG8A20	S3 TPB70	5.28	0.0	8.2	1.2	0.0	trace	-
BG8A21	S3 TPB73	4.24	0.0	3.8	0.5	0.0	trace	-

TABLE 4

TRS ACCELERATED EXPANSION TEST

TRS Ref	Site Ref	7 day (%)	14 day (%)	21 day (%)	28 day (%)
BG8A02	S3 TPA03	0.52	0.78	0.99	1.16
BG8A03	S3 TPA06	0.02	0.05	0.05	0.06
BG8A04	S3 TPA11	0.03	0.04	0.04	0.04
BG8A07	S3 TPB05	0.18	0.31	0.39	0.42
BG8A08	S3 TPB08	0.05	0.09	0.09	0.09
BG8A09	S3 TPB14	0.09	0.12	0.13	0.14
BG8A10	S3 TPB21	0.03	0.06	0.07	0.07
BG8A11	S3 TPB29	0.10	0.13	0.14	0.15
BG8A12	S3 TPB31	2.01	2.78	3.14	3.19
BG8A13	S3 TPB36	0.43	0.68	0.87	0.98
BG8A14	S3 TPB42	0.05	0.06	0.06	0.06
BG8A15	S3 TPB44	0.15	0.17	0.17	0.17
BG8A16	S3 TPB50	0.04	0.07	0.09	0.11
BG8A17	S3 TPB52	0.15	0.21	0.25	0.29
BG8A18	S3 TPB54	0.08	0.13	0.14	0.16
BG8A19	S3 TPB62	0.05	0.12	0.17	0.19
BG8A20	S3 TPB70	0.03	0.03	0.04	0.05
BG8A21	S3 TPB73	0.07	0.10	0.10	0.10

APPENDIX A

PETROLOGICAL REPORT ON SAMPLES BG8A 01-21

A petrological examination has been carried out of twenty-one samples, BG8A 01 to 21.

Polished blocks were prepared using particulate material crushed to a nominal size of $\sim 5\text{mm}$. Representative material was made up into resin-bonded blocks. One face of each of these was ground flat and polished using diamond pastes. In addition, when appropriate, the surfaces were selectively etched with water and 0.1%N HCl in order to help with the phase identification.

The detailed results are given in the accompanying Table.

Blast furnace slag occurs in medium, large or very large amounts in most of the samples, exceptions being samples nos. 1, 5, 6, 12 and 13.

Basic steel slag occurs mainly in small to medium amounts with a few samples having large or very large amounts, notably nos. 2, 12 and 13.

Very little basic refractory material was seen. This was usually dolomet.

Most samples contain very small amounts of fume; spherical particles chiefly of iron oxides typically less than 0.01mm in size. Only sample 13 has a substantial amount of this material.

The blast furnace slag is mostly vesicular and crystalline with vesicular infill and particle coatings of secondary material.

The unaltered slag consists mainly of melilite (Ca,Mg,Al silicate) with spinel (MgAl_2O_4) as a second principle phase (although many of the samples in the set 13-21 lack spinel suggesting a slight compositional change). Minor amounts of merwinite (Ca,Mg silicate) and dicalcium silicate (e.g. larnite ($\beta\text{-Ca}_2\text{SiO}_4$) and bredigite (Ca_2SiO_4 with some Mg in solid solution)) are present and other silicates such as wollastonite (Ca silicate), anorthite (Ca,Al silicate and Ca titano-silicate). These form a matrix to the melilite crystals. Some glassy slag is present, again mostly as a matrix phase. There is also some finely crystalline ceramic slag. Very small amounts of Ca, Mn and Fe sulphides are present and graphitic iron occurs as minute spherules and occasional larger prills. Secondary alteration is moderate in amount mainly infilling pores and occurring as surface rinds. Some has replaced the original phases especially the calcium-rich silicates. It consists mainly of granular material and aggregates of needle shaped crystals that are

probably silicate and sulpho-aluminate hydrates such as ettringite. Calcite (CaCO_3) occurs in some samples and a few samples have well-crystallised gypsum ($\text{CaSO}_4 \cdot 2\text{H}_2\text{O}$).

The unaltered basic steel slag consists mainly of dicalcium silicate, RO and R_3O_4 phases (FeO and Fe_3O_4 with some Al, Mn, Mg and Ca in solid solution) and CaF phases (complex Ca alumino-ferrites). The RO phase in samples 2 to 12 had a slightly lower reflectance than that in samples 13 to 20. This might be related to magnesium content. In some samples the RO phase has oxidised on cooling with exsolution of very finely granular periclase. There are minor amounts of others silicate, probably tricalcium silicate (dissociated on cooling to dicalcium silicate and free lime). There are small or very small amounts of lime phase (CaO with some Fe, Mn and Mg in solid solution) and periclase (MgO with some Fe in solid solution). The lime phase mostly forms spongy grains up to about 0.3 mm in size or is finely crystalline, well dispersed at other phase boundaries. Also, a little is present as a result of exsolution of the tricalcium silicate as noted above. The periclase occurs mostly as rounded grains up to about 0.1 mm in size that are often encapsulated in RO phase. The slag is extensively altered with the formation of secondary phases difficult to identify specifically under the microscope.

A little basic refractory material is present. This consists mainly of partly hydrated dolomet (originally finely crystalline periclase and lime phase bonded by minor amounts of silicates). There is also some partly hydrated periclase from magnesia refractory and, very minor, chrome-magnesia refractory..

The fume is made up of particles ranging in size from less than 1 to about 100 microns of iron oxides, glass, coke, etc. embedded in an extremely fine-grained matrix.

Other constituents include alumino-silicate refractories, especially in samples 01 and 17 (including high-alumina, firebrick and common types), quartz (mainly as sand but also silt and sandstone), silicic slag, cinder and clinker from heating furnaces, iron ore, metallic iron with associated iron oxide scale, rust, clay, coal, coke and used Portland cement. There are small to medium amounts of cementitious material binding the smaller and adherent to the larger particles. This appears to be similar to the slag alteration products including calcite but probably is also partly clay.

TRS SAMPLES BG8A 01-21 (Sheet 1 of 2)												
	1	2	3	4	5	6	7	8	9	10	11	12
BLAST FURNACE SLAG												
Amount	s	m	l	l	s	s	l	L	L	L	L	-
Phases present:-												
Melilite	L	L	L	L	l	l	L	L	L	L	L	-
Merwinite	-	-	s	-	-	-	-	-	-	-	-	-
Larnite & bredigite	-	-	vs	vs	-	-	vs	-	-	-	-	-
Matrix & other silicates	s	s	s	s	s	s	s	s	s	s	s	-
Ca & Fe,Mn sulphides	-	-	vs	vs	-	-	vs	vs	vs	vs	vs	-
Metal, rust, scale etc.	vs	vs	s	vs	vs	vs	vs	s	vs	s	vs	-
Spinel	-	s	s	s	-	vs	s	s	vs	vs	vs	-
Quartz inclusions	-	-	-	-	-	-	-	-	-	-	-	-
Glassy slag	-	-	vs	-	s	-	-	-	-	-	-	-
Alteration products	vs	s	s	m	m	m	m	m	s	m	m	-
Calcite	-	-	s	s	s	s	m	s	s	s	s	-
Gypsum	-	-	-	-	-	-	-	-	-	-	-	-
BASIC STEEL SLAG												
Amount	-	l	s	s	s	s	m	s	s	vs	vs	L
Phases present:-												
Dicalcium silicate	-	l	l	m	s	m	l	l	l	l	m	l
Tricalcium silicate	-	-	-	-	-	-	-	-	-	-	-	m
Unetched silicates	-	-	-	-	-	-	-	-	-	-	-	s
RO phase	-	m	s	s	s	s	m	m	m	m	s	m
CaF phase	-	s	s	s	-	s	s	s	s	-	-	s
R3O4 phase	-	-	-	-	-	-	s	-	-	-	-	s
R2O3 phase	-	-	-	-	-	-	vs	-	-	-	-	-
Metal & rust	-	-	-	-	-	-	-	vs	-	-	-	s
Lime phase	-	vs	vs	vs	-	-	vs	-	vs	-	-	s
Periclase	-	s	vs	vs	s	vs	s	s	vs	-	-	vs
Apatite	-	-	-	s	-	-	vs	-	-	vs	-	s
Alteration products	-	l	l	l	l	l	m	m	m	m	l	s
BASIC REFRACTORIES												
Amount	vs	-	-	-	-	-	vs	-	vs	-	vs	s
OTHER CONSTITUENTS												
Alumino-silicate brick	l	l	s	s	s	s	-	-	-	vs	s	vs
Quartz, sandstone, etc.	l	m	m	m	s	m	s	s	s	s	s	vs
Acid steel slag	-	-	-	-	-	-	-	-	-	-	-	-
Cindery slag	s	vs	s	vs	m	s	vs	vs	vs	-	-	-
Siliceous clinker	-	-	-	-	m	-	vs	-	-	-	-	-
Metal, rust & scale	s	s	s	s	s	m	s	s	s	s	s	s
Fume	vs	-	vs	vs	-	vs	-	-	-	-	-	-
Limestone & dolomite	-	-	s	-	-	s	-	vs	-	-	-	-
Iron ore, ironstone, sinter, etc.	s	vs	s	vs	vs	s	vs	vs	vs	-	-	-
Granite, basalt, etc.	-	-	vs	-	-	-	-	-	-	vs	-	-
Shale, clay & ash	-	-	-	-	s	-	-	-	-	vs	-	-
Coke	s	s	s	s	m	s	s	vs	s	s	s	-
Coal & char	s	vs	vs	s	s	s	vs	vs	vs	vs	vs	-
Cementitious material & clay	m	m	m	s	s	s	s	s	s	s	s	s
Used Portland cement	-	s	-	-	-	s	-	-	-	-	-	-
L = very large, l = large, m = medium, s = small and vs = very small amounts												

TRS SAMPLES BG8A 01-21 (Sheet 2 of 2)									
	13	14	15	16	17	18	19	20	21
BLAST FURNACE SLAG									
Amount	s	L	m	L	I	L	L	L	L
Phases present:-									
Mellilite	L	L	L	L	L	L	L	L	L
Merwinite	-	-	-	-	-	s	vs	-	-
Larnite & bredigite	-	vs	-	vs	-	-	vs	-	vs
Matrix & other silicates	s	s	s	s	s	s	s	s	s
Ca & Fe,Mn sulphides	-	vs	-	vs	vs	vs	vs	vs	vs
Metal, rust, scale etc.	vs	vs	vs	s	vs	s	s	s	s
Spinel	-	-	-	vs	s	-	-	-	-
Quartz inclusions	-	-	-	-	-	-	-	-	vs
Glassy slag	-	vs	s	s	s	-	-	-	-
Alteration products	s	m	s	s	s	s	m	m	m
Calcite	-	s	-	s	s	s	-	-	-
Gypsum	-	-	-	I	-	s	s	-	-
BASIC STEEL SLAG									
Amount	I	s	vs	s	m	vs	s	s	vs
Phases present:-									
Dicalcium silicate	m	m	m	I	I	m	I	I	s
Tricalcium silicate	s	-	-	-	-	-	-	-	-
Unetched silicates	s	-	-	-	-	-	-	-	s
RO phase	m	m	I	m	m	m	m	m	m
CaF phase	s	s	-	s	s	vs	vs	vs	-
R3O4 phase	s	-	-	s	s	-	-	-	-
R2O3 phase	vs	-	-	-	-	-	-	-	-
Metal & rust	s	vs	-	-	s	-	s	s	-
Lime phase	s	s	-	s	s	-	vs	vs	-
Periclase	-	s	-	s	s	-	-	vs	s
Apatite	s	-	-	-	-	-	-	-	s
Alteration products	I	I	m	m	m	I	m	I	I
BASIC REFRACTORIES									
Amount	-	vs	-	vs	s	-	vs	-	-
OTHER CONSTITUENTS									
Alumino-silicate brick	-	-	-	-	s	-	-	-	-
Quartz, sandstone, etc.	vs	s	I	s	s	s	s	vs	s
Acid steel slag	-	-	-	-	-	-	-	vs	-
Cindery slag	vs	-	-	-	-	-	-	-	-
Siliceous clinker	-	-	-	-	-	-	-	-	-
Metal, rust & scale	s	s	vs	s	m	s	s	vs	s
Fume	m	s	-	s	vs	-	-	-	-
Limestone & dolomite	-	-	s	-	-	-	-	-	-
Iron ore, ironstone, sinter, etc.	-	-	s	s	-	-	-	vs	-
Granite, basalt, etc.	-	-	-	-	-	-	-	-	-
Shale, clay & ash	-	-	-	-	-	-	-	-	-
Coke	vs	vs	-	s	vs	s	vs	vs	vs
Coal & char	-	-	vs	vs	-	-	-	-	-
Cementitious material & clay	I	m	s	s	m	s	s	m	m
Used Portland cement	-	-	m	-	vs	s	-	-	-
L = very large, I = large, m = medium, s = small and vs = very small amounts									

GENERAL EXPLANATION

L = very large, I = large, m = medium, s = small and vs = very small amounts.

Blast furnace slag. When present this consists mainly of melilite (Ca,Mg,Al silicate ranging in composition between $\text{Ca}_2\text{Al}_2\text{SiO}_7$ and $\text{Ca}_2\text{MgSi}_2\text{O}_7$). Other common phases are merwinite ($\text{Ca}_3\text{MgSi}_2\text{O}_8$), larnite ($\beta\text{-Ca}_2\text{SiO}_4$) and bredigite (Ca_2SiO_4 with some Mg in solid solution). The matrix often consists of some of the above phases, especially melilite, but may also contain other phases such as wollastonite (CaSiO_3), anorthite ($\text{CaAl}_2\text{Si}_2\text{O}_8$) and pyroxene ($(\text{CaMg})\text{SiO}_3$). Spinel (MgAl_2O_4) may be present. Sulphides and metal usually occur and are mostly finely dispersed, but the metal sometimes occurs as prills and may contain some graphite and Ti carbo-nitride (TiCN). Material reported as ceramic in appearance is very finely crystalline. The alteration products often include calcite and gypsum but are mostly silicate and/or sulpho-aluminate hydrates that are difficult to identify specifically under the microscope.

Basic steel slag. When present this consists mainly of dicalcium silicate, mostly the β -form (larnite) but sometimes the alpha form. Phosphoric slags may contain nagelschmidtite (Ca_2SiO_4 with $\text{Ca}_3\text{P}_2\text{O}_8$ in solid solution). Other silicate often present in small amounts, unetched by dilute HCl, is probably melilite. RO, R_3O_4 and RF phases are typically present and are mainly FeO and Fe_3O_4 with some Mg, Mn, Ca, etc. in solid solution and complex Ca aluminoferrites. There may also be some Fe_2O_3 and spinel ($(\text{Mg,Fe})\text{Al}_2\text{O}_4$). The slag typically carries minor amounts of periclase (MgO with some Fe in solid solution) and lime phase (CaO with some Fe, Mn & Mg in solid solution). Other possible minor constituents include fluorite (CaF_2) and apatite (Ca fluoro-phosphate), the last present in phosphoric slags. The alteration products are, again, difficult to identify specifically but are probably, mainly, hydrated silicates. Portlandite ($\text{Ca}(\text{OH})_2$) may be present.

Basic refractory material. When present, this is mainly magnesian and consists of granular periclase (MgO) with interstitial silicates. Sometimes samples contain chrome-magnesia material with chromite present in addition to the other phases. Hot face material (from close to the furnace) may also occur. The periclase and interstitial silicates show secondary alteration similar to that of the basic steel slag. Brucite ($\text{Mg}(\text{OH})_2$) is likely.

Acid steel slag. When present this consists mainly of fayalite ($(\text{Fe,Mn})_2\text{SiO}_4$), Fe,Mn oxides and cristobalite (high temperature SiO_2).

Other slags. The 'intermediate slag' (probably primary flush slags from steel furnaces) has a variable phase assemblage, being mainly formed of silicates, particularly dicalcium silicate, melilite, merwinite and a complex olivine phase together with spinel and wustite (FeO). Sometimes it contains significant amounts of periclase, well embedded in the slag. The 'ferrous slag' (probably from foundry operations) has similar silicates but much more substantial content of iron oxides, usually wustite. It is often associated with scale (iron oxides formed on the surface of steel during reheating/cooling). When present, the 'cindery slag' consists of various silicates and silicate glass with Fe oxides, hercynite (FeAl_2O_4) and, sometimes, corundum (Al_2O_3). It is usually derived from heating furnaces and is often associated with burnt shale. When present, the 'siliceous clinker' is similar but devoid of iron oxides.

Other constituents The aluminosilicate brick includes a range of refractory firebrick, common brick and alumina-rich refractories. The 'quartz, sandstone, etc.' may include used silica refractory material consisting of quartz and its high temperature forms. Sometimes there is a distinct granular texture and it is derived from silcrete, a kind of chert. Cementitious material may bond the finer particles together. It is similar to the other alteration products consisting mostly of complex hydrates difficult to identify under the microscope. Sometimes some is used Portland cement recognised by the relict textures of the clinker and the embedded quartz sand.

APPENDIX B

MECHANISMS OF VOLUMETRIC INSTABILITY IN IRON AND STEEL INDUSTRY SLAGS

Volumetric change with time can occur in some types of iron and steel industry slags. These mechanisms are briefly described in this section.

Blast Furnace Slags

Fresh-make air-cooled, i.e. crystalline, blast furnace slags are almost always volumetrically stable after cooling. The two mechanisms for volumetric instability listed in BS1047:1983 – **"Air Cooled Blast furnace Slag for use in Construction"** are:-

- a) Beta to gamma inversion of dicalcium silicate.
- b) Iron unsoundness.

a) Research by G H Thomas on this phase transformation has shown the transformation to be athermal rather than isothermal. In practical terms this means that inversion, and the expansion associated with it, can only occur during the cooling cycle. In fully cooled material there would appear to be no further risk of instability from this mechanism.

b) Iron unsoundness is a very rare form of instability frequently associated with operating problems in the blast furnace. TRS know of only one instance in over 40 years. The mechanism, which is a hydrolysis reaction, is immediately triggered off by the presence of water. Once water has initiated the reaction, the mechanism proceeds to completion. It is impossible to arrest the process once started; at least by methods operating in normal ambient conditions.

It follows that the risk of late expansion from either of these mechanisms in blast furnace slag is remote.

c) Sulphoaluminate Type Activity

Some years ago, G. H. Thomas discovered a third mechanism that may give rise to volumetric instability. The process is possible only in some old blast furnace slag altered by weathering. When the sulphide sulphur in the blast furnace slags is oxidised during

weathering to sulphate, under some circumstances reactions can take place within the **slag to produce an 'ettringite' type product. The process is somewhat analogous** to sulphatic attack on concrete and has a similar result - expansion of the mass and associated disruption.

For the mechanism to have any significance, the slag needs to have residual potential for this reaction. Evidence of past activity does not necessarily indicate further reaction is possible.

The TRS accelerated expansion test is, we believe, uniquely capable of identifying such slags, as well as instability attributable to free CaO and free MgO in steel slag & etc.

Basic Steel Slags

Basic steel slags commonly contain significant quantities of free CaO and free MgO. These free oxides are well known for the massive expansion associated with their hydration. In practical terms, it is impossible to forecast when hydration will take place, but it can be up to decades after the material was cooled – or placed. The reasons are complex, but include the varying density of the oxides, due to the variation in temperatures at which the products have been held in the furnace. Other factors influencing rate of hydration include:-

- the protection of slags by a reaction product at the oxide interface with the slag.
- the presence of the oxides as lime or magnesia rich solid solutions instead of the pure oxide.

The result is potential future volumetric instability but at an unforeseeable date. Periclase, i.e. free MgO, is relatively much slower than free CaO to hydrate.

Scrap High Magnesia Refractories

These are particularly undesirable components in fill as they commonly result in high concentrations of free MgO. The problems associated with these concentrations are similar to those where periclase is found in basic steel slag.

**Specialist Chemical Testing
(Tested Externally)**



Certificate of Analysis

Certificate Number 18-04702-2

17-Apr-18

Client Allied Exploration & Geotechnics Limited
Unit 25
Stella Gill Industrial Estate
Pelton Fell
DH2 2RG

Our Reference 18-04702-2

Client Reference 4155

Order No CH-1400

Contract Title The Former SSI Steelworks, Redcar - Ground Investigation Contract - Priority Areas Within SSI Landholdings - Contract 3

Description 2 Water samples.

Date Received 23-Feb-18

Date Started 27-Feb-18

Date Completed 17-Apr-18

Test Procedures Identified by prefix DETSn (details on request).

Notes **This report supersedes 18-04702-1, amendments.**

Opinions and interpretations are outside the laboratory's scope of ISO 17025 accreditation. This certificate is issued in accordance with the accreditation requirements of the United Kingdom Accreditation Service. The results reported herein relate only to the material supplied to the laboratory. This certificate shall not be reproduced except in full, without the prior written approval of the laboratory.

Approved By

Adam Fenwick
Contracts Manager





Summary of Chemical Analysis

Water Samples

Our Ref 18-04702-2

Client Ref 4155

The Former SSI Steelworks, Redcar - Ground

Investigation Contract - Priority Areas Within SSI

Contract Title Landholdings - Contract 3

Lab No	1303702	1303703
Sample ID	S3-BHA01	S3-BHA02
Depth		
Other ID		
Sample Type	EW	EW
Sampling Date	22/02/18	22/02/18
Sampling Time	n/s	n/s

Test	Method	LOD	Units		
Metals					
Arsenic, Dissolved	DETSC 2306	0.16	ug/l	2.3	0.66
Boron	DETSC 2123	100	ug/l	140	220
Cadmium, Dissolved	DETSC 2306	0.03	ug/l	< 0.03	0.06
Chromium, Dissolved	DETSC 2306	0.25	ug/l	< 0.25	< 0.25
Copper, Dissolved	DETSC 2306	0.4	ug/l	2.1	0.6
Lead, Dissolved	DETSC 2306	0.09	ug/l	0.13	0.09
Mercury, Dissolved	DETSC 2306	0.01	ug/l	< 0.01	< 0.01
Nickel, Dissolved	DETSC 2306	0.5	ug/l	1.4	4.2
Selenium, Dissolved	DETSC 2306	0.25	ug/l	3.9	2.9
Zinc, Dissolved	DETSC 2306	1.3	ug/l	2.8	4.2
Inorganics					
pH	DETSC 2008			8.5	8.6
Cyanide, Total	DETSC 2130	40	ug/l	< 40	< 40
Phenol - Monohydric	DETSC 2131	0.5	ug/l	< 0.5	< 0.5
Sulphate as SO4	DETSC 2055	0.1	mg/l	600	770
Petroleum Hydrocarbons					
Aliphatic C5-C6	DETSC 3322	0.1	ug/l	< 0.1	< 0.1
Aliphatic C6-C8	DETSC 3322	0.1	ug/l	< 0.1	< 0.1
Aliphatic C8-C10	DETSC 3322	0.1	ug/l	< 0.1	< 0.1
Aliphatic C10-C12	DETSC 3072*	1	ug/l	6.1	< 1.0
Aliphatic C12-C16	DETSC 3072*	1	ug/l	24	< 1.0
Aliphatic C16-C21	DETSC 3072*	1	ug/l	26	< 1.0
Aliphatic C21-C35	DETSC 3072*	1	ug/l	13	< 1.0
Aliphatic C5-C35	DETSC 3072*	10	ug/l	69	< 10
Aromatic C5-C7	DETSC 3322	0.1	ug/l	< 0.1	< 0.1
Aromatic C7-C8	DETSC 3322	0.1	ug/l	< 0.1	< 0.1
Aromatic C8-C10	DETSC 3322	0.1	ug/l	< 0.1	< 0.1
Aromatic C10-C12	DETSC 3072*	1	ug/l	< 1.0	< 1.0
Aromatic C12-C16	DETSC 3072*	1	ug/l	< 1.0	< 1.0
Aromatic C16-C21	DETSC 3072*	1	ug/l	< 1.0	< 1.0
Aromatic C21-C35	DETSC 3072*	1	ug/l	< 1.0	< 1.0
Aromatic C5-C35	DETSC 3072*	10	ug/l	< 10	< 10
TPH Ali/Aro Total	DETSC 3072*	10	ug/l	69	< 10
Benzene	DETSC 3322	1	ug/l	< 1.0	< 1.0
Toluene	DETSC 3322	1	ug/l	< 1.0	< 1.0
Ethylbenzene	DETSC 3322	1	ug/l	< 1.0	< 1.0
Xylene	DETSC 3322	1	ug/l	< 1.0	< 1.0

Summary of Chemical Analysis

Water Samples

Our Ref 18-04702-2

Client Ref 4155

The Former SSI Steelworks, Redcar - Ground

Investigation Contract - Priority Areas Within SSI

Contract Title Landholdings - Contract 3

Lab No	1303702	1303703
Sample ID	S3-BHA01	S3-BHA02
Depth		
Other ID		
Sample Type	EW	EW
Sampling Date	22/02/18	22/02/18
Sampling Time	n/s	n/s

Test	Method	LOD	Units		
PAHs					
Naphthalene	DETSC 3304	0.01	ug/l	0.04	< 0.01
Acenaphthylene	DETSC 3304	0.01	ug/l	< 0.01	< 0.01
Acenaphthene	DETSC 3304	0.01	ug/l	0.19	< 0.01
Fluorene	DETSC 3304	0.01	ug/l	0.15	< 0.01
Phenanthrene	DETSC 3304	0.01	ug/l	0.42	< 0.01
Anthracene	DETSC 3304	0.01	ug/l	0.10	< 0.01
Fluoranthene	DETSC 3304	0.01	ug/l	1.0	< 0.01
Pyrene	DETSC 3304	0.01	ug/l	1.2	0.02
Benzo(a)anthracene	DETSC 3304	0.01	ug/l	0.27	< 0.01
Chrysene	DETSC 3304	0.01	ug/l	0.32	< 0.01
Benzo(b)fluoranthene	DETSC 3304	0.01	ug/l	0.29	< 0.01
Benzo(k)fluoranthene	DETSC 3304	0.01	ug/l	0.12	< 0.01
Benzo(a)pyrene	DETSC 3304	0.01	ug/l	0.17	< 0.01
Indeno(1,2,3-c,d)pyrene	DETSC 3304	0.01	ug/l	0.11	< 0.01
Dibenzo(a,h)anthracene	DETSC 3304	0.01	ug/l	< 0.01	< 0.01
Benzo(g,h,i)perylene	DETSC 3304	0.01	ug/l	0.09	< 0.01
PAH Total	DETSC 3304	0.04	ug/l	4.5	< 0.04

Information in Support of the Analytical Results

Our Ref 18-04702-2
Client Ref 4155

The Former SSI Steelworks, Redcar - Ground Investigation Contract - Priority Areas Within SSI Landholdings - Contract 3
Contract

Containers Received & Deviating Samples

Lab No	Sample ID	Date Sampled	Containers Received	Holding time exceeded for tests	Inappropriate container for tests
1303702	S3-BHA01 WATER	22/02/18	GB 1L x2, GV x4, PB 1L		
1303703	S3-BHA02 WATER	22/02/18	GB 1L x2, GV x3, PB 1L		

Key: G-Glass P-Plastic B-Bottle V-Vial
DETS cannot be held responsible for the integrity of samples received whereby the laboratory did not undertake the sampling. In this instance samples received may be deviating. Deviating Sample criteria are based on British and International standards and laboratory trials in conjunction with the UKAS note 'Guidance on Deviating Samples'. All samples received are listed above. However, those samples that have additional comments in relation to hold time, inappropriate containers etc are deviating due to the reasons stated. This means that the analysis is accredited where applicable, but results may be compromised due to sample deviations. If no sampled date (soils) or date+time (waters) has been supplied then samples are deviating. However, if you are able to supply a sampled date (and time for waters) this will prevent samples being reported as deviating where specific hold times are not exceeded and where the container supplied is suitable.

Disposal

From the issue date of this test certificate, samples will be held for the following times prior to disposal :-
Soils - 1 month, Liquids - 2 weeks, Asbestos (test portion) - 6 months



Certificate of Analysis

Certificate Number 18-04650-1

12-Mar-18

Client Allied Exploration & Geotechnics Limited
Unit 25
Stella Gill Industrial Estate
Pelton Fell
DH2 2RG

Our Reference 18-04650-1

Client Reference 4155

Order No CH-1400

Contract Title The Former SSI Steelworks, Redcar - Ground Investigation Contract - Priority Areas Within SSI Landholdings, Contract 3

Description 4 Water samples.

Date Received 23-Feb-18

Date Started 26-Feb-18

Date Completed 12-Mar-18

Test Procedures Identified by prefix DETSn (details on request).

Notes **This report supersedes 18-04650, amendments.**

Opinions and interpretations are outside the laboratory's scope of ISO 17025 accreditation. This certificate is issued in accordance with the accreditation requirements of the United Kingdom Accreditation Service. The results reported herein relate only to the material supplied to the laboratory. This certificate shall not be reproduced except in full, without the prior written approval of the laboratory.

Approved By

A handwritten signature in black ink, appearing to read "A. Fenwick", is written over a light blue horizontal line.

Adam Fenwick
Contracts Manager



Summary of Chemical Analysis

Water Samples

Our Ref 18-04650-1

Client Ref 4155

The Former SSI Steelworks, Redcar - Ground

Investigation Contract - Priority Areas Within SSI

Contract Title Landholdings, Contract 3

Lab No	1303409	1303410	1303411	1303412
Sample ID	S3-BHB01	S3-BHB02	S3-BHB03	S3-BHB04D
Depth				
Other ID				
Sample Type	EW	EW	EW	EW
Sampling Date	22/02/18	22/02/18	22/02/18	22/02/18
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
Metals							
Arsenic, Dissolved	DETS 2306	0.16	ug/l	1.4	2.8	4.5	1.2
Boron	DETS 2123	100	ug/l	770	310	620	330
Cadmium, Dissolved	DETS 2306	0.03	ug/l	< 0.03	0.12	0.03	< 0.03
Chromium, Dissolved	DETS 2306	0.25	ug/l	0.91	1.3	< 0.25	< 0.25
Copper, Dissolved	DETS 2306	0.4	ug/l	0.8	0.8	< 0.4	1.1
Lead, Dissolved	DETS 2306	0.09	ug/l	< 0.09	< 0.09	< 0.09	< 0.09
Mercury, Dissolved	DETS 2306	0.01	ug/l	< 0.01	0.01	< 0.01	0.02
Nickel, Dissolved	DETS 2306	0.5	ug/l	1.5	2.0	3.3	2.6
Selenium, Dissolved	DETS 2306	0.25	ug/l	13	6.6	2.2	8.1
Zinc, Dissolved	DETS 2306	1.3	ug/l	2.0	2.5	2.4	1.7
Inorganics							
pH	DETS 2008			8.7	8.9	8.1	8.0
Cyanide, Total	DETS 2130	40	ug/l	< 40	< 40	< 40	< 40
Phenol - Monohydric	DETS 2131	0.5	ug/l	< 0.5	< 0.5	3.3	< 0.5
Sulphate as SO4	DETS 2055	0.1	mg/l	1600	450	470	760
Petroleum Hydrocarbons							
Aliphatic C5-C6	DETS 3322	0.1	ug/l	< 0.1	< 0.1	< 0.1	< 0.1
Aliphatic C6-C8	DETS 3322	0.1	ug/l	< 0.1	< 0.1	< 0.1	< 0.1
Aliphatic C8-C10	DETS 3322	0.1	ug/l	< 0.1	< 0.1	< 0.1	< 0.1
Aliphatic C10-C12	DETS 3072*	1	ug/l	< 1.0	< 1.0	< 1.0	< 1.0
Aliphatic C12-C16	DETS 3072*	1	ug/l	< 1.0	< 1.0	1.9	< 1.0
Aliphatic C16-C21	DETS 3072*	1	ug/l	< 1.0	< 1.0	25	< 1.0
Aliphatic C21-C35	DETS 3072*	1	ug/l	< 1.0	< 1.0	150	< 1.0
Aliphatic C5-C35	DETS 3072*	10	ug/l	< 10	< 10	170	< 10
Aromatic C5-C7	DETS 3322	0.1	ug/l	< 0.1	< 0.1	< 0.1	< 0.1
Aromatic C7-C8	DETS 3322	0.1	ug/l	< 0.1	< 0.1	< 0.1	< 0.1
Aromatic C8-C10	DETS 3322	0.1	ug/l	< 0.1	< 0.1	< 0.1	< 0.1
Aromatic C10-C12	DETS 3072*	1	ug/l	< 1.0	< 1.0	< 1.0	< 1.0
Aromatic C12-C16	DETS 3072*	1	ug/l	< 1.0	< 1.0	1.1	< 1.0
Aromatic C16-C21	DETS 3072*	1	ug/l	< 1.0	< 1.0	16	< 1.0
Aromatic C21-C35	DETS 3072*	1	ug/l	< 1.0	< 1.0	110	< 1.0
Aromatic C5-C35	DETS 3072*	10	ug/l	< 10	< 10	130	< 10
TPH Ali/Aro Total	DETS 3072*	10	ug/l	< 10	< 10	300	< 10
Benzene	DETS 3322	1	ug/l	< 1.0	< 1.0	< 1.0	< 1.0
Toluene	DETS 3322	1	ug/l	< 1.0	< 1.0	< 1.0	< 1.0
Ethylbenzene	DETS 3322	1	ug/l	< 1.0	< 1.0	< 1.0	< 1.0
Xylene	DETS 3322	1	ug/l	< 1.0	< 1.0	< 1.0	< 1.0
PAHs							

Summary of Chemical Analysis

Water Samples

Our Ref 18-04650-1

Client Ref 4155

The Former SSI Steelworks, Redcar - Ground

Investigation Contract - Priority Areas Within SSI

Contract Title Landholdings, Contract 3

Lab No	1303409	1303410	1303411	1303412
Sample ID	S3-BHB01	S3-BHB02	S3-BHB03	S3-BHB04D
Depth				
Other ID				
Sample Type	EW	EW	EW	EW
Sampling Date	22/02/18	22/02/18	22/02/18	22/02/18
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
Naphthalene	DETSC 3304	0.01	ug/l	0.04	0.03	0.41	0.02
Acenaphthylene	DETSC 3304	0.01	ug/l	0.01	< 0.01	< 0.10	0.01
Acenaphthene	DETSC 3304	0.01	ug/l	0.12	< 0.01	< 0.10	0.04
Fluorene	DETSC 3304	0.01	ug/l	0.04	0.04	< 0.10	< 0.01
Phenanthrene	DETSC 3304	0.01	ug/l	0.17	0.21	0.39	< 0.01
Anthracene	DETSC 3304	0.01	ug/l	0.08	< 0.01	< 0.10	< 0.01
Fluoranthene	DETSC 3304	0.01	ug/l	1.0	0.11	< 0.10	0.43
Pyrene	DETSC 3304	0.01	ug/l	1.0	0.15	< 0.10	0.45
Benzo(a)anthracene	DETSC 3304	0.01	ug/l	0.12	0.06	< 0.10	0.05
Chrysene	DETSC 3304	0.01	ug/l	0.13	0.23	< 0.10	0.05
Benzo(b)fluoranthene	DETSC 3304	0.01	ug/l	0.06	0.10	< 0.10	0.05
Benzo(k)fluoranthene	DETSC 3304	0.01	ug/l	0.02	< 0.01	< 0.10	< 0.01
Benzo(a)pyrene	DETSC 3304	0.01	ug/l	0.02	0.05	< 0.10	< 0.01
Indeno(1,2,3-c,d)pyrene	DETSC 3304	0.01	ug/l	< 0.01	< 0.01	< 0.10	< 0.01
Dibenzo(a,h)anthracene	DETSC 3304	0.01	ug/l	< 0.01	< 0.01	< 0.10	< 0.01
Benzo(g,h,i)perylene	DETSC 3304	0.01	ug/l	< 0.01	0.04	< 0.10	< 0.01
PAH Total	DETSC 3304	0.04	ug/l	2.8	1.0	< 1.60	1.1

Information in Support of the Analytical Results

Our Ref 18-04650-1
Client Ref 4155

The Former SSI Steelworks, Redcar - Ground Investigation Contract - Priority Areas Within SSI Landholdings, Contract 3
Contract

Containers Received & Deviating Samples

Lab No	Sample ID	Date Sampled	Containers Received	Holding time exceeded for tests	Inappropriate container for tests
1303409	S3-BHB01 WATER	22/02/18	GB 1L x2, GV x4, PB 1L		
1303410	S3-BHB02 WATER	22/02/18	GB 1L x2, GV x3, PB 1L		
1303411	S3-BHB03 WATER	22/02/18	GB 1L x2, GV x3, PB 1L		
1303412	S3-BHB04D WATER	22/02/18	GB 1L x2, GV x3, PB 1L		

Key: G-Glass P-Plastic B-Bottle V-Vial

DETS cannot be held responsible for the integrity of samples received whereby the laboratory did not undertake the sampling. In this instance samples received may be deviating. Deviating Sample criteria are based on British and International standards and laboratory trials in conjunction with the UKAS note 'Guidance on Deviating Samples'. All samples received are listed above. However, those samples that have additional comments in relation to hold time, inappropriate containers etc are deviating due to the reasons stated. This means that the analysis is accredited where applicable, but results may be compromised due to sample deviations. If no sampled date (soils) or date+time (waters) has been supplied then samples are deviating. However, if you are able to supply a sampled date (and time for waters) this will prevent samples being reported as deviating where specific hold times are not exceeded and where the container supplied is suitable.

Disposal

From the issue date of this test certificate, samples will be held for the following times prior to disposal :-

Soils - 1 month, Liquids - 2 weeks, Asbestos (test portion) - 6 months



Certificate of Analysis

Certificate Number 18-00913

18-Jan-18

Client Allied Exploration & Geotechnics Limited
Unit 25
Stella Gill Industrial Estate
Pelton Fell
DH2 2RG

Our Reference 18-00913

Client Reference 4155

Order No CH-1400

Contract Title The Former SSI Steelworks, Redcar - Ground Investigation
Contract - Priority Areas Within SSI Landholdings Contract 3

Description 7 Water samples.

Date Received 12-Jan-18

Date Started 12-Jan-18

Date Completed 18-Jan-18

Test Procedures Identified by prefix DETSn (details on request).

Notes Opinions and interpretations are outside the laboratory's scope of ISO 17025 accreditation. This certificate is issued in accordance with the accreditation requirements of the United Kingdom Accreditation Service. The results reported herein relate only to the material supplied to the laboratory. This certificate shall not be reproduced except in full, without the prior written approval of the laboratory.

Approved By

A handwritten signature in blue ink, appearing to read "A Fenwick", is positioned below the "Approved By" text.

Adam Fenwick
Contracts Manager



Summary of Chemical Analysis

Water Samples

Our Ref 18-00913

Client Ref 4155

The Former SSI Steelworks, Redcar -

Ground Investigation Contract - Priority

Areas Within SSI Landholdings Contract 3

Contract Title

Lab No	1283613	1283614	1283615	1283616
Sample ID	S3-BHA01	S3-BHA02	S3-BHB01	S3-BHB02
Depth				
Other ID	1	1	1	1
Sample Type	EW	EW	EW	EW
Sampling Date	10/01/18	10/01/18	10/01/18	10/01/18
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
Metals							
Antimony, Dissolved	DETSC 2306	0.17	ug/l	0.86	0.29	0.38	0.75
Arsenic, Dissolved	DETSC 2306	0.16	ug/l	2.6	1.0	1.4	2.9
Barium, Dissolved	DETSC 2306	0.26	ug/l	44	76	37	44
Beryllium, Dissolved	DETSC 2306*	0.1	ug/l	< 0.1	< 0.1	< 0.1	< 0.1
Boron	DETSC 2123	100	ug/l	280	280	880	530
Cadmium, Dissolved	DETSC 2306	0.03	ug/l	0.07	< 0.03	0.03	0.09
Chromium, Dissolved	DETSC 2306	0.25	ug/l	< 0.25	< 0.25	1.2	1.7
Copper, Dissolved	DETSC 2306	0.4	ug/l	3.4	0.8	1.2	0.6
Iron, Dissolved	DETSC 2306	5.5	ug/l	43	54	32	33
Lead, Dissolved	DETSC 2306	0.09	ug/l	0.21	0.31	< 0.09	0.15
Magnesium, Dissolved	DETSC 2306	0.02	mg/l	40	83	29	8.8
Manganese, Dissolved	DETSC 2306	0.22	ug/l	170	740	130	28
Mercury, Dissolved	DETSC 2306	0.01	ug/l	< 0.01	< 0.01	< 0.01	< 0.01
Nickel, Dissolved	DETSC 2306	0.5	ug/l	2.1	3.9	0.9	1.2
Selenium, Dissolved	DETSC 2306	0.25	ug/l	5.8	1.6	7.2	4.6
Vanadium, Dissolved	DETSC 2306	0.6	ug/l	6.0	1.1	16	73
Zinc, Dissolved	DETSC 2306	1.3	ug/l	4.3	2.8	< 1.3	6.4
Inorganics							
pH	DETSC 2008			8.6	7.6	9.0	9.5
Alkalinity as CaCO ₃ (Automated)	DETSC 2030	10	mg/l	38	240	32	37
Cyanide, Total	DETSC 2130	40	ug/l	< 40	< 40	< 40	< 40
Cyanide, Free	DETSC 2130	20	ug/l	< 20	< 20	< 20	< 20
Cyanide, Complex	DETSC 2130*	40	ug/l	< 40	< 40	< 40	< 40
Phenol - Monohydric	DETSC 2131	0.5	ug/l	< 0.5	< 0.5	< 0.5	< 0.5
Thiocyanate	DETSC 2130	40	ug/l	< 40	< 40	< 40	< 40
Total Dissolved Solids	DETSC 2035	5	mg/l	1200	1500	2700	890
Ammoniacal Nitrogen as N	DETSC 2207	0.015	mg/l	0.039	< 0.015	0.068	0.078
Chloride	DETSC 2055	0.1	mg/l	90	120	100	63
Sulphate as SO ₄	DETSC 2055	0.1	mg/l	690	700	1500	430

Summary of Chemical Analysis

Water Samples

Our Ref 18-00913

Client Ref 4155

The Former SSI Steelworks, Redcar -

Ground Investigation Contract - Priority

Areas Within SSI Landholdings Contract 3

Contract Title

Lab No	1283613	1283614	1283615	1283616
Sample ID	S3-BHA01	S3-BHA02	S3-BHB01	S3-BHB02
Depth				
Other ID	1	1	1	1
Sample Type	EW	EW	EW	EW
Sampling Date	10/01/18	10/01/18	10/01/18	10/01/18
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
Petroleum Hydrocarbons							
Aliphatic C5-C6	DETSC 3322	0.1	ug/l	< 0.1	< 0.1	< 0.1	< 0.1
Aliphatic C6-C8	DETSC 3322	0.1	ug/l	< 0.1	< 0.1	< 0.1	< 0.1
Aliphatic C8-C10	DETSC 3322	0.1	ug/l	< 0.1	< 0.1	< 0.1	< 0.1
Aliphatic C10-C12	DETSC 3072*	1	ug/l	< 1.0	6.1	< 1.0	3.1
Aliphatic C12-C16	DETSC 3072*	1	ug/l	< 1.0	15	< 1.0	4.2
Aliphatic C16-C21	DETSC 3072*	1	ug/l	< 1.0	17	< 1.0	5.3
Aliphatic C21-C35	DETSC 3072*	1	ug/l	< 1.0	13	< 1.0	13
Aliphatic C5-C35	DETSC 3072*	10	ug/l	< 10	52	< 10	26
Aromatic C5-C7	DETSC 3322	0.1	ug/l	< 0.1	< 0.1	< 0.1	< 0.1
Aromatic C7-C8	DETSC 3322	0.1	ug/l	< 0.1	< 0.1	< 0.1	< 0.1
Aromatic C8-C10	DETSC 3322	0.1	ug/l	< 0.1	< 0.1	< 0.1	< 0.1
Aromatic C10-C12	DETSC 3072*	1	ug/l	1.3	4.7	< 1.0	5.2
Aromatic C12-C16	DETSC 3072*	1	ug/l	5.5	7.3	< 1.0	7.1
Aromatic C16-C21	DETSC 3072*	1	ug/l	2.3	5.6	< 1.0	5.4
Aromatic C21-C35	DETSC 3072*	1	ug/l	< 1.0	20	< 1.0	6.3
Aromatic C5-C35	DETSC 3072*	10	ug/l	< 10	38	< 10	24
TPH Ali/Aro Total	DETSC 3072*	10	ug/l	< 10	90	< 10	50
PAHs							
Naphthalene	DETSC 3304	0.01	ug/l	< 0.01	< 0.01	< 0.01	0.06
Acenaphthylene	DETSC 3304	0.01	ug/l	0.02	< 0.01	0.13	0.01
Acenaphthene	DETSC 3304	0.01	ug/l	0.04	< 0.01	0.30	< 0.01
Fluorene	DETSC 3304	0.01	ug/l	0.02	< 0.01	0.02	0.02
Phenanthrene	DETSC 3304	0.01	ug/l	0.18	< 0.01	< 0.01	0.04
Anthracene	DETSC 3304	0.01	ug/l	0.06	< 0.01	0.07	0.02
Fluoranthene	DETSC 3304	0.01	ug/l	0.47	< 0.01	0.24	0.04
Pyrene	DETSC 3304	0.01	ug/l	0.46	< 0.01	0.20	0.04
Benzo(a)anthracene	DETSC 3304	0.01	ug/l	0.17	< 0.01	0.01	< 0.01
Chrysene	DETSC 3304	0.01	ug/l	0.18	< 0.01	0.02	< 0.01
Benzo(b)fluoranthene	DETSC 3304	0.01	ug/l	0.21	< 0.01	< 0.01	< 0.01
Benzo(k)fluoranthene	DETSC 3304	0.01	ug/l	0.10	< 0.01	< 0.01	< 0.01
Benzo(a)pyrene	DETSC 3304	0.01	ug/l	0.13	< 0.01	< 0.01	< 0.01
Indeno(1,2,3-c,d)pyrene	DETSC 3304	0.01	ug/l	0.14	< 0.01	< 0.01	< 0.01
Dibenzo(a,h)anthracene	DETSC 3304	0.01	ug/l	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(g,h,i)perylene	DETSC 3304	0.01	ug/l	0.15	< 0.01	< 0.01	< 0.01
PAH Total	DETSC 3304	0.04	ug/l	2.3	< 0.04	1.0	0.23

Summary of Chemical Analysis

Water Samples

Our Ref 18-00913

Client Ref 4155

The Former SSI Steelworks, Redcar -
Ground Investigation Contract - Priority
Areas Within SSI Landholdings Contract 3

Contract Title

Lab No	1283613	1283614	1283615	1283616
Sample ID	S3-BHA01	S3-BHA02	S3-BHB01	S3-BHB02
Depth				
Other ID	1	1	1	1
Sample Type	EW	EW	EW	EW
Sampling Date	10/01/18	10/01/18	10/01/18	10/01/18
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
PCBs							
PCB 28 + PCB 31	DETSC 3402	0.3	ug/l	< 0.3	< 0.3		
PCB 52	DETSC 3402	0.2	ug/l	< 0.2	< 0.2		
PCB 101	DETSC 3402	0.3	ug/l	< 0.3	< 0.3		
PCB 118 + PCB 123	DETSC 3402	0.6	ug/l	< 0.6	< 0.6		
PCB 138	DETSC 3402	0.2	ug/l	< 0.2	< 0.2		
PCB 153	DETSC 3402	0.2	ug/l	< 0.2	< 0.2		
PCB 180	DETSC 3402	0.2	ug/l	< 0.2	< 0.2		
PCB 7 Total	DETSC 3402	1	ug/l	< 1.0	< 1.0		
Phenols							
Phenol - Monohydric	DETSC 2130	100	ug/l	< 100	< 100	< 100	< 100

Summary of Chemical Analysis

Water Samples

Our Ref 18-00913

Client Ref 4155

The Former SSI Steelworks, Redcar -

Ground Investigation Contract - Priority

Areas Within SSI Landholdings Contract 3

Contract Title

Lab No	1283613	1283614	1283615	1283616
Sample ID	S3-BHA01	S3-BHA02	S3-BHB01	S3-BHB02
Depth				
Other ID	1	1	1	1
Sample Type	EW	EW	EW	EW
Sampling Date	10/01/18	10/01/18	10/01/18	10/01/18
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
VOCs							
Dichlorodifluoromethane	DETSC 3432	1	ug/l	< 1	< 1	< 1	< 1
Chloromethane	DETSC 3432	1	ug/l	< 1	< 1	< 1	< 1
Vinyl Chloride	DETSC 3432	1	ug/l	< 1	< 1	< 1	< 1
Bromomethane	DETSC 3432	1	ug/l	< 1	< 1	< 1	< 1
Chloroethane	DETSC 3432	1	ug/l	< 1	< 1	< 1	< 1
Trichlorofluoromethane	DETSC 3432*	1	ug/l	< 1	< 1	< 1	< 1
1,1-dichloroethylene	DETSC 3432	1	ug/l	< 1	< 1	< 1	< 1
Methylene Chloride	DETSC 3432*	27	ug/l	< 27	< 27	< 27	< 27
Trans-1,2-dichloroethylene	DETSC 3432	1	ug/l	< 1	< 1	< 1	< 1
1,1-dichloroethane	DETSC 3432	1	ug/l	< 1	< 1	< 1	< 1
Cis-1,2-dichloroethylene	DETSC 3432	1	ug/l	< 1	< 1	< 1	< 1
2,2-dichloropropane	DETSC 3432	2	ug/l	< 2	< 2	< 2	< 2
Bromochloromethane	DETSC 3432	4	ug/l	< 4	< 4	< 4	< 4
Chloroform	DETSC 3432	1	ug/l	< 1	< 1	< 1	< 1
1,1,1-trichloroethane	DETSC 3432	1	ug/l	< 1	< 1	< 1	< 1
1,1-dichloropropene	DETSC 3432	1	ug/l	< 1	< 1	< 1	< 1
Carbon tetrachloride	DETSC 3432	1	ug/l	< 1	< 1	< 1	< 1
Benzene	DETSC 3432	1	ug/l	< 1	< 1	< 1	< 1
1,2-dichloroethane	DETSC 3432	1	ug/l	< 1	< 1	< 1	< 1
Trichloroethylene	DETSC 3432*	1	ug/l	< 1	< 1	< 1	< 1
1,2-dichloropropane	DETSC 3432	1	ug/l	< 1	< 1	< 1	< 1
Dibromomethane	DETSC 3432	1	ug/l	< 1	< 1	< 1	< 1
Bromodichloromethane	DETSC 3432	4	ug/l	< 4	< 4	< 4	< 4
cis-1,3-dichloropropene	DETSC 3432	1	ug/l	< 1	< 1	< 1	< 1
Toluene	DETSC 3432	1	ug/l	< 1	< 1	< 1	< 1
trans-1,3-dichloropropene	DETSC 3432	1	ug/l	< 1	< 1	< 1	< 1
1,1,2-trichloroethane	DETSC 3432	1	ug/l	< 1	< 1	< 1	< 1
Tetrachloroethylene	DETSC 3432	1	ug/l	< 1	< 1	< 1	< 1
1,3-dichloropropane	DETSC 3432	1	ug/l	< 1	< 1	< 1	< 1
Dibromochloromethane	DETSC 3432	1	ug/l	< 1	< 1	< 1	< 1
1,2-dibromoethane	DETSC 3432	1	ug/l	< 1	< 1	< 1	< 1
Chlorobenzene	DETSC 3432	1	ug/l	< 1	< 1	< 1	< 1
1,1,1,2-tetrachloroethane	DETSC 3432	1	ug/l	< 1	< 1	< 1	< 1
Ethylbenzene	DETSC 3432	1	ug/l	< 1	< 1	< 1	< 1
m+p-Xylene	DETSC 3432	2	ug/l	< 2	< 2	< 2	< 2

Summary of Chemical Analysis

Water Samples

Our Ref 18-00913

Client Ref 4155

The Former SSI Steelworks, Redcar -

Ground Investigation Contract - Priority

Areas Within SSI Landholdings Contract 3

Contract Title

Lab No	1283613	1283614	1283615	1283616
Sample ID	S3-BHA01	S3-BHA02	S3-BHB01	S3-BHB02
Depth				
Other ID	1	1	1	1
Sample Type	EW	EW	EW	EW
Sampling Date	10/01/18	10/01/18	10/01/18	10/01/18
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
o-Xylene	DETSC 3432	1	ug/l	< 1	< 1	< 1	< 1
Styrene	DETSC 3432	1	ug/l	< 1	< 1	< 1	< 1
Bromoform	DETSC 3432	1	ug/l	< 1	< 1	< 1	< 1
Isopropylbenzene	DETSC 3432	1	ug/l	< 1	< 1	< 1	< 1
1,1,2,2-tetrachloroethane	DETSC 3432	1	ug/l	< 1	< 1	< 1	< 1
Bromobenzene	DETSC 3432	1	ug/l	< 1	< 1	< 1	< 1
1,2,3-trichloropropane	DETSC 3432	1	ug/l	< 1	< 1	< 1	< 1
n-propylbenzene	DETSC 3432	1	ug/l	< 1	< 1	< 1	< 1
2-chlorotoluene	DETSC 3432	1	ug/l	< 1	< 1	< 1	< 1
1,3,5-trimethylbenzene	DETSC 3432	1	ug/l	< 1	< 1	< 1	< 1
4-chlorotoluene	DETSC 3432	1	ug/l	< 1	< 1	< 1	< 1
Tert-butylbenzene	DETSC 3432	1	ug/l	< 1	< 1	< 1	< 1
1,2,4-trimethylbenzene	DETSC 3432	1	ug/l	< 1	< 1	< 1	< 1
sec-butylbenzene	DETSC 3432	1	ug/l	< 1	< 1	< 1	< 1
p-isopropyltoluene	DETSC 3432	1	ug/l	< 1	< 1	< 1	< 1
1,3-dichlorobenzene	DETSC 3432	2	ug/l	< 2	< 2	< 2	< 2
1,4-dichlorobenzene	DETSC 3432	1	ug/l	< 1	< 1	< 1	< 1
n-butylbenzene	DETSC 3432	1	ug/l	< 1	< 1	< 1	< 1
1,2-dichlorobenzene	DETSC 3432	1	ug/l	< 1	< 1	< 1	< 1
1,2-dibromo-3-chloropropane	DETSC 3432	1	ug/l	< 1	< 1	< 1	< 1
1,2,4-trichlorobenzene	DETSC 3432	1	ug/l	< 1	< 1	< 1	< 1
Hexachlorobutadiene	DETSC 3432	1	ug/l	< 1	< 1	< 1	< 1
1,2,3-trichlorobenzene	DETSC 3432	1	ug/l	< 1	< 1	< 1	< 1
MTBE	DETSC 3432*	1	ug/l	< 1	< 1	< 1	< 1

Summary of Chemical Analysis

Water Samples

Our Ref 18-00913

Client Ref 4155

The Former SSI Steelworks, Redcar -

Ground Investigation Contract - Priority

Areas Within SSI Landholdings Contract 3

Contract Title

Lab No	1283613	1283614	1283615	1283616
Sample ID	S3-BHA01	S3-BHA02	S3-BHB01	S3-BHB02
Depth				
Other ID	1	1	1	1
Sample Type	EW	EW	EW	EW
Sampling Date	10/01/18	10/01/18	10/01/18	10/01/18
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
SVOCs							
Phenol	DETSC 3434*	1	ug/l	< 1.0	< 1.0	< 1.0	< 1.0
Aniline	DETSC 3434*	1	ug/l	< 1.0	< 1.0	< 1.0	< 1.0
2-Chlorophenol	DETSC 3434*	1	ug/l	< 1.0	< 1.0	< 1.0	< 1.0
Benzyl Alcohol	DETSC 3434*	1	ug/l	< 1.0	< 1.0	< 1.0	< 1.0
2-Methylphenol	DETSC 3434*	1	ug/l	< 1.0	< 1.0	< 1.0	< 1.0
Bis(2-chloroisopropyl)ether	DETSC 3434*	1	ug/l	< 1.0	< 1.0	< 1.0	< 1.0
3&4-Methylphenol	DETSC 3434*	1	ug/l	< 1.0	< 1.0	< 1.0	< 1.0
Bis(2-chloroethoxy)methane	DETSC 3434*	1	ug/l	< 1.0	< 1.0	< 1.0	< 1.0
2,4-Dimethylphenol	DETSC 3434*	1	ug/l	< 1.0	< 1.0	< 1.0	< 1.0
2,4-Dichlorophenol	DETSC 3434*	1	ug/l	< 1.0	< 1.0	< 1.0	< 1.0
1,2,4-Trichlorobenzene	DETSC 3434*	1	ug/l	< 1.0	< 1.0	< 1.0	< 1.0
4-Chloro-3-methylphenol	DETSC 3434*	1	ug/l	< 1.0	< 1.0	< 1.0	< 1.0
2-Methylnaphthalene	DETSC 3434*	1	ug/l	< 1.0	< 1.0	< 1.0	< 1.0
Hexachlorocyclopentadiene	DETSC 3434*	1	ug/l	< 1.0	< 1.0	< 1.0	< 1.0
2,4,6-Trichlorophenol	DETSC 3434*	1	ug/l	< 1.0	< 1.0	< 1.0	< 1.0
2,4,5-Trichlorophenol	DETSC 3434*	1	ug/l	< 1.0	< 1.0	< 1.0	< 1.0
2-Chloronaphthalene	DETSC 3434*	1	ug/l	< 1.0	< 1.0	< 1.0	< 1.0
2-Nitroaniline	DETSC 3434*	1	ug/l	< 1.0	< 1.0	< 1.0	< 1.0
2,4-Dinitrotoluene	DETSC 3434*	1	ug/l	< 1.0	< 1.0	< 1.0	< 1.0
3-Nitroaniline	DETSC 3434*	1	ug/l	< 1.0	< 1.0	< 1.0	< 1.0
4-Nitrophenol	DETSC 3434*	1	ug/l	< 1.0	< 1.0	< 1.0	< 1.0
Dibenzofuran	DETSC 3434*	1	ug/l	< 1.0	< 1.0	< 1.0	< 1.0
2,6-Dinitrotoluene	DETSC 3434*	1	ug/l	< 1.0	< 1.0	< 1.0	< 1.0
2,3,4,6-Tetrachlorophenol	DETSC 3434*	1	ug/l	< 1.0	< 1.0	< 1.0	< 1.0
Diethylphthalate	DETSC 3434*	1	ug/l	< 1.0	< 1.0	< 1.0	< 1.0
4-Chlorophenylphenylether	DETSC 3434*	1	ug/l	< 1.0	< 1.0	< 1.0	< 1.0
4-Nitroaniline	DETSC 3434*	1	ug/l	< 1.0	< 1.0	< 1.0	< 1.0
Diphenylamine	DETSC 3434*	1	ug/l	< 1.0	< 1.0	< 1.0	< 1.0
4-Bromophenylphenylether	DETSC 3434*	1	ug/l	< 1.0	< 1.0	< 1.0	< 1.0
Hexachlorobenzene	DETSC 3434*	1	ug/l	< 1.0	< 1.0	< 1.0	< 1.0

Summary of Chemical Analysis

Water Samples

Our Ref 18-00913

Client Ref 4155

The Former SSI Steelworks, Redcar -

Ground Investigation Contract - Priority

Areas Within SSI Landholdings Contract 3

Contract Title

Lab No	1283613	1283614	1283615	1283616
Sample ID	S3-BHA01	S3-BHA02	S3-BHB01	S3-BHB02
Depth				
Other ID	1	1	1	1
Sample Type	EW	EW	EW	EW
Sampling Date	10/01/18	10/01/18	10/01/18	10/01/18
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
Bis(2-ethylhexyl)ester	DETSC 3434*	1	ug/l	< 1.0	< 1.0	< 1.0	< 1.0
Pentachlorophenol	DETSC 3434*	1	ug/l	< 1.0	< 1.0	< 1.0	< 1.0
Di-n-butylphthalate	DETSC 3434*	1	ug/l	< 1.0	< 1.0	< 1.0	< 1.0
Butylbenzylphthalate	DETSC 3434*	1	ug/l	< 1.0	< 1.0	< 1.0	< 1.0
Bis(2-ethylhexyl)phthalate	DETSC 3434*	1	ug/l	< 1.0	< 1.0	< 1.0	< 1.0
Di-n-octylphthalate	DETSC 3434*	1	ug/l	< 1.0	< 1.0	< 1.0	< 1.0
1,4-Dinitrobenzene	DETSC 3434*	1	ug/l	< 1.0	< 1.0	< 1.0	< 1.0
Dimethylphthalate	DETSC 3434*	1	ug/l	< 1.0	< 1.0	< 1.0	< 1.0
1,3-Dinitrobenzene	DETSC 3434*	1	ug/l	< 1.0	< 1.0	< 1.0	< 1.0
2,3,5,6-Tetrachlorophenol	DETSC 3434*	1	ug/l	< 1.0	< 1.0	< 1.0	< 1.0
Azobenzene	DETSC 3434*	1	ug/l	< 1.0	< 1.0	< 1.0	< 1.0
Carbazole	DETSC 3434*	1	ug/l	< 1.0	< 1.0	< 1.0	< 1.0
1-Methylnaphthalene	DETSC 3434*	1	ug/l	< 1.0	< 1.0	< 1.0	< 1.0

Summary of Chemical Analysis

Water Samples

Our Ref 18-00913

Client Ref 4155

The Former SSI Steelworks, Redcar -

Ground Investigation Contract - Priority

Areas Within SSI Landholdings Contract 3

Contract Title

Lab No	1283617	1283618	1283619
Sample ID	S3-BHB03	S3-BHB04	S3-BHB04
Depth		1.50	5.00
Other ID	1	1	1
Sample Type	EW	EW	EW
Sampling Date	10/01/18	10/01/18	10/01/18
Sampling Time	n/s	n/s	n/s

Test	Method	LOD	Units			
Metals						
Antimony, Dissolved	DETSC 2306	0.17	ug/l	0.44	0.41	0.55
Arsenic, Dissolved	DETSC 2306	0.16	ug/l	2.7	2.0	1.3
Barium, Dissolved	DETSC 2306	0.26	ug/l	180	120	71
Beryllium, Dissolved	DETSC 2306*	0.1	ug/l	< 0.1	< 0.1	< 0.1
Boron	DETSC 2123	100	ug/l	930	780	640
Cadmium, Dissolved	DETSC 2306	0.03	ug/l	0.03	0.05	< 0.03
Chromium, Dissolved	DETSC 2306	0.25	ug/l	< 0.25	3.7	< 0.25
Copper, Dissolved	DETSC 2306	0.4	ug/l	< 0.4	1.9	< 0.4
Iron, Dissolved	DETSC 2306	5.5	ug/l	170	17	12
Lead, Dissolved	DETSC 2306	0.09	ug/l	< 0.09	0.12	0.12
Magnesium, Dissolved	DETSC 2306	0.02	mg/l	77	36	63
Manganese, Dissolved	DETSC 2306	0.22	ug/l	1500	53	170
Mercury, Dissolved	DETSC 2306	0.01	ug/l	< 0.01	< 0.01	< 0.01
Nickel, Dissolved	DETSC 2306	0.5	ug/l	4.1	1.1	1.3
Selenium, Dissolved	DETSC 2306	0.25	ug/l	1.6	4.9	3.8
Vanadium, Dissolved	DETSC 2306	0.6	ug/l	6.6	11	2.8
Zinc, Dissolved	DETSC 2306	1.3	ug/l	2.9	43	36
Inorganics						
pH	DETSC 2008			8.1	8.0	8.3
Alkalinity as CaCO ₃ (Automated)	DETSC 2030	10	mg/l	170	120	140
Cyanide, Total	DETSC 2130	40	ug/l	< 40	< 40	< 40
Cyanide, Free	DETSC 2130	20	ug/l	< 20	< 20	< 20
Cyanide, Complex	DETSC 2130*	40	ug/l	< 40	< 40	< 40
Phenol - Monohydric	DETSC 2131	0.5	ug/l	5.2	1.6	< 0.5
Thiocyanate	DETSC 2130	40	ug/l	< 40	< 40	< 40
Total Dissolved Solids	DETSC 2035	5	mg/l	1100	1300	1300
Ammoniacal Nitrogen as N	DETSC 2207	0.015	mg/l	0.38	0.55	0.091
Chloride	DETSC 2055	0.1	mg/l	39	100	87
Sulphate as SO ₄	DETSC 2055	0.1	mg/l	540	6.1	600

Summary of Chemical Analysis

Water Samples

Our Ref 18-00913

Client Ref 4155

The Former SSI Steelworks, Redcar -

Ground Investigation Contract - Priority

Areas Within SSI Landholdings Contract 3

Contract Title

Lab No	1283617	1283618	1283619
Sample ID	S3-BHB03	S3-BHB04	S3-BHB04
Depth		1.50	5.00
Other ID	1	1	1
Sample Type	EW	EW	EW
Sampling Date	10/01/18	10/01/18	10/01/18
Sampling Time	n/s	n/s	n/s

Test	Method	LOD	Units			
Petroleum Hydrocarbons						
Aliphatic C5-C6	DETSC 3322	0.1	ug/l	< 0.1	< 0.1	< 0.1
Aliphatic C6-C8	DETSC 3322	0.1	ug/l	< 0.1	< 0.1	< 0.1
Aliphatic C8-C10	DETSC 3322	0.1	ug/l	< 0.1	< 0.1	< 0.1
Aliphatic C10-C12	DETSC 3072*	1	ug/l	2.3	< 1.0	3.5
Aliphatic C12-C16	DETSC 3072*	1	ug/l	1.8	< 1.0	3.9
Aliphatic C16-C21	DETSC 3072*	1	ug/l	14	< 1.0	5.4
Aliphatic C21-C35	DETSC 3072*	1	ug/l	50	< 1.0	11
Aliphatic C5-C35	DETSC 3072*	10	ug/l	68	< 10	24
Aromatic C5-C7	DETSC 3322	0.1	ug/l	< 0.1	< 0.1	< 0.1
Aromatic C7-C8	DETSC 3322	0.1	ug/l	< 0.1	< 0.1	< 0.1
Aromatic C8-C10	DETSC 3322	0.1	ug/l	< 0.1	< 0.1	< 0.1
Aromatic C10-C12	DETSC 3072*	1	ug/l	4.7	1.3	4.0
Aromatic C12-C16	DETSC 3072*	1	ug/l	5.2	< 1.0	8.3
Aromatic C16-C21	DETSC 3072*	1	ug/l	11	1.1	12
Aromatic C21-C35	DETSC 3072*	1	ug/l	34	1.1	11
Aromatic C5-C35	DETSC 3072*	10	ug/l	55	< 10	35
TPH Ali/Aro Total	DETSC 3072*	10	ug/l	120	< 10	59
PAHs						
Naphthalene	DETSC 3304	0.01	ug/l	0.82	0.40	9.0
Acenaphthylene	DETSC 3304	0.01	ug/l	0.06	0.26	0.17
Acenaphthene	DETSC 3304	0.01	ug/l	0.15	0.65	10
Fluorene	DETSC 3304	0.01	ug/l	0.33	0.29	3.7
Phenanthrene	DETSC 3304	0.01	ug/l	0.72	8.9	20
Anthracene	DETSC 3304	0.01	ug/l	0.08	1.6	32
Fluoranthene	DETSC 3304	0.01	ug/l	0.41	20	6.9
Pyrene	DETSC 3304	0.01	ug/l	0.48	16	4.6
Benzo(a)anthracene	DETSC 3304	0.01	ug/l	0.32	6.7	0.98
Chrysene	DETSC 3304	0.01	ug/l	0.40	9.2	0.88
Benzo(b)fluoranthene	DETSC 3304	0.01	ug/l	0.27	11	0.78
Benzo(k)fluoranthene	DETSC 3304	0.01	ug/l	0.09	5.1	0.36
Benzo(a)pyrene	DETSC 3304	0.01	ug/l	0.21	7.2	0.51
Indeno(1,2,3-c,d)pyrene	DETSC 3304	0.01	ug/l	0.10	6.9	0.40
Dibenzo(a,h)anthracene	DETSC 3304	0.01	ug/l	0.03	1.4	0.07
Benzo(g,h,i)perylene	DETSC 3304	0.01	ug/l	0.16	7.7	0.44
PAH Total	DETSC 3304	0.04	ug/l	4.6	100	92

Summary of Chemical Analysis

Water Samples

Our Ref 18-00913

Client Ref 4155

The Former SSI Steelworks, Redcar -
Ground Investigation Contract - Priority
Areas Within SSI Landholdings Contract 3

Contract Title

Lab No	1283617	1283618	1283619
Sample ID	S3-BHB03	S3-BHB04	S3-BHB04
Depth		1.50	5.00
Other ID	1	1	1
Sample Type	EW	EW	EW
Sampling Date	10/01/18	10/01/18	10/01/18
Sampling Time	n/s	n/s	n/s

Test	Method	LOD	Units			
PCBs						
PCB 28 + PCB 31	DETSC 3402	0.3	ug/l			
PCB 52	DETSC 3402	0.2	ug/l			
PCB 101	DETSC 3402	0.3	ug/l			
PCB 118 + PCB 123	DETSC 3402	0.6	ug/l			
PCB 138	DETSC 3402	0.2	ug/l			
PCB 153	DETSC 3402	0.2	ug/l			
PCB 180	DETSC 3402	0.2	ug/l			
PCB 7 Total	DETSC 3402	1	ug/l			
Phenols						
Phenol - Monohydric	DETSC 2130	100	ug/l	< 100	< 100	< 100

Summary of Chemical Analysis

Water Samples

Our Ref 18-00913

Client Ref 4155

The Former SSI Steelworks, Redcar -

Ground Investigation Contract - Priority

Areas Within SSI Landholdings Contract 3

Contract Title

Lab No	1283617	1283618	1283619
Sample ID	S3-BHB03	S3-BHB04	S3-BHB04
Depth		1.50	5.00
Other ID	1	1	1
Sample Type	EW	EW	EW
Sampling Date	10/01/18	10/01/18	10/01/18
Sampling Time	n/s	n/s	n/s

Test	Method	LOD	Units			
VOCS						
Dichlorodifluoromethane	DETSC 3432	1	ug/l	< 1	< 1	
Chloromethane	DETSC 3432	1	ug/l	< 1	< 1	
Vinyl Chloride	DETSC 3432	1	ug/l	< 1	< 1	
Bromomethane	DETSC 3432	1	ug/l	< 1	< 1	
Chloroethane	DETSC 3432	1	ug/l	< 1	< 1	
Trichlorofluoromethane	DETSC 3432*	1	ug/l	< 1	< 1	
1,1-dichloroethylene	DETSC 3432	1	ug/l	< 1	< 1	
Methylene Chloride	DETSC 3432*	27	ug/l	< 27	< 27	
Trans-1,2-dichloroethylene	DETSC 3432	1	ug/l	< 1	< 1	
1,1-dichloroethane	DETSC 3432	1	ug/l	< 1	< 1	
Cis-1,2-dichloroethylene	DETSC 3432	1	ug/l	< 1	< 1	
2,2-dichloropropane	DETSC 3432	2	ug/l	< 2	< 2	
Bromochloromethane	DETSC 3432	4	ug/l	< 4	< 4	
Chloroform	DETSC 3432	1	ug/l	< 1	< 1	
1,1,1-trichloroethane	DETSC 3432	1	ug/l	< 1	< 1	
1,1-dichloropropene	DETSC 3432	1	ug/l	< 1	< 1	
Carbon tetrachloride	DETSC 3432	1	ug/l	< 1	< 1	
Benzene	DETSC 3432	1	ug/l	< 1	< 1	
1,2-dichloroethane	DETSC 3432	1	ug/l	< 1	< 1	
Trichloroethylene	DETSC 3432*	1	ug/l	< 1	< 1	
1,2-dichloropropane	DETSC 3432	1	ug/l	< 1	< 1	
Dibromomethane	DETSC 3432	1	ug/l	< 1	< 1	
Bromodichloromethane	DETSC 3432	4	ug/l	< 4	< 4	
cis-1,3-dichloropropene	DETSC 3432	1	ug/l	< 1	< 1	
Toluene	DETSC 3432	1	ug/l	< 1	< 1	
trans-1,3-dichloropropene	DETSC 3432	1	ug/l	< 1	< 1	
1,1,2-trichloroethane	DETSC 3432	1	ug/l	< 1	< 1	
Tetrachloroethylene	DETSC 3432	1	ug/l	< 1	< 1	
1,3-dichloropropane	DETSC 3432	1	ug/l	< 1	< 1	
Dibromochloromethane	DETSC 3432	1	ug/l	< 1	< 1	
1,2-dibromoethane	DETSC 3432	1	ug/l	< 1	< 1	
Chlorobenzene	DETSC 3432	1	ug/l	< 1	< 1	
1,1,1,2-tetrachloroethane	DETSC 3432	1	ug/l	< 1	< 1	
Ethylbenzene	DETSC 3432	1	ug/l	< 1	< 1	
m+p-Xylene	DETSC 3432	2	ug/l	< 2	< 2	

Summary of Chemical Analysis

Water Samples

Our Ref 18-00913

Client Ref 4155

The Former SSI Steelworks, Redcar -

Ground Investigation Contract - Priority

Areas Within SSI Landholdings Contract 3

Contract Title

Lab No	1283617	1283618	1283619
Sample ID	S3-BHB03	S3-BHB04	S3-BHB04
Depth		1.50	5.00
Other ID	1	1	1
Sample Type	EW	EW	EW
Sampling Date	10/01/18	10/01/18	10/01/18
Sampling Time	n/s	n/s	n/s

Test	Method	LOD	Units			
o-Xylene	DETSC 3432	1	ug/l	< 1	< 1	
Styrene	DETSC 3432	1	ug/l	< 1	< 1	
Bromoform	DETSC 3432	1	ug/l	< 1	< 1	
Isopropylbenzene	DETSC 3432	1	ug/l	< 1	< 1	
1,1,2,2-tetrachloroethane	DETSC 3432	1	ug/l	< 1	< 1	
Bromobenzene	DETSC 3432	1	ug/l	< 1	< 1	
1,2,3-trichloropropane	DETSC 3432	1	ug/l	< 1	< 1	
n-propylbenzene	DETSC 3432	1	ug/l	< 1	< 1	
2-chlorotoluene	DETSC 3432	1	ug/l	< 1	< 1	
1,3,5-trimethylbenzene	DETSC 3432	1	ug/l	< 1	< 1	
4-chlorotoluene	DETSC 3432	1	ug/l	< 1	< 1	
Tert-butylbenzene	DETSC 3432	1	ug/l	< 1	< 1	
1,2,4-trimethylbenzene	DETSC 3432	1	ug/l	< 1	< 1	
sec-butylbenzene	DETSC 3432	1	ug/l	< 1	< 1	
p-isopropyltoluene	DETSC 3432	1	ug/l	< 1	< 1	
1,3-dichlorobenzene	DETSC 3432	2	ug/l	< 2	< 2	
1,4-dichlorobenzene	DETSC 3432	1	ug/l	< 1	< 1	
n-butylbenzene	DETSC 3432	1	ug/l	< 1	< 1	
1,2-dichlorobenzene	DETSC 3432	1	ug/l	< 1	< 1	
1,2-dibromo-3-chloropropane	DETSC 3432	1	ug/l	< 1	< 1	
1,2,4-trichlorobenzene	DETSC 3432	1	ug/l	< 1	< 1	
Hexachlorobutadiene	DETSC 3432	1	ug/l	< 1	< 1	
1,2,3-trichlorobenzene	DETSC 3432	1	ug/l	< 1	< 1	
MTBE	DETSC 3432*	1	ug/l	< 1	< 1	

Summary of Chemical Analysis

Water Samples

Our Ref 18-00913

Client Ref 4155

The Former SSI Steelworks, Redcar -

Ground Investigation Contract - Priority

Areas Within SSI Landholdings Contract 3

Contract Title

Lab No	1283617	1283618	1283619
Sample ID	S3-BHB03	S3-BHB04	S3-BHB04
Depth		1.50	5.00
Other ID	1	1	1
Sample Type	EW	EW	EW
Sampling Date	10/01/18	10/01/18	10/01/18
Sampling Time	n/s	n/s	n/s

Test	Method	LOD	Units			
SVOCs						
Phenol	DETSC 3434*	1	ug/l	< 1.0	< 1.0	
Aniline	DETSC 3434*	1	ug/l	< 1.0	< 1.0	
2-Chlorophenol	DETSC 3434*	1	ug/l	< 1.0	< 1.0	
Benzyl Alcohol	DETSC 3434*	1	ug/l	< 1.0	1.5	
2-Methylphenol	DETSC 3434*	1	ug/l	< 1.0	< 1.0	
Bis(2-chloroisopropyl)ether	DETSC 3434*	1	ug/l	< 1.0	< 1.0	
3&4-Methylphenol	DETSC 3434*	1	ug/l	< 1.0	< 1.0	
Bis(2-chloroethoxy)methane	DETSC 3434*	1	ug/l	< 1.0	< 1.0	
2,4-Dimethylphenol	DETSC 3434*	1	ug/l	< 1.0	< 1.0	
2,4-Dichlorophenol	DETSC 3434*	1	ug/l	< 1.0	< 1.0	
1,2,4-Trichlorobenzene	DETSC 3434*	1	ug/l	< 1.0	< 1.0	
4-Chloro-3-methylphenol	DETSC 3434*	1	ug/l	< 1.0	< 1.0	
2-Methylnaphthalene	DETSC 3434*	1	ug/l	< 1.0	< 1.0	
Hexachlorocyclopentadiene	DETSC 3434*	1	ug/l	< 1.0	< 1.0	
2,4,6-Trichlorophenol	DETSC 3434*	1	ug/l	< 1.0	< 1.0	
2,4,5-Trichlorophenol	DETSC 3434*	1	ug/l	< 1.0	< 1.0	
2-Chloronaphthalene	DETSC 3434*	1	ug/l	< 1.0	< 1.0	
2-Nitroaniline	DETSC 3434*	1	ug/l	< 1.0	< 1.0	
2,4-Dinitrotoluene	DETSC 3434*	1	ug/l	< 1.0	< 1.0	
3-Nitroaniline	DETSC 3434*	1	ug/l	< 1.0	< 1.0	
4-Nitrophenol	DETSC 3434*	1	ug/l	< 1.0	< 1.0	
Dibenzofuran	DETSC 3434*	1	ug/l	< 1.0	< 1.0	
2,6-Dinitrotoluene	DETSC 3434*	1	ug/l	< 1.0	< 1.0	
2,3,4,6-Tetrachlorophenol	DETSC 3434*	1	ug/l	< 1.0	< 1.0	
Diethylphthalate	DETSC 3434*	1	ug/l	< 1.0	< 1.0	
4-Chlorophenylphenylether	DETSC 3434*	1	ug/l	< 1.0	< 1.0	
4-Nitroaniline	DETSC 3434*	1	ug/l	< 1.0	< 1.0	
Diphenylamine	DETSC 3434*	1	ug/l	< 1.0	< 1.0	
4-Bromophenylphenylether	DETSC 3434*	1	ug/l	< 1.0	< 1.0	
Hexachlorobenzene	DETSC 3434*	1	ug/l	< 1.0	< 1.0	

Summary of Chemical Analysis

Water Samples

Our Ref 18-00913

Client Ref 4155

The Former SSI Steelworks, Redcar -

Ground Investigation Contract - Priority

Areas Within SSI Landholdings Contract 3

Contract Title

Lab No	1283617	1283618	1283619
Sample ID	S3-BHB03	S3-BHB04	S3-BHB04
Depth		1.50	5.00
Other ID	1	1	1
Sample Type	EW	EW	EW
Sampling Date	10/01/18	10/01/18	10/01/18
Sampling Time	n/s	n/s	n/s

Test	Method	LOD	Units			
Bis(2-ethylhexyl)ester	DETSC 3434*	1	ug/l	< 1.0	< 1.0	
Pentachlorophenol	DETSC 3434*	1	ug/l	< 1.0	< 1.0	
Di-n-butylphthalate	DETSC 3434*	1	ug/l	3.7	< 1.0	
Butylbenzylphthalate	DETSC 3434*	1	ug/l	< 1.0	< 1.0	
Bis(2-ethylhexyl)phthalate	DETSC 3434*	1	ug/l	< 1.0	2.4	
Di-n-octylphthalate	DETSC 3434*	1	ug/l	< 1.0	< 1.0	
1,4-Dinitrobenzene	DETSC 3434*	1	ug/l	< 1.0	< 1.0	
Dimethylphthalate	DETSC 3434*	1	ug/l	< 1.0	< 1.0	
1,3-Dinitrobenzene	DETSC 3434*	1	ug/l	< 1.0	< 1.0	
2,3,5,6-Tetrachlorophenol	DETSC 3434*	1	ug/l	< 1.0	< 1.0	
Azobenzene	DETSC 3434*	1	ug/l	< 1.0	< 1.0	
Carbazole	DETSC 3434*	1	ug/l	< 1.0	< 1.0	
1-Methylnaphthalene	DETSC 3434*	1	ug/l	< 1.0	< 1.0	

Information in Support of the Analytical Results

Our Ref 18-00913

Client Ref 4155

The Former SSI Steelworks, Redcar - Ground Investigation Contract - Priority Areas Within SSI Landholdings Contract 3
Contract

Containers Received & Deviating Samples

Lab No	Sample ID	Date Sampled	Containers Received	Holding time exceeded for tests	Inappropriate container for tests
1283613	S3-BHA01 WATER	10/01/18	GB 1L x2, GV x3, PB 1L x2		
1283614	S3-BHA02 WATER	10/01/18	GB 1L x2, GV x3, PB 1L x2		
1283615	S3-BHB01 WATER	10/01/18	GB 1L x2, GV x3, PB 1L x2		
1283616	S3-BHB02 WATER	10/01/18	GB 1L x2, GV x3, PB 1L x2		
1283617	S3-BHB03 WATER	10/01/18	GB 1L x2, GV x3, PB 1L x2		
1283618	S3-BHB04 1.50 WATER	10/01/18	GB 1L x2, GV x3, PB 1L x2		
1283619	S3-BHB04 5.00 WATER	10/01/18	GB 1L x2, GV x3, PB 1L x2		

Key: G-Glass P-Plastic B-Bottle V-Vial

DETS cannot be held responsible for the integrity of samples received whereby the laboratory did not undertake the sampling. In this instance samples received may be deviating. Deviating Sample criteria are based on British and International standards and laboratory trials in conjunction with the UKAS note 'Guidance on Deviating Samples'. All samples received are listed above. However, those samples that have additional comments in relation to hold time, inappropriate containers etc are deviating due to the reasons stated. This means that the analysis is accredited where applicable, but results may be compromised due to sample deviations. If no sampled date (soils) or date+time (waters) has been supplied then samples are deviating. However, if you are able to supply a sampled date (and time for waters) this will prevent samples being reported as deviating where specific hold times are not exceeded and where the container supplied is suitable.

Disposal

From the issue date of this test certificate, samples will be held for the following times prior to disposal :-

Soils - 1 month, Liquids - 2 weeks, Asbestos (test portion) - 6 months



Certificate of Analysis

Certificate Number 4155 Combined Report

12-Feb-18

Client Allied Exploration & Geotechnics Limited
Unit 25
Stella Gill Industrial Estate
Pelton Fell
DH2 2RG

Our Reference 4155 Combined Report

Client Reference 4155

Order No (not supplied)

Contract Title The Former SSI Steelworks, Redcar - Ground Investigation Contract - Priority
Areas Within SSI Landholdings, Contract 3

Description 293 Soil samples, 30 Leachate samples, 1 Misc sample.

Date Received 17-Oct-17

Date Started 18-Oct-17

Date Completed 12-Feb-18

Test Procedures Identified by prefix DETSn (details on request).

Notes Opinions and interpretations are outside the laboratory's scope of ISO 17025 accreditation. This certificate is issued in accordance with the accreditation requirements of the United Kingdom Accreditation Service. The results reported herein relate only to the material supplied to the laboratory. This certificate shall not be reproduced except in full, without the prior written approval of the laboratory.

Approved By

A handwritten signature in blue ink, appearing to read "A. Fenwick".

Adam Fenwick
Contracts Manager



Summary of Chemical Analysis

Matrix Descriptions

Our Ref 4155 Combined Report

Client Ref 4155

The Former SSI Steelworks, Redcar - Ground Investigation Contract - Priority Areas Within SSI Landholdings, Contract 3

Contract Title

Sample ID	Other ID	Depth	Lab No	Completed	Matrix Description
S3-TPA02	2	0.5	1248501	11/12/2017	Dark brown clayey, gravelly SAND
S3-TPA02	5	1.5	1248502	11/12/2017	Dark brown clayey, gravelly SAND (Made ground - brick)
S3-TPA03	5	1.8	1248503	11/12/2017	Dark brown clayey, gravelly SAND (Made ground - brick)
S3-TPA06	5	2	1248504	11/12/2017	Dark brown clayey, gravelly SAND (Made ground - brick)
S3-TPA06	8	2.75	1248505	11/12/2017	Dark brown sandy GRAVEL (sample matrix outside MCERTS scope of accreditation)
S3-TPA08	2	0.6	1248506	11/12/2017	Dark brown sandy GRAVEL (sample matrix outside MCERTS scope of accreditation)
S3-TPA11	7	2	1248507	11/12/2017	Brown gravelly, sandy, clayey (sample matrix outside MCERTS scope of accreditation)
S3-TPA12	5	1.5	1248508	11/12/2017	Dark brown gravelly, sandy CLAY
S3-TPA13	6	2	1248509	11/12/2017	Dark brown gravelly, sandy CLAY
S3-TPA13	9	3	1248510	11/12/2017	Brown gravelly, sandy CLAY
S3-TPB66	6	1.5	1248511	11/12/2017	Dark brown sandy GRAVEL (sample matrix outside MCERTS scope of accreditation)
S3-TPB68	5	1	1248512	11/12/2017	Dark grey white sandy GRAVEL (sample matrix outside MCERTS scope of accreditation)
S3-TPB69	2	0.2	1248513	11/12/2017	Dark brown gravelly, sandy CLAY
S3-TPB69	5	1	1248514	11/12/2017	Dark grey sandy GRAVEL (sample matrix outside MCERTS scope of accreditation)
S3-TPB71	6	1.5	1248515	11/12/2017	Dark brown sandy GRAVEL (sample matrix outside MCERTS scope of accreditation)
S3-TPB72	6	1.5	1248516	11/12/2017	Dark brown sandy GRAVEL (sample matrix outside MCERTS scope of accreditation)
S3-TPB72	9	2.5	1248517	11/12/2017	Dark brown gravelly, sandy CLAY
S3-TPB74	2	0.5	1248518	11/12/2017	Dark brown white sandy GRAVEL (sample matrix outside MCERTS scope of accreditation)
S3-TPB75	2	0.5	1248519	11/12/2017	Dark brown white sandy GRAVEL (sample matrix outside MCERTS scope of accreditation)
S3-TPA25	2	1	1248684	11/12/2017	Dark brown, sandy GRAVEL (sample matrix outside MCERTS scope of accreditation)
S3-TPA26	2	0.2	1248685	11/12/2017	Dark brown, sandy GRAVEL (sample matrix outside MCERTS scope of accreditation)
S3-TPA28	5	1	1248686	11/12/2017	Brown gravelly, sandy CLAY (Made ground - brick)
S3-TPA28	11	3.5	1248687	11/12/2017	Brown gravelly, sandy CLAY (Made ground - brick)
S3-TPA31	5	0.8	1248688	11/12/2017	Dark brown sandy GRAVEL (sample matrix outside MCERTS scope of accreditation)
S3-TPA31	8	2	1248689	11/12/2017	Brown gravelly, sandy CLAY
S3-TPA42	2	0.2	1248690	11/12/2017	Brown gravelly CLAY, sandy including odd rootlets
S3-TPB44	5	1.5	1248691	11/12/2017	Dark brown sandy GRAVEL (Made ground - brick) (sample matrix outside MCERTS scope of accreditation)
S3-TPB45	2	0.5	1248692	11/12/2017	Dark brown sandy GRAVEL (sample matrix outside MCERTS scope of accreditation)
S3-TPB50	5	1.3	1248693	11/12/2017	Brown gravelly, sandy CLAY
S3-TPB51	2	0.5	1248694	11/12/2017	Dark brown sandy GRAVEL (sample matrix outside MCERTS scope of accreditation)
S3-TPA15	3	1	1248695	11/12/2017	Dark brown sandy GRAVEL (sample matrix outside MCERTS scope of accreditation)
S3-TPA17	4	0.6	1248696	11/12/2017	Dark brown sandy GRAVEL (sample matrix outside MCERTS scope of accreditation)
S3-TPA18	4	1	1248697	11/12/2017	Dark brown gravelly, sandy CLAY
S3-TPA18	7	1.55	1248698	11/12/2017	White brown gravelly, sandy CLAY

Summary of Chemical Analysis

Matrix Descriptions

Our Ref 4155 Combined Report

Client Ref 4155

The Former SSI Steelworks, Redcar - Ground Investigation Contract - Priority Areas Within SSI Landholdings, Contract 3
Contract Title

Sample ID	Other ID	Depth	Lab No	Completed	Matrix Description
S3-TPA20	4	1	1248699	11/12/2017	Dark brown gravelly, sandy CLAY (Made ground - brick)
S3-TPA22	3	0.6	1248700	11/12/2017	Dark brown sandy GRAVEL (sample matrix outside MCERTS scope of accreditation)
S3-TPA22	6	1.8	1248701	11/12/2017	Dark brown sandy GRAVEL (sample matrix outside MCERTS scope of accreditation)
S3-TPB57	5	1.5	1248702	11/12/2017	Dark brown gravelly, sandy CLAY (Made ground - brick)
S3-TPB58	2	0.5	1248703	11/12/2017	Dark brown gravelly SAND
S3-TPB59	8	2.3	1248704	11/12/2017	Dark brown gravelly, sandy CLAY petrol odour
S3-TPB67	2	0.2	1248705	11/12/2017	Brown gravelly, sandy CLAY
S3-TPB67	9	2.8	1248706	11/12/2017	Brown gravelly, sandy CLAY
S3-TPA01	6	1.4	1250105	11/12/2017	Brown red gravelly, sandy CLAY (Possible made ground - brick)
S3-TPA04	5	1	1250106	11/12/2017	Dark brown gravelly, sandy CLAY (Possible made ground - slag)
S3-TPA05	2	0.5	1250107	11/12/2017	Dark grey clayey, sandy GRAVEL (Possible made ground - slag) (sample matrix outside MCERTS scope of accreditation)
S3-TPA05	5	2	1250108	11/12/2017	Dark brown gravelly, sandy CLAY (Possible made ground - slag)
S3-TPB63	2	0.5	1250109	11/12/2017	Dark brown gravelly, sandy CLAY (Possible made ground - slag)
S3-TPB64	5	1.5	1250110	11/12/2017	Dark brown grey clayey, sandy GRAVEL (Possible made ground - slag) (sample matrix outside MCERTS scope of accreditation)
S3-TPB65	6	1.5	1250111	11/12/2017	Dark brown grey clayey, sandy GRAVEL (Possible made ground - slag) (sample matrix outside MCERTS scope of accreditation)
S3-TPB70	3	0.5	1250112	11/12/2017	Dark grey, clayey, sandy GRAVEL (Possible made ground - slag) (sample matrix outside MCERTS scope of accreditation)
S3-TPB71	2	0.5	1250113	11/12/2017	Dark grey clayey, sandy GRAVEL (sample matrix outside MCERTS scope of accreditation)
S3-TPB06	2	0.5	1250312	11/12/2017	Dark grey gravelly, sandy CLAY
S3-TPB06	5	1	1250313	11/12/2017	Brown gravelly, sandy CLAY including numerous rootlets
S3-TPB12	5	0.6	1250314	11/12/2017	Grey white gravelly, sandy CLAY
S3-TPB14	5	0.7	1250315	11/12/2017	Dark brown gravelly, sandy CLAY
S3-TPB16	2	0.3	1250316	11/12/2017	Dark grey very gravelly, sandy CLAY
S3-TPB16	8	1.7	1250317	11/12/2017	Brown gravelly, sandy CLAY
S3-TPB54	6	1.5	1250318	11/12/2017	Dark grey sandy, gravelly CLAY
S3-TPB60	3	0.5	1250319	11/12/2017	Dark brown sandy, gravelly CLAY
S3-TPB61	5	1.5	1250320	11/12/2017	Dark grey sandy, gravelly CLAY
S3-TPB62	5	1.5	1250321	11/12/2017	Brown sandy, gravelly CLAY (Possible made ground - slag)
S3-TPB62	7	1.7	1250322	11/12/2017	Brown gravelly, sandy CLAY
S3-TPB03	2	0.7	1252170	11/12/2017	Dark brown very gravelly SAND (Possible made ground - slag)
S3-TPB04	10	2.5	1252171	11/12/2017	Dark brown very gravelly SAND
S3-TPB05	6	2	1252172	11/12/2017	Dark brown slightly clayey, very gravelly SAND (Made ground - brick, slag)
S3-TPB07	5	1.2	1252173	11/12/2017	Dark brown slightly clayey, very gravelly SAND including odd rootlets
S3-TPB08	1	0.5	1252174	11/12/2017	Dark brown very gravelly SAND (Possible made ground - slag)
S3-TPB09	1	0.2	1252175	11/12/2017	Dark grey gravelly SAND
S3-TPB10	5	1	1252176	11/12/2017	Dark brown slightly clayey, very gravelly SAND (Possible made ground - slag)
S3-TPB10	8	2	1252177	11/12/2017	Dark brown slightly clayey, very gravelly SAND (Possible made ground - brick)
S3-TPB26	2	0.5	1252178	11/12/2017	Dark brown clayey, gravelly SAND (Possible made ground - slag)
S3-TPB35	2	0.5	1252179	11/12/2017	Dark brown very sandy GRAVEL (sample matrix outside MCERTS scope of accreditation)
S3-TPB37	2	0.5	1252180	11/12/2017	Dark brown very sandy GRAVEL (Possible made ground - slag) (sample matrix outside MCERTS scope of accreditation)
S3-TPB37	5	1.5	1252181	11/12/2017	Dark brown gravelly, very sandy CLAY
S3-TPB41	2	0.5	1252182	11/12/2017	Dark brown, very gravelly, very clayey SAND (Made ground - metal)

Summary of Chemical Analysis

Matrix Descriptions

Our Ref 4155 Combined Report

Client Ref 4155

Contract Title The Former SSI Steelworks, Redcar - Ground Investigation Contract - Priority Areas Within SSI Landholdings, Contract 3

Sample ID	Other ID	Depth	Lab No	Completed	Matrix Description
S3-TPB46	3	0.4	1252183	11/12/2017	Dark brown very sandy GRAVEL (Possible made ground - slag) (sample matrix outside MCERTS scope of accreditation)
S3-TPB47	5	1.5	1252184	11/12/2017	Dark brown / grey very sandy GRAVEL (sample matrix outside MCERTS scope of accreditation)
S3-TPB48	2	0.5	1252185	11/12/2017	Dark brown slightly clayey, very sandy GRAVEL (sample matrix outside MCERTS scope of accreditation)
S3-TPB48	5	1.5	1252186	11/12/2017	Dark brown very gravelly SAND
S3-TPA34	2	0.8	1253426	11/12/2017	Dark brown very gravelly SAND (Possible made ground - brick) (Possible made ground - slag)
S3-TPA36	2	0.5	1253427	11/12/2017	Black dark brown very gravelly SAND (Possible made ground - slag)
S3-TPA39	2	0.3	1253429	11/12/2017	Dark brown very gravelly, clayey SAND (Possible made ground - slag)
S3-TPA39	5	0.8	1253430	11/12/2017	Dark brown slightly gravelly, sandy CLAY
S3-TPB38	6	1.5	1253431	11/12/2017	Grey very sandy CLAY (Made ground - slag) (Made ground - brick)
S3-TPB39	1	0.5	1253432	11/12/2017	Dark brown very sandy GRAVEL (Made ground - slag) (sample matrix outside MCERTS scope of accreditation)
S3-TPB43	8	2.5	1253433	11/12/2017	Dark brown very sandy GRAVEL (Made ground - slag) (sample matrix outside MCERTS scope of accreditation)
S3-TPB49	3	0.5	1253434	11/12/2017	Dark brown very sandy GRAVEL (Made ground - slag) (sample matrix outside MCERTS scope of accreditation)
S3-TPB49	8	2.2	1253435	11/12/2017	Dark brown slightly sandy, gravelly CLAY
S3-TPB01	2	0.1	1253579	11/12/2017	Dark brown very gravelly, slightly clayey SAND including odd organic matter
S3-TPB52	5	1.55	1253580	11/12/2017	Dark brown black very gravelly SAND (Made ground - slag) including odd rootlets
S3-TPB53	2	0.5	1253581	11/12/2017	Dark brown grey very gravelly SAND (Made ground - slag)
S3-TPB53	5	1.1	1253582	11/12/2017	Dark brown black slightly gravelly, slightly sandy CLAY including odd rootlets
S3-TPB55	3	0.5	1253583	11/12/2017	Dark brown slightly sandy CLAY
S3-TPB55	9	2.6	1253584	11/12/2017	Dark brown grey very gravelly SAND (Possible made ground - slag)
S3-TPB56	2	0.5	1253585	11/12/2017	Grey dark brown very gravelly SAND (Possible made ground - slag)
S3-TPB56	5	1.5	1253586	11/12/2017	Dark brown very gravelly, slightly clayey SAND
S3-TPA07	6	1.5	1253643	11/12/2017	Dark brown very gravelly, SAND (Made ground - brick) (Made ground - slag)
S3-TPB11	1	0.2	1253644	11/12/2017	Dark brown black very gravelly SAND (Possible made ground - slag)
S3-TPB13	2	0.15	1253645	11/12/2017	Dark brown very gravelly, slightly clayey SAND
S3-TPB13	11	2	1253646	11/12/2017	Dark brown very sandy GRAVEL (sample matrix outside MCERTS scope of accreditation)
S3-TPB13	14	2.7	1253647	11/12/2017	Brown slightly sandy CLAY
S3-TPB15	4	0.5	1253648	11/12/2017	Dark brown very gravelly SAND (Possible made ground - slag)
S3-TPB15	8	1.7	1253649	11/12/2017	Dark brown/brown slightly gravelly, slightly sandy CLAY (Possible made ground - brick)
S3-TPB17	2	0.2	1253650	11/12/2017	Dark brown very sandy SAND (Possible made ground - slag)
S3-TPB18	4	1.2	1253651	11/12/2017	Dark brown very gravelly SAND (Possible made ground - slag)
S3-TPB18	10	2.2	1253652	11/12/2017	Dark grey slightly sandy CLAY
S3-TPB21	2	0.4	1253653	11/12/2017	Dark brown very gravelly, slightly clayey SAND (Possible made ground - slag)
S3-TPB22	2	0.7	1253654	11/12/2017	Dark brown gravelly, sandy CLAY
S3-TPB22	6	1.9	1253655	11/12/2017	Dark brown very gravelly, very sandy CLAY petrol odour (Possible made ground - slag)
S3-TPB25	6	1.5	1253656	11/12/2017	Dark brown slightly gravelly, slightly sandy CLAY
S3-TPB27	2	0.5	1253657	11/12/2017	Dark brown very gravelly, slightly clayey SAND (Possible made ground - slag)
S3-TPB29	2	0.5	1253658	11/12/2017	Dark brown very gravelly, slightly clayey SAND
S3-TPB30	2	0.5	1253659	11/12/2017	Dark brown very gravelly SAND (Possible made ground - slag)

Summary of Chemical Analysis

Matrix Descriptions

Our Ref 4155 Combined Report

Client Ref 4155

Contract Title The Former SSI Steelworks, Redcar - Ground Investigation Contract - Priority Areas Within SSI Landholdings, Contract 3

Sample ID	Other ID	Depth	Lab No	Completed	Matrix Description
S3-TPB30	5	1.5	1253660	11/12/2017	Dark brown very gravelly SAND (Possible made ground - slag) (Made ground - brick)
S3-TPB31	2	0.5	1253661	11/12/2017	Dark brown black very gravelly SAND (Made ground - slag)
S3-TPB36	6	1.5	1253662	11/12/2017	Black dark brown very gravelly SAND (Made ground - slag)
S3-TPB42	8	2.5	1253747	11/12/2017	Grey sandy GRAVEL (sample matrix outside MCERTS scope of accreditation)
S3-BHB01	7	3.8	1256611	11/12/2017	Brown slightly gravelly, sandy CLAY
S3-BHA01	4	3.5	1259305	11/12/2017	Brown gravelly, sandy CLAY
S3-TPB03	8	2.7	1275450	11/12/2017	Grey sandy GRAVEL (Possible made ground - slag) (sample matrix outside MCERTS scope of accreditation)

Summary of Chemical Analysis

Soil/Misc Samples

Our Ref 4155 Combined Report

Client Ref 4155

The Former SSI Steelworks, Redcar - Ground

Investigation Contract - Priority Areas Within SSI

Contract Title Landholdings, Contract 3

Lab No	1244877	1244878	1244879	1244880
Sample ID	S3-TPA09	S3-TPA09	S3-TPA10	S3-TPA29
Depth	0.20	0.80	1.00	0.50
Other ID	2	4	4	2
Sample Type	ES	ES	ES	ES
Sampling Date	13/10/17	13/10/17	13/10/17	13/10/17
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
Asbestos Quantification	DETSC 1102	0					
Metals							
Aluminium	DETSC 2301*	1	mg/kg		40000		11000
Antimony	DETSC 2301*	1	mg/kg		< 1.0	18	10
Arsenic	DETSC 2301#	0.2	mg/kg	6.2	2.4	20	14
Barium	DETSC 2301#	1.5	mg/kg		420	500	440
Beryllium	DETSC 2301#	0.2	mg/kg		3.4	2.0	1.2
Boron, Water Soluble	DETSC 2123#	0.2	mg/kg	3.6	3.6	3.0	2.5
Cadmium	DETSC 2301#	0.1	mg/kg	0.2	0.1	1.3	0.6
Chromium	DETSC 2301#	0.15	mg/kg	49	31	200	670
Chromium, Hexavalent	DETSC 2204*	1	mg/kg		< 1.0	< 1.0	< 1.0
Copper	DETSC 2301#	0.2	mg/kg	26	11	230	50
Iron	DETSC 2301	25	mg/kg		11000		110000
Lead	DETSC 2301#	0.3	mg/kg	19	4.9	160	98
Magnesium	DETSC 2301*	1	mg/kg		23000		21000
Manganese	DETSC 2301#	20	mg/kg		5800		21000
Mercury	DETSC 2325#	0.05	mg/kg	< 0.05	< 0.05	1.2	< 0.05
Molybdenum	DETSC 2301#	0.4	mg/kg		0.7	6.6	2.4
Nickel	DETSC 2301#	1	mg/kg	8.8	3.2	46	18
Silicon	DETSC 2301*	10	mg/kg		64000		22000
Vanadium	DETSC 2301#	0.8	mg/kg		240	510	3000
Zinc	DETSC 2301#	1	mg/kg	82	42	370	130
Inorganics							
Loss on Ignition at 440oC	DETSC 2003#	0.01	%				
pH	DETSC 2008#			10.1	11.1	10.5	11.7
Cyanide, Total	DETSC 2130#	0.1	mg/kg	0.2	< 0.1	43	1.2
Cyanide, Free	DETSC 2130#	0.1	mg/kg			0.5	0.5
Cyanide, Complex	DETSC 2130*	0.2	mg/kg			42	0.7
Thiocyanate	DETSC 2130#	0.6	mg/kg			< 0.6	< 0.6
FOC	DETSC 2002	0.001					
Organic matter	DETSC 2002#	0.1	%	3.3	2.1	2.3	6.9
Sulphate Aqueous Extract as SO4	DETSC 2076#	10	mg/l	1200	1100	270	410
Sulphur (free)	DETSC 3049#	0.75	mg/kg		< 0.75	< 0.75	< 0.75
Sulphur as S, Total	DETSC 2320	0.01	%				
Sulphate as SO4, Total	DETSC 2321#	0.01	%				

Summary of Chemical Analysis

Soil/Misc Samples

Our Ref 4155 Combined Report

Client Ref 4155

The Former SSI Steelworks, Redcar - Ground

Investigation Contract - Priority Areas Within SSI

Contract Title Landholdings, Contract 3

Lab No	1244877	1244878	1244879	1244880
Sample ID	S3-TPA09	S3-TPA09	S3-TPA10	S3-TPA29
Depth	0.20	0.80	1.00	0.50
Other ID	2	4	4	2
Sample Type	ES	ES	ES	ES
Sampling Date	13/10/17	13/10/17	13/10/17	13/10/17
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
Petroleum Hydrocarbons							
Aliphatic C5-C6	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aliphatic C6-C8	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aliphatic C8-C10	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aliphatic C10-C12	DETSC 3072#	1.5	mg/kg	< 1.5	< 1.5	< 1.5	< 1.5
Aliphatic C12-C16	DETSC 3072#	1.2	mg/kg	2.0	< 1.2	< 1.2	< 1.2
Aliphatic C16-C21	DETSC 3072#	1.5	mg/kg	1.6	< 1.5	< 1.5	< 1.5
Aliphatic C21-C35	DETSC 3072#	3.4	mg/kg	22	< 3.4	< 3.4	3.5
Aliphatic C5-C35	DETSC 3072*	10	mg/kg	27	< 10	< 10	< 10
Aromatic C5-C7	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aromatic C7-C8	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aromatic C8-C10	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aromatic C10-C12	DETSC 3072#	0.9	mg/kg	4.0	< 0.9	1.0	< 0.9
Aromatic C12-C16	DETSC 3072#	0.5	mg/kg	3.7	< 0.5	6.1	< 0.5
Aromatic C16-C21	DETSC 3072#	0.6	mg/kg	19	1.8	120	3.4
Aromatic C21-C35	DETSC 3072#	1.4	mg/kg	43	1.4	210	7.4
Aromatic C5-C35	DETSC 3072*	10	mg/kg	69	< 10	340	11
TPH Ali/Aro Total	DETSC 3072*	10	mg/kg	96	< 10	340	14
PAHs							
Naphthalene	DETSC 3303#	0.03	mg/kg	< 0.30	< 0.03	0.67	< 0.03
Acenaphthylene	DETSC 3303#	0.03	mg/kg	0.64	0.40	1.1	0.05
Acenaphthene	DETSC 3303#	0.03	mg/kg	0.66	0.11	< 0.30	0.12
Fluorene	DETSC 3303	0.03	mg/kg	0.45	0.08	1.9	0.10
Phenanthrene	DETSC 3303#	0.03	mg/kg	6.9	0.86	13	0.65
Anthracene	DETSC 3303	0.03	mg/kg	3.2	1.1	6.5	0.16
Fluoranthene	DETSC 3303#	0.03	mg/kg	53	10	77	1.4
Pyrene	DETSC 3303#	0.03	mg/kg	50	10	56	1.2
Benzo(a)anthracene	DETSC 3303#	0.03	mg/kg	22	5.0	30	0.56
Chrysene	DETSC 3303	0.03	mg/kg	19	4.9	23	0.57
Benzo(b)fluoranthene	DETSC 3303#	0.03	mg/kg	25	7.2	40	0.64
Benzo(k)fluoranthene	DETSC 3303#	0.03	mg/kg	9.5	2.6	18	0.25
Benzo(a)pyrene	DETSC 3303#	0.03	mg/kg	15	4.1	25	0.36
Indeno(1,2,3-c,d)pyrene	DETSC 3303#	0.03	mg/kg	7.8	2.2	17	0.22
Dibenzo(a,h)anthracene	DETSC 3303#	0.03	mg/kg	2.2	0.77	2.8	0.07
Benzo(g,h,i)perylene	DETSC 3303#	0.03	mg/kg	9.1	2.4	18	0.26
PAH - USEPA 16, Total	DETSC 3303	0.1	mg/kg	< 203.87	52	330	6.6

Summary of Chemical Analysis

Soil/Misc Samples

Our Ref 4155 Combined Report

Client Ref 4155

The Former SSI Steelworks, Redcar - Ground

Investigation Contract - Priority Areas Within SSI

Contract Title Landholdings, Contract 3

Lab No	1244877	1244878	1244879	1244880
Sample ID	S3-TPA09	S3-TPA09	S3-TPA10	S3-TPA29
Depth	0.20	0.80	1.00	0.50
Other ID	2	4	4	2
Sample Type	ES	ES	ES	ES
Sampling Date	13/10/17	13/10/17	13/10/17	13/10/17
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
PCBs							
PCB 28 + PCB 31	DETSC 3401#	0.01	mg/kg				
PCB 52	DETSC 3401#	0.01	mg/kg				
PCB 101	DETSC 3401#	0.01	mg/kg				
PCB 118	DETSC 3401#	0.01	mg/kg				
PCB 153	DETSC 3401#	0.01	mg/kg				
PCB 138	DETSC 3401#	0.01	mg/kg				
PCB 180	DETSC 3401#	0.01	mg/kg				
PCB 7 Total	DETSC 3401#	0.01	mg/kg				
Phenols							
Phenol - Monohydric	DETSC 2130#	0.3	mg/kg	< 0.3	< 0.3	< 0.3	< 0.3

Summary of Chemical Analysis

Soil/Misc Samples

Our Ref 4155 Combined Report

Client Ref 4155

The Former SSI Steelworks, Redcar - Ground

Investigation Contract - Priority Areas Within SSI

Contract Title Landholdings, Contract 3

Lab No	1244881	1244882	1244883	1244884
Sample ID	S3-TPA32	S3-TPB19	S3-TPB20	S3-TPB23
Depth	1.00	1.50	1.70	0.50
Other ID	4	6	6	3
Sample Type	ES	ES	ES	ES
Sampling Date	13/10/17	13/10/17	13/10/17	13/10/17
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
Asbestos Quantification	DETSC 1102	0					
Metals							
Aluminium	DETSC 2301*	1	mg/kg		23000		27000
Antimony	DETSC 2301*	1	mg/kg	2.8	3.3	1.7	1.4
Arsenic	DETSC 2301#	0.2	mg/kg	19	13	13	5.1
Barium	DETSC 2301#	1.5	mg/kg	570	680	300	300
Beryllium	DETSC 2301#	0.2	mg/kg	2.3	2.4	1.3	2.7
Boron, Water Soluble	DETSC 2123#	0.2	mg/kg	2.0	12	2.5	13
Cadmium	DETSC 2301#	0.1	mg/kg	0.1	0.6	0.2	0.3
Chromium	DETSC 2301#	0.15	mg/kg	140	170	55	71
Chromium, Hexavalent	DETSC 2204*	1	mg/kg	< 1.0	< 1.0	< 1.0	< 1.0
Copper	DETSC 2301#	0.2	mg/kg	92	37	48	22
Iron	DETSC 2301	25	mg/kg		65000		34000
Lead	DETSC 2301#	0.3	mg/kg	40	70	37	24
Magnesium	DETSC 2301*	1	mg/kg		21000		27000
Manganese	DETSC 2301#	20	mg/kg		32000		8400
Mercury	DETSC 2325#	0.05	mg/kg	0.09	0.25	0.06	0.06
Molybdenum	DETSC 2301#	0.4	mg/kg	4.6	2.4	1.8	2.0
Nickel	DETSC 2301#	1	mg/kg	39	19	32	11
Silicon	DETSC 2301*	10	mg/kg		110000		87000
Vanadium	DETSC 2301#	0.8	mg/kg	430	500	130	180
Zinc	DETSC 2301#	1	mg/kg	58	170	95	92
Inorganics							
Loss on Ignition at 440oC	DETSC 2003#	0.01	%				
pH	DETSC 2008#			11.2	11.2	10.5	11.2
Cyanide, Total	DETSC 2130#	0.1	mg/kg	3.4	0.4	0.6	0.1
Cyanide, Free	DETSC 2130#	0.1	mg/kg			< 0.1	
Cyanide, Complex	DETSC 2130*	0.2	mg/kg			0.6	
Thiocyanate	DETSC 2130#	0.6	mg/kg			< 0.6	
FOC	DETSC 2002	0.001					
Organic matter	DETSC 2002#	0.1	%	2.5	3.1	2.4	1.2
Sulphate Aqueous Extract as SO4	DETSC 2076#	10	mg/l	320	200	440	310
Sulphur (free)	DETSC 3049#	0.75	mg/kg	3.3	6.5	< 0.75	38
Sulphur as S, Total	DETSC 2320	0.01	%				
Sulphate as SO4, Total	DETSC 2321#	0.01	%				

Summary of Chemical Analysis

Soil/Misc Samples

Our Ref 4155 Combined Report

Client Ref 4155

The Former SSI Steelworks, Redcar - Ground

Investigation Contract - Priority Areas Within SSI

Contract Title Landholdings, Contract 3

Lab No	1244881	1244882	1244883	1244884
Sample ID	S3-TPA32	S3-TPB19	S3-TPB20	S3-TPB23
Depth	1.00	1.50	1.70	0.50
Other ID	4	6	6	3
Sample Type	ES	ES	ES	ES
Sampling Date	13/10/17	13/10/17	13/10/17	13/10/17
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
Petroleum Hydrocarbons							
Aliphatic C5-C6	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aliphatic C6-C8	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aliphatic C8-C10	DETSC 3321*	0.01	mg/kg	6.3	< 0.01	< 0.01	< 0.01
Aliphatic C10-C12	DETSC 3072#	1.5	mg/kg	120	< 1.5	< 1.5	< 1.5
Aliphatic C12-C16	DETSC 3072#	1.2	mg/kg	430	< 1.2	< 1.2	< 1.2
Aliphatic C16-C21	DETSC 3072#	1.5	mg/kg	370	< 1.5	< 1.5	< 1.5
Aliphatic C21-C35	DETSC 3072#	3.4	mg/kg	150	< 3.4	< 3.4	12
Aliphatic C5-C35	DETSC 3072*	10	mg/kg	1100	< 10	< 10	14
Aromatic C5-C7	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aromatic C7-C8	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aromatic C8-C10	DETSC 3321*	0.01	mg/kg	4.8	< 0.01	< 0.01	< 0.01
Aromatic C10-C12	DETSC 3072#	0.9	mg/kg	34	< 0.9	< 0.9	< 0.9
Aromatic C12-C16	DETSC 3072#	0.5	mg/kg	210	< 0.5	< 0.5	< 0.5
Aromatic C16-C21	DETSC 3072#	0.6	mg/kg	310	< 0.6	< 0.6	< 0.6
Aromatic C21-C35	DETSC 3072#	1.4	mg/kg	200	< 1.4	< 1.4	15
Aromatic C5-C35	DETSC 3072*	10	mg/kg	750	< 10	< 10	15
TPH Ali/Aro Total	DETSC 3072*	10	mg/kg	1800	< 10	< 10	29
PAHs							
Naphthalene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	0.04	< 0.03
Acenaphthylene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	< 0.03	< 0.03
Acenaphthene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	< 0.03	< 0.03
Fluorene	DETSC 3303	0.03	mg/kg	< 0.03	< 0.03	< 0.03	< 0.03
Phenanthrene	DETSC 3303#	0.03	mg/kg	< 0.03	0.05	0.11	0.07
Anthracene	DETSC 3303	0.03	mg/kg	< 0.03	< 0.03	< 0.03	< 0.03
Fluoranthene	DETSC 3303#	0.03	mg/kg	0.64	0.10	0.12	0.11
Pyrene	DETSC 3303#	0.03	mg/kg	0.81	0.09	0.09	0.10
Benzo(a)anthracene	DETSC 3303#	0.03	mg/kg	0.36	0.06	0.04	0.06
Chrysene	DETSC 3303	0.03	mg/kg	0.46	0.07	0.05	0.07
Benzo(b)fluoranthene	DETSC 3303#	0.03	mg/kg	0.47	0.09	0.04	0.08
Benzo(k)fluoranthene	DETSC 3303#	0.03	mg/kg	0.17	< 0.03	< 0.03	< 0.03
Benzo(a)pyrene	DETSC 3303#	0.03	mg/kg	0.25	0.04	< 0.03	0.04
Indeno(1,2,3-c,d)pyrene	DETSC 3303#	0.03	mg/kg	0.15	0.05	< 0.03	0.04
Dibenzo(a,h)anthracene	DETSC 3303#	0.03	mg/kg	0.05	< 0.03	< 0.03	< 0.03
Benzo(g,h,i)perylene	DETSC 3303#	0.03	mg/kg	0.19	0.05	< 0.03	0.04
PAH - USEPA 16, Total	DETSC 3303	0.1	mg/kg	3.6	0.59	0.47	0.61

Summary of Chemical Analysis

Soil/Misc Samples

Our Ref 4155 Combined Report

Client Ref 4155

The Former SSI Steelworks, Redcar - Ground

Investigation Contract - Priority Areas Within SSI

Contract Title Landholdings, Contract 3

Lab No	1244881	1244882	1244883	1244884
Sample ID	S3-TPA32	S3-TPB19	S3-TPB20	S3-TPB23
Depth	1.00	1.50	1.70	0.50
Other ID	4	6	6	3
Sample Type	ES	ES	ES	ES
Sampling Date	13/10/17	13/10/17	13/10/17	13/10/17
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
PCBs							
PCB 28 + PCB 31	DETSC 3401#	0.01	mg/kg				
PCB 52	DETSC 3401#	0.01	mg/kg				
PCB 101	DETSC 3401#	0.01	mg/kg				
PCB 118	DETSC 3401#	0.01	mg/kg				
PCB 153	DETSC 3401#	0.01	mg/kg				
PCB 138	DETSC 3401#	0.01	mg/kg				
PCB 180	DETSC 3401#	0.01	mg/kg				
PCB 7 Total	DETSC 3401#	0.01	mg/kg				
Phenols							
Phenol - Monohydric	DETSC 2130#	0.3	mg/kg	0.5	< 0.3	< 0.3	< 0.3

Summary of Chemical Analysis

Soil/Misc Samples

Our Ref 4155 Combined Report

Client Ref 4155

The Former SSI Steelworks, Redcar - Ground

Investigation Contract - Priority Areas Within SSI

Contract Title Landholdings, Contract 3

Lab No	1244885	1244886	1244887	1244888
Sample ID	S3-TPB28	S3-TPA14	S3-TPA16	S3-TPA16
Depth	1.50	1.00	0.20	0.70
Other ID	6	5	2	4
Sample Type	ES	ES	ES	ES
Sampling Date	13/10/17	13/10/17	13/10/17	13/10/17
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
Asbestos Quantification	DETSC 1102	0					
Metals							
Aluminium	DETSC 2301*	1	mg/kg	21000	35000		
Antimony	DETSC 2301*	1	mg/kg	1.5	3.4	2.1	
Arsenic	DETSC 2301#	0.2	mg/kg	6.4	8.2	8.7	14
Barium	DETSC 2301#	1.5	mg/kg	660	440	100	
Beryllium	DETSC 2301#	0.2	mg/kg	2.3	3.6	3.5	
Boron, Water Soluble	DETSC 2123#	0.2	mg/kg	5.3	3.5	5.0	2.6
Cadmium	DETSC 2301#	0.1	mg/kg	0.2	1.5	0.3	0.3
Chromium	DETSC 2301#	0.15	mg/kg	81	200	85	170
Chromium, Hexavalent	DETSC 2204*	1	mg/kg	< 1.0	< 1.0	< 1.0	
Copper	DETSC 2301#	0.2	mg/kg	47	19	56	77
Iron	DETSC 2301	25	mg/kg	41000	72000		
Lead	DETSC 2301#	0.3	mg/kg	22	45	35	43
Magnesium	DETSC 2301*	1	mg/kg	15000	27000		
Manganese	DETSC 2301#	20	mg/kg	3700	16000		
Mercury	DETSC 2325#	0.05	mg/kg	< 0.05	< 0.05	1.2	0.44
Molybdenum	DETSC 2301#	0.4	mg/kg	2.6	1.4	1.3	
Nickel	DETSC 2301#	1	mg/kg	22	12	13	25
Silicon	DETSC 2301*	10	mg/kg	59000	55000		
Vanadium	DETSC 2301#	0.8	mg/kg	270	1100	180	
Zinc	DETSC 2301#	1	mg/kg	94	1500	160	140
Inorganics							
Loss on Ignition at 440oC	DETSC 2003#	0.01	%				
pH	DETSC 2008#			11.1	11.7	10.9	10.8
Cyanide, Total	DETSC 2130#	0.1	mg/kg	0.1	0.1	2.1	0.8
Cyanide, Free	DETSC 2130#	0.1	mg/kg	< 0.1			
Cyanide, Complex	DETSC 2130*	0.2	mg/kg	< 0.2			
Thiocyanate	DETSC 2130#	0.6	mg/kg	< 0.6			
FOC	DETSC 2002	0.001					
Organic matter	DETSC 2002#	0.1	%	3.2	1.0	1.7	5.8
Sulphate Aqueous Extract as SO4	DETSC 2076#	10	mg/l	210	190	450	290
Sulphur (free)	DETSC 3049#	0.75	mg/kg	36	< 0.75	< 0.75	
Sulphur as S, Total	DETSC 2320	0.01	%				
Sulphate as SO4, Total	DETSC 2321#	0.01	%				

Summary of Chemical Analysis

Soil/Misc Samples

Our Ref 4155 Combined Report

Client Ref 4155

The Former SSI Steelworks, Redcar - Ground

Investigation Contract - Priority Areas Within SSI

Contract Title Landholdings, Contract 3

Lab No	1244885	1244886	1244887	1244888
Sample ID	S3-TPB28	S3-TPA14	S3-TPA16	S3-TPA16
Depth	1.50	1.00	0.20	0.70
Other ID	6	5	2	4
Sample Type	ES	ES	ES	ES
Sampling Date	13/10/17	13/10/17	13/10/17	13/10/17
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
Petroleum Hydrocarbons							
Aliphatic C5-C6	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aliphatic C6-C8	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aliphatic C8-C10	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aliphatic C10-C12	DETSC 3072#	1.5	mg/kg	< 1.5	< 1.5	< 1.5	< 1.5
Aliphatic C12-C16	DETSC 3072#	1.2	mg/kg	< 1.2	< 1.2	< 1.2	< 1.2
Aliphatic C16-C21	DETSC 3072#	1.5	mg/kg	< 1.5	< 1.5	< 1.5	< 1.5
Aliphatic C21-C35	DETSC 3072#	3.4	mg/kg	4.3	< 3.4	7.0	< 3.4
Aliphatic C5-C35	DETSC 3072*	10	mg/kg	< 10	< 10	< 10	< 10
Aromatic C5-C7	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aromatic C7-C8	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aromatic C8-C10	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aromatic C10-C12	DETSC 3072#	0.9	mg/kg	< 0.9	< 0.9	< 0.9	< 0.9
Aromatic C12-C16	DETSC 3072#	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Aromatic C16-C21	DETSC 3072#	0.6	mg/kg	0.7	< 0.6	5.5	38
Aromatic C21-C35	DETSC 3072#	1.4	mg/kg	4.5	1.5	17	90
Aromatic C5-C35	DETSC 3072*	10	mg/kg	< 10	< 10	22	130
TPH Ali/Aro Total	DETSC 3072*	10	mg/kg	11	< 10	29	130
PAHs							
Naphthalene	DETSC 3303#	0.03	mg/kg	0.04	< 0.03	< 0.03	0.03
Acenaphthylene	DETSC 3303#	0.03	mg/kg	< 0.03	0.05	0.08	0.19
Acenaphthene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	0.04	0.14
Fluorene	DETSC 3303	0.03	mg/kg	0.04	< 0.03	0.04	0.15
Phenanthrene	DETSC 3303#	0.03	mg/kg	0.21	0.29	0.97	4.1
Anthracene	DETSC 3303	0.03	mg/kg	0.04	0.10	0.28	1.0
Fluoranthene	DETSC 3303#	0.03	mg/kg	0.28	0.97	5.7	21
Pyrene	DETSC 3303#	0.03	mg/kg	0.21	0.87	5.1	19
Benzo(a)anthracene	DETSC 3303#	0.03	mg/kg	0.12	0.43	3.2	11
Chrysene	DETSC 3303	0.03	mg/kg	0.12	0.44	2.9	9.7
Benzo(b)fluoranthene	DETSC 3303#	0.03	mg/kg	0.13	0.63	4.1	14
Benzo(k)fluoranthene	DETSC 3303#	0.03	mg/kg	0.05	0.23	1.6	4.9
Benzo(a)pyrene	DETSC 3303#	0.03	mg/kg	0.06	0.37	2.5	8.2
Indeno(1,2,3-c,d)pyrene	DETSC 3303#	0.03	mg/kg	0.04	0.26	1.3	4.1
Dibenzo(a,h)anthracene	DETSC 3303#	0.03	mg/kg	< 0.03	0.07	0.37	1.5
Benzo(g,h,i)perylene	DETSC 3303#	0.03	mg/kg	0.05	0.32	1.4	4.2
PAH - USEPA 16, Total	DETSC 3303	0.1	mg/kg	1.4	5.0	29	100

Summary of Chemical Analysis

Soil/Misc Samples

Our Ref 4155 Combined Report

Client Ref 4155

The Former SSI Steelworks, Redcar - Ground

Investigation Contract - Priority Areas Within SSI

Contract Title Landholdings, Contract 3

Lab No	1244885	1244886	1244887	1244888
Sample ID	S3-TPB28	S3-TPA14	S3-TPA16	S3-TPA16
Depth	1.50	1.00	0.20	0.70
Other ID	6	5	2	4
Sample Type	ES	ES	ES	ES
Sampling Date	13/10/17	13/10/17	13/10/17	13/10/17
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
PCBs							
PCB 28 + PCB 31	DETSC 3401#	0.01	mg/kg				
PCB 52	DETSC 3401#	0.01	mg/kg				
PCB 101	DETSC 3401#	0.01	mg/kg				
PCB 118	DETSC 3401#	0.01	mg/kg				
PCB 153	DETSC 3401#	0.01	mg/kg				
PCB 138	DETSC 3401#	0.01	mg/kg				
PCB 180	DETSC 3401#	0.01	mg/kg				
PCB 7 Total	DETSC 3401#	0.01	mg/kg				
Phenols							
Phenol - Monohydric	DETSC 2130#	0.3	mg/kg	< 0.3	< 0.3	< 0.3	< 0.3

Summary of Chemical Analysis

Soil/Misc Samples

Our Ref 4155 Combined Report

Client Ref 4155

The Former SSI Steelworks, Redcar - Ground

Investigation Contract - Priority Areas Within SSI

Contract Title Landholdings, Contract 3

Lab No	1244889	1244890	1244891	1244892
Sample ID	S3-TPA19	S3-TPA21	S3-TPA21	S3-TPB32
Depth	0.50	0.50	1.40	0.50
Other ID	3	2	5	3
Sample Type	ES	ES	ES	ES
Sampling Date	13/10/17	13/10/17	13/10/17	13/10/17
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
Asbestos Quantification	DETSC 1102	0					
Metals							
Aluminium	DETSC 2301*	1	mg/kg	46000			41000
Antimony	DETSC 2301*	1	mg/kg	2.3	3.2		2.5
Arsenic	DETSC 2301#	0.2	mg/kg	35	17	6.1	6.4
Barium	DETSC 2301#	1.5	mg/kg	150	250		76
Beryllium	DETSC 2301#	0.2	mg/kg	4.9	1.3		4.5
Boron, Water Soluble	DETSC 2123#	0.2	mg/kg	3.5	1.3	1.2	4.5
Cadmium	DETSC 2301#	0.1	mg/kg	0.2	0.3	< 0.1	0.1
Chromium	DETSC 2301#	0.15	mg/kg	79	92	16	160
Chromium, Hexavalent	DETSC 2204*	1	mg/kg	< 1.0	< 1.0		< 1.0
Copper	DETSC 2301#	0.2	mg/kg	61	280	14	53
Iron	DETSC 2301	25	mg/kg	54000			41000
Lead	DETSC 2301#	0.3	mg/kg	37	56	22	22
Magnesium	DETSC 2301*	1	mg/kg	27000			24000
Manganese	DETSC 2301#	20	mg/kg	4300			8700
Mercury	DETSC 2325#	0.05	mg/kg	5.6	0.22	0.65	< 0.05
Molybdenum	DETSC 2301#	0.4	mg/kg	2.0	2.6		0.9
Nickel	DETSC 2301#	1	mg/kg	32	33	7.6	7.0
Silicon	DETSC 2301*	10	mg/kg	53000			56000
Vanadium	DETSC 2301#	0.8	mg/kg	160	210		250
Zinc	DETSC 2301#	1	mg/kg	150	130	51	70
Inorganics							
Loss on Ignition at 440oC	DETSC 2003#	0.01	%				
pH	DETSC 2008#			10.6	10.7	8.8	11.5
Cyanide, Total	DETSC 2130#	0.1	mg/kg	13	0.6	1.9	0.1
Cyanide, Free	DETSC 2130#	0.1	mg/kg	0.2	< 0.1		< 0.1
Cyanide, Complex	DETSC 2130*	0.2	mg/kg	12	0.6		< 0.2
Thiocyanate	DETSC 2130#	0.6	mg/kg	0.9	< 0.6		0.7
FOC	DETSC 2002	0.001					
Organic matter	DETSC 2002#	0.1	%	1.8	7.6	1.1	2.4
Sulphate Aqueous Extract as SO4	DETSC 2076#	10	mg/l	510	92	130	200
Sulphur (free)	DETSC 3049#	0.75	mg/kg	< 0.75	< 0.75		3.0
Sulphur as S, Total	DETSC 2320	0.01	%				
Sulphate as SO4, Total	DETSC 2321#	0.01	%				

Summary of Chemical Analysis

Soil/Misc Samples

Our Ref 4155 Combined Report

Client Ref 4155

The Former SSI Steelworks, Redcar - Ground

Investigation Contract - Priority Areas Within SSI

Contract Title Landholdings, Contract 3

Lab No	1244889	1244890	1244891	1244892
Sample ID	S3-TPA19	S3-TPA21	S3-TPA21	S3-TPB32
Depth	0.50	0.50	1.40	0.50
Other ID	3	2	5	3
Sample Type	ES	ES	ES	ES
Sampling Date	13/10/17	13/10/17	13/10/17	13/10/17
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
Petroleum Hydrocarbons							
Aliphatic C5-C6	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aliphatic C6-C8	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aliphatic C8-C10	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aliphatic C10-C12	DETSC 3072#	1.5	mg/kg	< 1.5	< 1.5	< 1.5	< 1.5
Aliphatic C12-C16	DETSC 3072#	1.2	mg/kg	< 1.2	< 1.2	< 1.2	< 1.2
Aliphatic C16-C21	DETSC 3072#	1.5	mg/kg	6.0	54	< 1.5	< 1.5
Aliphatic C21-C35	DETSC 3072#	3.4	mg/kg	39	280	< 3.4	< 3.4
Aliphatic C5-C35	DETSC 3072*	10	mg/kg	45	330	< 10	< 10
Aromatic C5-C7	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aromatic C7-C8	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aromatic C8-C10	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aromatic C10-C12	DETSC 3072#	0.9	mg/kg	< 0.9	< 0.9	< 0.9	< 0.9
Aromatic C12-C16	DETSC 3072#	0.5	mg/kg	1.6	< 0.5	< 0.5	< 0.5
Aromatic C16-C21	DETSC 3072#	0.6	mg/kg	24	20	< 0.6	3.2
Aromatic C21-C35	DETSC 3072#	1.4	mg/kg	63	200	< 1.4	17
Aromatic C5-C35	DETSC 3072*	10	mg/kg	89	220	< 10	20
TPH Ali/Aro Total	DETSC 3072*	10	mg/kg	130	560	< 10	20
PAHs							
Naphthalene	DETSC 3303#	0.03	mg/kg	0.05	0.06	< 0.03	< 0.03
Acenaphthylene	DETSC 3303#	0.03	mg/kg	0.26	0.08	< 0.03	< 0.03
Acenaphthene	DETSC 3303#	0.03	mg/kg	0.05	< 0.03	< 0.03	< 0.03
Fluorene	DETSC 3303	0.03	mg/kg	0.21	< 0.03	< 0.03	< 0.03
Phenanthrene	DETSC 3303#	0.03	mg/kg	2.7	0.91	< 0.03	0.08
Anthracene	DETSC 3303	0.03	mg/kg	0.78	0.22	< 0.03	< 0.03
Fluoranthene	DETSC 3303#	0.03	mg/kg	6.3	2.0	< 0.03	0.16
Pyrene	DETSC 3303#	0.03	mg/kg	5.1	1.6	< 0.03	0.14
Benzo(a)anthracene	DETSC 3303#	0.03	mg/kg	3.0	0.94	< 0.03	0.08
Chrysene	DETSC 3303	0.03	mg/kg	2.5	0.94	< 0.03	0.07
Benzo(b)fluoranthene	DETSC 3303#	0.03	mg/kg	3.2	1.2	< 0.03	0.08
Benzo(k)fluoranthene	DETSC 3303#	0.03	mg/kg	1.2	0.49	< 0.03	< 0.03
Benzo(a)pyrene	DETSC 3303#	0.03	mg/kg	2.1	0.77	< 0.03	0.04
Indeno(1,2,3-c,d)pyrene	DETSC 3303#	0.03	mg/kg	0.90	0.44	< 0.03	0.04
Dibenzo(a,h)anthracene	DETSC 3303#	0.03	mg/kg	0.27	0.14	< 0.03	< 0.03
Benzo(g,h,i)perylene	DETSC 3303#	0.03	mg/kg	0.98	0.63	< 0.03	0.03
PAH - USEPA 16, Total	DETSC 3303	0.1	mg/kg	30	11	< 0.10	0.72

Summary of Chemical Analysis

Soil/Misc Samples

Our Ref 4155 Combined Report

Client Ref 4155

The Former SSI Steelworks, Redcar - Ground

Investigation Contract - Priority Areas Within SSI

Contract Title Landholdings, Contract 3

Lab No	1244889	1244890	1244891	1244892
Sample ID	S3-TPA19	S3-TPA21	S3-TPA21	S3-TPB32
Depth	0.50	0.50	1.40	0.50
Other ID	3	2	5	3
Sample Type	ES	ES	ES	ES
Sampling Date	13/10/17	13/10/17	13/10/17	13/10/17
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
PCBs							
PCB 28 + PCB 31	DETSC 3401#	0.01	mg/kg				
PCB 52	DETSC 3401#	0.01	mg/kg				
PCB 101	DETSC 3401#	0.01	mg/kg				
PCB 118	DETSC 3401#	0.01	mg/kg				
PCB 153	DETSC 3401#	0.01	mg/kg				
PCB 138	DETSC 3401#	0.01	mg/kg				
PCB 180	DETSC 3401#	0.01	mg/kg				
PCB 7 Total	DETSC 3401#	0.01	mg/kg				
Phenols							
Phenol - Monohydric	DETSC 2130#	0.3	mg/kg	< 0.3	< 0.3	< 0.3	< 0.3

Summary of Chemical Analysis

Soil/Misc Samples

Our Ref 4155 Combined Report

Client Ref 4155

The Former SSI Steelworks, Redcar - Ground

Investigation Contract - Priority Areas Within SSI

Contract Title Landholdings, Contract 3

Lab No	1244893	1244894	1244895	1244896
Sample ID	S3-TPA23	S3-TPA24	S3-TPA24	S3-TPA27
Depth	0.70	0.30	1.50	0.50
Other ID	2	2	7	2
Sample Type	ES	ES	ES	ES
Sampling Date	10/10/17	10/10/17	10/10/17	10/10/17
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
Asbestos Quantification	DETSC 1102	0					
Metals							
Aluminium	DETSC 2301*	1	mg/kg	9700		14000	13000
Antimony	DETSC 2301*	1	mg/kg	11		4.0	1.6
Arsenic	DETSC 2301#	0.2	mg/kg	11	5.9	13	7.7
Barium	DETSC 2301#	1.5	mg/kg	790		320	180
Beryllium	DETSC 2301#	0.2	mg/kg	0.7		1.4	1.0
Boron, Water Soluble	DETSC 2123#	0.2	mg/kg	2.7	3.3	1.8	1.4
Cadmium	DETSC 2301#	0.1	mg/kg	0.3	< 0.1	< 0.1	< 0.1
Chromium	DETSC 2301#	0.15	mg/kg	790	1300	150	77
Chromium, Hexavalent	DETSC 2204*	1	mg/kg	< 1.0		< 1.0	< 1.0
Copper	DETSC 2301#	0.2	mg/kg	53	85	97	25
Iron	DETSC 2301	25	mg/kg	140000		120000	39000
Lead	DETSC 2301#	0.3	mg/kg	430	39	45	31
Magnesium	DETSC 2301*	1	mg/kg	25000		8200	4000
Manganese	DETSC 2301#	20	mg/kg	17000		8700	1300
Mercury	DETSC 2325#	0.05	mg/kg	0.17	0.10	0.11	< 0.05
Molybdenum	DETSC 2301#	0.4	mg/kg	5.3		4.6	1.4
Nickel	DETSC 2301#	1	mg/kg	20	49	43	27
Silicon	DETSC 2301*	10	mg/kg	39000		110000	200000
Vanadium	DETSC 2301#	0.8	mg/kg	2100		260	110
Zinc	DETSC 2301#	1	mg/kg	170	62	220	75
Inorganics							
Loss on Ignition at 440oC	DETSC 2003#	0.01	%				
pH	DETSC 2008#			12.3	12.3	11.2	9.5
Cyanide, Total	DETSC 2130#	0.1	mg/kg	0.4	< 0.1	0.3	0.1
Cyanide, Free	DETSC 2130#	0.1	mg/kg	< 0.1			
Cyanide, Complex	DETSC 2130*	0.2	mg/kg	0.4			
Thiocyanate	DETSC 2130#	0.6	mg/kg	< 0.6			
FOC	DETSC 2002	0.001					
Organic matter	DETSC 2002#	0.1	%	1.1	1.1	3.4	2.4
Sulphate Aqueous Extract as SO4	DETSC 2076#	10	mg/l	12	20	240	130
Sulphur (free)	DETSC 3049#	0.75	mg/kg	< 0.75		< 0.75	8.0
Sulphur as S, Total	DETSC 2320	0.01	%				
Sulphate as SO4, Total	DETSC 2321#	0.01	%				

Summary of Chemical Analysis

Soil/Misc Samples

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The Former SSI Steelworks, Redcar - Ground

Investigation Contract - Priority Areas Within SSI

Contract Title Landholdings, Contract 3

Lab No	1244893	1244894	1244895	1244896
Sample ID	S3-TPA23	S3-TPA24	S3-TPA24	S3-TPA27
Depth	0.70	0.30	1.50	0.50
Other ID	2	2	7	2
Sample Type	ES	ES	ES	ES
Sampling Date	10/10/17	10/10/17	10/10/17	10/10/17
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
Petroleum Hydrocarbons							
Aliphatic C5-C6	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aliphatic C6-C8	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aliphatic C8-C10	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aliphatic C10-C12	DETSC 3072#	1.5	mg/kg	< 1.5	< 1.5	< 1.5	< 1.5
Aliphatic C12-C16	DETSC 3072#	1.2	mg/kg	< 1.2	< 1.2	< 1.2	1.3
Aliphatic C16-C21	DETSC 3072#	1.5	mg/kg	< 1.5	< 1.5	< 1.5	3.3
Aliphatic C21-C35	DETSC 3072#	3.4	mg/kg	5.9	9.2	< 3.4	11
Aliphatic C5-C35	DETSC 3072*	10	mg/kg	< 10	10	< 10	16
Aromatic C5-C7	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aromatic C7-C8	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aromatic C8-C10	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aromatic C10-C12	DETSC 3072#	0.9	mg/kg	< 0.9	< 0.9	< 0.9	< 0.9
Aromatic C12-C16	DETSC 3072#	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Aromatic C16-C21	DETSC 3072#	0.6	mg/kg	0.7	< 0.6	< 0.6	< 0.6
Aromatic C21-C35	DETSC 3072#	1.4	mg/kg	2.3	< 1.4	< 1.4	< 1.4
Aromatic C5-C35	DETSC 3072*	10	mg/kg	< 10	< 10	< 10	< 10
TPH Ali/Aro Total	DETSC 3072*	10	mg/kg	11	12	< 10	16
PAHs							
Naphthalene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	0.15	< 0.03
Acenaphthylene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	< 0.03	< 0.03
Acenaphthene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	0.06	< 0.03
Fluorene	DETSC 3303	0.03	mg/kg	< 0.03	< 0.03	0.09	< 0.03
Phenanthrene	DETSC 3303#	0.03	mg/kg	0.14	0.36	1.4	0.20
Anthracene	DETSC 3303	0.03	mg/kg	< 0.03	0.11	0.26	0.05
Fluoranthene	DETSC 3303#	0.03	mg/kg	0.29	1.1	1.3	0.51
Pyrene	DETSC 3303#	0.03	mg/kg	0.22	1.2	0.93	0.44
Benzo(a)anthracene	DETSC 3303#	0.03	mg/kg	0.12	0.56	0.41	0.22
Chrysene	DETSC 3303	0.03	mg/kg	0.12	0.64	0.35	0.23
Benzo(b)fluoranthene	DETSC 3303#	0.03	mg/kg	0.13	0.76	0.34	0.26
Benzo(k)fluoranthene	DETSC 3303#	0.03	mg/kg	0.06	0.26	0.13	0.10
Benzo(a)pyrene	DETSC 3303#	0.03	mg/kg	0.07	0.37	0.23	0.14
Indeno(1,2,3-c,d)pyrene	DETSC 3303#	0.03	mg/kg	0.06	0.25	0.13	0.09
Dibenzo(a,h)anthracene	DETSC 3303#	0.03	mg/kg	< 0.03	0.07	< 0.03	< 0.03
Benzo(g,h,i)perylene	DETSC 3303#	0.03	mg/kg	0.07	0.30	0.14	0.10
PAH - USEPA 16, Total	DETSC 3303	0.1	mg/kg	1.3	6.0	5.9	2.3

Summary of Chemical Analysis

Soil/Misc Samples

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The Former SSI Steelworks, Redcar - Ground

Investigation Contract - Priority Areas Within SSI

Contract Title Landholdings, Contract 3

Lab No	1244893	1244894	1244895	1244896
Sample ID	S3-TPA23	S3-TPA24	S3-TPA24	S3-TPA27
Depth	0.70	0.30	1.50	0.50
Other ID	2	2	7	2
Sample Type	ES	ES	ES	ES
Sampling Date	10/10/17	10/10/17	10/10/17	10/10/17
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
PCBs							
PCB 28 + PCB 31	DETSC 3401#	0.01	mg/kg				
PCB 52	DETSC 3401#	0.01	mg/kg				
PCB 101	DETSC 3401#	0.01	mg/kg				
PCB 118	DETSC 3401#	0.01	mg/kg				
PCB 153	DETSC 3401#	0.01	mg/kg				
PCB 138	DETSC 3401#	0.01	mg/kg				
PCB 180	DETSC 3401#	0.01	mg/kg				
PCB 7 Total	DETSC 3401#	0.01	mg/kg				
Phenols							
Phenol - Monohydric	DETSC 2130#	0.3	mg/kg	< 0.3	< 0.3	< 0.3	< 0.3

Summary of Chemical Analysis

Soil/Misc Samples

Our Ref 4155 Combined Report

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The Former SSI Steelworks, Redcar - Ground

Investigation Contract - Priority Areas Within SSI

Contract Title Landholdings, Contract 3

Lab No	1244897	1244898	1244899	1245437
Sample ID	S3-TPA27	S3-TPA30	S3-TPA30	S3-TPA33
Depth	1.20	1.00	2.00	0.50
Other ID	5	4	7	2
Sample Type	ES	ES	ES	ES
Sampling Date	10/10/17	10/10/17	10/10/17	16/10/17
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
Asbestos Quantification	DETSC 1102	0					Y
Metals							
Aluminium	DETSC 2301*	1	mg/kg		16000		
Antimony	DETSC 2301*	1	mg/kg		7.3		1.1
Arsenic	DETSC 2301#	0.2	mg/kg	96	19	6.5	7.3
Barium	DETSC 2301#	1.5	mg/kg		740		280
Beryllium	DETSC 2301#	0.2	mg/kg		1.3		2.6
Boron, Water Soluble	DETSC 2123#	0.2	mg/kg	1.4	3.6	0.7	6.5
Cadmium	DETSC 2301#	0.1	mg/kg	0.3	0.8	< 0.1	0.3
Chromium	DETSC 2301#	0.15	mg/kg	180	300	25	37
Chromium, Hexavalent	DETSC 2204*	1	mg/kg		< 1.0		< 1.0
Copper	DETSC 2301#	0.2	mg/kg	110	140	14	29
Iron	DETSC 2301	25	mg/kg		160000		
Lead	DETSC 2301#	0.3	mg/kg	100	160	22	29
Magnesium	DETSC 2301*	1	mg/kg		18000		
Manganese	DETSC 2301#	20	mg/kg		30000		
Mercury	DETSC 2325#	0.05	mg/kg	0.39	< 0.05	< 0.05	< 0.05
Molybdenum	DETSC 2301#	0.4	mg/kg		8.3		0.7
Nickel	DETSC 2301#	1	mg/kg	65	50	17	8.1
Silicon	DETSC 2301*	10	mg/kg		37000		
Vanadium	DETSC 2301#	0.8	mg/kg		460		81
Zinc	DETSC 2301#	1	mg/kg	110	230	47	57
Inorganics							
Loss on Ignition at 440oC	DETSC 2003#	0.01	%				
pH	DETSC 2008#			10.9	11.4	7.9	10.7
Cyanide, Total	DETSC 2130#	0.1	mg/kg	0.4	0.6	< 0.1	< 0.1
Cyanide, Free	DETSC 2130#	0.1	mg/kg				< 0.1
Cyanide, Complex	DETSC 2130*	0.2	mg/kg				< 0.2
Thiocyanate	DETSC 2130#	0.6	mg/kg				< 0.6
FOC	DETSC 2002	0.001					
Organic matter	DETSC 2002#	0.1	%	5.2	0.5	1.3	1.7
Sulphate Aqueous Extract as SO4	DETSC 2076#	10	mg/l	290	190	130	630
Sulphur (free)	DETSC 3049#	0.75	mg/kg		5.9		44
Sulphur as S, Total	DETSC 2320	0.01	%				
Sulphate as SO4, Total	DETSC 2321#	0.01	%				

Summary of Chemical Analysis

Soil/Misc Samples

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The Former SSI Steelworks, Redcar - Ground

Investigation Contract - Priority Areas Within SSI

Contract Title Landholdings, Contract 3

Lab No	1244897	1244898	1244899	1245437
Sample ID	S3-TPA27	S3-TPA30	S3-TPA30	S3-TPA33
Depth	1.20	1.00	2.00	0.50
Other ID	5	4	7	2
Sample Type	ES	ES	ES	ES
Sampling Date	10/10/17	10/10/17	10/10/17	16/10/17
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
Petroleum Hydrocarbons							
Aliphatic C5-C6	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aliphatic C6-C8	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aliphatic C8-C10	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aliphatic C10-C12	DETSC 3072#	1.5	mg/kg	< 1.5	< 1.5	< 1.5	< 1.5
Aliphatic C12-C16	DETSC 3072#	1.2	mg/kg	< 1.2	< 1.2	< 1.2	< 1.2
Aliphatic C16-C21	DETSC 3072#	1.5	mg/kg	< 1.5	1.8	< 1.5	2.5
Aliphatic C21-C35	DETSC 3072#	3.4	mg/kg	< 3.4	7.7	< 3.4	23
Aliphatic C5-C35	DETSC 3072*	10	mg/kg	< 10	11	< 10	26
Aromatic C5-C7	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aromatic C7-C8	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aromatic C8-C10	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aromatic C10-C12	DETSC 3072#	0.9	mg/kg	< 0.9	4.1	< 0.9	1.1
Aromatic C12-C16	DETSC 3072#	0.5	mg/kg	< 0.5	4.3	< 0.5	1.8
Aromatic C16-C21	DETSC 3072#	0.6	mg/kg	< 0.6	5.4	< 0.6	8.3
Aromatic C21-C35	DETSC 3072#	1.4	mg/kg	< 1.4	17	< 1.4	52
Aromatic C5-C35	DETSC 3072*	10	mg/kg	< 10	31	< 10	63
TPH Ali/Aro Total	DETSC 3072*	10	mg/kg	< 10	42	< 10	89
PAHs							
Naphthalene	DETSC 3303#	0.03	mg/kg	< 0.03	0.05	< 0.03	< 0.03
Acenaphthylene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	< 0.03	< 0.03
Acenaphthene	DETSC 3303#	0.03	mg/kg	< 0.03	0.03	< 0.03	0.07
Fluorene	DETSC 3303	0.03	mg/kg	< 0.03	0.05	< 0.03	0.03
Phenanthrene	DETSC 3303#	0.03	mg/kg	< 0.03	0.65	< 0.03	0.27
Anthracene	DETSC 3303	0.03	mg/kg	< 0.03	0.14	< 0.03	0.06
Fluoranthene	DETSC 3303#	0.03	mg/kg	< 0.03	1.6	< 0.03	0.59
Pyrene	DETSC 3303#	0.03	mg/kg	< 0.03	1.3	< 0.03	0.50
Benzo(a)anthracene	DETSC 3303#	0.03	mg/kg	< 0.03	0.63	< 0.03	0.22
Chrysene	DETSC 3303	0.03	mg/kg	< 0.03	0.58	< 0.03	0.23
Benzo(b)fluoranthene	DETSC 3303#	0.03	mg/kg	< 0.03	0.80	< 0.03	0.32
Benzo(k)fluoranthene	DETSC 3303#	0.03	mg/kg	< 0.03	0.29	< 0.03	0.09
Benzo(a)pyrene	DETSC 3303#	0.03	mg/kg	< 0.03	0.40	< 0.03	0.14
Indeno(1,2,3-c,d)pyrene	DETSC 3303#	0.03	mg/kg	< 0.03	0.25	< 0.03	0.09
Dibenzo(a,h)anthracene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	< 0.03	< 0.03
Benzo(g,h,i)perylene	DETSC 3303#	0.03	mg/kg	< 0.03	0.31	< 0.03	0.09
PAH - USEPA 16, Total	DETSC 3303	0.1	mg/kg	< 0.10	7.1	< 0.10	2.7

Summary of Chemical Analysis

Soil/Misc Samples

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Contract Title Landholdings, Contract 3

Lab No	1244897	1244898	1244899	1245437
Sample ID	S3-TPA27	S3-TPA30	S3-TPA30	S3-TPA33
Depth	1.20	1.00	2.00	0.50
Other ID	5	4	7	2
Sample Type	ES	ES	ES	ES
Sampling Date	10/10/17	10/10/17	10/10/17	16/10/17
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
PCBs							
PCB 28 + PCB 31	DETSC 3401#	0.01	mg/kg				
PCB 52	DETSC 3401#	0.01	mg/kg				
PCB 101	DETSC 3401#	0.01	mg/kg				
PCB 118	DETSC 3401#	0.01	mg/kg				
PCB 153	DETSC 3401#	0.01	mg/kg				
PCB 138	DETSC 3401#	0.01	mg/kg				
PCB 180	DETSC 3401#	0.01	mg/kg				
PCB 7 Total	DETSC 3401#	0.01	mg/kg				
Phenols							
Phenol - Monohydric	DETSC 2130#	0.3	mg/kg	< 0.3	< 0.3	< 0.3	0.5

Summary of Chemical Analysis

Soil/Misc Samples

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Contract Title Landholdings, Contract 3

Lab No	1245438	1245439	1245440	1245441
Sample ID	S3-TPA35	S3-TPA38	S3-TPA40	S3-TPB24
Depth	0.40	0.50	0.40	0.50
Other ID	2	2	2	3
Sample Type	ES	ES	ES	ES
Sampling Date	16/10/17	16/10/17	16/10/17	16/10/17
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
Asbestos Quantification	DETSC 1102	0		Y			Y
Metals							
Aluminium	DETSC 2301*	1	mg/kg	20000			
Antimony	DETSC 2301*	1	mg/kg	8.3	1.1	2.6	
Arsenic	DETSC 2301#	0.2	mg/kg	24	9.0	8.6	5.7
Barium	DETSC 2301#	1.5	mg/kg	530	300	320	
Beryllium	DETSC 2301#	0.2	mg/kg	1.8	2.3	2.4	
Boron, Water Soluble	DETSC 2123#	0.2	mg/kg	2.3	6.3	2.6	5.4
Cadmium	DETSC 2301#	0.1	mg/kg	2.3	0.6	0.8	1.9
Chromium	DETSC 2301#	0.15	mg/kg	180	120	100	78
Chromium, Hexavalent	DETSC 2204*	1	mg/kg	< 1.0	< 1.0	< 1.0	
Copper	DETSC 2301#	0.2	mg/kg	230	56	44	42
Iron	DETSC 2301	25	mg/kg	150000			
Lead	DETSC 2301#	0.3	mg/kg	110	48	18	35
Magnesium	DETSC 2301*	1	mg/kg	19000			
Manganese	DETSC 2301#	20	mg/kg	9400			
Mercury	DETSC 2325#	0.05	mg/kg	0.21	0.07	< 0.05	< 0.05
Molybdenum	DETSC 2301#	0.4	mg/kg	18	1.3	2.7	
Nickel	DETSC 2301#	1	mg/kg	100	9.4	22	12
Silicon	DETSC 2301*	10	mg/kg	36000			
Vanadium	DETSC 2301#	0.8	mg/kg	530	270	180	
Zinc	DETSC 2301#	1	mg/kg	250	78	41	210
Inorganics							
Loss on Ignition at 440oC	DETSC 2003#	0.01	%				
pH	DETSC 2008#			10.7	11.0	11.2	10.7
Cyanide, Total	DETSC 2130#	0.1	mg/kg	0.1	0.2	0.3	0.4
Cyanide, Free	DETSC 2130#	0.1	mg/kg	< 0.1			
Cyanide, Complex	DETSC 2130*	0.2	mg/kg	< 0.2			
Thiocyanate	DETSC 2130#	0.6	mg/kg	< 0.6			
FOC	DETSC 2002	0.001					
Organic matter	DETSC 2002#	0.1	%	1.2	1.8	2.5	0.9
Sulphate Aqueous Extract as SO4	DETSC 2076#	10	mg/l	210	220	300	470
Sulphur (free)	DETSC 3049#	0.75	mg/kg	< 0.75	< 0.75	14	
Sulphur as S, Total	DETSC 2320	0.01	%				
Sulphate as SO4, Total	DETSC 2321#	0.01	%				

Summary of Chemical Analysis

Soil/Misc Samples

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The Former SSI Steelworks, Redcar - Ground

Investigation Contract - Priority Areas Within SSI

Contract Title Landholdings, Contract 3

Lab No	1245438	1245439	1245440	1245441
Sample ID	S3-TPA35	S3-TPA38	S3-TPA40	S3-TPB24
Depth	0.40	0.50	0.40	0.50
Other ID	2	2	2	3
Sample Type	ES	ES	ES	ES
Sampling Date	16/10/17	16/10/17	16/10/17	16/10/17
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
Petroleum Hydrocarbons							
Aliphatic C5-C6	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aliphatic C6-C8	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aliphatic C8-C10	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aliphatic C10-C12	DETSC 3072#	1.5	mg/kg	< 1.5	< 1.5	< 1.5	< 1.5
Aliphatic C12-C16	DETSC 3072#	1.2	mg/kg	1.2	1.2	< 1.2	< 1.2
Aliphatic C16-C21	DETSC 3072#	1.5	mg/kg	2.8	4.3	1.6	2.3
Aliphatic C21-C35	DETSC 3072#	3.4	mg/kg	14	25	9.2	15
Aliphatic C5-C35	DETSC 3072*	10	mg/kg	17	31	12	19
Aromatic C5-C7	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aromatic C7-C8	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aromatic C8-C10	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aromatic C10-C12	DETSC 3072#	0.9	mg/kg	1.3	1.5	1.2	< 0.9
Aromatic C12-C16	DETSC 3072#	0.5	mg/kg	2.2	2.8	1.3	1.6
Aromatic C16-C21	DETSC 3072#	0.6	mg/kg	6.1	19	2.6	2.5
Aromatic C21-C35	DETSC 3072#	1.4	mg/kg	26	73	15	13
Aromatic C5-C35	DETSC 3072*	10	mg/kg	36	96	20	18
TPH Ali/Aro Total	DETSC 3072*	10	mg/kg	53	130	32	37
PAHs							
Naphthalene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	< 0.03	< 0.03
Acenaphthylene	DETSC 3303#	0.03	mg/kg	< 0.03	0.29	< 0.03	0.05
Acenaphthene	DETSC 3303#	0.03	mg/kg	< 0.03	0.13	< 0.03	0.10
Fluorene	DETSC 3303	0.03	mg/kg	< 0.03	0.13	< 0.03	0.06
Phenanthrene	DETSC 3303#	0.03	mg/kg	0.13	1.4	0.10	0.29
Anthracene	DETSC 3303	0.03	mg/kg	0.06	0.91	< 0.03	0.10
Fluoranthene	DETSC 3303#	0.03	mg/kg	0.37	9.9	0.36	0.46
Pyrene	DETSC 3303#	0.03	mg/kg	0.34	11	0.29	0.42
Benzo(a)anthracene	DETSC 3303#	0.03	mg/kg	0.22	6.0	0.20	0.24
Chrysene	DETSC 3303	0.03	mg/kg	0.24	5.5	0.17	0.28
Benzo(b)fluoranthene	DETSC 3303#	0.03	mg/kg	0.43	9.3	0.31	0.57
Benzo(k)fluoranthene	DETSC 3303#	0.03	mg/kg	0.15	3.6	0.13	0.50
Benzo(a)pyrene	DETSC 3303#	0.03	mg/kg	0.21	6.6	0.19	0.17
Indeno(1,2,3-c,d)pyrene	DETSC 3303#	0.03	mg/kg	0.15	3.2	0.14	0.16
Dibenzo(a,h)anthracene	DETSC 3303#	0.03	mg/kg	0.07	1.2	< 0.03	0.05
Benzo(g,h,i)perylene	DETSC 3303#	0.03	mg/kg	0.20	3.4	0.16	0.18
PAH - USEPA 16, Total	DETSC 3303	0.1	mg/kg	2.6	62	2.1	3.6

Summary of Chemical Analysis

Soil/Misc Samples

Our Ref 4155 Combined Report

Client Ref 4155

The Former SSI Steelworks, Redcar - Ground

Investigation Contract - Priority Areas Within SSI

Contract Title Landholdings, Contract 3

Lab No	1245438	1245439	1245440	1245441
Sample ID	S3-TPA35	S3-TPA38	S3-TPA40	S3-TPB24
Depth	0.40	0.50	0.40	0.50
Other ID	2	2	2	3
Sample Type	ES	ES	ES	ES
Sampling Date	16/10/17	16/10/17	16/10/17	16/10/17
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
PCBs							
PCB 28 + PCB 31	DETSC 3401#	0.01	mg/kg				
PCB 52	DETSC 3401#	0.01	mg/kg				
PCB 101	DETSC 3401#	0.01	mg/kg				
PCB 118	DETSC 3401#	0.01	mg/kg				
PCB 153	DETSC 3401#	0.01	mg/kg				
PCB 138	DETSC 3401#	0.01	mg/kg				
PCB 180	DETSC 3401#	0.01	mg/kg				
PCB 7 Total	DETSC 3401#	0.01	mg/kg				
Phenols							
Phenol - Monohydric	DETSC 2130#	0.3	mg/kg	< 0.3	< 0.3	< 0.3	< 0.3

Summary of Chemical Analysis

Soil/Misc Samples

Our Ref 4155 Combined Report

Client Ref 4155

The Former SSI Steelworks, Redcar - Ground

Investigation Contract - Priority Areas Within SSI

Contract Title Landholdings, Contract 3

Lab No	1245442	1245443	1245444	1245445
Sample ID	S3-TPB24	S3-TPB24	S3-TPB33	S3-TPB34
Depth	2.50	3.30	1.50	1.50
Other ID	9	11	6	6
Sample Type	ES	ES	ES	ES
Sampling Date	16/10/17	16/10/17	16/10/17	16/10/17
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
Asbestos Quantification	DETSC 1102	0					
Metals							
Aluminium	DETSC 2301*	1	mg/kg				
Antimony	DETSC 2301*	1	mg/kg	1.6		3.0	1.2
Arsenic	DETSC 2301#	0.2	mg/kg	9.5	8.0	17	6.2
Barium	DETSC 2301#	1.5	mg/kg	210		220	160
Beryllium	DETSC 2301#	0.2	mg/kg	1.2		1.2	3.5
Boron, Water Soluble	DETSC 2123#	0.2	mg/kg	2.7	1.1	2.6	3.7
Cadmium	DETSC 2301#	0.1	mg/kg	0.7	0.8	1.3	0.2
Chromium	DETSC 2301#	0.15	mg/kg	64	24	36	22
Chromium, Hexavalent	DETSC 2204*	1	mg/kg	< 1.0		< 1.0	< 1.0
Copper	DETSC 2301#	0.2	mg/kg	33	24	56	11
Iron	DETSC 2301	25	mg/kg				
Lead	DETSC 2301#	0.3	mg/kg	38	24	100	20
Magnesium	DETSC 2301*	1	mg/kg				
Manganese	DETSC 2301#	20	mg/kg				
Mercury	DETSC 2325#	0.05	mg/kg	0.07	< 0.05	0.11	< 0.05
Molybdenum	DETSC 2301#	0.4	mg/kg	1.4		2.1	0.6
Nickel	DETSC 2301#	1	mg/kg	23	40	32	6.2
Silicon	DETSC 2301*	10	mg/kg				
Vanadium	DETSC 2301#	0.8	mg/kg	120		61	46
Zinc	DETSC 2301#	1	mg/kg	100	77	250	51
Inorganics							
Loss on Ignition at 440oC	DETSC 2003#	0.01	%				
pH	DETSC 2008#			11.1	8.4	8.5	8.8
Cyanide, Total	DETSC 2130#	0.1	mg/kg	0.2	< 0.1	0.1	< 0.1
Cyanide, Free	DETSC 2130#	0.1	mg/kg				< 0.1
Cyanide, Complex	DETSC 2130*	0.2	mg/kg				< 0.2
Thiocyanate	DETSC 2130#	0.6	mg/kg				< 0.6
FOC	DETSC 2002	0.001					
Organic matter	DETSC 2002#	0.1	%	2.8	2.0	2.8	1.7
Sulphate Aqueous Extract as SO4	DETSC 2076#	10	mg/l	580	110	260	1100
Sulphur (free)	DETSC 3049#	0.75	mg/kg	3.6		2.1	49
Sulphur as S, Total	DETSC 2320	0.01	%				
Sulphate as SO4, Total	DETSC 2321#	0.01	%				

Summary of Chemical Analysis

Soil/Misc Samples

Our Ref 4155 Combined Report

Client Ref 4155

The Former SSI Steelworks, Redcar - Ground

Investigation Contract - Priority Areas Within SSI

Contract Title Landholdings, Contract 3

Lab No	1245442	1245443	1245444	1245445
Sample ID	S3-TPB24	S3-TPB24	S3-TPB33	S3-TPB34
Depth	2.50	3.30	1.50	1.50
Other ID	9	11	6	6
Sample Type	ES	ES	ES	ES
Sampling Date	16/10/17	16/10/17	16/10/17	16/10/17
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
Petroleum Hydrocarbons							
Aliphatic C5-C6	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aliphatic C6-C8	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aliphatic C8-C10	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aliphatic C10-C12	DETSC 3072#	1.5	mg/kg	< 1.5	< 1.5	< 1.5	< 1.5
Aliphatic C12-C16	DETSC 3072#	1.2	mg/kg	< 1.2	< 1.2	< 1.2	< 1.2
Aliphatic C16-C21	DETSC 3072#	1.5	mg/kg	< 1.5	1.7	< 1.5	< 1.5
Aliphatic C21-C35	DETSC 3072#	3.4	mg/kg	< 3.4	< 3.4	< 3.4	8.8
Aliphatic C5-C35	DETSC 3072*	10	mg/kg	< 10	< 10	< 10	11
Aromatic C5-C7	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aromatic C7-C8	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aromatic C8-C10	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aromatic C10-C12	DETSC 3072#	0.9	mg/kg	< 0.9	< 0.9	< 0.9	< 0.9
Aromatic C12-C16	DETSC 3072#	0.5	mg/kg	< 0.5	< 0.5	0.7	< 0.5
Aromatic C16-C21	DETSC 3072#	0.6	mg/kg	1.2	< 0.6	3.2	1.1
Aromatic C21-C35	DETSC 3072#	1.4	mg/kg	1.8	< 1.4	9.0	9.3
Aromatic C5-C35	DETSC 3072*	10	mg/kg	< 10	< 10	13	12
TPH Ali/Aro Total	DETSC 3072*	10	mg/kg	< 10	< 10	13	22
PAHs							
Naphthalene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	< 0.03	< 0.03
Acenaphthylene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	< 0.03	< 0.03
Acenaphthene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	0.06	< 0.03
Fluorene	DETSC 3303	0.03	mg/kg	< 0.03	< 0.03	0.04	< 0.03
Phenanthrene	DETSC 3303#	0.03	mg/kg	0.06	< 0.03	0.54	< 0.03
Anthracene	DETSC 3303	0.03	mg/kg	< 0.03	< 0.03	0.15	< 0.03
Fluoranthene	DETSC 3303#	0.03	mg/kg	0.09	< 0.03	0.93	0.07
Pyrene	DETSC 3303#	0.03	mg/kg	0.06	< 0.03	0.72	0.05
Benzo(a)anthracene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	0.26	< 0.03
Chrysene	DETSC 3303	0.03	mg/kg	< 0.03	< 0.03	0.26	< 0.03
Benzo(b)fluoranthene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	0.21	< 0.03
Benzo(k)fluoranthene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	0.09	< 0.03
Benzo(a)pyrene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	0.11	< 0.03
Indeno(1,2,3-c,d)pyrene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	0.07	< 0.03
Dibenzo(a,h)anthracene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	< 0.03	< 0.03
Benzo(g,h,i)perylene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	0.07	< 0.03
PAH - USEPA 16, Total	DETSC 3303	0.1	mg/kg	0.21	< 0.10	3.5	0.12

Summary of Chemical Analysis

Soil/Misc Samples

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The Former SSI Steelworks, Redcar - Ground

Investigation Contract - Priority Areas Within SSI

Contract Title Landholdings, Contract 3

Lab No	1245442	1245443	1245444	1245445
Sample ID	S3-TPB24	S3-TPB24	S3-TPB33	S3-TPB34
Depth	2.50	3.30	1.50	1.50
Other ID	9	11	6	6
Sample Type	ES	ES	ES	ES
Sampling Date	16/10/17	16/10/17	16/10/17	16/10/17
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
PCBs							
PCB 28 + PCB 31	DETSC 3401#	0.01	mg/kg				
PCB 52	DETSC 3401#	0.01	mg/kg				
PCB 101	DETSC 3401#	0.01	mg/kg				
PCB 118	DETSC 3401#	0.01	mg/kg				
PCB 153	DETSC 3401#	0.01	mg/kg				
PCB 138	DETSC 3401#	0.01	mg/kg				
PCB 180	DETSC 3401#	0.01	mg/kg				
PCB 7 Total	DETSC 3401#	0.01	mg/kg				
Phenols							
Phenol - Monohydric	DETSC 2130#	0.3	mg/kg	< 0.3	< 0.3	< 0.3	< 0.3

Summary of Chemical Analysis

Soil/Misc Samples

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The Former SSI Steelworks, Redcar - Ground

Investigation Contract - Priority Areas Within SSI

Contract Title Landholdings, Contract 3

Lab No	1245446	1248501	1248502	1248503
Sample ID	S3-TPB40	S3-TPA02	S3-TPA02	S3-TPA03
Depth	0.50	0.50	1.50	1.80
Other ID	2	2	5	5
Sample Type	ES	ES	ES	ES
Sampling Date	16/10/17	23/10/17	23/10/17	23/10/17
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
Asbestos Quantification	DETSC 1102	0		Y	Y	Y	Y
Metals							
Aluminium	DETSC 2301*	1	mg/kg	9900			
Antimony	DETSC 2301*	1	mg/kg	2.8	< 1.0		14
Arsenic	DETSC 2301#	0.2	mg/kg	5.6	8.0	9.0	21
Barium	DETSC 2301#	1.5	mg/kg	330	590		250
Beryllium	DETSC 2301#	0.2	mg/kg	1.4	4.1		1.4
Boron, Water Soluble	DETSC 2123#	0.2	mg/kg	4.1	3.5	3.6	5.1
Cadmium	DETSC 2301#	0.1	mg/kg	1.3	0.6	1.6	4.3
Chromium	DETSC 2301#	0.15	mg/kg	44	33	48	330
Chromium, Hexavalent	DETSC 2204*	1	mg/kg	< 1.0	< 1.0		< 1.0
Copper	DETSC 2301#	0.2	mg/kg	17	19	22	63
Iron	DETSC 2301	25	mg/kg	56000			
Lead	DETSC 2301#	0.3	mg/kg	15	42	100	210
Magnesium	DETSC 2301*	1	mg/kg	10000			
Manganese	DETSC 2301#	20	mg/kg	1000			
Mercury	DETSC 2325#	0.05	mg/kg	< 0.05	< 0.05	< 0.05	0.18
Molybdenum	DETSC 2301#	0.4	mg/kg	1.7	0.7		3.5
Nickel	DETSC 2301#	1	mg/kg	19	6.2	8.6	27
Silicon	DETSC 2301*	10	mg/kg	40000			
Vanadium	DETSC 2301#	0.8	mg/kg	66	92		270
Zinc	DETSC 2301#	1	mg/kg	69	110	290	630
Inorganics							
Loss on Ignition at 440oC	DETSC 2003#	0.01	%				
pH	DETSC 2008#			10.0	10.2	9.9	11.2
Cyanide, Total	DETSC 2130#	0.1	mg/kg	< 0.1	0.1	0.2	0.3
Cyanide, Free	DETSC 2130#	0.1	mg/kg	< 0.1			< 0.1
Cyanide, Complex	DETSC 2130*	0.2	mg/kg	< 0.2			0.3
Thiocyanate	DETSC 2130#	0.6	mg/kg	< 0.6			< 0.6
FOC	DETSC 2002	0.001					
Organic matter	DETSC 2002#	0.1	%	3.3	0.9	0.7	1.1
Sulphate Aqueous Extract as SO4	DETSC 2076#	10	mg/l	450	1300	1200	210
Sulphur (free)	DETSC 3049#	0.75	mg/kg	6.3	10		3.0
Sulphur as S, Total	DETSC 2320	0.01	%				
Sulphate as SO4, Total	DETSC 2321#	0.01	%				

Summary of Chemical Analysis

Soil/Misc Samples

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The Former SSI Steelworks, Redcar - Ground

Investigation Contract - Priority Areas Within SSI

Contract Title Landholdings, Contract 3

Lab No	1245446	1248501	1248502	1248503
Sample ID	S3-TPB40	S3-TPA02	S3-TPA02	S3-TPA03
Depth	0.50	0.50	1.50	1.80
Other ID	2	2	5	5
Sample Type	ES	ES	ES	ES
Sampling Date	16/10/17	23/10/17	23/10/17	23/10/17
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
Petroleum Hydrocarbons							
Aliphatic C5-C6	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aliphatic C6-C8	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aliphatic C8-C10	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aliphatic C10-C12	DETSC 3072#	1.5	mg/kg	< 1.5	< 1.5	< 1.5	< 1.5
Aliphatic C12-C16	DETSC 3072#	1.2	mg/kg	< 1.2	7.8	< 1.2	< 1.2
Aliphatic C16-C21	DETSC 3072#	1.5	mg/kg	1.8	13	1.7	< 1.5
Aliphatic C21-C35	DETSC 3072#	3.4	mg/kg	16	94	6.8	3.4
Aliphatic C5-C35	DETSC 3072*	10	mg/kg	19	120	< 10	< 10
Aromatic C5-C7	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aromatic C7-C8	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aromatic C8-C10	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aromatic C10-C12	DETSC 3072#	0.9	mg/kg	1.1	< 0.9	< 0.9	2.0
Aromatic C12-C16	DETSC 3072#	0.5	mg/kg	1.6	7.4	< 0.5	1.7
Aromatic C16-C21	DETSC 3072#	0.6	mg/kg	3.1	22	4.4	8.3
Aromatic C21-C35	DETSC 3072#	1.4	mg/kg	13	94	15	20
Aromatic C5-C35	DETSC 3072*	10	mg/kg	18	120	20	32
TPH Ali/Aro Total	DETSC 3072*	10	mg/kg	37	240	29	36
PAHs							
Naphthalene	DETSC 3303#	0.03	mg/kg	0.08	0.08	0.04	< 0.03
Acenaphthylene	DETSC 3303#	0.03	mg/kg	< 0.03	0.05	< 0.03	< 0.03
Acenaphthene	DETSC 3303#	0.03	mg/kg	< 0.03	0.09	< 0.03	0.05
Fluorene	DETSC 3303	0.03	mg/kg	< 0.03	0.05	< 0.03	0.03
Phenanthrene	DETSC 3303#	0.03	mg/kg	0.18	0.97	0.22	0.50
Anthracene	DETSC 3303	0.03	mg/kg	0.04	0.26	0.07	0.09
Fluoranthene	DETSC 3303#	0.03	mg/kg	0.15	2.6	0.49	1.1
Pyrene	DETSC 3303#	0.03	mg/kg	0.14	2.3	0.42	1.1
Benzo(a)anthracene	DETSC 3303#	0.03	mg/kg	0.07	1.1	0.18	0.42
Chrysene	DETSC 3303	0.03	mg/kg	0.11	0.96	0.17	0.41
Benzo(b)fluoranthene	DETSC 3303#	0.03	mg/kg	0.06	1.6	0.25	0.42
Benzo(k)fluoranthene	DETSC 3303#	0.03	mg/kg	< 0.03	0.59	0.09	0.21
Benzo(a)pyrene	DETSC 3303#	0.03	mg/kg	0.03	0.99	0.15	0.29
Indeno(1,2,3-c,d)pyrene	DETSC 3303#	0.03	mg/kg	< 0.03	0.43	0.07	0.14
Dibenzo(a,h)anthracene	DETSC 3303#	0.03	mg/kg	< 0.03	0.12	< 0.03	< 0.03
Benzo(g,h,i)perylene	DETSC 3303#	0.03	mg/kg	< 0.03	0.53	0.08	0.14
PAH - USEPA 16, Total	DETSC 3303	0.1	mg/kg	0.87	13	2.2	4.9

Summary of Chemical Analysis

Soil/Misc Samples

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The Former SSI Steelworks, Redcar - Ground

Investigation Contract - Priority Areas Within SSI

Contract Title Landholdings, Contract 3

Lab No	1245446	1248501	1248502	1248503
Sample ID	S3-TPB40	S3-TPA02	S3-TPA02	S3-TPA03
Depth	0.50	0.50	1.50	1.80
Other ID	2	2	5	5
Sample Type	ES	ES	ES	ES
Sampling Date	16/10/17	23/10/17	23/10/17	23/10/17
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
PCBs							
PCB 28 + PCB 31	DETSC 3401#	0.01	mg/kg				
PCB 52	DETSC 3401#	0.01	mg/kg				
PCB 101	DETSC 3401#	0.01	mg/kg				
PCB 118	DETSC 3401#	0.01	mg/kg				
PCB 153	DETSC 3401#	0.01	mg/kg				
PCB 138	DETSC 3401#	0.01	mg/kg				
PCB 180	DETSC 3401#	0.01	mg/kg				
PCB 7 Total	DETSC 3401#	0.01	mg/kg				
Phenols							
Phenol - Monohydric	DETSC 2130#	0.3	mg/kg	< 0.3	< 0.3	< 0.3	< 0.3

Summary of Chemical Analysis

Soil/Misc Samples

Our Ref 4155 Combined Report

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The Former SSI Steelworks, Redcar - Ground

Investigation Contract - Priority Areas Within SSI

Contract Title Landholdings, Contract 3

Lab No	1248504	1248505	1248506	1248507
Sample ID	S3-TPA06	S3-TPA06	S3-TPA08	S3-TPA11
Depth	2.00	2.75	0.60	2.00
Other ID	5	8	2	7
Sample Type	ES	ES	ES	ES
Sampling Date	23/10/17	23/10/17	20/10/17	20/10/17
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
Asbestos Quantification	DETSC 1102	0		Y			
Metals							
Aluminium	DETSC 2301*	1	mg/kg			33000	
Antimony	DETSC 2301*	1	mg/kg	6.8		2.0	< 1.0
Arsenic	DETSC 2301#	0.2	mg/kg	7.3		11	7.9
Barium	DETSC 2301#	1.5	mg/kg	360		240	41
Beryllium	DETSC 2301#	0.2	mg/kg	1.2		3.2	4.5
Boron, Water Soluble	DETSC 2123#	0.2	mg/kg	3.6		4.8	35
Cadmium	DETSC 2301#	0.1	mg/kg	1.3		0.8	< 0.1
Chromium	DETSC 2301#	0.15	mg/kg	670		160	8.4
Chromium, Hexavalent	DETSC 2204*	1	mg/kg	< 1.0		< 1.0	< 1.0
Copper	DETSC 2301#	0.2	mg/kg	56		36	6.7
Iron	DETSC 2301	25	mg/kg			40000	
Lead	DETSC 2301#	0.3	mg/kg	77		51	5.3
Magnesium	DETSC 2301*	1	mg/kg			19000	
Manganese	DETSC 2301#	20	mg/kg			3400	
Mercury	DETSC 2325#	0.05	mg/kg	< 0.05		0.05	< 0.05
Molybdenum	DETSC 2301#	0.4	mg/kg	3.2		2.1	0.9
Nickel	DETSC 2301#	1	mg/kg	22		12	2.6
Silicon	DETSC 2301*	10	mg/kg			72000	
Vanadium	DETSC 2301#	0.8	mg/kg	720		200	30
Zinc	DETSC 2301#	1	mg/kg	630		120	14
Inorganics							
Loss on Ignition at 440oC	DETSC 2003#	0.01	%				
pH	DETSC 2008#			11.5		10.7	10.0
Cyanide, Total	DETSC 2130#	0.1	mg/kg	< 0.1		0.1	< 0.1
Cyanide, Free	DETSC 2130#	0.1	mg/kg				< 0.1
Cyanide, Complex	DETSC 2130*	0.2	mg/kg				< 0.2
Thiocyanate	DETSC 2130#	0.6	mg/kg				2.3
FOC	DETSC 2002	0.001				0.018	
Organic matter	DETSC 2002#	0.1	%	0.8		3.1	0.6
Sulphate Aqueous Extract as SO4	DETSC 2076#	10	mg/l	340		1300	880
Sulphur (free)	DETSC 3049#	0.75	mg/kg	14		29	< 0.75
Sulphur as S, Total	DETSC 2320	0.01	%			0.50	
Sulphate as SO4, Total	DETSC 2321#	0.01	%			1.2	

Summary of Chemical Analysis

Soil/Misc Samples

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The Former SSI Steelworks, Redcar - Ground

Investigation Contract - Priority Areas Within SSI

Contract Title Landholdings, Contract 3

Lab No	1248504	1248505	1248506	1248507
Sample ID	S3-TPA06	S3-TPA06	S3-TPA08	S3-TPA11
Depth	2.00	2.75	0.60	2.00
Other ID	5	8	2	7
Sample Type	ES	ES	ES	ES
Sampling Date	23/10/17	23/10/17	20/10/17	20/10/17
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
Petroleum Hydrocarbons							
Aliphatic C5-C6	DETSC 3321*	0.01	mg/kg	< 0.01		< 0.01	< 0.01
Aliphatic C6-C8	DETSC 3321*	0.01	mg/kg	< 0.01		< 0.01	< 0.01
Aliphatic C8-C10	DETSC 3321*	0.01	mg/kg	< 0.01		< 0.01	0.03
Aliphatic C10-C12	DETSC 3072#	1.5	mg/kg	< 1.5		< 1.5	< 1.5
Aliphatic C12-C16	DETSC 3072#	1.2	mg/kg	< 1.2		< 1.2	< 1.2
Aliphatic C16-C21	DETSC 3072#	1.5	mg/kg	< 1.5		< 1.5	< 1.5
Aliphatic C21-C35	DETSC 3072#	3.4	mg/kg	5.5		< 3.4	3.8
Aliphatic C5-C35	DETSC 3072*	10	mg/kg	< 10		< 10	< 10
Aromatic C5-C7	DETSC 3321*	0.01	mg/kg	< 0.01		< 0.01	< 0.01
Aromatic C7-C8	DETSC 3321*	0.01	mg/kg	< 0.01		< 0.01	< 0.01
Aromatic C8-C10	DETSC 3321*	0.01	mg/kg	< 0.01		< 0.01	0.04
Aromatic C10-C12	DETSC 3072#	0.9	mg/kg	< 0.9		2.3	< 0.9
Aromatic C12-C16	DETSC 3072#	0.5	mg/kg	1.9		3.2	< 0.5
Aromatic C16-C21	DETSC 3072#	0.6	mg/kg	10		5.2	5.3
Aromatic C21-C35	DETSC 3072#	1.4	mg/kg	23		13	14
Aromatic C5-C35	DETSC 3072*	10	mg/kg	35		24	20
TPH Ali/Aro Total	DETSC 3072*	10	mg/kg	42		25	25
PAHs							
Naphthalene	DETSC 3303#	0.03	mg/kg	0.07		< 0.03	0.07
Acenaphthylene	DETSC 3303#	0.03	mg/kg	< 0.03		< 0.03	0.12
Acenaphthene	DETSC 3303#	0.03	mg/kg	0.06		< 0.03	< 0.03
Fluorene	DETSC 3303	0.03	mg/kg	0.06		0.05	0.11
Phenanthrene	DETSC 3303#	0.03	mg/kg	0.71		0.20	1.0
Anthracene	DETSC 3303	0.03	mg/kg	0.11		0.06	0.33
Fluoranthene	DETSC 3303#	0.03	mg/kg	0.91		0.26	4.2
Pyrene	DETSC 3303#	0.03	mg/kg	0.73		0.18	3.4
Benzo(a)anthracene	DETSC 3303#	0.03	mg/kg	0.32		0.09	2.0
Chrysene	DETSC 3303	0.03	mg/kg	0.31		0.09	1.6
Benzo(b)fluoranthene	DETSC 3303#	0.03	mg/kg	0.32		0.08	3.0
Benzo(k)fluoranthene	DETSC 3303#	0.03	mg/kg	0.14		0.03	1.3
Benzo(a)pyrene	DETSC 3303#	0.03	mg/kg	0.22		0.06	1.9
Indeno(1,2,3-c,d)pyrene	DETSC 3303#	0.03	mg/kg	0.11		0.03	1.2
Dibenzo(a,h)anthracene	DETSC 3303#	0.03	mg/kg	< 0.03		< 0.03	0.13
Benzo(g,h,i)perylene	DETSC 3303#	0.03	mg/kg	0.11		< 0.03	1.2
PAH - USEPA 16, Total	DETSC 3303	0.1	mg/kg	4.2		1.1	22

Summary of Chemical Analysis

Soil/Misc Samples

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The Former SSI Steelworks, Redcar - Ground

Investigation Contract - Priority Areas Within SSI

Contract Title Landholdings, Contract 3

Lab No	1248504	1248505	1248506	1248507
Sample ID	S3-TPA06	S3-TPA06	S3-TPA08	S3-TPA11
Depth	2.00	2.75	0.60	2.00
Other ID	5	8	2	7
Sample Type	ES	ES	ES	ES
Sampling Date	23/10/17	23/10/17	20/10/17	20/10/17
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
PCBs							
PCB 28 + PCB 31	DETSC 3401#	0.01	mg/kg		< 0.01		
PCB 52	DETSC 3401#	0.01	mg/kg		< 0.01		
PCB 101	DETSC 3401#	0.01	mg/kg		< 0.01		
PCB 118	DETSC 3401#	0.01	mg/kg		< 0.01		
PCB 153	DETSC 3401#	0.01	mg/kg		< 0.01		
PCB 138	DETSC 3401#	0.01	mg/kg		< 0.01		
PCB 180	DETSC 3401#	0.01	mg/kg		< 0.01		
PCB 7 Total	DETSC 3401#	0.01	mg/kg		< 0.01		
Phenols							
Phenol - Monohydric	DETSC 2130#	0.3	mg/kg	< 0.3		< 0.3	< 0.3

Summary of Chemical Analysis

Soil/Misc Samples

Our Ref 4155 Combined Report

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The Former SSI Steelworks, Redcar - Ground

Investigation Contract - Priority Areas Within SSI

Contract Title Landholdings, Contract 3

Lab No	1248508	1248509	1248510	1248511
Sample ID	S3-TPA12	S3-TPA13	S3-TPA13	S3-TPB66
Depth	1.50	2.00	3.00	1.50
Other ID	5	6	9	6
Sample Type	ES	ES	ES	ES
Sampling Date	20/10/17	20/10/17	20/10/17	23/10/17
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
Asbestos Quantification	DETSC 1102	0			Y		
Metals							
Aluminium	DETSC 2301*	1	mg/kg				36000
Antimony	DETSC 2301*	1	mg/kg	5.6	2.0		1.2
Arsenic	DETSC 2301#	0.2	mg/kg	9.5	9.3	6.8	6.4
Barium	DETSC 2301#	1.5	mg/kg	340	310		160
Beryllium	DETSC 2301#	0.2	mg/kg	1.6	3.1		3.0
Boron, Water Soluble	DETSC 2123#	0.2	mg/kg	2.0	7.6	2.0	4.8
Cadmium	DETSC 2301#	0.1	mg/kg	0.9	0.5	0.4	1.0
Chromium	DETSC 2301#	0.15	mg/kg	480	110	32	140
Chromium, Hexavalent	DETSC 2204*	1	mg/kg	< 1.0	< 1.0		< 1.0
Copper	DETSC 2301#	0.2	mg/kg	27	32	26	21
Iron	DETSC 2301	25	mg/kg				22000
Lead	DETSC 2301#	0.3	mg/kg	49	49	27	200
Magnesium	DETSC 2301*	1	mg/kg				20000
Manganese	DETSC 2301#	20	mg/kg				14000
Mercury	DETSC 2325#	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Molybdenum	DETSC 2301#	0.4	mg/kg	1.4	1.6		1.1
Nickel	DETSC 2301#	1	mg/kg	10	10	28	7.2
Silicon	DETSC 2301*	10	mg/kg				70000
Vanadium	DETSC 2301#	0.8	mg/kg	980	220		250
Zinc	DETSC 2301#	1	mg/kg	66	100	66	110
Inorganics							
Loss on Ignition at 440oC	DETSC 2003#	0.01	%				
pH	DETSC 2008#			12.0	10.5	9.2	10.7
Cyanide, Total	DETSC 2130#	0.1	mg/kg	0.1	0.3	< 0.1	< 0.1
Cyanide, Free	DETSC 2130#	0.1	mg/kg		< 0.1		< 0.1
Cyanide, Complex	DETSC 2130*	0.2	mg/kg		0.3		< 0.2
Thiocyanate	DETSC 2130#	0.6	mg/kg		0.6		< 0.6
FOC	DETSC 2002	0.001					
Organic matter	DETSC 2002#	0.1	%	1.5	1.6	1.8	1.9
Sulphate Aqueous Extract as SO4	DETSC 2076#	10	mg/l	59	720	170	670
Sulphur (free)	DETSC 3049#	0.75	mg/kg	3.8	7.2		11
Sulphur as S, Total	DETSC 2320	0.01	%				
Sulphate as SO4, Total	DETSC 2321#	0.01	%				

Summary of Chemical Analysis

Soil/Misc Samples

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The Former SSI Steelworks, Redcar - Ground

Investigation Contract - Priority Areas Within SSI

Contract Title Landholdings, Contract 3

Lab No	1248508	1248509	1248510	1248511
Sample ID	S3-TPA12	S3-TPA13	S3-TPA13	S3-TPB66
Depth	1.50	2.00	3.00	1.50
Other ID	5	6	9	6
Sample Type	ES	ES	ES	ES
Sampling Date	20/10/17	20/10/17	20/10/17	23/10/17
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
Petroleum Hydrocarbons							
Aliphatic C5-C6	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aliphatic C6-C8	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aliphatic C8-C10	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aliphatic C10-C12	DETSC 3072#	1.5	mg/kg	< 1.5	< 1.5	< 1.5	< 1.5
Aliphatic C12-C16	DETSC 3072#	1.2	mg/kg	< 1.2	< 1.2	< 1.2	< 1.2
Aliphatic C16-C21	DETSC 3072#	1.5	mg/kg	< 1.5	< 1.5	< 1.5	< 1.5
Aliphatic C21-C35	DETSC 3072#	3.4	mg/kg	8.5	< 3.4	< 3.4	< 3.4
Aliphatic C5-C35	DETSC 3072*	10	mg/kg	< 10	< 10	< 10	< 10
Aromatic C5-C7	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aromatic C7-C8	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aromatic C8-C10	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aromatic C10-C12	DETSC 3072#	0.9	mg/kg	< 0.9	< 0.9	< 0.9	< 0.9
Aromatic C12-C16	DETSC 3072#	0.5	mg/kg	< 0.5	2.2	< 0.5	< 0.5
Aromatic C16-C21	DETSC 3072#	0.6	mg/kg	0.6	16	< 0.6	< 0.6
Aromatic C21-C35	DETSC 3072#	1.4	mg/kg	< 1.4	44	< 1.4	1.9
Aromatic C5-C35	DETSC 3072*	10	mg/kg	< 10	62	< 10	< 10
TPH Ali/Aro Total	DETSC 3072*	10	mg/kg	11	64	< 10	< 10
PAHs							
Naphthalene	DETSC 3303#	0.03	mg/kg	< 0.03	0.04	< 0.03	< 0.03
Acenaphthylene	DETSC 3303#	0.03	mg/kg	< 0.03	0.04	< 0.03	< 0.03
Acenaphthene	DETSC 3303#	0.03	mg/kg	< 0.03	0.35	< 0.03	< 0.03
Fluorene	DETSC 3303	0.03	mg/kg	< 0.03	0.18	< 0.03	< 0.03
Phenanthrene	DETSC 3303#	0.03	mg/kg	0.21	2.0	< 0.03	0.03
Anthracene	DETSC 3303	0.03	mg/kg	0.04	0.61	< 0.03	< 0.03
Fluoranthene	DETSC 3303#	0.03	mg/kg	0.55	6.0	0.05	0.09
Pyrene	DETSC 3303#	0.03	mg/kg	0.46	4.9	0.04	0.06
Benzo(a)anthracene	DETSC 3303#	0.03	mg/kg	0.29	2.3	< 0.03	0.04
Chrysene	DETSC 3303	0.03	mg/kg	0.30	2.1	< 0.03	0.04
Benzo(b)fluoranthene	DETSC 3303#	0.03	mg/kg	0.42	2.6	< 0.03	0.06
Benzo(k)fluoranthene	DETSC 3303#	0.03	mg/kg	0.15	1.1	< 0.03	< 0.03
Benzo(a)pyrene	DETSC 3303#	0.03	mg/kg	0.28	1.7	< 0.03	0.03
Indeno(1,2,3-c,d)pyrene	DETSC 3303#	0.03	mg/kg	0.17	0.74	< 0.03	0.03
Dibenzo(a,h)anthracene	DETSC 3303#	0.03	mg/kg	0.03	0.16	< 0.03	< 0.03
Benzo(g,h,i)perylene	DETSC 3303#	0.03	mg/kg	0.20	0.86	< 0.03	0.03
PAH - USEPA 16, Total	DETSC 3303	0.1	mg/kg	3.1	26	< 0.10	0.43

Summary of Chemical Analysis

Soil/Misc Samples

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The Former SSI Steelworks, Redcar - Ground

Investigation Contract - Priority Areas Within SSI

Contract Title Landholdings, Contract 3

Lab No	1248508	1248509	1248510	1248511
Sample ID	S3-TPA12	S3-TPA13	S3-TPA13	S3-TPB66
Depth	1.50	2.00	3.00	1.50
Other ID	5	6	9	6
Sample Type	ES	ES	ES	ES
Sampling Date	20/10/17	20/10/17	20/10/17	23/10/17
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
PCBs							
PCB 28 + PCB 31	DETSC 3401#	0.01	mg/kg				
PCB 52	DETSC 3401#	0.01	mg/kg				
PCB 101	DETSC 3401#	0.01	mg/kg				
PCB 118	DETSC 3401#	0.01	mg/kg				
PCB 153	DETSC 3401#	0.01	mg/kg				
PCB 138	DETSC 3401#	0.01	mg/kg				
PCB 180	DETSC 3401#	0.01	mg/kg				
PCB 7 Total	DETSC 3401#	0.01	mg/kg				
Phenols							
Phenol - Monohydric	DETSC 2130#	0.3	mg/kg	< 0.3	< 0.3	< 0.3	< 0.3

Summary of Chemical Analysis

Soil/Misc Samples

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Contract Title Landholdings, Contract 3

Lab No	1248512	1248513	1248514	1248515
Sample ID	S3-TPB68	S3-TPB69	S3-TPB69	S3-TPB71
Depth	1.00	0.20	1.00	1.50
Other ID	5	2	5	6
Sample Type	ES	ES	ES	ES
Sampling Date	20/10/17	20/10/17	20/10/17	23/10/17
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
Asbestos Quantification	DETSC 1102	0		Y			
Metals							
Aluminium	DETSC 2301*	1	mg/kg	45000		27000	48000
Antimony	DETSC 2301*	1	mg/kg	1.6	2.8	1.2	1.8
Arsenic	DETSC 2301#	0.2	mg/kg	6.4	10	7.4	5.8
Barium	DETSC 2301#	1.5	mg/kg	230	100	530	330
Beryllium	DETSC 2301#	0.2	mg/kg	4.6	3.3	2.6	4.0
Boron, Water Soluble	DETSC 2123#	0.2	mg/kg	4.5	6.9	3.0	4.0
Cadmium	DETSC 2301#	0.1	mg/kg	0.2	0.3	0.3	0.4
Chromium	DETSC 2301#	0.15	mg/kg	29	350	28	130
Chromium, Hexavalent	DETSC 2204*	1	mg/kg	< 1.0	< 1.0	< 1.0	< 1.0
Copper	DETSC 2301#	0.2	mg/kg	12	29	21	20
Iron	DETSC 2301	25	mg/kg	14000		20000	45000
Lead	DETSC 2301#	0.3	mg/kg	54	38	86	38
Magnesium	DETSC 2301*	1	mg/kg	24000		16000	25000
Manganese	DETSC 2301#	20	mg/kg	13000		4100	7900
Mercury	DETSC 2325#	0.05	mg/kg	< 0.05	< 0.05	0.29	< 0.05
Molybdenum	DETSC 2301#	0.4	mg/kg	0.9	1.8	1.2	1.0
Nickel	DETSC 2301#	1	mg/kg	1.9	11	13	7.3
Silicon	DETSC 2301*	10	mg/kg	54000		140000	66000
Vanadium	DETSC 2301#	0.8	mg/kg	86	730	59	230
Zinc	DETSC 2301#	1	mg/kg	41	31	86	43
Inorganics							
Loss on Ignition at 440oC	DETSC 2003#	0.01	%				
pH	DETSC 2008#			10.5	11.2	9.5	11.0
Cyanide, Total	DETSC 2130#	0.1	mg/kg	< 0.1	< 0.1	0.5	0.2
Cyanide, Free	DETSC 2130#	0.1	mg/kg	< 0.1			
Cyanide, Complex	DETSC 2130*	0.2	mg/kg	< 0.2			
Thiocyanate	DETSC 2130#	0.6	mg/kg	< 0.6			
FOC	DETSC 2002	0.001					
Organic matter	DETSC 2002#	0.1	%	0.3	0.9	2.5	1.0
Sulphate Aqueous Extract as SO4	DETSC 2076#	10	mg/l	910	290	410	460
Sulphur (free)	DETSC 3049#	0.75	mg/kg	8.6	< 0.75		8.0
Sulphur as S, Total	DETSC 2320	0.01	%				
Sulphate as SO4, Total	DETSC 2321#	0.01	%				

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The Former SSI Steelworks, Redcar - Ground

Investigation Contract - Priority Areas Within SSI

Contract Title Landholdings, Contract 3

Lab No	1248512	1248513	1248514	1248515
Sample ID	S3-TPB68	S3-TPB69	S3-TPB69	S3-TPB71
Depth	1.00	0.20	1.00	1.50
Other ID	5	2	5	6
Sample Type	ES	ES	ES	ES
Sampling Date	20/10/17	20/10/17	20/10/17	23/10/17
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
Petroleum Hydrocarbons							
Aliphatic C5-C6	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aliphatic C6-C8	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aliphatic C8-C10	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aliphatic C10-C12	DETSC 3072#	1.5	mg/kg	< 1.5	< 1.5	< 1.5	< 1.5
Aliphatic C12-C16	DETSC 3072#	1.2	mg/kg	< 1.2	< 1.2	< 1.2	< 1.2
Aliphatic C16-C21	DETSC 3072#	1.5	mg/kg	< 1.5	< 1.5	< 1.5	< 1.5
Aliphatic C21-C35	DETSC 3072#	3.4	mg/kg	< 3.4	< 3.4	< 3.4	< 3.4
Aliphatic C5-C35	DETSC 3072*	10	mg/kg	< 10	< 10	< 10	< 10
Aromatic C5-C7	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aromatic C7-C8	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aromatic C8-C10	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aromatic C10-C12	DETSC 3072#	0.9	mg/kg	< 0.9	< 0.9	< 0.9	< 0.9
Aromatic C12-C16	DETSC 3072#	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Aromatic C16-C21	DETSC 3072#	0.6	mg/kg	< 0.6	< 0.6	< 0.6	0.7
Aromatic C21-C35	DETSC 3072#	1.4	mg/kg	< 1.4	< 1.4	< 1.4	< 1.4
Aromatic C5-C35	DETSC 3072*	10	mg/kg	< 10	< 10	< 10	< 10
TPH Ali/Aro Total	DETSC 3072*	10	mg/kg	< 10	< 10	< 10	< 10
PAHs							
Naphthalene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	< 0.03	< 0.03
Acenaphthylene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	< 0.03	< 0.03
Acenaphthene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	< 0.03	< 0.03
Fluorene	DETSC 3303	0.03	mg/kg	< 0.03	< 0.03	< 0.03	< 0.03
Phenanthrene	DETSC 3303#	0.03	mg/kg	< 0.03	0.08	< 0.03	0.11
Anthracene	DETSC 3303	0.03	mg/kg	< 0.03	< 0.03	< 0.03	< 0.03
Fluoranthene	DETSC 3303#	0.03	mg/kg	0.07	0.17	< 0.03	0.43
Pyrene	DETSC 3303#	0.03	mg/kg	0.05	0.13	< 0.03	0.33
Benzo(a)anthracene	DETSC 3303#	0.03	mg/kg	0.03	0.06	< 0.03	0.16
Chrysene	DETSC 3303	0.03	mg/kg	0.04	0.07	< 0.03	0.16
Benzo(b)fluoranthene	DETSC 3303#	0.03	mg/kg	0.04	0.07	< 0.03	0.14
Benzo(k)fluoranthene	DETSC 3303#	0.03	mg/kg	< 0.03	0.04	< 0.03	0.08
Benzo(a)pyrene	DETSC 3303#	0.03	mg/kg	0.03	0.04	< 0.03	0.09
Indeno(1,2,3-c,d)pyrene	DETSC 3303#	0.03	mg/kg	< 0.03	0.04	< 0.03	0.05
Dibenzo(a,h)anthracene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	< 0.03	< 0.03
Benzo(g,h,i)perylene	DETSC 3303#	0.03	mg/kg	0.03	0.04	< 0.03	0.05
PAH - USEPA 16, Total	DETSC 3303	0.1	mg/kg	0.30	0.73	< 0.10	1.6

Summary of Chemical Analysis

Soil/Misc Samples

Our Ref 4155 Combined Report

Client Ref 4155

The Former SSI Steelworks, Redcar - Ground

Investigation Contract - Priority Areas Within SSI

Contract Title Landholdings, Contract 3

Lab No	1248512	1248513	1248514	1248515
Sample ID	S3-TPB68	S3-TPB69	S3-TPB69	S3-TPB71
Depth	1.00	0.20	1.00	1.50
Other ID	5	2	5	6
Sample Type	ES	ES	ES	ES
Sampling Date	20/10/17	20/10/17	20/10/17	23/10/17
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
PCBs							
PCB 28 + PCB 31	DETS 3401#	0.01	mg/kg				
PCB 52	DETS 3401#	0.01	mg/kg				
PCB 101	DETS 3401#	0.01	mg/kg				
PCB 118	DETS 3401#	0.01	mg/kg				
PCB 153	DETS 3401#	0.01	mg/kg				
PCB 138	DETS 3401#	0.01	mg/kg				
PCB 180	DETS 3401#	0.01	mg/kg				
PCB 7 Total	DETS 3401#	0.01	mg/kg				
Phenols							
Phenol - Monohydric	DETS 2130#	0.3	mg/kg	< 0.3	< 0.3	< 0.3	< 0.3

Summary of Chemical Analysis

Soil/Misc Samples

Our Ref 4155 Combined Report

Client Ref 4155

The Former SSI Steelworks, Redcar - Ground

Investigation Contract - Priority Areas Within SSI

Contract Title Landholdings, Contract 3

Lab No	1248516	1248517	1248518	1248519
Sample ID	S3-TPB72	S3-TPB72	S3-TPB74	S3-TPB75
Depth	1.50	2.50	0.50	0.50
Other ID	6	9	2	2
Sample Type	ES	ES	ES	ES
Sampling Date	23/10/17	23/10/17	20/10/17	20/10/17
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
Asbestos Quantification	DETSC 1102	0					
Metals							
Aluminium	DETSC 2301*	1	mg/kg	38000		30000	47000
Antimony	DETSC 2301*	1	mg/kg	2.5		2.2	< 1.0
Arsenic	DETSC 2301#	0.2	mg/kg	5.9	7.4	17	8.4
Barium	DETSC 2301#	1.5	mg/kg	230		340	150
Beryllium	DETSC 2301#	0.2	mg/kg	3.4		2.3	3.8
Boron, Water Soluble	DETSC 2123#	0.2	mg/kg	5.8	5.3	4.3	5.3
Cadmium	DETSC 2301#	0.1	mg/kg	0.2	0.3	0.7	0.3
Chromium	DETSC 2301#	0.15	mg/kg	330	99	50	87
Chromium, Hexavalent	DETSC 2204*	1	mg/kg	< 1.0		< 1.0	< 1.0
Copper	DETSC 2301#	0.2	mg/kg	15	14	46	25
Iron	DETSC 2301	25	mg/kg	32000		41000	27000
Lead	DETSC 2301#	0.3	mg/kg	21	8.6	65	32
Magnesium	DETSC 2301*	1	mg/kg	24000		11000	25000
Manganese	DETSC 2301#	20	mg/kg	17000		2200	9600
Mercury	DETSC 2325#	0.05	mg/kg	< 0.05	< 0.05	0.13	< 0.05
Molybdenum	DETSC 2301#	0.4	mg/kg	1.5		1.3	0.7
Nickel	DETSC 2301#	1	mg/kg	4.2	4.9	22	5.7
Silicon	DETSC 2301*	10	mg/kg	59000		160000	45000
Vanadium	DETSC 2301#	0.8	mg/kg	590		89	400
Zinc	DETSC 2301#	1	mg/kg	43	26	160	45
Inorganics							
Loss on Ignition at 440oC	DETSC 2003#	0.01	%				
pH	DETSC 2008#			11.2	11.1	8.5	11.2
Cyanide, Total	DETSC 2130#	0.1	mg/kg	0.3	0.1	0.3	0.2
Cyanide, Free	DETSC 2130#	0.1	mg/kg	< 0.1		< 0.1	
Cyanide, Complex	DETSC 2130*	0.2	mg/kg	0.3		< 0.2	
Thiocyanate	DETSC 2130#	0.6	mg/kg	< 0.6		1.9	
FOC	DETSC 2002	0.001					
Organic matter	DETSC 2002#	0.1	%	1.1	1.0	3.7	0.7
Sulphate Aqueous Extract as SO4	DETSC 2076#	10	mg/l	420	780	380	380
Sulphur (free)	DETSC 3049#	0.75	mg/kg	4.6		1.6	0.83
Sulphur as S, Total	DETSC 2320	0.01	%				
Sulphate as SO4, Total	DETSC 2321#	0.01	%				

Summary of Chemical Analysis

Soil/Misc Samples

Our Ref 4155 Combined Report

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The Former SSI Steelworks, Redcar - Ground

Investigation Contract - Priority Areas Within SSI

Contract Title Landholdings, Contract 3

Lab No	1248516	1248517	1248518	1248519
Sample ID	S3-TPB72	S3-TPB72	S3-TPB74	S3-TPB75
Depth	1.50	2.50	0.50	0.50
Other ID	6	9	2	2
Sample Type	ES	ES	ES	ES
Sampling Date	23/10/17	23/10/17	20/10/17	20/10/17
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
Petroleum Hydrocarbons							
Aliphatic C5-C6	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aliphatic C6-C8	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aliphatic C8-C10	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aliphatic C10-C12	DETSC 3072#	1.5	mg/kg	< 1.5	< 1.5	< 1.5	< 1.5
Aliphatic C12-C16	DETSC 3072#	1.2	mg/kg	< 1.2	< 1.2	< 1.2	< 1.2
Aliphatic C16-C21	DETSC 3072#	1.5	mg/kg	< 1.5	< 1.5	< 1.5	< 1.5
Aliphatic C21-C35	DETSC 3072#	3.4	mg/kg	< 3.4	< 3.4	< 3.4	< 3.4
Aliphatic C5-C35	DETSC 3072*	10	mg/kg	< 10	< 10	< 10	< 10
Aromatic C5-C7	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aromatic C7-C8	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aromatic C8-C10	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aromatic C10-C12	DETSC 3072#	0.9	mg/kg	< 0.9	< 0.9	< 0.9	< 0.9
Aromatic C12-C16	DETSC 3072#	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Aromatic C16-C21	DETSC 3072#	0.6	mg/kg	< 0.6	< 0.6	< 0.6	< 0.6
Aromatic C21-C35	DETSC 3072#	1.4	mg/kg	1.4	< 1.4	< 1.4	1.9
Aromatic C5-C35	DETSC 3072*	10	mg/kg	< 10	< 10	< 10	< 10
TPH Ali/Aro Total	DETSC 3072*	10	mg/kg	< 10	< 10	< 10	< 10
PAHs							
Naphthalene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	< 0.03	< 0.03
Acenaphthylene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	< 0.03	< 0.03
Acenaphthene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	< 0.03	< 0.03
Fluorene	DETSC 3303	0.03	mg/kg	< 0.03	< 0.03	< 0.03	< 0.03
Phenanthrene	DETSC 3303#	0.03	mg/kg	0.04	< 0.03	< 0.03	< 0.03
Anthracene	DETSC 3303	0.03	mg/kg	< 0.03	< 0.03	< 0.03	< 0.03
Fluoranthene	DETSC 3303#	0.03	mg/kg	0.22	< 0.03	0.04	< 0.03
Pyrene	DETSC 3303#	0.03	mg/kg	0.17	< 0.03	0.03	< 0.03
Benzo(a)anthracene	DETSC 3303#	0.03	mg/kg	0.11	< 0.03	< 0.03	< 0.03
Chrysene	DETSC 3303	0.03	mg/kg	0.10	< 0.03	0.03	< 0.03
Benzo(b)fluoranthene	DETSC 3303#	0.03	mg/kg	0.11	< 0.03	0.03	< 0.03
Benzo(k)fluoranthene	DETSC 3303#	0.03	mg/kg	0.04	< 0.03	< 0.03	< 0.03
Benzo(a)pyrene	DETSC 3303#	0.03	mg/kg	0.07	< 0.03	< 0.03	< 0.03
Indeno(1,2,3-c,d)pyrene	DETSC 3303#	0.03	mg/kg	0.04	< 0.03	< 0.03	< 0.03
Dibenzo(a,h)anthracene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	< 0.03	< 0.03
Benzo(g,h,i)perylene	DETSC 3303#	0.03	mg/kg	0.04	< 0.03	< 0.03	< 0.03
PAH - USEPA 16, Total	DETSC 3303	0.1	mg/kg	0.94	< 0.10	0.14	< 0.10

Summary of Chemical Analysis

Soil/Misc Samples

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Client Ref 4155

The Former SSI Steelworks, Redcar - Ground

Investigation Contract - Priority Areas Within SSI

Contract Title Landholdings, Contract 3

Lab No	1248516	1248517	1248518	1248519
Sample ID	S3-TPB72	S3-TPB72	S3-TPB74	S3-TPB75
Depth	1.50	2.50	0.50	0.50
Other ID	6	9	2	2
Sample Type	ES	ES	ES	ES
Sampling Date	23/10/17	23/10/17	20/10/17	20/10/17
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
PCBs							
PCB 28 + PCB 31	DETSC 3401#	0.01	mg/kg				
PCB 52	DETSC 3401#	0.01	mg/kg				
PCB 101	DETSC 3401#	0.01	mg/kg				
PCB 118	DETSC 3401#	0.01	mg/kg				
PCB 153	DETSC 3401#	0.01	mg/kg				
PCB 138	DETSC 3401#	0.01	mg/kg				
PCB 180	DETSC 3401#	0.01	mg/kg				
PCB 7 Total	DETSC 3401#	0.01	mg/kg				
Phenols							
Phenol - Monohydric	DETSC 2130#	0.3	mg/kg	< 0.3	< 0.3	< 0.3	< 0.3

Summary of Chemical Analysis

Soil/Misc Samples

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The Former SSI Steelworks, Redcar - Ground

Investigation Contract - Priority Areas Within SSI

Contract Title Landholdings, Contract 3

Lab No	1248684	1248685	1248686	1248687
Sample ID	S3-TPA25	S3-TPA26	S3-TPA28	S3-TPA28
Depth	1.00	0.20	1.00	3.50
Other ID	2	2	5	11
Sample Type	ES	ES	ES	ES
Sampling Date	18/10/17	18/10/17	18/10/17	18/10/17
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
Asbestos Quantification	DETSC 1102	0		Y	Y	Y	Y
Metals							
Aluminium	DETSC 2301*	1	mg/kg				
Antimony	DETSC 2301*	1	mg/kg	1.6	2.5		5.8
Arsenic	DETSC 2301#	0.2	mg/kg	10	20	7.6	19
Barium	DETSC 2301#	1.5	mg/kg	490	240		240
Beryllium	DETSC 2301#	0.2	mg/kg	2.8	1.7		1.5
Boron, Water Soluble	DETSC 2123#	0.2	mg/kg	3.8	2.7	2.0	1.9
Cadmium	DETSC 2301#	0.1	mg/kg	1.1	5.7	0.7	8.4
Chromium	DETSC 2301#	0.15	mg/kg	56	67	37	110
Chromium, Hexavalent	DETSC 2204*	1	mg/kg	< 1.0	< 1.0		< 1.0
Copper	DETSC 2301#	0.2	mg/kg	36	49	18	130
Iron	DETSC 2301	25	mg/kg				
Lead	DETSC 2301#	0.3	mg/kg	65	790	22	700
Magnesium	DETSC 2301*	1	mg/kg				
Manganese	DETSC 2301#	20	mg/kg				
Mercury	DETSC 2325#	0.05	mg/kg	0.28	0.25	< 0.05	< 0.05
Molybdenum	DETSC 2301#	0.4	mg/kg	2.2	1.7		1.2
Nickel	DETSC 2301#	1	mg/kg	15	21	9.6	35
Silicon	DETSC 2301*	10	mg/kg				
Vanadium	DETSC 2301#	0.8	mg/kg	140	150		180
Zinc	DETSC 2301#	1	mg/kg	240	610	55	5000
Inorganics							
Loss on Ignition at 440oC	DETSC 2003#	0.01	%				
pH	DETSC 2008#			10.8	9.3	10.0	9.2
Cyanide, Total	DETSC 2130#	0.1	mg/kg	0.9	22	0.6	6.3
Cyanide, Free	DETSC 2130#	0.1	mg/kg	< 0.1	1.1		< 0.1
Cyanide, Complex	DETSC 2130*	0.2	mg/kg	0.9	21		6.2
Thiocyanate	DETSC 2130#	0.6	mg/kg	< 0.6	2.0		< 0.6
FOC	DETSC 2002	0.001					
Organic matter	DETSC 2002#	0.1	%	0.8	1.0	1.1	1.4
Sulphate Aqueous Extract as SO4	DETSC 2076#	10	mg/l	870	1600	230	< 10
Sulphur (free)	DETSC 3049#	0.75	mg/kg	1.5	4.1		< 0.75
Sulphur as S, Total	DETSC 2320	0.01	%				
Sulphate as SO4, Total	DETSC 2321#	0.01	%				

Summary of Chemical Analysis

Soil/Misc Samples

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The Former SSI Steelworks, Redcar - Ground

Investigation Contract - Priority Areas Within SSI

Contract Title Landholdings, Contract 3

Lab No	1248684	1248685	1248686	1248687
Sample ID	S3-TPA25	S3-TPA26	S3-TPA28	S3-TPA28
Depth	1.00	0.20	1.00	3.50
Other ID	2	2	5	11
Sample Type	ES	ES	ES	ES
Sampling Date	18/10/17	18/10/17	18/10/17	18/10/17
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
Petroleum Hydrocarbons							
Aliphatic C5-C6	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aliphatic C6-C8	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aliphatic C8-C10	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aliphatic C10-C12	DETSC 3072#	1.5	mg/kg	< 1.5	4.0	< 1.5	< 1.5
Aliphatic C12-C16	DETSC 3072#	1.2	mg/kg	< 1.2	9.8	< 1.2	< 1.2
Aliphatic C16-C21	DETSC 3072#	1.5	mg/kg	< 1.5	10	< 1.5	< 1.5
Aliphatic C21-C35	DETSC 3072#	3.4	mg/kg	7.0	120	< 3.4	< 3.4
Aliphatic C5-C35	DETSC 3072*	10	mg/kg	< 10	140	< 10	< 10
Aromatic C5-C7	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aromatic C7-C8	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aromatic C8-C10	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aromatic C10-C12	DETSC 3072#	0.9	mg/kg	< 0.9	2.3	< 0.9	< 0.9
Aromatic C12-C16	DETSC 3072#	0.5	mg/kg	0.7	40	1.0	< 0.5
Aromatic C16-C21	DETSC 3072#	0.6	mg/kg	4.0	140	0.9	< 0.6
Aromatic C21-C35	DETSC 3072#	1.4	mg/kg	16	310	3.3	< 1.4
Aromatic C5-C35	DETSC 3072*	10	mg/kg	21	490	< 10	< 10
TPH Ali/Aro Total	DETSC 3072*	10	mg/kg	31	640	< 10	< 10
PAHs							
Naphthalene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	< 0.03	< 0.03
Acenaphthylene	DETSC 3303#	0.03	mg/kg	0.03	0.03	< 0.03	< 0.03
Acenaphthene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	< 0.03	< 0.03
Fluorene	DETSC 3303	0.03	mg/kg	< 0.03	< 0.03	< 0.03	< 0.03
Phenanthrene	DETSC 3303#	0.03	mg/kg	0.28	0.29	0.14	< 0.03
Anthracene	DETSC 3303	0.03	mg/kg	0.10	0.10	0.05	< 0.03
Fluoranthene	DETSC 3303#	0.03	mg/kg	0.70	1.6	0.48	< 0.03
Pyrene	DETSC 3303#	0.03	mg/kg	0.60	1.3	0.43	< 0.03
Benzo(a)anthracene	DETSC 3303#	0.03	mg/kg	0.32	0.60	0.21	< 0.03
Chrysene	DETSC 3303	0.03	mg/kg	0.38	0.60	0.26	< 0.03
Benzo(b)fluoranthene	DETSC 3303#	0.03	mg/kg	0.50	0.64	0.35	< 0.03
Benzo(k)fluoranthene	DETSC 3303#	0.03	mg/kg	0.21	0.28	0.16	< 0.03
Benzo(a)pyrene	DETSC 3303#	0.03	mg/kg	0.25	0.34	0.14	< 0.03
Indeno(1,2,3-c,d)pyrene	DETSC 3303#	0.03	mg/kg	0.27	0.20	0.16	< 0.03
Dibenzo(a,h)anthracene	DETSC 3303#	0.03	mg/kg	0.06	< 0.03	< 0.03	< 0.03
Benzo(g,h,i)perylene	DETSC 3303#	0.03	mg/kg	0.29	0.23	0.19	< 0.03
PAH - USEPA 16, Total	DETSC 3303	0.1	mg/kg	4.0	6.3	2.6	< 0.10

Summary of Chemical Analysis

Soil/Misc Samples

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The Former SSI Steelworks, Redcar - Ground

Investigation Contract - Priority Areas Within SSI

Contract Title Landholdings, Contract 3

Lab No	1248684	1248685	1248686	1248687
Sample ID	S3-TPA25	S3-TPA26	S3-TPA28	S3-TPA28
Depth	1.00	0.20	1.00	3.50
Other ID	2	2	5	11
Sample Type	ES	ES	ES	ES
Sampling Date	18/10/17	18/10/17	18/10/17	18/10/17
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
PCBs							
PCB 28 + PCB 31	DETSC 3401#	0.01	mg/kg			< 0.01	
PCB 52	DETSC 3401#	0.01	mg/kg			< 0.01	
PCB 101	DETSC 3401#	0.01	mg/kg			< 0.01	
PCB 118	DETSC 3401#	0.01	mg/kg			< 0.01	
PCB 153	DETSC 3401#	0.01	mg/kg			< 0.01	
PCB 138	DETSC 3401#	0.01	mg/kg			< 0.01	
PCB 180	DETSC 3401#	0.01	mg/kg			< 0.01	
PCB 7 Total	DETSC 3401#	0.01	mg/kg			< 0.01	
Phenols							
Phenol - Monohydric	DETSC 2130#	0.3	mg/kg	< 0.3	< 0.3	< 0.3	< 0.3

Summary of Chemical Analysis

Soil/Misc Samples

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The Former SSI Steelworks, Redcar - Ground

Investigation Contract - Priority Areas Within SSI

Contract Title Landholdings, Contract 3

Lab No	1248688	1248689	1248690	1248691
Sample ID	S3-TPA31	S3-TPA31	S3-TPA42	S3-TPB44
Depth	0.80	2.00	0.20	1.50
Other ID	5	8	2	5
Sample Type	ES	ES	ES	ES
Sampling Date	18/10/17	18/10/17	18/10/17	18/10/17
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
Asbestos Quantification	DETSC 1102	0		Y		Y	
Metals							
Aluminium	DETSC 2301*	1	mg/kg				17000
Antimony	DETSC 2301*	1	mg/kg		< 1.0	< 1.0	1.5
Arsenic	DETSC 2301#	0.2	mg/kg	24	7.6	5.3	5.8
Barium	DETSC 2301#	1.5	mg/kg		160	160	240
Beryllium	DETSC 2301#	0.2	mg/kg		1.0	1.5	1.4
Boron, Water Soluble	DETSC 2123#	0.2	mg/kg	4.0	2.3	2.4	3.6
Cadmium	DETSC 2301#	0.1	mg/kg	0.8	0.7	0.2	1.0
Chromium	DETSC 2301#	0.15	mg/kg	94	27	12	75
Chromium, Hexavalent	DETSC 2204*	1	mg/kg		< 1.0	< 1.0	< 1.0
Copper	DETSC 2301#	0.2	mg/kg	65	26	14	34
Iron	DETSC 2301	25	mg/kg				110000
Lead	DETSC 2301#	0.3	mg/kg	55	30	18	40
Magnesium	DETSC 2301*	1	mg/kg				16000
Manganese	DETSC 2301#	20	mg/kg				4400
Mercury	DETSC 2325#	0.05	mg/kg	0.33	< 0.05	< 0.05	< 0.05
Molybdenum	DETSC 2301#	0.4	mg/kg		0.4	0.7	3.9
Nickel	DETSC 2301#	1	mg/kg	27	30	9.0	22
Silicon	DETSC 2301*	10	mg/kg				48000
Vanadium	DETSC 2301#	0.8	mg/kg		26	25	79
Zinc	DETSC 2301#	1	mg/kg	160	110	55	130
Inorganics							
Loss on Ignition at 440oC	DETSC 2003#	0.01	%				
pH	DETSC 2008#			9.7	8.2	9.8	12.1
Cyanide, Total	DETSC 2130#	0.1	mg/kg	0.2	< 0.1	< 0.1	0.1
Cyanide, Free	DETSC 2130#	0.1	mg/kg				< 0.1
Cyanide, Complex	DETSC 2130*	0.2	mg/kg				< 0.2
Thiocyanate	DETSC 2130#	0.6	mg/kg				< 0.6
FOC	DETSC 2002	0.001					
Organic matter	DETSC 2002#	0.1	%	1.2	1.8	3.3	1.8
Sulphate Aqueous Extract as SO4	DETSC 2076#	10	mg/l	240	170	240	58
Sulphur (free)	DETSC 3049#	0.75	mg/kg		< 0.75	4.6	1.7
Sulphur as S, Total	DETSC 2320	0.01	%				
Sulphate as SO4, Total	DETSC 2321#	0.01	%				

Summary of Chemical Analysis

Soil/Misc Samples

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The Former SSI Steelworks, Redcar - Ground

Investigation Contract - Priority Areas Within SSI

Contract Title Landholdings, Contract 3

Lab No	1248688	1248689	1248690	1248691
Sample ID	S3-TPA31	S3-TPA31	S3-TPA42	S3-TPB44
Depth	0.80	2.00	0.20	1.50
Other ID	5	8	2	5
Sample Type	ES	ES	ES	ES
Sampling Date	18/10/17	18/10/17	18/10/17	18/10/17
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
Petroleum Hydrocarbons							
Aliphatic C5-C6	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aliphatic C6-C8	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aliphatic C8-C10	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aliphatic C10-C12	DETSC 3072#	1.5	mg/kg	< 1.5	< 1.5	< 1.5	< 1.5
Aliphatic C12-C16	DETSC 3072#	1.2	mg/kg	< 1.2	< 1.2	24	2.9
Aliphatic C16-C21	DETSC 3072#	1.5	mg/kg	< 1.5	< 1.5	100	14
Aliphatic C21-C35	DETSC 3072#	3.4	mg/kg	6.6	< 3.4	280	170
Aliphatic C5-C35	DETSC 3072*	10	mg/kg	< 10	< 10	400	190
Aromatic C5-C7	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aromatic C7-C8	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aromatic C8-C10	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aromatic C10-C12	DETSC 3072#	0.9	mg/kg	< 0.9	< 0.9	< 0.9	< 0.9
Aromatic C12-C16	DETSC 3072#	0.5	mg/kg	< 0.5	< 0.5	14	3.4
Aromatic C16-C21	DETSC 3072#	0.6	mg/kg	1.2	< 0.6	120	13
Aromatic C21-C35	DETSC 3072#	1.4	mg/kg	6.7	< 1.4	360	77
Aromatic C5-C35	DETSC 3072*	10	mg/kg	< 10	< 10	490	94
TPH Ali/Aro Total	DETSC 3072*	10	mg/kg	16	< 10	900	290
PAHs							
Naphthalene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	0.10	< 0.03
Acenaphthylene	DETSC 3303#	0.03	mg/kg	0.03	< 0.03	0.04	< 0.03
Acenaphthene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	0.05	< 0.03
Fluorene	DETSC 3303	0.03	mg/kg	< 0.03	< 0.03	< 0.03	< 0.03
Phenanthrene	DETSC 3303#	0.03	mg/kg	0.30	< 0.03	0.91	0.14
Anthracene	DETSC 3303	0.03	mg/kg	0.07	< 0.03	0.09	0.05
Fluoranthene	DETSC 3303#	0.03	mg/kg	0.57	< 0.03	0.98	0.60
Pyrene	DETSC 3303#	0.03	mg/kg	0.51	< 0.03	1.2	0.64
Benzo(a)anthracene	DETSC 3303#	0.03	mg/kg	0.29	< 0.03	0.27	0.28
Chrysene	DETSC 3303	0.03	mg/kg	0.33	< 0.03	0.54	0.29
Benzo(b)fluoranthene	DETSC 3303#	0.03	mg/kg	0.50	< 0.03	0.55	0.48
Benzo(k)fluoranthene	DETSC 3303#	0.03	mg/kg	0.23	< 0.03	0.16	0.18
Benzo(a)pyrene	DETSC 3303#	0.03	mg/kg	0.24	< 0.03	0.40	0.24
Indeno(1,2,3-c,d)pyrene	DETSC 3303#	0.03	mg/kg	0.21	< 0.03	0.16	0.15
Dibenzo(a,h)anthracene	DETSC 3303#	0.03	mg/kg	0.06	< 0.03	0.06	0.05
Benzo(g,h,i)perylene	DETSC 3303#	0.03	mg/kg	0.25	< 0.03	0.23	0.20
PAH - USEPA 16, Total	DETSC 3303	0.1	mg/kg	3.6	< 0.10	5.7	3.3

Summary of Chemical Analysis

Soil/Misc Samples

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The Former SSI Steelworks, Redcar - Ground

Investigation Contract - Priority Areas Within SSI

Contract Title Landholdings, Contract 3

Lab No	1248688	1248689	1248690	1248691
Sample ID	S3-TPA31	S3-TPA31	S3-TPA42	S3-TPB44
Depth	0.80	2.00	0.20	1.50
Other ID	5	8	2	5
Sample Type	ES	ES	ES	ES
Sampling Date	18/10/17	18/10/17	18/10/17	18/10/17
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
PCBs							
PCB 28 + PCB 31	DETSC 3401#	0.01	mg/kg				
PCB 52	DETSC 3401#	0.01	mg/kg				
PCB 101	DETSC 3401#	0.01	mg/kg				
PCB 118	DETSC 3401#	0.01	mg/kg				
PCB 153	DETSC 3401#	0.01	mg/kg				
PCB 138	DETSC 3401#	0.01	mg/kg				
PCB 180	DETSC 3401#	0.01	mg/kg				
PCB 7 Total	DETSC 3401#	0.01	mg/kg				
Phenols							
Phenol - Monohydric	DETSC 2130#	0.3	mg/kg	< 0.3	< 0.3	< 0.3	< 0.3

Summary of Chemical Analysis

Soil/Misc Samples

Our Ref 4155 Combined Report

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The Former SSI Steelworks, Redcar - Ground

Investigation Contract - Priority Areas Within SSI

Contract Title Landholdings, Contract 3

Lab No	1248692	1248693	1248694	1248695
Sample ID	S3-TPB45	S3-TPB50	S3-TPB51	S3-TPA15
Depth	0.50	1.30	0.50	1.00
Other ID	2	5	2	3
Sample Type	ES	ES	ES	ES
Sampling Date	18/10/17	18/10/17	18/10/17	19/10/17
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
Asbestos Quantification	DETSC 1102	0					
Metals							
Aluminium	DETSC 2301*	1	mg/kg	21000	29000	23000	8600
Antimony	DETSC 2301*	1	mg/kg	< 1.0	< 1.0	2.9	7.9
Arsenic	DETSC 2301#	0.2	mg/kg	5.1	6.7	4.0	16
Barium	DETSC 2301#	1.5	mg/kg	570	360	290	770
Beryllium	DETSC 2301#	0.2	mg/kg	2.1	2.8	2.0	0.9
Boron, Water Soluble	DETSC 2123#	0.2	mg/kg	2.8	4.6	7.2	2.2
Cadmium	DETSC 2301#	0.1	mg/kg	0.7	0.4	1.0	1.5
Chromium	DETSC 2301#	0.15	mg/kg	23	42	250	720
Chromium, Hexavalent	DETSC 2204*	1	mg/kg	< 1.0	< 1.0	< 1.0	< 1.0
Copper	DETSC 2301#	0.2	mg/kg	11	14	27	27
Iron	DETSC 2301	25	mg/kg	75000	16000	85000	110000
Lead	DETSC 2301#	0.3	mg/kg	13	18	23	45
Magnesium	DETSC 2301*	1	mg/kg	20000	14000	25000	23000
Manganese	DETSC 2301#	20	mg/kg	1400	2300	12000	23000
Mercury	DETSC 2325#	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Molybdenum	DETSC 2301#	0.4	mg/kg	0.9	1.2	2.4	1.2
Nickel	DETSC 2301#	1	mg/kg	10	14	24	11
Silicon	DETSC 2301*	10	mg/kg	23000	160000	35000	55000
Vanadium	DETSC 2301#	0.8	mg/kg	35	73	380	2800
Zinc	DETSC 2301#	1	mg/kg	42	57	76	43
Inorganics							
Loss on Ignition at 440oC	DETSC 2003#	0.01	%				
pH	DETSC 2008#			10.4	9.7	12.3	11.9
Cyanide, Total	DETSC 2130#	0.1	mg/kg	< 0.1	< 0.1	0.1	< 0.1
Cyanide, Free	DETSC 2130#	0.1	mg/kg		< 0.1		< 0.1
Cyanide, Complex	DETSC 2130*	0.2	mg/kg		< 0.2		< 0.2
Thiocyanate	DETSC 2130#	0.6	mg/kg		< 0.6		< 0.6
FOC	DETSC 2002	0.001					
Organic matter	DETSC 2002#	0.1	%	1.7	1.2	2.4	0.9
Sulphate Aqueous Extract as SO4	DETSC 2076#	10	mg/l	380	1800	130	160
Sulphur (free)	DETSC 3049#	0.75	mg/kg	1.6	2.5	11	5.6
Sulphur as S, Total	DETSC 2320	0.01	%				
Sulphate as SO4, Total	DETSC 2321#	0.01	%				

Summary of Chemical Analysis

Soil/Misc Samples

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The Former SSI Steelworks, Redcar - Ground

Investigation Contract - Priority Areas Within SSI

Contract Title Landholdings, Contract 3

Lab No	1248692	1248693	1248694	1248695
Sample ID	S3-TPB45	S3-TPB50	S3-TPB51	S3-TPA15
Depth	0.50	1.30	0.50	1.00
Other ID	2	5	2	3
Sample Type	ES	ES	ES	ES
Sampling Date	18/10/17	18/10/17	18/10/17	19/10/17
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
Petroleum Hydrocarbons							
Aliphatic C5-C6	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aliphatic C6-C8	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aliphatic C8-C10	DETSC 3321*	0.01	mg/kg	0.02	< 0.01	< 0.01	< 0.01
Aliphatic C10-C12	DETSC 3072#	1.5	mg/kg	< 1.5	< 1.5	< 1.5	1.6
Aliphatic C12-C16	DETSC 3072#	1.2	mg/kg	< 1.2	< 1.2	9.7	2.6
Aliphatic C16-C21	DETSC 3072#	1.5	mg/kg	2.4	< 1.5	54	3.0
Aliphatic C21-C35	DETSC 3072#	3.4	mg/kg	23	< 3.4	560	< 3.4
Aliphatic C5-C35	DETSC 3072*	10	mg/kg	26	< 10	620	< 10
Aromatic C5-C7	DETSC 3321*	0.01	mg/kg	0.01	< 0.01	< 0.01	< 0.01
Aromatic C7-C8	DETSC 3321*	0.01	mg/kg	0.01	< 0.01	< 0.01	< 0.01
Aromatic C8-C10	DETSC 3321*	0.01	mg/kg	0.09	< 0.01	< 0.01	< 0.01
Aromatic C10-C12	DETSC 3072#	0.9	mg/kg	< 0.9	< 0.9	1.9	2.8
Aromatic C12-C16	DETSC 3072#	0.5	mg/kg	1.3	< 0.5	9.1	4.5
Aromatic C16-C21	DETSC 3072#	0.6	mg/kg	2.3	< 0.6	70	4.9
Aromatic C21-C35	DETSC 3072#	1.4	mg/kg	13	< 1.4	250	15
Aromatic C5-C35	DETSC 3072*	10	mg/kg	16	< 10	330	27
TPH Ali/Aro Total	DETSC 3072*	10	mg/kg	42	< 10	960	36
PAHs							
Naphthalene	DETSC 3303#	0.03	mg/kg	0.05	< 0.03	0.08	0.04
Acenaphthylene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	0.20	0.06
Acenaphthene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	0.82	< 0.03
Fluorene	DETSC 3303	0.03	mg/kg	< 0.03	< 0.03	0.44	0.04
Phenanthrene	DETSC 3303#	0.03	mg/kg	0.11	< 0.03	9.0	0.45
Anthracene	DETSC 3303	0.03	mg/kg	< 0.03	< 0.03	1.6	0.16
Fluoranthene	DETSC 3303#	0.03	mg/kg	0.10	< 0.03	15	1.7
Pyrene	DETSC 3303#	0.03	mg/kg	0.10	< 0.03	12	1.0
Benzo(a)anthracene	DETSC 3303#	0.03	mg/kg	0.06	< 0.03	5.3	0.55
Chrysene	DETSC 3303	0.03	mg/kg	0.07	< 0.03	5.2	0.61
Benzo(b)fluoranthene	DETSC 3303#	0.03	mg/kg	0.07	< 0.03	7.6	1.0
Benzo(k)fluoranthene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	3.1	0.32
Benzo(a)pyrene	DETSC 3303#	0.03	mg/kg	0.05	< 0.03	4.5	0.34
Indeno(1,2,3-c,d)pyrene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	2.6	0.22
Dibenzo(a,h)anthracene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	0.92	0.05
Benzo(g,h,i)perylene	DETSC 3303#	0.03	mg/kg	0.04	< 0.03	3.2	0.24
PAH - USEPA 16, Total	DETSC 3303	0.1	mg/kg	0.66	< 0.10	71	6.9

Summary of Chemical Analysis

Soil/Misc Samples

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The Former SSI Steelworks, Redcar - Ground

Investigation Contract - Priority Areas Within SSI

Contract Title Landholdings, Contract 3

Lab No	1248692	1248693	1248694	1248695
Sample ID	S3-TPB45	S3-TPB50	S3-TPB51	S3-TPA15
Depth	0.50	1.30	0.50	1.00
Other ID	2	5	2	3
Sample Type	ES	ES	ES	ES
Sampling Date	18/10/17	18/10/17	18/10/17	19/10/17
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
PCBs							
PCB 28 + PCB 31	DETSC 3401#	0.01	mg/kg	< 0.01			
PCB 52	DETSC 3401#	0.01	mg/kg	< 0.01			
PCB 101	DETSC 3401#	0.01	mg/kg	< 0.01			
PCB 118	DETSC 3401#	0.01	mg/kg	< 0.01			
PCB 153	DETSC 3401#	0.01	mg/kg	< 0.01			
PCB 138	DETSC 3401#	0.01	mg/kg	< 0.01			
PCB 180	DETSC 3401#	0.01	mg/kg	< 0.01			
PCB 7 Total	DETSC 3401#	0.01	mg/kg	< 0.01			
Phenols							
Phenol - Monohydric	DETSC 2130#	0.3	mg/kg	< 0.3	< 0.3	< 0.3	< 0.3

Summary of Chemical Analysis

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Contract Title Landholdings, Contract 3

Lab No	1248696	1248697	1248698	1248699
Sample ID	S3-TPA17	S3-TPA18	S3-TPA18	S3-TPA20
Depth	0.60	1.00	1.55	1.00
Other ID	4	4	7	4
Sample Type	ES	ES	ES	ES
Sampling Date	19/10/17	19/10/17	19/10/17	19/10/17
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
Asbestos Quantification	DETSC 1102	0		Y			
Metals							
Aluminium	DETSC 2301*	1	mg/kg		23000		
Antimony	DETSC 2301*	1	mg/kg	6.1	< 1.0		< 1.0
Arsenic	DETSC 2301#	0.2	mg/kg	13	19	3.9	10
Barium	DETSC 2301#	1.5	mg/kg	560	330		300
Beryllium	DETSC 2301#	0.2	mg/kg	3.1	3.0		2.4
Boron, Water Soluble	DETSC 2123#	0.2	mg/kg	5.9	5.2	17	4.4
Cadmium	DETSC 2301#	0.1	mg/kg	3.5	0.6	< 0.1	1.2
Chromium	DETSC 2301#	0.15	mg/kg	430	43	9.1	100
Chromium, Hexavalent	DETSC 2204*	1	mg/kg	< 1.0	< 1.0		< 1.0
Copper	DETSC 2301#	0.2	mg/kg	70	3200	16	65
Iron	DETSC 2301	25	mg/kg		20000		
Lead	DETSC 2301#	0.3	mg/kg	240	210	8.3	79
Magnesium	DETSC 2301*	1	mg/kg		13000		
Manganese	DETSC 2301#	20	mg/kg		2200		
Mercury	DETSC 2325#	0.05	mg/kg	0.40	0.14	< 0.05	0.15
Molybdenum	DETSC 2301#	0.4	mg/kg	2.7	0.9		1.8
Nickel	DETSC 2301#	1	mg/kg	19	12	2.3	12
Silicon	DETSC 2301*	10	mg/kg		100000		
Vanadium	DETSC 2301#	0.8	mg/kg	490	130		210
Zinc	DETSC 2301#	1	mg/kg	730	230	21	210
Inorganics							
Loss on Ignition at 440oC	DETSC 2003#	0.01	%				
pH	DETSC 2008#			9.9	10.0	10.5	10.9
Cyanide, Total	DETSC 2130#	0.1	mg/kg	36	1.0	0.5	27
Cyanide, Free	DETSC 2130#	0.1	mg/kg	0.5			0.6
Cyanide, Complex	DETSC 2130*	0.2	mg/kg	35			26
Thiocyanate	DETSC 2130#	0.6	mg/kg	1.0			8.7
FOC	DETSC 2002	0.001					
Organic matter	DETSC 2002#	0.1	%	1.0	3.6	0.8	1.4
Sulphate Aqueous Extract as SO4	DETSC 2076#	10	mg/l	280	600	1300	330
Sulphur (free)	DETSC 3049#	0.75	mg/kg	< 0.75	< 0.75		2.3
Sulphur as S, Total	DETSC 2320	0.01	%				
Sulphate as SO4, Total	DETSC 2321#	0.01	%				

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Soil/Misc Samples

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Investigation Contract - Priority Areas Within SSI

Contract Title Landholdings, Contract 3

Lab No	1248696	1248697	1248698	1248699
Sample ID	S3-TPA17	S3-TPA18	S3-TPA18	S3-TPA20
Depth	0.60	1.00	1.55	1.00
Other ID	4	4	7	4
Sample Type	ES	ES	ES	ES
Sampling Date	19/10/17	19/10/17	19/10/17	19/10/17
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
Petroleum Hydrocarbons							
Aliphatic C5-C6	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aliphatic C6-C8	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aliphatic C8-C10	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aliphatic C10-C12	DETSC 3072#	1.5	mg/kg	< 1.5	< 1.5	< 1.5	< 1.5
Aliphatic C12-C16	DETSC 3072#	1.2	mg/kg	< 1.2	< 1.2	< 1.2	1.4
Aliphatic C16-C21	DETSC 3072#	1.5	mg/kg	< 1.5	< 1.5	< 1.5	1.6
Aliphatic C21-C35	DETSC 3072#	3.4	mg/kg	< 3.4	< 3.4	< 3.4	9.2
Aliphatic C5-C35	DETSC 3072*	10	mg/kg	< 10	< 10	< 10	13
Aromatic C5-C7	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aromatic C7-C8	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aromatic C8-C10	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aromatic C10-C12	DETSC 3072#	0.9	mg/kg	< 0.9	< 0.9	< 0.9	< 0.9
Aromatic C12-C16	DETSC 3072#	0.5	mg/kg	1.5	0.9	< 0.5	2.2
Aromatic C16-C21	DETSC 3072#	0.6	mg/kg	5.1	1.0	< 0.6	2.2
Aromatic C21-C35	DETSC 3072#	1.4	mg/kg	18	< 1.4	< 1.4	5.6
Aromatic C5-C35	DETSC 3072*	10	mg/kg	25	< 10	< 10	11
TPH Ali/Aro Total	DETSC 3072*	10	mg/kg	25	< 10	< 10	23
PAHs							
Naphthalene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	< 0.03	< 0.03
Acenaphthylene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	< 0.03	< 0.03
Acenaphthene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	< 0.03	< 0.03
Fluorene	DETSC 3303	0.03	mg/kg	< 0.03	< 0.03	< 0.03	< 0.03
Phenanthrene	DETSC 3303#	0.03	mg/kg	0.06	0.17	< 0.03	0.08
Anthracene	DETSC 3303	0.03	mg/kg	< 0.03	0.05	< 0.03	< 0.03
Fluoranthene	DETSC 3303#	0.03	mg/kg	0.20	0.47	< 0.03	0.21
Pyrene	DETSC 3303#	0.03	mg/kg	0.18	0.43	< 0.03	0.19
Benzo(a)anthracene	DETSC 3303#	0.03	mg/kg	0.10	0.23	< 0.03	0.11
Chrysene	DETSC 3303	0.03	mg/kg	0.10	0.26	< 0.03	0.14
Benzo(b)fluoranthene	DETSC 3303#	0.03	mg/kg	0.16	0.30	< 0.03	0.14
Benzo(k)fluoranthene	DETSC 3303#	0.03	mg/kg	0.07	0.12	< 0.03	0.07
Benzo(a)pyrene	DETSC 3303#	0.03	mg/kg	0.09	0.15	< 0.03	0.07
Indeno(1,2,3-c,d)pyrene	DETSC 3303#	0.03	mg/kg	0.06	0.13	< 0.03	0.08
Dibenzo(a,h)anthracene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	< 0.03	< 0.03
Benzo(g,h,i)perylene	DETSC 3303#	0.03	mg/kg	0.06	0.13	< 0.03	0.10
PAH - USEPA 16, Total	DETSC 3303	0.1	mg/kg	1.1	2.4	< 0.10	1.2

Summary of Chemical Analysis

Soil/Misc Samples

Our Ref 4155 Combined Report

Client Ref 4155

The Former SSI Steelworks, Redcar - Ground

Investigation Contract - Priority Areas Within SSI

Contract Title Landholdings, Contract 3

Lab No	1248696	1248697	1248698	1248699
Sample ID	S3-TPA17	S3-TPA18	S3-TPA18	S3-TPA20
Depth	0.60	1.00	1.55	1.00
Other ID	4	4	7	4
Sample Type	ES	ES	ES	ES
Sampling Date	19/10/17	19/10/17	19/10/17	19/10/17
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
PCBs							
PCB 28 + PCB 31	DETSC 3401#	0.01	mg/kg				
PCB 52	DETSC 3401#	0.01	mg/kg				
PCB 101	DETSC 3401#	0.01	mg/kg				
PCB 118	DETSC 3401#	0.01	mg/kg				
PCB 153	DETSC 3401#	0.01	mg/kg				
PCB 138	DETSC 3401#	0.01	mg/kg				
PCB 180	DETSC 3401#	0.01	mg/kg				
PCB 7 Total	DETSC 3401#	0.01	mg/kg				
Phenols							
Phenol - Monohydric	DETSC 2130#	0.3	mg/kg	< 0.3	< 0.3	< 0.3	< 0.3

Summary of Chemical Analysis

Soil/Misc Samples

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The Former SSI Steelworks, Redcar - Ground

Investigation Contract - Priority Areas Within SSI

Contract Title Landholdings, Contract 3

Lab No	1248700	1248701	1248702	1248703
Sample ID	S3-TPA22	S3-TPA22	S3-TPB57	S3-TPB58
Depth	0.60	1.80	1.50	0.50
Other ID	3	6	5	2
Sample Type	ES	ES	ES	ES
Sampling Date	19/10/17	19/10/17	19/10/17	19/10/17
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
Asbestos Quantification	DETSC 1102	0			Y		
Metals							
Aluminium	DETSC 2301*	1	mg/kg	15000		34000	42000
Antimony	DETSC 2301*	1	mg/kg	7.1		< 1.0	< 1.0
Arsenic	DETSC 2301#	0.2	mg/kg	15	8.1	9.2	7.0
Barium	DETSC 2301#	1.5	mg/kg	1100		550	320
Beryllium	DETSC 2301#	0.2	mg/kg	1.3		3.6	3.2
Boron, Water Soluble	DETSC 2123#	0.2	mg/kg	2.7	11	6.0	7.4
Cadmium	DETSC 2301#	0.1	mg/kg	3.4	0.4	0.6	0.6
Chromium	DETSC 2301#	0.15	mg/kg	540	85	58	62
Chromium, Hexavalent	DETSC 2204*	1	mg/kg	< 1.0		< 1.0	< 1.0
Copper	DETSC 2301#	0.2	mg/kg	120	16	31	22
Iron	DETSC 2301	25	mg/kg	100000		22000	25000
Lead	DETSC 2301#	0.3	mg/kg	110	24	45	34
Magnesium	DETSC 2301*	1	mg/kg	17000		20000	25000
Manganese	DETSC 2301#	20	mg/kg	10000		3100	6200
Mercury	DETSC 2325#	0.05	mg/kg	0.82	< 0.05	< 0.05	2.6
Molybdenum	DETSC 2301#	0.4	mg/kg	3.5		1.1	1.4
Nickel	DETSC 2301#	1	mg/kg	25	5.0	12	10
Silicon	DETSC 2301*	10	mg/kg	52000		76000	60000
Vanadium	DETSC 2301#	0.8	mg/kg	1100		100	130
Zinc	DETSC 2301#	1	mg/kg	260	32	160	130
Inorganics							
Loss on Ignition at 440oC	DETSC 2003#	0.01	%				
pH	DETSC 2008#			11.4	10.5	10.8	10.0
Cyanide, Total	DETSC 2130#	0.1	mg/kg	0.7	0.2	0.3	21
Cyanide, Free	DETSC 2130#	0.1	mg/kg				0.5
Cyanide, Complex	DETSC 2130*	0.2	mg/kg				20
Thiocyanate	DETSC 2130#	0.6	mg/kg				2.7
FOC	DETSC 2002	0.001					
Organic matter	DETSC 2002#	0.1	%	3.9	0.9	0.9	1.3
Sulphate Aqueous Extract as SO4	DETSC 2076#	10	mg/l	570	620	440	970
Sulphur (free)	DETSC 3049#	0.75	mg/kg	2.7		3.7	6.7
Sulphur as S, Total	DETSC 2320	0.01	%				
Sulphate as SO4, Total	DETSC 2321#	0.01	%				

Summary of Chemical Analysis

Soil/Misc Samples

Our Ref 4155 Combined Report

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The Former SSI Steelworks, Redcar - Ground

Investigation Contract - Priority Areas Within SSI

Contract Title Landholdings, Contract 3

Lab No	1248700	1248701	1248702	1248703
Sample ID	S3-TPA22	S3-TPA22	S3-TPB57	S3-TPB58
Depth	0.60	1.80	1.50	0.50
Other ID	3	6	5	2
Sample Type	ES	ES	ES	ES
Sampling Date	19/10/17	19/10/17	19/10/17	19/10/17
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
Petroleum Hydrocarbons							
Aliphatic C5-C6	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aliphatic C6-C8	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aliphatic C8-C10	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aliphatic C10-C12	DETSC 3072#	1.5	mg/kg	< 1.5	< 1.5	< 1.5	< 1.5
Aliphatic C12-C16	DETSC 3072#	1.2	mg/kg	< 1.2	< 1.2	< 1.2	< 1.2
Aliphatic C16-C21	DETSC 3072#	1.5	mg/kg	< 1.5	1.5	< 1.5	3.6
Aliphatic C21-C35	DETSC 3072#	3.4	mg/kg	< 3.4	14	5.6	53
Aliphatic C5-C35	DETSC 3072*	10	mg/kg	< 10	15	< 10	57
Aromatic C5-C7	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aromatic C7-C8	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aromatic C8-C10	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aromatic C10-C12	DETSC 3072#	0.9	mg/kg	< 0.9	2.6	< 0.9	2.4
Aromatic C12-C16	DETSC 3072#	0.5	mg/kg	< 0.5	1.3	< 0.5	9.0
Aromatic C16-C21	DETSC 3072#	0.6	mg/kg	< 0.6	2.5	< 0.6	8.0
Aromatic C21-C35	DETSC 3072#	1.4	mg/kg	< 1.4	21	< 1.4	81
Aromatic C5-C35	DETSC 3072*	10	mg/kg	< 10	28	< 10	100
TPH Ali/Aro Total	DETSC 3072*	10	mg/kg	< 10	43	< 10	160
PAHs							
Naphthalene	DETSC 3303#	0.03	mg/kg	< 0.03	0.09	< 0.03	0.11
Acenaphthylene	DETSC 3303#	0.03	mg/kg	< 0.03	0.08	< 0.03	0.22
Acenaphthene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	< 0.03	0.50
Fluorene	DETSC 3303	0.03	mg/kg	< 0.03	< 0.03	< 0.03	3.8
Phenanthrene	DETSC 3303#	0.03	mg/kg	0.17	0.55	0.16	3.4
Anthracene	DETSC 3303	0.03	mg/kg	0.06	0.16	0.06	0.83
Fluoranthene	DETSC 3303#	0.03	mg/kg	0.68	2.3	0.44	1.7
Pyrene	DETSC 3303#	0.03	mg/kg	0.53	1.9	0.40	1.3
Benzo(a)anthracene	DETSC 3303#	0.03	mg/kg	0.31	1.7	0.25	0.66
Chrysene	DETSC 3303	0.03	mg/kg	0.33	1.7	0.27	0.75
Benzo(b)fluoranthene	DETSC 3303#	0.03	mg/kg	0.47	3.2	0.44	1.4
Benzo(k)fluoranthene	DETSC 3303#	0.03	mg/kg	0.21	1.4	0.19	0.46
Benzo(a)pyrene	DETSC 3303#	0.03	mg/kg	0.29	2.3	0.28	0.98
Indeno(1,2,3-c,d)pyrene	DETSC 3303#	0.03	mg/kg	0.23	1.1	0.16	0.50
Dibenzo(a,h)anthracene	DETSC 3303#	0.03	mg/kg	< 0.03	0.34	< 0.03	0.16
Benzo(g,h,i)perylene	DETSC 3303#	0.03	mg/kg	0.23	1.2	0.19	0.70
PAH - USEPA 16, Total	DETSC 3303	0.1	mg/kg	3.5	18	2.8	17

Summary of Chemical Analysis

Soil/Misc Samples

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The Former SSI Steelworks, Redcar - Ground

Investigation Contract - Priority Areas Within SSI

Contract Title Landholdings, Contract 3

Lab No	1248700	1248701	1248702	1248703
Sample ID	S3-TPA22	S3-TPA22	S3-TPB57	S3-TPB58
Depth	0.60	1.80	1.50	0.50
Other ID	3	6	5	2
Sample Type	ES	ES	ES	ES
Sampling Date	19/10/17	19/10/17	19/10/17	19/10/17
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
PCBs							
PCB 28 + PCB 31	DETSC 3401#	0.01	mg/kg				
PCB 52	DETSC 3401#	0.01	mg/kg				
PCB 101	DETSC 3401#	0.01	mg/kg				
PCB 118	DETSC 3401#	0.01	mg/kg				
PCB 153	DETSC 3401#	0.01	mg/kg				
PCB 138	DETSC 3401#	0.01	mg/kg				
PCB 180	DETSC 3401#	0.01	mg/kg				
PCB 7 Total	DETSC 3401#	0.01	mg/kg				
Phenols							
Phenol - Monohydric	DETSC 2130#	0.3	mg/kg	< 0.3	< 0.3	< 0.3	< 0.3

Summary of Chemical Analysis

Soil/Misc Samples

Our Ref 4155 Combined Report

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The Former SSI Steelworks, Redcar - Ground

Investigation Contract - Priority Areas Within SSI

Contract Title Landholdings, Contract 3

Lab No	1248704	1248705	1248706	1248932
Sample ID	S3-TPB59	S3-TPB67	S3-TPB67	S3-TPA17
Depth	2.30	0.20	2.80	0.25
Other ID	8	2	9	2
Sample Type	ES	ES	ES	ES
Sampling Date	19/10/17	19/10/17	19/10/17	19/10/17
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
Asbestos Quantification	DETSC 1102	0			Y		
Metals							
Aluminium	DETSC 2301*	1	mg/kg				
Antimony	DETSC 2301*	1	mg/kg	1.3	< 1.0		
Arsenic	DETSC 2301#	0.2	mg/kg	15	7.8	8.5	
Barium	DETSC 2301#	1.5	mg/kg	230	180		
Beryllium	DETSC 2301#	0.2	mg/kg	1.2	1.2		
Boron, Water Soluble	DETSC 2123#	0.2	mg/kg	5.0	2.5	1.9	
Cadmium	DETSC 2301#	0.1	mg/kg	0.8	0.5	0.8	
Chromium	DETSC 2301#	0.15	mg/kg	64	31	120	
Chromium, Hexavalent	DETSC 2204*	1	mg/kg	< 1.0	< 1.0		
Copper	DETSC 2301#	0.2	mg/kg	31	21	27	
Iron	DETSC 2301	25	mg/kg				
Lead	DETSC 2301#	0.3	mg/kg	90	100	27	
Magnesium	DETSC 2301*	1	mg/kg				
Manganese	DETSC 2301#	20	mg/kg				
Mercury	DETSC 2325#	0.05	mg/kg	0.15	0.41	< 0.05	
Molybdenum	DETSC 2301#	0.4	mg/kg	1.1	1.0		
Nickel	DETSC 2301#	1	mg/kg	21	25	43	
Silicon	DETSC 2301*	10	mg/kg				
Vanadium	DETSC 2301#	0.8	mg/kg	96	45		
Zinc	DETSC 2301#	1	mg/kg	170	65	70	
Inorganics							
Loss on Ignition at 440oC	DETSC 2003#	0.01	%				
pH	DETSC 2008#			8.6	8.7	11.2	
Cyanide, Total	DETSC 2130#	0.1	mg/kg	0.9	1.6	< 0.1	
Cyanide, Free	DETSC 2130#	0.1	mg/kg				
Cyanide, Complex	DETSC 2130*	0.2	mg/kg				
Thiocyanate	DETSC 2130#	0.6	mg/kg				
FOC	DETSC 2002	0.001					
Organic matter	DETSC 2002#	0.1	%	5.0	1.3	1.7	
Sulphate Aqueous Extract as SO4	DETSC 2076#	10	mg/l	140	130	160	
Sulphur (free)	DETSC 3049#	0.75	mg/kg	58	0.90		
Sulphur as S, Total	DETSC 2320	0.01	%				
Sulphate as SO4, Total	DETSC 2321#	0.01	%				

Summary of Chemical Analysis

Soil/Misc Samples

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The Former SSI Steelworks, Redcar - Ground

Investigation Contract - Priority Areas Within SSI

Contract Title Landholdings, Contract 3

Lab No	1248704	1248705	1248706	1248932
Sample ID	S3-TPB59	S3-TPB67	S3-TPB67	S3-TPA17
Depth	2.30	0.20	2.80	0.25
Other ID	8	2	9	2
Sample Type	ES	ES	ES	ES
Sampling Date	19/10/17	19/10/17	19/10/17	19/10/17
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
Petroleum Hydrocarbons							
Aliphatic C5-C6	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	
Aliphatic C6-C8	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	
Aliphatic C8-C10	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	
Aliphatic C10-C12	DETSC 3072#	1.5	mg/kg	2.3	< 1.5	< 1.5	
Aliphatic C12-C16	DETSC 3072#	1.2	mg/kg	28	< 1.2	< 1.2	
Aliphatic C16-C21	DETSC 3072#	1.5	mg/kg	190	< 1.5	< 1.5	
Aliphatic C21-C35	DETSC 3072#	3.4	mg/kg	1200	< 3.4	< 3.4	
Aliphatic C5-C35	DETSC 3072*	10	mg/kg	1500	< 10	< 10	
Aromatic C5-C7	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	
Aromatic C7-C8	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	
Aromatic C8-C10	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	
Aromatic C10-C12	DETSC 3072#	0.9	mg/kg	7.8	1.0	< 0.9	
Aromatic C12-C16	DETSC 3072#	0.5	mg/kg	33	0.7	< 0.5	
Aromatic C16-C21	DETSC 3072#	0.6	mg/kg	210	1.9	< 0.6	
Aromatic C21-C35	DETSC 3072#	1.4	mg/kg	1600	40	< 1.4	
Aromatic C5-C35	DETSC 3072*	10	mg/kg	1900	43	< 10	
TPH Ali/Aro Total	DETSC 3072*	10	mg/kg	3300	43	< 10	
PAHs							
Naphthalene	DETSC 3303#	0.03	mg/kg	< 0.30	< 0.03	< 0.03	
Acenaphthylene	DETSC 3303#	0.03	mg/kg	< 0.30	< 0.03	< 0.03	
Acenaphthene	DETSC 3303#	0.03	mg/kg	< 0.30	< 0.03	< 0.03	
Fluorene	DETSC 3303	0.03	mg/kg	0.57	< 0.03	< 0.03	
Phenanthrene	DETSC 3303#	0.03	mg/kg	2.5	0.08	< 0.03	
Anthracene	DETSC 3303	0.03	mg/kg	< 0.30	< 0.03	< 0.03	
Fluoranthene	DETSC 3303#	0.03	mg/kg	< 0.30	0.18	< 0.03	
Pyrene	DETSC 3303#	0.03	mg/kg	0.99	0.14	< 0.03	
Benzo(a)anthracene	DETSC 3303#	0.03	mg/kg	0.55	0.07	< 0.03	
Chrysene	DETSC 3303	0.03	mg/kg	1.1	0.06	< 0.03	
Benzo(b)fluoranthene	DETSC 3303#	0.03	mg/kg	0.48	0.11	< 0.03	
Benzo(k)fluoranthene	DETSC 3303#	0.03	mg/kg	< 0.30	0.04	< 0.03	
Benzo(a)pyrene	DETSC 3303#	0.03	mg/kg	< 0.30	0.10	< 0.03	
Indeno(1,2,3-c,d)pyrene	DETSC 3303#	0.03	mg/kg	< 0.30	< 0.03	< 0.03	
Dibenzo(a,h)anthracene	DETSC 3303#	0.03	mg/kg	< 0.30	< 0.03	< 0.03	
Benzo(g,h,i)perylene	DETSC 3303#	0.03	mg/kg	0.39	< 0.03	< 0.03	
PAH - USEPA 16, Total	DETSC 3303	0.1	mg/kg	< 5.27	0.77	< 0.10	

Summary of Chemical Analysis

Soil/Misc Samples

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The Former SSI Steelworks, Redcar - Ground

Investigation Contract - Priority Areas Within SSI

Contract Title Landholdings, Contract 3

Lab No	1248704	1248705	1248706	1248932
Sample ID	S3-TPB59	S3-TPB67	S3-TPB67	S3-TPA17
Depth	2.30	0.20	2.80	0.25
Other ID	8	2	9	2
Sample Type	ES	ES	ES	ES
Sampling Date	19/10/17	19/10/17	19/10/17	19/10/17
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
PCBs							
PCB 28 + PCB 31	DETS 3401#	0.01	mg/kg	< 0.01			< 0.01
PCB 52	DETS 3401#	0.01	mg/kg	< 0.01			< 0.01
PCB 101	DETS 3401#	0.01	mg/kg	< 0.01			< 0.01
PCB 118	DETS 3401#	0.01	mg/kg	< 0.01			< 0.01
PCB 153	DETS 3401#	0.01	mg/kg	< 0.01			< 0.01
PCB 138	DETS 3401#	0.01	mg/kg	< 0.01			< 0.01
PCB 180	DETS 3401#	0.01	mg/kg	< 0.01			< 0.01
PCB 7 Total	DETS 3401#	0.01	mg/kg	< 0.01			< 0.01
Phenols							
Phenol - Monohydric	DETS 2130#	0.3	mg/kg	< 0.3	< 0.3	< 0.3	

Summary of Chemical Analysis

Soil/Misc Samples

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Contract Title Landholdings, Contract 3

Lab No	1250105	1250106	1250107	1250108
Sample ID	S3-TPA01	S3-TPA04	S3-TPA05	S3-TPA05
Depth	1.40	1.00	0.50	2.00
Other ID	6	5	2	5
Sample Type	ES	ES	ES	ES
Sampling Date	24/10/17	24/10/17	24/10/17	24/10/17
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
Asbestos Quantification	DETSC 1102	0		Y			
Metals							
Aluminium	DETSC 2301*	1	mg/kg				7600
Antimony	DETSC 2301*	1	mg/kg	5.0	2.7		10
Arsenic	DETSC 2301#	0.2	mg/kg	19	13	16	17
Barium	DETSC 2301#	1.5	mg/kg	480	800		270
Beryllium	DETSC 2301#	0.2	mg/kg	1.8	2.7		0.6
Boron, Water Soluble	DETSC 2123#	0.2	mg/kg	5.9	2.3	1.8	2.1
Cadmium	DETSC 2301#	0.1	mg/kg	5.1	0.7	1.8	1.3
Chromium	DETSC 2301#	0.15	mg/kg	220	88	140	640
Chromium, Hexavalent	DETSC 2204*	1	mg/kg	< 1.0	< 1.0		< 1.0
Copper	DETSC 2301#	0.2	mg/kg	73	68	44	35
Iron	DETSC 2301	25	mg/kg				88000
Lead	DETSC 2301#	0.3	mg/kg	250	45	56	14
Magnesium	DETSC 2301*	1	mg/kg				20000
Manganese	DETSC 2301#	20	mg/kg				17000
Mercury	DETSC 2325#	0.05	mg/kg	0.14	0.08	0.11	< 0.05
Molybdenum	DETSC 2301#	0.4	mg/kg	2.0	1.8		1.4
Nickel	DETSC 2301#	1	mg/kg	24	26	21	19
Silicon	DETSC 2301*	10	mg/kg				53000
Vanadium	DETSC 2301#	0.8	mg/kg	320	170		1800
Zinc	DETSC 2301#	1	mg/kg	550	150	140	40
Inorganics							
Loss on Ignition at 440oC	DETSC 2003#	0.01	%				
pH	DETSC 2008#			11.3	10.0	11.1	12.4
Cyanide, Total	DETSC 2130#	0.1	mg/kg	0.9	0.3	0.9	< 0.1
Cyanide, Free	DETSC 2130#	0.1	mg/kg	< 0.1			< 0.1
Cyanide, Complex	DETSC 2130*	0.2	mg/kg	0.9			< 0.2
Thiocyanate	DETSC 2130#	0.6	mg/kg	< 0.6			< 0.6
FOC	DETSC 2002	0.001					
Organic matter	DETSC 2002#	0.1	%	3.2	1.8	2.1	0.9
Sulphate Aqueous Extract as SO4	DETSC 2076#	10	mg/l	430	150	420	10
Sulphur (free)	DETSC 3049#	0.75	mg/kg	< 0.75	< 0.75		0.85
Sulphur as S, Total	DETSC 2320	0.01	%				
Sulphate as SO4, Total	DETSC 2321#	0.01	%				

Summary of Chemical Analysis

Soil/Misc Samples

Our Ref 4155 Combined Report

Client Ref 4155

The Former SSI Steelworks, Redcar - Ground

Investigation Contract - Priority Areas Within SSI

Contract Title Landholdings, Contract 3

Lab No	1250105	1250106	1250107	1250108
Sample ID	S3-TPA01	S3-TPA04	S3-TPA05	S3-TPA05
Depth	1.40	1.00	0.50	2.00
Other ID	6	5	2	5
Sample Type	ES	ES	ES	ES
Sampling Date	24/10/17	24/10/17	24/10/17	24/10/17
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
Petroleum Hydrocarbons							
Aliphatic C5-C6	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aliphatic C6-C8	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aliphatic C8-C10	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aliphatic C10-C12	DETSC 3072#	1.5	mg/kg	< 1.5	< 1.5	< 1.5	< 1.5
Aliphatic C12-C16	DETSC 3072#	1.2	mg/kg	< 1.2	< 1.2	< 1.2	< 1.2
Aliphatic C16-C21	DETSC 3072#	1.5	mg/kg	3.2	< 1.5	4.0	4.7
Aliphatic C21-C35	DETSC 3072#	3.4	mg/kg	16	4.0	99	11
Aliphatic C5-C35	DETSC 3072*	10	mg/kg	20	< 10	100	16
Aromatic C5-C7	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aromatic C7-C8	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aromatic C8-C10	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aromatic C10-C12	DETSC 3072#	0.9	mg/kg	< 0.9	< 0.9	< 0.9	3.4
Aromatic C12-C16	DETSC 3072#	0.5	mg/kg	1.0	< 0.5	< 0.5	4.2
Aromatic C16-C21	DETSC 3072#	0.6	mg/kg	16	1.3	2.6	6.9
Aromatic C21-C35	DETSC 3072#	1.4	mg/kg	37	4.9	31	17
Aromatic C5-C35	DETSC 3072*	10	mg/kg	54	< 10	35	31
TPH Ali/Aro Total	DETSC 3072*	10	mg/kg	74	11	140	48
PAHs							
Naphthalene	DETSC 3303#	0.03	mg/kg	0.17	< 0.03	< 0.03	< 0.03
Acenaphthylene	DETSC 3303#	0.03	mg/kg	0.14	< 0.03	< 0.03	< 0.03
Acenaphthene	DETSC 3303#	0.03	mg/kg	0.84	< 0.03	< 0.03	< 0.03
Fluorene	DETSC 3303	0.03	mg/kg	0.69	< 0.03	< 0.03	< 0.03
Phenanthrene	DETSC 3303#	0.03	mg/kg	5.1	0.19	0.21	0.10
Anthracene	DETSC 3303	0.03	mg/kg	1.2	0.05	0.05	< 0.03
Fluoranthene	DETSC 3303#	0.03	mg/kg	7.1	0.56	0.35	0.21
Pyrene	DETSC 3303#	0.03	mg/kg	5.7	0.48	0.31	0.20
Benzo(a)anthracene	DETSC 3303#	0.03	mg/kg	2.0	0.24	0.15	0.11
Chrysene	DETSC 3303	0.03	mg/kg	1.9	0.24	0.19	0.12
Benzo(b)fluoranthene	DETSC 3303#	0.03	mg/kg	2.1	0.44	0.25	0.15
Benzo(k)fluoranthene	DETSC 3303#	0.03	mg/kg	0.76	0.17	0.09	0.06
Benzo(a)pyrene	DETSC 3303#	0.03	mg/kg	1.3	0.26	0.10	0.09
Indeno(1,2,3-c,d)pyrene	DETSC 3303#	0.03	mg/kg	0.55	0.20	0.09	0.07
Dibenzo(a,h)anthracene	DETSC 3303#	0.03	mg/kg	0.15	0.03	< 0.03	< 0.03
Benzo(g,h,i)perylene	DETSC 3303#	0.03	mg/kg	0.64	0.24	0.10	0.08
PAH - USEPA 16, Total	DETSC 3303	0.1	mg/kg	30	3.1	1.9	1.2

Summary of Chemical Analysis

Soil/Misc Samples

Our Ref 4155 Combined Report

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The Former SSI Steelworks, Redcar - Ground

Investigation Contract - Priority Areas Within SSI

Contract Title Landholdings, Contract 3

Lab No	1250105	1250106	1250107	1250108
Sample ID	S3-TPA01	S3-TPA04	S3-TPA05	S3-TPA05
Depth	1.40	1.00	0.50	2.00
Other ID	6	5	2	5
Sample Type	ES	ES	ES	ES
Sampling Date	24/10/17	24/10/17	24/10/17	24/10/17
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
PCBs							
PCB 28 + PCB 31	DETSC 3401#	0.01	mg/kg				
PCB 52	DETSC 3401#	0.01	mg/kg				
PCB 101	DETSC 3401#	0.01	mg/kg				
PCB 118	DETSC 3401#	0.01	mg/kg				
PCB 153	DETSC 3401#	0.01	mg/kg				
PCB 138	DETSC 3401#	0.01	mg/kg				
PCB 180	DETSC 3401#	0.01	mg/kg				
PCB 7 Total	DETSC 3401#	0.01	mg/kg				
Phenols							
Phenol - Monohydric	DETSC 2130#	0.3	mg/kg	< 0.3	0.5	0.6	< 0.3

Summary of Chemical Analysis

Soil/Misc Samples

Our Ref 4155 Combined Report

Client Ref 4155

The Former SSI Steelworks, Redcar - Ground

Investigation Contract - Priority Areas Within SSI

Contract Title Landholdings, Contract 3

Lab No	1250109	1250110	1250111	1250112
Sample ID	S3-TPB63	S3-TPB64	S3-TPB65	S3-TPB70
Depth	0.50	1.50	1.50	0.50
Other ID	2	5	6	3
Sample Type	ES	ES	ES	ES
Sampling Date	24/10/17	24/10/17	24/10/17	24/10/17
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
Asbestos Quantification	DETSC 1102	0					
Metals							
Aluminium	DETSC 2301*	1	mg/kg	50000	41000	46000	46000
Antimony	DETSC 2301*	1	mg/kg	2.5	4.2	3.8	2.5
Arsenic	DETSC 2301#	0.2	mg/kg	7.9	10	6.9	7.4
Barium	DETSC 2301#	1.5	mg/kg	140	79	79	65
Beryllium	DETSC 2301#	0.2	mg/kg	4.6	3.4	3.7	3.7
Boron, Water Soluble	DETSC 2123#	0.2	mg/kg	5.9	1.9	2.2	3.6
Cadmium	DETSC 2301#	0.1	mg/kg	0.5	0.6	0.5	0.4
Chromium	DETSC 2301#	0.15	mg/kg	110	330	230	180
Chromium, Hexavalent	DETSC 2204*	1	mg/kg	< 1.0	< 1.0	< 1.0	< 1.0
Copper	DETSC 2301#	0.2	mg/kg	18	26	20	22
Iron	DETSC 2301	25	mg/kg	39000	49000	50000	33000
Lead	DETSC 2301#	0.3	mg/kg	17	32	11	13
Magnesium	DETSC 2301*	1	mg/kg	32000	32000	33000	34000
Manganese	DETSC 2301#	20	mg/kg	9400	13000	14000	15000
Mercury	DETSC 2325#	0.05	mg/kg	< 0.05	0.06	< 0.05	< 0.05
Molybdenum	DETSC 2301#	0.4	mg/kg	1.5	1.9	1.7	1.1
Nickel	DETSC 2301#	1	mg/kg	6.6	7.3	10	5.0
Silicon	DETSC 2301*	10	mg/kg	69000	60000	62000	47000
Vanadium	DETSC 2301#	0.8	mg/kg	250	810	370	520
Zinc	DETSC 2301#	1	mg/kg	62	84	37	38
Inorganics							
Loss on Ignition at 440oC	DETSC 2003#	0.01	%				
pH	DETSC 2008#			11.2	11.7	11.5	11.6
Cyanide, Total	DETSC 2130#	0.1	mg/kg	0.5	0.2	0.1	< 0.1
Cyanide, Free	DETSC 2130#	0.1	mg/kg		< 0.1		< 0.1
Cyanide, Complex	DETSC 2130*	0.2	mg/kg		< 0.2		< 0.2
Thiocyanate	DETSC 2130#	0.6	mg/kg		< 0.6		< 0.6
FOC	DETSC 2002	0.001					
Organic matter	DETSC 2002#	0.1	%	3.0	1.2	7.8	1.1
Sulphate Aqueous Extract as SO4	DETSC 2076#	10	mg/l	850	380	620	290
Sulphur (free)	DETSC 3049#	0.75	mg/kg	31	8.1	22	4.2
Sulphur as S, Total	DETSC 2320	0.01	%				
Sulphate as SO4, Total	DETSC 2321#	0.01	%				

Summary of Chemical Analysis

Soil/Misc Samples

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The Former SSI Steelworks, Redcar - Ground

Investigation Contract - Priority Areas Within SSI

Contract Title Landholdings, Contract 3

Lab No	1250109	1250110	1250111	1250112
Sample ID	S3-TPB63	S3-TPB64	S3-TPB65	S3-TPB70
Depth	0.50	1.50	1.50	0.50
Other ID	2	5	6	3
Sample Type	ES	ES	ES	ES
Sampling Date	24/10/17	24/10/17	24/10/17	24/10/17
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
Petroleum Hydrocarbons							
Aliphatic C5-C6	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aliphatic C6-C8	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aliphatic C8-C10	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aliphatic C10-C12	DETSC 3072#	1.5	mg/kg	< 1.5	< 1.5	< 1.5	< 1.5
Aliphatic C12-C16	DETSC 3072#	1.2	mg/kg	6.2	< 1.2	1.8	< 1.2
Aliphatic C16-C21	DETSC 3072#	1.5	mg/kg	40	6.2	8.9	4.2
Aliphatic C21-C35	DETSC 3072#	3.4	mg/kg	490	100	18	37
Aliphatic C5-C35	DETSC 3072*	10	mg/kg	530	110	29	42
Aromatic C5-C7	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aromatic C7-C8	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aromatic C8-C10	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aromatic C10-C12	DETSC 3072#	0.9	mg/kg	2.3	2.9	1.9	2.1
Aromatic C12-C16	DETSC 3072#	0.5	mg/kg	5.9	4.0	3.8	3.7
Aromatic C16-C21	DETSC 3072#	0.6	mg/kg	39	13	9.7	9.2
Aromatic C21-C35	DETSC 3072#	1.4	mg/kg	390	130	28	52
Aromatic C5-C35	DETSC 3072*	10	mg/kg	440	150	43	68
TPH Ali/Aro Total	DETSC 3072*	10	mg/kg	970	260	71	110
PAHs							
Naphthalene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	0.14	< 0.03
Acenaphthylene	DETSC 3303#	0.03	mg/kg	0.06	0.03	< 0.03	< 0.03
Acenaphthene	DETSC 3303#	0.03	mg/kg	0.17	< 0.03	< 0.03	< 0.03
Fluorene	DETSC 3303	0.03	mg/kg	0.05	< 0.03	< 0.03	< 0.03
Phenanthrene	DETSC 3303#	0.03	mg/kg	1.2	0.30	0.22	0.07
Anthracene	DETSC 3303	0.03	mg/kg	0.23	0.07	0.05	< 0.03
Fluoranthene	DETSC 3303#	0.03	mg/kg	4.3	0.88	0.26	0.33
Pyrene	DETSC 3303#	0.03	mg/kg	3.4	1.1	0.23	0.29
Benzo(a)anthracene	DETSC 3303#	0.03	mg/kg	1.1	0.55	0.11	0.17
Chrysene	DETSC 3303	0.03	mg/kg	1.1	0.59	0.14	0.16
Benzo(b)fluoranthene	DETSC 3303#	0.03	mg/kg	1.1	0.82	0.16	0.19
Benzo(k)fluoranthene	DETSC 3303#	0.03	mg/kg	0.43	0.33	0.06	0.07
Benzo(a)pyrene	DETSC 3303#	0.03	mg/kg	0.62	0.47	0.09	0.13
Indeno(1,2,3-c,d)pyrene	DETSC 3303#	0.03	mg/kg	0.37	0.28	0.07	0.07
Dibenzo(a,h)anthracene	DETSC 3303#	0.03	mg/kg	0.09	0.07	< 0.03	< 0.03
Benzo(g,h,i)perylene	DETSC 3303#	0.03	mg/kg	0.49	0.33	0.08	0.07
PAH - USEPA 16, Total	DETSC 3303	0.1	mg/kg	15	5.9	1.6	1.5

Summary of Chemical Analysis

Soil/Misc Samples

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The Former SSI Steelworks, Redcar - Ground

Investigation Contract - Priority Areas Within SSI

Contract Title Landholdings, Contract 3

Lab No	1250109	1250110	1250111	1250112
Sample ID	S3-TPB63	S3-TPB64	S3-TPB65	S3-TPB70
Depth	0.50	1.50	1.50	0.50
Other ID	2	5	6	3
Sample Type	ES	ES	ES	ES
Sampling Date	24/10/17	24/10/17	24/10/17	24/10/17
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
PCBs							
PCB 28 + PCB 31	DETSC 3401#	0.01	mg/kg				
PCB 52	DETSC 3401#	0.01	mg/kg				
PCB 101	DETSC 3401#	0.01	mg/kg				
PCB 118	DETSC 3401#	0.01	mg/kg				
PCB 153	DETSC 3401#	0.01	mg/kg				
PCB 138	DETSC 3401#	0.01	mg/kg				
PCB 180	DETSC 3401#	0.01	mg/kg				
PCB 7 Total	DETSC 3401#	0.01	mg/kg				
Phenols							
Phenol - Monohydric	DETSC 2130#	0.3	mg/kg	< 0.3	< 0.3	< 0.3	< 0.3

Summary of Chemical Analysis

Soil/Misc Samples

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The Former SSI Steelworks, Redcar - Ground

Investigation Contract - Priority Areas Within SSI

Contract Title Landholdings, Contract 3

Lab No	1250113	1250312	1250313	1250314
Sample ID	S3-TPB71	S3-TPB06	S3-TPB06	S3-TPB12
Depth	0.50	0.50	1.00	0.60
Other ID	2	2	5	5
Sample Type	ES	ES	ES	ES
Sampling Date	23/10/17	25/10/17	25/10/17	25/10/17
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
Asbestos Quantification	DETSC 1102	0					
Metals							
Aluminium	DETSC 2301*	1	mg/kg				
Antimony	DETSC 2301*	1	mg/kg		2.8		1.9
Arsenic	DETSC 2301#	0.2	mg/kg		2.4	10	5.4
Barium	DETSC 2301#	1.5	mg/kg		170		82
Beryllium	DETSC 2301#	0.2	mg/kg		1.3		4.2
Boron, Water Soluble	DETSC 2123#	0.2	mg/kg		1.7	2.5	3.6
Cadmium	DETSC 2301#	0.1	mg/kg		0.7	0.9	< 0.1
Chromium	DETSC 2301#	0.15	mg/kg		97	30	35
Chromium, Hexavalent	DETSC 2204*	1	mg/kg		< 1.0		< 1.0
Copper	DETSC 2301#	0.2	mg/kg		15	24	6.0
Iron	DETSC 2301	25	mg/kg				
Lead	DETSC 2301#	0.3	mg/kg		11	44	2.7
Magnesium	DETSC 2301*	1	mg/kg				
Manganese	DETSC 2301#	20	mg/kg				
Mercury	DETSC 2325#	0.05	mg/kg		< 0.05	0.06	< 0.05
Molybdenum	DETSC 2301#	0.4	mg/kg		1.8		0.4
Nickel	DETSC 2301#	1	mg/kg		7.6	32	1.2
Silicon	DETSC 2301*	10	mg/kg				
Vanadium	DETSC 2301#	0.8	mg/kg		140		63
Zinc	DETSC 2301#	1	mg/kg		52	150	12
Inorganics							
Loss on Ignition at 440oC	DETSC 2003#	0.01	%				
pH	DETSC 2008#				11.5	8.2	10.9
Cyanide, Total	DETSC 2130#	0.1	mg/kg		0.1	0.1	< 0.1
Cyanide, Free	DETSC 2130#	0.1	mg/kg		< 0.1		< 0.1
Cyanide, Complex	DETSC 2130*	0.2	mg/kg		< 0.2		< 0.2
Thiocyanate	DETSC 2130#	0.6	mg/kg		< 0.6		< 0.6
FOC	DETSC 2002	0.001					
Organic matter	DETSC 2002#	0.1	%		1.4	3.4	0.6
Sulphate Aqueous Extract as SO4	DETSC 2076#	10	mg/l		300	420	490
Sulphur (free)	DETSC 3049#	0.75	mg/kg		46		< 0.75
Sulphur as S, Total	DETSC 2320	0.01	%				
Sulphate as SO4, Total	DETSC 2321#	0.01	%				

Summary of Chemical Analysis

Soil/Misc Samples

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The Former SSI Steelworks, Redcar - Ground

Investigation Contract - Priority Areas Within SSI

Contract Title Landholdings, Contract 3

Lab No	1250113	1250312	1250313	1250314
Sample ID	S3-TPB71	S3-TPB06	S3-TPB06	S3-TPB12
Depth	0.50	0.50	1.00	0.60
Other ID	2	2	5	5
Sample Type	ES	ES	ES	ES
Sampling Date	23/10/17	25/10/17	25/10/17	25/10/17
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
Petroleum Hydrocarbons							
Aliphatic C5-C6	DETSC 3321*	0.01	mg/kg		< 0.01	< 0.01	< 0.01
Aliphatic C6-C8	DETSC 3321*	0.01	mg/kg		< 0.01	< 0.01	< 0.01
Aliphatic C8-C10	DETSC 3321*	0.01	mg/kg		< 0.01	< 0.01	< 0.01
Aliphatic C10-C12	DETSC 3072#	1.5	mg/kg		< 1.5	< 1.5	< 1.5
Aliphatic C12-C16	DETSC 3072#	1.2	mg/kg		< 1.2	< 1.2	< 1.2
Aliphatic C16-C21	DETSC 3072#	1.5	mg/kg		< 1.5	< 1.5	< 1.5
Aliphatic C21-C35	DETSC 3072#	3.4	mg/kg		16	< 3.4	< 3.4
Aliphatic C5-C35	DETSC 3072*	10	mg/kg		16	< 10	< 10
Aromatic C5-C7	DETSC 3321*	0.01	mg/kg		< 0.01	< 0.01	< 0.01
Aromatic C7-C8	DETSC 3321*	0.01	mg/kg		< 0.01	< 0.01	< 0.01
Aromatic C8-C10	DETSC 3321*	0.01	mg/kg		< 0.01	< 0.01	< 0.01
Aromatic C10-C12	DETSC 3072#	0.9	mg/kg		5.4	< 0.9	< 0.9
Aromatic C12-C16	DETSC 3072#	0.5	mg/kg		9.5	< 0.5	< 0.5
Aromatic C16-C21	DETSC 3072#	0.6	mg/kg		13	< 0.6	< 0.6
Aromatic C21-C35	DETSC 3072#	1.4	mg/kg		47	< 1.4	< 1.4
Aromatic C5-C35	DETSC 3072*	10	mg/kg		75	< 10	< 10
TPH Ali/Aro Total	DETSC 3072*	10	mg/kg		91	< 10	< 10
PAHs							
Naphthalene	DETSC 3303#	0.03	mg/kg		< 0.03	< 0.03	< 0.03
Acenaphthylene	DETSC 3303#	0.03	mg/kg		< 0.03	< 0.03	< 0.03
Acenaphthene	DETSC 3303#	0.03	mg/kg		< 0.03	< 0.03	< 0.03
Fluorene	DETSC 3303	0.03	mg/kg		< 0.03	< 0.03	< 0.03
Phenanthrene	DETSC 3303#	0.03	mg/kg		0.07	< 0.03	< 0.03
Anthracene	DETSC 3303	0.03	mg/kg		< 0.03	< 0.03	< 0.03
Fluoranthene	DETSC 3303#	0.03	mg/kg		0.11	< 0.03	< 0.03
Pyrene	DETSC 3303#	0.03	mg/kg		0.09	< 0.03	< 0.03
Benzo(a)anthracene	DETSC 3303#	0.03	mg/kg		0.04	< 0.03	< 0.03
Chrysene	DETSC 3303	0.03	mg/kg		0.06	< 0.03	< 0.03
Benzo(b)fluoranthene	DETSC 3303#	0.03	mg/kg		0.07	< 0.03	< 0.03
Benzo(k)fluoranthene	DETSC 3303#	0.03	mg/kg		0.03	< 0.03	< 0.03
Benzo(a)pyrene	DETSC 3303#	0.03	mg/kg		< 0.03	< 0.03	< 0.03
Indeno(1,2,3-c,d)pyrene	DETSC 3303#	0.03	mg/kg		0.03	< 0.03	< 0.03
Dibenzo(a,h)anthracene	DETSC 3303#	0.03	mg/kg		< 0.03	< 0.03	< 0.03
Benzo(g,h,i)perylene	DETSC 3303#	0.03	mg/kg		0.04	< 0.03	< 0.03
PAH - USEPA 16, Total	DETSC 3303	0.1	mg/kg		0.56	< 0.10	< 0.10

Summary of Chemical Analysis

Soil/Misc Samples

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The Former SSI Steelworks, Redcar - Ground

Investigation Contract - Priority Areas Within SSI

Contract Title Landholdings, Contract 3

Lab No	1250113	1250312	1250313	1250314
Sample ID	S3-TPB71	S3-TPB06	S3-TPB06	S3-TPB12
Depth	0.50	0.50	1.00	0.60
Other ID	2	2	5	5
Sample Type	ES	ES	ES	ES
Sampling Date	23/10/17	25/10/17	25/10/17	25/10/17
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
PCBs							
PCB 28 + PCB 31	DETSC 3401#	0.01	mg/kg	< 0.01			
PCB 52	DETSC 3401#	0.01	mg/kg	< 0.01			
PCB 101	DETSC 3401#	0.01	mg/kg	< 0.01			
PCB 118	DETSC 3401#	0.01	mg/kg	< 0.01			
PCB 153	DETSC 3401#	0.01	mg/kg	< 0.01			
PCB 138	DETSC 3401#	0.01	mg/kg	< 0.01			
PCB 180	DETSC 3401#	0.01	mg/kg	< 0.01			
PCB 7 Total	DETSC 3401#	0.01	mg/kg	< 0.01			
Phenols							
Phenol - Monohydric	DETSC 2130#	0.3	mg/kg		< 0.3	< 0.3	< 0.3

Summary of Chemical Analysis

Soil/Misc Samples

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The Former SSI Steelworks, Redcar - Ground

Investigation Contract - Priority Areas Within SSI

Contract Title Landholdings, Contract 3

Lab No	1250315	1250316	1250317	1250318
Sample ID	S3-TPB14	S3-TPB16	S3-TPB16	S3-TPB54
Depth	0.70	0.30	1.70	1.50
Other ID	5	2	8	6
Sample Type	ES	ES	ES	ES
Sampling Date	25/10/17	25/10/17	25/10/17	25/10/17
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
Asbestos Quantification	DETSC 1102	0				Y	
Metals							
Aluminium	DETSC 2301*	1	mg/kg	61000			48000
Antimony	DETSC 2301*	1	mg/kg	2.2		2.0	3.0
Arsenic	DETSC 2301#	0.2	mg/kg	7.5		11	7.8
Barium	DETSC 2301#	1.5	mg/kg	330		260	68
Beryllium	DETSC 2301#	0.2	mg/kg	5.7		1.9	3.7
Boron, Water Soluble	DETSC 2123#	0.2	mg/kg	2.7		3.0	2.2
Cadmium	DETSC 2301#	0.1	mg/kg	0.2		0.6	0.4
Chromium	DETSC 2301#	0.15	mg/kg	25		29	150
Chromium, Hexavalent	DETSC 2204*	1	mg/kg	< 1.0		< 1.0	< 1.0
Copper	DETSC 2301#	0.2	mg/kg	7.4		25	18
Iron	DETSC 2301	25	mg/kg	15000			31000
Lead	DETSC 2301#	0.3	mg/kg	24		39	8.6
Magnesium	DETSC 2301*	1	mg/kg	44000			25000
Manganese	DETSC 2301#	20	mg/kg	6100			16000
Mercury	DETSC 2325#	0.05	mg/kg	0.19		0.06	< 0.05
Molybdenum	DETSC 2301#	0.4	mg/kg	0.5		0.7	1.1
Nickel	DETSC 2301#	1	mg/kg	3.0		17	5.7
Silicon	DETSC 2301*	10	mg/kg	45000			38000
Vanadium	DETSC 2301#	0.8	mg/kg	65		63	360
Zinc	DETSC 2301#	1	mg/kg	110		140	24
Inorganics							
Loss on Ignition at 440oC	DETSC 2003#	0.01	%				
pH	DETSC 2008#			10.9		9.6	11.4
Cyanide, Total	DETSC 2130#	0.1	mg/kg	1.0		0.2	< 0.1
Cyanide, Free	DETSC 2130#	0.1	mg/kg	< 0.1		< 0.1	< 0.1
Cyanide, Complex	DETSC 2130*	0.2	mg/kg	1.0		< 0.2	< 0.2
Thiocyanate	DETSC 2130#	0.6	mg/kg	< 0.6		< 0.6	< 0.6
FOC	DETSC 2002	0.001					
Organic matter	DETSC 2002#	0.1	%	0.7		3.4	1.5
Sulphate Aqueous Extract as SO4	DETSC 2076#	10	mg/l	1200		200	540
Sulphur (free)	DETSC 3049#	0.75	mg/kg	2.5		3.0	33
Sulphur as S, Total	DETSC 2320	0.01	%				
Sulphate as SO4, Total	DETSC 2321#	0.01	%				

Summary of Chemical Analysis

Soil/Misc Samples

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The Former SSI Steelworks, Redcar - Ground

Investigation Contract - Priority Areas Within SSI

Contract Title Landholdings, Contract 3

Lab No	1250315	1250316	1250317	1250318
Sample ID	S3-TPB14	S3-TPB16	S3-TPB16	S3-TPB54
Depth	0.70	0.30	1.70	1.50
Other ID	5	2	8	6
Sample Type	ES	ES	ES	ES
Sampling Date	25/10/17	25/10/17	25/10/17	25/10/17
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
Petroleum Hydrocarbons							
Aliphatic C5-C6	DETSC 3321*	0.01	mg/kg	< 0.01		< 0.01	< 0.01
Aliphatic C6-C8	DETSC 3321*	0.01	mg/kg	< 0.01		< 0.01	< 0.01
Aliphatic C8-C10	DETSC 3321*	0.01	mg/kg	< 0.01		< 0.01	< 0.01
Aliphatic C10-C12	DETSC 3072#	1.5	mg/kg	< 1.5		< 1.5	< 1.5
Aliphatic C12-C16	DETSC 3072#	1.2	mg/kg	2.4		< 1.2	1.3
Aliphatic C16-C21	DETSC 3072#	1.5	mg/kg	3.8		< 1.5	1.7
Aliphatic C21-C35	DETSC 3072#	3.4	mg/kg	11		4.5	6.3
Aliphatic C5-C35	DETSC 3072*	10	mg/kg	18		< 10	< 10
Aromatic C5-C7	DETSC 3321*	0.01	mg/kg	< 0.01		< 0.01	< 0.01
Aromatic C7-C8	DETSC 3321*	0.01	mg/kg	< 0.01		< 0.01	< 0.01
Aromatic C8-C10	DETSC 3321*	0.01	mg/kg	< 0.01		< 0.01	< 0.01
Aromatic C10-C12	DETSC 3072#	0.9	mg/kg	2.1		< 0.9	1.7
Aromatic C12-C16	DETSC 3072#	0.5	mg/kg	5.7		0.6	1.3
Aromatic C16-C21	DETSC 3072#	0.6	mg/kg	11		< 0.6	8.9
Aromatic C21-C35	DETSC 3072#	1.4	mg/kg	45		< 1.4	13
Aromatic C5-C35	DETSC 3072*	10	mg/kg	64		< 10	25
TPH Ali/Aro Total	DETSC 3072*	10	mg/kg	82		< 10	35
PAHs							
Naphthalene	DETSC 3303#	0.03	mg/kg	< 0.03		< 0.03	0.16
Acenaphthylene	DETSC 3303#	0.03	mg/kg	< 0.03		< 0.03	< 0.03
Acenaphthene	DETSC 3303#	0.03	mg/kg	< 0.03		< 0.03	0.38
Fluorene	DETSC 3303	0.03	mg/kg	< 0.03		< 0.03	0.21
Phenanthrene	DETSC 3303#	0.03	mg/kg	< 0.03		0.05	3.7
Anthracene	DETSC 3303	0.03	mg/kg	< 0.03		< 0.03	0.77
Fluoranthene	DETSC 3303#	0.03	mg/kg	0.04		0.08	4.7
Pyrene	DETSC 3303#	0.03	mg/kg	0.04		0.07	3.9
Benzo(a)anthracene	DETSC 3303#	0.03	mg/kg	< 0.03		< 0.03	1.8
Chrysene	DETSC 3303	0.03	mg/kg	< 0.03		< 0.03	1.6
Benzo(b)fluoranthene	DETSC 3303#	0.03	mg/kg	< 0.03		< 0.03	1.8
Benzo(k)fluoranthene	DETSC 3303#	0.03	mg/kg	< 0.03		< 0.03	0.75
Benzo(a)pyrene	DETSC 3303#	0.03	mg/kg	< 0.03		< 0.03	1.3
Indeno(1,2,3-c,d)pyrene	DETSC 3303#	0.03	mg/kg	< 0.03		< 0.03	0.74
Dibenzo(a,h)anthracene	DETSC 3303#	0.03	mg/kg	< 0.03		< 0.03	0.14
Benzo(g,h,i)perylene	DETSC 3303#	0.03	mg/kg	< 0.03		< 0.03	0.86
PAH - USEPA 16, Total	DETSC 3303	0.1	mg/kg	< 0.10		0.20	23

Summary of Chemical Analysis

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The Former SSI Steelworks, Redcar - Ground

Investigation Contract - Priority Areas Within SSI

Contract Title Landholdings, Contract 3

Lab No	1250315	1250316	1250317	1250318
Sample ID	S3-TPB14	S3-TPB16	S3-TPB16	S3-TPB54
Depth	0.70	0.30	1.70	1.50
Other ID	5	2	8	6
Sample Type	ES	ES	ES	ES
Sampling Date	25/10/17	25/10/17	25/10/17	25/10/17
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
PCBs							
PCB 28 + PCB 31	DETSC 3401#	0.01	mg/kg		< 0.01		
PCB 52	DETSC 3401#	0.01	mg/kg		< 0.01		
PCB 101	DETSC 3401#	0.01	mg/kg		< 0.01		
PCB 118	DETSC 3401#	0.01	mg/kg		< 0.01		
PCB 153	DETSC 3401#	0.01	mg/kg		< 0.01		
PCB 138	DETSC 3401#	0.01	mg/kg		< 0.01		
PCB 180	DETSC 3401#	0.01	mg/kg		< 0.01		
PCB 7 Total	DETSC 3401#	0.01	mg/kg		< 0.01		
Phenols							
Phenol - Monohydric	DETSC 2130#	0.3	mg/kg	< 0.3		< 0.3	< 0.3

Summary of Chemical Analysis

Soil/Misc Samples

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Contract Title Landholdings, Contract 3

Lab No	1250319	1250320	1250321	1250322
Sample ID	S3-TPB60	S3-TPB61	S3-TPB62	S3-TPB62
Depth	0.50	1.50	1.50	1.70
Other ID	3	5	5	7
Sample Type	ES	ES	ES	ES
Sampling Date	25/10/17	25/10/17	25/10/17	25/10/17
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
Asbestos Quantification	DETSC 1102	0					
Metals							
Aluminium	DETSC 2301*	1	mg/kg	32000	44000	62000	
Antimony	DETSC 2301*	1	mg/kg	4.7	4.5	2.0	
Arsenic	DETSC 2301#	0.2	mg/kg	15	9.6	20	24
Barium	DETSC 2301#	1.5	mg/kg	150	260	250	
Beryllium	DETSC 2301#	0.2	mg/kg	2.5	3.5	4.8	
Boron, Water Soluble	DETSC 2123#	0.2	mg/kg	3.5	4.9	2.8	4.7
Cadmium	DETSC 2301#	0.1	mg/kg	1.2	1.3	0.2	1.1
Chromium	DETSC 2301#	0.15	mg/kg	210	62	39	27
Chromium, Hexavalent	DETSC 2204*	1	mg/kg	< 1.0	< 1.0	< 1.0	
Copper	DETSC 2301#	0.2	mg/kg	34	47	9.2	46
Iron	DETSC 2301	25	mg/kg	62000	120000	17000	
Lead	DETSC 2301#	0.3	mg/kg	85	15	21	120
Magnesium	DETSC 2301*	1	mg/kg	23000	23000	29000	
Manganese	DETSC 2301#	20	mg/kg	10000	8600	3200	
Mercury	DETSC 2325#	0.05	mg/kg	0.34	< 0.05	< 0.05	0.16
Molybdenum	DETSC 2301#	0.4	mg/kg	1.6	4.5	1.3	
Nickel	DETSC 2301#	1	mg/kg	13	35	4.7	22
Silicon	DETSC 2301*	10	mg/kg	62000	58000	55000	
Vanadium	DETSC 2301#	0.8	mg/kg	480	160	140	
Zinc	DETSC 2301#	1	mg/kg	180	43	54	240
Inorganics							
Loss on Ignition at 440oC	DETSC 2003#	0.01	%				
pH	DETSC 2008#			11.6	10.8	11.2	7.9
Cyanide, Total	DETSC 2130#	0.1	mg/kg	0.3	0.2	0.1	0.4
Cyanide, Free	DETSC 2130#	0.1	mg/kg	< 0.1		< 0.1	
Cyanide, Complex	DETSC 2130*	0.2	mg/kg	0.3		< 0.2	
Thiocyanate	DETSC 2130#	0.6	mg/kg	< 0.6		< 0.6	
FOC	DETSC 2002	0.001					
Organic matter	DETSC 2002#	0.1	%	2.3	1.8	1.8	3.4
Sulphate Aqueous Extract as SO4	DETSC 2076#	10	mg/l	1800	1900	1300	220
Sulphur (free)	DETSC 3049#	0.75	mg/kg	24	25	31	
Sulphur as S, Total	DETSC 2320	0.01	%				
Sulphate as SO4, Total	DETSC 2321#	0.01	%				

Summary of Chemical Analysis

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Contract Title Landholdings, Contract 3

Lab No	1250319	1250320	1250321	1250322
Sample ID	S3-TPB60	S3-TPB61	S3-TPB62	S3-TPB62
Depth	0.50	1.50	1.50	1.70
Other ID	3	5	5	7
Sample Type	ES	ES	ES	ES
Sampling Date	25/10/17	25/10/17	25/10/17	25/10/17
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
Petroleum Hydrocarbons							
Aliphatic C5-C6	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aliphatic C6-C8	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aliphatic C8-C10	DETSC 3321*	0.01	mg/kg	0.02	< 0.01	< 0.01	< 0.01
Aliphatic C10-C12	DETSC 3072#	1.5	mg/kg	6.4	< 1.5	< 1.5	< 1.5
Aliphatic C12-C16	DETSC 3072#	1.2	mg/kg	32	1.3	< 1.2	< 1.2
Aliphatic C16-C21	DETSC 3072#	1.5	mg/kg	210	18	< 1.5	< 1.5
Aliphatic C21-C35	DETSC 3072#	3.4	mg/kg	2100	97	< 3.4	< 3.4
Aliphatic C5-C35	DETSC 3072*	10	mg/kg	2400	120	< 10	< 10
Aromatic C5-C7	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aromatic C7-C8	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aromatic C8-C10	DETSC 3321*	0.01	mg/kg	0.06	< 0.01	< 0.01	< 0.01
Aromatic C10-C12	DETSC 3072#	0.9	mg/kg	2.2	< 0.9	< 0.9	< 0.9
Aromatic C12-C16	DETSC 3072#	0.5	mg/kg	21	< 0.5	5.4	< 0.5
Aromatic C16-C21	DETSC 3072#	0.6	mg/kg	120	4.8	46	< 0.6
Aromatic C21-C35	DETSC 3072#	1.4	mg/kg	880	21	32	< 1.4
Aromatic C5-C35	DETSC 3072*	10	mg/kg	1000	26	83	< 10
TPH Ali/Aro Total	DETSC 3072*	10	mg/kg	3400	140	84	< 10
PAHs							
Naphthalene	DETSC 3303#	0.03	mg/kg	0.04	< 0.03	0.54	< 0.03
Acenaphthylene	DETSC 3303#	0.03	mg/kg	0.03	< 0.03	0.09	< 0.03
Acenaphthene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	2.2	< 0.03
Fluorene	DETSC 3303	0.03	mg/kg	0.04	< 0.03	1.5	< 0.03
Phenanthrene	DETSC 3303#	0.03	mg/kg	0.29	0.14	19	0.12
Anthracene	DETSC 3303	0.03	mg/kg	0.08	0.04	4.0	< 0.03
Fluoranthene	DETSC 3303#	0.03	mg/kg	0.69	0.61	14	0.13
Pyrene	DETSC 3303#	0.03	mg/kg	0.72	0.57	10	0.10
Benzo(a)anthracene	DETSC 3303#	0.03	mg/kg	0.34	0.32	4.2	0.04
Chrysene	DETSC 3303	0.03	mg/kg	0.39	0.36	3.7	0.04
Benzo(b)fluoranthene	DETSC 3303#	0.03	mg/kg	0.55	0.46	3.9	0.05
Benzo(k)fluoranthene	DETSC 3303#	0.03	mg/kg	0.19	0.16	1.6	< 0.03
Benzo(a)pyrene	DETSC 3303#	0.03	mg/kg	0.26	0.23	2.6	< 0.03
Indeno(1,2,3-c,d)pyrene	DETSC 3303#	0.03	mg/kg	0.25	0.19	1.5	< 0.03
Dibenzo(a,h)anthracene	DETSC 3303#	0.03	mg/kg	0.04	0.03	0.32	< 0.03
Benzo(g,h,i)perylene	DETSC 3303#	0.03	mg/kg	0.32	0.22	1.7	< 0.03
PAH - USEPA 16, Total	DETSC 3303	0.1	mg/kg	4.2	3.4	71	0.48

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Lab No	1250319	1250320	1250321	1250322
Sample ID	S3-TPB60	S3-TPB61	S3-TPB62	S3-TPB62
Depth	0.50	1.50	1.50	1.70
Other ID	3	5	5	7
Sample Type	ES	ES	ES	ES
Sampling Date	25/10/17	25/10/17	25/10/17	25/10/17
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
PCBs							
PCB 28 + PCB 31	DETSC 3401#	0.01	mg/kg				
PCB 52	DETSC 3401#	0.01	mg/kg				
PCB 101	DETSC 3401#	0.01	mg/kg				
PCB 118	DETSC 3401#	0.01	mg/kg				
PCB 153	DETSC 3401#	0.01	mg/kg				
PCB 138	DETSC 3401#	0.01	mg/kg				
PCB 180	DETSC 3401#	0.01	mg/kg				
PCB 7 Total	DETSC 3401#	0.01	mg/kg				
Phenols							
Phenol - Monohydric	DETSC 2130#	0.3	mg/kg	< 0.3	< 0.3	< 0.3	< 0.3

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Contract Title Landholdings, Contract 3

Lab No	1251103	1252170	1252171	1252172
Sample ID	S3-TPA26	S3-TPB03	S3-TPB04	S3-TPB05
Depth	0.70	0.70	2.50	2.00
Other ID	5	2	10	6
Sample Type	ES	ES	ES	ES
Sampling Date	18/10/17	27/10/17	27/10/17	27/10/17
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
Asbestos Quantification	DETSC 1102	0				Y	Y
Metals							
Aluminium	DETSC 2301*	1	mg/kg		34000	11000	33000
Antimony	DETSC 2301*	1	mg/kg		2.0	6.0	2.0
Arsenic	DETSC 2301#	0.2	mg/kg	6.6	5.7	11	5.8
Barium	DETSC 2301#	1.5	mg/kg		310	710	360
Beryllium	DETSC 2301#	0.2	mg/kg		2.9	0.8	3.4
Boron, Water Soluble	DETSC 2123#	0.2	mg/kg	5.6	6.0	2.9	1.5
Cadmium	DETSC 2301#	0.1	mg/kg	0.2	0.2	2.4	0.2
Chromium	DETSC 2301#	0.15	mg/kg	170	100	340	95
Chromium, Hexavalent	DETSC 2204*	1	mg/kg		< 1.0	< 1.0	< 1.0
Copper	DETSC 2301#	0.2	mg/kg	11	13	37	11
Iron	DETSC 2301	25	mg/kg		25000	80000	20000
Lead	DETSC 2301#	0.3	mg/kg	4.8	11	150	13
Magnesium	DETSC 2301*	1	mg/kg				
Manganese	DETSC 2301#	20	mg/kg		10000	13000	8100
Mercury	DETSC 2325#	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Molybdenum	DETSC 2301#	0.4	mg/kg		1.1	2.6	1.0
Nickel	DETSC 2301#	1	mg/kg	3.3	4.2	18	3.4
Silicon	DETSC 2301*	10	mg/kg				
Vanadium	DETSC 2301#	0.8	mg/kg		220	660	210
Zinc	DETSC 2301#	1	mg/kg	15	24	190	39
Inorganics							
Loss on Ignition at 440oC	DETSC 2003#	0.01	%				
pH	DETSC 2008#			11.2	11.4	12.0	11.6
Cyanide, Total	DETSC 2130#	0.1	mg/kg	0.2	< 0.1	0.1	0.1
Cyanide, Free	DETSC 2130#	0.1	mg/kg				
Cyanide, Complex	DETSC 2130*	0.2	mg/kg				
Thiocyanate	DETSC 2130#	0.6	mg/kg			< 0.6	
FOC	DETSC 2002	0.001					
Organic matter	DETSC 2002#	0.1	%	0.5	0.9	1.3	0.9
Sulphate Aqueous Extract as SO4	DETSC 2076#	10	mg/l	660	710	110	690
Sulphur (free)	DETSC 3049#	0.75	mg/kg		3.5	1.0	8.2
Sulphur as S, Total	DETSC 2320	0.01	%				
Sulphate as SO4, Total	DETSC 2321#	0.01	%				

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Contract Title Landholdings, Contract 3

Lab No	1251103	1252170	1252171	1252172
Sample ID	S3-TPA26	S3-TPB03	S3-TPB04	S3-TPB05
Depth	0.70	0.70	2.50	2.00
Other ID	5	2	10	6
Sample Type	ES	ES	ES	ES
Sampling Date	18/10/17	27/10/17	27/10/17	27/10/17
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
Petroleum Hydrocarbons							
Aliphatic C5-C6	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aliphatic C6-C8	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aliphatic C8-C10	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aliphatic C10-C12	DETSC 3072#	1.5	mg/kg	< 1.5	< 1.5	< 1.5	< 1.5
Aliphatic C12-C16	DETSC 3072#	1.2	mg/kg	< 1.2	< 1.2	< 1.2	1.4
Aliphatic C16-C21	DETSC 3072#	1.5	mg/kg	< 1.5	2.3	< 1.5	4.3
Aliphatic C21-C35	DETSC 3072#	3.4	mg/kg	< 3.4	9.1	< 3.4	21
Aliphatic C5-C35	DETSC 3072*	10	mg/kg	< 10	12	< 10	28
Aromatic C5-C7	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aromatic C7-C8	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aromatic C8-C10	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aromatic C10-C12	DETSC 3072#	0.9	mg/kg	< 0.9	< 0.9	< 0.9	< 0.9
Aromatic C12-C16	DETSC 3072#	0.5	mg/kg	< 0.5	< 0.5	0.7	< 0.5
Aromatic C16-C21	DETSC 3072#	0.6	mg/kg	< 0.6	< 0.6	< 0.6	1.6
Aromatic C21-C35	DETSC 3072#	1.4	mg/kg	< 1.4	< 1.4	< 1.4	14
Aromatic C5-C35	DETSC 3072*	10	mg/kg	< 10	< 10	< 10	15
TPH Ali/Aro Total	DETSC 3072*	10	mg/kg	< 10	12	< 10	43
PAHs							
Naphthalene	DETSC 3303#	0.03	mg/kg	< 0.03	0.03	< 0.03	< 0.03
Acenaphthylene	DETSC 3303#	0.03	mg/kg	0.03	< 0.03	< 0.03	< 0.03
Acenaphthene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	< 0.03	< 0.03
Fluorene	DETSC 3303	0.03	mg/kg	< 0.03	< 0.03	< 0.03	< 0.03
Phenanthrene	DETSC 3303#	0.03	mg/kg	0.27	0.08	0.29	0.11
Anthracene	DETSC 3303	0.03	mg/kg	0.08	< 0.03	0.07	< 0.03
Fluoranthene	DETSC 3303#	0.03	mg/kg	0.43	0.20	0.44	0.24
Pyrene	DETSC 3303#	0.03	mg/kg	0.57	0.17	0.33	0.29
Benzo(a)anthracene	DETSC 3303#	0.03	mg/kg	0.29	0.10	0.17	0.13
Chrysene	DETSC 3303	0.03	mg/kg	0.28	0.11	0.19	0.16
Benzo(b)fluoranthene	DETSC 3303#	0.03	mg/kg	0.31	0.11	0.15	0.18
Benzo(k)fluoranthene	DETSC 3303#	0.03	mg/kg	0.13	0.05	0.08	0.09
Benzo(a)pyrene	DETSC 3303#	0.03	mg/kg	0.18	0.05	0.09	0.10
Indeno(1,2,3-c,d)pyrene	DETSC 3303#	0.03	mg/kg	0.12	0.05	0.08	0.09
Dibenzo(a,h)anthracene	DETSC 3303#	0.03	mg/kg	0.04	< 0.03	< 0.03	< 0.03
Benzo(g,h,i)perylene	DETSC 3303#	0.03	mg/kg	0.13	0.05	0.09	0.10
PAH - USEPA 16, Total	DETSC 3303	0.1	mg/kg	2.9	1.0	2.0	1.5

Summary of Chemical Analysis

Soil/Misc Samples

Our Ref 4155 Combined Report

Client Ref 4155

The Former SSI Steelworks, Redcar - Ground

Investigation Contract - Priority Areas Within SSI

Contract Title Landholdings, Contract 3

Lab No	1251103	1252170	1252171	1252172
Sample ID	S3-TPA26	S3-TPB03	S3-TPB04	S3-TPB05
Depth	0.70	0.70	2.50	2.00
Other ID	5	2	10	6
Sample Type	ES	ES	ES	ES
Sampling Date	18/10/17	27/10/17	27/10/17	27/10/17
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
PCBs							
PCB 28 + PCB 31	DETS 3401#	0.01	mg/kg				
PCB 52	DETS 3401#	0.01	mg/kg				
PCB 101	DETS 3401#	0.01	mg/kg				
PCB 118	DETS 3401#	0.01	mg/kg				
PCB 153	DETS 3401#	0.01	mg/kg				
PCB 138	DETS 3401#	0.01	mg/kg				
PCB 180	DETS 3401#	0.01	mg/kg				
PCB 7 Total	DETS 3401#	0.01	mg/kg				
Phenols							
Phenol - Monohydric	DETS 2130#	0.3	mg/kg	< 0.3	< 0.3	< 0.3	< 0.3

Summary of Chemical Analysis

Soil/Misc Samples

Our Ref 4155 Combined Report

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The Former SSI Steelworks, Redcar - Ground

Investigation Contract - Priority Areas Within SSI

Contract Title Landholdings, Contract 3

Lab No	1252173	1252174	1252175	1252176
Sample ID	S3-TPB07	S3-TPB08	S3-TPB09	S3-TPB10
Depth	1.20	0.50	0.20	1.00
Other ID	5	1	1	5
Sample Type	ES	ES	ES	ES
Sampling Date	27/10/17	30/10/17	30/10/17	30/10/17
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
Asbestos Quantification	DETSC 1102	0		Y			
Metals							
Aluminium	DETSC 2301*	1	mg/kg	17000	23000	12000	29000
Antimony	DETSC 2301*	1	mg/kg	3.1	2.3	5.5	4.4
Arsenic	DETSC 2301#	0.2	mg/kg	2.8	4.8	1.8	5.9
Barium	DETSC 2301#	1.5	mg/kg	230	290	110	740
Beryllium	DETSC 2301#	0.2	mg/kg	1.5	2.9	0.3	3.1
Boron, Water Soluble	DETSC 2123#	0.2	mg/kg	5.9	5.7	4.6	6.2
Cadmium	DETSC 2301#	0.1	mg/kg	0.5	0.4	0.9	0.9
Chromium	DETSC 2301#	0.15	mg/kg	160	110	310	200
Chromium, Hexavalent	DETSC 2204*	1	mg/kg	< 1.0	< 1.0	< 1.0	< 1.0
Copper	DETSC 2301#	0.2	mg/kg	11	8.9	8.3	17
Iron	DETSC 2301	25	mg/kg	54000	52000	140000	85000
Lead	DETSC 2301#	0.3	mg/kg	9.1	6.7	6.8	16
Magnesium	DETSC 2301*	1	mg/kg				
Manganese	DETSC 2301#	20	mg/kg	8600	7800	15000	11000
Mercury	DETSC 2325#	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Molybdenum	DETSC 2301#	0.4	mg/kg	0.9	0.7	1.4	1.6
Nickel	DETSC 2301#	1	mg/kg	4.4	2.9	2.0	7.3
Silicon	DETSC 2301*	10	mg/kg				
Vanadium	DETSC 2301#	0.8	mg/kg	230	170	350	440
Zinc	DETSC 2301#	1	mg/kg	26	39	21	42
Inorganics							
Loss on Ignition at 440oC	DETSC 2003#	0.01	%				
pH	DETSC 2008#			12.5	11.9	12.4	12.2
Cyanide, Total	DETSC 2130#	0.1	mg/kg	0.2	< 0.1	< 0.1	< 0.1
Cyanide, Free	DETSC 2130#	0.1	mg/kg		< 0.1		
Cyanide, Complex	DETSC 2130*	0.2	mg/kg		< 0.2		
Thiocyanate	DETSC 2130#	0.6	mg/kg		< 0.6		< 0.6
FOC	DETSC 2002	0.001					
Organic matter	DETSC 2002#	0.1	%	1.2	0.6	0.6	0.6
Sulphate Aqueous Extract as SO4	DETSC 2076#	10	mg/l	85	260	24	62
Sulphur (free)	DETSC 3049#	0.75	mg/kg	6.4	25	< 0.75	16
Sulphur as S, Total	DETSC 2320	0.01	%				
Sulphate as SO4, Total	DETSC 2321#	0.01	%				

Summary of Chemical Analysis

Soil/Misc Samples

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The Former SSI Steelworks, Redcar - Ground

Investigation Contract - Priority Areas Within SSI

Contract Title Landholdings, Contract 3

Lab No	1252173	1252174	1252175	1252176
Sample ID	S3-TPB07	S3-TPB08	S3-TPB09	S3-TPB10
Depth	1.20	0.50	0.20	1.00
Other ID	5	1	1	5
Sample Type	ES	ES	ES	ES
Sampling Date	27/10/17	30/10/17	30/10/17	30/10/17
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
Petroleum Hydrocarbons							
Aliphatic C5-C6	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aliphatic C6-C8	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aliphatic C8-C10	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aliphatic C10-C12	DETSC 3072#	1.5	mg/kg	< 1.5	< 1.5	< 1.5	< 1.5
Aliphatic C12-C16	DETSC 3072#	1.2	mg/kg	2.0	< 1.2	< 1.2	< 1.2
Aliphatic C16-C21	DETSC 3072#	1.5	mg/kg	5.4	2.5	< 1.5	4.5
Aliphatic C21-C35	DETSC 3072#	3.4	mg/kg	26	14	< 3.4	37
Aliphatic C5-C35	DETSC 3072*	10	mg/kg	35	18	< 10	42
Aromatic C5-C7	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aromatic C7-C8	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aromatic C8-C10	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aromatic C10-C12	DETSC 3072#	0.9	mg/kg	3.2	< 0.9	2.0	1.9
Aromatic C12-C16	DETSC 3072#	0.5	mg/kg	4.4	< 0.5	4.6	3.6
Aromatic C16-C21	DETSC 3072#	0.6	mg/kg	9.1	< 0.6	5.9	9.0
Aromatic C21-C35	DETSC 3072#	1.4	mg/kg	28	< 1.4	20	34
Aromatic C5-C35	DETSC 3072*	10	mg/kg	45	< 10	32	48
TPH Ali/Aro Total	DETSC 3072*	10	mg/kg	79	18	32	90
PAHs							
Naphthalene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	< 0.03	< 0.03
Acenaphthylene	DETSC 3303#	0.03	mg/kg	0.05	< 0.03	< 0.03	< 0.03
Acenaphthene	DETSC 3303#	0.03	mg/kg	0.03	< 0.03	< 0.03	< 0.03
Fluorene	DETSC 3303	0.03	mg/kg	< 0.03	< 0.03	< 0.03	< 0.03
Phenanthrene	DETSC 3303#	0.03	mg/kg	0.22	0.16	< 0.03	0.20
Anthracene	DETSC 3303	0.03	mg/kg	0.18	< 0.03	< 0.03	< 0.03
Fluoranthene	DETSC 3303#	0.03	mg/kg	0.37	0.24	< 0.03	0.40
Pyrene	DETSC 3303#	0.03	mg/kg	0.35	0.20	< 0.03	0.32
Benzo(a)anthracene	DETSC 3303#	0.03	mg/kg	0.10	0.08	< 0.03	0.13
Chrysene	DETSC 3303	0.03	mg/kg	0.22	0.09	< 0.03	0.18
Benzo(b)fluoranthene	DETSC 3303#	0.03	mg/kg	0.21	0.08	< 0.03	0.16
Benzo(k)fluoranthene	DETSC 3303#	0.03	mg/kg	0.08	0.04	< 0.03	0.09
Benzo(a)pyrene	DETSC 3303#	0.03	mg/kg	0.11	0.04	< 0.03	0.07
Indeno(1,2,3-c,d)pyrene	DETSC 3303#	0.03	mg/kg	0.09	0.04	< 0.03	0.08
Dibenzo(a,h)anthracene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	< 0.03	< 0.03
Benzo(g,h,i)perylene	DETSC 3303#	0.03	mg/kg	0.09	0.05	< 0.03	0.09
PAH - USEPA 16, Total	DETSC 3303	0.1	mg/kg	2.1	1.0	< 0.10	1.7

Summary of Chemical Analysis

Soil/Misc Samples

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The Former SSI Steelworks, Redcar - Ground

Investigation Contract - Priority Areas Within SSI

Contract Title Landholdings, Contract 3

Lab No	1252173	1252174	1252175	1252176
Sample ID	S3-TPB07	S3-TPB08	S3-TPB09	S3-TPB10
Depth	1.20	0.50	0.20	1.00
Other ID	5	1	1	5
Sample Type	ES	ES	ES	ES
Sampling Date	27/10/17	30/10/17	30/10/17	30/10/17
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
PCBs							
PCB 28 + PCB 31	DETSC 3401#	0.01	mg/kg				
PCB 52	DETSC 3401#	0.01	mg/kg				
PCB 101	DETSC 3401#	0.01	mg/kg				
PCB 118	DETSC 3401#	0.01	mg/kg				
PCB 153	DETSC 3401#	0.01	mg/kg				
PCB 138	DETSC 3401#	0.01	mg/kg				
PCB 180	DETSC 3401#	0.01	mg/kg				
PCB 7 Total	DETSC 3401#	0.01	mg/kg				
Phenols							
Phenol - Monohydric	DETSC 2130#	0.3	mg/kg	< 0.3	< 0.3	< 0.3	< 0.3

Summary of Chemical Analysis

Soil/Misc Samples

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The Former SSI Steelworks, Redcar - Ground

Investigation Contract - Priority Areas Within SSI

Contract Title Landholdings, Contract 3

Lab No	1252177	1252178	1252179	1252180
Sample ID	S3-TPB10	S3-TPB26	S3-TPB35	S3-TPB37
Depth	2.00	0.50	0.50	0.50
Other ID	8	2	2	2
Sample Type	ES	ES	ES	ES
Sampling Date	30/10/17	30/10/17	30/10/17	27/10/17
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
Asbestos Quantification	DETSC 1102	0					Y
Metals							
Aluminium	DETSC 2301*	1	mg/kg		8800		14000
Antimony	DETSC 2301*	1	mg/kg		7.0	1.8	3.3
Arsenic	DETSC 2301#	0.2	mg/kg	13	2.1	7.5	8.8
Barium	DETSC 2301#	1.5	mg/kg		110	240	360
Beryllium	DETSC 2301#	0.2	mg/kg		0.3	2.4	1.6
Boron, Water Soluble	DETSC 2123#	0.2	mg/kg	4.2	11	5.9	2.9
Cadmium	DETSC 2301#	0.1	mg/kg	1.2	1.4	0.5	0.9
Chromium	DETSC 2301#	0.15	mg/kg	97	330	55	48
Chromium, Hexavalent	DETSC 2204*	1	mg/kg		< 1.0	< 1.0	
Copper	DETSC 2301#	0.2	mg/kg	24	19	14	21
Iron	DETSC 2301	25	mg/kg		190000		44000
Lead	DETSC 2301#	0.3	mg/kg	50	22	23	56
Magnesium	DETSC 2301*	1	mg/kg				
Manganese	DETSC 2301#	20	mg/kg		15000		3600
Mercury	DETSC 2325#	0.05	mg/kg	0.06	< 0.05	< 0.05	0.26
Molybdenum	DETSC 2301#	0.4	mg/kg		2.9	0.7	1.5
Nickel	DETSC 2301#	1	mg/kg	13	10	7.1	17
Silicon	DETSC 2301*	10	mg/kg				
Vanadium	DETSC 2301#	0.8	mg/kg		400	130	170
Zinc	DETSC 2301#	1	mg/kg	230	120	77	140
Inorganics							
Loss on Ignition at 440oC	DETSC 2003#	0.01	%				
pH	DETSC 2008#			11.7	12.7	11.4	11.2
Cyanide, Total	DETSC 2130#	0.1	mg/kg	2.1	< 0.1	0.5	0.2
Cyanide, Free	DETSC 2130#	0.1	mg/kg		< 0.1		
Cyanide, Complex	DETSC 2130*	0.2	mg/kg		< 0.2		
Thiocyanate	DETSC 2130#	0.6	mg/kg		< 0.6		
FOC	DETSC 2002	0.001					
Organic matter	DETSC 2002#	0.1	%	1.9	1.3	1.6	1.7
Sulphate Aqueous Extract as SO4	DETSC 2076#	10	mg/l	650	10	540	270
Sulphur (free)	DETSC 3049#	0.75	mg/kg		< 0.75	9.7	
Sulphur as S, Total	DETSC 2320	0.01	%				
Sulphate as SO4, Total	DETSC 2321#	0.01	%				

Summary of Chemical Analysis

Soil/Misc Samples

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The Former SSI Steelworks, Redcar - Ground

Investigation Contract - Priority Areas Within SSI

Contract Title Landholdings, Contract 3

Lab No	1252177	1252178	1252179	1252180
Sample ID	S3-TPB10	S3-TPB26	S3-TPB35	S3-TPB37
Depth	2.00	0.50	0.50	0.50
Other ID	8	2	2	2
Sample Type	ES	ES	ES	ES
Sampling Date	30/10/17	30/10/17	30/10/17	27/10/17
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
Petroleum Hydrocarbons							
Aliphatic C5-C6	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aliphatic C6-C8	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aliphatic C8-C10	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aliphatic C10-C12	DETSC 3072#	1.5	mg/kg	< 1.5	< 1.5	1.8	< 1.5
Aliphatic C12-C16	DETSC 3072#	1.2	mg/kg	< 1.2	< 1.2	2.1	< 1.2
Aliphatic C16-C21	DETSC 3072#	1.5	mg/kg	< 1.5	2.2	4.5	< 1.5
Aliphatic C21-C35	DETSC 3072#	3.4	mg/kg	< 3.4	16	19	< 3.4
Aliphatic C5-C35	DETSC 3072*	10	mg/kg	< 10	18	27	< 10
Aromatic C5-C7	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aromatic C7-C8	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aromatic C8-C10	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aromatic C10-C12	DETSC 3072#	0.9	mg/kg	< 0.9	< 0.9	5.7	2.9
Aromatic C12-C16	DETSC 3072#	0.5	mg/kg	1.1	< 0.5	12	1.0
Aromatic C16-C21	DETSC 3072#	0.6	mg/kg	3.2	< 0.6	28	< 0.6
Aromatic C21-C35	DETSC 3072#	1.4	mg/kg	12	< 1.4	140	< 1.4
Aromatic C5-C35	DETSC 3072*	10	mg/kg	16	< 10	190	< 10
TPH Ali/Aro Total	DETSC 3072*	10	mg/kg	16	18	210	< 10
PAHs							
Naphthalene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	0.06	< 0.03
Acenaphthylene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	0.04	< 0.03
Acenaphthene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	0.09	< 0.03
Fluorene	DETSC 3303	0.03	mg/kg	< 0.03	< 0.03	0.09	< 0.03
Phenanthrene	DETSC 3303#	0.03	mg/kg	0.26	0.04	0.66	0.06
Anthracene	DETSC 3303	0.03	mg/kg	0.04	< 0.03	0.20	< 0.03
Fluoranthene	DETSC 3303#	0.03	mg/kg	0.46	0.06	1.1	0.17
Pyrene	DETSC 3303#	0.03	mg/kg	0.36	0.05	1.7	0.17
Benzo(a)anthracene	DETSC 3303#	0.03	mg/kg	0.20	< 0.03	0.75	0.09
Chrysene	DETSC 3303	0.03	mg/kg	0.25	0.04	0.79	0.12
Benzo(b)fluoranthene	DETSC 3303#	0.03	mg/kg	0.25	0.04	0.85	0.18
Benzo(k)fluoranthene	DETSC 3303#	0.03	mg/kg	0.12	< 0.03	0.37	0.07
Benzo(a)pyrene	DETSC 3303#	0.03	mg/kg	0.15	< 0.03	0.55	0.09
Indeno(1,2,3-c,d)pyrene	DETSC 3303#	0.03	mg/kg	0.11	< 0.03	0.30	0.11
Dibenzo(a,h)anthracene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	0.06	< 0.03
Benzo(g,h,i)perylene	DETSC 3303#	0.03	mg/kg	0.13	0.03	0.36	0.13
PAH - USEPA 16, Total	DETSC 3303	0.1	mg/kg	2.3	0.28	8.0	1.2

Summary of Chemical Analysis

Soil/Misc Samples

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The Former SSI Steelworks, Redcar - Ground

Investigation Contract - Priority Areas Within SSI

Contract Title Landholdings, Contract 3

Lab No	1252177	1252178	1252179	1252180
Sample ID	S3-TPB10	S3-TPB26	S3-TPB35	S3-TPB37
Depth	2.00	0.50	0.50	0.50
Other ID	8	2	2	2
Sample Type	ES	ES	ES	ES
Sampling Date	30/10/17	30/10/17	30/10/17	27/10/17
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
PCBs							
PCB 28 + PCB 31	DETSC 3401#	0.01	mg/kg				
PCB 52	DETSC 3401#	0.01	mg/kg				
PCB 101	DETSC 3401#	0.01	mg/kg				
PCB 118	DETSC 3401#	0.01	mg/kg				
PCB 153	DETSC 3401#	0.01	mg/kg				
PCB 138	DETSC 3401#	0.01	mg/kg				
PCB 180	DETSC 3401#	0.01	mg/kg				
PCB 7 Total	DETSC 3401#	0.01	mg/kg				
Phenols							
Phenol - Monohydric	DETSC 2130#	0.3	mg/kg	< 0.3	< 0.3	< 0.3	< 0.3

Summary of Chemical Analysis

Soil/Misc Samples

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The Former SSI Steelworks, Redcar - Ground

Investigation Contract - Priority Areas Within SSI

Contract Title Landholdings, Contract 3

Lab No	1252181	1252182	1252183	1252184
Sample ID	S3-TPB37	S3-TPB41	S3-TPB46	S3-TPB47
Depth	1.50	0.50	0.40	1.50
Other ID	5	2	3	5
Sample Type	ES	ES	ES	ES
Sampling Date	27/10/17	30/10/17	30/10/17	27/10/17
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
Asbestos Quantification	DETSC 1102	0			Y	Y	
Metals							
Aluminium	DETSC 2301*	1	mg/kg	11000		23000	33000
Antimony	DETSC 2301*	1	mg/kg	3.1	3.6	2.1	2.6
Arsenic	DETSC 2301#	0.2	mg/kg	2.3	3.6	4.0	8.8
Barium	DETSC 2301#	1.5	mg/kg	120	120	210	270
Beryllium	DETSC 2301#	0.2	mg/kg	0.5	0.7	1.9	2.7
Boron, Water Soluble	DETSC 2123#	0.2	mg/kg	8.0	8.7	3.9	13
Cadmium	DETSC 2301#	0.1	mg/kg	0.8	1.2	0.7	0.2
Chromium	DETSC 2301#	0.15	mg/kg	110	150	72	150
Chromium, Hexavalent	DETSC 2204*	1	mg/kg	< 1.0	< 1.0	< 1.0	< 1.0
Copper	DETSC 2301#	0.2	mg/kg	15	16	13	17
Iron	DETSC 2301	25	mg/kg	120000		55000	30000
Lead	DETSC 2301#	0.3	mg/kg	11	29	27	11
Magnesium	DETSC 2301*	1	mg/kg				
Manganese	DETSC 2301#	20	mg/kg	8900		9000	56000
Mercury	DETSC 2325#	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Molybdenum	DETSC 2301#	0.4	mg/kg	2.0	2.6	1.4	1.9
Nickel	DETSC 2301#	1	mg/kg	11	10	7.2	15
Silicon	DETSC 2301*	10	mg/kg				
Vanadium	DETSC 2301#	0.8	mg/kg	89	400	210	350
Zinc	DETSC 2301#	1	mg/kg	40	130	150	26
Inorganics							
Loss on Ignition at 440oC	DETSC 2003#	0.01	%				
pH	DETSC 2008#			12.2	11.8	11.1	11.5
Cyanide, Total	DETSC 2130#	0.1	mg/kg	< 0.1	0.2	0.2	< 0.1
Cyanide, Free	DETSC 2130#	0.1	mg/kg			< 0.1	
Cyanide, Complex	DETSC 2130*	0.2	mg/kg			< 0.2	
Thiocyanate	DETSC 2130#	0.6	mg/kg			1.2	
FOC	DETSC 2002	0.001					
Organic matter	DETSC 2002#	0.1	%	1.5	2.7	1.0	0.6
Sulphate Aqueous Extract as SO4	DETSC 2076#	10	mg/l	10	100	270	420
Sulphur (free)	DETSC 3049#	0.75	mg/kg	< 0.75	11	1.8	4.4
Sulphur as S, Total	DETSC 2320	0.01	%				
Sulphate as SO4, Total	DETSC 2321#	0.01	%				

Summary of Chemical Analysis

Soil/Misc Samples

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The Former SSI Steelworks, Redcar - Ground

Investigation Contract - Priority Areas Within SSI

Contract Title Landholdings, Contract 3

Lab No	1252181	1252182	1252183	1252184
Sample ID	S3-TPB37	S3-TPB41	S3-TPB46	S3-TPB47
Depth	1.50	0.50	0.40	1.50
Other ID	5	2	3	5
Sample Type	ES	ES	ES	ES
Sampling Date	27/10/17	30/10/17	30/10/17	27/10/17
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
Petroleum Hydrocarbons							
Aliphatic C5-C6	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aliphatic C6-C8	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aliphatic C8-C10	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aliphatic C10-C12	DETSC 3072#	1.5	mg/kg	< 1.5	< 1.5	1.6	< 1.5
Aliphatic C12-C16	DETSC 3072#	1.2	mg/kg	< 1.2	12	< 1.2	< 1.2
Aliphatic C16-C21	DETSC 3072#	1.5	mg/kg	< 1.5	29	< 1.5	< 1.5
Aliphatic C21-C35	DETSC 3072#	3.4	mg/kg	< 3.4	160	4.9	< 3.4
Aliphatic C5-C35	DETSC 3072*	10	mg/kg	< 10	200	< 10	< 10
Aromatic C5-C7	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aromatic C7-C8	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aromatic C8-C10	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aromatic C10-C12	DETSC 3072#	0.9	mg/kg	2.7	4.6	< 0.9	< 0.9
Aromatic C12-C16	DETSC 3072#	0.5	mg/kg	0.7	33	< 0.5	< 0.5
Aromatic C16-C21	DETSC 3072#	0.6	mg/kg	< 0.6	82	1.4	2.1
Aromatic C21-C35	DETSC 3072#	1.4	mg/kg	< 1.4	440	15	5.9
Aromatic C5-C35	DETSC 3072*	10	mg/kg	< 10	560	17	< 10
TPH Ali/Aro Total	DETSC 3072*	10	mg/kg	< 10	760	26	< 10
PAHs							
Naphthalene	DETSC 3303#	0.03	mg/kg	< 0.03	1.1	0.03	< 0.03
Acenaphthylene	DETSC 3303#	0.03	mg/kg	< 0.03	0.10	0.03	0.06
Acenaphthene	DETSC 3303#	0.03	mg/kg	< 0.03	3.9	< 0.03	< 0.03
Fluorene	DETSC 3303	0.03	mg/kg	< 0.03	2.0	< 0.03	0.04
Phenanthrene	DETSC 3303#	0.03	mg/kg	0.05	5.6	0.31	0.55
Anthracene	DETSC 3303	0.03	mg/kg	< 0.03	0.77	0.12	0.20
Fluoranthene	DETSC 3303#	0.03	mg/kg	0.07	4.3	1.5	1.1
Pyrene	DETSC 3303#	0.03	mg/kg	0.06	3.3	1.3	0.83
Benzo(a)anthracene	DETSC 3303#	0.03	mg/kg	0.04	0.96	0.84	0.47
Chrysene	DETSC 3303	0.03	mg/kg	0.04	1.1	0.86	0.44
Benzo(b)fluoranthene	DETSC 3303#	0.03	mg/kg	0.04	0.99	1.2	0.44
Benzo(k)fluoranthene	DETSC 3303#	0.03	mg/kg	< 0.03	0.38	0.56	0.20
Benzo(a)pyrene	DETSC 3303#	0.03	mg/kg	< 0.03	0.57	0.88	0.29
Indeno(1,2,3-c,d)pyrene	DETSC 3303#	0.03	mg/kg	< 0.03	0.31	0.56	0.16
Dibenzo(a,h)anthracene	DETSC 3303#	0.03	mg/kg	< 0.03	0.09	0.09	0.04
Benzo(g,h,i)perylene	DETSC 3303#	0.03	mg/kg	< 0.03	0.37	0.68	0.17
PAH - USEPA 16, Total	DETSC 3303	0.1	mg/kg	0.29	26	9.0	5.0

Summary of Chemical Analysis

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Contract Title Landholdings, Contract 3

Lab No	1252181	1252182	1252183	1252184
Sample ID	S3-TPB37	S3-TPB41	S3-TPB46	S3-TPB47
Depth	1.50	0.50	0.40	1.50
Other ID	5	2	3	5
Sample Type	ES	ES	ES	ES
Sampling Date	27/10/17	30/10/17	30/10/17	27/10/17
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
PCBs							
PCB 28 + PCB 31	DETSC 3401#	0.01	mg/kg				
PCB 52	DETSC 3401#	0.01	mg/kg				
PCB 101	DETSC 3401#	0.01	mg/kg				
PCB 118	DETSC 3401#	0.01	mg/kg				
PCB 153	DETSC 3401#	0.01	mg/kg				
PCB 138	DETSC 3401#	0.01	mg/kg				
PCB 180	DETSC 3401#	0.01	mg/kg				
PCB 7 Total	DETSC 3401#	0.01	mg/kg				
Phenols							
Phenol - Monohydric	DETSC 2130#	0.3	mg/kg	< 0.3	< 0.3	< 0.3	< 0.3

Summary of Chemical Analysis

Soil/Misc Samples

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The Former SSI Steelworks, Redcar - Ground

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Contract Title Landholdings, Contract 3

Lab No	1252185	1252186	1253426	1253427
Sample ID	S3-TPB48	S3-TPB48	S3-TPA34	S3-TPA36
Depth	0.50	1.50	0.80	0.50
Other ID	2	5	2	2
Sample Type	ES	ES	ES	ES
Sampling Date	27/10/17	27/10/17	17/10/17	31/10/17
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
Asbestos Quantification	DETSC 1102	0			Y	Y	
Metals							
Aluminium	DETSC 2301*	1	mg/kg				
Antimony	DETSC 2301*	1	mg/kg		3.1	2.1	8.8
Arsenic	DETSC 2301#	0.2	mg/kg	5.0	13	17	8.2
Barium	DETSC 2301#	1.5	mg/kg		290	490	230
Beryllium	DETSC 2301#	0.2	mg/kg		1.6	3.4	0.8
Boron, Water Soluble	DETSC 2123#	0.2	mg/kg	3.8	11	2.8	3.1
Cadmium	DETSC 2301#	0.1	mg/kg	0.5	0.7	0.6	1.5
Chromium	DETSC 2301#	0.15	mg/kg	63	100	50	530
Chromium, Hexavalent	DETSC 2204*	1	mg/kg		< 1.0	< 1.0	< 1.0
Copper	DETSC 2301#	0.2	mg/kg	17	33	110	53
Iron	DETSC 2301	25	mg/kg				
Lead	DETSC 2301#	0.3	mg/kg	29	73	77	1200
Magnesium	DETSC 2301*	1	mg/kg				
Manganese	DETSC 2301#	20	mg/kg				
Mercury	DETSC 2325#	0.05	mg/kg	< 0.05	0.14	0.74	0.06
Molybdenum	DETSC 2301#	0.4	mg/kg		1.0	4.0	7.8
Nickel	DETSC 2301#	1	mg/kg	16	12	27	26
Silicon	DETSC 2301*	10	mg/kg				
Vanadium	DETSC 2301#	0.8	mg/kg		210	110	440
Zinc	DETSC 2301#	1	mg/kg	100	180	180	670
Inorganics							
Loss on Ignition at 440oC	DETSC 2003#	0.01	%				
pH	DETSC 2008#			10.5	11.5	11.1	12.5
Cyanide, Total	DETSC 2130#	0.1	mg/kg	0.1	0.4	1.3	0.8
Cyanide, Free	DETSC 2130#	0.1	mg/kg				
Cyanide, Complex	DETSC 2130*	0.2	mg/kg				
Thiocyanate	DETSC 2130#	0.6	mg/kg		< 0.6		
FOC	DETSC 2002	0.001					
Organic matter	DETSC 2002#	0.1	%	0.8	2.2	1.6	2.1
Sulphate Aqueous Extract as SO4	DETSC 2076#	10	mg/l	280	490	560	17
Sulphur (free)	DETSC 3049#	0.75	mg/kg		1.6	1.1	< 0.75
Sulphur as S, Total	DETSC 2320	0.01	%				
Sulphate as SO4, Total	DETSC 2321#	0.01	%				

Summary of Chemical Analysis

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Lab No	1252185	1252186	1253426	1253427
Sample ID	S3-TPB48	S3-TPB48	S3-TPA34	S3-TPA36
Depth	0.50	1.50	0.80	0.50
Other ID	2	5	2	2
Sample Type	ES	ES	ES	ES
Sampling Date	27/10/17	27/10/17	17/10/17	31/10/17
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
Petroleum Hydrocarbons							
Aliphatic C5-C6	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aliphatic C6-C8	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aliphatic C8-C10	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aliphatic C10-C12	DETSC 3072#	1.5	mg/kg	< 1.5	< 1.5	1.6	< 1.5
Aliphatic C12-C16	DETSC 3072#	1.2	mg/kg	< 1.2	< 1.2	< 1.2	< 1.2
Aliphatic C16-C21	DETSC 3072#	1.5	mg/kg	< 1.5	4.9	6.7	4.5
Aliphatic C21-C35	DETSC 3072#	3.4	mg/kg	11	13	48	50
Aliphatic C5-C35	DETSC 3072*	10	mg/kg	13	19	57	55
Aromatic C5-C7	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aromatic C7-C8	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aromatic C8-C10	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aromatic C10-C12	DETSC 3072#	0.9	mg/kg	< 0.9	< 0.9	< 0.9	1.4
Aromatic C12-C16	DETSC 3072#	0.5	mg/kg	1.3	< 0.5	< 0.5	4.8
Aromatic C16-C21	DETSC 3072#	0.6	mg/kg	4.3	0.9	3.7	7.1
Aromatic C21-C35	DETSC 3072#	1.4	mg/kg	38	< 1.4	4.2	42
Aromatic C5-C35	DETSC 3072*	10	mg/kg	44	< 10	< 10	56
TPH Ali/Aro Total	DETSC 3072*	10	mg/kg	57	21	64	110
PAHs							
Naphthalene	DETSC 3303#	0.03	mg/kg	< 0.03	0.05	< 0.03	< 0.03
Acenaphthylene	DETSC 3303#	0.03	mg/kg	< 0.03	0.15	0.04	< 0.03
Acenaphthene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	< 0.03	< 0.03
Fluorene	DETSC 3303	0.03	mg/kg	< 0.03	0.09	< 0.03	< 0.03
Phenanthrene	DETSC 3303#	0.03	mg/kg	0.08	1.2	0.20	0.03
Anthracene	DETSC 3303	0.03	mg/kg	< 0.03	0.33	0.09	< 0.03
Fluoranthene	DETSC 3303#	0.03	mg/kg	0.27	2.9	0.76	0.11
Pyrene	DETSC 3303#	0.03	mg/kg	0.26	2.9	0.72	0.13
Benzo(a)anthracene	DETSC 3303#	0.03	mg/kg	0.17	1.5	0.46	0.07
Chrysene	DETSC 3303	0.03	mg/kg	0.21	1.4	0.47	0.11
Benzo(b)fluoranthene	DETSC 3303#	0.03	mg/kg	0.31	1.8	0.71	0.13
Benzo(k)fluoranthene	DETSC 3303#	0.03	mg/kg	0.13	0.86	0.28	0.05
Benzo(a)pyrene	DETSC 3303#	0.03	mg/kg	0.23	1.2	0.48	0.05
Indeno(1,2,3-c,d)pyrene	DETSC 3303#	0.03	mg/kg	0.20	0.67	0.33	0.05
Dibenzo(a,h)anthracene	DETSC 3303#	0.03	mg/kg	0.03	0.12	0.09	< 0.03
Benzo(g,h,i)perylene	DETSC 3303#	0.03	mg/kg	0.25	0.75	0.41	0.06
PAH - USEPA 16, Total	DETSC 3303	0.1	mg/kg	2.1	16	5.1	0.79

Summary of Chemical Analysis

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Lab No	1252185	1252186	1253426	1253427
Sample ID	S3-TPB48	S3-TPB48	S3-TPA34	S3-TPA36
Depth	0.50	1.50	0.80	0.50
Other ID	2	5	2	2
Sample Type	ES	ES	ES	ES
Sampling Date	27/10/17	27/10/17	17/10/17	31/10/17
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
PCBs							
PCB 28 + PCB 31	DETSC 3401#	0.01	mg/kg				
PCB 52	DETSC 3401#	0.01	mg/kg				
PCB 101	DETSC 3401#	0.01	mg/kg				
PCB 118	DETSC 3401#	0.01	mg/kg				
PCB 153	DETSC 3401#	0.01	mg/kg				
PCB 138	DETSC 3401#	0.01	mg/kg				
PCB 180	DETSC 3401#	0.01	mg/kg				
PCB 7 Total	DETSC 3401#	0.01	mg/kg				
Phenols							
Phenol - Monohydric	DETSC 2130#	0.3	mg/kg	< 0.3	< 0.3	0.3	< 0.3

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Lab No	1253429	1253430	1253431	1253432
Sample ID	S3-TPA39	S3-TPA39	S3-TPB38	S3-TPB39
Depth	0.30	0.80	1.50	0.50
Other ID	2	5	6	1
Sample Type	ES	ES	ES	ES
Sampling Date	17/10/17	17/10/17	17/10/17	17/10/17
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
Asbestos Quantification	DETSC 1102	0				Y	
Metals							
Aluminium	DETSC 2301*	1	mg/kg				
Antimony	DETSC 2301*	1	mg/kg		11	1.2	< 1.0
Arsenic	DETSC 2301#	0.2	mg/kg	2.8	12	6.3	3.5
Barium	DETSC 2301#	1.5	mg/kg		140	170	89
Beryllium	DETSC 2301#	0.2	mg/kg		1.0	0.7	0.6
Boron, Water Soluble	DETSC 2123#	0.2	mg/kg	3.7	1.1	1.8	1.0
Cadmium	DETSC 2301#	0.1	mg/kg	< 0.1	0.4	0.2	0.2
Chromium	DETSC 2301#	0.15	mg/kg	76	32	26	13
Chromium, Hexavalent	DETSC 2204*	1	mg/kg		< 1.0	< 1.0	< 1.0
Copper	DETSC 2301#	0.2	mg/kg	20	34	45	12
Iron	DETSC 2301	25	mg/kg				
Lead	DETSC 2301#	0.3	mg/kg	18	70	22	12
Magnesium	DETSC 2301*	1	mg/kg				
Manganese	DETSC 2301#	20	mg/kg				
Mercury	DETSC 2325#	0.05	mg/kg	0.09	0.26	< 0.05	< 0.05
Molybdenum	DETSC 2301#	0.4	mg/kg		1.5	2.0	0.6
Nickel	DETSC 2301#	1	mg/kg	8.0	21	14	6.8
Silicon	DETSC 2301*	10	mg/kg				
Vanadium	DETSC 2301#	0.8	mg/kg		44	37	25
Zinc	DETSC 2301#	1	mg/kg	47	160	60	34
Inorganics							
Loss on Ignition at 440oC	DETSC 2003#	0.01	%				
pH	DETSC 2008#			11.6	8.9	12.4	12.5
Cyanide, Total	DETSC 2130#	0.1	mg/kg	0.4	0.3	0.2	0.2
Cyanide, Free	DETSC 2130#	0.1	mg/kg			< 0.1	
Cyanide, Complex	DETSC 2130*	0.2	mg/kg			< 0.2	
Thiocyanate	DETSC 2130#	0.6	mg/kg			< 0.6	
FOC	DETSC 2002	0.001					
Organic matter	DETSC 2002#	0.1	%	1.7	1.6	0.4	0.5
Sulphate Aqueous Extract as SO4	DETSC 2076#	10	mg/l	1200	260	26	49
Sulphur (free)	DETSC 3049#	0.75	mg/kg		3.2	< 0.75	< 0.75
Sulphur as S, Total	DETSC 2320	0.01	%				
Sulphate as SO4, Total	DETSC 2321#	0.01	%				

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Lab No	1253429	1253430	1253431	1253432
Sample ID	S3-TPA39	S3-TPA39	S3-TPB38	S3-TPB39
Depth	0.30	0.80	1.50	0.50
Other ID	2	5	6	1
Sample Type	ES	ES	ES	ES
Sampling Date	17/10/17	17/10/17	17/10/17	17/10/17
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
Petroleum Hydrocarbons							
Aliphatic C5-C6	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aliphatic C6-C8	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aliphatic C8-C10	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aliphatic C10-C12	DETSC 3072#	1.5	mg/kg	< 1.5	< 1.5	< 1.5	1.7
Aliphatic C12-C16	DETSC 3072#	1.2	mg/kg	4.1	< 1.2	1.6	< 1.2
Aliphatic C16-C21	DETSC 3072#	1.5	mg/kg	15	< 1.5	4.9	< 1.5
Aliphatic C21-C35	DETSC 3072#	3.4	mg/kg	27	< 3.4	24	16
Aliphatic C5-C35	DETSC 3072*	10	mg/kg	46	< 10	31	19
Aromatic C5-C7	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aromatic C7-C8	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aromatic C8-C10	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aromatic C10-C12	DETSC 3072#	0.9	mg/kg	1.5	1.8	< 0.9	7.5
Aromatic C12-C16	DETSC 3072#	0.5	mg/kg	6.5	5.8	4.3	20
Aromatic C16-C21	DETSC 3072#	0.6	mg/kg	130	10	8.2	32
Aromatic C21-C35	DETSC 3072#	1.4	mg/kg	460	5.0	4.7	120
Aromatic C5-C35	DETSC 3072*	10	mg/kg	600	23	17	180
TPH Ali/Aro Total	DETSC 3072*	10	mg/kg	640	23	49	200
PAHs							
Naphthalene	DETSC 3303#	0.03	mg/kg	0.07	< 0.03	< 0.03	< 0.03
Acenaphthylene	DETSC 3303#	0.03	mg/kg	0.48	< 0.03	< 0.03	< 0.03
Acenaphthene	DETSC 3303#	0.03	mg/kg	0.23	< 0.03	< 0.03	< 0.03
Fluorene	DETSC 3303	0.03	mg/kg	0.22	< 0.03	< 0.03	< 0.03
Phenanthrene	DETSC 3303#	0.03	mg/kg	3.2	0.16	0.05	< 0.03
Anthracene	DETSC 3303	0.03	mg/kg	1.5	< 0.03	< 0.03	< 0.03
Fluoranthene	DETSC 3303#	0.03	mg/kg	24	0.24	0.15	< 0.03
Pyrene	DETSC 3303#	0.03	mg/kg	23	0.20	0.15	< 0.03
Benzo(a)anthracene	DETSC 3303#	0.03	mg/kg	14	0.10	0.07	< 0.03
Chrysene	DETSC 3303	0.03	mg/kg	13	0.10	0.08	< 0.03
Benzo(b)fluoranthene	DETSC 3303#	0.03	mg/kg	22	0.09	0.08	< 0.03
Benzo(k)fluoranthene	DETSC 3303#	0.03	mg/kg	9.0	0.04	0.03	< 0.03
Benzo(a)pyrene	DETSC 3303#	0.03	mg/kg	18	0.06	0.05	< 0.03
Indeno(1,2,3-c,d)pyrene	DETSC 3303#	0.03	mg/kg	9.7	0.04	0.03	< 0.03
Dibenzo(a,h)anthracene	DETSC 3303#	0.03	mg/kg	3.1	< 0.03	< 0.03	< 0.03
Benzo(g,h,i)perylene	DETSC 3303#	0.03	mg/kg	11	< 0.03	0.03	< 0.03
PAH - USEPA 16, Total	DETSC 3303	0.1	mg/kg	150	1.0	0.71	< 0.10

Summary of Chemical Analysis

Soil/Misc Samples

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The Former SSI Steelworks, Redcar - Ground

Investigation Contract - Priority Areas Within SSI

Contract Title Landholdings, Contract 3

Lab No	1253429	1253430	1253431	1253432
Sample ID	S3-TPA39	S3-TPA39	S3-TPB38	S3-TPB39
Depth	0.30	0.80	1.50	0.50
Other ID	2	5	6	1
Sample Type	ES	ES	ES	ES
Sampling Date	17/10/17	17/10/17	17/10/17	17/10/17
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
PCBs							
PCB 28 + PCB 31	DETSC 3401#	0.01	mg/kg				
PCB 52	DETSC 3401#	0.01	mg/kg				
PCB 101	DETSC 3401#	0.01	mg/kg				
PCB 118	DETSC 3401#	0.01	mg/kg				
PCB 153	DETSC 3401#	0.01	mg/kg				
PCB 138	DETSC 3401#	0.01	mg/kg				
PCB 180	DETSC 3401#	0.01	mg/kg				
PCB 7 Total	DETSC 3401#	0.01	mg/kg				
Phenols							
Phenol - Monohydric	DETSC 2130#	0.3	mg/kg	0.4	0.5	0.8	0.8

Summary of Chemical Analysis

Soil/Misc Samples

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The Former SSI Steelworks, Redcar - Ground

Investigation Contract - Priority Areas Within SSI

Contract Title Landholdings, Contract 3

Lab No	1253433	1253434	1253435	1253579
Sample ID	S3-TPB43	S3-TPB49	S3-TPB49	S3-TPB01
Depth	2.50	0.50	2.20	0.10
Other ID	8	3	8	2
Sample Type	ES	ES	ES	ES
Sampling Date	17/10/17	17/10/17	17/10/17	26/10/17
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
Asbestos Quantification	DETSC 1102	0			Y		Y
Metals							
Aluminium	DETSC 2301*	1	mg/kg	45000	25000		
Antimony	DETSC 2301*	1	mg/kg	< 1.0	3.2		1.7
Arsenic	DETSC 2301#	0.2	mg/kg	4.3	7.8	6.0	0.7
Barium	DETSC 2301#	1.5	mg/kg	340	500		170
Beryllium	DETSC 2301#	0.2	mg/kg	4.8	3.1		1.0
Boron, Water Soluble	DETSC 2123#	0.2	mg/kg	3.9	4.8	4.0	5.4
Cadmium	DETSC 2301#	0.1	mg/kg	< 0.1	0.5	< 0.1	0.2
Chromium	DETSC 2301#	0.15	mg/kg	39	200	38	88
Chromium, Hexavalent	DETSC 2204*	1	mg/kg	< 1.0	< 1.0		< 1.0
Copper	DETSC 2301#	0.2	mg/kg	7.9	44	21	6.7
Iron	DETSC 2301	25	mg/kg	12000	47000		
Lead	DETSC 2301#	0.3	mg/kg	11	63	17	4.7
Magnesium	DETSC 2301*	1	mg/kg	31000	36000		
Manganese	DETSC 2301#	20	mg/kg	6800	5400		
Mercury	DETSC 2325#	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Molybdenum	DETSC 2301#	0.4	mg/kg	0.7	36		1.3
Nickel	DETSC 2301#	1	mg/kg	2.8	220	21	2.2
Silicon	DETSC 2301*	10	mg/kg	43000	76000		
Vanadium	DETSC 2301#	0.8	mg/kg	68	110		94
Zinc	DETSC 2301#	1	mg/kg	20	140	46	28
Inorganics							
Loss on Ignition at 440oC	DETSC 2003#	0.01	%				
pH	DETSC 2008#			10.8	11.1	9.5	11.7
Cyanide, Total	DETSC 2130#	0.1	mg/kg	0.4	0.3	0.2	0.4
Cyanide, Free	DETSC 2130#	0.1	mg/kg				
Cyanide, Complex	DETSC 2130*	0.2	mg/kg				
Thiocyanate	DETSC 2130#	0.6	mg/kg				
FOC	DETSC 2002	0.001					
Organic matter	DETSC 2002#	0.1	%	0.8	2.2	1.3	0.4
Sulphate Aqueous Extract as SO4	DETSC 2076#	10	mg/l	1500	1600	980	120
Sulphur (free)	DETSC 3049#	0.75	mg/kg	20	4.6		5.8
Sulphur as S, Total	DETSC 2320	0.01	%				
Sulphate as SO4, Total	DETSC 2321#	0.01	%				

Summary of Chemical Analysis

Soil/Misc Samples

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The Former SSI Steelworks, Redcar - Ground

Investigation Contract - Priority Areas Within SSI

Contract Title Landholdings, Contract 3

Lab No	1253433	1253434	1253435	1253579
Sample ID	S3-TPB43	S3-TPB49	S3-TPB49	S3-TPB01
Depth	2.50	0.50	2.20	0.10
Other ID	8	3	8	2
Sample Type	ES	ES	ES	ES
Sampling Date	17/10/17	17/10/17	17/10/17	26/10/17
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
Petroleum Hydrocarbons							
Aliphatic C5-C6	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aliphatic C6-C8	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aliphatic C8-C10	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aliphatic C10-C12	DETSC 3072#	1.5	mg/kg	2.8	< 1.5	< 1.5	< 1.5
Aliphatic C12-C16	DETSC 3072#	1.2	mg/kg	3.8	< 1.2	< 1.2	< 1.2
Aliphatic C16-C21	DETSC 3072#	1.5	mg/kg	5.8	2.1	< 1.5	1.6
Aliphatic C21-C35	DETSC 3072#	3.4	mg/kg	13	12	< 3.4	15
Aliphatic C5-C35	DETSC 3072*	10	mg/kg	25	16	< 10	17
Aromatic C5-C7	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aromatic C7-C8	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aromatic C8-C10	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aromatic C10-C12	DETSC 3072#	0.9	mg/kg	3.3	6.8	1.6	< 0.9
Aromatic C12-C16	DETSC 3072#	0.5	mg/kg	22	15	< 0.5	< 0.5
Aromatic C16-C21	DETSC 3072#	0.6	mg/kg	37	46	< 0.6	1.0
Aromatic C21-C35	DETSC 3072#	1.4	mg/kg	75	160	< 1.4	5.2
Aromatic C5-C35	DETSC 3072*	10	mg/kg	140	230	< 10	< 10
TPH Ali/Aro Total	DETSC 3072*	10	mg/kg	160	250	< 10	23
PAHs							
Naphthalene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	< 0.03	< 0.03
Acenaphthylene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	< 0.03	< 0.03
Acenaphthene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	< 0.03	< 0.03
Fluorene	DETSC 3303	0.03	mg/kg	< 0.03	< 0.03	< 0.03	< 0.03
Phenanthrene	DETSC 3303#	0.03	mg/kg	0.03	0.35	< 0.03	0.21
Anthracene	DETSC 3303	0.03	mg/kg	< 0.03	0.07	< 0.03	0.04
Fluoranthene	DETSC 3303#	0.03	mg/kg	0.08	0.70	0.05	0.37
Pyrene	DETSC 3303#	0.03	mg/kg	0.08	0.55	0.04	0.37
Benzo(a)anthracene	DETSC 3303#	0.03	mg/kg	0.05	0.33	< 0.03	0.17
Chrysene	DETSC 3303	0.03	mg/kg	0.05	0.35	< 0.03	0.21
Benzo(b)fluoranthene	DETSC 3303#	0.03	mg/kg	0.06	0.45	< 0.03	0.19
Benzo(k)fluoranthene	DETSC 3303#	0.03	mg/kg	0.03	0.16	< 0.03	0.09
Benzo(a)pyrene	DETSC 3303#	0.03	mg/kg	0.04	0.26	< 0.03	0.08
Indeno(1,2,3-c,d)pyrene	DETSC 3303#	0.03	mg/kg	0.03	0.16	< 0.03	0.07
Dibenzo(a,h)anthracene	DETSC 3303#	0.03	mg/kg	< 0.03	0.05	< 0.03	< 0.03
Benzo(g,h,i)perylene	DETSC 3303#	0.03	mg/kg	0.03	0.19	< 0.03	0.08
PAH - USEPA 16, Total	DETSC 3303	0.1	mg/kg	0.49	3.6	< 0.10	1.9

Summary of Chemical Analysis

Soil/Misc Samples

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The Former SSI Steelworks, Redcar - Ground

Investigation Contract - Priority Areas Within SSI

Contract Title Landholdings, Contract 3

Lab No	1253433	1253434	1253435	1253579
Sample ID	S3-TPB43	S3-TPB49	S3-TPB49	S3-TPB01
Depth	2.50	0.50	2.20	0.10
Other ID	8	3	8	2
Sample Type	ES	ES	ES	ES
Sampling Date	17/10/17	17/10/17	17/10/17	26/10/17
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
PCBs							
PCB 28 + PCB 31	DETSC 3401#	0.01	mg/kg				
PCB 52	DETSC 3401#	0.01	mg/kg				
PCB 101	DETSC 3401#	0.01	mg/kg				
PCB 118	DETSC 3401#	0.01	mg/kg				
PCB 153	DETSC 3401#	0.01	mg/kg				
PCB 138	DETSC 3401#	0.01	mg/kg				
PCB 180	DETSC 3401#	0.01	mg/kg				
PCB 7 Total	DETSC 3401#	0.01	mg/kg				
Phenols							
Phenol - Monohydric	DETSC 2130#	0.3	mg/kg	0.9	< 0.3	0.7	0.6

Summary of Chemical Analysis

Soil/Misc Samples

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Investigation Contract - Priority Areas Within SSI

Contract Title Landholdings, Contract 3

Lab No	1253580	1253581	1253582	1253583
Sample ID	S3-TPB52	S3-TPB53	S3-TPB53	S3-TPB55
Depth	1.55	0.50	1.10	0.50
Other ID	5	2	5	3
Sample Type	ES	ES	ES	ES
Sampling Date	26/10/17	26/10/17	26/10/17	26/10/17
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
Asbestos Quantification	DETSC 1102	0					
Metals							
Aluminium	DETSC 2301*	1	mg/kg	18000		38000	11000
Antimony	DETSC 2301*	1	mg/kg	4.9		< 1.0	7.3
Arsenic	DETSC 2301#	0.2	mg/kg	4.0		4.1	33
Barium	DETSC 2301#	1.5	mg/kg	1300		330	280
Beryllium	DETSC 2301#	0.2	mg/kg	1.8		4.4	1.2
Boron, Water Soluble	DETSC 2123#	0.2	mg/kg	3.5		6.7	4.9
Cadmium	DETSC 2301#	0.1	mg/kg	< 0.1		< 0.1	2.2
Chromium	DETSC 2301#	0.15	mg/kg	400		36	54
Chromium, Hexavalent	DETSC 2204*	1	mg/kg	< 1.0		< 1.0	< 1.0
Copper	DETSC 2301#	0.2	mg/kg	21		6.8	110
Iron	DETSC 2301	25	mg/kg	48000		11000	63000
Lead	DETSC 2301#	0.3	mg/kg	7.1		2.6	170
Magnesium	DETSC 2301*	1	mg/kg	19000		21000	2900
Manganese	DETSC 2301#	20	mg/kg	13000		4300	770
Mercury	DETSC 2325#	0.05	mg/kg	< 0.05		< 0.05	0.44
Molybdenum	DETSC 2301#	0.4	mg/kg	2.0		< 0.4	4.1
Nickel	DETSC 2301#	1	mg/kg	6.6		1.9	54
Silicon	DETSC 2301*	10	mg/kg	30000		43000	170000
Vanadium	DETSC 2301#	0.8	mg/kg	2000		130	94
Zinc	DETSC 2301#	1	mg/kg	25		8.7	340
Inorganics							
Loss on Ignition at 440oC	DETSC 2003#	0.01	%				
pH	DETSC 2008#			11.7		10.9	9.2
Cyanide, Total	DETSC 2130#	0.1	mg/kg	0.3		0.2	0.7
Cyanide, Free	DETSC 2130#	0.1	mg/kg	< 0.1			
Cyanide, Complex	DETSC 2130*	0.2	mg/kg	0.3			
Thiocyanate	DETSC 2130#	0.6	mg/kg	< 0.6			
FOC	DETSC 2002	0.001					
Organic matter	DETSC 2002#	0.1	%	1.6		1.6	3.7
Sulphate Aqueous Extract as SO4	DETSC 2076#	10	mg/l	400		1600	200
Sulphur (free)	DETSC 3049#	0.75	mg/kg	370		49	5.9
Sulphur as S, Total	DETSC 2320	0.01	%				
Sulphate as SO4, Total	DETSC 2321#	0.01	%				

Summary of Chemical Analysis

Soil/Misc Samples

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The Former SSI Steelworks, Redcar - Ground

Investigation Contract - Priority Areas Within SSI

Contract Title Landholdings, Contract 3

Lab No	1253580	1253581	1253582	1253583
Sample ID	S3-TPB52	S3-TPB53	S3-TPB53	S3-TPB55
Depth	1.55	0.50	1.10	0.50
Other ID	5	2	5	3
Sample Type	ES	ES	ES	ES
Sampling Date	26/10/17	26/10/17	26/10/17	26/10/17
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
Petroleum Hydrocarbons							
Aliphatic C5-C6	DETSC 3321*	0.01	mg/kg	< 0.01		< 0.01	< 0.01
Aliphatic C6-C8	DETSC 3321*	0.01	mg/kg	< 0.01		< 0.01	< 0.01
Aliphatic C8-C10	DETSC 3321*	0.01	mg/kg	< 0.01		< 0.01	< 0.01
Aliphatic C10-C12	DETSC 3072#	1.5	mg/kg	65		2.8	< 1.5
Aliphatic C12-C16	DETSC 3072#	1.2	mg/kg	330		18	< 1.2
Aliphatic C16-C21	DETSC 3072#	1.5	mg/kg	340		19	2.6
Aliphatic C21-C35	DETSC 3072#	3.4	mg/kg	390		6.6	39
Aliphatic C5-C35	DETSC 3072*	10	mg/kg	1100		46	43
Aromatic C5-C7	DETSC 3321*	0.01	mg/kg	< 0.01		< 0.01	< 0.01
Aromatic C7-C8	DETSC 3321*	0.01	mg/kg	< 0.01		< 0.01	< 0.01
Aromatic C8-C10	DETSC 3321*	0.01	mg/kg	< 0.01		< 0.01	< 0.01
Aromatic C10-C12	DETSC 3072#	0.9	mg/kg	9.8		4.2	< 0.9
Aromatic C12-C16	DETSC 3072#	0.5	mg/kg	150		35	< 0.5
Aromatic C16-C21	DETSC 3072#	0.6	mg/kg	280		53	2.1
Aromatic C21-C35	DETSC 3072#	1.4	mg/kg	340		18	13
Aromatic C5-C35	DETSC 3072*	10	mg/kg	780		110	15
TPH Ali/Aro Total	DETSC 3072*	10	mg/kg	1900		160	58
PAHs							
Naphthalene	DETSC 3303#	0.03	mg/kg	0.04		< 0.03	< 0.03
Acenaphthylene	DETSC 3303#	0.03	mg/kg	0.13		< 0.03	< 0.03
Acenaphthene	DETSC 3303#	0.03	mg/kg	0.11		< 0.03	< 0.03
Fluorene	DETSC 3303	0.03	mg/kg	0.12		< 0.03	< 0.03
Phenanthrene	DETSC 3303#	0.03	mg/kg	1.3		0.15	0.14
Anthracene	DETSC 3303	0.03	mg/kg	0.40		< 0.03	< 0.03
Fluoranthene	DETSC 3303#	0.03	mg/kg	4.6		0.24	0.33
Pyrene	DETSC 3303#	0.03	mg/kg	5.8		0.17	0.36
Benzo(a)anthracene	DETSC 3303#	0.03	mg/kg	2.7		0.06	0.19
Chrysene	DETSC 3303	0.03	mg/kg	2.7		0.07	0.23
Benzo(b)fluoranthene	DETSC 3303#	0.03	mg/kg	3.3		0.06	0.24
Benzo(k)fluoranthene	DETSC 3303#	0.03	mg/kg	1.3		< 0.03	0.11
Benzo(a)pyrene	DETSC 3303#	0.03	mg/kg	2.1		< 0.03	0.13
Indeno(1,2,3-c,d)pyrene	DETSC 3303#	0.03	mg/kg	1.2		< 0.03	0.11
Dibenzo(a,h)anthracene	DETSC 3303#	0.03	mg/kg	0.42		< 0.03	< 0.03
Benzo(g,h,i)perylene	DETSC 3303#	0.03	mg/kg	1.3		< 0.03	0.12
PAH - USEPA 16, Total	DETSC 3303	0.1	mg/kg	27		0.76	2.0

Summary of Chemical Analysis

Soil/Misc Samples

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The Former SSI Steelworks, Redcar - Ground

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Contract Title Landholdings, Contract 3

Lab No	1253580	1253581	1253582	1253583
Sample ID	S3-TPB52	S3-TPB53	S3-TPB53	S3-TPB55
Depth	1.55	0.50	1.10	0.50
Other ID	5	2	5	3
Sample Type	ES	ES	ES	ES
Sampling Date	26/10/17	26/10/17	26/10/17	26/10/17
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
PCBs							
PCB 28 + PCB 31	DETS 3401#	0.01	mg/kg		< 0.01		
PCB 52	DETS 3401#	0.01	mg/kg		< 0.01		
PCB 101	DETS 3401#	0.01	mg/kg		< 0.01		
PCB 118	DETS 3401#	0.01	mg/kg		< 0.01		
PCB 153	DETS 3401#	0.01	mg/kg		< 0.01		
PCB 138	DETS 3401#	0.01	mg/kg		< 0.01		
PCB 180	DETS 3401#	0.01	mg/kg		< 0.01		
PCB 7 Total	DETS 3401#	0.01	mg/kg		< 0.01		
Phenols							
Phenol - Monohydric	DETS 2130#	0.3	mg/kg	0.5		0.8	0.6

Summary of Chemical Analysis

Soil/Misc Samples

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Contract Title Landholdings, Contract 3

Lab No	1253584	1253585	1253586	1253643
Sample ID	S3-TPB55	S3-TPB56	S3-TPB56	S3-TPA07
Depth	2.60	0.50	1.50	1.50
Other ID	9	2	5	6
Sample Type	ES	ES	ES	ES
Sampling Date	26/10/17	26/10/17	26/10/17	01/11/17
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
Asbestos Quantification	DETSC 1102	0		Y			
Metals							
Aluminium	DETSC 2301*	1	mg/kg	23000	12000		9800
Antimony	DETSC 2301*	1	mg/kg	3.8	1.9	1.4	3.2
Arsenic	DETSC 2301#	0.2	mg/kg	2.8	8.6	4.5	11
Barium	DETSC 2301#	1.5	mg/kg	380	200	470	820
Beryllium	DETSC 2301#	0.2	mg/kg	2.8	1.4	4.3	1.9
Boron, Water Soluble	DETSC 2123#	0.2	mg/kg	5.2	2.3	12	4.2
Cadmium	DETSC 2301#	0.1	mg/kg	0.1	0.1	0.1	< 0.1
Chromium	DETSC 2301#	0.15	mg/kg	300	35	120	170
Chromium, Hexavalent	DETSC 2204*	1	mg/kg	< 1.0	< 1.0	< 1.0	< 1.0
Copper	DETSC 2301#	0.2	mg/kg	16	27	15	80
Iron	DETSC 2301	25	mg/kg	33000	32000		53000
Lead	DETSC 2301#	0.3	mg/kg	7.7	33	13	15
Magnesium	DETSC 2301*	1	mg/kg	22000	3800		
Manganese	DETSC 2301#	20	mg/kg	13000	900		6400
Mercury	DETSC 2325#	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Molybdenum	DETSC 2301#	0.4	mg/kg	2.0	0.8	0.9	3.3
Nickel	DETSC 2301#	1	mg/kg	5.1	36	3.0	31
Silicon	DETSC 2301*	10	mg/kg	50000	190000		
Vanadium	DETSC 2301#	0.8	mg/kg	700	48	170	430
Zinc	DETSC 2301#	1	mg/kg	23	82	16	36
Inorganics							
Loss on Ignition at 440oC	DETSC 2003#	0.01	%				
pH	DETSC 2008#			11.7	8.1	11.1	11.1
Cyanide, Total	DETSC 2130#	0.1	mg/kg	1.4	0.1	0.2	0.1
Cyanide, Free	DETSC 2130#	0.1	mg/kg				< 0.1
Cyanide, Complex	DETSC 2130*	0.2	mg/kg				< 0.2
Thiocyanate	DETSC 2130#	0.6	mg/kg			0.6	< 0.6
FOC	DETSC 2002	0.001					
Organic matter	DETSC 2002#	0.1	%	0.6	1.8	0.6	0.5
Sulphate Aqueous Extract as SO4	DETSC 2076#	10	mg/l	400	110	530	150
Sulphur (free)	DETSC 3049#	0.75	mg/kg			1.5	3.7
Sulphur as S, Total	DETSC 2320	0.01	%				
Sulphate as SO4, Total	DETSC 2321#	0.01	%				

Summary of Chemical Analysis

Soil/Misc Samples

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The Former SSI Steelworks, Redcar - Ground

Investigation Contract - Priority Areas Within SSI

Contract Title Landholdings, Contract 3

Lab No	1253584	1253585	1253586	1253643
Sample ID	S3-TPB55	S3-TPB56	S3-TPB56	S3-TPA07
Depth	2.60	0.50	1.50	1.50
Other ID	9	2	5	6
Sample Type	ES	ES	ES	ES
Sampling Date	26/10/17	26/10/17	26/10/17	01/11/17
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
Petroleum Hydrocarbons							
Aliphatic C5-C6	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aliphatic C6-C8	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aliphatic C8-C10	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aliphatic C10-C12	DETSC 3072#	1.5	mg/kg	< 1.5	< 1.5	< 1.5	< 1.5
Aliphatic C12-C16	DETSC 3072#	1.2	mg/kg	< 1.2	5.4	7.1	2.8
Aliphatic C16-C21	DETSC 3072#	1.5	mg/kg	< 1.5	6.8	11	3.8
Aliphatic C21-C35	DETSC 3072#	3.4	mg/kg	< 3.4	< 3.4	11	< 3.4
Aliphatic C5-C35	DETSC 3072*	10	mg/kg	< 10	14	30	< 10
Aromatic C5-C7	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aromatic C7-C8	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aromatic C8-C10	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aromatic C10-C12	DETSC 3072#	0.9	mg/kg	< 0.9	2.0	1.7	< 0.9
Aromatic C12-C16	DETSC 3072#	0.5	mg/kg	< 0.5	14	12	6.4
Aromatic C16-C21	DETSC 3072#	0.6	mg/kg	< 0.6	23	19	12
Aromatic C21-C35	DETSC 3072#	1.4	mg/kg	< 1.4	6.0	8.7	3.6
Aromatic C5-C35	DETSC 3072*	10	mg/kg	< 10	45	41	22
TPH Ali/Aro Total	DETSC 3072*	10	mg/kg	< 10	59	71	29
PAHs							
Naphthalene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	0.03	0.06
Acenaphthylene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	0.04	0.06
Acenaphthene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	< 0.03	< 0.03
Fluorene	DETSC 3303	0.03	mg/kg	< 0.03	< 0.03	< 0.03	0.05
Phenanthrene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	0.17	0.38
Anthracene	DETSC 3303	0.03	mg/kg	< 0.03	< 0.03	0.06	0.12
Fluoranthene	DETSC 3303#	0.03	mg/kg	< 0.03	0.04	0.35	0.89
Pyrene	DETSC 3303#	0.03	mg/kg	< 0.03	0.03	0.30	0.67
Benzo(a)anthracene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	0.18	0.40
Chrysene	DETSC 3303	0.03	mg/kg	< 0.03	0.03	0.21	0.43
Benzo(b)fluoranthene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	0.31	0.56
Benzo(k)fluoranthene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	0.16	0.24
Benzo(a)pyrene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	0.20	0.33
Indeno(1,2,3-c,d)pyrene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	0.22	0.24
Dibenzo(a,h)anthracene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	0.06	0.06
Benzo(g,h,i)perylene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	0.27	0.26
PAH - USEPA 16, Total	DETSC 3303	0.1	mg/kg	< 0.10	0.11	2.6	4.8

Summary of Chemical Analysis

Soil/Misc Samples

Our Ref 4155 Combined Report

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The Former SSI Steelworks, Redcar - Ground

Investigation Contract - Priority Areas Within SSI

Contract Title Landholdings, Contract 3

Lab No	1253584	1253585	1253586	1253643
Sample ID	S3-TPB55	S3-TPB56	S3-TPB56	S3-TPA07
Depth	2.60	0.50	1.50	1.50
Other ID	9	2	5	6
Sample Type	ES	ES	ES	ES
Sampling Date	26/10/17	26/10/17	26/10/17	01/11/17
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
PCBs							
PCB 28 + PCB 31	DETSC 3401#	0.01	mg/kg				
PCB 52	DETSC 3401#	0.01	mg/kg				
PCB 101	DETSC 3401#	0.01	mg/kg				
PCB 118	DETSC 3401#	0.01	mg/kg				
PCB 153	DETSC 3401#	0.01	mg/kg				
PCB 138	DETSC 3401#	0.01	mg/kg				
PCB 180	DETSC 3401#	0.01	mg/kg				
PCB 7 Total	DETSC 3401#	0.01	mg/kg				
Phenols							
Phenol - Monohydric	DETSC 2130#	0.3	mg/kg	< 0.3	< 0.3	< 0.3	< 0.3

Summary of Chemical Analysis

Soil/Misc Samples

Our Ref 4155 Combined Report

Client Ref 4155

The Former SSI Steelworks, Redcar - Ground

Investigation Contract - Priority Areas Within SSI

Contract Title Landholdings, Contract 3

Lab No	1253644	1253645	1253646	1253647
Sample ID	S3-TPB11	S3-TPB13	S3-TPB13	S3-TPB13
Depth	0.20	0.15	2.00	2.70
Other ID	1	2	11	14
Sample Type	ES	ES	ES	ES
Sampling Date	31/10/17	31/10/17	31/10/17	31/10/17
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
Asbestos Quantification	DETSC 1102	0					
Metals							
Aluminium	DETSC 2301*	1	mg/kg	13000		32000	
Antimony	DETSC 2301*	1	mg/kg	8.7		2.6	
Arsenic	DETSC 2301#	0.2	mg/kg	0.5	1.6	2.5	6.9
Barium	DETSC 2301#	1.5	mg/kg	150		340	
Beryllium	DETSC 2301#	0.2	mg/kg	< 0.2		4.0	
Boron, Water Soluble	DETSC 2123#	0.2	mg/kg	2.8	2.9	2.4	1.9
Cadmium	DETSC 2301#	0.1	mg/kg	0.2	< 0.1	< 0.1	< 0.1
Chromium	DETSC 2301#	0.15	mg/kg	660	430	180	26
Chromium, Hexavalent	DETSC 2204*	1	mg/kg	< 1.0		< 1.0	
Copper	DETSC 2301#	0.2	mg/kg	16	29	17	14
Iron	DETSC 2301	25	mg/kg	220000		41000	
Lead	DETSC 2301#	0.3	mg/kg	6.6	28	6.7	23
Magnesium	DETSC 2301*	1	mg/kg				
Manganese	DETSC 2301#	20	mg/kg	21000		7200	
Mercury	DETSC 2325#	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Molybdenum	DETSC 2301#	0.4	mg/kg	4.8		1.5	
Nickel	DETSC 2301#	1	mg/kg	3.3	11	5.4	13
Silicon	DETSC 2301*	10	mg/kg				
Vanadium	DETSC 2301#	0.8	mg/kg	470		170	
Zinc	DETSC 2301#	1	mg/kg	27	150	27	50
Inorganics							
Loss on Ignition at 440oC	DETSC 2003#	0.01	%				
pH	DETSC 2008#			12.5	12.1	12.0	8.1
Cyanide, Total	DETSC 2130#	0.1	mg/kg	< 0.1	0.1	0.4	0.1
Cyanide, Free	DETSC 2130#	0.1	mg/kg				
Cyanide, Complex	DETSC 2130*	0.2	mg/kg				
Thiocyanate	DETSC 2130#	0.6	mg/kg				
FOC	DETSC 2002	0.001					
Organic matter	DETSC 2002#	0.1	%	0.5	1.3	1.0	1.5
Sulphate Aqueous Extract as SO4	DETSC 2076#	10	mg/l	18	87	1300	360
Sulphur (free)	DETSC 3049#	0.75	mg/kg	0.84		20	
Sulphur as S, Total	DETSC 2320	0.01	%				
Sulphate as SO4, Total	DETSC 2321#	0.01	%				

Summary of Chemical Analysis

Soil/Misc Samples

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The Former SSI Steelworks, Redcar - Ground

Investigation Contract - Priority Areas Within SSI

Contract Title Landholdings, Contract 3

Lab No	1253644	1253645	1253646	1253647
Sample ID	S3-TPB11	S3-TPB13	S3-TPB13	S3-TPB13
Depth	0.20	0.15	2.00	2.70
Other ID	1	2	11	14
Sample Type	ES	ES	ES	ES
Sampling Date	31/10/17	31/10/17	31/10/17	31/10/17
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
Petroleum Hydrocarbons							
Aliphatic C5-C6	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aliphatic C6-C8	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aliphatic C8-C10	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aliphatic C10-C12	DETSC 3072#	1.5	mg/kg	< 1.5	< 1.5	< 1.5	< 1.5
Aliphatic C12-C16	DETSC 3072#	1.2	mg/kg	< 1.2	< 1.2	6.0	< 1.2
Aliphatic C16-C21	DETSC 3072#	1.5	mg/kg	< 1.5	8.6	13	< 1.5
Aliphatic C21-C35	DETSC 3072#	3.4	mg/kg	11	130	11	< 3.4
Aliphatic C5-C35	DETSC 3072*	10	mg/kg	12	140	30	< 10
Aromatic C5-C7	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aromatic C7-C8	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aromatic C8-C10	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aromatic C10-C12	DETSC 3072#	0.9	mg/kg	< 0.9	< 0.9	< 0.9	2.5
Aromatic C12-C16	DETSC 3072#	0.5	mg/kg	< 0.5	< 0.5	1.6	2.9
Aromatic C16-C21	DETSC 3072#	0.6	mg/kg	< 0.6	5.6	7.4	2.7
Aromatic C21-C35	DETSC 3072#	1.4	mg/kg	< 1.4	37	4.5	9.0
Aromatic C5-C35	DETSC 3072*	10	mg/kg	< 10	43	14	17
TPH Ali/Aro Total	DETSC 3072*	10	mg/kg	12	180	43	19
PAHs							
Naphthalene	DETSC 3303#	0.03	mg/kg	< 0.03	0.04	< 0.03	< 0.03
Acenaphthylene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	< 0.03	< 0.03
Acenaphthene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	< 0.03	< 0.03
Fluorene	DETSC 3303	0.03	mg/kg	< 0.03	< 0.03	< 0.03	< 0.03
Phenanthrene	DETSC 3303#	0.03	mg/kg	0.07	0.28	0.04	< 0.03
Anthracene	DETSC 3303	0.03	mg/kg	< 0.03	0.08	< 0.03	< 0.03
Fluoranthene	DETSC 3303#	0.03	mg/kg	0.08	0.80	0.17	< 0.03
Pyrene	DETSC 3303#	0.03	mg/kg	0.07	1.4	0.24	< 0.03
Benzo(a)anthracene	DETSC 3303#	0.03	mg/kg	< 0.03	0.70	0.13	< 0.03
Chrysene	DETSC 3303	0.03	mg/kg	0.03	0.83	0.14	< 0.03
Benzo(b)fluoranthene	DETSC 3303#	0.03	mg/kg	< 0.03	1.1	0.18	< 0.03
Benzo(k)fluoranthene	DETSC 3303#	0.03	mg/kg	< 0.03	0.44	0.07	< 0.03
Benzo(a)pyrene	DETSC 3303#	0.03	mg/kg	< 0.03	0.56	0.11	< 0.03
Indeno(1,2,3-c,d)pyrene	DETSC 3303#	0.03	mg/kg	< 0.03	0.43	0.08	< 0.03
Dibenzo(a,h)anthracene	DETSC 3303#	0.03	mg/kg	< 0.03	0.11	< 0.03	< 0.03
Benzo(g,h,i)perylene	DETSC 3303#	0.03	mg/kg	< 0.03	0.51	0.10	< 0.03
PAH - USEPA 16, Total	DETSC 3303	0.1	mg/kg	0.26	7.2	1.3	< 0.10

Summary of Chemical Analysis

Soil/Misc Samples

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The Former SSI Steelworks, Redcar - Ground

Investigation Contract - Priority Areas Within SSI

Contract Title Landholdings, Contract 3

Lab No	1253644	1253645	1253646	1253647
Sample ID	S3-TPB11	S3-TPB13	S3-TPB13	S3-TPB13
Depth	0.20	0.15	2.00	2.70
Other ID	1	2	11	14
Sample Type	ES	ES	ES	ES
Sampling Date	31/10/17	31/10/17	31/10/17	31/10/17
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
PCBs							
PCB 28 + PCB 31	DETSC 3401#	0.01	mg/kg				
PCB 52	DETSC 3401#	0.01	mg/kg				
PCB 101	DETSC 3401#	0.01	mg/kg				
PCB 118	DETSC 3401#	0.01	mg/kg				
PCB 153	DETSC 3401#	0.01	mg/kg				
PCB 138	DETSC 3401#	0.01	mg/kg				
PCB 180	DETSC 3401#	0.01	mg/kg				
PCB 7 Total	DETSC 3401#	0.01	mg/kg				
Phenols							
Phenol - Monohydric	DETSC 2130#	0.3	mg/kg	< 0.3	< 0.3	< 0.3	< 0.3

Summary of Chemical Analysis

Soil/Misc Samples

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Investigation Contract - Priority Areas Within SSI

Contract Title Landholdings, Contract 3

Lab No	1253648	1253649	1253650	1253651
Sample ID	S3-TPB15	S3-TPB15	S3-TPB17	S3-TPB18
Depth	0.50	1.70	0.20	1.20
Other ID	4	8	2	4
Sample Type	ES	ES	ES	ES
Sampling Date	31/10/17	31/10/17	31/10/17	31/10/17
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
Asbestos Quantification	DETSC 1102	0					
Metals							
Aluminium	DETSC 2301*	1	mg/kg	34000			29000
Antimony	DETSC 2301*	1	mg/kg	3.7	1.2	< 1.0	1.9
Arsenic	DETSC 2301#	0.2	mg/kg	8.9	14	< 0.2	5.8
Barium	DETSC 2301#	1.5	mg/kg	200	170	< 1.5	280
Beryllium	DETSC 2301#	0.2	mg/kg	4.3	1.0	< 0.2	6.0
Boron, Water Soluble	DETSC 2123#	0.2	mg/kg	4.8	1.8	3.0	4.0
Cadmium	DETSC 2301#	0.1	mg/kg	0.2	0.2	< 0.1	< 0.1
Chromium	DETSC 2301#	0.15	mg/kg	200	26	0.18	120
Chromium, Hexavalent	DETSC 2204*	1	mg/kg		< 1.0	< 1.0	< 1.0
Copper	DETSC 2301#	0.2	mg/kg	24	29	< 0.2	10
Iron	DETSC 2301	25	mg/kg	45000			25000
Lead	DETSC 2301#	0.3	mg/kg	14	54	< 0.3	5.2
Magnesium	DETSC 2301*	1	mg/kg				
Manganese	DETSC 2301#	20	mg/kg	9800			5700
Mercury	DETSC 2325#	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Molybdenum	DETSC 2301#	0.4	mg/kg	1.7	1.0	< 0.4	1.2
Nickel	DETSC 2301#	1	mg/kg	9.6	23	< 1.0	3.1
Silicon	DETSC 2301*	10	mg/kg				
Vanadium	DETSC 2301#	0.8	mg/kg	270	41	< 0.8	180
Zinc	DETSC 2301#	1	mg/kg	49	130	< 1.0	22
Inorganics							
Loss on Ignition at 440oC	DETSC 2003#	0.01	%				
pH	DETSC 2008#			11.7	8.2	11.9	11.3
Cyanide, Total	DETSC 2130#	0.1	mg/kg	0.2	< 0.1	0.1	0.1
Cyanide, Free	DETSC 2130#	0.1	mg/kg				< 0.1
Cyanide, Complex	DETSC 2130*	0.2	mg/kg				< 0.2
Thiocyanate	DETSC 2130#	0.6	mg/kg				< 0.6
FOC	DETSC 2002	0.001					
Organic matter	DETSC 2002#	0.1	%	0.8	1.5	1.0	0.6
Sulphate Aqueous Extract as SO4	DETSC 2076#	10	mg/l	650	120	420	1500
Sulphur (free)	DETSC 3049#	0.75	mg/kg		< 0.75	9.6	34
Sulphur as S, Total	DETSC 2320	0.01	%				
Sulphate as SO4, Total	DETSC 2321#	0.01	%				

Summary of Chemical Analysis

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Investigation Contract - Priority Areas Within SSI

Contract Title Landholdings, Contract 3

Lab No	1253648	1253649	1253650	1253651
Sample ID	S3-TPB15	S3-TPB15	S3-TPB17	S3-TPB18
Depth	0.50	1.70	0.20	1.20
Other ID	4	8	2	4
Sample Type	ES	ES	ES	ES
Sampling Date	31/10/17	31/10/17	31/10/17	31/10/17
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
Petroleum Hydrocarbons							
Aliphatic C5-C6	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aliphatic C6-C8	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aliphatic C8-C10	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aliphatic C10-C12	DETSC 3072#	1.5	mg/kg	< 1.5	< 1.5	< 1.5	< 1.5
Aliphatic C12-C16	DETSC 3072#	1.2	mg/kg	< 1.2	< 1.2	< 1.2	< 1.2
Aliphatic C16-C21	DETSC 3072#	1.5	mg/kg	< 1.5	< 1.5	< 1.5	< 1.5
Aliphatic C21-C35	DETSC 3072#	3.4	mg/kg	< 3.4	< 3.4	< 3.4	< 3.4
Aliphatic C5-C35	DETSC 3072*	10	mg/kg	< 10	< 10	< 10	< 10
Aromatic C5-C7	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aromatic C7-C8	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aromatic C8-C10	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aromatic C10-C12	DETSC 3072#	0.9	mg/kg	2.5	2.2	1.1	1.4
Aromatic C12-C16	DETSC 3072#	0.5	mg/kg	2.3	2.2	1.3	1.2
Aromatic C16-C21	DETSC 3072#	0.6	mg/kg	2.1	1.7	1.5	1.4
Aromatic C21-C35	DETSC 3072#	1.4	mg/kg	15	< 1.4	9.8	10
Aromatic C5-C35	DETSC 3072*	10	mg/kg	22	< 10	14	14
TPH Ali/Aro Total	DETSC 3072*	10	mg/kg	23	< 10	15	16
PAHs							
Naphthalene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	< 0.03	< 0.03
Acenaphthylene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	< 0.03	< 0.03
Acenaphthene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	< 0.03	< 0.03
Fluorene	DETSC 3303	0.03	mg/kg	< 0.03	< 0.03	< 0.03	< 0.03
Phenanthrene	DETSC 3303#	0.03	mg/kg	0.12	< 0.03	0.38	0.07
Anthracene	DETSC 3303	0.03	mg/kg	0.03	< 0.03	0.11	< 0.03
Fluoranthene	DETSC 3303#	0.03	mg/kg	0.39	< 0.03	1.3	0.19
Pyrene	DETSC 3303#	0.03	mg/kg	0.40	< 0.03	1.5	0.16
Benzo(a)anthracene	DETSC 3303#	0.03	mg/kg	0.22	< 0.03	0.73	0.08
Chrysene	DETSC 3303	0.03	mg/kg	0.23	< 0.03	0.73	0.08
Benzo(b)fluoranthene	DETSC 3303#	0.03	mg/kg	0.28	< 0.03	0.90	0.09
Benzo(k)fluoranthene	DETSC 3303#	0.03	mg/kg	0.11	< 0.03	0.41	0.03
Benzo(a)pyrene	DETSC 3303#	0.03	mg/kg	0.17	< 0.03	0.53	0.04
Indeno(1,2,3-c,d)pyrene	DETSC 3303#	0.03	mg/kg	0.13	< 0.03	0.35	0.04
Dibenzo(a,h)anthracene	DETSC 3303#	0.03	mg/kg	0.04	< 0.03	0.10	< 0.03
Benzo(g,h,i)perylene	DETSC 3303#	0.03	mg/kg	0.15	< 0.03	0.41	0.04
PAH - USEPA 16, Total	DETSC 3303	0.1	mg/kg	2.3	< 0.10	7.5	0.82

Summary of Chemical Analysis

Soil/Misc Samples

Our Ref 4155 Combined Report

Client Ref 4155

The Former SSI Steelworks, Redcar - Ground

Investigation Contract - Priority Areas Within SSI

Contract Title Landholdings, Contract 3

Lab No	1253648	1253649	1253650	1253651
Sample ID	S3-TPB15	S3-TPB15	S3-TPB17	S3-TPB18
Depth	0.50	1.70	0.20	1.20
Other ID	4	8	2	4
Sample Type	ES	ES	ES	ES
Sampling Date	31/10/17	31/10/17	31/10/17	31/10/17
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
PCBs							
PCB 28 + PCB 31	DETSC 3401#	0.01	mg/kg				
PCB 52	DETSC 3401#	0.01	mg/kg				
PCB 101	DETSC 3401#	0.01	mg/kg				
PCB 118	DETSC 3401#	0.01	mg/kg				
PCB 153	DETSC 3401#	0.01	mg/kg				
PCB 138	DETSC 3401#	0.01	mg/kg				
PCB 180	DETSC 3401#	0.01	mg/kg				
PCB 7 Total	DETSC 3401#	0.01	mg/kg				
Phenols							
Phenol - Monohydric	DETSC 2130#	0.3	mg/kg	< 0.3	< 0.3	< 0.3	< 0.3

Summary of Chemical Analysis

Soil/Misc Samples

Our Ref 4155 Combined Report

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The Former SSI Steelworks, Redcar - Ground

Investigation Contract - Priority Areas Within SSI

Contract Title Landholdings, Contract 3

Lab No	1253652	1253653	1253654	1253655
Sample ID	S3-TPB18	S3-TPB21	S3-TPB22	S3-TPB22
Depth	2.20	0.40	0.70	1.90
Other ID	10	2	2	6
Sample Type	ES	ES	ES	ES
Sampling Date	31/10/17	01/11/17	01/11/17	01/11/17
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
Asbestos Quantification	DETSC 1102	0					
Metals							
Aluminium	DETSC 2301*	1	mg/kg				
Antimony	DETSC 2301*	1	mg/kg		6.7		1.0
Arsenic	DETSC 2301#	0.2	mg/kg	6.4	2.6	5.2	8.7
Barium	DETSC 2301#	1.5	mg/kg		200		370
Beryllium	DETSC 2301#	0.2	mg/kg		0.9		3.7
Boron, Water Soluble	DETSC 2123#	0.2	mg/kg	2.1	6.0	4.9	4.6
Cadmium	DETSC 2301#	0.1	mg/kg	< 0.1	< 0.1	0.2	0.3
Chromium	DETSC 2301#	0.15	mg/kg	64	360	120	52
Chromium, Hexavalent	DETSC 2204*	1	mg/kg		< 1.0		< 1.0
Copper	DETSC 2301#	0.2	mg/kg	28	49	22	23
Iron	DETSC 2301	25	mg/kg				
Lead	DETSC 2301#	0.3	mg/kg	24	33	22	42
Magnesium	DETSC 2301*	1	mg/kg				
Manganese	DETSC 2301#	20	mg/kg				
Mercury	DETSC 2325#	0.05	mg/kg	< 0.05	< 0.05	< 0.05	0.07
Molybdenum	DETSC 2301#	0.4	mg/kg		7.6		1.3
Nickel	DETSC 2301#	1	mg/kg	13	28	5.8	8.4
Silicon	DETSC 2301*	10	mg/kg				
Vanadium	DETSC 2301#	0.8	mg/kg		340		140
Zinc	DETSC 2301#	1	mg/kg	61	170	64	95
Inorganics							
Loss on Ignition at 440oC	DETSC 2003#	0.01	%				
pH	DETSC 2008#			10.8	12.4	11.2	10.4
Cyanide, Total	DETSC 2130#	0.1	mg/kg	0.2	< 0.1	0.1	0.2
Cyanide, Free	DETSC 2130#	0.1	mg/kg				< 0.1
Cyanide, Complex	DETSC 2130*	0.2	mg/kg				0.2
Thiocyanate	DETSC 2130#	0.6	mg/kg				< 0.6
FOC	DETSC 2002	0.001					
Organic matter	DETSC 2002#	0.1	%	1.0	1.1	2.2	2.9
Sulphate Aqueous Extract as SO4	DETSC 2076#	10	mg/l	440	130	1100	1100
Sulphur (free)	DETSC 3049#	0.75	mg/kg		1.6		130
Sulphur as S, Total	DETSC 2320	0.01	%				
Sulphate as SO4, Total	DETSC 2321#	0.01	%				

Summary of Chemical Analysis

Soil/Misc Samples

Our Ref 4155 Combined Report

Client Ref 4155

The Former SSI Steelworks, Redcar - Ground

Investigation Contract - Priority Areas Within SSI

Contract Title Landholdings, Contract 3

Lab No	1253652	1253653	1253654	1253655
Sample ID	S3-TPB18	S3-TPB21	S3-TPB22	S3-TPB22
Depth	2.20	0.40	0.70	1.90
Other ID	10	2	2	6
Sample Type	ES	ES	ES	ES
Sampling Date	31/10/17	01/11/17	01/11/17	01/11/17
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
Petroleum Hydrocarbons							
Aliphatic C5-C6	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aliphatic C6-C8	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aliphatic C8-C10	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aliphatic C10-C12	DETSC 3072#	1.5	mg/kg	< 1.5	< 1.5	< 1.5	7.7
Aliphatic C12-C16	DETSC 3072#	1.2	mg/kg	< 1.2	1.8	3.5	48
Aliphatic C16-C21	DETSC 3072#	1.5	mg/kg	< 1.5	4.2	26	65
Aliphatic C21-C35	DETSC 3072#	3.4	mg/kg	< 3.4	30	330	210
Aliphatic C5-C35	DETSC 3072*	10	mg/kg	< 10	36	360	330
Aromatic C5-C7	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aromatic C7-C8	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aromatic C8-C10	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aromatic C10-C12	DETSC 3072#	0.9	mg/kg	< 0.9	< 0.9	< 0.9	11
Aromatic C12-C16	DETSC 3072#	0.5	mg/kg	2.5	2.7	6.3	100
Aromatic C16-C21	DETSC 3072#	0.6	mg/kg	3.7	9.7	49	180
Aromatic C21-C35	DETSC 3072#	1.4	mg/kg	< 1.4	36	400	380
Aromatic C5-C35	DETSC 3072*	10	mg/kg	< 10	49	450	670
TPH Ali/Aro Total	DETSC 3072*	10	mg/kg	< 10	85	810	990
PAHs							
Naphthalene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	< 0.03	< 0.03
Acenaphthylene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	< 0.03	< 0.03
Acenaphthene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	< 0.03	< 0.03
Fluorene	DETSC 3303	0.03	mg/kg	< 0.03	< 0.03	< 0.03	< 0.03
Phenanthrene	DETSC 3303#	0.03	mg/kg	< 0.03	0.21	0.06	0.10
Anthracene	DETSC 3303	0.03	mg/kg	< 0.03	0.05	< 0.03	< 0.03
Fluoranthene	DETSC 3303#	0.03	mg/kg	< 0.03	0.69	0.08	0.11
Pyrene	DETSC 3303#	0.03	mg/kg	< 0.03	1.1	0.10	0.17
Benzo(a)anthracene	DETSC 3303#	0.03	mg/kg	< 0.03	0.48	0.04	0.04
Chrysene	DETSC 3303	0.03	mg/kg	< 0.03	0.58	0.08	0.08
Benzo(b)fluoranthene	DETSC 3303#	0.03	mg/kg	< 0.03	0.70	0.11	0.05
Benzo(k)fluoranthene	DETSC 3303#	0.03	mg/kg	< 0.03	0.27	0.03	< 0.03
Benzo(a)pyrene	DETSC 3303#	0.03	mg/kg	< 0.03	0.34	0.07	< 0.03
Indeno(1,2,3-c,d)pyrene	DETSC 3303#	0.03	mg/kg	< 0.03	0.28	0.07	< 0.03
Dibenzo(a,h)anthracene	DETSC 3303#	0.03	mg/kg	< 0.03	0.06	< 0.03	< 0.03
Benzo(g,h,i)perylene	DETSC 3303#	0.03	mg/kg	< 0.03	0.33	0.09	< 0.03
PAH - USEPA 16, Total	DETSC 3303	0.1	mg/kg	< 0.10	5.1	0.72	0.55

Summary of Chemical Analysis

Soil/Misc Samples

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The Former SSI Steelworks, Redcar - Ground

Investigation Contract - Priority Areas Within SSI

Contract Title Landholdings, Contract 3

Lab No	1253652	1253653	1253654	1253655
Sample ID	S3-TPB18	S3-TPB21	S3-TPB22	S3-TPB22
Depth	2.20	0.40	0.70	1.90
Other ID	10	2	2	6
Sample Type	ES	ES	ES	ES
Sampling Date	31/10/17	01/11/17	01/11/17	01/11/17
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
PCBs							
PCB 28 + PCB 31	DETSC 3401#	0.01	mg/kg				< 0.01
PCB 52	DETSC 3401#	0.01	mg/kg				< 0.01
PCB 101	DETSC 3401#	0.01	mg/kg				< 0.01
PCB 118	DETSC 3401#	0.01	mg/kg				< 0.01
PCB 153	DETSC 3401#	0.01	mg/kg				< 0.01
PCB 138	DETSC 3401#	0.01	mg/kg				< 0.01
PCB 180	DETSC 3401#	0.01	mg/kg				< 0.01
PCB 7 Total	DETSC 3401#	0.01	mg/kg				< 0.01
Phenols							
Phenol - Monohydric	DETSC 2130#	0.3	mg/kg	< 0.3	< 0.3	< 0.3	< 0.3

Summary of Chemical Analysis

Soil/Misc Samples

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The Former SSI Steelworks, Redcar - Ground

Investigation Contract - Priority Areas Within SSI

Contract Title Landholdings, Contract 3

Lab No	1253656	1253657	1253658	1253659
Sample ID	S3-TPB25	S3-TPB27	S3-TPB29	S3-TPB30
Depth	1.50	0.50	0.50	0.50
Other ID	6	2	2	2
Sample Type	ES	ES	ES	ES
Sampling Date	01/11/17	01/11/17	31/10/17	31/10/17
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
Asbestos Quantification	DETSC 1102	0					
Metals							
Aluminium	DETSC 2301*	1	mg/kg				
Antimony	DETSC 2301*	1	mg/kg	2.9	7.6	3.5	
Arsenic	DETSC 2301#	0.2	mg/kg	5.6	3.2	25	
Barium	DETSC 2301#	1.5	mg/kg	270	160	570	
Beryllium	DETSC 2301#	0.2	mg/kg	1.3	0.4	3.4	
Boron, Water Soluble	DETSC 2123#	0.2	mg/kg	3.3	6.6	5.2	
Cadmium	DETSC 2301#	0.1	mg/kg	0.1	< 0.1	0.3	
Chromium	DETSC 2301#	0.15	mg/kg	140	400	140	
Chromium, Hexavalent	DETSC 2204*	1	mg/kg	< 1.0	< 1.0	< 1.0	
Copper	DETSC 2301#	0.2	mg/kg	29	48	48	
Iron	DETSC 2301	25	mg/kg				
Lead	DETSC 2301#	0.3	mg/kg	32	49	87	
Magnesium	DETSC 2301*	1	mg/kg				
Manganese	DETSC 2301#	20	mg/kg				
Mercury	DETSC 2325#	0.05	mg/kg	< 0.05	0.07	0.21	
Molybdenum	DETSC 2301#	0.4	mg/kg	1.6	6.7	4.5	
Nickel	DETSC 2301#	1	mg/kg	26	90	34	
Silicon	DETSC 2301*	10	mg/kg				
Vanadium	DETSC 2301#	0.8	mg/kg	240	290	280	
Zinc	DETSC 2301#	1	mg/kg	83	330	210	
Inorganics							
Loss on Ignition at 440oC	DETSC 2003#	0.01	%				
pH	DETSC 2008#			11.4	12.6	11.9	
Cyanide, Total	DETSC 2130#	0.1	mg/kg	0.1	< 0.1	1.5	
Cyanide, Free	DETSC 2130#	0.1	mg/kg				
Cyanide, Complex	DETSC 2130*	0.2	mg/kg				
Thiocyanate	DETSC 2130#	0.6	mg/kg				
FOC	DETSC 2002	0.001					
Organic matter	DETSC 2002#	0.1	%	1.6	1.3	1.7	
Sulphate Aqueous Extract as SO4	DETSC 2076#	10	mg/l	670	< 10	260	
Sulphur (free)	DETSC 3049#	0.75	mg/kg	5.0	1.3	7.1	
Sulphur as S, Total	DETSC 2320	0.01	%				
Sulphate as SO4, Total	DETSC 2321#	0.01	%				

Summary of Chemical Analysis

Soil/Misc Samples

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The Former SSI Steelworks, Redcar - Ground

Investigation Contract - Priority Areas Within SSI

Contract Title Landholdings, Contract 3

Lab No	1253656	1253657	1253658	1253659
Sample ID	S3-TPB25	S3-TPB27	S3-TPB29	S3-TPB30
Depth	1.50	0.50	0.50	0.50
Other ID	6	2	2	2
Sample Type	ES	ES	ES	ES
Sampling Date	01/11/17	01/11/17	31/10/17	31/10/17
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
Petroleum Hydrocarbons							
Aliphatic C5-C6	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	
Aliphatic C6-C8	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	
Aliphatic C8-C10	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	
Aliphatic C10-C12	DETSC 3072#	1.5	mg/kg	< 1.5	< 1.5	< 1.5	
Aliphatic C12-C16	DETSC 3072#	1.2	mg/kg	< 1.2	3.1	< 1.2	
Aliphatic C16-C21	DETSC 3072#	1.5	mg/kg	< 1.5	6.5	6.1	
Aliphatic C21-C35	DETSC 3072#	3.4	mg/kg	< 3.4	32	45	
Aliphatic C5-C35	DETSC 3072*	10	mg/kg	< 10	43	52	
Aromatic C5-C7	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	
Aromatic C7-C8	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	
Aromatic C8-C10	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	
Aromatic C10-C12	DETSC 3072#	0.9	mg/kg	< 0.9	1.1	0.9	
Aromatic C12-C16	DETSC 3072#	0.5	mg/kg	2.1	6.0	4.2	
Aromatic C16-C21	DETSC 3072#	0.6	mg/kg	4.8	14	18	
Aromatic C21-C35	DETSC 3072#	1.4	mg/kg	7.1	34	70	
Aromatic C5-C35	DETSC 3072*	10	mg/kg	14	55	93	
TPH Ali/Aro Total	DETSC 3072*	10	mg/kg	14	97	150	
PAHs							
Naphthalene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	0.13	
Acenaphthylene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	0.27	
Acenaphthene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	0.12	
Fluorene	DETSC 3303	0.03	mg/kg	< 0.03	< 0.03	0.14	
Phenanthrene	DETSC 3303#	0.03	mg/kg	< 0.03	0.24	1.3	
Anthracene	DETSC 3303	0.03	mg/kg	< 0.03	0.04	0.37	
Fluoranthene	DETSC 3303#	0.03	mg/kg	< 0.03	0.54	2.2	
Pyrene	DETSC 3303#	0.03	mg/kg	< 0.03	0.56	1.8	
Benzo(a)anthracene	DETSC 3303#	0.03	mg/kg	< 0.03	0.21	1.1	
Chrysene	DETSC 3303	0.03	mg/kg	< 0.03	0.26	1.2	
Benzo(b)fluoranthene	DETSC 3303#	0.03	mg/kg	< 0.03	0.28	2.2	
Benzo(k)fluoranthene	DETSC 3303#	0.03	mg/kg	< 0.03	0.13	0.80	
Benzo(a)pyrene	DETSC 3303#	0.03	mg/kg	< 0.03	0.13	1.7	
Indeno(1,2,3-c,d)pyrene	DETSC 3303#	0.03	mg/kg	< 0.03	0.09	0.93	
Dibenzo(a,h)anthracene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	0.21	
Benzo(g,h,i)perylene	DETSC 3303#	0.03	mg/kg	< 0.03	0.11	1.1	
PAH - USEPA 16, Total	DETSC 3303	0.1	mg/kg	< 0.10	2.6	16	

Summary of Chemical Analysis

Soil/Misc Samples

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The Former SSI Steelworks, Redcar - Ground

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Contract Title Landholdings, Contract 3

Lab No	1253656	1253657	1253658	1253659
Sample ID	S3-TPB25	S3-TPB27	S3-TPB29	S3-TPB30
Depth	1.50	0.50	0.50	0.50
Other ID	6	2	2	2
Sample Type	ES	ES	ES	ES
Sampling Date	01/11/17	01/11/17	31/10/17	31/10/17
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
PCBs							
PCB 28 + PCB 31	DETSC 3401#	0.01	mg/kg				< 0.01
PCB 52	DETSC 3401#	0.01	mg/kg				< 0.01
PCB 101	DETSC 3401#	0.01	mg/kg				< 0.01
PCB 118	DETSC 3401#	0.01	mg/kg				< 0.01
PCB 153	DETSC 3401#	0.01	mg/kg				< 0.01
PCB 138	DETSC 3401#	0.01	mg/kg				< 0.01
PCB 180	DETSC 3401#	0.01	mg/kg				< 0.01
PCB 7 Total	DETSC 3401#	0.01	mg/kg				< 0.01
Phenols							
Phenol - Monohydric	DETSC 2130#	0.3	mg/kg	< 0.3	< 0.3	< 0.3	

Summary of Chemical Analysis

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Contract Title Landholdings, Contract 3

Lab No	1253660	1253661	1253662	1253747
Sample ID	S3-TPB30	S3-TPB31	S3-TPB36	S3-TPB42
Depth	1.50	0.50	1.50	2.50
Other ID	5	2	6	8
Sample Type	ES	ES	ES	ES
Sampling Date	31/10/17	31/10/17	31/10/17	27/10/17
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
Asbestos Quantification	DETSC 1102	0		Y			
Metals							
Aluminium	DETSC 2301*	1	mg/kg	7900	6700		
Antimony	DETSC 2301*	1	mg/kg	9.4	10	9.3	1.3
Arsenic	DETSC 2301#	0.2	mg/kg	12	1.4	13	4.1
Barium	DETSC 2301#	1.5	mg/kg	300	110	160	450
Beryllium	DETSC 2301#	0.2	mg/kg	0.9	0.2	0.6	5.1
Boron, Water Soluble	DETSC 2123#	0.2	mg/kg	8.7	8.5	8.5	11
Cadmium	DETSC 2301#	0.1	mg/kg	5.6	1.5	5.9	0.1
Chromium	DETSC 2301#	0.15	mg/kg	150	710	230	160
Chromium, Hexavalent	DETSC 2204*	1	mg/kg	< 1.0	< 1.0	< 1.0	< 1.0
Copper	DETSC 2301#	0.2	mg/kg	190	37	130	37
Iron	DETSC 2301	25	mg/kg	220000	250000		
Lead	DETSC 2301#	0.3	mg/kg	170	50	530	4.1
Magnesium	DETSC 2301*	1	mg/kg				
Manganese	DETSC 2301#	20	mg/kg	12000	16000		
Mercury	DETSC 2325#	0.05	mg/kg	0.59	< 0.05	0.26	< 0.05
Molybdenum	DETSC 2301#	0.4	mg/kg	9.3	8.0	11	0.9
Nickel	DETSC 2301#	1	mg/kg	38	27	36	1.9
Silicon	DETSC 2301*	10	mg/kg				
Vanadium	DETSC 2301#	0.8	mg/kg	740	1500	350	220
Zinc	DETSC 2301#	1	mg/kg	2900	360	1900	11
Inorganics							
Loss on Ignition at 440oC	DETSC 2003#	0.01	%				
pH	DETSC 2008#			12.0	12.6	12.3	10.4
Cyanide, Total	DETSC 2130#	0.1	mg/kg	0.2	< 0.1	0.5	0.3
Cyanide, Free	DETSC 2130#	0.1	mg/kg	< 0.1		< 0.1	< 0.1
Cyanide, Complex	DETSC 2130*	0.2	mg/kg	0.2		0.5	0.3
Thiocyanate	DETSC 2130#	0.6	mg/kg	< 0.6		< 0.6	< 0.6
FOC	DETSC 2002	0.001					
Organic matter	DETSC 2002#	0.1	%	2.0	1.3	1.7	0.7
Sulphate Aqueous Extract as SO4	DETSC 2076#	10	mg/l	200	< 10	38	960
Sulphur (free)	DETSC 3049#	0.75	mg/kg	2.9	< 0.75	< 0.75	6.8
Sulphur as S, Total	DETSC 2320	0.01	%				
Sulphate as SO4, Total	DETSC 2321#	0.01	%				

Summary of Chemical Analysis

Soil/Misc Samples

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Contract Title Landholdings, Contract 3

Lab No	1253660	1253661	1253662	1253747
Sample ID	S3-TPB30	S3-TPB31	S3-TPB36	S3-TPB42
Depth	1.50	0.50	1.50	2.50
Other ID	5	2	6	8
Sample Type	ES	ES	ES	ES
Sampling Date	31/10/17	31/10/17	31/10/17	27/10/17
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
Petroleum Hydrocarbons							
Aliphatic C5-C6	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aliphatic C6-C8	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aliphatic C8-C10	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aliphatic C10-C12	DETSC 3072#	1.5	mg/kg	1.6	< 1.5	< 1.5	< 1.5
Aliphatic C12-C16	DETSC 3072#	1.2	mg/kg	6.8	< 1.2	< 1.2	< 1.2
Aliphatic C16-C21	DETSC 3072#	1.5	mg/kg	17	1.9	2.5	< 1.5
Aliphatic C21-C35	DETSC 3072#	3.4	mg/kg	52	22	14	< 3.4
Aliphatic C5-C35	DETSC 3072*	10	mg/kg	77	25	18	< 10
Aromatic C5-C7	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aromatic C7-C8	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aromatic C8-C10	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aromatic C10-C12	DETSC 3072#	0.9	mg/kg	< 0.9	< 0.9	< 0.9	< 0.9
Aromatic C12-C16	DETSC 3072#	0.5	mg/kg	8.4	< 0.5	< 0.5	< 0.5
Aromatic C16-C21	DETSC 3072#	0.6	mg/kg	25	< 0.6	3.6	< 0.6
Aromatic C21-C35	DETSC 3072#	1.4	mg/kg	53	< 1.4	17	< 1.4
Aromatic C5-C35	DETSC 3072*	10	mg/kg	87	< 10	21	< 10
TPH Ali/Aro Total	DETSC 3072*	10	mg/kg	160	25	39	< 10
PAHs							
Naphthalene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	0.03	< 0.03
Acenaphthylene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	< 0.03	< 0.03
Acenaphthene	DETSC 3303#	0.03	mg/kg	0.03	< 0.03	< 0.03	< 0.03
Fluorene	DETSC 3303	0.03	mg/kg	< 0.03	< 0.03	0.08	< 0.03
Phenanthrene	DETSC 3303#	0.03	mg/kg	0.49	< 0.03	0.18	0.05
Anthracene	DETSC 3303	0.03	mg/kg	0.10	< 0.03	0.46	< 0.03
Fluoranthene	DETSC 3303#	0.03	mg/kg	1.5	< 0.03	0.35	0.13
Pyrene	DETSC 3303#	0.03	mg/kg	1.7	< 0.03	0.47	0.12
Benzo(a)anthracene	DETSC 3303#	0.03	mg/kg	0.72	< 0.03	0.24	0.08
Chrysene	DETSC 3303	0.03	mg/kg	0.97	< 0.03	0.29	0.07
Benzo(b)fluoranthene	DETSC 3303#	0.03	mg/kg	1.3	< 0.03	0.25	0.11
Benzo(k)fluoranthene	DETSC 3303#	0.03	mg/kg	0.40	< 0.03	0.10	0.04
Benzo(a)pyrene	DETSC 3303#	0.03	mg/kg	0.54	< 0.03	0.14	0.06
Indeno(1,2,3-c,d)pyrene	DETSC 3303#	0.03	mg/kg	0.37	< 0.03	0.08	0.04
Dibenzo(a,h)anthracene	DETSC 3303#	0.03	mg/kg	0.10	< 0.03	< 0.03	< 0.03
Benzo(g,h,i)perylene	DETSC 3303#	0.03	mg/kg	0.47	< 0.03	0.09	0.04
PAH - USEPA 16, Total	DETSC 3303	0.1	mg/kg	8.7	< 0.10	2.8	0.73

Summary of Chemical Analysis

Soil/Misc Samples

Our Ref 4155 Combined Report

Client Ref 4155

The Former SSI Steelworks, Redcar - Ground

Investigation Contract - Priority Areas Within SSI

Contract Title Landholdings, Contract 3

Lab No	1253660	1253661	1253662	1253747
Sample ID	S3-TPB30	S3-TPB31	S3-TPB36	S3-TPB42
Depth	1.50	0.50	1.50	2.50
Other ID	5	2	6	8
Sample Type	ES	ES	ES	ES
Sampling Date	31/10/17	31/10/17	31/10/17	27/10/17
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
PCBs							
PCB 28 + PCB 31	DETSC 3401#	0.01	mg/kg				
PCB 52	DETSC 3401#	0.01	mg/kg				
PCB 101	DETSC 3401#	0.01	mg/kg				
PCB 118	DETSC 3401#	0.01	mg/kg				
PCB 153	DETSC 3401#	0.01	mg/kg				
PCB 138	DETSC 3401#	0.01	mg/kg				
PCB 180	DETSC 3401#	0.01	mg/kg				
PCB 7 Total	DETSC 3401#	0.01	mg/kg				
Phenols							
Phenol - Monohydric	DETSC 2130#	0.3	mg/kg	< 0.3	< 0.3	< 0.3	< 0.3

Summary of Chemical Analysis

Soil/Misc Samples

Our Ref 4155 Combined Report

Client Ref 4155

The Former SSI Steelworks, Redcar - Ground

Investigation Contract - Priority Areas Within SSI

Contract Title Landholdings, Contract 3

Lab No	1254713	1254714	1256611	1257800
Sample ID	S3-TPB05	S3-TPB03	S3-BHB01	S3-TPA35
Depth	0.20	2.70	3.80	0.60
Other ID	2	9	7	3
Sample Type	ES	B	ES	B
Sampling Date	27/10/17	27/10/17	07/11/17	16/10/17
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
Asbestos Quantification	DETSC 1102	0					
Metals							
Aluminium	DETSC 2301*	1	mg/kg			13000	
Antimony	DETSC 2301*	1	mg/kg			< 1.0	
Arsenic	DETSC 2301#	0.2	mg/kg		5.2	5.4	
Barium	DETSC 2301#	1.5	mg/kg			170	
Beryllium	DETSC 2301#	0.2	mg/kg			1.0	
Boron, Water Soluble	DETSC 2123#	0.2	mg/kg		5.4	4.1	
Cadmium	DETSC 2301#	0.1	mg/kg		< 0.1	< 0.1	
Chromium	DETSC 2301#	0.15	mg/kg		110	32	
Chromium, Hexavalent	DETSC 2204*	1	mg/kg			< 1.0	
Copper	DETSC 2301#	0.2	mg/kg		15	17	
Iron	DETSC 2301	25	mg/kg			23000	
Lead	DETSC 2301#	0.3	mg/kg		9.8	10	
Magnesium	DETSC 2301*	1	mg/kg			11000	
Manganese	DETSC 2301#	20	mg/kg			630	
Mercury	DETSC 2325#	0.05	mg/kg		< 0.05	< 0.05	
Molybdenum	DETSC 2301#	0.4	mg/kg			1.7	
Nickel	DETSC 2301#	1	mg/kg		5.3	23	
Silicon	DETSC 2301*	10	mg/kg			110000	
Vanadium	DETSC 2301#	0.8	mg/kg			33	
Zinc	DETSC 2301#	1	mg/kg		18	41	
Inorganics							
Loss on Ignition at 440oC	DETSC 2003#	0.01	%				
pH	DETSC 2008#				10.7	9.0	9.9
Cyanide, Total	DETSC 2130#	0.1	mg/kg		0.2	< 0.1	
Cyanide, Free	DETSC 2130#	0.1	mg/kg				
Cyanide, Complex	DETSC 2130*	0.2	mg/kg				
Thiocyanate	DETSC 2130#	0.6	mg/kg				
FOC	DETSC 2002	0.001					0.016
Organic matter	DETSC 2002#	0.1	%		0.5	3.7	2.7
Sulphate Aqueous Extract as SO4	DETSC 2076#	10	mg/l		1600	430	300
Sulphur (free)	DETSC 3049#	0.75	mg/kg			9.9	
Sulphur as S, Total	DETSC 2320	0.01	%				0.17
Sulphate as SO4, Total	DETSC 2321#	0.01	%				0.37

Summary of Chemical Analysis

Soil/Misc Samples

Our Ref 4155 Combined Report

Client Ref 4155

The Former SSI Steelworks, Redcar - Ground

Investigation Contract - Priority Areas Within SSI

Contract Title Landholdings, Contract 3

Lab No	1254713	1254714	1256611	1257800
Sample ID	S3-TPB05	S3-TPB03	S3-BHB01	S3-TPA35
Depth	0.20	2.70	3.80	0.60
Other ID	2	9	7	3
Sample Type	ES	B	ES	B
Sampling Date	27/10/17	27/10/17	07/11/17	16/10/17
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
Petroleum Hydrocarbons							
Aliphatic C5-C6	DETSC 3321*	0.01	mg/kg		< 0.01	< 0.01	
Aliphatic C6-C8	DETSC 3321*	0.01	mg/kg		< 0.01	< 0.01	
Aliphatic C8-C10	DETSC 3321*	0.01	mg/kg		< 0.01	< 0.01	
Aliphatic C10-C12	DETSC 3072#	1.5	mg/kg		10	< 1.5	
Aliphatic C12-C16	DETSC 3072#	1.2	mg/kg		23	< 1.2	
Aliphatic C16-C21	DETSC 3072#	1.5	mg/kg		58	< 1.5	
Aliphatic C21-C35	DETSC 3072#	3.4	mg/kg		210	< 3.4	
Aliphatic C5-C35	DETSC 3072*	10	mg/kg		310	< 10	
Aromatic C5-C7	DETSC 3321*	0.01	mg/kg		< 0.01	< 0.01	
Aromatic C7-C8	DETSC 3321*	0.01	mg/kg		< 0.01	< 0.01	
Aromatic C8-C10	DETSC 3321*	0.01	mg/kg		< 0.01	< 0.01	
Aromatic C10-C12	DETSC 3072#	0.9	mg/kg		< 0.9	< 0.9	
Aromatic C12-C16	DETSC 3072#	0.5	mg/kg		21	< 0.5	
Aromatic C16-C21	DETSC 3072#	0.6	mg/kg		41	< 0.6	
Aromatic C21-C35	DETSC 3072#	1.4	mg/kg		10	< 1.4	
Aromatic C5-C35	DETSC 3072*	10	mg/kg		73	< 10	
TPH Ali/Aro Total	DETSC 3072*	10	mg/kg		380	< 10	
PAHs							
Naphthalene	DETSC 3303#	0.03	mg/kg		< 0.03	< 0.03	
Acenaphthylene	DETSC 3303#	0.03	mg/kg		< 0.03	< 0.03	
Acenaphthene	DETSC 3303#	0.03	mg/kg		< 0.03	< 0.03	
Fluorene	DETSC 3303	0.03	mg/kg		< 0.03	< 0.03	
Phenanthrene	DETSC 3303#	0.03	mg/kg		0.11	0.08	
Anthracene	DETSC 3303	0.03	mg/kg		0.03	< 0.03	
Fluoranthene	DETSC 3303#	0.03	mg/kg		0.22	0.27	
Pyrene	DETSC 3303#	0.03	mg/kg		0.18	0.21	
Benzo(a)anthracene	DETSC 3303#	0.03	mg/kg		0.09	0.08	
Chrysene	DETSC 3303	0.03	mg/kg		0.12	0.07	
Benzo(b)fluoranthene	DETSC 3303#	0.03	mg/kg		0.10	0.06	
Benzo(k)fluoranthene	DETSC 3303#	0.03	mg/kg		0.05	< 0.03	
Benzo(a)pyrene	DETSC 3303#	0.03	mg/kg		0.05	0.04	
Indeno(1,2,3-c,d)pyrene	DETSC 3303#	0.03	mg/kg		0.05	< 0.03	
Dibenzo(a,h)anthracene	DETSC 3303#	0.03	mg/kg		< 0.03	< 0.03	
Benzo(g,h,i)perylene	DETSC 3303#	0.03	mg/kg		0.05	< 0.03	
PAH - USEPA 16, Total	DETSC 3303	0.1	mg/kg		1.1	0.81	

Summary of Chemical Analysis

Soil/Misc Samples

Our Ref 4155 Combined Report

Client Ref 4155

The Former SSI Steelworks, Redcar - Ground

Investigation Contract - Priority Areas Within SSI

Contract Title Landholdings, Contract 3

Lab No	1254713	1254714	1256611	1257800
Sample ID	S3-TPB05	S3-TPB03	S3-BHB01	S3-TPA35
Depth	0.20	2.70	3.80	0.60
Other ID	2	9	7	3
Sample Type	ES	B	ES	B
Sampling Date	27/10/17	27/10/17	07/11/17	16/10/17
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
PCBs							
PCB 28 + PCB 31	DETSC 3401#	0.01	mg/kg	< 0.01			
PCB 52	DETSC 3401#	0.01	mg/kg	< 0.01			
PCB 101	DETSC 3401#	0.01	mg/kg	< 0.01			
PCB 118	DETSC 3401#	0.01	mg/kg	< 0.01			
PCB 153	DETSC 3401#	0.01	mg/kg	< 0.01			
PCB 138	DETSC 3401#	0.01	mg/kg	< 0.01			
PCB 180	DETSC 3401#	0.01	mg/kg	< 0.01			
PCB 7 Total	DETSC 3401#	0.01	mg/kg	< 0.01			
Phenols							
Phenol - Monohydric	DETSC 2130#	0.3	mg/kg		0.8	< 0.3	

Summary of Chemical Analysis

Soil/Misc Samples

Our Ref 4155 Combined Report

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The Former SSI Steelworks, Redcar - Ground

Investigation Contract - Priority Areas Within SSI

Contract Title Landholdings, Contract 3

Lab No	1257801	1259305	1261633	1261634
Sample ID	S3-TPB40	S3-BHA01	S3-TPA14	S3-TPA19
Depth	1.00	3.50	0.50	1.60
Other ID	3	4	3	7
Sample Type	B	ES	B	B
Sampling Date	16/10/17	10/11/17	12/10/17	12/10/17
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
Asbestos Quantification	DETSC 1102	0					
Metals							
Aluminium	DETSC 2301*	1	mg/kg				
Antimony	DETSC 2301*	1	mg/kg		1.7		
Arsenic	DETSC 2301#	0.2	mg/kg		8.0		
Barium	DETSC 2301#	1.5	mg/kg		200		
Beryllium	DETSC 2301#	0.2	mg/kg		1.3		
Boron, Water Soluble	DETSC 2123#	0.2	mg/kg		1.8		
Cadmium	DETSC 2301#	0.1	mg/kg		< 0.1		
Chromium	DETSC 2301#	0.15	mg/kg		72		
Chromium, Hexavalent	DETSC 2204*	1	mg/kg		< 1.0		
Copper	DETSC 2301#	0.2	mg/kg		30		
Iron	DETSC 2301	25	mg/kg				
Lead	DETSC 2301#	0.3	mg/kg		26		
Magnesium	DETSC 2301*	1	mg/kg				
Manganese	DETSC 2301#	20	mg/kg				
Mercury	DETSC 2325#	0.05	mg/kg		0.08		
Molybdenum	DETSC 2301#	0.4	mg/kg		1.4		
Nickel	DETSC 2301#	1	mg/kg		24		
Silicon	DETSC 2301*	10	mg/kg				
Vanadium	DETSC 2301#	0.8	mg/kg		150		
Zinc	DETSC 2301#	1	mg/kg		65		
Inorganics							
Loss on Ignition at 440oC	DETSC 2003#	0.01	%				
pH	DETSC 2008#			11.4	9.3	9.7	8.2
Cyanide, Total	DETSC 2130#	0.1	mg/kg		0.5		
Cyanide, Free	DETSC 2130#	0.1	mg/kg		< 0.1		
Cyanide, Complex	DETSC 2130*	0.2	mg/kg		0.4		
Thiocyanate	DETSC 2130#	0.6	mg/kg		< 0.6		
FOC	DETSC 2002	0.001				0.019	0.011
Organic matter	DETSC 2002#	0.1	%		2.6	3.3	1.9
Sulphate Aqueous Extract as SO4	DETSC 2076#	10	mg/l	630	230	89	95
Sulphur (free)	DETSC 3049#	0.75	mg/kg				
Sulphur as S, Total	DETSC 2320	0.01	%	0.18		0.12	0.02
Sulphate as SO4, Total	DETSC 2321#	0.01	%	0.44		0.20	0.03

Summary of Chemical Analysis

Soil/Misc Samples

Our Ref 4155 Combined Report

Client Ref 4155

The Former SSI Steelworks, Redcar - Ground

Investigation Contract - Priority Areas Within SSI

Contract Title Landholdings, Contract 3

Lab No	1257801	1259305	1261633	1261634
Sample ID	S3-TPB40	S3-BHA01	S3-TPA14	S3-TPA19
Depth	1.00	3.50	0.50	1.60
Other ID	3	4	3	7
Sample Type	B	ES	B	B
Sampling Date	16/10/17	10/11/17	12/10/17	12/10/17
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
Petroleum Hydrocarbons							
Aliphatic C5-C6	DETSC 3321*	0.01	mg/kg		< 0.01		
Aliphatic C6-C8	DETSC 3321*	0.01	mg/kg		< 0.01		
Aliphatic C8-C10	DETSC 3321*	0.01	mg/kg		< 0.01		
Aliphatic C10-C12	DETSC 3072#	1.5	mg/kg		< 1.5		
Aliphatic C12-C16	DETSC 3072#	1.2	mg/kg		< 1.2		
Aliphatic C16-C21	DETSC 3072#	1.5	mg/kg		< 1.5		
Aliphatic C21-C35	DETSC 3072#	3.4	mg/kg		< 3.4		
Aliphatic C5-C35	DETSC 3072*	10	mg/kg		< 10		
Aromatic C5-C7	DETSC 3321*	0.01	mg/kg		< 0.01		
Aromatic C7-C8	DETSC 3321*	0.01	mg/kg		< 0.01		
Aromatic C8-C10	DETSC 3321*	0.01	mg/kg		< 0.01		
Aromatic C10-C12	DETSC 3072#	0.9	mg/kg		< 0.9		
Aromatic C12-C16	DETSC 3072#	0.5	mg/kg		< 0.5		
Aromatic C16-C21	DETSC 3072#	0.6	mg/kg		< 0.6		
Aromatic C21-C35	DETSC 3072#	1.4	mg/kg		< 1.4		
Aromatic C5-C35	DETSC 3072*	10	mg/kg		< 10		
TPH Ali/Aro Total	DETSC 3072*	10	mg/kg		< 10		
PAHs							
Naphthalene	DETSC 3303#	0.03	mg/kg		< 0.03		
Acenaphthylene	DETSC 3303#	0.03	mg/kg		< 0.03		
Acenaphthene	DETSC 3303#	0.03	mg/kg		< 0.03		
Fluorene	DETSC 3303	0.03	mg/kg		< 0.03		
Phenanthrene	DETSC 3303#	0.03	mg/kg		< 0.03		
Anthracene	DETSC 3303	0.03	mg/kg		< 0.03		
Fluoranthene	DETSC 3303#	0.03	mg/kg		< 0.03		
Pyrene	DETSC 3303#	0.03	mg/kg		< 0.03		
Benzo(a)anthracene	DETSC 3303#	0.03	mg/kg		< 0.03		
Chrysene	DETSC 3303	0.03	mg/kg		< 0.03		
Benzo(b)fluoranthene	DETSC 3303#	0.03	mg/kg		< 0.03		
Benzo(k)fluoranthene	DETSC 3303#	0.03	mg/kg		< 0.03		
Benzo(a)pyrene	DETSC 3303#	0.03	mg/kg		< 0.03		
Indeno(1,2,3-c,d)pyrene	DETSC 3303#	0.03	mg/kg		< 0.03		
Dibenzo(a,h)anthracene	DETSC 3303#	0.03	mg/kg		< 0.03		
Benzo(g,h,i)perylene	DETSC 3303#	0.03	mg/kg		< 0.03		
PAH - USEPA 16, Total	DETSC 3303	0.1	mg/kg		< 0.10		

Summary of Chemical Analysis

Soil/Misc Samples

Our Ref 4155 Combined Report

Client Ref 4155

The Former SSI Steelworks, Redcar - Ground

Investigation Contract - Priority Areas Within SSI

Contract Title Landholdings, Contract 3

Lab No	1257801	1259305	1261633	1261634
Sample ID	S3-TPB40	S3-BHA01	S3-TPA14	S3-TPA19
Depth	1.00	3.50	0.50	1.60
Other ID	3	4	3	7
Sample Type	B	ES	B	B
Sampling Date	16/10/17	10/11/17	12/10/17	12/10/17
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
PCBs							
PCB 28 + PCB 31	DETSC 3401#	0.01	mg/kg				
PCB 52	DETSC 3401#	0.01	mg/kg				
PCB 101	DETSC 3401#	0.01	mg/kg				
PCB 118	DETSC 3401#	0.01	mg/kg				
PCB 153	DETSC 3401#	0.01	mg/kg				
PCB 138	DETSC 3401#	0.01	mg/kg				
PCB 180	DETSC 3401#	0.01	mg/kg				
PCB 7 Total	DETSC 3401#	0.01	mg/kg				
Phenols							
Phenol - Monohydric	DETSC 2130#	0.3	mg/kg		< 0.3		

Summary of Chemical Analysis

Soil/Misc Samples

Our Ref 4155 Combined Report

Client Ref 4155

The Former SSI Steelworks, Redcar - Ground

Investigation Contract - Priority Areas Within SSI

Contract Title Landholdings, Contract 3

Lab No	1261635	1261636	1261637	1261638
Sample ID	S3-TPA21	S3-TPA23	S3-TPA24	S3-TPA27
Depth	0.70	1.00	1.70	0.70
Other ID	3	3	8	3
Sample Type	B	B	B	LB
Sampling Date	12/10/17	10/10/17	10/10/17	10/10/17
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
Asbestos Quantification	DETSC 1102	0					
Metals							
Aluminium	DETSC 2301*	1	mg/kg				
Antimony	DETSC 2301*	1	mg/kg				
Arsenic	DETSC 2301#	0.2	mg/kg				
Barium	DETSC 2301#	1.5	mg/kg				
Beryllium	DETSC 2301#	0.2	mg/kg				
Boron, Water Soluble	DETSC 2123#	0.2	mg/kg				
Cadmium	DETSC 2301#	0.1	mg/kg				
Chromium	DETSC 2301#	0.15	mg/kg				
Chromium, Hexavalent	DETSC 2204*	1	mg/kg				
Copper	DETSC 2301#	0.2	mg/kg				
Iron	DETSC 2301	25	mg/kg				
Lead	DETSC 2301#	0.3	mg/kg				
Magnesium	DETSC 2301*	1	mg/kg				
Manganese	DETSC 2301#	20	mg/kg				
Mercury	DETSC 2325#	0.05	mg/kg				
Molybdenum	DETSC 2301#	0.4	mg/kg				
Nickel	DETSC 2301#	1	mg/kg				
Silicon	DETSC 2301*	10	mg/kg				
Vanadium	DETSC 2301#	0.8	mg/kg				
Zinc	DETSC 2301#	1	mg/kg				
Inorganics							
Loss on Ignition at 440oC	DETSC 2003#	0.01	%				
pH	DETSC 2008#			9.4	12.0	12.0	10.6
Cyanide, Total	DETSC 2130#	0.1	mg/kg				
Cyanide, Free	DETSC 2130#	0.1	mg/kg				
Cyanide, Complex	DETSC 2130*	0.2	mg/kg				
Thiocyanate	DETSC 2130#	0.6	mg/kg				
FOC	DETSC 2002	0.001		0.039	0.010	0.012	0.004
Organic matter	DETSC 2002#	0.1	%	6.8	1.8	2.1	0.7
Sulphate Aqueous Extract as SO4	DETSC 2076#	10	mg/l	110	20	54	320
Sulphur (free)	DETSC 3049#	0.75	mg/kg				
Sulphur as S, Total	DETSC 2320	0.01	%	0.11	0.18	0.35	0.14
Sulphate as SO4, Total	DETSC 2321#	0.01	%	0.16	0.61	0.83	0.23

Summary of Chemical Analysis

Soil/Misc Samples

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Contract Title Landholdings, Contract 3

Lab No	1261635	1261636	1261637	1261638
Sample ID	S3-TPA21	S3-TPA23	S3-TPA24	S3-TPA27
Depth	0.70	1.00	1.70	0.70
Other ID	3	3	8	3
Sample Type	B	B	B	LB
Sampling Date	12/10/17	10/10/17	10/10/17	10/10/17
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
Petroleum Hydrocarbons							
Aliphatic C5-C6	DETSC 3321*	0.01	mg/kg				
Aliphatic C6-C8	DETSC 3321*	0.01	mg/kg				
Aliphatic C8-C10	DETSC 3321*	0.01	mg/kg				
Aliphatic C10-C12	DETSC 3072#	1.5	mg/kg				
Aliphatic C12-C16	DETSC 3072#	1.2	mg/kg				
Aliphatic C16-C21	DETSC 3072#	1.5	mg/kg				
Aliphatic C21-C35	DETSC 3072#	3.4	mg/kg				
Aliphatic C5-C35	DETSC 3072*	10	mg/kg				
Aromatic C5-C7	DETSC 3321*	0.01	mg/kg				
Aromatic C7-C8	DETSC 3321*	0.01	mg/kg				
Aromatic C8-C10	DETSC 3321*	0.01	mg/kg				
Aromatic C10-C12	DETSC 3072#	0.9	mg/kg				
Aromatic C12-C16	DETSC 3072#	0.5	mg/kg				
Aromatic C16-C21	DETSC 3072#	0.6	mg/kg				
Aromatic C21-C35	DETSC 3072#	1.4	mg/kg				
Aromatic C5-C35	DETSC 3072*	10	mg/kg				
TPH Ali/Aro Total	DETSC 3072*	10	mg/kg				
PAHs							
Naphthalene	DETSC 3303#	0.03	mg/kg				
Acenaphthylene	DETSC 3303#	0.03	mg/kg				
Acenaphthene	DETSC 3303#	0.03	mg/kg				
Fluorene	DETSC 3303	0.03	mg/kg				
Phenanthrene	DETSC 3303#	0.03	mg/kg				
Anthracene	DETSC 3303	0.03	mg/kg				
Fluoranthene	DETSC 3303#	0.03	mg/kg				
Pyrene	DETSC 3303#	0.03	mg/kg				
Benzo(a)anthracene	DETSC 3303#	0.03	mg/kg				
Chrysene	DETSC 3303	0.03	mg/kg				
Benzo(b)fluoranthene	DETSC 3303#	0.03	mg/kg				
Benzo(k)fluoranthene	DETSC 3303#	0.03	mg/kg				
Benzo(a)pyrene	DETSC 3303#	0.03	mg/kg				
Indeno(1,2,3-c,d)pyrene	DETSC 3303#	0.03	mg/kg				
Dibenzo(a,h)anthracene	DETSC 3303#	0.03	mg/kg				
Benzo(g,h,i)perylene	DETSC 3303#	0.03	mg/kg				
PAH - USEPA 16, Total	DETSC 3303	0.1	mg/kg				

Summary of Chemical Analysis

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Lab No	1261635	1261636	1261637	1261638
Sample ID	S3-TPA21	S3-TPA23	S3-TPA24	S3-TPA27
Depth	0.70	1.00	1.70	0.70
Other ID	3	3	8	3
Sample Type	B	B	B	LB
Sampling Date	12/10/17	10/10/17	10/10/17	10/10/17
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
PCBs							
PCB 28 + PCB 31	DETSC 3401#	0.01	mg/kg				
PCB 52	DETSC 3401#	0.01	mg/kg				
PCB 101	DETSC 3401#	0.01	mg/kg				
PCB 118	DETSC 3401#	0.01	mg/kg				
PCB 153	DETSC 3401#	0.01	mg/kg				
PCB 138	DETSC 3401#	0.01	mg/kg				
PCB 180	DETSC 3401#	0.01	mg/kg				
PCB 7 Total	DETSC 3401#	0.01	mg/kg				
Phenols							
Phenol - Monohydric	DETSC 2130#	0.3	mg/kg				

Summary of Chemical Analysis

Soil/Misc Samples

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Lab No	1261639	1261640	1261641	1261642
Sample ID	S3-TPA30	S3-TPA34	S3-TPA36	S3-TPA37
Depth	1.20	1.20	0.60	0.50
Other ID	5	3	3	1
Sample Type	B	B	B	LB
Sampling Date	10/10/17	17/10/17	17/10/17	17/10/17
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
Asbestos Quantification	DETSC 1102	0					
Metals							
Aluminium	DETSC 2301*	1	mg/kg				
Antimony	DETSC 2301*	1	mg/kg				
Arsenic	DETSC 2301#	0.2	mg/kg				
Barium	DETSC 2301#	1.5	mg/kg				
Beryllium	DETSC 2301#	0.2	mg/kg				
Boron, Water Soluble	DETSC 2123#	0.2	mg/kg				
Cadmium	DETSC 2301#	0.1	mg/kg				
Chromium	DETSC 2301#	0.15	mg/kg				
Chromium, Hexavalent	DETSC 2204*	1	mg/kg				
Copper	DETSC 2301#	0.2	mg/kg				
Iron	DETSC 2301	25	mg/kg				
Lead	DETSC 2301#	0.3	mg/kg				
Magnesium	DETSC 2301*	1	mg/kg				
Manganese	DETSC 2301#	20	mg/kg				
Mercury	DETSC 2325#	0.05	mg/kg				
Molybdenum	DETSC 2301#	0.4	mg/kg				
Nickel	DETSC 2301#	1	mg/kg				
Silicon	DETSC 2301*	10	mg/kg				
Vanadium	DETSC 2301#	0.8	mg/kg				
Zinc	DETSC 2301#	1	mg/kg				
Inorganics							
Loss on Ignition at 440oC	DETSC 2003#	0.01	%	9.1	5.5		
pH	DETSC 2008#			11.1	9.8	10.5	10.4
Cyanide, Total	DETSC 2130#	0.1	mg/kg				
Cyanide, Free	DETSC 2130#	0.1	mg/kg				
Cyanide, Complex	DETSC 2130*	0.2	mg/kg				
Thiocyanate	DETSC 2130#	0.6	mg/kg				
FOC	DETSC 2002	0.001		0.015	0.010	0.012	0.004
Organic matter	DETSC 2002#	0.1	%	2.5	1.8	2.1	0.6
Sulphate Aqueous Extract as SO4	DETSC 2076#	10	mg/l	280	250	480	810
Sulphur (free)	DETSC 3049#	0.75	mg/kg				
Sulphur as S, Total	DETSC 2320	0.01	%	0.19	0.22	0.26	0.36
Sulphate as SO4, Total	DETSC 2321#	0.01	%	0.41	0.38	0.53	0.42

Summary of Chemical Analysis

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Lab No	1261639	1261640	1261641	1261642
Sample ID	S3-TPA30	S3-TPA34	S3-TPA36	S3-TPA37
Depth	1.20	1.20	0.60	0.50
Other ID	5	3	3	1
Sample Type	B	B	B	LB
Sampling Date	10/10/17	17/10/17	17/10/17	17/10/17
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
Petroleum Hydrocarbons							
Aliphatic C5-C6	DETSC 3321*	0.01	mg/kg				
Aliphatic C6-C8	DETSC 3321*	0.01	mg/kg				
Aliphatic C8-C10	DETSC 3321*	0.01	mg/kg				
Aliphatic C10-C12	DETSC 3072#	1.5	mg/kg				
Aliphatic C12-C16	DETSC 3072#	1.2	mg/kg				
Aliphatic C16-C21	DETSC 3072#	1.5	mg/kg				
Aliphatic C21-C35	DETSC 3072#	3.4	mg/kg				
Aliphatic C5-C35	DETSC 3072*	10	mg/kg				
Aromatic C5-C7	DETSC 3321*	0.01	mg/kg				
Aromatic C7-C8	DETSC 3321*	0.01	mg/kg				
Aromatic C8-C10	DETSC 3321*	0.01	mg/kg				
Aromatic C10-C12	DETSC 3072#	0.9	mg/kg				
Aromatic C12-C16	DETSC 3072#	0.5	mg/kg				
Aromatic C16-C21	DETSC 3072#	0.6	mg/kg				
Aromatic C21-C35	DETSC 3072#	1.4	mg/kg				
Aromatic C5-C35	DETSC 3072*	10	mg/kg				
TPH Ali/Aro Total	DETSC 3072*	10	mg/kg				
PAHs							
Naphthalene	DETSC 3303#	0.03	mg/kg				
Acenaphthylene	DETSC 3303#	0.03	mg/kg				
Acenaphthene	DETSC 3303#	0.03	mg/kg				
Fluorene	DETSC 3303	0.03	mg/kg				
Phenanthrene	DETSC 3303#	0.03	mg/kg				
Anthracene	DETSC 3303	0.03	mg/kg				
Fluoranthene	DETSC 3303#	0.03	mg/kg				
Pyrene	DETSC 3303#	0.03	mg/kg				
Benzo(a)anthracene	DETSC 3303#	0.03	mg/kg				
Chrysene	DETSC 3303	0.03	mg/kg				
Benzo(b)fluoranthene	DETSC 3303#	0.03	mg/kg				
Benzo(k)fluoranthene	DETSC 3303#	0.03	mg/kg				
Benzo(a)pyrene	DETSC 3303#	0.03	mg/kg				
Indeno(1,2,3-c,d)pyrene	DETSC 3303#	0.03	mg/kg				
Dibenzo(a,h)anthracene	DETSC 3303#	0.03	mg/kg				
Benzo(g,h,i)perylene	DETSC 3303#	0.03	mg/kg				
PAH - USEPA 16, Total	DETSC 3303	0.1	mg/kg				

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Lab No	1261639	1261640	1261641	1261642
Sample ID	S3-TPA30	S3-TPA34	S3-TPA36	S3-TPA37
Depth	1.20	1.20	0.60	0.50
Other ID	5	3	3	1
Sample Type	B	B	B	LB
Sampling Date	10/10/17	17/10/17	17/10/17	17/10/17
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
PCBs							
PCB 28 + PCB 31	DETSC 3401#	0.01	mg/kg				
PCB 52	DETSC 3401#	0.01	mg/kg				
PCB 101	DETSC 3401#	0.01	mg/kg				
PCB 118	DETSC 3401#	0.01	mg/kg				
PCB 153	DETSC 3401#	0.01	mg/kg				
PCB 138	DETSC 3401#	0.01	mg/kg				
PCB 180	DETSC 3401#	0.01	mg/kg				
PCB 7 Total	DETSC 3401#	0.01	mg/kg				
Phenols							
Phenol - Monohydric	DETSC 2130#	0.3	mg/kg				

Summary of Chemical Analysis

Soil/Misc Samples

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Contract Title Landholdings, Contract 3

Lab No	1261643	1261644	1261645	1261646
Sample ID	S3-TPA39	S3-TPA40	S3-TPA41	S3-TPB19
Depth	0.90	0.70	0.50	1.00
Other ID	6	4	1	4
Sample Type	B	B	LB	LB
Sampling Date	17/10/17	16/10/17	17/10/17	13/10/17
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
Asbestos Quantification	DETSC 1102	0					
Metals							
Aluminium	DETSC 2301*	1	mg/kg				
Antimony	DETSC 2301*	1	mg/kg				
Arsenic	DETSC 2301#	0.2	mg/kg				
Barium	DETSC 2301#	1.5	mg/kg				
Beryllium	DETSC 2301#	0.2	mg/kg				
Boron, Water Soluble	DETSC 2123#	0.2	mg/kg				
Cadmium	DETSC 2301#	0.1	mg/kg				
Chromium	DETSC 2301#	0.15	mg/kg				
Chromium, Hexavalent	DETSC 2204*	1	mg/kg				
Copper	DETSC 2301#	0.2	mg/kg				
Iron	DETSC 2301	25	mg/kg				
Lead	DETSC 2301#	0.3	mg/kg				
Magnesium	DETSC 2301*	1	mg/kg				
Manganese	DETSC 2301#	20	mg/kg				
Mercury	DETSC 2325#	0.05	mg/kg				
Molybdenum	DETSC 2301#	0.4	mg/kg				
Nickel	DETSC 2301#	1	mg/kg				
Silicon	DETSC 2301*	10	mg/kg				
Vanadium	DETSC 2301#	0.8	mg/kg				
Zinc	DETSC 2301#	1	mg/kg				
Inorganics							
Loss on Ignition at 440oC	DETSC 2003#	0.01	%			3.1	
pH	DETSC 2008#			9.1	11.1	10.0	10.7
Cyanide, Total	DETSC 2130#	0.1	mg/kg				
Cyanide, Free	DETSC 2130#	0.1	mg/kg				
Cyanide, Complex	DETSC 2130*	0.2	mg/kg				
Thiocyanate	DETSC 2130#	0.6	mg/kg				
FOC	DETSC 2002	0.001		0.010	0.010	0.003	0.013
Organic matter	DETSC 2002#	0.1	%	1.8	1.7	0.4	2.2
Sulphate Aqueous Extract as SO4	DETSC 2076#	10	mg/l	410	160	360	210
Sulphur (free)	DETSC 3049#	0.75	mg/kg				
Sulphur as S, Total	DETSC 2320	0.01	%	0.08	0.11	0.36	0.26
Sulphate as SO4, Total	DETSC 2321#	0.01	%	0.19	0.17	0.38	0.52

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Lab No	1261643	1261644	1261645	1261646
Sample ID	S3-TPA39	S3-TPA40	S3-TPA41	S3-TPB19
Depth	0.90	0.70	0.50	1.00
Other ID	6	4	1	4
Sample Type	B	B	LB	LB
Sampling Date	17/10/17	16/10/17	17/10/17	13/10/17
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
Petroleum Hydrocarbons							
Aliphatic C5-C6	DETSC 3321*	0.01	mg/kg				
Aliphatic C6-C8	DETSC 3321*	0.01	mg/kg				
Aliphatic C8-C10	DETSC 3321*	0.01	mg/kg				
Aliphatic C10-C12	DETSC 3072#	1.5	mg/kg				
Aliphatic C12-C16	DETSC 3072#	1.2	mg/kg				
Aliphatic C16-C21	DETSC 3072#	1.5	mg/kg				
Aliphatic C21-C35	DETSC 3072#	3.4	mg/kg				
Aliphatic C5-C35	DETSC 3072*	10	mg/kg				
Aromatic C5-C7	DETSC 3321*	0.01	mg/kg				
Aromatic C7-C8	DETSC 3321*	0.01	mg/kg				
Aromatic C8-C10	DETSC 3321*	0.01	mg/kg				
Aromatic C10-C12	DETSC 3072#	0.9	mg/kg				
Aromatic C12-C16	DETSC 3072#	0.5	mg/kg				
Aromatic C16-C21	DETSC 3072#	0.6	mg/kg				
Aromatic C21-C35	DETSC 3072#	1.4	mg/kg				
Aromatic C5-C35	DETSC 3072*	10	mg/kg				
TPH Ali/Aro Total	DETSC 3072*	10	mg/kg				
PAHs							
Naphthalene	DETSC 3303#	0.03	mg/kg				
Acenaphthylene	DETSC 3303#	0.03	mg/kg				
Acenaphthene	DETSC 3303#	0.03	mg/kg				
Fluorene	DETSC 3303	0.03	mg/kg				
Phenanthrene	DETSC 3303#	0.03	mg/kg				
Anthracene	DETSC 3303	0.03	mg/kg				
Fluoranthene	DETSC 3303#	0.03	mg/kg				
Pyrene	DETSC 3303#	0.03	mg/kg				
Benzo(a)anthracene	DETSC 3303#	0.03	mg/kg				
Chrysene	DETSC 3303	0.03	mg/kg				
Benzo(b)fluoranthene	DETSC 3303#	0.03	mg/kg				
Benzo(k)fluoranthene	DETSC 3303#	0.03	mg/kg				
Benzo(a)pyrene	DETSC 3303#	0.03	mg/kg				
Indeno(1,2,3-c,d)pyrene	DETSC 3303#	0.03	mg/kg				
Dibenzo(a,h)anthracene	DETSC 3303#	0.03	mg/kg				
Benzo(g,h,i)perylene	DETSC 3303#	0.03	mg/kg				
PAH - USEPA 16, Total	DETSC 3303	0.1	mg/kg				

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Lab No	1261643	1261644	1261645	1261646
Sample ID	S3-TPA39	S3-TPA40	S3-TPA41	S3-TPB19
Depth	0.90	0.70	0.50	1.00
Other ID	6	4	1	4
Sample Type	B	B	LB	LB
Sampling Date	17/10/17	16/10/17	17/10/17	13/10/17
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
PCBs							
PCB 28 + PCB 31	DETSC 3401#	0.01	mg/kg				
PCB 52	DETSC 3401#	0.01	mg/kg				
PCB 101	DETSC 3401#	0.01	mg/kg				
PCB 118	DETSC 3401#	0.01	mg/kg				
PCB 153	DETSC 3401#	0.01	mg/kg				
PCB 138	DETSC 3401#	0.01	mg/kg				
PCB 180	DETSC 3401#	0.01	mg/kg				
PCB 7 Total	DETSC 3401#	0.01	mg/kg				
Phenols							
Phenol - Monohydric	DETSC 2130#	0.3	mg/kg				

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Lab No	1261647	1261648	1261649	1261650
Sample ID	S3-TPB20	S3-TPB23	S3-TPB24	S3-TPB28
Depth	2.00	1.00	2.00	1.00
Other ID	7	4	7	4
Sample Type	B	B	B	B
Sampling Date	13/10/17	13/10/17	16/10/17	13/10/17
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
Asbestos Quantification	DETSC 1102	0					
Metals							
Aluminium	DETSC 2301*	1	mg/kg				
Antimony	DETSC 2301*	1	mg/kg				
Arsenic	DETSC 2301#	0.2	mg/kg				
Barium	DETSC 2301#	1.5	mg/kg				
Beryllium	DETSC 2301#	0.2	mg/kg				
Boron, Water Soluble	DETSC 2123#	0.2	mg/kg				
Cadmium	DETSC 2301#	0.1	mg/kg				
Chromium	DETSC 2301#	0.15	mg/kg				
Chromium, Hexavalent	DETSC 2204*	1	mg/kg				
Copper	DETSC 2301#	0.2	mg/kg				
Iron	DETSC 2301	25	mg/kg				
Lead	DETSC 2301#	0.3	mg/kg				
Magnesium	DETSC 2301*	1	mg/kg				
Manganese	DETSC 2301#	20	mg/kg				
Mercury	DETSC 2325#	0.05	mg/kg				
Molybdenum	DETSC 2301#	0.4	mg/kg				
Nickel	DETSC 2301#	1	mg/kg				
Silicon	DETSC 2301*	10	mg/kg				
Vanadium	DETSC 2301#	0.8	mg/kg				
Zinc	DETSC 2301#	1	mg/kg				
Inorganics							
Loss on Ignition at 440oC	DETSC 2003#	0.01	%				
pH	DETSC 2008#			9.0	11.0	9.4	11.3
Cyanide, Total	DETSC 2130#	0.1	mg/kg				
Cyanide, Free	DETSC 2130#	0.1	mg/kg				
Cyanide, Complex	DETSC 2130*	0.2	mg/kg				
Thiocyanate	DETSC 2130#	0.6	mg/kg				
FOC	DETSC 2002	0.001		0.011	0.008	0.009	
Organic matter	DETSC 2002#	0.1	%	1.9	1.3	1.6	
Sulphate Aqueous Extract as SO4	DETSC 2076#	10	mg/l	680	420	730	360
Sulphur (free)	DETSC 3049#	0.75	mg/kg				
Sulphur as S, Total	DETSC 2320	0.01	%	0.20	0.48	0.20	0.27
Sulphate as SO4, Total	DETSC 2321#	0.01	%	0.29	1.0	0.26	0.03

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Lab No	1261647	1261648	1261649	1261650
Sample ID	S3-TPB20	S3-TPB23	S3-TPB24	S3-TPB28
Depth	2.00	1.00	2.00	1.00
Other ID	7	4	7	4
Sample Type	B	B	B	B
Sampling Date	13/10/17	13/10/17	16/10/17	13/10/17
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
Petroleum Hydrocarbons							
Aliphatic C5-C6	DETSC 3321*	0.01	mg/kg				
Aliphatic C6-C8	DETSC 3321*	0.01	mg/kg				
Aliphatic C8-C10	DETSC 3321*	0.01	mg/kg				
Aliphatic C10-C12	DETSC 3072#	1.5	mg/kg				
Aliphatic C12-C16	DETSC 3072#	1.2	mg/kg				
Aliphatic C16-C21	DETSC 3072#	1.5	mg/kg				
Aliphatic C21-C35	DETSC 3072#	3.4	mg/kg				
Aliphatic C5-C35	DETSC 3072*	10	mg/kg				
Aromatic C5-C7	DETSC 3321*	0.01	mg/kg				
Aromatic C7-C8	DETSC 3321*	0.01	mg/kg				
Aromatic C8-C10	DETSC 3321*	0.01	mg/kg				
Aromatic C10-C12	DETSC 3072#	0.9	mg/kg				
Aromatic C12-C16	DETSC 3072#	0.5	mg/kg				
Aromatic C16-C21	DETSC 3072#	0.6	mg/kg				
Aromatic C21-C35	DETSC 3072#	1.4	mg/kg				
Aromatic C5-C35	DETSC 3072*	10	mg/kg				
TPH Ali/Aro Total	DETSC 3072*	10	mg/kg				
PAHs							
Naphthalene	DETSC 3303#	0.03	mg/kg				
Acenaphthylene	DETSC 3303#	0.03	mg/kg				
Acenaphthene	DETSC 3303#	0.03	mg/kg				
Fluorene	DETSC 3303	0.03	mg/kg				
Phenanthrene	DETSC 3303#	0.03	mg/kg				
Anthracene	DETSC 3303	0.03	mg/kg				
Fluoranthene	DETSC 3303#	0.03	mg/kg				
Pyrene	DETSC 3303#	0.03	mg/kg				
Benzo(a)anthracene	DETSC 3303#	0.03	mg/kg				
Chrysene	DETSC 3303	0.03	mg/kg				
Benzo(b)fluoranthene	DETSC 3303#	0.03	mg/kg				
Benzo(k)fluoranthene	DETSC 3303#	0.03	mg/kg				
Benzo(a)pyrene	DETSC 3303#	0.03	mg/kg				
Indeno(1,2,3-c,d)pyrene	DETSC 3303#	0.03	mg/kg				
Dibenzo(a,h)anthracene	DETSC 3303#	0.03	mg/kg				
Benzo(g,h,i)perylene	DETSC 3303#	0.03	mg/kg				
PAH - USEPA 16, Total	DETSC 3303	0.1	mg/kg				

Summary of Chemical Analysis

Soil/Misc Samples

Our Ref 4155 Combined Report

Client Ref 4155

The Former SSI Steelworks, Redcar - Ground

Investigation Contract - Priority Areas Within SSI

Contract Title Landholdings, Contract 3

Lab No	1261647	1261648	1261649	1261650
Sample ID	S3-TPB20	S3-TPB23	S3-TPB24	S3-TPB28
Depth	2.00	1.00	2.00	1.00
Other ID	7	4	7	4
Sample Type	B	B	B	B
Sampling Date	13/10/17	13/10/17	16/10/17	13/10/17
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
PCBs							
PCB 28 + PCB 31	DETSC 3401#	0.01	mg/kg				
PCB 52	DETSC 3401#	0.01	mg/kg				
PCB 101	DETSC 3401#	0.01	mg/kg				
PCB 118	DETSC 3401#	0.01	mg/kg				
PCB 153	DETSC 3401#	0.01	mg/kg				
PCB 138	DETSC 3401#	0.01	mg/kg				
PCB 180	DETSC 3401#	0.01	mg/kg				
PCB 7 Total	DETSC 3401#	0.01	mg/kg				
Phenols							
Phenol - Monohydric	DETSC 2130#	0.3	mg/kg				

Summary of Chemical Analysis

Soil/Misc Samples

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The Former SSI Steelworks, Redcar - Ground

Investigation Contract - Priority Areas Within SSI

Contract Title Landholdings, Contract 3

Lab No	1261651	1261652	1261653	1263039
Sample ID	S3-TPB32	S3-TPB33	S3-TPB43	S3-TPB49
Depth	0.50	2.00	2.00	1.00
Other ID	2	7	6	4
Sample Type	B	B	LB	LB
Sampling Date	12/10/17	16/10/17	17/10/17	17/10/17
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
Asbestos Quantification	DETSC 1102	0					
Metals							
Aluminium	DETSC 2301*	1	mg/kg				
Antimony	DETSC 2301*	1	mg/kg				
Arsenic	DETSC 2301#	0.2	mg/kg				
Barium	DETSC 2301#	1.5	mg/kg				
Beryllium	DETSC 2301#	0.2	mg/kg				
Boron, Water Soluble	DETSC 2123#	0.2	mg/kg				
Cadmium	DETSC 2301#	0.1	mg/kg				
Chromium	DETSC 2301#	0.15	mg/kg				
Chromium, Hexavalent	DETSC 2204*	1	mg/kg				
Copper	DETSC 2301#	0.2	mg/kg				
Iron	DETSC 2301	25	mg/kg				
Lead	DETSC 2301#	0.3	mg/kg				
Magnesium	DETSC 2301*	1	mg/kg				
Manganese	DETSC 2301#	20	mg/kg				
Mercury	DETSC 2325#	0.05	mg/kg				
Molybdenum	DETSC 2301#	0.4	mg/kg				
Nickel	DETSC 2301#	1	mg/kg				
Silicon	DETSC 2301*	10	mg/kg				
Vanadium	DETSC 2301#	0.8	mg/kg				
Zinc	DETSC 2301#	1	mg/kg				
Inorganics							
Loss on Ignition at 440oC	DETSC 2003#	0.01	%				
pH	DETSC 2008#			11.1	8.8	10.0	11.6
Cyanide, Total	DETSC 2130#	0.1	mg/kg				
Cyanide, Free	DETSC 2130#	0.1	mg/kg				
Cyanide, Complex	DETSC 2130*	0.2	mg/kg				
Thiocyanate	DETSC 2130#	0.6	mg/kg				
FOC	DETSC 2002	0.001		0.009	0.008	0.007	0.008
Organic matter	DETSC 2002#	0.1	%	1.6	1.3	1.2	1.4
Sulphate Aqueous Extract as SO4	DETSC 2076#	10	mg/l	400	420	2200	1700
Sulphur (free)	DETSC 3049#	0.75	mg/kg				
Sulphur as S, Total	DETSC 2320	0.01	%	0.56	0.06	0.77	0.22
Sulphate as SO4, Total	DETSC 2321#	0.01	%	1.8	0.17	1.7	1.7

Summary of Chemical Analysis

Soil/Misc Samples

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The Former SSI Steelworks, Redcar - Ground

Investigation Contract - Priority Areas Within SSI

Contract Title Landholdings, Contract 3

Lab No	1261651	1261652	1261653	1263039
Sample ID	S3-TPB32	S3-TPB33	S3-TPB43	S3-TPB49
Depth	0.50	2.00	2.00	1.00
Other ID	2	7	6	4
Sample Type	B	B	LB	LB
Sampling Date	12/10/17	16/10/17	17/10/17	17/10/17
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
Petroleum Hydrocarbons							
Aliphatic C5-C6	DETSC 3321*	0.01	mg/kg				
Aliphatic C6-C8	DETSC 3321*	0.01	mg/kg				
Aliphatic C8-C10	DETSC 3321*	0.01	mg/kg				
Aliphatic C10-C12	DETSC 3072#	1.5	mg/kg				
Aliphatic C12-C16	DETSC 3072#	1.2	mg/kg				
Aliphatic C16-C21	DETSC 3072#	1.5	mg/kg				
Aliphatic C21-C35	DETSC 3072#	3.4	mg/kg				
Aliphatic C5-C35	DETSC 3072*	10	mg/kg				
Aromatic C5-C7	DETSC 3321*	0.01	mg/kg				
Aromatic C7-C8	DETSC 3321*	0.01	mg/kg				
Aromatic C8-C10	DETSC 3321*	0.01	mg/kg				
Aromatic C10-C12	DETSC 3072#	0.9	mg/kg				
Aromatic C12-C16	DETSC 3072#	0.5	mg/kg				
Aromatic C16-C21	DETSC 3072#	0.6	mg/kg				
Aromatic C21-C35	DETSC 3072#	1.4	mg/kg				
Aromatic C5-C35	DETSC 3072*	10	mg/kg				
TPH Ali/Aro Total	DETSC 3072*	10	mg/kg				
PAHs							
Naphthalene	DETSC 3303#	0.03	mg/kg				
Acenaphthylene	DETSC 3303#	0.03	mg/kg				
Acenaphthene	DETSC 3303#	0.03	mg/kg				
Fluorene	DETSC 3303	0.03	mg/kg				
Phenanthrene	DETSC 3303#	0.03	mg/kg				
Anthracene	DETSC 3303	0.03	mg/kg				
Fluoranthene	DETSC 3303#	0.03	mg/kg				
Pyrene	DETSC 3303#	0.03	mg/kg				
Benzo(a)anthracene	DETSC 3303#	0.03	mg/kg				
Chrysene	DETSC 3303	0.03	mg/kg				
Benzo(b)fluoranthene	DETSC 3303#	0.03	mg/kg				
Benzo(k)fluoranthene	DETSC 3303#	0.03	mg/kg				
Benzo(a)pyrene	DETSC 3303#	0.03	mg/kg				
Indeno(1,2,3-c,d)pyrene	DETSC 3303#	0.03	mg/kg				
Dibenzo(a,h)anthracene	DETSC 3303#	0.03	mg/kg				
Benzo(g,h,i)perylene	DETSC 3303#	0.03	mg/kg				
PAH - USEPA 16, Total	DETSC 3303	0.1	mg/kg				

Summary of Chemical Analysis

Soil/Misc Samples

Our Ref 4155 Combined Report

Client Ref 4155

The Former SSI Steelworks, Redcar - Ground

Investigation Contract - Priority Areas Within SSI

Contract Title Landholdings, Contract 3

Lab No	1261651	1261652	1261653	1263039
Sample ID	S3-TPB32	S3-TPB33	S3-TPB43	S3-TPB49
Depth	0.50	2.00	2.00	1.00
Other ID	2	7	6	4
Sample Type	B	B	LB	LB
Sampling Date	12/10/17	16/10/17	17/10/17	17/10/17
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
PCBs							
PCB 28 + PCB 31	DETSC 3401#	0.01	mg/kg				
PCB 52	DETSC 3401#	0.01	mg/kg				
PCB 101	DETSC 3401#	0.01	mg/kg				
PCB 118	DETSC 3401#	0.01	mg/kg				
PCB 153	DETSC 3401#	0.01	mg/kg				
PCB 138	DETSC 3401#	0.01	mg/kg				
PCB 180	DETSC 3401#	0.01	mg/kg				
PCB 7 Total	DETSC 3401#	0.01	mg/kg				
Phenols							
Phenol - Monohydric	DETSC 2130#	0.3	mg/kg				

Summary of Chemical Analysis

Soil/Misc Samples

Our Ref 4155 Combined Report

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The Former SSI Steelworks, Redcar - Ground

Investigation Contract - Priority Areas Within SSI

Contract Title Landholdings, Contract 3

Lab No	1266631	1268009	1268010	1268011
Sample ID	S3-TPA25	S3-TPA01	S3-TPA04	S3-TPA05
Depth	1.20	2.70	0.70	2.20
Other ID	3	11	3	6
Sample Type	B	B	B	B
Sampling Date	18/10/17	24/10/17	24/10/17	24/10/17
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
Asbestos Quantification	DETSC 1102	0					
Metals							
Aluminium	DETSC 2301*	1	mg/kg				
Antimony	DETSC 2301*	1	mg/kg				
Arsenic	DETSC 2301#	0.2	mg/kg				
Barium	DETSC 2301#	1.5	mg/kg				
Beryllium	DETSC 2301#	0.2	mg/kg				
Boron, Water Soluble	DETSC 2123#	0.2	mg/kg				
Cadmium	DETSC 2301#	0.1	mg/kg				
Chromium	DETSC 2301#	0.15	mg/kg				
Chromium, Hexavalent	DETSC 2204*	1	mg/kg				
Copper	DETSC 2301#	0.2	mg/kg				
Iron	DETSC 2301	25	mg/kg				
Lead	DETSC 2301#	0.3	mg/kg				
Magnesium	DETSC 2301*	1	mg/kg				
Manganese	DETSC 2301#	20	mg/kg				
Mercury	DETSC 2325#	0.05	mg/kg				
Molybdenum	DETSC 2301#	0.4	mg/kg				
Nickel	DETSC 2301#	1	mg/kg				
Silicon	DETSC 2301*	10	mg/kg				
Vanadium	DETSC 2301#	0.8	mg/kg				
Zinc	DETSC 2301#	1	mg/kg				
Inorganics							
Loss on Ignition at 440oC	DETSC 2003#	0.01	%		9.9		3.7
pH	DETSC 2008#			8.2	10.2	11.4	12.3
Cyanide, Total	DETSC 2130#	0.1	mg/kg				
Cyanide, Free	DETSC 2130#	0.1	mg/kg				
Cyanide, Complex	DETSC 2130*	0.2	mg/kg				
Thiocyanate	DETSC 2130#	0.6	mg/kg				
FOC	DETSC 2002	0.001		< 0.001	0.022	0.014	< 0.001
Organic matter	DETSC 2002#	0.1	%	< 0.1	3.8	2.4	< 0.1
Sulphate Aqueous Extract as SO4	DETSC 2076#	10	mg/l	450	330	390	14
Sulphur (free)	DETSC 3049#	0.75	mg/kg				
Sulphur as S, Total	DETSC 2320	0.01	%	0.19	0.16	0.27	0.19
Sulphate as SO4, Total	DETSC 2321#	0.01	%	0.61	0.29	0.44	0.60

Summary of Chemical Analysis

Soil/Misc Samples

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The Former SSI Steelworks, Redcar - Ground

Investigation Contract - Priority Areas Within SSI

Contract Title Landholdings, Contract 3

Lab No	1266631	1268009	1268010	1268011
Sample ID	S3-TPA25	S3-TPA01	S3-TPA04	S3-TPA05
Depth	1.20	2.70	0.70	2.20
Other ID	3	11	3	6
Sample Type	B	B	B	B
Sampling Date	18/10/17	24/10/17	24/10/17	24/10/17
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
Petroleum Hydrocarbons							
Aliphatic C5-C6	DETSC 3321*	0.01	mg/kg				
Aliphatic C6-C8	DETSC 3321*	0.01	mg/kg				
Aliphatic C8-C10	DETSC 3321*	0.01	mg/kg				
Aliphatic C10-C12	DETSC 3072#	1.5	mg/kg				
Aliphatic C12-C16	DETSC 3072#	1.2	mg/kg				
Aliphatic C16-C21	DETSC 3072#	1.5	mg/kg				
Aliphatic C21-C35	DETSC 3072#	3.4	mg/kg				
Aliphatic C5-C35	DETSC 3072*	10	mg/kg				
Aromatic C5-C7	DETSC 3321*	0.01	mg/kg				
Aromatic C7-C8	DETSC 3321*	0.01	mg/kg				
Aromatic C8-C10	DETSC 3321*	0.01	mg/kg				
Aromatic C10-C12	DETSC 3072#	0.9	mg/kg				
Aromatic C12-C16	DETSC 3072#	0.5	mg/kg				
Aromatic C16-C21	DETSC 3072#	0.6	mg/kg				
Aromatic C21-C35	DETSC 3072#	1.4	mg/kg				
Aromatic C5-C35	DETSC 3072*	10	mg/kg				
TPH Ali/Aro Total	DETSC 3072*	10	mg/kg				
PAHs							
Naphthalene	DETSC 3303#	0.03	mg/kg				
Acenaphthylene	DETSC 3303#	0.03	mg/kg				
Acenaphthene	DETSC 3303#	0.03	mg/kg				
Fluorene	DETSC 3303	0.03	mg/kg				
Phenanthrene	DETSC 3303#	0.03	mg/kg				
Anthracene	DETSC 3303	0.03	mg/kg				
Fluoranthene	DETSC 3303#	0.03	mg/kg				
Pyrene	DETSC 3303#	0.03	mg/kg				
Benzo(a)anthracene	DETSC 3303#	0.03	mg/kg				
Chrysene	DETSC 3303	0.03	mg/kg				
Benzo(b)fluoranthene	DETSC 3303#	0.03	mg/kg				
Benzo(k)fluoranthene	DETSC 3303#	0.03	mg/kg				
Benzo(a)pyrene	DETSC 3303#	0.03	mg/kg				
Indeno(1,2,3-c,d)pyrene	DETSC 3303#	0.03	mg/kg				
Dibenzo(a,h)anthracene	DETSC 3303#	0.03	mg/kg				
Benzo(g,h,i)perylene	DETSC 3303#	0.03	mg/kg				
PAH - USEPA 16, Total	DETSC 3303	0.1	mg/kg				

Summary of Chemical Analysis

Soil/Misc Samples

Our Ref 4155 Combined Report

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The Former SSI Steelworks, Redcar - Ground

Investigation Contract - Priority Areas Within SSI

Contract Title Landholdings, Contract 3

Lab No	1266631	1268009	1268010	1268011
Sample ID	S3-TPA25	S3-TPA01	S3-TPA04	S3-TPA05
Depth	1.20	2.70	0.70	2.20
Other ID	3	11	3	6
Sample Type	B	B	B	B
Sampling Date	18/10/17	24/10/17	24/10/17	24/10/17
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
PCBs							
PCB 28 + PCB 31	DETSC 3401#	0.01	mg/kg				
PCB 52	DETSC 3401#	0.01	mg/kg				
PCB 101	DETSC 3401#	0.01	mg/kg				
PCB 118	DETSC 3401#	0.01	mg/kg				
PCB 153	DETSC 3401#	0.01	mg/kg				
PCB 138	DETSC 3401#	0.01	mg/kg				
PCB 180	DETSC 3401#	0.01	mg/kg				
PCB 7 Total	DETSC 3401#	0.01	mg/kg				
Phenols							
Phenol - Monohydric	DETSC 2130#	0.3	mg/kg				

Summary of Chemical Analysis

Soil/Misc Samples

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The Former SSI Steelworks, Redcar - Ground

Investigation Contract - Priority Areas Within SSI

Contract Title Landholdings, Contract 3

Lab No	1268012	1268013	1268014	1268015
Sample ID	S3-TPA11	S3-TPA15	S3-TPA18	S3-TPA20
Depth	2.30	1.30	1.50	1.50
Other ID	8	4	6	5
Sample Type	B	B	J	LB
Sampling Date	20/10/17	19/10/17	19/10/17	19/10/17
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
Asbestos Quantification	DETSC 1102	0					
Metals							
Aluminium	DETSC 2301*	1	mg/kg				
Antimony	DETSC 2301*	1	mg/kg				
Arsenic	DETSC 2301#	0.2	mg/kg				
Barium	DETSC 2301#	1.5	mg/kg				
Beryllium	DETSC 2301#	0.2	mg/kg				
Boron, Water Soluble	DETSC 2123#	0.2	mg/kg				
Cadmium	DETSC 2301#	0.1	mg/kg				
Chromium	DETSC 2301#	0.15	mg/kg				
Chromium, Hexavalent	DETSC 2204*	1	mg/kg				
Copper	DETSC 2301#	0.2	mg/kg				
Iron	DETSC 2301	25	mg/kg				
Lead	DETSC 2301#	0.3	mg/kg				
Magnesium	DETSC 2301*	1	mg/kg				
Manganese	DETSC 2301#	20	mg/kg				
Mercury	DETSC 2325#	0.05	mg/kg				
Molybdenum	DETSC 2301#	0.4	mg/kg				
Nickel	DETSC 2301#	1	mg/kg				
Silicon	DETSC 2301*	10	mg/kg				
Vanadium	DETSC 2301#	0.8	mg/kg				
Zinc	DETSC 2301#	1	mg/kg				
Inorganics							
Loss on Ignition at 440oC	DETSC 2003#	0.01	%	5.1	7.3		
pH	DETSC 2008#			12.4	11.9	11.6	10.5
Cyanide, Total	DETSC 2130#	0.1	mg/kg				
Cyanide, Free	DETSC 2130#	0.1	mg/kg				
Cyanide, Complex	DETSC 2130*	0.2	mg/kg				
Thiocyanate	DETSC 2130#	0.6	mg/kg				
FOC	DETSC 2002	0.001		0.019	0.014	0.007	0.015
Organic matter	DETSC 2002#	0.1	%	3.3	2.3	1.2	2.6
Sulphate Aqueous Extract as SO4	DETSC 2076#	10	mg/l	170	120	480	800
Sulphur (free)	DETSC 3049#	0.75	mg/kg				
Sulphur as S, Total	DETSC 2320	0.01	%	0.27	0.14	1.6	0.50
Sulphate as SO4, Total	DETSC 2321#	0.01	%	0.57	0.32	6.2	1.4

Summary of Chemical Analysis

Soil/Misc Samples

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The Former SSI Steelworks, Redcar - Ground

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Contract Title Landholdings, Contract 3

Lab No	1268012	1268013	1268014	1268015
Sample ID	S3-TPA11	S3-TPA15	S3-TPA18	S3-TPA20
Depth	2.30	1.30	1.50	1.50
Other ID	8	4	6	5
Sample Type	B	B	J	LB
Sampling Date	20/10/17	19/10/17	19/10/17	19/10/17
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
Petroleum Hydrocarbons							
Aliphatic C5-C6	DETSC 3321*	0.01	mg/kg				
Aliphatic C6-C8	DETSC 3321*	0.01	mg/kg				
Aliphatic C8-C10	DETSC 3321*	0.01	mg/kg				
Aliphatic C10-C12	DETSC 3072#	1.5	mg/kg				
Aliphatic C12-C16	DETSC 3072#	1.2	mg/kg				
Aliphatic C16-C21	DETSC 3072#	1.5	mg/kg				
Aliphatic C21-C35	DETSC 3072#	3.4	mg/kg				
Aliphatic C5-C35	DETSC 3072*	10	mg/kg				
Aromatic C5-C7	DETSC 3321*	0.01	mg/kg				
Aromatic C7-C8	DETSC 3321*	0.01	mg/kg				
Aromatic C8-C10	DETSC 3321*	0.01	mg/kg				
Aromatic C10-C12	DETSC 3072#	0.9	mg/kg				
Aromatic C12-C16	DETSC 3072#	0.5	mg/kg				
Aromatic C16-C21	DETSC 3072#	0.6	mg/kg				
Aromatic C21-C35	DETSC 3072#	1.4	mg/kg				
Aromatic C5-C35	DETSC 3072*	10	mg/kg				
TPH Ali/Aro Total	DETSC 3072*	10	mg/kg				
PAHs							
Naphthalene	DETSC 3303#	0.03	mg/kg				
Acenaphthylene	DETSC 3303#	0.03	mg/kg				
Acenaphthene	DETSC 3303#	0.03	mg/kg				
Fluorene	DETSC 3303	0.03	mg/kg				
Phenanthrene	DETSC 3303#	0.03	mg/kg				
Anthracene	DETSC 3303	0.03	mg/kg				
Fluoranthene	DETSC 3303#	0.03	mg/kg				
Pyrene	DETSC 3303#	0.03	mg/kg				
Benzo(a)anthracene	DETSC 3303#	0.03	mg/kg				
Chrysene	DETSC 3303	0.03	mg/kg				
Benzo(b)fluoranthene	DETSC 3303#	0.03	mg/kg				
Benzo(k)fluoranthene	DETSC 3303#	0.03	mg/kg				
Benzo(a)pyrene	DETSC 3303#	0.03	mg/kg				
Indeno(1,2,3-c,d)pyrene	DETSC 3303#	0.03	mg/kg				
Dibenzo(a,h)anthracene	DETSC 3303#	0.03	mg/kg				
Benzo(g,h,i)perylene	DETSC 3303#	0.03	mg/kg				
PAH - USEPA 16, Total	DETSC 3303	0.1	mg/kg				

Summary of Chemical Analysis

Soil/Misc Samples

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The Former SSI Steelworks, Redcar - Ground

Investigation Contract - Priority Areas Within SSI

Contract Title Landholdings, Contract 3

Lab No	1268012	1268013	1268014	1268015
Sample ID	S3-TPA11	S3-TPA15	S3-TPA18	S3-TPA20
Depth	2.30	1.30	1.50	1.50
Other ID	8	4	6	5
Sample Type	B	B	J	LB
Sampling Date	20/10/17	19/10/17	19/10/17	19/10/17
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
PCBs							
PCB 28 + PCB 31	DETSC 3401#	0.01	mg/kg				
PCB 52	DETSC 3401#	0.01	mg/kg				
PCB 101	DETSC 3401#	0.01	mg/kg				
PCB 118	DETSC 3401#	0.01	mg/kg				
PCB 153	DETSC 3401#	0.01	mg/kg				
PCB 138	DETSC 3401#	0.01	mg/kg				
PCB 180	DETSC 3401#	0.01	mg/kg				
PCB 7 Total	DETSC 3401#	0.01	mg/kg				
Phenols							
Phenol - Monohydric	DETSC 2130#	0.3	mg/kg				

Summary of Chemical Analysis

Soil/Misc Samples

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The Former SSI Steelworks, Redcar - Ground

Investigation Contract - Priority Areas Within SSI

Contract Title Landholdings, Contract 3

Lab No	1268016	1268017	1268018	1268019
Sample ID	S3-TPA26	S3-TPA28	S3-TPA31	S3-TPA42
Depth	2.20	0.30	2.50	1.00
Other ID	9	3	9	3
Sample Type	B	B	B	B
Sampling Date	19/10/17	19/10/17	19/10/17	19/10/17
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
Asbestos Quantification	DETSC 1102	0					
Metals							
Aluminium	DETSC 2301*	1	mg/kg				
Antimony	DETSC 2301*	1	mg/kg				
Arsenic	DETSC 2301#	0.2	mg/kg				
Barium	DETSC 2301#	1.5	mg/kg				
Beryllium	DETSC 2301#	0.2	mg/kg				
Boron, Water Soluble	DETSC 2123#	0.2	mg/kg				
Cadmium	DETSC 2301#	0.1	mg/kg				
Chromium	DETSC 2301#	0.15	mg/kg				
Chromium, Hexavalent	DETSC 2204*	1	mg/kg				
Copper	DETSC 2301#	0.2	mg/kg				
Iron	DETSC 2301	25	mg/kg				
Lead	DETSC 2301#	0.3	mg/kg				
Magnesium	DETSC 2301*	1	mg/kg				
Manganese	DETSC 2301#	20	mg/kg				
Mercury	DETSC 2325#	0.05	mg/kg				
Molybdenum	DETSC 2301#	0.4	mg/kg				
Nickel	DETSC 2301#	1	mg/kg				
Silicon	DETSC 2301*	10	mg/kg				
Vanadium	DETSC 2301#	0.8	mg/kg				
Zinc	DETSC 2301#	1	mg/kg				
Inorganics							
Loss on Ignition at 440oC	DETSC 2003#	0.01	%				
pH	DETSC 2008#			10.7	9.4	8.6	10.4
Cyanide, Total	DETSC 2130#	0.1	mg/kg				
Cyanide, Free	DETSC 2130#	0.1	mg/kg				
Cyanide, Complex	DETSC 2130*	0.2	mg/kg				
Thiocyanate	DETSC 2130#	0.6	mg/kg				
FOC	DETSC 2002	0.001		0.021	0.010		0.008
Organic matter	DETSC 2002#	0.1	%	3.6	1.7		1.3
Sulphate Aqueous Extract as SO4	DETSC 2076#	10	mg/l	700	1200	260	550
Sulphur (free)	DETSC 3049#	0.75	mg/kg				
Sulphur as S, Total	DETSC 2320	0.01	%	0.32	0.29		0.40
Sulphate as SO4, Total	DETSC 2321#	0.01	%	0.89	0.76		0.40

Summary of Chemical Analysis

Soil/Misc Samples

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The Former SSI Steelworks, Redcar - Ground

Investigation Contract - Priority Areas Within SSI

Contract Title Landholdings, Contract 3

Lab No	1268016	1268017	1268018	1268019
Sample ID	S3-TPA26	S3-TPA28	S3-TPA31	S3-TPA42
Depth	2.20	0.30	2.50	1.00
Other ID	9	3	9	3
Sample Type	B	B	B	B
Sampling Date	19/10/17	19/10/17	19/10/17	19/10/17
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
Petroleum Hydrocarbons							
Aliphatic C5-C6	DETSC 3321*	0.01	mg/kg				
Aliphatic C6-C8	DETSC 3321*	0.01	mg/kg				
Aliphatic C8-C10	DETSC 3321*	0.01	mg/kg				
Aliphatic C10-C12	DETSC 3072#	1.5	mg/kg				
Aliphatic C12-C16	DETSC 3072#	1.2	mg/kg				
Aliphatic C16-C21	DETSC 3072#	1.5	mg/kg				
Aliphatic C21-C35	DETSC 3072#	3.4	mg/kg				
Aliphatic C5-C35	DETSC 3072*	10	mg/kg				
Aromatic C5-C7	DETSC 3321*	0.01	mg/kg				
Aromatic C7-C8	DETSC 3321*	0.01	mg/kg				
Aromatic C8-C10	DETSC 3321*	0.01	mg/kg				
Aromatic C10-C12	DETSC 3072#	0.9	mg/kg				
Aromatic C12-C16	DETSC 3072#	0.5	mg/kg				
Aromatic C16-C21	DETSC 3072#	0.6	mg/kg				
Aromatic C21-C35	DETSC 3072#	1.4	mg/kg				
Aromatic C5-C35	DETSC 3072*	10	mg/kg				
TPH Ali/Aro Total	DETSC 3072*	10	mg/kg				
PAHs							
Naphthalene	DETSC 3303#	0.03	mg/kg				
Acenaphthylene	DETSC 3303#	0.03	mg/kg				
Acenaphthene	DETSC 3303#	0.03	mg/kg				
Fluorene	DETSC 3303	0.03	mg/kg				
Phenanthrene	DETSC 3303#	0.03	mg/kg				
Anthracene	DETSC 3303	0.03	mg/kg				
Fluoranthene	DETSC 3303#	0.03	mg/kg				
Pyrene	DETSC 3303#	0.03	mg/kg				
Benzo(a)anthracene	DETSC 3303#	0.03	mg/kg				
Chrysene	DETSC 3303	0.03	mg/kg				
Benzo(b)fluoranthene	DETSC 3303#	0.03	mg/kg				
Benzo(k)fluoranthene	DETSC 3303#	0.03	mg/kg				
Benzo(a)pyrene	DETSC 3303#	0.03	mg/kg				
Indeno(1,2,3-c,d)pyrene	DETSC 3303#	0.03	mg/kg				
Dibenzo(a,h)anthracene	DETSC 3303#	0.03	mg/kg				
Benzo(g,h,i)perylene	DETSC 3303#	0.03	mg/kg				
PAH - USEPA 16, Total	DETSC 3303	0.1	mg/kg				

Summary of Chemical Analysis

Soil/Misc Samples

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The Former SSI Steelworks, Redcar - Ground

Investigation Contract - Priority Areas Within SSI

Contract Title Landholdings, Contract 3

Lab No	1268016	1268017	1268018	1268019
Sample ID	S3-TPA26	S3-TPA28	S3-TPA31	S3-TPA42
Depth	2.20	0.30	2.50	1.00
Other ID	9	3	9	3
Sample Type	B	B	B	B
Sampling Date	19/10/17	19/10/17	19/10/17	19/10/17
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
PCBs							
PCB 28 + PCB 31	DETSC 3401#	0.01	mg/kg				
PCB 52	DETSC 3401#	0.01	mg/kg				
PCB 101	DETSC 3401#	0.01	mg/kg				
PCB 118	DETSC 3401#	0.01	mg/kg				
PCB 153	DETSC 3401#	0.01	mg/kg				
PCB 138	DETSC 3401#	0.01	mg/kg				
PCB 180	DETSC 3401#	0.01	mg/kg				
PCB 7 Total	DETSC 3401#	0.01	mg/kg				
Phenols							
Phenol - Monohydric	DETSC 2130#	0.3	mg/kg				

Summary of Chemical Analysis

Soil/Misc Samples

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The Former SSI Steelworks, Redcar - Ground

Investigation Contract - Priority Areas Within SSI

Contract Title Landholdings, Contract 3

Lab No	1268020	1268021	1268022	1268023
Sample ID	S3-TPB01	S3-TPB05	S3-TPB07	S3-TPB10
Depth	1.80	2.50	1.50	2.50
Other ID	7	7	6	9
Sample Type	B	B	LB	B
Sampling Date	26/10/17	27/10/17	27/10/17	30/10/17
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
Asbestos Quantification	DETSC 1102	0					
Metals							
Aluminium	DETSC 2301*	1	mg/kg				
Antimony	DETSC 2301*	1	mg/kg				
Arsenic	DETSC 2301#	0.2	mg/kg				
Barium	DETSC 2301#	1.5	mg/kg				
Beryllium	DETSC 2301#	0.2	mg/kg				
Boron, Water Soluble	DETSC 2123#	0.2	mg/kg				
Cadmium	DETSC 2301#	0.1	mg/kg				
Chromium	DETSC 2301#	0.15	mg/kg				
Chromium, Hexavalent	DETSC 2204*	1	mg/kg				
Copper	DETSC 2301#	0.2	mg/kg				
Iron	DETSC 2301	25	mg/kg				
Lead	DETSC 2301#	0.3	mg/kg				
Magnesium	DETSC 2301*	1	mg/kg				
Manganese	DETSC 2301#	20	mg/kg				
Mercury	DETSC 2325#	0.05	mg/kg				
Molybdenum	DETSC 2301#	0.4	mg/kg				
Nickel	DETSC 2301#	1	mg/kg				
Silicon	DETSC 2301*	10	mg/kg				
Vanadium	DETSC 2301#	0.8	mg/kg				
Zinc	DETSC 2301#	1	mg/kg				
Inorganics							
Loss on Ignition at 440oC	DETSC 2003#	0.01	%				5.3
pH	DETSC 2008#			11.7	11.5	10.9	9.8
Cyanide, Total	DETSC 2130#	0.1	mg/kg				
Cyanide, Free	DETSC 2130#	0.1	mg/kg				
Cyanide, Complex	DETSC 2130*	0.2	mg/kg				
Thiocyanate	DETSC 2130#	0.6	mg/kg				
FOC	DETSC 2002	0.001		0.008			
Organic matter	DETSC 2002#	0.1	%	1.3			
Sulphate Aqueous Extract as SO4	DETSC 2076#	10	mg/l	1500	730	1300	580
Sulphur (free)	DETSC 3049#	0.75	mg/kg				
Sulphur as S, Total	DETSC 2320	0.01	%	0.52	0.58	0.40	0.27
Sulphate as SO4, Total	DETSC 2321#	0.01	%	1.2	1.3	0.77	0.33

Summary of Chemical Analysis

Soil/Misc Samples

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Contract Title Landholdings, Contract 3

Lab No	1268020	1268021	1268022	1268023
Sample ID	S3-TPB01	S3-TPB05	S3-TPB07	S3-TPB10
Depth	1.80	2.50	1.50	2.50
Other ID	7	7	6	9
Sample Type	B	B	LB	B
Sampling Date	26/10/17	27/10/17	27/10/17	30/10/17
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
Petroleum Hydrocarbons							
Aliphatic C5-C6	DETSC 3321*	0.01	mg/kg				
Aliphatic C6-C8	DETSC 3321*	0.01	mg/kg				
Aliphatic C8-C10	DETSC 3321*	0.01	mg/kg				
Aliphatic C10-C12	DETSC 3072#	1.5	mg/kg				
Aliphatic C12-C16	DETSC 3072#	1.2	mg/kg				
Aliphatic C16-C21	DETSC 3072#	1.5	mg/kg				
Aliphatic C21-C35	DETSC 3072#	3.4	mg/kg				
Aliphatic C5-C35	DETSC 3072*	10	mg/kg				
Aromatic C5-C7	DETSC 3321*	0.01	mg/kg				
Aromatic C7-C8	DETSC 3321*	0.01	mg/kg				
Aromatic C8-C10	DETSC 3321*	0.01	mg/kg				
Aromatic C10-C12	DETSC 3072#	0.9	mg/kg				
Aromatic C12-C16	DETSC 3072#	0.5	mg/kg				
Aromatic C16-C21	DETSC 3072#	0.6	mg/kg				
Aromatic C21-C35	DETSC 3072#	1.4	mg/kg				
Aromatic C5-C35	DETSC 3072*	10	mg/kg				
TPH Ali/Aro Total	DETSC 3072*	10	mg/kg				
PAHs							
Naphthalene	DETSC 3303#	0.03	mg/kg				
Acenaphthylene	DETSC 3303#	0.03	mg/kg				
Acenaphthene	DETSC 3303#	0.03	mg/kg				
Fluorene	DETSC 3303	0.03	mg/kg				
Phenanthrene	DETSC 3303#	0.03	mg/kg				
Anthracene	DETSC 3303	0.03	mg/kg				
Fluoranthene	DETSC 3303#	0.03	mg/kg				
Pyrene	DETSC 3303#	0.03	mg/kg				
Benzo(a)anthracene	DETSC 3303#	0.03	mg/kg				
Chrysene	DETSC 3303	0.03	mg/kg				
Benzo(b)fluoranthene	DETSC 3303#	0.03	mg/kg				
Benzo(k)fluoranthene	DETSC 3303#	0.03	mg/kg				
Benzo(a)pyrene	DETSC 3303#	0.03	mg/kg				
Indeno(1,2,3-c,d)pyrene	DETSC 3303#	0.03	mg/kg				
Dibenzo(a,h)anthracene	DETSC 3303#	0.03	mg/kg				
Benzo(g,h,i)perylene	DETSC 3303#	0.03	mg/kg				
PAH - USEPA 16, Total	DETSC 3303	0.1	mg/kg				

Summary of Chemical Analysis

Soil/Misc Samples

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The Former SSI Steelworks, Redcar - Ground

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Contract Title Landholdings, Contract 3

Lab No	1268020	1268021	1268022	1268023
Sample ID	S3-TPB01	S3-TPB05	S3-TPB07	S3-TPB10
Depth	1.80	2.50	1.50	2.50
Other ID	7	7	6	9
Sample Type	B	B	LB	B
Sampling Date	26/10/17	27/10/17	27/10/17	30/10/17
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
PCBs							
PCB 28 + PCB 31	DETSC 3401#	0.01	mg/kg				
PCB 52	DETSC 3401#	0.01	mg/kg				
PCB 101	DETSC 3401#	0.01	mg/kg				
PCB 118	DETSC 3401#	0.01	mg/kg				
PCB 153	DETSC 3401#	0.01	mg/kg				
PCB 138	DETSC 3401#	0.01	mg/kg				
PCB 180	DETSC 3401#	0.01	mg/kg				
PCB 7 Total	DETSC 3401#	0.01	mg/kg				
Phenols							
Phenol - Monohydric	DETSC 2130#	0.3	mg/kg				

Summary of Chemical Analysis

Soil/Misc Samples

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The Former SSI Steelworks, Redcar - Ground

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Contract Title Landholdings, Contract 3

Lab No	1268024	1268025	1268026	1268027
Sample ID	S3-TPB13	S3-TPB14	S3-TPB15	S3-TPB17
Depth	0.70	2.20	2.00	0.60
Other ID	5	9	9	5
Sample Type	B	B	B	B
Sampling Date	31/10/17	25/10/17	31/10/17	31/10/17
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
Asbestos Quantification	DETSC 1102	0					
Metals							
Aluminium	DETSC 2301*	1	mg/kg				
Antimony	DETSC 2301*	1	mg/kg				
Arsenic	DETSC 2301#	0.2	mg/kg				
Barium	DETSC 2301#	1.5	mg/kg				
Beryllium	DETSC 2301#	0.2	mg/kg				
Boron, Water Soluble	DETSC 2123#	0.2	mg/kg				
Cadmium	DETSC 2301#	0.1	mg/kg				
Chromium	DETSC 2301#	0.15	mg/kg				
Chromium, Hexavalent	DETSC 2204*	1	mg/kg				
Copper	DETSC 2301#	0.2	mg/kg				
Iron	DETSC 2301	25	mg/kg				
Lead	DETSC 2301#	0.3	mg/kg				
Magnesium	DETSC 2301*	1	mg/kg				
Manganese	DETSC 2301#	20	mg/kg				
Mercury	DETSC 2325#	0.05	mg/kg				
Molybdenum	DETSC 2301#	0.4	mg/kg				
Nickel	DETSC 2301#	1	mg/kg				
Silicon	DETSC 2301*	10	mg/kg				
Vanadium	DETSC 2301#	0.8	mg/kg				
Zinc	DETSC 2301#	1	mg/kg				
Inorganics							
Loss on Ignition at 440oC	DETSC 2003#	0.01	%	2.9			
pH	DETSC 2008#			12.1	8.1	9.1	11.2
Cyanide, Total	DETSC 2130#	0.1	mg/kg				
Cyanide, Free	DETSC 2130#	0.1	mg/kg				
Cyanide, Complex	DETSC 2130*	0.2	mg/kg				
Thiocyanate	DETSC 2130#	0.6	mg/kg				
FOC	DETSC 2002	0.001					
Organic matter	DETSC 2002#	0.1	%			1.8	
Sulphate Aqueous Extract as SO4	DETSC 2076#	10	mg/l	170	230	180	280
Sulphur (free)	DETSC 3049#	0.75	mg/kg				
Sulphur as S, Total	DETSC 2320	0.01	%	0.34		0.05	0.46
Sulphate as SO4, Total	DETSC 2321#	0.01	%	0.43		0.09	0.82

Summary of Chemical Analysis

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The Former SSI Steelworks, Redcar - Ground

Investigation Contract - Priority Areas Within SSI

Contract Title Landholdings, Contract 3

Lab No	1268024	1268025	1268026	1268027
Sample ID	S3-TPB13	S3-TPB14	S3-TPB15	S3-TPB17
Depth	0.70	2.20	2.00	0.60
Other ID	5	9	9	5
Sample Type	B	B	B	B
Sampling Date	31/10/17	25/10/17	31/10/17	31/10/17
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
Petroleum Hydrocarbons							
Aliphatic C5-C6	DETSC 3321*	0.01	mg/kg				
Aliphatic C6-C8	DETSC 3321*	0.01	mg/kg				
Aliphatic C8-C10	DETSC 3321*	0.01	mg/kg				
Aliphatic C10-C12	DETSC 3072#	1.5	mg/kg				
Aliphatic C12-C16	DETSC 3072#	1.2	mg/kg				
Aliphatic C16-C21	DETSC 3072#	1.5	mg/kg				
Aliphatic C21-C35	DETSC 3072#	3.4	mg/kg				
Aliphatic C5-C35	DETSC 3072*	10	mg/kg				
Aromatic C5-C7	DETSC 3321*	0.01	mg/kg				
Aromatic C7-C8	DETSC 3321*	0.01	mg/kg				
Aromatic C8-C10	DETSC 3321*	0.01	mg/kg				
Aromatic C10-C12	DETSC 3072#	0.9	mg/kg				
Aromatic C12-C16	DETSC 3072#	0.5	mg/kg				
Aromatic C16-C21	DETSC 3072#	0.6	mg/kg				
Aromatic C21-C35	DETSC 3072#	1.4	mg/kg				
Aromatic C5-C35	DETSC 3072*	10	mg/kg				
TPH Ali/Aro Total	DETSC 3072*	10	mg/kg				
PAHs							
Naphthalene	DETSC 3303#	0.03	mg/kg				
Acenaphthylene	DETSC 3303#	0.03	mg/kg				
Acenaphthene	DETSC 3303#	0.03	mg/kg				
Fluorene	DETSC 3303	0.03	mg/kg				
Phenanthrene	DETSC 3303#	0.03	mg/kg				
Anthracene	DETSC 3303	0.03	mg/kg				
Fluoranthene	DETSC 3303#	0.03	mg/kg				
Pyrene	DETSC 3303#	0.03	mg/kg				
Benzo(a)anthracene	DETSC 3303#	0.03	mg/kg				
Chrysene	DETSC 3303	0.03	mg/kg				
Benzo(b)fluoranthene	DETSC 3303#	0.03	mg/kg				
Benzo(k)fluoranthene	DETSC 3303#	0.03	mg/kg				
Benzo(a)pyrene	DETSC 3303#	0.03	mg/kg				
Indeno(1,2,3-c,d)pyrene	DETSC 3303#	0.03	mg/kg				
Dibenzo(a,h)anthracene	DETSC 3303#	0.03	mg/kg				
Benzo(g,h,i)perylene	DETSC 3303#	0.03	mg/kg				
PAH - USEPA 16, Total	DETSC 3303	0.1	mg/kg				

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The Former SSI Steelworks, Redcar - Ground

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Contract Title Landholdings, Contract 3

Lab No	1268024	1268025	1268026	1268027
Sample ID	S3-TPB13	S3-TPB14	S3-TPB15	S3-TPB17
Depth	0.70	2.20	2.00	0.60
Other ID	5	9	9	5
Sample Type	B	B	B	B
Sampling Date	31/10/17	25/10/17	31/10/17	31/10/17
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
PCBs							
PCB 28 + PCB 31	DETSC 3401#	0.01	mg/kg				
PCB 52	DETSC 3401#	0.01	mg/kg				
PCB 101	DETSC 3401#	0.01	mg/kg				
PCB 118	DETSC 3401#	0.01	mg/kg				
PCB 153	DETSC 3401#	0.01	mg/kg				
PCB 138	DETSC 3401#	0.01	mg/kg				
PCB 180	DETSC 3401#	0.01	mg/kg				
PCB 7 Total	DETSC 3401#	0.01	mg/kg				
Phenols							
Phenol - Monohydric	DETSC 2130#	0.3	mg/kg				

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Contract Title Landholdings, Contract 3

Lab No	1268028	1268029	1268030	1268031
Sample ID	S3-TPB18	S3-TPB21	S3-TPB29	S3-TPB31
Depth	0.50	1.10	1.00	1.00
Other ID	2	6	3	3
Sample Type	J	B	LB	B
Sampling Date	31/10/17	01/11/17	31/10/17	31/10/17
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
Asbestos Quantification	DETSC 1102	0					
Metals							
Aluminium	DETSC 2301*	1	mg/kg				
Antimony	DETSC 2301*	1	mg/kg				
Arsenic	DETSC 2301#	0.2	mg/kg				
Barium	DETSC 2301#	1.5	mg/kg				
Beryllium	DETSC 2301#	0.2	mg/kg				
Boron, Water Soluble	DETSC 2123#	0.2	mg/kg				
Cadmium	DETSC 2301#	0.1	mg/kg				
Chromium	DETSC 2301#	0.15	mg/kg				
Chromium, Hexavalent	DETSC 2204*	1	mg/kg				
Copper	DETSC 2301#	0.2	mg/kg				
Iron	DETSC 2301	25	mg/kg				
Lead	DETSC 2301#	0.3	mg/kg				
Magnesium	DETSC 2301*	1	mg/kg				
Manganese	DETSC 2301#	20	mg/kg				
Mercury	DETSC 2325#	0.05	mg/kg				
Molybdenum	DETSC 2301#	0.4	mg/kg				
Nickel	DETSC 2301#	1	mg/kg				
Silicon	DETSC 2301*	10	mg/kg				
Vanadium	DETSC 2301#	0.8	mg/kg				
Zinc	DETSC 2301#	1	mg/kg				
Inorganics							
Loss on Ignition at 440oC	DETSC 2003#	0.01	%			3.5	2.9
pH	DETSC 2008#			11.3	11.4	10.9	12.4
Cyanide, Total	DETSC 2130#	0.1	mg/kg				
Cyanide, Free	DETSC 2130#	0.1	mg/kg				
Cyanide, Complex	DETSC 2130*	0.2	mg/kg				
Thiocyanate	DETSC 2130#	0.6	mg/kg				
FOC	DETSC 2002	0.001				0.008	0.006
Organic matter	DETSC 2002#	0.1	%			1.4	1.1
Sulphate Aqueous Extract as SO4	DETSC 2076#	10	mg/l	1700	320	1300	< 10
Sulphur (free)	DETSC 3049#	0.75	mg/kg				
Sulphur as S, Total	DETSC 2320	0.01	%	0.61	0.44	0.45	0.09
Sulphate as SO4, Total	DETSC 2321#	0.01	%	1.3	0.86	0.63	0.24

Summary of Chemical Analysis

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The Former SSI Steelworks, Redcar - Ground

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Contract Title Landholdings, Contract 3

Lab No	1268028	1268029	1268030	1268031
Sample ID	S3-TPB18	S3-TPB21	S3-TPB29	S3-TPB31
Depth	0.50	1.10	1.00	1.00
Other ID	2	6	3	3
Sample Type	J	B	LB	B
Sampling Date	31/10/17	01/11/17	31/10/17	31/10/17
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
Petroleum Hydrocarbons							
Aliphatic C5-C6	DETSC 3321*	0.01	mg/kg				
Aliphatic C6-C8	DETSC 3321*	0.01	mg/kg				
Aliphatic C8-C10	DETSC 3321*	0.01	mg/kg				
Aliphatic C10-C12	DETSC 3072#	1.5	mg/kg				
Aliphatic C12-C16	DETSC 3072#	1.2	mg/kg				
Aliphatic C16-C21	DETSC 3072#	1.5	mg/kg				
Aliphatic C21-C35	DETSC 3072#	3.4	mg/kg				
Aliphatic C5-C35	DETSC 3072*	10	mg/kg				
Aromatic C5-C7	DETSC 3321*	0.01	mg/kg				
Aromatic C7-C8	DETSC 3321*	0.01	mg/kg				
Aromatic C8-C10	DETSC 3321*	0.01	mg/kg				
Aromatic C10-C12	DETSC 3072#	0.9	mg/kg				
Aromatic C12-C16	DETSC 3072#	0.5	mg/kg				
Aromatic C16-C21	DETSC 3072#	0.6	mg/kg				
Aromatic C21-C35	DETSC 3072#	1.4	mg/kg				
Aromatic C5-C35	DETSC 3072*	10	mg/kg				
TPH Ali/Aro Total	DETSC 3072*	10	mg/kg				
PAHs							
Naphthalene	DETSC 3303#	0.03	mg/kg				
Acenaphthylene	DETSC 3303#	0.03	mg/kg				
Acenaphthene	DETSC 3303#	0.03	mg/kg				
Fluorene	DETSC 3303	0.03	mg/kg				
Phenanthrene	DETSC 3303#	0.03	mg/kg				
Anthracene	DETSC 3303	0.03	mg/kg				
Fluoranthene	DETSC 3303#	0.03	mg/kg				
Pyrene	DETSC 3303#	0.03	mg/kg				
Benzo(a)anthracene	DETSC 3303#	0.03	mg/kg				
Chrysene	DETSC 3303	0.03	mg/kg				
Benzo(b)fluoranthene	DETSC 3303#	0.03	mg/kg				
Benzo(k)fluoranthene	DETSC 3303#	0.03	mg/kg				
Benzo(a)pyrene	DETSC 3303#	0.03	mg/kg				
Indeno(1,2,3-c,d)pyrene	DETSC 3303#	0.03	mg/kg				
Dibenzo(a,h)anthracene	DETSC 3303#	0.03	mg/kg				
Benzo(g,h,i)perylene	DETSC 3303#	0.03	mg/kg				
PAH - USEPA 16, Total	DETSC 3303	0.1	mg/kg				

Summary of Chemical Analysis

Soil/Misc Samples

Our Ref 4155 Combined Report

Client Ref 4155

The Former SSI Steelworks, Redcar - Ground

Investigation Contract - Priority Areas Within SSI

Contract Title Landholdings, Contract 3

Lab No	1268028	1268029	1268030	1268031
Sample ID	S3-TPB18	S3-TPB21	S3-TPB29	S3-TPB31
Depth	0.50	1.10	1.00	1.00
Other ID	2	6	3	3
Sample Type	J	B	LB	B
Sampling Date	31/10/17	01/11/17	31/10/17	31/10/17
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
PCBs							
PCB 28 + PCB 31	DETSC 3401#	0.01	mg/kg				
PCB 52	DETSC 3401#	0.01	mg/kg				
PCB 101	DETSC 3401#	0.01	mg/kg				
PCB 118	DETSC 3401#	0.01	mg/kg				
PCB 153	DETSC 3401#	0.01	mg/kg				
PCB 138	DETSC 3401#	0.01	mg/kg				
PCB 180	DETSC 3401#	0.01	mg/kg				
PCB 7 Total	DETSC 3401#	0.01	mg/kg				
Phenols							
Phenol - Monohydric	DETSC 2130#	0.3	mg/kg				

Summary of Chemical Analysis

Soil/Misc Samples

Our Ref 4155 Combined Report

Client Ref 4155

The Former SSI Steelworks, Redcar - Ground

Investigation Contract - Priority Areas Within SSI

Contract Title Landholdings, Contract 3

Lab No	1268032	1268033	1268034	1268035
Sample ID	S3-TPB35	S3-TPP37	S3-TPB42	S3-TPB44
Depth	1.00	2.00	2.00	1.00
Other ID	3	6	6	3
Sample Type	LB	B	B	B
Sampling Date	30/10/17	27/10/17	27/10/17	18/10/17
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
Asbestos Quantification	DETSC 1102	0					
Metals							
Aluminium	DETSC 2301*	1	mg/kg				
Antimony	DETSC 2301*	1	mg/kg				
Arsenic	DETSC 2301#	0.2	mg/kg				
Barium	DETSC 2301#	1.5	mg/kg				
Beryllium	DETSC 2301#	0.2	mg/kg				
Boron, Water Soluble	DETSC 2123#	0.2	mg/kg				
Cadmium	DETSC 2301#	0.1	mg/kg				
Chromium	DETSC 2301#	0.15	mg/kg				
Chromium, Hexavalent	DETSC 2204*	1	mg/kg				
Copper	DETSC 2301#	0.2	mg/kg				
Iron	DETSC 2301	25	mg/kg				
Lead	DETSC 2301#	0.3	mg/kg				
Magnesium	DETSC 2301*	1	mg/kg				
Manganese	DETSC 2301#	20	mg/kg				
Mercury	DETSC 2325#	0.05	mg/kg				
Molybdenum	DETSC 2301#	0.4	mg/kg				
Nickel	DETSC 2301#	1	mg/kg				
Silicon	DETSC 2301*	10	mg/kg				
Vanadium	DETSC 2301#	0.8	mg/kg				
Zinc	DETSC 2301#	1	mg/kg				
Inorganics							
Loss on Ignition at 440oC	DETSC 2003#	0.01	%			4.1	5.6
pH	DETSC 2008#			11.1	9.6	11.4	11.9
Cyanide, Total	DETSC 2130#	0.1	mg/kg				
Cyanide, Free	DETSC 2130#	0.1	mg/kg				
Cyanide, Complex	DETSC 2130*	0.2	mg/kg				
Thiocyanate	DETSC 2130#	0.6	mg/kg				
FOC	DETSC 2002	0.001		0.011	0.009	0.007	0.009
Organic matter	DETSC 2002#	0.1	%	1.9	1.6	1.3	1.6
Sulphate Aqueous Extract as SO4	DETSC 2076#	10	mg/l	760	240	880	110
Sulphur (free)	DETSC 3049#	0.75	mg/kg				
Sulphur as S, Total	DETSC 2320	0.01	%	0.41	0.05	0.63	0.16
Sulphate as SO4, Total	DETSC 2321#	0.01	%	0.51	0.12	1.2	0.47

Summary of Chemical Analysis

Soil/Misc Samples

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The Former SSI Steelworks, Redcar - Ground

Investigation Contract - Priority Areas Within SSI

Contract Title Landholdings, Contract 3

Lab No	1268032	1268033	1268034	1268035
Sample ID	S3-TPB35	S3-TPP37	S3-TPB42	S3-TPB44
Depth	1.00	2.00	2.00	1.00
Other ID	3	6	6	3
Sample Type	LB	B	B	B
Sampling Date	30/10/17	27/10/17	27/10/17	18/10/17
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
Petroleum Hydrocarbons							
Aliphatic C5-C6	DETSC 3321*	0.01	mg/kg				
Aliphatic C6-C8	DETSC 3321*	0.01	mg/kg				
Aliphatic C8-C10	DETSC 3321*	0.01	mg/kg				
Aliphatic C10-C12	DETSC 3072#	1.5	mg/kg				
Aliphatic C12-C16	DETSC 3072#	1.2	mg/kg				
Aliphatic C16-C21	DETSC 3072#	1.5	mg/kg				
Aliphatic C21-C35	DETSC 3072#	3.4	mg/kg				
Aliphatic C5-C35	DETSC 3072*	10	mg/kg				
Aromatic C5-C7	DETSC 3321*	0.01	mg/kg				
Aromatic C7-C8	DETSC 3321*	0.01	mg/kg				
Aromatic C8-C10	DETSC 3321*	0.01	mg/kg				
Aromatic C10-C12	DETSC 3072#	0.9	mg/kg				
Aromatic C12-C16	DETSC 3072#	0.5	mg/kg				
Aromatic C16-C21	DETSC 3072#	0.6	mg/kg				
Aromatic C21-C35	DETSC 3072#	1.4	mg/kg				
Aromatic C5-C35	DETSC 3072*	10	mg/kg				
TPH Ali/Aro Total	DETSC 3072*	10	mg/kg				
PAHs							
Naphthalene	DETSC 3303#	0.03	mg/kg				
Acenaphthylene	DETSC 3303#	0.03	mg/kg				
Acenaphthene	DETSC 3303#	0.03	mg/kg				
Fluorene	DETSC 3303	0.03	mg/kg				
Phenanthrene	DETSC 3303#	0.03	mg/kg				
Anthracene	DETSC 3303	0.03	mg/kg				
Fluoranthene	DETSC 3303#	0.03	mg/kg				
Pyrene	DETSC 3303#	0.03	mg/kg				
Benzo(a)anthracene	DETSC 3303#	0.03	mg/kg				
Chrysene	DETSC 3303	0.03	mg/kg				
Benzo(b)fluoranthene	DETSC 3303#	0.03	mg/kg				
Benzo(k)fluoranthene	DETSC 3303#	0.03	mg/kg				
Benzo(a)pyrene	DETSC 3303#	0.03	mg/kg				
Indeno(1,2,3-c,d)pyrene	DETSC 3303#	0.03	mg/kg				
Dibenzo(a,h)anthracene	DETSC 3303#	0.03	mg/kg				
Benzo(g,h,i)perylene	DETSC 3303#	0.03	mg/kg				
PAH - USEPA 16, Total	DETSC 3303	0.1	mg/kg				

Summary of Chemical Analysis

Soil/Misc Samples

Our Ref 4155 Combined Report

Client Ref 4155

The Former SSI Steelworks, Redcar - Ground

Investigation Contract - Priority Areas Within SSI

Contract Title Landholdings, Contract 3

Lab No	1268032	1268033	1268034	1268035
Sample ID	S3-TPB35	S3-TPP37	S3-TPB42	S3-TPB44
Depth	1.00	2.00	2.00	1.00
Other ID	3	6	6	3
Sample Type	LB	B	B	B
Sampling Date	30/10/17	27/10/17	27/10/17	18/10/17
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
PCBs							
PCB 28 + PCB 31	DETSC 3401#	0.01	mg/kg				
PCB 52	DETSC 3401#	0.01	mg/kg				
PCB 101	DETSC 3401#	0.01	mg/kg				
PCB 118	DETSC 3401#	0.01	mg/kg				
PCB 153	DETSC 3401#	0.01	mg/kg				
PCB 138	DETSC 3401#	0.01	mg/kg				
PCB 180	DETSC 3401#	0.01	mg/kg				
PCB 7 Total	DETSC 3401#	0.01	mg/kg				
Phenols							
Phenol - Monohydric	DETSC 2130#	0.3	mg/kg				

Summary of Chemical Analysis

Soil/Misc Samples

Our Ref 4155 Combined Report

Client Ref 4155

The Former SSI Steelworks, Redcar - Ground

Investigation Contract - Priority Areas Within SSI

Contract Title Landholdings, Contract 3

Lab No	1268036	1268037	1268038	1268039
Sample ID	S3-TPB45	S3-TPB47	S3-TPB48	S3-TPB51
Depth	1.00	1.00	2.00	2.50
Other ID	3	3	6	9
Sample Type	B	LB	B	B
Sampling Date	18/10/17	27/10/17	27/10/17	18/10/17
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
Asbestos Quantification	DETSC 1102	0					
Metals							
Aluminium	DETSC 2301*	1	mg/kg				
Antimony	DETSC 2301*	1	mg/kg				
Arsenic	DETSC 2301#	0.2	mg/kg				
Barium	DETSC 2301#	1.5	mg/kg				
Beryllium	DETSC 2301#	0.2	mg/kg				
Boron, Water Soluble	DETSC 2123#	0.2	mg/kg				
Cadmium	DETSC 2301#	0.1	mg/kg				
Chromium	DETSC 2301#	0.15	mg/kg				
Chromium, Hexavalent	DETSC 2204*	1	mg/kg				
Copper	DETSC 2301#	0.2	mg/kg				
Iron	DETSC 2301	25	mg/kg				
Lead	DETSC 2301#	0.3	mg/kg				
Magnesium	DETSC 2301*	1	mg/kg				
Manganese	DETSC 2301#	20	mg/kg				
Mercury	DETSC 2325#	0.05	mg/kg				
Molybdenum	DETSC 2301#	0.4	mg/kg				
Nickel	DETSC 2301#	1	mg/kg				
Silicon	DETSC 2301*	10	mg/kg				
Vanadium	DETSC 2301#	0.8	mg/kg				
Zinc	DETSC 2301#	1	mg/kg				
Inorganics							
Loss on Ignition at 440oC	DETSC 2003#	0.01	%				
pH	DETSC 2008#			11.5	12.1	11.4	9.1
Cyanide, Total	DETSC 2130#	0.1	mg/kg				
Cyanide, Free	DETSC 2130#	0.1	mg/kg				
Cyanide, Complex	DETSC 2130*	0.2	mg/kg				
Thiocyanate	DETSC 2130#	0.6	mg/kg				
FOC	DETSC 2002	0.001		0.018	0.003	0.014	
Organic matter	DETSC 2002#	0.1	%	3.1	0.6	2.5	
Sulphate Aqueous Extract as SO4	DETSC 2076#	10	mg/l	530	200	460	340
Sulphur (free)	DETSC 3049#	0.75	mg/kg				
Sulphur as S, Total	DETSC 2320	0.01	%	0.23	0.70	0.32	
Sulphate as SO4, Total	DETSC 2321#	0.01	%	0.49	1.7	0.74	

Summary of Chemical Analysis

Soil/Misc Samples

Our Ref 4155 Combined Report

Client Ref 4155

The Former SSI Steelworks, Redcar - Ground

Investigation Contract - Priority Areas Within SSI

Contract Title Landholdings, Contract 3

Lab No	1268036	1268037	1268038	1268039
Sample ID	S3-TPB45	S3-TPB47	S3-TPB48	S3-TPB51
Depth	1.00	1.00	2.00	2.50
Other ID	3	3	6	9
Sample Type	B	LB	B	B
Sampling Date	18/10/17	27/10/17	27/10/17	18/10/17
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
Petroleum Hydrocarbons							
Aliphatic C5-C6	DETSC 3321*	0.01	mg/kg				
Aliphatic C6-C8	DETSC 3321*	0.01	mg/kg				
Aliphatic C8-C10	DETSC 3321*	0.01	mg/kg				
Aliphatic C10-C12	DETSC 3072#	1.5	mg/kg				
Aliphatic C12-C16	DETSC 3072#	1.2	mg/kg				
Aliphatic C16-C21	DETSC 3072#	1.5	mg/kg				
Aliphatic C21-C35	DETSC 3072#	3.4	mg/kg				
Aliphatic C5-C35	DETSC 3072*	10	mg/kg				
Aromatic C5-C7	DETSC 3321*	0.01	mg/kg				
Aromatic C7-C8	DETSC 3321*	0.01	mg/kg				
Aromatic C8-C10	DETSC 3321*	0.01	mg/kg				
Aromatic C10-C12	DETSC 3072#	0.9	mg/kg				
Aromatic C12-C16	DETSC 3072#	0.5	mg/kg				
Aromatic C16-C21	DETSC 3072#	0.6	mg/kg				
Aromatic C21-C35	DETSC 3072#	1.4	mg/kg				
Aromatic C5-C35	DETSC 3072*	10	mg/kg				
TPH Ali/Aro Total	DETSC 3072*	10	mg/kg				
PAHs							
Naphthalene	DETSC 3303#	0.03	mg/kg				
Acenaphthylene	DETSC 3303#	0.03	mg/kg				
Acenaphthene	DETSC 3303#	0.03	mg/kg				
Fluorene	DETSC 3303	0.03	mg/kg				
Phenanthrene	DETSC 3303#	0.03	mg/kg				
Anthracene	DETSC 3303	0.03	mg/kg				
Fluoranthene	DETSC 3303#	0.03	mg/kg				
Pyrene	DETSC 3303#	0.03	mg/kg				
Benzo(a)anthracene	DETSC 3303#	0.03	mg/kg				
Chrysene	DETSC 3303	0.03	mg/kg				
Benzo(b)fluoranthene	DETSC 3303#	0.03	mg/kg				
Benzo(k)fluoranthene	DETSC 3303#	0.03	mg/kg				
Benzo(a)pyrene	DETSC 3303#	0.03	mg/kg				
Indeno(1,2,3-c,d)pyrene	DETSC 3303#	0.03	mg/kg				
Dibenzo(a,h)anthracene	DETSC 3303#	0.03	mg/kg				
Benzo(g,h,i)perylene	DETSC 3303#	0.03	mg/kg				
PAH - USEPA 16, Total	DETSC 3303	0.1	mg/kg				

Summary of Chemical Analysis

Soil/Misc Samples

Our Ref 4155 Combined Report

Client Ref 4155

The Former SSI Steelworks, Redcar - Ground

Investigation Contract - Priority Areas Within SSI

Contract Title Landholdings, Contract 3

Lab No	1268036	1268037	1268038	1268039
Sample ID	S3-TPB45	S3-TPB47	S3-TPB48	S3-TPB51
Depth	1.00	1.00	2.00	2.50
Other ID	3	3	6	9
Sample Type	B	LB	B	B
Sampling Date	18/10/17	27/10/17	27/10/17	18/10/17
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
PCBs							
PCB 28 + PCB 31	DETSC 3401#	0.01	mg/kg				
PCB 52	DETSC 3401#	0.01	mg/kg				
PCB 101	DETSC 3401#	0.01	mg/kg				
PCB 118	DETSC 3401#	0.01	mg/kg				
PCB 153	DETSC 3401#	0.01	mg/kg				
PCB 138	DETSC 3401#	0.01	mg/kg				
PCB 180	DETSC 3401#	0.01	mg/kg				
PCB 7 Total	DETSC 3401#	0.01	mg/kg				
Phenols							
Phenol - Monohydric	DETSC 2130#	0.3	mg/kg				

Summary of Chemical Analysis

Soil/Misc Samples

Our Ref 4155 Combined Report

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The Former SSI Steelworks, Redcar - Ground

Investigation Contract - Priority Areas Within SSI

Contract Title Landholdings, Contract 3

Lab No	1268040	1268041	1268042	1268043
Sample ID	S3-TPB52	S3-TPB53	S3-TPB54	S3-TPB56
Depth	2.00	1.00	1.00	1.00
Other ID	8	3	4	3
Sample Type	B	B	B	B
Sampling Date	26/10/17	25/10/17	25/10/17	26/10/17
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
Asbestos Quantification	DETSC 1102	0					
Metals							
Aluminium	DETSC 2301*	1	mg/kg				
Antimony	DETSC 2301*	1	mg/kg				
Arsenic	DETSC 2301#	0.2	mg/kg				
Barium	DETSC 2301#	1.5	mg/kg				
Beryllium	DETSC 2301#	0.2	mg/kg				
Boron, Water Soluble	DETSC 2123#	0.2	mg/kg				
Cadmium	DETSC 2301#	0.1	mg/kg				
Chromium	DETSC 2301#	0.15	mg/kg				
Chromium, Hexavalent	DETSC 2204*	1	mg/kg				
Copper	DETSC 2301#	0.2	mg/kg				
Iron	DETSC 2301	25	mg/kg				
Lead	DETSC 2301#	0.3	mg/kg				
Magnesium	DETSC 2301*	1	mg/kg				
Manganese	DETSC 2301#	20	mg/kg				
Mercury	DETSC 2325#	0.05	mg/kg				
Molybdenum	DETSC 2301#	0.4	mg/kg				
Nickel	DETSC 2301#	1	mg/kg				
Silicon	DETSC 2301*	10	mg/kg				
Vanadium	DETSC 2301#	0.8	mg/kg				
Zinc	DETSC 2301#	1	mg/kg				
Inorganics							
Loss on Ignition at 440oC	DETSC 2003#	0.01	%				
pH	DETSC 2008#			8.6	10.2	11.3	10.9
Cyanide, Total	DETSC 2130#	0.1	mg/kg				
Cyanide, Free	DETSC 2130#	0.1	mg/kg				
Cyanide, Complex	DETSC 2130*	0.2	mg/kg				
Thiocyanate	DETSC 2130#	0.6	mg/kg				
FOC	DETSC 2002	0.001			0.003	0.009	0.002
Organic matter	DETSC 2002#	0.1	%		0.5	1.6	0.4
Sulphate Aqueous Extract as SO4	DETSC 2076#	10	mg/l	160	1600	650	470
Sulphur (free)	DETSC 3049#	0.75	mg/kg				
Sulphur as S, Total	DETSC 2320	0.01	%		0.69	0.66	0.54
Sulphate as SO4, Total	DETSC 2321#	0.01	%		1.2	1.8	0.97

Summary of Chemical Analysis

Soil/Misc Samples

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The Former SSI Steelworks, Redcar - Ground

Investigation Contract - Priority Areas Within SSI

Contract Title Landholdings, Contract 3

Lab No	1268040	1268041	1268042	1268043
Sample ID	S3-TPB52	S3-TPB53	S3-TPB54	S3-TPB56
Depth	2.00	1.00	1.00	1.00
Other ID	8	3	4	3
Sample Type	B	B	B	B
Sampling Date	26/10/17	25/10/17	25/10/17	26/10/17
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
Petroleum Hydrocarbons							
Aliphatic C5-C6	DETSC 3321*	0.01	mg/kg				
Aliphatic C6-C8	DETSC 3321*	0.01	mg/kg				
Aliphatic C8-C10	DETSC 3321*	0.01	mg/kg				
Aliphatic C10-C12	DETSC 3072#	1.5	mg/kg				
Aliphatic C12-C16	DETSC 3072#	1.2	mg/kg				
Aliphatic C16-C21	DETSC 3072#	1.5	mg/kg				
Aliphatic C21-C35	DETSC 3072#	3.4	mg/kg				
Aliphatic C5-C35	DETSC 3072*	10	mg/kg				
Aromatic C5-C7	DETSC 3321*	0.01	mg/kg				
Aromatic C7-C8	DETSC 3321*	0.01	mg/kg				
Aromatic C8-C10	DETSC 3321*	0.01	mg/kg				
Aromatic C10-C12	DETSC 3072#	0.9	mg/kg				
Aromatic C12-C16	DETSC 3072#	0.5	mg/kg				
Aromatic C16-C21	DETSC 3072#	0.6	mg/kg				
Aromatic C21-C35	DETSC 3072#	1.4	mg/kg				
Aromatic C5-C35	DETSC 3072*	10	mg/kg				
TPH Ali/Aro Total	DETSC 3072*	10	mg/kg				
PAHs							
Naphthalene	DETSC 3303#	0.03	mg/kg				
Acenaphthylene	DETSC 3303#	0.03	mg/kg				
Acenaphthene	DETSC 3303#	0.03	mg/kg				
Fluorene	DETSC 3303	0.03	mg/kg				
Phenanthrene	DETSC 3303#	0.03	mg/kg				
Anthracene	DETSC 3303	0.03	mg/kg				
Fluoranthene	DETSC 3303#	0.03	mg/kg				
Pyrene	DETSC 3303#	0.03	mg/kg				
Benzo(a)anthracene	DETSC 3303#	0.03	mg/kg				
Chrysene	DETSC 3303	0.03	mg/kg				
Benzo(b)fluoranthene	DETSC 3303#	0.03	mg/kg				
Benzo(k)fluoranthene	DETSC 3303#	0.03	mg/kg				
Benzo(a)pyrene	DETSC 3303#	0.03	mg/kg				
Indeno(1,2,3-c,d)pyrene	DETSC 3303#	0.03	mg/kg				
Dibenzo(a,h)anthracene	DETSC 3303#	0.03	mg/kg				
Benzo(g,h,i)perylene	DETSC 3303#	0.03	mg/kg				
PAH - USEPA 16, Total	DETSC 3303	0.1	mg/kg				

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The Former SSI Steelworks, Redcar - Ground

Investigation Contract - Priority Areas Within SSI

Contract Title Landholdings, Contract 3

Lab No	1268040	1268041	1268042	1268043
Sample ID	S3-TPB52	S3-TPB53	S3-TPB54	S3-TPB56
Depth	2.00	1.00	1.00	1.00
Other ID	8	3	4	3
Sample Type	B	B	B	B
Sampling Date	26/10/17	25/10/17	25/10/17	26/10/17
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
PCBs							
PCB 28 + PCB 31	DETSC 3401#	0.01	mg/kg				
PCB 52	DETSC 3401#	0.01	mg/kg				
PCB 101	DETSC 3401#	0.01	mg/kg				
PCB 118	DETSC 3401#	0.01	mg/kg				
PCB 153	DETSC 3401#	0.01	mg/kg				
PCB 138	DETSC 3401#	0.01	mg/kg				
PCB 180	DETSC 3401#	0.01	mg/kg				
PCB 7 Total	DETSC 3401#	0.01	mg/kg				
Phenols							
Phenol - Monohydric	DETSC 2130#	0.3	mg/kg				

Summary of Chemical Analysis

Soil/Misc Samples

Our Ref 4155 Combined Report

Client Ref 4155

The Former SSI Steelworks, Redcar - Ground

Investigation Contract - Priority Areas Within SSI

Contract Title Landholdings, Contract 3

Lab No	1268044	1268045	1268046	1268047
Sample ID	S3-TPB57	S3-TPB57	S3-TPB58	S3-TPB59
Depth	2.00	2.40	1.00	2.00
Other ID	6	9	3	7
Sample Type	B	B	LB	B
Sampling Date	19/10/17	19/10/17	19/10/17	19/10/17
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
Asbestos Quantification	DETSC 1102	0					
Metals							
Aluminium	DETSC 2301*	1	mg/kg				
Antimony	DETSC 2301*	1	mg/kg				
Arsenic	DETSC 2301#	0.2	mg/kg				
Barium	DETSC 2301#	1.5	mg/kg				
Beryllium	DETSC 2301#	0.2	mg/kg				
Boron, Water Soluble	DETSC 2123#	0.2	mg/kg				
Cadmium	DETSC 2301#	0.1	mg/kg				
Chromium	DETSC 2301#	0.15	mg/kg				
Chromium, Hexavalent	DETSC 2204*	1	mg/kg				
Copper	DETSC 2301#	0.2	mg/kg				
Iron	DETSC 2301	25	mg/kg				
Lead	DETSC 2301#	0.3	mg/kg				
Magnesium	DETSC 2301*	1	mg/kg				
Manganese	DETSC 2301#	20	mg/kg				
Mercury	DETSC 2325#	0.05	mg/kg				
Molybdenum	DETSC 2301#	0.4	mg/kg				
Nickel	DETSC 2301#	1	mg/kg				
Silicon	DETSC 2301*	10	mg/kg				
Vanadium	DETSC 2301#	0.8	mg/kg				
Zinc	DETSC 2301#	1	mg/kg				
Inorganics							
Loss on Ignition at 440oC	DETSC 2003#	0.01	%	3.0			
pH	DETSC 2008#			11.0	7.9	9.3	10.7
Cyanide, Total	DETSC 2130#	0.1	mg/kg				
Cyanide, Free	DETSC 2130#	0.1	mg/kg				
Cyanide, Complex	DETSC 2130*	0.2	mg/kg				
Thiocyanate	DETSC 2130#	0.6	mg/kg				
FOC	DETSC 2002	0.001		0.010		0.011	0.014
Organic matter	DETSC 2002#	0.1	%	1.6		1.8	2.3
Sulphate Aqueous Extract as SO4	DETSC 2076#	10	mg/l	560	1100	1700	820
Sulphur (free)	DETSC 3049#	0.75	mg/kg				
Sulphur as S, Total	DETSC 2320	0.01	%	0.33		0.59	0.35
Sulphate as SO4, Total	DETSC 2321#	0.01	%	0.69		1.3	0.67

Summary of Chemical Analysis

Soil/Misc Samples

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The Former SSI Steelworks, Redcar - Ground

Investigation Contract - Priority Areas Within SSI

Contract Title Landholdings, Contract 3

Lab No	1268044	1268045	1268046	1268047
Sample ID	S3-TPB57	S3-TPB57	S3-TPB58	S3-TPB59
Depth	2.00	2.40	1.00	2.00
Other ID	6	9	3	7
Sample Type	B	B	LB	B
Sampling Date	19/10/17	19/10/17	19/10/17	19/10/17
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
Petroleum Hydrocarbons							
Aliphatic C5-C6	DETSC 3321*	0.01	mg/kg				
Aliphatic C6-C8	DETSC 3321*	0.01	mg/kg				
Aliphatic C8-C10	DETSC 3321*	0.01	mg/kg				
Aliphatic C10-C12	DETSC 3072#	1.5	mg/kg				
Aliphatic C12-C16	DETSC 3072#	1.2	mg/kg				
Aliphatic C16-C21	DETSC 3072#	1.5	mg/kg				
Aliphatic C21-C35	DETSC 3072#	3.4	mg/kg				
Aliphatic C5-C35	DETSC 3072*	10	mg/kg				
Aromatic C5-C7	DETSC 3321*	0.01	mg/kg				
Aromatic C7-C8	DETSC 3321*	0.01	mg/kg				
Aromatic C8-C10	DETSC 3321*	0.01	mg/kg				
Aromatic C10-C12	DETSC 3072#	0.9	mg/kg				
Aromatic C12-C16	DETSC 3072#	0.5	mg/kg				
Aromatic C16-C21	DETSC 3072#	0.6	mg/kg				
Aromatic C21-C35	DETSC 3072#	1.4	mg/kg				
Aromatic C5-C35	DETSC 3072*	10	mg/kg				
TPH Ali/Aro Total	DETSC 3072*	10	mg/kg				
PAHs							
Naphthalene	DETSC 3303#	0.03	mg/kg				
Acenaphthylene	DETSC 3303#	0.03	mg/kg				
Acenaphthene	DETSC 3303#	0.03	mg/kg				
Fluorene	DETSC 3303	0.03	mg/kg				
Phenanthrene	DETSC 3303#	0.03	mg/kg				
Anthracene	DETSC 3303	0.03	mg/kg				
Fluoranthene	DETSC 3303#	0.03	mg/kg				
Pyrene	DETSC 3303#	0.03	mg/kg				
Benzo(a)anthracene	DETSC 3303#	0.03	mg/kg				
Chrysene	DETSC 3303	0.03	mg/kg				
Benzo(b)fluoranthene	DETSC 3303#	0.03	mg/kg				
Benzo(k)fluoranthene	DETSC 3303#	0.03	mg/kg				
Benzo(a)pyrene	DETSC 3303#	0.03	mg/kg				
Indeno(1,2,3-c,d)pyrene	DETSC 3303#	0.03	mg/kg				
Dibenzo(a,h)anthracene	DETSC 3303#	0.03	mg/kg				
Benzo(g,h,i)perylene	DETSC 3303#	0.03	mg/kg				
PAH - USEPA 16, Total	DETSC 3303	0.1	mg/kg				

Summary of Chemical Analysis

Soil/Misc Samples

Our Ref 4155 Combined Report

Client Ref 4155

The Former SSI Steelworks, Redcar - Ground

Investigation Contract - Priority Areas Within SSI

Contract Title Landholdings, Contract 3

Lab No	1268044	1268045	1268046	1268047
Sample ID	S3-TPB57	S3-TPB57	S3-TPB58	S3-TPB59
Depth	2.00	2.40	1.00	2.00
Other ID	6	9	3	7
Sample Type	B	B	LB	B
Sampling Date	19/10/17	19/10/17	19/10/17	19/10/17
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
PCBs							
PCB 28 + PCB 31	DETSC 3401#	0.01	mg/kg				
PCB 52	DETSC 3401#	0.01	mg/kg				
PCB 101	DETSC 3401#	0.01	mg/kg				
PCB 118	DETSC 3401#	0.01	mg/kg				
PCB 153	DETSC 3401#	0.01	mg/kg				
PCB 138	DETSC 3401#	0.01	mg/kg				
PCB 180	DETSC 3401#	0.01	mg/kg				
PCB 7 Total	DETSC 3401#	0.01	mg/kg				
Phenols							
Phenol - Monohydric	DETSC 2130#	0.3	mg/kg				

Summary of Chemical Analysis

Soil/Misc Samples

Our Ref 4155 Combined Report

Client Ref 4155

The Former SSI Steelworks, Redcar - Ground

Investigation Contract - Priority Areas Within SSI

Contract Title Landholdings, Contract 3

Lab No	1268048	1268049	1268050	1268051
Sample ID	S3-TPB60	S3-TPB61	S3-TPB61	S3-TPB62
Depth	1.00	1.00	2.00	1.00
Other ID	4	3	8	3
Sample Type	B	LB	B	LB
Sampling Date	25/10/17	25/10/17	25/10/17	25/10/17
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
Asbestos Quantification	DETSC 1102	0					
Metals							
Aluminium	DETSC 2301*	1	mg/kg				
Antimony	DETSC 2301*	1	mg/kg				
Arsenic	DETSC 2301#	0.2	mg/kg				
Barium	DETSC 2301#	1.5	mg/kg				
Beryllium	DETSC 2301#	0.2	mg/kg				
Boron, Water Soluble	DETSC 2123#	0.2	mg/kg				
Cadmium	DETSC 2301#	0.1	mg/kg				
Chromium	DETSC 2301#	0.15	mg/kg				
Chromium, Hexavalent	DETSC 2204*	1	mg/kg				
Copper	DETSC 2301#	0.2	mg/kg				
Iron	DETSC 2301	25	mg/kg				
Lead	DETSC 2301#	0.3	mg/kg				
Magnesium	DETSC 2301*	1	mg/kg				
Manganese	DETSC 2301#	20	mg/kg				
Mercury	DETSC 2325#	0.05	mg/kg				
Molybdenum	DETSC 2301#	0.4	mg/kg				
Nickel	DETSC 2301#	1	mg/kg				
Silicon	DETSC 2301*	10	mg/kg				
Vanadium	DETSC 2301#	0.8	mg/kg				
Zinc	DETSC 2301#	1	mg/kg				
Inorganics							
Loss on Ignition at 440oC	DETSC 2003#	0.01	%				
pH	DETSC 2008#			12.0	10.8	9.4	10.8
Cyanide, Total	DETSC 2130#	0.1	mg/kg				
Cyanide, Free	DETSC 2130#	0.1	mg/kg				
Cyanide, Complex	DETSC 2130*	0.2	mg/kg				
Thiocyanate	DETSC 2130#	0.6	mg/kg				
FOC	DETSC 2002	0.001		0.014	0.002	0.011	0.002
Organic matter	DETSC 2002#	0.1	%	2.4	0.3	1.8	0.4
Sulphate Aqueous Extract as SO4	DETSC 2076#	10	mg/l	1400	1400	480	1200
Sulphur (free)	DETSC 3049#	0.75	mg/kg				
Sulphur as S, Total	DETSC 2320	0.01	%	0.38	0.66		0.59
Sulphate as SO4, Total	DETSC 2321#	0.01	%	0.91	1.7		1.9

Summary of Chemical Analysis

Soil/Misc Samples

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The Former SSI Steelworks, Redcar - Ground

Investigation Contract - Priority Areas Within SSI

Contract Title Landholdings, Contract 3

Lab No	1268048	1268049	1268050	1268051
Sample ID	S3-TPB60	S3-TPB61	S3-TPB61	S3-TPB62
Depth	1.00	1.00	2.00	1.00
Other ID	4	3	8	3
Sample Type	B	LB	B	LB
Sampling Date	25/10/17	25/10/17	25/10/17	25/10/17
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
Petroleum Hydrocarbons							
Aliphatic C5-C6	DETSC 3321*	0.01	mg/kg				
Aliphatic C6-C8	DETSC 3321*	0.01	mg/kg				
Aliphatic C8-C10	DETSC 3321*	0.01	mg/kg				
Aliphatic C10-C12	DETSC 3072#	1.5	mg/kg				
Aliphatic C12-C16	DETSC 3072#	1.2	mg/kg				
Aliphatic C16-C21	DETSC 3072#	1.5	mg/kg				
Aliphatic C21-C35	DETSC 3072#	3.4	mg/kg				
Aliphatic C5-C35	DETSC 3072*	10	mg/kg				
Aromatic C5-C7	DETSC 3321*	0.01	mg/kg				
Aromatic C7-C8	DETSC 3321*	0.01	mg/kg				
Aromatic C8-C10	DETSC 3321*	0.01	mg/kg				
Aromatic C10-C12	DETSC 3072#	0.9	mg/kg				
Aromatic C12-C16	DETSC 3072#	0.5	mg/kg				
Aromatic C16-C21	DETSC 3072#	0.6	mg/kg				
Aromatic C21-C35	DETSC 3072#	1.4	mg/kg				
Aromatic C5-C35	DETSC 3072*	10	mg/kg				
TPH Ali/Aro Total	DETSC 3072*	10	mg/kg				
PAHs							
Naphthalene	DETSC 3303#	0.03	mg/kg				
Acenaphthylene	DETSC 3303#	0.03	mg/kg				
Acenaphthene	DETSC 3303#	0.03	mg/kg				
Fluorene	DETSC 3303	0.03	mg/kg				
Phenanthrene	DETSC 3303#	0.03	mg/kg				
Anthracene	DETSC 3303	0.03	mg/kg				
Fluoranthene	DETSC 3303#	0.03	mg/kg				
Pyrene	DETSC 3303#	0.03	mg/kg				
Benzo(a)anthracene	DETSC 3303#	0.03	mg/kg				
Chrysene	DETSC 3303	0.03	mg/kg				
Benzo(b)fluoranthene	DETSC 3303#	0.03	mg/kg				
Benzo(k)fluoranthene	DETSC 3303#	0.03	mg/kg				
Benzo(a)pyrene	DETSC 3303#	0.03	mg/kg				
Indeno(1,2,3-c,d)pyrene	DETSC 3303#	0.03	mg/kg				
Dibenzo(a,h)anthracene	DETSC 3303#	0.03	mg/kg				
Benzo(g,h,i)perylene	DETSC 3303#	0.03	mg/kg				
PAH - USEPA 16, Total	DETSC 3303	0.1	mg/kg				

Summary of Chemical Analysis

Soil/Misc Samples

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The Former SSI Steelworks, Redcar - Ground

Investigation Contract - Priority Areas Within SSI

Contract Title Landholdings, Contract 3

Lab No	1268048	1268049	1268050	1268051
Sample ID	S3-TPB60	S3-TPB61	S3-TPB61	S3-TPB62
Depth	1.00	1.00	2.00	1.00
Other ID	4	3	8	3
Sample Type	B	LB	B	LB
Sampling Date	25/10/17	25/10/17	25/10/17	25/10/17
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
PCBs							
PCB 28 + PCB 31	DETSC 3401#	0.01	mg/kg				
PCB 52	DETSC 3401#	0.01	mg/kg				
PCB 101	DETSC 3401#	0.01	mg/kg				
PCB 118	DETSC 3401#	0.01	mg/kg				
PCB 153	DETSC 3401#	0.01	mg/kg				
PCB 138	DETSC 3401#	0.01	mg/kg				
PCB 180	DETSC 3401#	0.01	mg/kg				
PCB 7 Total	DETSC 3401#	0.01	mg/kg				
Phenols							
Phenol - Monohydric	DETSC 2130#	0.3	mg/kg				

Summary of Chemical Analysis

Soil/Misc Samples

Our Ref 4155 Combined Report

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The Former SSI Steelworks, Redcar - Ground

Investigation Contract - Priority Areas Within SSI

Contract Title Landholdings, Contract 3

Lab No	1268052	1268053	1268054	1268055
Sample ID	S3-TPB64	S3-TPB65	S3-TPB65	S3-TPB67
Depth	2.00	1.00	2.00	2.00
Other ID	6	4	7	7
Sample Type	B	B	B	B
Sampling Date	24/10/17	24/10/17	24/10/17	19/10/17
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
Asbestos Quantification	DETSC 1102	0					
Metals							
Aluminium	DETSC 2301*	1	mg/kg				
Antimony	DETSC 2301*	1	mg/kg				
Arsenic	DETSC 2301#	0.2	mg/kg				
Barium	DETSC 2301#	1.5	mg/kg				
Beryllium	DETSC 2301#	0.2	mg/kg				
Boron, Water Soluble	DETSC 2123#	0.2	mg/kg				
Cadmium	DETSC 2301#	0.1	mg/kg				
Chromium	DETSC 2301#	0.15	mg/kg				
Chromium, Hexavalent	DETSC 2204*	1	mg/kg				
Copper	DETSC 2301#	0.2	mg/kg				
Iron	DETSC 2301	25	mg/kg				
Lead	DETSC 2301#	0.3	mg/kg				
Magnesium	DETSC 2301*	1	mg/kg				
Manganese	DETSC 2301#	20	mg/kg				
Mercury	DETSC 2325#	0.05	mg/kg				
Molybdenum	DETSC 2301#	0.4	mg/kg				
Nickel	DETSC 2301#	1	mg/kg				
Silicon	DETSC 2301*	10	mg/kg				
Vanadium	DETSC 2301#	0.8	mg/kg				
Zinc	DETSC 2301#	1	mg/kg				
Inorganics							
Loss on Ignition at 440oC	DETSC 2003#	0.01	%		6.1		
pH	DETSC 2008#			11.7	11.1	11.2	11.7
Cyanide, Total	DETSC 2130#	0.1	mg/kg				
Cyanide, Free	DETSC 2130#	0.1	mg/kg				
Cyanide, Complex	DETSC 2130*	0.2	mg/kg				
Thiocyanate	DETSC 2130#	0.6	mg/kg				
FOC	DETSC 2002	0.001		0.008	0.005		< 0.001
Organic matter	DETSC 2002#	0.1	%	1.4	0.9		0.1
Sulphate Aqueous Extract as SO4	DETSC 2076#	10	mg/l	260	390	1300	160
Sulphur (free)	DETSC 3049#	0.75	mg/kg				
Sulphur as S, Total	DETSC 2320	0.01	%	0.43	0.73		0.65
Sulphate as SO4, Total	DETSC 2321#	0.01	%	1.2	1.5		1.4

Summary of Chemical Analysis

Soil/Misc Samples

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The Former SSI Steelworks, Redcar - Ground

Investigation Contract - Priority Areas Within SSI

Contract Title Landholdings, Contract 3

Lab No	1268052	1268053	1268054	1268055
Sample ID	S3-TPB64	S3-TPB65	S3-TPB65	S3-TPB67
Depth	2.00	1.00	2.00	2.00
Other ID	6	4	7	7
Sample Type	B	B	B	B
Sampling Date	24/10/17	24/10/17	24/10/17	19/10/17
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
Petroleum Hydrocarbons							
Aliphatic C5-C6	DETSC 3321*	0.01	mg/kg				
Aliphatic C6-C8	DETSC 3321*	0.01	mg/kg				
Aliphatic C8-C10	DETSC 3321*	0.01	mg/kg				
Aliphatic C10-C12	DETSC 3072#	1.5	mg/kg				
Aliphatic C12-C16	DETSC 3072#	1.2	mg/kg				
Aliphatic C16-C21	DETSC 3072#	1.5	mg/kg				
Aliphatic C21-C35	DETSC 3072#	3.4	mg/kg				
Aliphatic C5-C35	DETSC 3072*	10	mg/kg				
Aromatic C5-C7	DETSC 3321*	0.01	mg/kg				
Aromatic C7-C8	DETSC 3321*	0.01	mg/kg				
Aromatic C8-C10	DETSC 3321*	0.01	mg/kg				
Aromatic C10-C12	DETSC 3072#	0.9	mg/kg				
Aromatic C12-C16	DETSC 3072#	0.5	mg/kg				
Aromatic C16-C21	DETSC 3072#	0.6	mg/kg				
Aromatic C21-C35	DETSC 3072#	1.4	mg/kg				
Aromatic C5-C35	DETSC 3072*	10	mg/kg				
TPH Ali/Aro Total	DETSC 3072*	10	mg/kg				
PAHs							
Naphthalene	DETSC 3303#	0.03	mg/kg				
Acenaphthylene	DETSC 3303#	0.03	mg/kg				
Acenaphthene	DETSC 3303#	0.03	mg/kg				
Fluorene	DETSC 3303	0.03	mg/kg				
Phenanthrene	DETSC 3303#	0.03	mg/kg				
Anthracene	DETSC 3303	0.03	mg/kg				
Fluoranthene	DETSC 3303#	0.03	mg/kg				
Pyrene	DETSC 3303#	0.03	mg/kg				
Benzo(a)anthracene	DETSC 3303#	0.03	mg/kg				
Chrysene	DETSC 3303	0.03	mg/kg				
Benzo(b)fluoranthene	DETSC 3303#	0.03	mg/kg				
Benzo(k)fluoranthene	DETSC 3303#	0.03	mg/kg				
Benzo(a)pyrene	DETSC 3303#	0.03	mg/kg				
Indeno(1,2,3-c,d)pyrene	DETSC 3303#	0.03	mg/kg				
Dibenzo(a,h)anthracene	DETSC 3303#	0.03	mg/kg				
Benzo(g,h,i)perylene	DETSC 3303#	0.03	mg/kg				
PAH - USEPA 16, Total	DETSC 3303	0.1	mg/kg				

Summary of Chemical Analysis

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The Former SSI Steelworks, Redcar - Ground

Investigation Contract - Priority Areas Within SSI

Contract Title Landholdings, Contract 3

Lab No	1268052	1268053	1268054	1268055
Sample ID	S3-TPB64	S3-TPB65	S3-TPB65	S3-TPB67
Depth	2.00	1.00	2.00	2.00
Other ID	6	4	7	7
Sample Type	B	B	B	B
Sampling Date	24/10/17	24/10/17	24/10/17	19/10/17
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
PCBs							
PCB 28 + PCB 31	DETSC 3401#	0.01	mg/kg				
PCB 52	DETSC 3401#	0.01	mg/kg				
PCB 101	DETSC 3401#	0.01	mg/kg				
PCB 118	DETSC 3401#	0.01	mg/kg				
PCB 153	DETSC 3401#	0.01	mg/kg				
PCB 138	DETSC 3401#	0.01	mg/kg				
PCB 180	DETSC 3401#	0.01	mg/kg				
PCB 7 Total	DETSC 3401#	0.01	mg/kg				
Phenols							
Phenol - Monohydric	DETSC 2130#	0.3	mg/kg				

Summary of Chemical Analysis

Soil/Misc Samples

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The Former SSI Steelworks, Redcar - Ground

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Contract Title Landholdings, Contract 3

Lab No	1268056	1268057	1268058	1268059
Sample ID	S3-TPB70	S3-TPB70	S3-TPB74	S3-TPB75
Depth	2.00	2.30	1.00	1.00
Other ID	7	10	3	3
Sample Type	B	B	B	LB
Sampling Date	24/10/17	24/10/17	20/10/17	20/10/17
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
Asbestos Quantification	DETSC 1102	0					
Metals							
Aluminium	DETSC 2301*	1	mg/kg				
Antimony	DETSC 2301*	1	mg/kg				
Arsenic	DETSC 2301#	0.2	mg/kg				
Barium	DETSC 2301#	1.5	mg/kg				
Beryllium	DETSC 2301#	0.2	mg/kg				
Boron, Water Soluble	DETSC 2123#	0.2	mg/kg				
Cadmium	DETSC 2301#	0.1	mg/kg				
Chromium	DETSC 2301#	0.15	mg/kg				
Chromium, Hexavalent	DETSC 2204*	1	mg/kg				
Copper	DETSC 2301#	0.2	mg/kg				
Iron	DETSC 2301	25	mg/kg				
Lead	DETSC 2301#	0.3	mg/kg				
Magnesium	DETSC 2301*	1	mg/kg				
Manganese	DETSC 2301#	20	mg/kg				
Mercury	DETSC 2325#	0.05	mg/kg				
Molybdenum	DETSC 2301#	0.4	mg/kg				
Nickel	DETSC 2301#	1	mg/kg				
Silicon	DETSC 2301*	10	mg/kg				
Vanadium	DETSC 2301#	0.8	mg/kg				
Zinc	DETSC 2301#	1	mg/kg				
Inorganics							
Loss on Ignition at 440oC	DETSC 2003#	0.01	%				
pH	DETSC 2008#			11.8	9.2	11.2	10.7
Cyanide, Total	DETSC 2130#	0.1	mg/kg				
Cyanide, Free	DETSC 2130#	0.1	mg/kg				
Cyanide, Complex	DETSC 2130*	0.2	mg/kg				
Thiocyanate	DETSC 2130#	0.6	mg/kg				
FOC	DETSC 2002	0.001		0.007		0.007	0.003
Organic matter	DETSC 2002#	0.1	%	1.3		1.2	0.5
Sulphate Aqueous Extract as SO4	DETSC 2076#	10	mg/l	260	300	800	440
Sulphur (free)	DETSC 3049#	0.75	mg/kg				
Sulphur as S, Total	DETSC 2320	0.01	%	0.41		0.53	0.59
Sulphate as SO4, Total	DETSC 2321#	0.01	%	1.3		1.1	2.0

Summary of Chemical Analysis

Soil/Misc Samples

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The Former SSI Steelworks, Redcar - Ground

Investigation Contract - Priority Areas Within SSI

Contract Title Landholdings, Contract 3

Lab No	1268056	1268057	1268058	1268059
Sample ID	S3-TPB70	S3-TPB70	S3-TPB74	S3-TPB75
Depth	2.00	2.30	1.00	1.00
Other ID	7	10	3	3
Sample Type	B	B	B	LB
Sampling Date	24/10/17	24/10/17	20/10/17	20/10/17
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
Petroleum Hydrocarbons							
Aliphatic C5-C6	DETSC 3321*	0.01	mg/kg				
Aliphatic C6-C8	DETSC 3321*	0.01	mg/kg				
Aliphatic C8-C10	DETSC 3321*	0.01	mg/kg				
Aliphatic C10-C12	DETSC 3072#	1.5	mg/kg				
Aliphatic C12-C16	DETSC 3072#	1.2	mg/kg				
Aliphatic C16-C21	DETSC 3072#	1.5	mg/kg				
Aliphatic C21-C35	DETSC 3072#	3.4	mg/kg				
Aliphatic C5-C35	DETSC 3072*	10	mg/kg				
Aromatic C5-C7	DETSC 3321*	0.01	mg/kg				
Aromatic C7-C8	DETSC 3321*	0.01	mg/kg				
Aromatic C8-C10	DETSC 3321*	0.01	mg/kg				
Aromatic C10-C12	DETSC 3072#	0.9	mg/kg				
Aromatic C12-C16	DETSC 3072#	0.5	mg/kg				
Aromatic C16-C21	DETSC 3072#	0.6	mg/kg				
Aromatic C21-C35	DETSC 3072#	1.4	mg/kg				
Aromatic C5-C35	DETSC 3072*	10	mg/kg				
TPH Ali/Aro Total	DETSC 3072*	10	mg/kg				
PAHs							
Naphthalene	DETSC 3303#	0.03	mg/kg				
Acenaphthylene	DETSC 3303#	0.03	mg/kg				
Acenaphthene	DETSC 3303#	0.03	mg/kg				
Fluorene	DETSC 3303	0.03	mg/kg				
Phenanthrene	DETSC 3303#	0.03	mg/kg				
Anthracene	DETSC 3303	0.03	mg/kg				
Fluoranthene	DETSC 3303#	0.03	mg/kg				
Pyrene	DETSC 3303#	0.03	mg/kg				
Benzo(a)anthracene	DETSC 3303#	0.03	mg/kg				
Chrysene	DETSC 3303	0.03	mg/kg				
Benzo(b)fluoranthene	DETSC 3303#	0.03	mg/kg				
Benzo(k)fluoranthene	DETSC 3303#	0.03	mg/kg				
Benzo(a)pyrene	DETSC 3303#	0.03	mg/kg				
Indeno(1,2,3-c,d)pyrene	DETSC 3303#	0.03	mg/kg				
Dibenzo(a,h)anthracene	DETSC 3303#	0.03	mg/kg				
Benzo(g,h,i)perylene	DETSC 3303#	0.03	mg/kg				
PAH - USEPA 16, Total	DETSC 3303	0.1	mg/kg				

Summary of Chemical Analysis

Soil/Misc Samples

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The Former SSI Steelworks, Redcar - Ground

Investigation Contract - Priority Areas Within SSI

Contract Title Landholdings, Contract 3

Lab No	1268056	1268057	1268058	1268059
Sample ID	S3-TPB70	S3-TPB70	S3-TPB74	S3-TPB75
Depth	2.00	2.30	1.00	1.00
Other ID	7	10	3	3
Sample Type	B	B	B	LB
Sampling Date	24/10/17	24/10/17	20/10/17	20/10/17
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
PCBs							
PCB 28 + PCB 31	DETSC 3401#	0.01	mg/kg				
PCB 52	DETSC 3401#	0.01	mg/kg				
PCB 101	DETSC 3401#	0.01	mg/kg				
PCB 118	DETSC 3401#	0.01	mg/kg				
PCB 153	DETSC 3401#	0.01	mg/kg				
PCB 138	DETSC 3401#	0.01	mg/kg				
PCB 180	DETSC 3401#	0.01	mg/kg				
PCB 7 Total	DETSC 3401#	0.01	mg/kg				
Phenols							
Phenol - Monohydric	DETSC 2130#	0.3	mg/kg				

Summary of Chemical Analysis

Soil/Misc Samples

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The Former SSI Steelworks, Redcar - Ground

Investigation Contract - Priority Areas Within SSI

Contract Title Landholdings, Contract 3

Lab No	1268093	1269238	1269239	1269240
Sample ID	S3-TPA33	S3-TPA01	S3-TPA04	S3-TPA06
Depth	0.70	3.70	2.40	0.70
Other ID	3	13	9	3
Sample Type	B	B	B	B
Sampling Date	16/10/17	24/10/17	24/10/17	23/10/17
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
Asbestos Quantification	DETSC 1102	0					
Metals							
Aluminium	DETSC 2301*	1	mg/kg				
Antimony	DETSC 2301*	1	mg/kg				
Arsenic	DETSC 2301#	0.2	mg/kg				
Barium	DETSC 2301#	1.5	mg/kg				
Beryllium	DETSC 2301#	0.2	mg/kg				
Boron, Water Soluble	DETSC 2123#	0.2	mg/kg				
Cadmium	DETSC 2301#	0.1	mg/kg				
Chromium	DETSC 2301#	0.15	mg/kg				
Chromium, Hexavalent	DETSC 2204*	1	mg/kg				
Copper	DETSC 2301#	0.2	mg/kg				
Iron	DETSC 2301	25	mg/kg				
Lead	DETSC 2301#	0.3	mg/kg				
Magnesium	DETSC 2301*	1	mg/kg				
Manganese	DETSC 2301#	20	mg/kg				
Mercury	DETSC 2325#	0.05	mg/kg				
Molybdenum	DETSC 2301#	0.4	mg/kg				
Nickel	DETSC 2301#	1	mg/kg				
Silicon	DETSC 2301*	10	mg/kg				
Vanadium	DETSC 2301#	0.8	mg/kg				
Zinc	DETSC 2301#	1	mg/kg				
Inorganics							
Loss on Ignition at 440oC	DETSC 2003#	0.01	%	7.7		4.6	
pH	DETSC 2008#			10.7	7.5	11.4	11.4
Cyanide, Total	DETSC 2130#	0.1	mg/kg				
Cyanide, Free	DETSC 2130#	0.1	mg/kg				
Cyanide, Complex	DETSC 2130*	0.2	mg/kg				
Thiocyanate	DETSC 2130#	0.6	mg/kg				
FOC	DETSC 2002	0.001				0.014	0.007
Organic matter	DETSC 2002#	0.1	%	2.9		2.3	1.2
Sulphate Aqueous Extract as SO4	DETSC 2076#	10	mg/l	500	250	200	290
Sulphur (free)	DETSC 3049#	0.75	mg/kg				
Sulphur as S, Total	DETSC 2320	0.01	%	0.22		0.16	0.24
Sulphate as SO4, Total	DETSC 2321#	0.01	%	0.65		0.28	0.46

Summary of Chemical Analysis

Soil/Misc Samples

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The Former SSI Steelworks, Redcar - Ground

Investigation Contract - Priority Areas Within SSI

Contract Title Landholdings, Contract 3

Lab No	1268093	1269238	1269239	1269240
Sample ID	S3-TPA33	S3-TPA01	S3-TPA04	S3-TPA06
Depth	0.70	3.70	2.40	0.70
Other ID	3	13	9	3
Sample Type	B	B	B	B
Sampling Date	16/10/17	24/10/17	24/10/17	23/10/17
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
Petroleum Hydrocarbons							
Aliphatic C5-C6	DETSC 3321*	0.01	mg/kg				
Aliphatic C6-C8	DETSC 3321*	0.01	mg/kg				
Aliphatic C8-C10	DETSC 3321*	0.01	mg/kg				
Aliphatic C10-C12	DETSC 3072#	1.5	mg/kg				
Aliphatic C12-C16	DETSC 3072#	1.2	mg/kg				
Aliphatic C16-C21	DETSC 3072#	1.5	mg/kg				
Aliphatic C21-C35	DETSC 3072#	3.4	mg/kg				
Aliphatic C5-C35	DETSC 3072*	10	mg/kg				
Aromatic C5-C7	DETSC 3321*	0.01	mg/kg				
Aromatic C7-C8	DETSC 3321*	0.01	mg/kg				
Aromatic C8-C10	DETSC 3321*	0.01	mg/kg				
Aromatic C10-C12	DETSC 3072#	0.9	mg/kg				
Aromatic C12-C16	DETSC 3072#	0.5	mg/kg				
Aromatic C16-C21	DETSC 3072#	0.6	mg/kg				
Aromatic C21-C35	DETSC 3072#	1.4	mg/kg				
Aromatic C5-C35	DETSC 3072*	10	mg/kg				
TPH Ali/Aro Total	DETSC 3072*	10	mg/kg				
PAHs							
Naphthalene	DETSC 3303#	0.03	mg/kg				
Acenaphthylene	DETSC 3303#	0.03	mg/kg				
Acenaphthene	DETSC 3303#	0.03	mg/kg				
Fluorene	DETSC 3303	0.03	mg/kg				
Phenanthrene	DETSC 3303#	0.03	mg/kg				
Anthracene	DETSC 3303	0.03	mg/kg				
Fluoranthene	DETSC 3303#	0.03	mg/kg				
Pyrene	DETSC 3303#	0.03	mg/kg				
Benzo(a)anthracene	DETSC 3303#	0.03	mg/kg				
Chrysene	DETSC 3303	0.03	mg/kg				
Benzo(b)fluoranthene	DETSC 3303#	0.03	mg/kg				
Benzo(k)fluoranthene	DETSC 3303#	0.03	mg/kg				
Benzo(a)pyrene	DETSC 3303#	0.03	mg/kg				
Indeno(1,2,3-c,d)pyrene	DETSC 3303#	0.03	mg/kg				
Dibenzo(a,h)anthracene	DETSC 3303#	0.03	mg/kg				
Benzo(g,h,i)perylene	DETSC 3303#	0.03	mg/kg				
PAH - USEPA 16, Total	DETSC 3303	0.1	mg/kg				

Summary of Chemical Analysis

Soil/Misc Samples

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The Former SSI Steelworks, Redcar - Ground

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Contract Title Landholdings, Contract 3

Lab No	1268093	1269238	1269239	1269240
Sample ID	S3-TPA33	S3-TPA01	S3-TPA04	S3-TPA06
Depth	0.70	3.70	2.40	0.70
Other ID	3	13	9	3
Sample Type	B	B	B	B
Sampling Date	16/10/17	24/10/17	24/10/17	23/10/17
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
PCBs							
PCB 28 + PCB 31	DETSC 3401#	0.01	mg/kg				
PCB 52	DETSC 3401#	0.01	mg/kg				
PCB 101	DETSC 3401#	0.01	mg/kg				
PCB 118	DETSC 3401#	0.01	mg/kg				
PCB 153	DETSC 3401#	0.01	mg/kg				
PCB 138	DETSC 3401#	0.01	mg/kg				
PCB 180	DETSC 3401#	0.01	mg/kg				
PCB 7 Total	DETSC 3401#	0.01	mg/kg				
Phenols							
Phenol - Monohydric	DETSC 2130#	0.3	mg/kg				

Summary of Chemical Analysis

Soil/Misc Samples

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Contract Title Landholdings, Contract 3

Lab No	1269241	1269242	1269243	1269244
Sample ID	S3-TPA07	S3-TPA11	S3-TPA12	S3-TPA16
Depth	1.70	2.90	1.70	1.00
Other ID	7	10	6	5
Sample Type	B	B	B	B
Sampling Date	01/11/17	20/10/17	20/10/17	12/10/17
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
Asbestos Quantification	DETSC 1102	0					
Metals							
Aluminium	DETSC 2301*	1	mg/kg				
Antimony	DETSC 2301*	1	mg/kg				
Arsenic	DETSC 2301#	0.2	mg/kg				
Barium	DETSC 2301#	1.5	mg/kg				
Beryllium	DETSC 2301#	0.2	mg/kg				
Boron, Water Soluble	DETSC 2123#	0.2	mg/kg				
Cadmium	DETSC 2301#	0.1	mg/kg				
Chromium	DETSC 2301#	0.15	mg/kg				
Chromium, Hexavalent	DETSC 2204*	1	mg/kg				
Copper	DETSC 2301#	0.2	mg/kg				
Iron	DETSC 2301	25	mg/kg				
Lead	DETSC 2301#	0.3	mg/kg				
Magnesium	DETSC 2301*	1	mg/kg				
Manganese	DETSC 2301#	20	mg/kg				
Mercury	DETSC 2325#	0.05	mg/kg				
Molybdenum	DETSC 2301#	0.4	mg/kg				
Nickel	DETSC 2301#	1	mg/kg				
Silicon	DETSC 2301*	10	mg/kg				
Vanadium	DETSC 2301#	0.8	mg/kg				
Zinc	DETSC 2301#	1	mg/kg				
Inorganics							
Loss on Ignition at 440oC	DETSC 2003#	0.01	%	13			
pH	DETSC 2008#			11.1	8.8	10.1	9.8
Cyanide, Total	DETSC 2130#	0.1	mg/kg				
Cyanide, Free	DETSC 2130#	0.1	mg/kg				
Cyanide, Complex	DETSC 2130*	0.2	mg/kg				
Thiocyanate	DETSC 2130#	0.6	mg/kg				
FOC	DETSC 2002	0.001				0.012	0.043
Organic matter	DETSC 2002#	0.1	%	4.4		2.1	7.4
Sulphate Aqueous Extract as SO4	DETSC 2076#	10	mg/l	1100	250	1700	500
Sulphur (free)	DETSC 3049#	0.75	mg/kg				
Sulphur as S, Total	DETSC 2320	0.01	%	0.35		0.40	0.29
Sulphate as SO4, Total	DETSC 2321#	0.01	%	0.68		0.68	0.52

Summary of Chemical Analysis

Soil/Misc Samples

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The Former SSI Steelworks, Redcar - Ground

Investigation Contract - Priority Areas Within SSI

Contract Title Landholdings, Contract 3

Lab No	1269241	1269242	1269243	1269244
Sample ID	S3-TPA07	S3-TPA11	S3-TPA12	S3-TPA16
Depth	1.70	2.90	1.70	1.00
Other ID	7	10	6	5
Sample Type	B	B	B	B
Sampling Date	01/11/17	20/10/17	20/10/17	12/10/17
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
Petroleum Hydrocarbons							
Aliphatic C5-C6	DETSC 3321*	0.01	mg/kg				
Aliphatic C6-C8	DETSC 3321*	0.01	mg/kg				
Aliphatic C8-C10	DETSC 3321*	0.01	mg/kg				
Aliphatic C10-C12	DETSC 3072#	1.5	mg/kg				
Aliphatic C12-C16	DETSC 3072#	1.2	mg/kg				
Aliphatic C16-C21	DETSC 3072#	1.5	mg/kg				
Aliphatic C21-C35	DETSC 3072#	3.4	mg/kg				
Aliphatic C5-C35	DETSC 3072*	10	mg/kg				
Aromatic C5-C7	DETSC 3321*	0.01	mg/kg				
Aromatic C7-C8	DETSC 3321*	0.01	mg/kg				
Aromatic C8-C10	DETSC 3321*	0.01	mg/kg				
Aromatic C10-C12	DETSC 3072#	0.9	mg/kg				
Aromatic C12-C16	DETSC 3072#	0.5	mg/kg				
Aromatic C16-C21	DETSC 3072#	0.6	mg/kg				
Aromatic C21-C35	DETSC 3072#	1.4	mg/kg				
Aromatic C5-C35	DETSC 3072*	10	mg/kg				
TPH Ali/Aro Total	DETSC 3072*	10	mg/kg				
PAHs							
Naphthalene	DETSC 3303#	0.03	mg/kg				
Acenaphthylene	DETSC 3303#	0.03	mg/kg				
Acenaphthene	DETSC 3303#	0.03	mg/kg				
Fluorene	DETSC 3303	0.03	mg/kg				
Phenanthrene	DETSC 3303#	0.03	mg/kg				
Anthracene	DETSC 3303	0.03	mg/kg				
Fluoranthene	DETSC 3303#	0.03	mg/kg				
Pyrene	DETSC 3303#	0.03	mg/kg				
Benzo(a)anthracene	DETSC 3303#	0.03	mg/kg				
Chrysene	DETSC 3303	0.03	mg/kg				
Benzo(b)fluoranthene	DETSC 3303#	0.03	mg/kg				
Benzo(k)fluoranthene	DETSC 3303#	0.03	mg/kg				
Benzo(a)pyrene	DETSC 3303#	0.03	mg/kg				
Indeno(1,2,3-c,d)pyrene	DETSC 3303#	0.03	mg/kg				
Dibenzo(a,h)anthracene	DETSC 3303#	0.03	mg/kg				
Benzo(g,h,i)perylene	DETSC 3303#	0.03	mg/kg				
PAH - USEPA 16, Total	DETSC 3303	0.1	mg/kg				

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The Former SSI Steelworks, Redcar - Ground

Investigation Contract - Priority Areas Within SSI

Contract Title Landholdings, Contract 3

Lab No	1269241	1269242	1269243	1269244
Sample ID	S3-TPA07	S3-TPA11	S3-TPA12	S3-TPA16
Depth	1.70	2.90	1.70	1.00
Other ID	7	10	6	5
Sample Type	B	B	B	B
Sampling Date	01/11/17	20/10/17	20/10/17	12/10/17
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
PCBs							
PCB 28 + PCB 31	DETSC 3401#	0.01	mg/kg				
PCB 52	DETSC 3401#	0.01	mg/kg				
PCB 101	DETSC 3401#	0.01	mg/kg				
PCB 118	DETSC 3401#	0.01	mg/kg				
PCB 153	DETSC 3401#	0.01	mg/kg				
PCB 138	DETSC 3401#	0.01	mg/kg				
PCB 180	DETSC 3401#	0.01	mg/kg				
PCB 7 Total	DETSC 3401#	0.01	mg/kg				
Phenols							
Phenol - Monohydric	DETSC 2130#	0.3	mg/kg				

Summary of Chemical Analysis

Soil/Misc Samples

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Contract Title Landholdings, Contract 3

Lab No	1269245	1269246	1269247	1269248
Sample ID	S3-TPB01	S3-TPB04	S3-TPB06	S3-TPB08
Depth	2.60	0.80	0.70	1.00
Other ID	10	5	3	3
Sample Type	B	B	B	B
Sampling Date	26/10/17	27/10/17	25/10/17	30/10/17
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
Asbestos Quantification	DETSC 1102	0					
Metals							
Aluminium	DETSC 2301*	1	mg/kg				
Antimony	DETSC 2301*	1	mg/kg				
Arsenic	DETSC 2301#	0.2	mg/kg				
Barium	DETSC 2301#	1.5	mg/kg				
Beryllium	DETSC 2301#	0.2	mg/kg				
Boron, Water Soluble	DETSC 2123#	0.2	mg/kg				
Cadmium	DETSC 2301#	0.1	mg/kg				
Chromium	DETSC 2301#	0.15	mg/kg				
Chromium, Hexavalent	DETSC 2204*	1	mg/kg				
Copper	DETSC 2301#	0.2	mg/kg				
Iron	DETSC 2301	25	mg/kg				
Lead	DETSC 2301#	0.3	mg/kg				
Magnesium	DETSC 2301*	1	mg/kg				
Manganese	DETSC 2301#	20	mg/kg				
Mercury	DETSC 2325#	0.05	mg/kg				
Molybdenum	DETSC 2301#	0.4	mg/kg				
Nickel	DETSC 2301#	1	mg/kg				
Silicon	DETSC 2301*	10	mg/kg				
Vanadium	DETSC 2301#	0.8	mg/kg				
Zinc	DETSC 2301#	1	mg/kg				
Inorganics							
Loss on Ignition at 440oC	DETSC 2003#	0.01	%				
pH	DETSC 2008#			8.5	10.6	11.3	10.8
Cyanide, Total	DETSC 2130#	0.1	mg/kg				
Cyanide, Free	DETSC 2130#	0.1	mg/kg				
Cyanide, Complex	DETSC 2130*	0.2	mg/kg				
Thiocyanate	DETSC 2130#	0.6	mg/kg				
FOC	DETSC 2002	0.001				0.005	
Organic matter	DETSC 2002#	0.1	%			0.9	
Sulphate Aqueous Extract as SO4	DETSC 2076#	10	mg/l	310	570	700	1500
Sulphur (free)	DETSC 3049#	0.75	mg/kg				
Sulphur as S, Total	DETSC 2320	0.01	%		0.30	0.15	0.40
Sulphate as SO4, Total	DETSC 2321#	0.01	%		0.68	0.43	1.0

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Contract Title Landholdings, Contract 3

Lab No	1269245	1269246	1269247	1269248
Sample ID	S3-TPB01	S3-TPB04	S3-TPB06	S3-TPB08
Depth	2.60	0.80	0.70	1.00
Other ID	10	5	3	3
Sample Type	B	B	B	B
Sampling Date	26/10/17	27/10/17	25/10/17	30/10/17
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
Petroleum Hydrocarbons							
Aliphatic C5-C6	DETSC 3321*	0.01	mg/kg				
Aliphatic C6-C8	DETSC 3321*	0.01	mg/kg				
Aliphatic C8-C10	DETSC 3321*	0.01	mg/kg				
Aliphatic C10-C12	DETSC 3072#	1.5	mg/kg				
Aliphatic C12-C16	DETSC 3072#	1.2	mg/kg				
Aliphatic C16-C21	DETSC 3072#	1.5	mg/kg				
Aliphatic C21-C35	DETSC 3072#	3.4	mg/kg				
Aliphatic C5-C35	DETSC 3072*	10	mg/kg				
Aromatic C5-C7	DETSC 3321*	0.01	mg/kg				
Aromatic C7-C8	DETSC 3321*	0.01	mg/kg				
Aromatic C8-C10	DETSC 3321*	0.01	mg/kg				
Aromatic C10-C12	DETSC 3072#	0.9	mg/kg				
Aromatic C12-C16	DETSC 3072#	0.5	mg/kg				
Aromatic C16-C21	DETSC 3072#	0.6	mg/kg				
Aromatic C21-C35	DETSC 3072#	1.4	mg/kg				
Aromatic C5-C35	DETSC 3072*	10	mg/kg				
TPH Ali/Aro Total	DETSC 3072*	10	mg/kg				
PAHs							
Naphthalene	DETSC 3303#	0.03	mg/kg				
Acenaphthylene	DETSC 3303#	0.03	mg/kg				
Acenaphthene	DETSC 3303#	0.03	mg/kg				
Fluorene	DETSC 3303	0.03	mg/kg				
Phenanthrene	DETSC 3303#	0.03	mg/kg				
Anthracene	DETSC 3303	0.03	mg/kg				
Fluoranthene	DETSC 3303#	0.03	mg/kg				
Pyrene	DETSC 3303#	0.03	mg/kg				
Benzo(a)anthracene	DETSC 3303#	0.03	mg/kg				
Chrysene	DETSC 3303	0.03	mg/kg				
Benzo(b)fluoranthene	DETSC 3303#	0.03	mg/kg				
Benzo(k)fluoranthene	DETSC 3303#	0.03	mg/kg				
Benzo(a)pyrene	DETSC 3303#	0.03	mg/kg				
Indeno(1,2,3-c,d)pyrene	DETSC 3303#	0.03	mg/kg				
Dibenzo(a,h)anthracene	DETSC 3303#	0.03	mg/kg				
Benzo(g,h,i)perylene	DETSC 3303#	0.03	mg/kg				
PAH - USEPA 16, Total	DETSC 3303	0.1	mg/kg				

Summary of Chemical Analysis

Soil/Misc Samples

Our Ref 4155 Combined Report

Client Ref 4155

The Former SSI Steelworks, Redcar - Ground

Investigation Contract - Priority Areas Within SSI

Contract Title Landholdings, Contract 3

Lab No	1269245	1269246	1269247	1269248
Sample ID	S3-TPB01	S3-TPB04	S3-TPB06	S3-TPB08
Depth	2.60	0.80	0.70	1.00
Other ID	10	5	3	3
Sample Type	B	B	B	B
Sampling Date	26/10/17	27/10/17	25/10/17	30/10/17
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
PCBs							
PCB 28 + PCB 31	DETSC 3401#	0.01	mg/kg				
PCB 52	DETSC 3401#	0.01	mg/kg				
PCB 101	DETSC 3401#	0.01	mg/kg				
PCB 118	DETSC 3401#	0.01	mg/kg				
PCB 153	DETSC 3401#	0.01	mg/kg				
PCB 138	DETSC 3401#	0.01	mg/kg				
PCB 180	DETSC 3401#	0.01	mg/kg				
PCB 7 Total	DETSC 3401#	0.01	mg/kg				
Phenols							
Phenol - Monohydric	DETSC 2130#	0.3	mg/kg				

Summary of Chemical Analysis

Soil/Misc Samples

Our Ref 4155 Combined Report

Client Ref 4155

The Former SSI Steelworks, Redcar - Ground

Investigation Contract - Priority Areas Within SSI

Contract Title Landholdings, Contract 3

Lab No	1269249	1269250	1269251	1269252
Sample ID	S3-TPB14	S3-TPB22	S3-TPB25	S3-TPB26
Depth	0.80	1.00	1.00	1.00
Other ID	6	3	4	3
Sample Type	B	B	B	LB
Sampling Date	25/10/17	01/11/17	01/11/17	30/10/17
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
Asbestos Quantification	DETSC 1102	0					
Metals							
Aluminium	DETSC 2301*	1	mg/kg				
Antimony	DETSC 2301*	1	mg/kg				
Arsenic	DETSC 2301#	0.2	mg/kg				
Barium	DETSC 2301#	1.5	mg/kg				
Beryllium	DETSC 2301#	0.2	mg/kg				
Boron, Water Soluble	DETSC 2123#	0.2	mg/kg				
Cadmium	DETSC 2301#	0.1	mg/kg				
Chromium	DETSC 2301#	0.15	mg/kg				
Chromium, Hexavalent	DETSC 2204*	1	mg/kg				
Copper	DETSC 2301#	0.2	mg/kg				
Iron	DETSC 2301	25	mg/kg				
Lead	DETSC 2301#	0.3	mg/kg				
Magnesium	DETSC 2301*	1	mg/kg				
Manganese	DETSC 2301#	20	mg/kg				
Mercury	DETSC 2325#	0.05	mg/kg				
Molybdenum	DETSC 2301#	0.4	mg/kg				
Nickel	DETSC 2301#	1	mg/kg				
Silicon	DETSC 2301*	10	mg/kg				
Vanadium	DETSC 2301#	0.8	mg/kg				
Zinc	DETSC 2301#	1	mg/kg				
Inorganics							
Loss on Ignition at 440oC	DETSC 2003#	0.01	%				
pH	DETSC 2008#			10.1	11.9	8.5	11.9
Cyanide, Total	DETSC 2130#	0.1	mg/kg				
Cyanide, Free	DETSC 2130#	0.1	mg/kg				
Cyanide, Complex	DETSC 2130*	0.2	mg/kg				
Thiocyanate	DETSC 2130#	0.6	mg/kg				
FOC	DETSC 2002	0.001		0.014			0.010
Organic matter	DETSC 2002#	0.1	%	2.5			1.7
Sulphate Aqueous Extract as SO4	DETSC 2076#	10	mg/l	1300	190	880	110
Sulphur (free)	DETSC 3049#	0.75	mg/kg				
Sulphur as S, Total	DETSC 2320	0.01	%	0.15	0.44	0.36	0.25
Sulphate as SO4, Total	DETSC 2321#	0.01	%	0.36	1.4	0.36	0.52

Summary of Chemical Analysis

Soil/Misc Samples

Our Ref 4155 Combined Report

Client Ref 4155

The Former SSI Steelworks, Redcar - Ground

Investigation Contract - Priority Areas Within SSI

Contract Title Landholdings, Contract 3

Lab No	1269249	1269250	1269251	1269252
Sample ID	S3-TPB14	S3-TPB22	S3-TPB25	S3-TPB26
Depth	0.80	1.00	1.00	1.00
Other ID	6	3	4	3
Sample Type	B	B	B	LB
Sampling Date	25/10/17	01/11/17	01/11/17	30/10/17
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
Petroleum Hydrocarbons							
Aliphatic C5-C6	DETSC 3321*	0.01	mg/kg				
Aliphatic C6-C8	DETSC 3321*	0.01	mg/kg				
Aliphatic C8-C10	DETSC 3321*	0.01	mg/kg				
Aliphatic C10-C12	DETSC 3072#	1.5	mg/kg				
Aliphatic C12-C16	DETSC 3072#	1.2	mg/kg				
Aliphatic C16-C21	DETSC 3072#	1.5	mg/kg				
Aliphatic C21-C35	DETSC 3072#	3.4	mg/kg				
Aliphatic C5-C35	DETSC 3072*	10	mg/kg				
Aromatic C5-C7	DETSC 3321*	0.01	mg/kg				
Aromatic C7-C8	DETSC 3321*	0.01	mg/kg				
Aromatic C8-C10	DETSC 3321*	0.01	mg/kg				
Aromatic C10-C12	DETSC 3072#	0.9	mg/kg				
Aromatic C12-C16	DETSC 3072#	0.5	mg/kg				
Aromatic C16-C21	DETSC 3072#	0.6	mg/kg				
Aromatic C21-C35	DETSC 3072#	1.4	mg/kg				
Aromatic C5-C35	DETSC 3072*	10	mg/kg				
TPH Ali/Aro Total	DETSC 3072*	10	mg/kg				
PAHs							
Naphthalene	DETSC 3303#	0.03	mg/kg				
Acenaphthylene	DETSC 3303#	0.03	mg/kg				
Acenaphthene	DETSC 3303#	0.03	mg/kg				
Fluorene	DETSC 3303	0.03	mg/kg				
Phenanthrene	DETSC 3303#	0.03	mg/kg				
Anthracene	DETSC 3303	0.03	mg/kg				
Fluoranthene	DETSC 3303#	0.03	mg/kg				
Pyrene	DETSC 3303#	0.03	mg/kg				
Benzo(a)anthracene	DETSC 3303#	0.03	mg/kg				
Chrysene	DETSC 3303	0.03	mg/kg				
Benzo(b)fluoranthene	DETSC 3303#	0.03	mg/kg				
Benzo(k)fluoranthene	DETSC 3303#	0.03	mg/kg				
Benzo(a)pyrene	DETSC 3303#	0.03	mg/kg				
Indeno(1,2,3-c,d)pyrene	DETSC 3303#	0.03	mg/kg				
Dibenzo(a,h)anthracene	DETSC 3303#	0.03	mg/kg				
Benzo(g,h,i)perylene	DETSC 3303#	0.03	mg/kg				
PAH - USEPA 16, Total	DETSC 3303	0.1	mg/kg				

Summary of Chemical Analysis

Soil/Misc Samples

Our Ref 4155 Combined Report

Client Ref 4155

The Former SSI Steelworks, Redcar - Ground

Investigation Contract - Priority Areas Within SSI

Contract Title Landholdings, Contract 3

Lab No	1269249	1269250	1269251	1269252
Sample ID	S3-TPB14	S3-TPB22	S3-TPB25	S3-TPB26
Depth	0.80	1.00	1.00	1.00
Other ID	6	3	4	3
Sample Type	B	B	B	LB
Sampling Date	25/10/17	01/11/17	01/11/17	30/10/17
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
PCBs							
PCB 28 + PCB 31	DETSC 3401#	0.01	mg/kg				
PCB 52	DETSC 3401#	0.01	mg/kg				
PCB 101	DETSC 3401#	0.01	mg/kg				
PCB 118	DETSC 3401#	0.01	mg/kg				
PCB 153	DETSC 3401#	0.01	mg/kg				
PCB 138	DETSC 3401#	0.01	mg/kg				
PCB 180	DETSC 3401#	0.01	mg/kg				
PCB 7 Total	DETSC 3401#	0.01	mg/kg				
Phenols							
Phenol - Monohydric	DETSC 2130#	0.3	mg/kg				

Summary of Chemical Analysis

Soil/Misc Samples

Our Ref 4155 Combined Report

Client Ref 4155

The Former SSI Steelworks, Redcar - Ground

Investigation Contract - Priority Areas Within SSI

Contract Title Landholdings, Contract 3

Lab No	1269253	1269254	1269255	1269256
Sample ID	S3-TPB26	S3-TPB30	S3-TPB36	S3-TPB37
Depth	1.70	1.00	2.00	2.70
Other ID	6	3	7	9
Sample Type	B	B	B	B
Sampling Date	30/01/17	31/10/17	31/01/17	27/10/17
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
Asbestos Quantification	DETSC 1102	0					
Metals							
Aluminium	DETSC 2301*	1	mg/kg				
Antimony	DETSC 2301*	1	mg/kg				
Arsenic	DETSC 2301#	0.2	mg/kg				
Barium	DETSC 2301#	1.5	mg/kg				
Beryllium	DETSC 2301#	0.2	mg/kg				
Boron, Water Soluble	DETSC 2123#	0.2	mg/kg				
Cadmium	DETSC 2301#	0.1	mg/kg				
Chromium	DETSC 2301#	0.15	mg/kg				
Chromium, Hexavalent	DETSC 2204*	1	mg/kg				
Copper	DETSC 2301#	0.2	mg/kg				
Iron	DETSC 2301	25	mg/kg				
Lead	DETSC 2301#	0.3	mg/kg				
Magnesium	DETSC 2301*	1	mg/kg				
Manganese	DETSC 2301#	20	mg/kg				
Mercury	DETSC 2325#	0.05	mg/kg				
Molybdenum	DETSC 2301#	0.4	mg/kg				
Nickel	DETSC 2301#	1	mg/kg				
Silicon	DETSC 2301*	10	mg/kg				
Vanadium	DETSC 2301#	0.8	mg/kg				
Zinc	DETSC 2301#	1	mg/kg				
Inorganics							
Loss on Ignition at 440oC	DETSC 2003#	0.01	%	5.0			
pH	DETSC 2008#			11.7	10.8	11.4	11.0
Cyanide, Total	DETSC 2130#	0.1	mg/kg				
Cyanide, Free	DETSC 2130#	0.1	mg/kg				
Cyanide, Complex	DETSC 2130*	0.2	mg/kg				
Thiocyanate	DETSC 2130#	0.6	mg/kg				
FOC	DETSC 2002	0.001		0.015	0.007	0.012	
Organic matter	DETSC 2002#	0.1	%	2.6	1.2	2.0	
Sulphate Aqueous Extract as SO4	DETSC 2076#	10	mg/l	170	370	390	630
Sulphur (free)	DETSC 3049#	0.75	mg/kg				
Sulphur as S, Total	DETSC 2320	0.01	%		0.10	0.29	
Sulphate as SO4, Total	DETSC 2321#	0.01	%		0.27	0.47	

Summary of Chemical Analysis

Soil/Misc Samples

Our Ref 4155 Combined Report

Client Ref 4155

The Former SSI Steelworks, Redcar - Ground

Investigation Contract - Priority Areas Within SSI

Contract Title Landholdings, Contract 3

Lab No	1269253	1269254	1269255	1269256
Sample ID	S3-TPB26	S3-TPB30	S3-TPB36	S3-TPB37
Depth	1.70	1.00	2.00	2.70
Other ID	6	3	7	9
Sample Type	B	B	B	B
Sampling Date	30/01/17	31/10/17	31/01/17	27/10/17
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
Petroleum Hydrocarbons							
Aliphatic C5-C6	DETSC 3321*	0.01	mg/kg				
Aliphatic C6-C8	DETSC 3321*	0.01	mg/kg				
Aliphatic C8-C10	DETSC 3321*	0.01	mg/kg				
Aliphatic C10-C12	DETSC 3072#	1.5	mg/kg				
Aliphatic C12-C16	DETSC 3072#	1.2	mg/kg				
Aliphatic C16-C21	DETSC 3072#	1.5	mg/kg				
Aliphatic C21-C35	DETSC 3072#	3.4	mg/kg				
Aliphatic C5-C35	DETSC 3072*	10	mg/kg				
Aromatic C5-C7	DETSC 3321*	0.01	mg/kg				
Aromatic C7-C8	DETSC 3321*	0.01	mg/kg				
Aromatic C8-C10	DETSC 3321*	0.01	mg/kg				
Aromatic C10-C12	DETSC 3072#	0.9	mg/kg				
Aromatic C12-C16	DETSC 3072#	0.5	mg/kg				
Aromatic C16-C21	DETSC 3072#	0.6	mg/kg				
Aromatic C21-C35	DETSC 3072#	1.4	mg/kg				
Aromatic C5-C35	DETSC 3072*	10	mg/kg				
TPH Ali/Aro Total	DETSC 3072*	10	mg/kg				
PAHs							
Naphthalene	DETSC 3303#	0.03	mg/kg				
Acenaphthylene	DETSC 3303#	0.03	mg/kg				
Acenaphthene	DETSC 3303#	0.03	mg/kg				
Fluorene	DETSC 3303	0.03	mg/kg				
Phenanthrene	DETSC 3303#	0.03	mg/kg				
Anthracene	DETSC 3303	0.03	mg/kg				
Fluoranthene	DETSC 3303#	0.03	mg/kg				
Pyrene	DETSC 3303#	0.03	mg/kg				
Benzo(a)anthracene	DETSC 3303#	0.03	mg/kg				
Chrysene	DETSC 3303	0.03	mg/kg				
Benzo(b)fluoranthene	DETSC 3303#	0.03	mg/kg				
Benzo(k)fluoranthene	DETSC 3303#	0.03	mg/kg				
Benzo(a)pyrene	DETSC 3303#	0.03	mg/kg				
Indeno(1,2,3-c,d)pyrene	DETSC 3303#	0.03	mg/kg				
Dibenzo(a,h)anthracene	DETSC 3303#	0.03	mg/kg				
Benzo(g,h,i)perylene	DETSC 3303#	0.03	mg/kg				
PAH - USEPA 16, Total	DETSC 3303	0.1	mg/kg				

Summary of Chemical Analysis

Soil/Misc Samples

Our Ref 4155 Combined Report

Client Ref 4155

The Former SSI Steelworks, Redcar - Ground

Investigation Contract - Priority Areas Within SSI

Contract Title Landholdings, Contract 3

Lab No	1269253	1269254	1269255	1269256
Sample ID	S3-TPB26	S3-TPB30	S3-TPB36	S3-TPB37
Depth	1.70	1.00	2.00	2.70
Other ID	6	3	7	9
Sample Type	B	B	B	B
Sampling Date	30/01/17	31/10/17	31/01/17	27/10/17
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
PCBs							
PCB 28 + PCB 31	DETSC 3401#	0.01	mg/kg				
PCB 52	DETSC 3401#	0.01	mg/kg				
PCB 101	DETSC 3401#	0.01	mg/kg				
PCB 118	DETSC 3401#	0.01	mg/kg				
PCB 153	DETSC 3401#	0.01	mg/kg				
PCB 138	DETSC 3401#	0.01	mg/kg				
PCB 180	DETSC 3401#	0.01	mg/kg				
PCB 7 Total	DETSC 3401#	0.01	mg/kg				
Phenols							
Phenol - Monohydric	DETSC 2130#	0.3	mg/kg				

Summary of Chemical Analysis

Soil/Misc Samples

Our Ref 4155 Combined Report

Client Ref 4155

The Former SSI Steelworks, Redcar - Ground

Investigation Contract - Priority Areas Within SSI

Contract Title Landholdings, Contract 3

Lab No	1269257	1269258	1269259	1269260
Sample ID	S3-TPB41	S3-TPB46	S3-TPB50	S3-TPB51
Depth	1.00	0.40	1.00	2.00
Other ID	3	4	3	6
Sample Type	LB	B	B	B
Sampling Date	30/10/17	30/10/17	18/10/17	18/10/17
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
Asbestos Quantification	DETSC 1102	0					
Metals							
Aluminium	DETSC 2301*	1	mg/kg				
Antimony	DETSC 2301*	1	mg/kg				
Arsenic	DETSC 2301#	0.2	mg/kg				
Barium	DETSC 2301#	1.5	mg/kg				
Beryllium	DETSC 2301#	0.2	mg/kg				
Boron, Water Soluble	DETSC 2123#	0.2	mg/kg				
Cadmium	DETSC 2301#	0.1	mg/kg				
Chromium	DETSC 2301#	0.15	mg/kg				
Chromium, Hexavalent	DETSC 2204*	1	mg/kg				
Copper	DETSC 2301#	0.2	mg/kg				
Iron	DETSC 2301	25	mg/kg				
Lead	DETSC 2301#	0.3	mg/kg				
Magnesium	DETSC 2301*	1	mg/kg				
Manganese	DETSC 2301#	20	mg/kg				
Mercury	DETSC 2325#	0.05	mg/kg				
Molybdenum	DETSC 2301#	0.4	mg/kg				
Nickel	DETSC 2301#	1	mg/kg				
Silicon	DETSC 2301*	10	mg/kg				
Vanadium	DETSC 2301#	0.8	mg/kg				
Zinc	DETSC 2301#	1	mg/kg				
Inorganics							
Loss on Ignition at 440oC	DETSC 2003#	0.01	%			3.9	
pH	DETSC 2008#			11.4	11.0	11.6	11.0
Cyanide, Total	DETSC 2130#	0.1	mg/kg				
Cyanide, Free	DETSC 2130#	0.1	mg/kg				
Cyanide, Complex	DETSC 2130*	0.2	mg/kg				
Thiocyanate	DETSC 2130#	0.6	mg/kg				
FOC	DETSC 2002	0.001		0.027	0.005	0.012	0.007
Organic matter	DETSC 2002#	0.1	%	4.6	0.9	2.1	1.3
Sulphate Aqueous Extract as SO4	DETSC 2076#	10	mg/l	390	1600	480	1500
Sulphur (free)	DETSC 3049#	0.75	mg/kg				
Sulphur as S, Total	DETSC 2320	0.01	%	0.24	0.24	0.10	0.19
Sulphate as SO4, Total	DETSC 2321#	0.01	%	0.70	1.2	0.44	0.96

Summary of Chemical Analysis

Soil/Misc Samples

Our Ref 4155 Combined Report

Client Ref 4155

The Former SSI Steelworks, Redcar - Ground

Investigation Contract - Priority Areas Within SSI

Contract Title Landholdings, Contract 3

Lab No	1269257	1269258	1269259	1269260
Sample ID	S3-TPB41	S3-TPB46	S3-TPB50	S3-TPB51
Depth	1.00	0.40	1.00	2.00
Other ID	3	4	3	6
Sample Type	LB	B	B	B
Sampling Date	30/10/17	30/10/17	18/10/17	18/10/17
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
Petroleum Hydrocarbons							
Aliphatic C5-C6	DETSC 3321*	0.01	mg/kg				
Aliphatic C6-C8	DETSC 3321*	0.01	mg/kg				
Aliphatic C8-C10	DETSC 3321*	0.01	mg/kg				
Aliphatic C10-C12	DETSC 3072#	1.5	mg/kg				
Aliphatic C12-C16	DETSC 3072#	1.2	mg/kg				
Aliphatic C16-C21	DETSC 3072#	1.5	mg/kg				
Aliphatic C21-C35	DETSC 3072#	3.4	mg/kg				
Aliphatic C5-C35	DETSC 3072*	10	mg/kg				
Aromatic C5-C7	DETSC 3321*	0.01	mg/kg				
Aromatic C7-C8	DETSC 3321*	0.01	mg/kg				
Aromatic C8-C10	DETSC 3321*	0.01	mg/kg				
Aromatic C10-C12	DETSC 3072#	0.9	mg/kg				
Aromatic C12-C16	DETSC 3072#	0.5	mg/kg				
Aromatic C16-C21	DETSC 3072#	0.6	mg/kg				
Aromatic C21-C35	DETSC 3072#	1.4	mg/kg				
Aromatic C5-C35	DETSC 3072*	10	mg/kg				
TPH Ali/Aro Total	DETSC 3072*	10	mg/kg				
PAHs							
Naphthalene	DETSC 3303#	0.03	mg/kg				
Acenaphthylene	DETSC 3303#	0.03	mg/kg				
Acenaphthene	DETSC 3303#	0.03	mg/kg				
Fluorene	DETSC 3303	0.03	mg/kg				
Phenanthrene	DETSC 3303#	0.03	mg/kg				
Anthracene	DETSC 3303	0.03	mg/kg				
Fluoranthene	DETSC 3303#	0.03	mg/kg				
Pyrene	DETSC 3303#	0.03	mg/kg				
Benzo(a)anthracene	DETSC 3303#	0.03	mg/kg				
Chrysene	DETSC 3303	0.03	mg/kg				
Benzo(b)fluoranthene	DETSC 3303#	0.03	mg/kg				
Benzo(k)fluoranthene	DETSC 3303#	0.03	mg/kg				
Benzo(a)pyrene	DETSC 3303#	0.03	mg/kg				
Indeno(1,2,3-c,d)pyrene	DETSC 3303#	0.03	mg/kg				
Dibenzo(a,h)anthracene	DETSC 3303#	0.03	mg/kg				
Benzo(g,h,i)perylene	DETSC 3303#	0.03	mg/kg				
PAH - USEPA 16, Total	DETSC 3303	0.1	mg/kg				

Summary of Chemical Analysis

Soil/Misc Samples

Our Ref 4155 Combined Report

Client Ref 4155

The Former SSI Steelworks, Redcar - Ground

Investigation Contract - Priority Areas Within SSI

Contract Title Landholdings, Contract 3

Lab No	1269257	1269258	1269259	1269260
Sample ID	S3-TPB41	S3-TPB46	S3-TPB50	S3-TPB51
Depth	1.00	0.40	1.00	2.00
Other ID	3	4	3	6
Sample Type	LB	B	B	B
Sampling Date	30/10/17	30/10/17	18/10/17	18/10/17
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
PCBs							
PCB 28 + PCB 31	DETSC 3401#	0.01	mg/kg				
PCB 52	DETSC 3401#	0.01	mg/kg				
PCB 101	DETSC 3401#	0.01	mg/kg				
PCB 118	DETSC 3401#	0.01	mg/kg				
PCB 153	DETSC 3401#	0.01	mg/kg				
PCB 138	DETSC 3401#	0.01	mg/kg				
PCB 180	DETSC 3401#	0.01	mg/kg				
PCB 7 Total	DETSC 3401#	0.01	mg/kg				
Phenols							
Phenol - Monohydric	DETSC 2130#	0.3	mg/kg				

Summary of Chemical Analysis

Soil/Misc Samples

Our Ref 4155 Combined Report

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The Former SSI Steelworks, Redcar - Ground

Investigation Contract - Priority Areas Within SSI

Contract Title Landholdings, Contract 3

Lab No	1269261	1269262	1269263	1269264
Sample ID	S3-TPB52	S3-TPB66	S3-TPB69	S3-TPB71
Depth	1.00	1.00	1.00	1.00
Other ID	3	4	4	4
Sample Type	LB	LB	B	B
Sampling Date	26/10/17	23/10/17	20/10/17	23/10/17
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
Asbestos Quantification	DETSC 1102	0					
Metals							
Aluminium	DETSC 2301*	1	mg/kg				
Antimony	DETSC 2301*	1	mg/kg				
Arsenic	DETSC 2301#	0.2	mg/kg				
Barium	DETSC 2301#	1.5	mg/kg				
Beryllium	DETSC 2301#	0.2	mg/kg				
Boron, Water Soluble	DETSC 2123#	0.2	mg/kg				
Cadmium	DETSC 2301#	0.1	mg/kg				
Chromium	DETSC 2301#	0.15	mg/kg				
Chromium, Hexavalent	DETSC 2204*	1	mg/kg				
Copper	DETSC 2301#	0.2	mg/kg				
Iron	DETSC 2301	25	mg/kg				
Lead	DETSC 2301#	0.3	mg/kg				
Magnesium	DETSC 2301*	1	mg/kg				
Manganese	DETSC 2301#	20	mg/kg				
Mercury	DETSC 2325#	0.05	mg/kg				
Molybdenum	DETSC 2301#	0.4	mg/kg				
Nickel	DETSC 2301#	1	mg/kg				
Silicon	DETSC 2301*	10	mg/kg				
Vanadium	DETSC 2301#	0.8	mg/kg				
Zinc	DETSC 2301#	1	mg/kg				
Inorganics							
Loss on Ignition at 440oC	DETSC 2003#	0.01	%	4.5			
pH	DETSC 2008#			11.5	11.1	11.4	11.3
Cyanide, Total	DETSC 2130#	0.1	mg/kg				
Cyanide, Free	DETSC 2130#	0.1	mg/kg				
Cyanide, Complex	DETSC 2130*	0.2	mg/kg				
Thiocyanate	DETSC 2130#	0.6	mg/kg				
FOC	DETSC 2002	0.001		0.006	0.007	0.009	0.011
Organic matter	DETSC 2002#	0.1	%	1.1	1.3	1.6	1.9
Sulphate Aqueous Extract as SO4	DETSC 2076#	10	mg/l	540	970	560	600
Sulphur (free)	DETSC 3049#	0.75	mg/kg				
Sulphur as S, Total	DETSC 2320	0.01	%	0.24	0.11	0.11	0.24
Sulphate as SO4, Total	DETSC 2321#	0.01	%	1.2	1.0	1.3	1.3

Summary of Chemical Analysis

Soil/Misc Samples

Our Ref 4155 Combined Report

Client Ref 4155

The Former SSI Steelworks, Redcar - Ground

Investigation Contract - Priority Areas Within SSI

Contract Title Landholdings, Contract 3

Lab No	1269261	1269262	1269263	1269264
Sample ID	S3-TPB52	S3-TPB66	S3-TPB69	S3-TPB71
Depth	1.00	1.00	1.00	1.00
Other ID	3	4	4	4
Sample Type	LB	LB	B	B
Sampling Date	26/10/17	23/10/17	20/10/17	23/10/17
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
Petroleum Hydrocarbons							
Aliphatic C5-C6	DETSC 3321*	0.01	mg/kg				
Aliphatic C6-C8	DETSC 3321*	0.01	mg/kg				
Aliphatic C8-C10	DETSC 3321*	0.01	mg/kg				
Aliphatic C10-C12	DETSC 3072#	1.5	mg/kg				
Aliphatic C12-C16	DETSC 3072#	1.2	mg/kg				
Aliphatic C16-C21	DETSC 3072#	1.5	mg/kg				
Aliphatic C21-C35	DETSC 3072#	3.4	mg/kg				
Aliphatic C5-C35	DETSC 3072*	10	mg/kg				
Aromatic C5-C7	DETSC 3321*	0.01	mg/kg				
Aromatic C7-C8	DETSC 3321*	0.01	mg/kg				
Aromatic C8-C10	DETSC 3321*	0.01	mg/kg				
Aromatic C10-C12	DETSC 3072#	0.9	mg/kg				
Aromatic C12-C16	DETSC 3072#	0.5	mg/kg				
Aromatic C16-C21	DETSC 3072#	0.6	mg/kg				
Aromatic C21-C35	DETSC 3072#	1.4	mg/kg				
Aromatic C5-C35	DETSC 3072*	10	mg/kg				
TPH Ali/Aro Total	DETSC 3072*	10	mg/kg				
PAHs							
Naphthalene	DETSC 3303#	0.03	mg/kg				
Acenaphthylene	DETSC 3303#	0.03	mg/kg				
Acenaphthene	DETSC 3303#	0.03	mg/kg				
Fluorene	DETSC 3303	0.03	mg/kg				
Phenanthrene	DETSC 3303#	0.03	mg/kg				
Anthracene	DETSC 3303	0.03	mg/kg				
Fluoranthene	DETSC 3303#	0.03	mg/kg				
Pyrene	DETSC 3303#	0.03	mg/kg				
Benzo(a)anthracene	DETSC 3303#	0.03	mg/kg				
Chrysene	DETSC 3303	0.03	mg/kg				
Benzo(b)fluoranthene	DETSC 3303#	0.03	mg/kg				
Benzo(k)fluoranthene	DETSC 3303#	0.03	mg/kg				
Benzo(a)pyrene	DETSC 3303#	0.03	mg/kg				
Indeno(1,2,3-c,d)pyrene	DETSC 3303#	0.03	mg/kg				
Dibenzo(a,h)anthracene	DETSC 3303#	0.03	mg/kg				
Benzo(g,h,i)perylene	DETSC 3303#	0.03	mg/kg				
PAH - USEPA 16, Total	DETSC 3303	0.1	mg/kg				

Summary of Chemical Analysis

Soil/Misc Samples

Our Ref 4155 Combined Report

Client Ref 4155

The Former SSI Steelworks, Redcar - Ground

Investigation Contract - Priority Areas Within SSI

Contract Title Landholdings, Contract 3

Lab No	1269261	1269262	1269263	1269264
Sample ID	S3-TPB52	S3-TPB66	S3-TPB69	S3-TPB71
Depth	1.00	1.00	1.00	1.00
Other ID	3	4	4	4
Sample Type	LB	LB	B	B
Sampling Date	26/10/17	23/10/17	20/10/17	23/10/17
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
PCBs							
PCB 28 + PCB 31	DETSC 3401#	0.01	mg/kg				
PCB 52	DETSC 3401#	0.01	mg/kg				
PCB 101	DETSC 3401#	0.01	mg/kg				
PCB 118	DETSC 3401#	0.01	mg/kg				
PCB 153	DETSC 3401#	0.01	mg/kg				
PCB 138	DETSC 3401#	0.01	mg/kg				
PCB 180	DETSC 3401#	0.01	mg/kg				
PCB 7 Total	DETSC 3401#	0.01	mg/kg				
Phenols							
Phenol - Monohydric	DETSC 2130#	0.3	mg/kg				

Summary of Chemical Analysis

Soil/Misc Samples

Our Ref 4155 Combined Report

Client Ref 4155

The Former SSI Steelworks, Redcar - Ground

Investigation Contract - Priority Areas Within SSI

Contract Title Landholdings, Contract 3

Lab No	1269265	1269266	1269267	1275450
Sample ID	S3-TPB72	S3-TPB73	S3-TPB74	S3-TPB03
Depth	1.00	1.00	1.50	2.70
Other ID	4	4	6	8
Sample Type	B	LB	B	ES
Sampling Date	23/10/17	23/10/17	20/10/17	27/10/17
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
Asbestos Quantification	DETSC 1102	0					
Metals							
Aluminium	DETSC 2301*	1	mg/kg				47000
Antimony	DETSC 2301*	1	mg/kg				2.5
Arsenic	DETSC 2301#	0.2	mg/kg				5.3
Barium	DETSC 2301#	1.5	mg/kg				260
Beryllium	DETSC 2301#	0.2	mg/kg				4.9
Boron, Water Soluble	DETSC 2123#	0.2	mg/kg				6.1
Cadmium	DETSC 2301#	0.1	mg/kg				0.1
Chromium	DETSC 2301#	0.15	mg/kg				88
Chromium, Hexavalent	DETSC 2204*	1	mg/kg				
Copper	DETSC 2301#	0.2	mg/kg				9.9
Iron	DETSC 2301	25	mg/kg				10000
Lead	DETSC 2301#	0.3	mg/kg				3.6
Magnesium	DETSC 2301*	1	mg/kg				
Manganese	DETSC 2301#	20	mg/kg				9300
Mercury	DETSC 2325#	0.05	mg/kg				< 0.05
Molybdenum	DETSC 2301#	0.4	mg/kg				0.8
Nickel	DETSC 2301#	1	mg/kg				3.6
Silicon	DETSC 2301*	10	mg/kg				
Vanadium	DETSC 2301#	0.8	mg/kg				120
Zinc	DETSC 2301#	1	mg/kg				13
Inorganics							
Loss on Ignition at 440oC	DETSC 2003#	0.01	%				
pH	DETSC 2008#			9.2	11.5	11.5	11.2
Cyanide, Total	DETSC 2130#	0.1	mg/kg				< 0.1
Cyanide, Free	DETSC 2130#	0.1	mg/kg				
Cyanide, Complex	DETSC 2130*	0.2	mg/kg				
Thiocyanate	DETSC 2130#	0.6	mg/kg				
FOC	DETSC 2002	0.001		0.008	0.007		
Organic matter	DETSC 2002#	0.1	%	1.4	1.1		0.9
Sulphate Aqueous Extract as SO4	DETSC 2076#	10	mg/l	330	720	1300	1600
Sulphur (free)	DETSC 3049#	0.75	mg/kg				8.7
Sulphur as S, Total	DETSC 2320	0.01	%	0.04	0.17		
Sulphate as SO4, Total	DETSC 2321#	0.01	%	0.22	0.90		

Summary of Chemical Analysis

Soil/Misc Samples

Our Ref 4155 Combined Report

Client Ref 4155

The Former SSI Steelworks, Redcar - Ground

Investigation Contract - Priority Areas Within SSI

Contract Title Landholdings, Contract 3

Lab No	1269265	1269266	1269267	1275450
Sample ID	S3-TPB72	S3-TPB73	S3-TPB74	S3-TPB03
Depth	1.00	1.00	1.50	2.70
Other ID	4	4	6	8
Sample Type	B	LB	B	ES
Sampling Date	23/10/17	23/10/17	20/10/17	27/10/17
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
Petroleum Hydrocarbons							
Aliphatic C5-C6	DETSC 3321*	0.01	mg/kg				< 0.01
Aliphatic C6-C8	DETSC 3321*	0.01	mg/kg				< 0.01
Aliphatic C8-C10	DETSC 3321*	0.01	mg/kg				< 0.01
Aliphatic C10-C12	DETSC 3072#	1.5	mg/kg				< 1.5
Aliphatic C12-C16	DETSC 3072#	1.2	mg/kg				< 1.2
Aliphatic C16-C21	DETSC 3072#	1.5	mg/kg				2.0
Aliphatic C21-C35	DETSC 3072#	3.4	mg/kg				13
Aliphatic C5-C35	DETSC 3072*	10	mg/kg				17
Aromatic C5-C7	DETSC 3321*	0.01	mg/kg				< 0.01
Aromatic C7-C8	DETSC 3321*	0.01	mg/kg				< 0.01
Aromatic C8-C10	DETSC 3321*	0.01	mg/kg				< 0.01
Aromatic C10-C12	DETSC 3072#	0.9	mg/kg				< 0.9
Aromatic C12-C16	DETSC 3072#	0.5	mg/kg				< 0.5
Aromatic C16-C21	DETSC 3072#	0.6	mg/kg				< 0.6
Aromatic C21-C35	DETSC 3072#	1.4	mg/kg				< 1.4
Aromatic C5-C35	DETSC 3072*	10	mg/kg				< 10
TPH Ali/Aro Total	DETSC 3072*	10	mg/kg				17
PAHs							
Naphthalene	DETSC 3303#	0.03	mg/kg				< 0.03
Acenaphthylene	DETSC 3303#	0.03	mg/kg				< 0.03
Acenaphthene	DETSC 3303#	0.03	mg/kg				< 0.03
Fluorene	DETSC 3303	0.03	mg/kg				< 0.03
Phenanthrene	DETSC 3303#	0.03	mg/kg				0.36
Anthracene	DETSC 3303	0.03	mg/kg				0.07
Fluoranthene	DETSC 3303#	0.03	mg/kg				0.70
Pyrene	DETSC 3303#	0.03	mg/kg				0.55
Benzo(a)anthracene	DETSC 3303#	0.03	mg/kg				0.23
Chrysene	DETSC 3303	0.03	mg/kg				0.22
Benzo(b)fluoranthene	DETSC 3303#	0.03	mg/kg				0.24
Benzo(k)fluoranthene	DETSC 3303#	0.03	mg/kg				0.09
Benzo(a)pyrene	DETSC 3303#	0.03	mg/kg				0.18
Indeno(1,2,3-c,d)pyrene	DETSC 3303#	0.03	mg/kg				0.09
Dibenzo(a,h)anthracene	DETSC 3303#	0.03	mg/kg				< 0.03
Benzo(g,h,i)perylene	DETSC 3303#	0.03	mg/kg				0.09
PAH - USEPA 16, Total	DETSC 3303	0.1	mg/kg				2.8

Summary of Chemical Analysis

Soil/Misc Samples

Our Ref 4155 Combined Report

Client Ref 4155

The Former SSI Steelworks, Redcar - Ground

Investigation Contract - Priority Areas Within SSI

Contract Title Landholdings, Contract 3

Lab No	1269265	1269266	1269267	1275450
Sample ID	S3-TPB72	S3-TPB73	S3-TPB74	S3-TPB03
Depth	1.00	1.00	1.50	2.70
Other ID	4	4	6	8
Sample Type	B	LB	B	ES
Sampling Date	23/10/17	23/10/17	20/10/17	27/10/17
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
PCBs							
PCB 28 + PCB 31	DETS 3401#	0.01	mg/kg				
PCB 52	DETS 3401#	0.01	mg/kg				
PCB 101	DETS 3401#	0.01	mg/kg				
PCB 118	DETS 3401#	0.01	mg/kg				
PCB 153	DETS 3401#	0.01	mg/kg				
PCB 138	DETS 3401#	0.01	mg/kg				
PCB 180	DETS 3401#	0.01	mg/kg				
PCB 7 Total	DETS 3401#	0.01	mg/kg				
Phenols							
Phenol - Monohydric	DETS 2130#	0.3	mg/kg				< 0.3

Summary of Chemical Analysis

Soil/Misc Samples

Our Ref 4155 Combined Report

Client Ref 4155

The Former SSI Steelworks, Redcar - Ground

Investigation Contract - Priority Areas Within SSI

Contract Title Landholdings, Contract 3

Lab No	1276865	1276866	1276867	1276868
Sample ID	S3-BHA01	S3-BHB02	S3-BHB02	S3-BHB03
Depth	6.50	3.50	6.50	2.50
Other ID	10	6	11	5
Sample Type	J	B	B	B
Sampling Date	n/s	n/s	n/s	n/s
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
Asbestos Quantification	DETSC 1102	0					
Metals							
Aluminium	DETSC 2301*	1	mg/kg				
Antimony	DETSC 2301*	1	mg/kg				
Arsenic	DETSC 2301#	0.2	mg/kg				
Barium	DETSC 2301#	1.5	mg/kg				
Beryllium	DETSC 2301#	0.2	mg/kg				
Boron, Water Soluble	DETSC 2123#	0.2	mg/kg				
Cadmium	DETSC 2301#	0.1	mg/kg				
Chromium	DETSC 2301#	0.15	mg/kg				
Chromium, Hexavalent	DETSC 2204*	1	mg/kg				
Copper	DETSC 2301#	0.2	mg/kg				
Iron	DETSC 2301	25	mg/kg				
Lead	DETSC 2301#	0.3	mg/kg				
Magnesium	DETSC 2301*	1	mg/kg				
Manganese	DETSC 2301#	20	mg/kg				
Mercury	DETSC 2325#	0.05	mg/kg				
Molybdenum	DETSC 2301#	0.4	mg/kg				
Nickel	DETSC 2301#	1	mg/kg				
Silicon	DETSC 2301*	10	mg/kg				
Vanadium	DETSC 2301#	0.8	mg/kg				
Zinc	DETSC 2301#	1	mg/kg				
Inorganics							
Loss on Ignition at 440oC	DETSC 2003#	0.01	%				
pH	DETSC 2008#			9.1	9.1	9.7	9.3
Cyanide, Total	DETSC 2130#	0.1	mg/kg				
Cyanide, Free	DETSC 2130#	0.1	mg/kg				
Cyanide, Complex	DETSC 2130*	0.2	mg/kg				
Thiocyanate	DETSC 2130#	0.6	mg/kg				
FOC	DETSC 2002	0.001					
Organic matter	DETSC 2002#	0.1	%				
Sulphate Aqueous Extract as SO4	DETSC 2076#	10	mg/l	200	320	160	160
Sulphur (free)	DETSC 3049#	0.75	mg/kg				
Sulphur as S, Total	DETSC 2320	0.01	%				
Sulphate as SO4, Total	DETSC 2321#	0.01	%				

Summary of Chemical Analysis

Soil/Misc Samples

Our Ref 4155 Combined Report

Client Ref 4155

The Former SSI Steelworks, Redcar - Ground

Investigation Contract - Priority Areas Within SSI

Contract Title Landholdings, Contract 3

Lab No	1276865	1276866	1276867	1276868
Sample ID	S3-BHA01	S3-BHB02	S3-BHB02	S3-BHB03
Depth	6.50	3.50	6.50	2.50
Other ID	10	6	11	5
Sample Type	J	B	B	B
Sampling Date	n/s	n/s	n/s	n/s
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
Petroleum Hydrocarbons							
Aliphatic C5-C6	DETSC 3321*	0.01	mg/kg				
Aliphatic C6-C8	DETSC 3321*	0.01	mg/kg				
Aliphatic C8-C10	DETSC 3321*	0.01	mg/kg				
Aliphatic C10-C12	DETSC 3072#	1.5	mg/kg				
Aliphatic C12-C16	DETSC 3072#	1.2	mg/kg				
Aliphatic C16-C21	DETSC 3072#	1.5	mg/kg				
Aliphatic C21-C35	DETSC 3072#	3.4	mg/kg				
Aliphatic C5-C35	DETSC 3072*	10	mg/kg				
Aromatic C5-C7	DETSC 3321*	0.01	mg/kg				
Aromatic C7-C8	DETSC 3321*	0.01	mg/kg				
Aromatic C8-C10	DETSC 3321*	0.01	mg/kg				
Aromatic C10-C12	DETSC 3072#	0.9	mg/kg				
Aromatic C12-C16	DETSC 3072#	0.5	mg/kg				
Aromatic C16-C21	DETSC 3072#	0.6	mg/kg				
Aromatic C21-C35	DETSC 3072#	1.4	mg/kg				
Aromatic C5-C35	DETSC 3072*	10	mg/kg				
TPH Ali/Aro Total	DETSC 3072*	10	mg/kg				
PAHs							
Naphthalene	DETSC 3303#	0.03	mg/kg				
Acenaphthylene	DETSC 3303#	0.03	mg/kg				
Acenaphthene	DETSC 3303#	0.03	mg/kg				
Fluorene	DETSC 3303	0.03	mg/kg				
Phenanthrene	DETSC 3303#	0.03	mg/kg				
Anthracene	DETSC 3303	0.03	mg/kg				
Fluoranthene	DETSC 3303#	0.03	mg/kg				
Pyrene	DETSC 3303#	0.03	mg/kg				
Benzo(a)anthracene	DETSC 3303#	0.03	mg/kg				
Chrysene	DETSC 3303	0.03	mg/kg				
Benzo(b)fluoranthene	DETSC 3303#	0.03	mg/kg				
Benzo(k)fluoranthene	DETSC 3303#	0.03	mg/kg				
Benzo(a)pyrene	DETSC 3303#	0.03	mg/kg				
Indeno(1,2,3-c,d)pyrene	DETSC 3303#	0.03	mg/kg				
Dibenzo(a,h)anthracene	DETSC 3303#	0.03	mg/kg				
Benzo(g,h,i)perylene	DETSC 3303#	0.03	mg/kg				
PAH - USEPA 16, Total	DETSC 3303	0.1	mg/kg				

Summary of Chemical Analysis

Soil/Misc Samples

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The Former SSI Steelworks, Redcar - Ground

Investigation Contract - Priority Areas Within SSI

Contract Title Landholdings, Contract 3

Lab No	1276865	1276866	1276867	1276868
Sample ID	S3-BHA01	S3-BHB02	S3-BHB02	S3-BHB03
Depth	6.50	3.50	6.50	2.50
Other ID	10	6	11	5
Sample Type	J	B	B	B
Sampling Date	n/s	n/s	n/s	n/s
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
PCBs							
PCB 28 + PCB 31	DETSC 3401#	0.01	mg/kg				
PCB 52	DETSC 3401#	0.01	mg/kg				
PCB 101	DETSC 3401#	0.01	mg/kg				
PCB 118	DETSC 3401#	0.01	mg/kg				
PCB 153	DETSC 3401#	0.01	mg/kg				
PCB 138	DETSC 3401#	0.01	mg/kg				
PCB 180	DETSC 3401#	0.01	mg/kg				
PCB 7 Total	DETSC 3401#	0.01	mg/kg				
Phenols							
Phenol - Monohydric	DETSC 2130#	0.3	mg/kg				

Summary of Chemical Analysis

Soil/Misc Samples

Our Ref 4155 Combined Report

Client Ref 4155

The Former SSI Steelworks, Redcar - Ground

Investigation Contract - Priority Areas Within SSI

Contract Title Landholdings, Contract 3

Lab No	1276869	1276870	1276871	1276872
Sample ID	S3-BHB03	S3-BHB04	S3-BHB04	S3-TPB34
Depth	8.00	4.00	6.50	1.00
Other ID	14	7	12	4
Sample Type	B	B	B	B
Sampling Date	n/s	n/s	n/s	n/s
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
Asbestos Quantification	DETSC 1102	0					
Metals							
Aluminium	DETSC 2301*	1	mg/kg				
Antimony	DETSC 2301*	1	mg/kg				
Arsenic	DETSC 2301#	0.2	mg/kg				
Barium	DETSC 2301#	1.5	mg/kg				
Beryllium	DETSC 2301#	0.2	mg/kg				
Boron, Water Soluble	DETSC 2123#	0.2	mg/kg				
Cadmium	DETSC 2301#	0.1	mg/kg				
Chromium	DETSC 2301#	0.15	mg/kg				
Chromium, Hexavalent	DETSC 2204*	1	mg/kg				
Copper	DETSC 2301#	0.2	mg/kg				
Iron	DETSC 2301	25	mg/kg				
Lead	DETSC 2301#	0.3	mg/kg				
Magnesium	DETSC 2301*	1	mg/kg				
Manganese	DETSC 2301#	20	mg/kg				
Mercury	DETSC 2325#	0.05	mg/kg				
Molybdenum	DETSC 2301#	0.4	mg/kg				
Nickel	DETSC 2301#	1	mg/kg				
Silicon	DETSC 2301*	10	mg/kg				
Vanadium	DETSC 2301#	0.8	mg/kg				
Zinc	DETSC 2301#	1	mg/kg				
Inorganics							
Loss on Ignition at 440oC	DETSC 2003#	0.01	%				
pH	DETSC 2008#			8.8	8.2	8.6	11.0
Cyanide, Total	DETSC 2130#	0.1	mg/kg				
Cyanide, Free	DETSC 2130#	0.1	mg/kg				
Cyanide, Complex	DETSC 2130*	0.2	mg/kg				
Thiocyanate	DETSC 2130#	0.6	mg/kg				
FOC	DETSC 2002	0.001					0.011
Organic matter	DETSC 2002#	0.1	%				1.9
Sulphate Aqueous Extract as SO4	DETSC 2076#	10	mg/l	150	160	150	630
Sulphur (free)	DETSC 3049#	0.75	mg/kg				
Sulphur as S, Total	DETSC 2320	0.01	%				0.23
Sulphate as SO4, Total	DETSC 2321#	0.01	%				0.31

Summary of Chemical Analysis

Soil/Misc Samples

Our Ref 4155 Combined Report

Client Ref 4155

The Former SSI Steelworks, Redcar - Ground

Investigation Contract - Priority Areas Within SSI

Contract Title Landholdings, Contract 3

Lab No	1276869	1276870	1276871	1276872
Sample ID	S3-BHB03	S3-BHB04	S3-BHB04	S3-TPB34
Depth	8.00	4.00	6.50	1.00
Other ID	14	7	12	4
Sample Type	B	B	B	B
Sampling Date	n/s	n/s	n/s	n/s
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
Petroleum Hydrocarbons							
Aliphatic C5-C6	DETSC 3321*	0.01	mg/kg				
Aliphatic C6-C8	DETSC 3321*	0.01	mg/kg				
Aliphatic C8-C10	DETSC 3321*	0.01	mg/kg				
Aliphatic C10-C12	DETSC 3072#	1.5	mg/kg				
Aliphatic C12-C16	DETSC 3072#	1.2	mg/kg				
Aliphatic C16-C21	DETSC 3072#	1.5	mg/kg				
Aliphatic C21-C35	DETSC 3072#	3.4	mg/kg				
Aliphatic C5-C35	DETSC 3072*	10	mg/kg				
Aromatic C5-C7	DETSC 3321*	0.01	mg/kg				
Aromatic C7-C8	DETSC 3321*	0.01	mg/kg				
Aromatic C8-C10	DETSC 3321*	0.01	mg/kg				
Aromatic C10-C12	DETSC 3072#	0.9	mg/kg				
Aromatic C12-C16	DETSC 3072#	0.5	mg/kg				
Aromatic C16-C21	DETSC 3072#	0.6	mg/kg				
Aromatic C21-C35	DETSC 3072#	1.4	mg/kg				
Aromatic C5-C35	DETSC 3072*	10	mg/kg				
TPH Ali/Aro Total	DETSC 3072*	10	mg/kg				
PAHs							
Naphthalene	DETSC 3303#	0.03	mg/kg				
Acenaphthylene	DETSC 3303#	0.03	mg/kg				
Acenaphthene	DETSC 3303#	0.03	mg/kg				
Fluorene	DETSC 3303	0.03	mg/kg				
Phenanthrene	DETSC 3303#	0.03	mg/kg				
Anthracene	DETSC 3303	0.03	mg/kg				
Fluoranthene	DETSC 3303#	0.03	mg/kg				
Pyrene	DETSC 3303#	0.03	mg/kg				
Benzo(a)anthracene	DETSC 3303#	0.03	mg/kg				
Chrysene	DETSC 3303	0.03	mg/kg				
Benzo(b)fluoranthene	DETSC 3303#	0.03	mg/kg				
Benzo(k)fluoranthene	DETSC 3303#	0.03	mg/kg				
Benzo(a)pyrene	DETSC 3303#	0.03	mg/kg				
Indeno(1,2,3-c,d)pyrene	DETSC 3303#	0.03	mg/kg				
Dibenzo(a,h)anthracene	DETSC 3303#	0.03	mg/kg				
Benzo(g,h,i)perylene	DETSC 3303#	0.03	mg/kg				
PAH - USEPA 16, Total	DETSC 3303	0.1	mg/kg				

Summary of Chemical Analysis

Soil/Misc Samples

Our Ref 4155 Combined Report

Client Ref 4155

The Former SSI Steelworks, Redcar - Ground

Investigation Contract - Priority Areas Within SSI

Contract Title Landholdings, Contract 3

Lab No	1276869	1276870	1276871	1276872
Sample ID	S3-BHB03	S3-BHB04	S3-BHB04	S3-TPB34
Depth	8.00	4.00	6.50	1.00
Other ID	14	7	12	4
Sample Type	B	B	B	B
Sampling Date	n/s	n/s	n/s	n/s
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
PCBs							
PCB 28 + PCB 31	DETSC 3401#	0.01	mg/kg				
PCB 52	DETSC 3401#	0.01	mg/kg				
PCB 101	DETSC 3401#	0.01	mg/kg				
PCB 118	DETSC 3401#	0.01	mg/kg				
PCB 153	DETSC 3401#	0.01	mg/kg				
PCB 138	DETSC 3401#	0.01	mg/kg				
PCB 180	DETSC 3401#	0.01	mg/kg				
PCB 7 Total	DETSC 3401#	0.01	mg/kg				
Phenols							
Phenol - Monohydric	DETSC 2130#	0.3	mg/kg				

Summary of Chemical Analysis

Soil/Misc Samples

Our Ref 4155 Combined Report

Client Ref 4155

The Former SSI Steelworks, Redcar - Ground

Investigation Contract - Priority Areas Within SSI

Contract Title Landholdings, Contract 3

Lab No	1276873	1278011	1278012
Sample ID	S3-TPB38	S3-TPA02	S3-TPA11
Depth	1.00	1.80	1.20
Other ID	4	6	4
Sample Type	B	B	B
Sampling Date	n/s	23/10/17	20/10/17
Sampling Time	n/s	n/s	n/s

Test	Method	LOD	Units			
Asbestos Quantification	DETSC 1102	0				
Metals						
Aluminium	DETSC 2301*	1	mg/kg			
Antimony	DETSC 2301*	1	mg/kg			
Arsenic	DETSC 2301#	0.2	mg/kg			
Barium	DETSC 2301#	1.5	mg/kg			
Beryllium	DETSC 2301#	0.2	mg/kg			
Boron, Water Soluble	DETSC 2123#	0.2	mg/kg			
Cadmium	DETSC 2301#	0.1	mg/kg			
Chromium	DETSC 2301#	0.15	mg/kg			
Chromium, Hexavalent	DETSC 2204*	1	mg/kg			
Copper	DETSC 2301#	0.2	mg/kg			
Iron	DETSC 2301	25	mg/kg			
Lead	DETSC 2301#	0.3	mg/kg			
Magnesium	DETSC 2301*	1	mg/kg			
Manganese	DETSC 2301#	20	mg/kg			
Mercury	DETSC 2325#	0.05	mg/kg			
Molybdenum	DETSC 2301#	0.4	mg/kg			
Nickel	DETSC 2301#	1	mg/kg			
Silicon	DETSC 2301*	10	mg/kg			
Vanadium	DETSC 2301#	0.8	mg/kg			
Zinc	DETSC 2301#	1	mg/kg			
Inorganics						
Loss on Ignition at 440oC	DETSC 2003#	0.01	%	6.4		
pH	DETSC 2008#			12.2	10.8	11.2
Cyanide, Total	DETSC 2130#	0.1	mg/kg			
Cyanide, Free	DETSC 2130#	0.1	mg/kg			
Cyanide, Complex	DETSC 2130*	0.2	mg/kg			
Thiocyanate	DETSC 2130#	0.6	mg/kg			
FOC	DETSC 2002	0.001		0.005	0.008	0.011
Organic matter	DETSC 2002#	0.1	%	0.8	1.3	2.0
Sulphate Aqueous Extract as SO4	DETSC 2076#	10	mg/l	61	1600	1300
Sulphur (free)	DETSC 3049#	0.75	mg/kg			
Sulphur as S, Total	DETSC 2320	0.01	%	0.23	0.40	0.42
Sulphate as SO4, Total	DETSC 2321#	0.01	%	0.64	0.70	0.54

Summary of Chemical Analysis

Soil/Misc Samples

Our Ref 4155 Combined Report

Client Ref 4155

The Former SSI Steelworks, Redcar - Ground

Investigation Contract - Priority Areas Within SSI

Contract Title Landholdings, Contract 3

Lab No	1276873	1278011	1278012
Sample ID	S3-TPB38	S3-TPA02	S3-TPA11
Depth	1.00	1.80	1.20
Other ID	4	6	4
Sample Type	B	B	B
Sampling Date	n/s	23/10/17	20/10/17
Sampling Time	n/s	n/s	n/s

Test	Method	LOD	Units			
Petroleum Hydrocarbons						
Aliphatic C5-C6	DETSC 3321*	0.01	mg/kg			
Aliphatic C6-C8	DETSC 3321*	0.01	mg/kg			
Aliphatic C8-C10	DETSC 3321*	0.01	mg/kg			
Aliphatic C10-C12	DETSC 3072#	1.5	mg/kg			
Aliphatic C12-C16	DETSC 3072#	1.2	mg/kg			
Aliphatic C16-C21	DETSC 3072#	1.5	mg/kg			
Aliphatic C21-C35	DETSC 3072#	3.4	mg/kg			
Aliphatic C5-C35	DETSC 3072*	10	mg/kg			
Aromatic C5-C7	DETSC 3321*	0.01	mg/kg			
Aromatic C7-C8	DETSC 3321*	0.01	mg/kg			
Aromatic C8-C10	DETSC 3321*	0.01	mg/kg			
Aromatic C10-C12	DETSC 3072#	0.9	mg/kg			
Aromatic C12-C16	DETSC 3072#	0.5	mg/kg			
Aromatic C16-C21	DETSC 3072#	0.6	mg/kg			
Aromatic C21-C35	DETSC 3072#	1.4	mg/kg			
Aromatic C5-C35	DETSC 3072*	10	mg/kg			
TPH Ali/Aro Total	DETSC 3072*	10	mg/kg			
PAHs						
Naphthalene	DETSC 3303#	0.03	mg/kg			
Acenaphthylene	DETSC 3303#	0.03	mg/kg			
Acenaphthene	DETSC 3303#	0.03	mg/kg			
Fluorene	DETSC 3303	0.03	mg/kg			
Phenanthrene	DETSC 3303#	0.03	mg/kg			
Anthracene	DETSC 3303	0.03	mg/kg			
Fluoranthene	DETSC 3303#	0.03	mg/kg			
Pyrene	DETSC 3303#	0.03	mg/kg			
Benzo(a)anthracene	DETSC 3303#	0.03	mg/kg			
Chrysene	DETSC 3303	0.03	mg/kg			
Benzo(b)fluoranthene	DETSC 3303#	0.03	mg/kg			
Benzo(k)fluoranthene	DETSC 3303#	0.03	mg/kg			
Benzo(a)pyrene	DETSC 3303#	0.03	mg/kg			
Indeno(1,2,3-c,d)pyrene	DETSC 3303#	0.03	mg/kg			
Dibenzo(a,h)anthracene	DETSC 3303#	0.03	mg/kg			
Benzo(g,h,i)perylene	DETSC 3303#	0.03	mg/kg			
PAH - USEPA 16, Total	DETSC 3303	0.1	mg/kg			

Summary of Chemical Analysis

Soil/Misc Samples

Our Ref 4155 Combined Report

Client Ref 4155

The Former SSI Steelworks, Redcar - Ground

Investigation Contract - Priority Areas Within SSI

Contract Title Landholdings, Contract 3

Lab No	1276873	1278011	1278012
Sample ID	S3-TPB38	S3-TPA02	S3-TPA11
Depth	1.00	1.80	1.20
Other ID	4	6	4
Sample Type	B	B	B
Sampling Date	n/s	23/10/17	20/10/17
Sampling Time	n/s	n/s	n/s

Test	Method	LOD	Units			
PCBs						
PCB 28 + PCB 31	DETSC 3401#	0.01	mg/kg			
PCB 52	DETSC 3401#	0.01	mg/kg			
PCB 101	DETSC 3401#	0.01	mg/kg			
PCB 118	DETSC 3401#	0.01	mg/kg			
PCB 153	DETSC 3401#	0.01	mg/kg			
PCB 138	DETSC 3401#	0.01	mg/kg			
PCB 180	DETSC 3401#	0.01	mg/kg			
PCB 7 Total	DETSC 3401#	0.01	mg/kg			
Phenols						
Phenol - Monohydric	DETSC 2130#	0.3	mg/kg			

Summary of Chemical Analysis

Soil/Misc Samples

Our Ref 4155 Combined Report

Client Ref 4155

The Former SSI Steelworks, Redcar - Ground

Investigation Contract - Priority Areas Within SSI

Contract Title Landholdings, Contract 3

Lab No	1278013	1281643
Sample ID	S3-BHHB03	S3-TPA17
Depth	4.50	2.30
Other ID	8	10
Sample Type	B	ES
Sampling Date	10/11/17	19/10/17
Sampling Time	n/s	n/s

Test	Method	LOD	Units		
Asbestos Quantification	DETSC 1102	0			
Metals					
Aluminium	DETSC 2301*	1	mg/kg		
Antimony	DETSC 2301*	1	mg/kg		
Arsenic	DETSC 2301#	0.2	mg/kg		
Barium	DETSC 2301#	1.5	mg/kg		
Beryllium	DETSC 2301#	0.2	mg/kg		
Boron, Water Soluble	DETSC 2123#	0.2	mg/kg		
Cadmium	DETSC 2301#	0.1	mg/kg		
Chromium	DETSC 2301#	0.15	mg/kg		
Chromium, Hexavalent	DETSC 2204*	1	mg/kg		
Copper	DETSC 2301#	0.2	mg/kg		
Iron	DETSC 2301	25	mg/kg		
Lead	DETSC 2301#	0.3	mg/kg		
Magnesium	DETSC 2301*	1	mg/kg		
Manganese	DETSC 2301#	20	mg/kg		
Mercury	DETSC 2325#	0.05	mg/kg		
Molybdenum	DETSC 2301#	0.4	mg/kg		
Nickel	DETSC 2301#	1	mg/kg		
Silicon	DETSC 2301*	10	mg/kg		
Vanadium	DETSC 2301#	0.8	mg/kg		
Zinc	DETSC 2301#	1	mg/kg		
Inorganics					
Loss on Ignition at 440oC	DETSC 2003#	0.01	%		4.6
pH	DETSC 2008#			9.4	10.4
Cyanide, Total	DETSC 2130#	0.1	mg/kg		
Cyanide, Free	DETSC 2130#	0.1	mg/kg		
Cyanide, Complex	DETSC 2130*	0.2	mg/kg		
Thiocyanate	DETSC 2130#	0.6	mg/kg		
FOC	DETSC 2002	0.001			0.026
Organic matter	DETSC 2002#	0.1	%		4.4
Sulphate Aqueous Extract as SO4	DETSC 2076#	10	mg/l	860	380
Sulphur (free)	DETSC 3049#	0.75	mg/kg		
Sulphur as S, Total	DETSC 2320	0.01	%		0.17
Sulphate as SO4, Total	DETSC 2321#	0.01	%		0.22

Summary of Chemical Analysis

Soil/Misc Samples

Our Ref 4155 Combined Report

Client Ref 4155

The Former SSI Steelworks, Redcar - Ground

Investigation Contract - Priority Areas Within SSI

Contract Title Landholdings, Contract 3

Lab No	1278013	1281643
Sample ID	S3-BHHB03	S3-TPA17
Depth	4.50	2.30
Other ID	8	10
Sample Type	B	ES
Sampling Date	10/11/17	19/10/17
Sampling Time	n/s	n/s

Test	Method	LOD	Units		
Petroleum Hydrocarbons					
Aliphatic C5-C6	DETSC 3321*	0.01	mg/kg		
Aliphatic C6-C8	DETSC 3321*	0.01	mg/kg		
Aliphatic C8-C10	DETSC 3321*	0.01	mg/kg		
Aliphatic C10-C12	DETSC 3072#	1.5	mg/kg		
Aliphatic C12-C16	DETSC 3072#	1.2	mg/kg		
Aliphatic C16-C21	DETSC 3072#	1.5	mg/kg		
Aliphatic C21-C35	DETSC 3072#	3.4	mg/kg		
Aliphatic C5-C35	DETSC 3072*	10	mg/kg		
Aromatic C5-C7	DETSC 3321*	0.01	mg/kg		
Aromatic C7-C8	DETSC 3321*	0.01	mg/kg		
Aromatic C8-C10	DETSC 3321*	0.01	mg/kg		
Aromatic C10-C12	DETSC 3072#	0.9	mg/kg		
Aromatic C12-C16	DETSC 3072#	0.5	mg/kg		
Aromatic C16-C21	DETSC 3072#	0.6	mg/kg		
Aromatic C21-C35	DETSC 3072#	1.4	mg/kg		
Aromatic C5-C35	DETSC 3072*	10	mg/kg		
TPH Ali/Aro Total	DETSC 3072*	10	mg/kg		
PAHs					
Naphthalene	DETSC 3303#	0.03	mg/kg		
Acenaphthylene	DETSC 3303#	0.03	mg/kg		
Acenaphthene	DETSC 3303#	0.03	mg/kg		
Fluorene	DETSC 3303	0.03	mg/kg		
Phenanthrene	DETSC 3303#	0.03	mg/kg		
Anthracene	DETSC 3303	0.03	mg/kg		
Fluoranthene	DETSC 3303#	0.03	mg/kg		
Pyrene	DETSC 3303#	0.03	mg/kg		
Benzo(a)anthracene	DETSC 3303#	0.03	mg/kg		
Chrysene	DETSC 3303	0.03	mg/kg		
Benzo(b)fluoranthene	DETSC 3303#	0.03	mg/kg		
Benzo(k)fluoranthene	DETSC 3303#	0.03	mg/kg		
Benzo(a)pyrene	DETSC 3303#	0.03	mg/kg		
Indeno(1,2,3-c,d)pyrene	DETSC 3303#	0.03	mg/kg		
Dibenzo(a,h)anthracene	DETSC 3303#	0.03	mg/kg		
Benzo(g,h,i)perylene	DETSC 3303#	0.03	mg/kg		
PAH - USEPA 16, Total	DETSC 3303	0.1	mg/kg		

Summary of Chemical Analysis

Soil/Misc Samples

Our Ref 4155 Combined Report

Client Ref 4155

The Former SSI Steelworks, Redcar - Ground

Investigation Contract - Priority Areas Within SSI

Contract Title Landholdings, Contract 3

Lab No	1278013	1281643
Sample ID	S3-BHHB03	S3-TPA17
Depth	4.50	2.30
Other ID	8	10
Sample Type	B	ES
Sampling Date	10/11/17	19/10/17
Sampling Time	n/s	n/s

Test	Method	LOD	Units		
PCBs					
PCB 28 + PCB 31	DETSC 3401#	0.01	mg/kg		
PCB 52	DETSC 3401#	0.01	mg/kg		
PCB 101	DETSC 3401#	0.01	mg/kg		
PCB 118	DETSC 3401#	0.01	mg/kg		
PCB 153	DETSC 3401#	0.01	mg/kg		
PCB 138	DETSC 3401#	0.01	mg/kg		
PCB 180	DETSC 3401#	0.01	mg/kg		
PCB 7 Total	DETSC 3401#	0.01	mg/kg		
Phenols					
Phenol - Monohydric	DETSC 2130#	0.3	mg/kg		

Summary of Chemical Analysis

Soil VOC/SVOC Samples

Our Ref 4155 Combined Report

Client Ref 4155

The Former SSI Steelworks, Redcar - Ground

Investigation Contract - Priority Areas Within SSI

Landholdings, Contract 3

Contract Title

Lab No	1244878	1244879	1244880	1244890
Sample ID	S3-TPA09	S3-TPA10	S3-TPA29	S3-TPA21
Depth	0.80	1.00	0.50	0.50
Other ID	4	4	2	2
Sample Type	ES	ES	ES	ES
Sampling Date	13/10/17	13/10/17	13/10/17	13/10/17
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
VOCs							
Vinyl Chloride	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
1,1 Dichloroethylene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Trans-1,2-dichloroethylene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
1,1-dichloroethane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Cis-1,2-dichloroethylene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
2,2-dichloropropane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Bromochloromethane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Chloroform	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
1,1,1-trichloroethane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
1,1-dichloropropene	DETSC 3431	0.01	mg/kg	< 0.01	0.01	0.01	0.01
Carbon tetrachloride	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Benzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
1,2-dichloroethane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Trichloroethylene	DETSC 3431	0.01	mg/kg	< 0.01	0.22	< 0.01	< 0.01
1,2-dichloropropane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Dibromomethane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Bromodichloromethane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
cis-1,3-dichloropropene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Toluene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
trans-1,3-dichloropropene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
1,1,2-trichloroethane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Tetrachloroethylene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
1,3-dichloropropane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Dibromochloromethane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
1,2-dibromoethane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Chlorobenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
1,1,1,2-tetrachloroethane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Ethylbenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
m+p-Xylene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01

Summary of Chemical Analysis

Soil VOC/SVOC Samples

Our Ref 4155 Combined Report

Client Ref 4155

The Former SSI Steelworks, Redcar - Ground

Investigation Contract - Priority Areas Within SSI

Landholdings, Contract 3

Contract Title

Lab No	1244878	1244879	1244880	1244890
Sample ID	S3-TPA09	S3-TPA10	S3-TPA29	S3-TPA21
Depth	0.80	1.00	0.50	0.50
Other ID	4	4	2	2
Sample Type	ES	ES	ES	ES
Sampling Date	13/10/17	13/10/17	13/10/17	13/10/17
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
o-Xylene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Styrene	DETSC 3431*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Bromoform	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Isopropylbenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Bromobenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
1,2,3-trichloropropane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
n-propylbenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
2-chlorotoluene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
1,3,5-trimethylbenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
4-chlorotoluene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Tert-butylbenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
1,2,4-trimethylbenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
sec-butylbenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
p-isopropyltoluene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
1,3-dichlorobenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
1,4-dichlorobenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
n-butylbenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
1,2-dichlorobenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
1,2-dibromo-3-chloropropane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
1,2,4-trichlorobenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Hexachlorobutadiene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
1,2,3-trichlorobenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
MTBE	DETSC 3431*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01

Summary of Chemical Analysis

Soil VOC/SVOC Samples

Our Ref 4155 Combined Report

Client Ref 4155

The Former SSI Steelworks, Redcar - Ground

Investigation Contract - Priority Areas Within SSI

Landholdings, Contract 3

Contract Title

Lab No	1244878	1244879	1244880	1244890
Sample ID	S3-TPA09	S3-TPA10	S3-TPA29	S3-TPA21
Depth	0.80	1.00	0.50	0.50
Other ID	4	4	2	2
Sample Type	ES	ES	ES	ES
Sampling Date	13/10/17	13/10/17	13/10/17	13/10/17
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
SVOCs							
Phenol	DETSC 3433	0.1	mg/kg	< 0.1	0.2	< 0.1	0.2
Aniline	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
2-Chlorophenol	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Benzyl Alcohol	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
2-Methylphenol	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Bis(2-chloroisopropyl)ether	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
3&4-Methylphenol	DETSC 3433	0.1	mg/kg	< 0.1	0.1	< 0.1	0.2
2,4-Dimethylphenol	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Bis-(dichloroethoxy)methane	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
2,4-Dichlorophenol	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
1,2,4-Trichlorobenzene	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
4-Chloro-3-methylphenol	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
2-Methylnaphthalene	DETSC 3433	0.1	mg/kg	< 0.1	0.7	< 0.1	0.2
Hexachlorocyclopentadiene	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
2,4,6-Trichlorophenol	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
2,4,5-Trichlorophenol	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
2-Chloronaphthalene	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
2-Nitroaniline	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
2,4-Dinitrotoluene	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
3-Nitroaniline	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
4-Nitrophenol	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Dibenzofuran	DETSC 3433	0.1	mg/kg	< 0.1	2.5	0.2	0.1
2,6-Dinitrotoluene	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
2,3,4,6-Tetrachlorophenol	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Diethylphthalate	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
4-Chlorophenylphenylether	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
4-Nitroaniline	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
2-Methyl-4,6-Dinitrophenol	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Diphenylamine	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
4-Bromophenylphenylether	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1

Summary of Chemical Analysis

Soil VOC/SVOC Samples

Our Ref 4155 Combined Report

Client Ref 4155

The Former SSI Steelworks, Redcar - Ground

Investigation Contract - Priority Areas Within SSI

Landholdings, Contract 3

Contract Title

Lab No	1244878	1244879	1244880	1244890
Sample ID	S3-TPA09	S3-TPA10	S3-TPA29	S3-TPA21
Depth	0.80	1.00	0.50	0.50
Other ID	4	4	2	2
Sample Type	ES	ES	ES	ES
Sampling Date	13/10/17	13/10/17	13/10/17	13/10/17
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
Hexachlorobenzene	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Pentachlorophenol	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Di-n-butylphthalate	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Butylbenzylphthalate	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Bis(2-ethylhexyl)phthalate	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Di-n-octylphthalate	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
1,4-Dinitrobenzene	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Dimethylphthalate	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
1,3-Dinitrobenzene	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
1,2-Dinitrobenzene	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
2,3,5,6-Tetrachlorophenol	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Azobenzene	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Carbazole	DETSC 3433*	0.1	mg/kg	< 0.1	4.2	0.2	0.2

Summary of Chemical Analysis

Soil VOC/SVOC Samples

Our Ref 4155 Combined Report

Client Ref 4155

The Former SSI Steelworks, Redcar - Ground

Investigation Contract - Priority Areas Within SSI

Landholdings, Contract 3

Contract Title

Lab No	1244892	1245437	1245445	1248504
Sample ID	S3-TPB32	S3-TPA33	S3-TPB34	S3-TPA06
Depth	0.50	0.50	1.50	2.00
Other ID	3	2	6	5
Sample Type	ES	ES	ES	ES
Sampling Date	13/10/17	16/10/17	16/10/17	23/10/17
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
VOCs							
Vinyl Chloride	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
1,1 Dichloroethylene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Trans-1,2-dichloroethylene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
1,1-dichloroethane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Cis-1,2-dichloroethylene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
2,2-dichloropropane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Bromochloromethane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Chloroform	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
1,1,1-trichloroethane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
1,1-dichloropropene	DETSC 3431	0.01	mg/kg	< 0.01	0.01	0.01	< 0.01
Carbon tetrachloride	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Benzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
1,2-dichloroethane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Trichloroethylene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
1,2-dichloropropane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Dibromomethane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Bromodichloromethane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
cis-1,3-dichloropropene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Toluene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
trans-1,3-dichloropropene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
1,1,2-trichloroethane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Tetrachloroethylene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
1,3-dichloropropane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Dibromochloromethane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
1,2-dibromoethane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Chlorobenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
1,1,1,2-tetrachloroethane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Ethylbenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
m+p-Xylene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01

Summary of Chemical Analysis

Soil VOC/SVOC Samples

Our Ref 4155 Combined Report

Client Ref 4155

The Former SSI Steelworks, Redcar - Ground

Investigation Contract - Priority Areas Within SSI

Landholdings, Contract 3

Contract Title

Lab No	1244892	1245437	1245445	1248504
Sample ID	S3-TPB32	S3-TPA33	S3-TPB34	S3-TPA06
Depth	0.50	0.50	1.50	2.00
Other ID	3	2	6	5
Sample Type	ES	ES	ES	ES
Sampling Date	13/10/17	16/10/17	16/10/17	23/10/17
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
o-Xylene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Styrene	DETSC 3431*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Bromoform	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Isopropylbenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Bromobenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
1,2,3-trichloropropane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
n-propylbenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
2-chlorotoluene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
1,3,5-trimethylbenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
4-chlorotoluene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Tert-butylbenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
1,2,4-trimethylbenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
sec-butylbenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
p-isopropyltoluene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
1,3-dichlorobenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
1,4-dichlorobenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
n-butylbenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
1,2-dichlorobenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
1,2-dibromo-3-chloropropane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
1,2,4-trichlorobenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Hexachlorobutadiene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
1,2,3-trichlorobenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
MTBE	DETSC 3431*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01

Summary of Chemical Analysis

Soil VOC/SVOC Samples

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The Former SSI Steelworks, Redcar - Ground

Investigation Contract - Priority Areas Within SSI

Landholdings, Contract 3

Contract Title

Lab No	1244892	1245437	1245445	1248504
Sample ID	S3-TPB32	S3-TPA33	S3-TPB34	S3-TPA06
Depth	0.50	0.50	1.50	2.00
Other ID	3	2	6	5
Sample Type	ES	ES	ES	ES
Sampling Date	13/10/17	16/10/17	16/10/17	23/10/17
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
SVOCs							
Phenol	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Aniline	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
2-Chlorophenol	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Benzyl Alcohol	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
2-Methylphenol	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Bis(2-chloroisopropyl)ether	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
3&4-Methylphenol	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
2,4-Dimethylphenol	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Bis-(dichloroethoxy)methane	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
2,4-Dichlorophenol	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
1,2,4-Trichlorobenzene	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
4-Chloro-3-methylphenol	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
2-Methylnaphthalene	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Hexachlorocyclopentadiene	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
2,4,6-Trichlorophenol	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
2,4,5-Trichlorophenol	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
2-Chloronaphthalene	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
2-Nitroaniline	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
2,4-Dinitrotoluene	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
3-Nitroaniline	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
4-Nitrophenol	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Dibenzofuran	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	0.4
2,6-Dinitrotoluene	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
2,3,4,6-Tetrachlorophenol	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Diethylphthalate	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
4-Chlorophenylphenylether	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
4-Nitroaniline	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
2-Methyl-4,6-Dinitrophenol	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Diphenylamine	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
4-Bromophenylphenylether	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1

Summary of Chemical Analysis

Soil VOC/SVOC Samples

Our Ref 4155 Combined Report

Client Ref 4155

The Former SSI Steelworks, Redcar - Ground

Investigation Contract - Priority Areas Within SSI

Landholdings, Contract 3

Contract Title

Lab No	1244892	1245437	1245445	1248504
Sample ID	S3-TPB32	S3-TPA33	S3-TPB34	S3-TPA06
Depth	0.50	0.50	1.50	2.00
Other ID	3	2	6	5
Sample Type	ES	ES	ES	ES
Sampling Date	13/10/17	16/10/17	16/10/17	23/10/17
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
Hexachlorobenzene	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Pentachlorophenol	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Di-n-butylphthalate	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Butylbenzylphthalate	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Bis(2-ethylhexyl)phthalate	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Di-n-octylphthalate	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
1,4-Dinitrobenzene	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Dimethylphthalate	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
1,3-Dinitrobenzene	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
1,2-Dinitrobenzene	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
2,3,5,6-Tetrachlorophenol	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Azobenzene	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Carbazole	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	0.2

Summary of Chemical Analysis

Soil VOC/SVOC Samples

Our Ref 4155 Combined Report

Client Ref 4155

The Former SSI Steelworks, Redcar - Ground

Investigation Contract - Priority Areas Within SSI

Landholdings, Contract 3

Contract Title

Lab No	1248511	1248518	1248684	1248704
Sample ID	S3-TPB66	S3-TPB74	S3-TPA25	S3-TPB59
Depth	1.50	0.50	1.00	2.30
Other ID	6	2	2	8
Sample Type	ES	ES	ES	ES
Sampling Date	23/10/17	20/10/17	18/10/17	19/10/17
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
VOCs							
Vinyl Chloride	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
1,1 Dichloroethylene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Trans-1,2-dichloroethylene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
1,1-dichloroethane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Cis-1,2-dichloroethylene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
2,2-dichloropropane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Bromochloromethane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Chloroform	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
1,1,1-trichloroethane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
1,1-dichloropropene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Carbon tetrachloride	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Benzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
1,2-dichloroethane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Trichloroethylene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
1,2-dichloropropane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Dibromomethane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Bromodichloromethane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
cis-1,3-dichloropropene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Toluene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
trans-1,3-dichloropropene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
1,1,2-trichloroethane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Tetrachloroethylene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
1,3-dichloropropane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Dibromochloromethane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
1,2-dibromoethane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Chlorobenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
1,1,1,2-tetrachloroethane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Ethylbenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
m+p-Xylene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01

Summary of Chemical Analysis

Soil VOC/SVOC Samples

Our Ref 4155 Combined Report

Client Ref 4155

The Former SSI Steelworks, Redcar - Ground

Investigation Contract - Priority Areas Within SSI

Landholdings, Contract 3

Contract Title

Lab No	1248511	1248518	1248684	1248704
Sample ID	S3-TPB66	S3-TPB74	S3-TPA25	S3-TPB59
Depth	1.50	0.50	1.00	2.30
Other ID	6	2	2	8
Sample Type	ES	ES	ES	ES
Sampling Date	23/10/17	20/10/17	18/10/17	19/10/17
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
o-Xylene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Styrene	DETSC 3431*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Bromoform	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Isopropylbenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Bromobenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
1,2,3-trichloropropane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
n-propylbenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
2-chlorotoluene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
1,3,5-trimethylbenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
4-chlorotoluene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Tert-butylbenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
1,2,4-trimethylbenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
sec-butylbenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
p-isopropyltoluene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
1,3-dichlorobenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
1,4-dichlorobenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
n-butylbenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
1,2-dichlorobenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
1,2-dibromo-3-chloropropane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
1,2,4-trichlorobenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Hexachlorobutadiene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
1,2,3-trichlorobenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
MTBE	DETSC 3431*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01

Summary of Chemical Analysis

Soil VOC/SVOC Samples

Our Ref 4155 Combined Report

Client Ref 4155

The Former SSI Steelworks, Redcar - Ground

Investigation Contract - Priority Areas Within SSI

Landholdings, Contract 3

Contract Title

Lab No	1248511	1248518	1248684	1248704
Sample ID	S3-TPB66	S3-TPB74	S3-TPA25	S3-TPB59
Depth	1.50	0.50	1.00	2.30
Other ID	6	2	2	8
Sample Type	ES	ES	ES	ES
Sampling Date	23/10/17	20/10/17	18/10/17	19/10/17
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
SVOCs							
Phenol	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Aniline	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
2-Chlorophenol	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Benzyl Alcohol	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
2-Methylphenol	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Bis(2-chloroisopropyl)ether	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
3&4-Methylphenol	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
2,4-Dimethylphenol	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Bis-(dichloroethoxy)methane	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
2,4-Dichlorophenol	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
1,2,4-Trichlorobenzene	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
4-Chloro-3-methylphenol	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
2-Methylnaphthalene	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	0.5
Hexachlorocyclopentadiene	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
2,4,6-Trichlorophenol	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
2,4,5-Trichlorophenol	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
2-Chloronaphthalene	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
2-Nitroaniline	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
2,4-Dinitrotoluene	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
3-Nitroaniline	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
4-Nitrophenol	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Dibenzofuran	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
2,6-Dinitrotoluene	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
2,3,4,6-Tetrachlorophenol	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Diethylphthalate	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
4-Chlorophenylphenylether	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
4-Nitroaniline	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
2-Methyl-4,6-Dinitrophenol	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Diphenylamine	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
4-Bromophenylphenylether	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1

Summary of Chemical Analysis

Soil VOC/SVOC Samples

Our Ref 4155 Combined Report

Client Ref 4155

The Former SSI Steelworks, Redcar - Ground

Investigation Contract - Priority Areas Within SSI

Landholdings, Contract 3

Contract Title

Lab No	1248511	1248518	1248684	1248704
Sample ID	S3-TPB66	S3-TPB74	S3-TPA25	S3-TPB59
Depth	1.50	0.50	1.00	2.30
Other ID	6	2	2	8
Sample Type	ES	ES	ES	ES
Sampling Date	23/10/17	20/10/17	18/10/17	19/10/17
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
Hexachlorobenzene	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Pentachlorophenol	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Di-n-butylphthalate	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Butylbenzylphthalate	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Bis(2-ethylhexyl)phthalate	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	0.4
Di-n-octylphthalate	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	0.1
1,4-Dinitrobenzene	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Dimethylphthalate	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
1,3-Dinitrobenzene	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
1,2-Dinitrobenzene	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
2,3,5,6-Tetrachlorophenol	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Azobenzene	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Carbazole	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1

Summary of Chemical Analysis

Soil VOC/SVOC Samples

Our Ref 4155 Combined Report

Client Ref 4155

The Former SSI Steelworks, Redcar - Ground

Investigation Contract - Priority Areas Within SSI

Landholdings, Contract 3

Contract Title

Lab No	1250105	1250112	1250312	1250315
Sample ID	S3-TPA01	S3-TPB70	S3-TPB06	S3-TPB14
Depth	1.40	0.50	0.50	0.70
Other ID	6	3	2	5
Sample Type	ES	ES	ES	ES
Sampling Date	24/10/17	24/10/17	25/10/17	25/10/17
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
VOCs							
Vinyl Chloride	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
1,1 Dichloroethylene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Trans-1,2-dichloroethylene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
1,1-dichloroethane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Cis-1,2-dichloroethylene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
2,2-dichloropropane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Bromochloromethane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Chloroform	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
1,1,1-trichloroethane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
1,1-dichloropropene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Carbon tetrachloride	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Benzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
1,2-dichloroethane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Trichloroethylene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
1,2-dichloropropane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Dibromomethane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Bromodichloromethane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
cis-1,3-dichloropropene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Toluene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
trans-1,3-dichloropropene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
1,1,2-trichloroethane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Tetrachloroethylene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
1,3-dichloropropane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Dibromochloromethane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
1,2-dibromoethane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Chlorobenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
1,1,1,2-tetrachloroethane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Ethylbenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
m+p-Xylene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01

Summary of Chemical Analysis

Soil VOC/SVOC Samples

Our Ref 4155 Combined Report

Client Ref 4155

The Former SSI Steelworks, Redcar - Ground

Investigation Contract - Priority Areas Within SSI

Landholdings, Contract 3

Contract Title

Lab No	1250105	1250112	1250312	1250315
Sample ID	S3-TPA01	S3-TPB70	S3-TPB06	S3-TPB14
Depth	1.40	0.50	0.50	0.70
Other ID	6	3	2	5
Sample Type	ES	ES	ES	ES
Sampling Date	24/10/17	24/10/17	25/10/17	25/10/17
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
o-Xylene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Styrene	DETSC 3431*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Bromoform	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Isopropylbenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Bromobenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
1,2,3-trichloropropane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
n-propylbenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
2-chlorotoluene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
1,3,5-trimethylbenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
4-chlorotoluene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Tert-butylbenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
1,2,4-trimethylbenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
sec-butylbenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
p-isopropyltoluene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
1,3-dichlorobenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
1,4-dichlorobenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
n-butylbenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
1,2-dichlorobenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
1,2-dibromo-3-chloropropane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
1,2,4-trichlorobenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Hexachlorobutadiene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
1,2,3-trichlorobenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
MTBE	DETSC 3431*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01

Summary of Chemical Analysis

Soil VOC/SVOC Samples

Our Ref 4155 Combined Report

Client Ref 4155

The Former SSI Steelworks, Redcar - Ground

Investigation Contract - Priority Areas Within SSI

Landholdings, Contract 3

Contract Title

Lab No	1250105	1250112	1250312	1250315
Sample ID	S3-TPA01	S3-TPB70	S3-TPB06	S3-TPB14
Depth	1.40	0.50	0.50	0.70
Other ID	6	3	2	5
Sample Type	ES	ES	ES	ES
Sampling Date	24/10/17	24/10/17	25/10/17	25/10/17
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
SVOCs							
Phenol	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Aniline	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
2-Chlorophenol	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Benzyl Alcohol	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
2-Methylphenol	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Bis(2-chloroisopropyl)ether	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
3&4-Methylphenol	DETSC 3433	0.1	mg/kg	0.2	< 0.1	< 0.1	< 0.1
2,4-Dimethylphenol	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Bis-(dichloroethoxy)methane	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
2,4-Dichlorophenol	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
1,2,4-Trichlorobenzene	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
4-Chloro-3-methylphenol	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
2-Methylnaphthalene	DETSC 3433	0.1	mg/kg	0.4	< 0.1	< 0.1	< 0.1
Hexachlorocyclopentadiene	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
2,4,6-Trichlorophenol	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
2,4,5-Trichlorophenol	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
2-Chloronaphthalene	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
2-Nitroaniline	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
2,4-Dinitrotoluene	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
3-Nitroaniline	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
4-Nitrophenol	DETSC 3433*	0.1	mg/kg	1.8	< 0.1	< 0.1	< 0.1
Dibenzofuran	DETSC 3433	0.1	mg/kg	0.5	< 0.1	< 0.1	< 0.1
2,6-Dinitrotoluene	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
2,3,4,6-Tetrachlorophenol	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Diethylphthalate	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
4-Chlorophenylphenylether	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
4-Nitroaniline	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
2-Methyl-4,6-Dinitrophenol	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Diphenylamine	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
4-Bromophenylphenylether	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1

Summary of Chemical Analysis

Soil VOC/SVOC Samples

Our Ref 4155 Combined Report

Client Ref 4155

The Former SSI Steelworks, Redcar - Ground

Investigation Contract - Priority Areas Within SSI

Landholdings, Contract 3

Contract Title

Lab No	1250105	1250112	1250312	1250315
Sample ID	S3-TPA01	S3-TPB70	S3-TPB06	S3-TPB14
Depth	1.40	0.50	0.50	0.70
Other ID	6	3	2	5
Sample Type	ES	ES	ES	ES
Sampling Date	24/10/17	24/10/17	25/10/17	25/10/17
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
Hexachlorobenzene	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Pentachlorophenol	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Di-n-butylphthalate	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Butylbenzylphthalate	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Bis(2-ethylhexyl)phthalate	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Di-n-octylphthalate	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
1,4-Dinitrobenzene	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Dimethylphthalate	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
1,3-Dinitrobenzene	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
1,2-Dinitrobenzene	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
2,3,5,6-Tetrachlorophenol	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Azobenzene	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Carbazole	DETSC 3433*	0.1	mg/kg	0.8	< 0.1	< 0.1	< 0.1

Summary of Chemical Analysis

Soil VOC/SVOC Samples

Our Ref 4155 Combined Report

Client Ref 4155

The Former SSI Steelworks, Redcar - Ground

Investigation Contract - Priority Areas Within SSI

Landholdings, Contract 3

Contract Title

Lab No	1252178	1252182	1252184	1253434
Sample ID	S3-TPB26	S3-TPB41	S3-TPB47	S3-TPB49
Depth	0.50	0.50	1.50	0.50
Other ID	2	2	5	3
Sample Type	ES	ES	ES	ES
Sampling Date	30/10/17	30/10/17	27/10/17	17/10/17
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
VOCs							
Vinyl Chloride	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
1,1 Dichloroethylene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Trans-1,2-dichloroethylene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
1,1-dichloroethane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Cis-1,2-dichloroethylene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
2,2-dichloropropane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Bromochloromethane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Chloroform	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
1,1,1-trichloroethane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
1,1-dichloropropene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Carbon tetrachloride	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Benzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
1,2-dichloroethane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Trichloroethylene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
1,2-dichloropropane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Dibromomethane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Bromodichloromethane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
cis-1,3-dichloropropene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Toluene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
trans-1,3-dichloropropene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
1,1,2-trichloroethane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Tetrachloroethylene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
1,3-dichloropropane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Dibromochloromethane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
1,2-dibromoethane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Chlorobenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
1,1,1,2-tetrachloroethane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Ethylbenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
m+p-Xylene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01

Summary of Chemical Analysis

Soil VOC/SVOC Samples

Our Ref 4155 Combined Report

Client Ref 4155

The Former SSI Steelworks, Redcar - Ground

Investigation Contract - Priority Areas Within SSI

Landholdings, Contract 3

Contract Title

Lab No	1252178	1252182	1252184	1253434
Sample ID	S3-TPB26	S3-TPB41	S3-TPB47	S3-TPB49
Depth	0.50	0.50	1.50	0.50
Other ID	2	2	5	3
Sample Type	ES	ES	ES	ES
Sampling Date	30/10/17	30/10/17	27/10/17	17/10/17
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
o-Xylene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Styrene	DETSC 3431*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Bromoform	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Isopropylbenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Bromobenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
1,2,3-trichloropropane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
n-propylbenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
2-chlorotoluene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
1,3,5-trimethylbenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
4-chlorotoluene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Tert-butylbenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
1,2,4-trimethylbenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
sec-butylbenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
p-isopropyltoluene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
1,3-dichlorobenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
1,4-dichlorobenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
n-butylbenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
1,2-dichlorobenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
1,2-dibromo-3-chloropropane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
1,2,4-trichlorobenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Hexachlorobutadiene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
1,2,3-trichlorobenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
MTBE	DETSC 3431*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01

Summary of Chemical Analysis

Soil VOC/SVOC Samples

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The Former SSI Steelworks, Redcar - Ground

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Contract Title

Lab No	1252178	1252182	1252184	1253434
Sample ID	S3-TPB26	S3-TPB41	S3-TPB47	S3-TPB49
Depth	0.50	0.50	1.50	0.50
Other ID	2	2	5	3
Sample Type	ES	ES	ES	ES
Sampling Date	30/10/17	30/10/17	27/10/17	17/10/17
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
SVOCs							
Phenol	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Aniline	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
2-Chlorophenol	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Benzyl Alcohol	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
2-Methylphenol	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Bis(2-chloroisopropyl)ether	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
3&4-Methylphenol	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
2,4-Dimethylphenol	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Bis-(dichloroethoxy)methane	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
2,4-Dichlorophenol	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
1,2,4-Trichlorobenzene	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
4-Chloro-3-methylphenol	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
2-Methylnaphthalene	DETSC 3433	0.1	mg/kg	< 0.1	0.4	< 0.1	< 0.1
Hexachlorocyclopentadiene	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
2,4,6-Trichlorophenol	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
2,4,5-Trichlorophenol	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
2-Chloronaphthalene	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
2-Nitroaniline	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
2,4-Dinitrotoluene	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	4.4	< 0.1
3-Nitroaniline	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
4-Nitrophenol	DETSC 3433*	0.1	mg/kg	< 0.1	3.0	< 0.1	< 0.1
Dibenzofuran	DETSC 3433	0.1	mg/kg	< 0.1	0.8	< 0.1	< 0.1
2,6-Dinitrotoluene	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
2,3,4,6-Tetrachlorophenol	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Diethylphthalate	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
4-Chlorophenylphenylether	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
4-Nitroaniline	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
2-Methyl-4,6-Dinitrophenol	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Diphenylamine	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
4-Bromophenylphenylether	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1

Summary of Chemical Analysis

Soil VOC/SVOC Samples

Our Ref 4155 Combined Report

Client Ref 4155

The Former SSI Steelworks, Redcar - Ground

Investigation Contract - Priority Areas Within SSI

Landholdings, Contract 3

Contract Title

Lab No	1252178	1252182	1252184	1253434
Sample ID	S3-TPB26	S3-TPB41	S3-TPB47	S3-TPB49
Depth	0.50	0.50	1.50	0.50
Other ID	2	2	5	3
Sample Type	ES	ES	ES	ES
Sampling Date	30/10/17	30/10/17	27/10/17	17/10/17
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
Hexachlorobenzene	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Pentachlorophenol	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Di-n-butylphthalate	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Butylbenzylphthalate	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Bis(2-ethylhexyl)phthalate	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Di-n-octylphthalate	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
1,4-Dinitrobenzene	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Dimethylphthalate	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
1,3-Dinitrobenzene	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
1,2-Dinitrobenzene	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
2,3,5,6-Tetrachlorophenol	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Azobenzene	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Carbazole	DETSC 3433*	0.1	mg/kg	< 0.1	0.1	< 0.1	< 0.1

Summary of Chemical Analysis

Soil VOC/SVOC Samples

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The Former SSI Steelworks, Redcar - Ground

Investigation Contract - Priority Areas Within SSI

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Contract Title

Lab No	1253580	1253655	1253747
Sample ID	S3-TPB52	S3-TPB22	S3-TPB42
Depth	1.55	1.90	2.50
Other ID	5	6	8
Sample Type	ES	ES	ES
Sampling Date	26/10/17	01/11/17	27/10/17
Sampling Time	n/s	n/s	n/s

Test	Method	LOD	Units			
VOCs						
Vinyl Chloride	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01
1,1 Dichloroethylene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01
Trans-1,2-dichloroethylene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01
1,1-dichloroethane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01
Cis-1,2-dichloroethylene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01
2,2-dichloropropane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01
Bromochloromethane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01
Chloroform	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01
1,1,1-trichloroethane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01
1,1-dichloropropene	DETSC 3431	0.01	mg/kg	< 0.01	0.01	< 0.01
Carbon tetrachloride	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01
Benzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01
1,2-dichloroethane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01
Trichloroethylene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01
1,2-dichloropropane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01
Dibromomethane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01
Bromodichloromethane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01
cis-1,3-dichloropropene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01
Toluene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01
trans-1,3-dichloropropene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01
1,1,2-trichloroethane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01
Tetrachloroethylene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01
1,3-dichloropropane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01
Dibromochloromethane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01
1,2-dibromoethane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01
Chlorobenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01
1,1,1,2-tetrachloroethane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01
Ethylbenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01
m+p-Xylene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01

Summary of Chemical Analysis

Soil VOC/SVOC Samples

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The Former SSI Steelworks, Redcar - Ground

Investigation Contract - Priority Areas Within SSI

Landholdings, Contract 3

Contract Title

Lab No	1253580	1253655	1253747
Sample ID	S3-TPB52	S3-TPB22	S3-TPB42
Depth	1.55	1.90	2.50
Other ID	5	6	8
Sample Type	ES	ES	ES
Sampling Date	26/10/17	01/11/17	27/10/17
Sampling Time	n/s	n/s	n/s

Test	Method	LOD	Units			
o-Xylene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01
Styrene	DETSC 3431*	0.01	mg/kg	< 0.01	< 0.01	< 0.01
Bromoform	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01
Isopropylbenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01
Bromobenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01
1,2,3-trichloropropane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01
n-propylbenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01
2-chlorotoluene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01
1,3,5-trimethylbenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01
4-chlorotoluene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01
Tert-butylbenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01
1,2,4-trimethylbenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01
sec-butylbenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01
p-isopropyltoluene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01
1,3-dichlorobenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01
1,4-dichlorobenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01
n-butylbenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01
1,2-dichlorobenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01
1,2-dibromo-3-chloropropane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01
1,2,4-trichlorobenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01
Hexachlorobutadiene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01
1,2,3-trichlorobenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01
MTBE	DETSC 3431*	0.01	mg/kg	< 0.01	< 0.01	< 0.01

Summary of Chemical Analysis

Soil VOC/SVOC Samples

Our Ref 4155 Combined Report

Client Ref 4155

The Former SSI Steelworks, Redcar - Ground

Investigation Contract - Priority Areas Within SSI

Landholdings, Contract 3

Contract Title

Lab No	1253580	1253655	1253747
Sample ID	S3-TPB52	S3-TPB22	S3-TPB42
Depth	1.55	1.90	2.50
Other ID	5	6	8
Sample Type	ES	ES	ES
Sampling Date	26/10/17	01/11/17	27/10/17
Sampling Time	n/s	n/s	n/s

Test	Method	LOD	Units			
SVOCs						
Phenol	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1
Aniline	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 0.1
2-Chlorophenol	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1
Benzyl Alcohol	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1
2-Methylphenol	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1
Bis(2-chloroisopropyl)ether	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1
3&4-Methylphenol	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1
2,4-Dimethylphenol	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1
Bis-(dichloroethoxy)methane	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1
2,4-Dichlorophenol	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1
1,2,4-Trichlorobenzene	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1
4-Chloro-3-methylphenol	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1
2-Methylnaphthalene	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1
Hexachlorocyclopentadiene	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 0.1
2,4,6-Trichlorophenol	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1
2,4,5-Trichlorophenol	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 0.1
2-Chloronaphthalene	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1
2-Nitroaniline	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 0.1
2,4-Dinitrotoluene	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 0.1
3-Nitroaniline	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 0.1
4-Nitrophenol	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 0.1
Dibenzofuran	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1
2,6-Dinitrotoluene	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1
2,3,4,6-Tetrachlorophenol	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 0.1
Diethylphthalate	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1
4-Chlorophenylphenylether	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 0.1
4-Nitroaniline	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 0.1
2-Methyl-4,6-Dinitrophenol	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 0.1
Diphenylamine	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1
4-Bromophenylphenylether	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1

Summary of Chemical Analysis

Soil VOC/SVOC Samples

Our Ref 4155 Combined Report

Client Ref 4155

The Former SSI Steelworks, Redcar - Ground

Investigation Contract - Priority Areas Within SSI

Landholdings, Contract 3

Contract Title

Lab No	1253580	1253655	1253747
Sample ID	S3-TPB52	S3-TPB22	S3-TPB42
Depth	1.55	1.90	2.50
Other ID	5	6	8
Sample Type	ES	ES	ES
Sampling Date	26/10/17	01/11/17	27/10/17
Sampling Time	n/s	n/s	n/s

Test	Method	LOD	Units			
Hexachlorobenzene	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1
Pentachlorophenol	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 0.1
Di-n-butylphthalate	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1
Butylbenzylphthalate	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 0.1
Bis(2-ethylhexyl)phthalate	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1
Di-n-octylphthalate	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1
1,4-Dinitrobenzene	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 0.1
Dimethylphthalate	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1
1,3-Dinitrobenzene	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 0.1
1,2-Dinitrobenzene	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 0.1
2,3,5,6-Tetrachlorophenol	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 0.1
Azobenzene	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1
Carbazole	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 0.1

Summary of Chemical Analysis

Soil VOC/SVOC Samples

Our Ref 4155 Combined Report

Client Ref 4155

The Former SSI Steelworks, Redcar - Ground

Investigation Contract - Priority Areas Within SSI

Landholdings, Contract 3

Contract Title

Lab No	1254714	1275450
Sample ID	S3-TPB03	S3-TPB03
Depth	2.70	2.70
Other ID	9	8
Sample Type	B	ES
Sampling Date	27/10/17	27/10/17
Sampling Time	n/s	n/s

Test	Method	LOD	Units		
VOCs					
Vinyl Chloride	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01
1,1 Dichloroethylene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01
Trans-1,2-dichloroethylene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01
1,1-dichloroethane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01
Cis-1,2-dichloroethylene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01
2,2-dichloropropane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01
Bromochloromethane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01
Chloroform	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01
1,1,1-trichloroethane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01
1,1-dichloropropene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01
Carbon tetrachloride	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01
Benzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01
1,2-dichloroethane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01
Trichloroethylene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01
1,2-dichloropropane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01
Dibromomethane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01
Bromodichloromethane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01
cis-1,3-dichloropropene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01
Toluene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01
trans-1,3-dichloropropene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01
1,1,2-trichloroethane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01
Tetrachloroethylene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01
1,3-dichloropropane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01
Dibromochloromethane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01
1,2-dibromoethane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01
Chlorobenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01
1,1,1,2-tetrachloroethane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01
Ethylbenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01
m+p-Xylene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01

Summary of Chemical Analysis

Soil VOC/SVOC Samples

Our Ref 4155 Combined Report

Client Ref 4155

The Former SSI Steelworks, Redcar - Ground

Investigation Contract - Priority Areas Within SSI

Landholdings, Contract 3

Contract Title

Lab No	1254714	1275450
Sample ID	S3-TPB03	S3-TPB03
Depth	2.70	2.70
Other ID	9	8
Sample Type	B	ES
Sampling Date	27/10/17	27/10/17
Sampling Time	n/s	n/s

Test	Method	LOD	Units		
o-Xylene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01
Styrene	DETSC 3431*	0.01	mg/kg	< 0.01	< 0.01
Bromoform	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01
Isopropylbenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01
Bromobenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01
1,2,3-trichloropropane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01
n-propylbenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01
2-chlorotoluene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01
1,3,5-trimethylbenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01
4-chlorotoluene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01
Tert-butylbenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01
1,2,4-trimethylbenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01
sec-butylbenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01
p-isopropyltoluene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01
1,3-dichlorobenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01
1,4-dichlorobenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01
n-butylbenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01
1,2-dichlorobenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01
1,2-dibromo-3-chloropropane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01
1,2,4-trichlorobenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01
Hexachlorobutadiene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01
1,2,3-trichlorobenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01
MTBE	DETSC 3431*	0.01	mg/kg	< 0.01	< 0.01

Summary of Chemical Analysis

Soil VOC/SVOC Samples

Our Ref 4155 Combined Report

Client Ref 4155

The Former SSI Steelworks, Redcar - Ground

Investigation Contract - Priority Areas Within SSI

Landholdings, Contract 3

Contract Title

Lab No	1254714	1275450
Sample ID	S3-TPB03	S3-TPB03
Depth	2.70	2.70
Other ID	9	8
Sample Type	B	ES
Sampling Date	27/10/17	27/10/17
Sampling Time	n/s	n/s

Test	Method	LOD	Units		
SVOCs					
Phenol	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1
Aniline	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1
2-Chlorophenol	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1
Benzyl Alcohol	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1
2-Methylphenol	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1
Bis(2-chloroisopropyl)ether	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1
3&4-Methylphenol	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1
2,4-Dimethylphenol	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1
Bis-(dichloroethoxy)methane	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1
2,4-Dichlorophenol	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1
1,2,4-Trichlorobenzene	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1
4-Chloro-3-methylphenol	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1
2-Methylnaphthalene	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1
Hexachlorocyclopentadiene	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1
2,4,6-Trichlorophenol	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1
2,4,5-Trichlorophenol	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1
2-Chloronaphthalene	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1
2-Nitroaniline	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1
2,4-Dinitrotoluene	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1
3-Nitroaniline	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1
4-Nitrophenol	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1
Dibenzofuran	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1
2,6-Dinitrotoluene	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1
2,3,4,6-Tetrachlorophenol	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1
Diethylphthalate	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1
4-Chlorophenylphenylether	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1
4-Nitroaniline	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1
2-Methyl-4,6-Dinitrophenol	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1
Diphenylamine	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1
4-Bromophenylphenylether	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1

Summary of Chemical Analysis

Soil VOC/SVOC Samples

Our Ref 4155 Combined Report

Client Ref 4155

The Former SSI Steelworks, Redcar - Ground

Investigation Contract - Priority Areas Within SSI

Landholdings, Contract 3

Contract Title

Lab No	1254714	1275450
Sample ID	S3-TPB03	S3-TPB03
Depth	2.70	2.70
Other ID	9	8
Sample Type	B	ES
Sampling Date	27/10/17	27/10/17
Sampling Time	n/s	n/s

Test	Method	LOD	Units		
Hexachlorobenzene	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1
Pentachlorophenol	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1
Di-n-butylphthalate	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1
Butylbenzylphthalate	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1
Bis(2-ethylhexyl)phthalate	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1
Di-n-octylphthalate	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1
1,4-Dinitrobenzene	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1
Dimethylphthalate	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1
1,3-Dinitrobenzene	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1
1,2-Dinitrobenzene	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1
2,3,5,6-Tetrachlorophenol	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1
Azobenzene	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1
Carbazole	DETSC 3433*	0.1	mg/kg	< 0.1	0.4

Summary of Chemical Analysis

Leachate Samples

Our Ref 4155 Combined Report

Client Ref 4155

The Former SSI Steelworks, Redcar - Ground
Investigation Contract - Priority Areas Within SSI
Landholdings, Contract 3

Contract Title

Lab No	1244900	1244901	1244902	1244903	1244904
Sample ID	S3-TPA 10	S3-TPA 32	S3-TPB19	S3-TPB28	S3-TPA14
Depth	1.00	1.00	1.50	1.50	1.00
Other ID	4	4	6	6	5
Sample Type	ES	ES	ES	ES	ES
Sampling Date	13/10/17	13/10/17	13/10/17	13/10/17	13/10/17
Sampling Time	n/s	n/s	n/s	n/s	n/s

Test	Method	LOD	Units					
Preparation								
BS EN 12457 10:1	DETS 036*			Y	Y	Y	Y	Y
Metals								
Antimony, Dissolved	DETSC 2306	0.17	ug/l	2.3	0.48	0.49	0.24	0.28
Arsenic, Dissolved	DETSC 2306	0.16	ug/l	8.9	3.4	2.6	2.5	
Barium, Dissolved	DETSC 2306	0.26	ug/l	4.4	6.6	3.0	6.2	3.1
Beryllium, Dissolved	DETSC 2306*	0.1	ug/l	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Boron	DETSC 2123	100	ug/l	200	120	420	170	
Cadmium, Dissolved	DETSC 2306	0.03	ug/l	< 0.03	< 0.03	< 0.03	< 0.03	
Chromium, Dissolved	DETSC 2306	0.25	ug/l	0.44	6.7	< 0.25	1.0	
Copper, Dissolved	DETSC 2306	0.4	ug/l	1.1	1.0	1.2	1.1	
Iron, Dissolved	DETSC 2306	5.5	ug/l	9.3	14	35	6.9	130
Lead, Dissolved	DETSC 2306	0.09	ug/l	0.10	0.39	0.18	0.09	
Manganese, Dissolved	DETSC 2306	0.22	ug/l	2.7	4.0	15	0.78	3.2
Mercury, Dissolved	DETSC 2306	0.01	ug/l	0.02	< 0.01	0.01	< 0.01	
Nickel, Dissolved	DETSC 2306	0.5	ug/l	0.6	< 0.5	< 0.5	< 0.5	
Selenium, Dissolved	DETSC 2306	0.25	ug/l	4.4	1.7	1.6	1.4	
Vanadium, Dissolved	DETSC 2306	0.6	ug/l	36	24	17	220	34
Zinc, Dissolved	DETSC 2306	1.3	ug/l	< 1.3	< 1.3	< 1.3	< 1.3	
Inorganics								
pH	DETSC 2008			8.6	7.5	7.4	8.9	
Cyanide, Total	DETSC 2130	40	ug/l		< 40			
Phenol - Monohydric	DETSC 2131	0.5	ug/l		< 0.5			
Ammoniacal Nitrogen as N	DETSC 2207	0.015	mg/l	0.84	0.11	0.038	0.040	0.026
Sulphate as SO4	DETSC 2055	0.1	mg/l		73			

Summary of Chemical Analysis

Leachate Samples

Our Ref 4155 Combined Report

Client Ref 4155

The Former SSI Steelworks, Redcar - Ground
Investigation Contract - Priority Areas Within SSI
Landholdings, Contract 3

Contract Title

Lab No	1244900	1244901	1244902	1244903	1244904
Sample ID	S3-TPA 10	S3-TPA 32	S3-TPB19	S3-TPB28	S3-TPA14
Depth	1.00	1.00	1.50	1.50	1.00
Other ID	4	4	6	6	5
Sample Type	ES	ES	ES	ES	ES
Sampling Date	13/10/17	13/10/17	13/10/17	13/10/17	13/10/17
Sampling Time	n/s	n/s	n/s	n/s	n/s

Test	Method	LOD	Units					
Petroleum Hydrocarbons								
Aliphatic C5-C6	DETSC 3322	0.1	ug/l		< 0.1			
Aliphatic C6-C8	DETSC 3322	0.1	ug/l		< 0.1			
Aliphatic C8-C10	DETSC 3322	0.1	ug/l		< 0.1			
Aliphatic C10-C12	DETSC 3072*	1	ug/l		1.1			
Aliphatic C12-C16	DETSC 3072*	1	ug/l		7.0			
Aliphatic C16-C21	DETSC 3072*	1	ug/l		13			
Aliphatic C21-C35	DETSC 3072*	1	ug/l		8.8			
Aliphatic C5-C35	DETSC 3072*	10	ug/l		30			
Aromatic C5-C7	DETSC 3322	0.1	ug/l		< 0.1			
Aromatic C7-C8	DETSC 3322	0.1	ug/l		< 0.1			
Aromatic C8-C10	DETSC 3322	0.1	ug/l		< 0.1			
Aromatic C10-C12	DETSC 3072*	1	ug/l		5.1			
Aromatic C12-C16	DETSC 3072*	1	ug/l		14			
Aromatic C16-C21	DETSC 3072*	1	ug/l		5.9			
Aromatic C21-C35	DETSC 3072*	1	ug/l		< 1.0			
Aromatic C5-C35	DETSC 3072*	10	ug/l		25			
TPH Ali/Aro Total	DETSC 3072*	10	ug/l		55			
PAHs								
Naphthalene	DETSC 3304	0.01	ug/l		0.07			
Acenaphthylene	DETSC 3304	0.01	ug/l		0.02			
Acenaphthene	DETSC 3304	0.01	ug/l		0.07			
Fluorene	DETSC 3304	0.01	ug/l		0.13			
Phenanthrene	DETSC 3304	0.01	ug/l		0.05			
Anthracene	DETSC 3304	0.01	ug/l		< 0.01			
Fluoranthene	DETSC 3304	0.01	ug/l		0.07			
Pyrene	DETSC 3304	0.01	ug/l		0.06			
Benzo(a)anthracene	DETSC 3304	0.01	ug/l		0.02			
Chrysene	DETSC 3304	0.01	ug/l		0.03			
Benzo(b)fluoranthene	DETSC 3304	0.01	ug/l		0.04			
Benzo(k)fluoranthene	DETSC 3304	0.01	ug/l		0.02			
Benzo(a)pyrene	DETSC 3304	0.01	ug/l		0.03			
Indeno(1,2,3-c,d)pyrene	DETSC 3304	0.01	ug/l		0.03			
Dibenzo(a,h)anthracene	DETSC 3304	0.01	ug/l		< 0.01			
Benzo(g,h,i)perylene	DETSC 3304	0.01	ug/l		0.03			
PAH Total	DETSC 3304	0.04	ug/l		0.65			

Summary of Chemical Analysis

Leachate Samples

Our Ref 4155 Combined Report

Client Ref 4155

The Former SSI Steelworks, Redcar - Ground
Investigation Contract - Priority Areas Within SSI
Landholdings, Contract 3

Contract Title

Lab No	1244905	1244906	1244907	1245447	1253587
Sample ID	S3-TPA16	S3-TPB32	S3-TPA24	S3-TPB33	S3-TPB52
Depth	0.20	0.50	1.50	1.50	1.55
Other ID	2	3	7	6	5
Sample Type	ES	ES	ES	ES	ES
Sampling Date	13/10/17	13/10/17	10/10/17	16/10/17	26/10/17
Sampling Time	n/s	n/s	n/s	n/s	n/s

Test	Method	LOD	Units					
Preparation								
BS EN 12457 10:1	DETS 036*			Y	Y	Y	Y	Y
Metals								
Antimony, Dissolved	DETSC 2306	0.17	ug/l	0.37	0.19	0.37	0.88	< 0.17
Arsenic, Dissolved	DETSC 2306	0.16	ug/l	0.76	0.57	0.27	1.2	0.54
Barium, Dissolved	DETSC 2306	0.26	ug/l	23	29	180	4.6	20
Beryllium, Dissolved	DETSC 2306*	0.1	ug/l	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Boron	DETSC 2123	100	ug/l	230	170	180	< 100	370
Cadmium, Dissolved	DETSC 2306	0.03	ug/l	< 0.03	< 0.03	0.33	< 0.03	< 0.03
Chromium, Dissolved	DETSC 2306	0.25	ug/l	0.99	0.95	0.27	< 0.25	< 0.25
Copper, Dissolved	DETSC 2306	0.4	ug/l	0.9	0.8	4.5	0.8	1.5
Iron, Dissolved	DETSC 2306	5.5	ug/l	33	< 5.5	< 5.5	170	< 5.5
Lead, Dissolved	DETSC 2306	0.09	ug/l	0.11	< 0.09	< 0.09	0.94	< 0.09
Manganese, Dissolved	DETSC 2306	0.22	ug/l	3.8	0.43	0.51	15	5.9
Mercury, Dissolved	DETSC 2306	0.01	ug/l	0.06	< 0.01	0.17	< 0.01	< 0.01
Nickel, Dissolved	DETSC 2306	0.5	ug/l	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Selenium, Dissolved	DETSC 2306	0.25	ug/l	0.71	0.87	6.8	0.33	< 0.25
Vanadium, Dissolved	DETSC 2306	0.6	ug/l	4.7	77	37	3.0	18
Zinc, Dissolved	DETSC 2306	1.3	ug/l	< 1.3	< 1.3	< 1.3	2.0	< 1.3
Inorganics								
pH	DETSC 2008			7.6	10.6	11.7	6.6	10.2
Cyanide, Total	DETSC 2130	40	ug/l					< 40
Phenol - Monohydric	DETSC 2131	0.5	ug/l					< 0.5
Ammoniacal Nitrogen as N	DETSC 2207	0.015	mg/l	0.030	0.024	0.034	0.60	< 0.015
Sulphate as SO4	DETSC 2055	0.1	mg/l					11

Summary of Chemical Analysis

Leachate Samples

Our Ref 4155 Combined Report

Client Ref 4155

The Former SSI Steelworks, Redcar - Ground
Investigation Contract - Priority Areas Within SSI
Landholdings, Contract 3

Contract Title

Lab No	1244905	1244906	1244907	1245447	1253587
Sample ID	S3-TPA16	S3-TPB32	S3-TPA24	S3-TPB33	S3-TPB52
Depth	0.20	0.50	1.50	1.50	1.55
Other ID	2	3	7	6	5
Sample Type	ES	ES	ES	ES	ES
Sampling Date	13/10/17	13/10/17	10/10/17	16/10/17	26/10/17
Sampling Time	n/s	n/s	n/s	n/s	n/s

Test	Method	LOD	Units					
Petroleum Hydrocarbons								
Aliphatic C5-C6	DETSC 3322	0.1	ug/l					< 0.1
Aliphatic C6-C8	DETSC 3322	0.1	ug/l					< 0.1
Aliphatic C8-C10	DETSC 3322	0.1	ug/l					< 0.1
Aliphatic C10-C12	DETSC 3072*	1	ug/l					< 1.0
Aliphatic C12-C16	DETSC 3072*	1	ug/l					< 1.0
Aliphatic C16-C21	DETSC 3072*	1	ug/l					< 1.0
Aliphatic C21-C35	DETSC 3072*	1	ug/l					< 1.0
Aliphatic C5-C35	DETSC 3072*	10	ug/l					< 10
Aromatic C5-C7	DETSC 3322	0.1	ug/l					< 0.1
Aromatic C7-C8	DETSC 3322	0.1	ug/l					< 0.1
Aromatic C8-C10	DETSC 3322	0.1	ug/l					< 0.1
Aromatic C10-C12	DETSC 3072*	1	ug/l					< 1.0
Aromatic C12-C16	DETSC 3072*	1	ug/l					< 1.0
Aromatic C16-C21	DETSC 3072*	1	ug/l					< 1.0
Aromatic C21-C35	DETSC 3072*	1	ug/l					< 1.0
Aromatic C5-C35	DETSC 3072*	10	ug/l					< 10
TPH Ali/Aro Total	DETSC 3072*	10	ug/l					< 10
PAHs								
Naphthalene	DETSC 3304	0.01	ug/l					0.03
Acenaphthylene	DETSC 3304	0.01	ug/l					< 0.01
Acenaphthene	DETSC 3304	0.01	ug/l					< 0.01
Fluorene	DETSC 3304	0.01	ug/l					< 0.01
Phenanthrene	DETSC 3304	0.01	ug/l					0.05
Anthracene	DETSC 3304	0.01	ug/l					< 0.01
Fluoranthene	DETSC 3304	0.01	ug/l					0.07
Pyrene	DETSC 3304	0.01	ug/l					0.07
Benzo(a)anthracene	DETSC 3304	0.01	ug/l					0.04
Chrysene	DETSC 3304	0.01	ug/l					0.05
Benzo(b)fluoranthene	DETSC 3304	0.01	ug/l					0.09
Benzo(k)fluoranthene	DETSC 3304	0.01	ug/l					0.03
Benzo(a)pyrene	DETSC 3304	0.01	ug/l					0.05
Indeno(1,2,3-c,d)pyrene	DETSC 3304	0.01	ug/l					0.06
Dibenzo(a,h)anthracene	DETSC 3304	0.01	ug/l					< 0.01
Benzo(g,h,i)perylene	DETSC 3304	0.01	ug/l					0.07
PAH Total	DETSC 3304	0.04	ug/l					0.61

Summary of Chemical Analysis

Leachate Samples

Our Ref 4155 Combined Report

Client Ref 4155

The Former SSI Steelworks, Redcar - Ground
Investigation Contract - Priority Areas Within SSI
Landholdings, Contract 3

Contract Title

Lab No	1253663	1254299	1256398	1256399	1256424
Sample ID	S3-TPB22	S3-TPA02	S3-TPA23	S3-TPA29	S3-TPA26
Depth	1.90	0.50	0.70	0.50	0.20
Other ID	6	2	2	2	2
Sample Type	ES	ES	ES	ES	ES
Sampling Date	01/11/17	23/10/17	10/10/17	13/10/17	18/10/17
Sampling Time	n/s	n/s	n/s	n/s	n/s

Test	Method	LOD	Units					
Preparation								
BS EN 12457 10:1	DETS 036*			Y	Y	Y	Y	Y
Metals								
Antimony, Dissolved	DETSC 2306	0.17	ug/l	0.72	< 0.17	0.31	1.1	
Arsenic, Dissolved	DETSC 2306	0.16	ug/l	2.4	0.56	0.73	1.9	0.79
Barium, Dissolved	DETSC 2306	0.26	ug/l	22	24	31	4.6	
Beryllium, Dissolved	DETSC 2306*	0.1	ug/l	< 0.1	< 0.1	< 0.1	< 0.1	
Boron	DETSC 2123	100	ug/l	400	420	< 100	< 100	< 100
Cadmium, Dissolved	DETSC 2306	0.03	ug/l	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03
Chromium, Dissolved	DETSC 2306	0.25	ug/l	< 0.25	< 0.25	3.9	0.41	0.28
Copper, Dissolved	DETSC 2306	0.4	ug/l	< 0.4	1.2	2.4	3.0	1.1
Iron, Dissolved	DETSC 2306	5.5	ug/l	11	13	8.3	96	
Lead, Dissolved	DETSC 2306	0.09	ug/l	< 0.09	0.09	< 0.09	1.3	1.0
Manganese, Dissolved	DETSC 2306	0.22	ug/l	66		22	21	
Mercury, Dissolved	DETSC 2306	0.01	ug/l	< 0.01	< 0.01	0.01	0.11	0.13
Nickel, Dissolved	DETSC 2306	0.5	ug/l	< 0.5	< 0.5	< 0.5	0.6	< 0.5
Selenium, Dissolved	DETSC 2306	0.25	ug/l	< 0.25	0.61	1.7	1.3	0.48
Vanadium, Dissolved	DETSC 2306	0.6	ug/l	4.4	3.5	6.2	9.2	
Zinc, Dissolved	DETSC 2306	1.3	ug/l	8.5	< 1.3	< 1.3	3.8	3.7
Inorganics								
pH	DETSC 2008			8.1	9.4	7.9	7.8	6.7
Cyanide, Total	DETSC 2130	40	ug/l	< 40	< 40			< 40
Phenol - Monohydric	DETSC 2131	0.5	ug/l	< 0.5	< 0.5			< 0.5
Ammoniacal Nitrogen as N	DETSC 2207	0.015	mg/l	0.10	0.17	0.060	0.039	
Sulphate as SO4	DETSC 2055	0.1	mg/l	86	85			5.5

Summary of Chemical Analysis

Leachate Samples

Our Ref 4155 Combined Report

Client Ref 4155

The Former SSI Steelworks, Redcar - Ground
Investigation Contract - Priority Areas Within SSI
Landholdings, Contract 3

Contract Title

Lab No	1253663	1254299	1256398	1256399	1256424
Sample ID	S3-TPB22	S3-TPA02	S3-TPA23	S3-TPA29	S3-TPA26
Depth	1.90	0.50	0.70	0.50	0.20
Other ID	6	2	2	2	2
Sample Type	ES	ES	ES	ES	ES
Sampling Date	01/11/17	23/10/17	10/10/17	13/10/17	18/10/17
Sampling Time	n/s	n/s	n/s	n/s	n/s

Test	Method	LOD	Units					
Petroleum Hydrocarbons								
Aliphatic C5-C6	DETSC 3322	0.1	ug/l	< 0.1	< 0.1			< 0.1
Aliphatic C6-C8	DETSC 3322	0.1	ug/l	< 0.1	< 0.1			< 0.1
Aliphatic C8-C10	DETSC 3322	0.1	ug/l	< 0.1	< 0.1			< 0.1
Aliphatic C10-C12	DETSC 3072*	1	ug/l	2.3	< 1.0			< 1.0
Aliphatic C12-C16	DETSC 3072*	1	ug/l	5.6	< 1.0			< 1.0
Aliphatic C16-C21	DETSC 3072*	1	ug/l	15	< 1.0			< 1.0
Aliphatic C21-C35	DETSC 3072*	1	ug/l	31	< 1.0			< 1.0
Aliphatic C5-C35	DETSC 3072*	10	ug/l	54	< 10			< 10
Aromatic C5-C7	DETSC 3322	0.1	ug/l	< 0.1	< 0.1			< 0.1
Aromatic C7-C8	DETSC 3322	0.1	ug/l	< 0.1	< 0.1			< 0.1
Aromatic C8-C10	DETSC 3322	0.1	ug/l	< 0.1	< 0.1			< 0.1
Aromatic C10-C12	DETSC 3072*	1	ug/l	< 1.0	< 1.0			< 1.0
Aromatic C12-C16	DETSC 3072*	1	ug/l	5.0	< 1.0			< 1.0
Aromatic C16-C21	DETSC 3072*	1	ug/l	8.4	< 1.0			< 1.0
Aromatic C21-C35	DETSC 3072*	1	ug/l	8.7	< 1.0			< 1.0
Aromatic C5-C35	DETSC 3072*	10	ug/l	22	< 10			< 10
TPH Ali/Aro Total	DETSC 3072*	10	ug/l	76	< 10			< 10
PAHs								
Naphthalene	DETSC 3304	0.01	ug/l	0.03	0.12			0.02
Acenaphthylene	DETSC 3304	0.01	ug/l	< 0.01	0.02			0.01
Acenaphthene	DETSC 3304	0.01	ug/l	< 0.01	0.05			0.10
Fluorene	DETSC 3304	0.01	ug/l	< 0.01	0.03			0.06
Phenanthrene	DETSC 3304	0.01	ug/l	0.03	0.21			0.04
Anthracene	DETSC 3304	0.01	ug/l	< 0.01	0.04			0.03
Fluoranthene	DETSC 3304	0.01	ug/l	0.02	0.67			0.07
Pyrene	DETSC 3304	0.01	ug/l	0.02	0.54			0.07
Benzo(a)anthracene	DETSC 3304	0.01	ug/l	< 0.01	0.29			0.04
Chrysene	DETSC 3304	0.01	ug/l	< 0.01	0.37			0.05
Benzo(b)fluoranthene	DETSC 3304	0.01	ug/l	< 0.01	0.56			0.10
Benzo(k)fluoranthene	DETSC 3304	0.01	ug/l	< 0.01	0.22			0.04
Benzo(a)pyrene	DETSC 3304	0.01	ug/l	< 0.01	0.38			0.06
Indeno(1,2,3-c,d)pyrene	DETSC 3304	0.01	ug/l	< 0.01	0.41			0.08
Dibenzo(a,h)anthracene	DETSC 3304	0.01	ug/l	< 0.01	0.07			< 0.01
Benzo(g,h,i)perylene	DETSC 3304	0.01	ug/l	< 0.01	0.36			0.10
PAH Total	DETSC 3304	0.04	ug/l	0.10	4.3			0.88

Summary of Chemical Analysis

Leachate Samples

Our Ref 4155 Combined Report

Client Ref 4155

The Former SSI Steelworks, Redcar - Ground
Investigation Contract - Priority Areas Within SSI
Landholdings, Contract 3

Contract Title

Lab No	1256425	1256426	1256427	1256428	1256429
Sample ID	S3-TPA28	S3-TPA42	S3-TPB44	S3-TPB51	S3-TPA18
Depth	3.50	0.20	1.50	0.50	1.00
Other ID	11	2	5	2	4
Sample Type	ES	ES	ES	ES	ES
Sampling Date	18/10/17	18/10/17	18/10/17	18/10/17	19/10/17
Sampling Time	n/s	n/s	n/s	n/s	n/s

Test	Method	LOD	Units					
Preparation								
BS EN 12457 10:1	DETS 036*			Y	Y	Y	Y	Y
Metals								
Antimony, Dissolved	DETSC 2306	0.17	ug/l	0.47		< 0.17	< 0.17	< 0.17
Arsenic, Dissolved	DETSC 2306	0.16	ug/l	0.82	0.46	1.9	0.27	1.0
Barium, Dissolved	DETSC 2306	0.26	ug/l	16		1.9	2.0	3.7
Beryllium, Dissolved	DETSC 2306*	0.1	ug/l	< 0.1		< 0.1	< 0.1	< 0.1
Boron	DETSC 2123	100	ug/l	< 100	< 100	< 100	< 100	< 100
Cadmium, Dissolved	DETSC 2306	0.03	ug/l	0.03	< 0.03	< 0.03	< 0.03	< 0.03
Chromium, Dissolved	DETSC 2306	0.25	ug/l	< 0.25	< 0.25	1.5	< 0.25	0.27
Copper, Dissolved	DETSC 2306	0.4	ug/l	0.5	1.2	2.1	< 0.4	0.8
Iron, Dissolved	DETSC 2306	5.5	ug/l	59		22	8.2	60
Lead, Dissolved	DETSC 2306	0.09	ug/l	2.0	0.97	0.13	< 0.09	0.31
Manganese, Dissolved	DETSC 2306	0.22	ug/l	4.4		1.7	2.2	1.2
Mercury, Dissolved	DETSC 2306	0.01	ug/l	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Nickel, Dissolved	DETSC 2306	0.5	ug/l	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Selenium, Dissolved	DETSC 2306	0.25	ug/l	0.25	0.32	0.35	< 0.25	0.31
Vanadium, Dissolved	DETSC 2306	0.6	ug/l	< 0.6		5.0	< 0.6	3.4
Zinc, Dissolved	DETSC 2306	1.3	ug/l	4.9	2.5	< 1.3	< 1.3	4.4
Inorganics								
pH	DETSC 2008			6.9	6.8	9.8	8.7	8.1
Cyanide, Total	DETSC 2130	40	ug/l		< 40	< 40	< 40	
Phenol - Monohydric	DETSC 2131	0.5	ug/l		< 0.5	< 0.5	< 0.5	
Ammoniacal Nitrogen as N	DETSC 2207	0.015	mg/l	< 0.015		0.018	< 0.015	< 0.015
Sulphate as SO4	DETSC 2055	0.1	mg/l		5.5	8.0	3.3	

Summary of Chemical Analysis

Leachate Samples

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The Former SSI Steelworks, Redcar - Ground
Investigation Contract - Priority Areas Within SSI
Landholdings, Contract 3

Contract Title

Lab No	1256425	1256426	1256427	1256428	1256429
Sample ID	S3-TPA28	S3-TPA42	S3-TPB44	S3-TPB51	S3-TPA18
Depth	3.50	0.20	1.50	0.50	1.00
Other ID	11	2	5	2	4
Sample Type	ES	ES	ES	ES	ES
Sampling Date	18/10/17	18/10/17	18/10/17	18/10/17	19/10/17
Sampling Time	n/s	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
Petroleum Hydrocarbons							
Aliphatic C5-C6	DETSC 3322	0.1	ug/l		< 0.1	< 0.1	< 0.1
Aliphatic C6-C8	DETSC 3322	0.1	ug/l		< 0.1	< 0.1	< 0.1
Aliphatic C8-C10	DETSC 3322	0.1	ug/l		< 0.1	< 0.1	< 0.1
Aliphatic C10-C12	DETSC 3072*	1	ug/l		< 1.0	< 1.0	< 1.0
Aliphatic C12-C16	DETSC 3072*	1	ug/l		< 1.0	< 1.0	< 1.0
Aliphatic C16-C21	DETSC 3072*	1	ug/l		< 1.0	< 1.0	< 1.0
Aliphatic C21-C35	DETSC 3072*	1	ug/l		< 1.0	< 1.0	< 1.0
Aliphatic C5-C35	DETSC 3072*	10	ug/l		< 10	< 10	< 10
Aromatic C5-C7	DETSC 3322	0.1	ug/l		< 0.1	< 0.1	< 0.1
Aromatic C7-C8	DETSC 3322	0.1	ug/l		< 0.1	< 0.1	< 0.1
Aromatic C8-C10	DETSC 3322	0.1	ug/l		< 0.1	< 0.1	< 0.1
Aromatic C10-C12	DETSC 3072*	1	ug/l		< 1.0	< 1.0	< 1.0
Aromatic C12-C16	DETSC 3072*	1	ug/l		< 1.0	< 1.0	< 1.0
Aromatic C16-C21	DETSC 3072*	1	ug/l		< 1.0	< 1.0	1.7
Aromatic C21-C35	DETSC 3072*	1	ug/l		< 1.0	< 1.0	< 1.0
Aromatic C5-C35	DETSC 3072*	10	ug/l		< 10	< 10	< 10
TPH Ali/Aro Total	DETSC 3072*	10	ug/l		< 10	< 10	< 10
PAHs							
Naphthalene	DETSC 3304	0.01	ug/l		0.06	< 0.01	0.03
Acenaphthylene	DETSC 3304	0.01	ug/l		< 0.01	< 0.01	< 0.01
Acenaphthene	DETSC 3304	0.01	ug/l		0.04	< 0.01	0.12
Fluorene	DETSC 3304	0.01	ug/l		< 0.01	< 0.01	0.02
Phenanthrene	DETSC 3304	0.01	ug/l		0.08	0.02	0.08
Anthracene	DETSC 3304	0.01	ug/l		< 0.01	< 0.01	< 0.01
Fluoranthene	DETSC 3304	0.01	ug/l		0.02	0.04	0.03
Pyrene	DETSC 3304	0.01	ug/l		0.01	0.03	0.02
Benzo(a)anthracene	DETSC 3304	0.01	ug/l		< 0.01	0.02	< 0.01
Chrysene	DETSC 3304	0.01	ug/l		< 0.01	0.02	< 0.01
Benzo(b)fluoranthene	DETSC 3304	0.01	ug/l		< 0.01	0.03	< 0.01
Benzo(k)fluoranthene	DETSC 3304	0.01	ug/l		< 0.01	0.01	< 0.01
Benzo(a)pyrene	DETSC 3304	0.01	ug/l		< 0.01	0.02	< 0.01
Indeno(1,2,3-c,d)pyrene	DETSC 3304	0.01	ug/l		< 0.01	0.02	< 0.01
Dibenzo(a,h)anthracene	DETSC 3304	0.01	ug/l		< 0.01	< 0.01	< 0.01
Benzo(g,h,i)perylene	DETSC 3304	0.01	ug/l		< 0.01	0.02	< 0.01
PAH Total	DETSC 3304	0.04	ug/l		0.22	0.23	0.30

Summary of Chemical Analysis

Leachate Samples

Our Ref 4155 Combined Report

Client Ref 4155

The Former SSI Steelworks, Redcar - Ground
Investigation Contract - Priority Areas Within SSI
Landholdings, Contract 3

Contract Title

Lab No	1256430	1256437	1256438	1256444	1263237
Sample ID	S3-TPB59	S3-TPB63	S3-TPB64	S3-TPB60	S3-TPA39
Depth	2.30	0.50	1.50	0.50	0.30
Other ID	8	2	5	3	2
Sample Type	ES	ES	ES	ES	LEACHATE
Sampling Date	19/10/17	24/10/17	24/10/17	25/10/17	17/10/17
Sampling Time	n/s	n/s	n/s	n/s	n/s

Test	Method	LOD	Units					
Preparation								
BS EN 12457 10:1	DETS 036*			Y	Y	Y	Y	Y
Metals								
Antimony, Dissolved	DETSC 2306	0.17	ug/l	< 0.17	< 0.17	< 0.17	< 0.17	
Arsenic, Dissolved	DETSC 2306	0.16	ug/l	0.33	0.38	0.75	1.0	0.39
Barium, Dissolved	DETSC 2306	0.26	ug/l	5.4	7.3	9.3	22	
Beryllium, Dissolved	DETSC 2306*	0.1	ug/l	< 0.1	< 0.1	< 0.1	< 0.1	
Boron	DETSC 2123	100	ug/l	< 100	< 100	< 100	< 100	120
Cadmium, Dissolved	DETSC 2306	0.03	ug/l	< 0.03	< 0.03	< 0.03	< 0.03	0.04
Chromium, Dissolved	DETSC 2306	0.25	ug/l	< 0.25	< 0.25	0.78	0.27	0.53
Copper, Dissolved	DETSC 2306	0.4	ug/l	0.5	0.9	0.7	0.9	1.7
Iron, Dissolved	DETSC 2306	5.5	ug/l	74	7.7	5.5	13	
Lead, Dissolved	DETSC 2306	0.09	ug/l	0.09	< 0.09	< 0.09	< 0.09	< 0.09
Manganese, Dissolved	DETSC 2306	0.22	ug/l	13	3.5	1.1	11	
Mercury, Dissolved	DETSC 2306	0.01	ug/l	< 0.01	< 0.01	< 0.01	< 0.01	0.04
Nickel, Dissolved	DETSC 2306	0.5	ug/l	< 0.5	< 0.5	< 0.5	< 0.5	0.6
Selenium, Dissolved	DETSC 2306	0.25	ug/l	< 0.25	0.60	0.55	0.43	1.6
Vanadium, Dissolved	DETSC 2306	0.6	ug/l	< 0.6	2.6	5.4	3.1	
Zinc, Dissolved	DETSC 2306	1.3	ug/l	2.3	< 1.3	2.0	3.9	130
Inorganics								
pH	DETSC 2008			8.0	7.9	8.0	6.4	6.9
Cyanide, Total	DETSC 2130	40	ug/l	< 40	< 40	< 40	< 40	< 40
Phenol - Monohydric	DETSC 2131	0.5	ug/l	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Ammoniacal Nitrogen as N	DETSC 2207	0.015	mg/l	0.029	0.024	0.047	< 0.015	
Sulphate as SO4	DETSC 2055	0.1	mg/l	8.4	14	12	44	47

Summary of Chemical Analysis

Leachate Samples

Our Ref 4155 Combined Report

Client Ref 4155

The Former SSI Steelworks, Redcar - Ground
Investigation Contract - Priority Areas Within SSI
Landholdings, Contract 3

Contract Title

Lab No	1256430	1256437	1256438	1256444	1263237
Sample ID	S3-TPB59	S3-TPB63	S3-TPB64	S3-TPB60	S3-TPA39
Depth	2.30	0.50	1.50	0.50	0.30
Other ID	8	2	5	3	2
Sample Type	ES	ES	ES	ES	LEACHATE
Sampling Date	19/10/17	24/10/17	24/10/17	25/10/17	17/10/17
Sampling Time	n/s	n/s	n/s	n/s	n/s

Test	Method	LOD	Units					
Petroleum Hydrocarbons								
Aliphatic C5-C6	DETSC 3322	0.1	ug/l	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Aliphatic C6-C8	DETSC 3322	0.1	ug/l	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Aliphatic C8-C10	DETSC 3322	0.1	ug/l	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Aliphatic C10-C12	DETSC 3072*	1	ug/l	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aliphatic C12-C16	DETSC 3072*	1	ug/l	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aliphatic C16-C21	DETSC 3072*	1	ug/l	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aliphatic C21-C35	DETSC 3072*	1	ug/l	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aliphatic C5-C35	DETSC 3072*	10	ug/l	< 10	< 10	< 10	< 10	< 10
Aromatic C5-C7	DETSC 3322	0.1	ug/l	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Aromatic C7-C8	DETSC 3322	0.1	ug/l	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Aromatic C8-C10	DETSC 3322	0.1	ug/l	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Aromatic C10-C12	DETSC 3072*	1	ug/l	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aromatic C12-C16	DETSC 3072*	1	ug/l	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aromatic C16-C21	DETSC 3072*	1	ug/l	< 1.0	< 1.0	< 1.0	< 1.0	7.2
Aromatic C21-C35	DETSC 3072*	1	ug/l	< 1.0	4.0	1.3	2.7	50
Aromatic C5-C35	DETSC 3072*	10	ug/l	< 10	< 10	< 10	< 10	58
TPH Ali/Aro Total	DETSC 3072*	10	ug/l	< 10	< 10	< 10	< 10	58
PAHs								
Naphthalene	DETSC 3304	0.01	ug/l	< 0.01	0.01	< 0.01	0.02	0.04
Acenaphthylene	DETSC 3304	0.01	ug/l	< 0.01	< 0.01	< 0.01	< 0.01	0.24
Acenaphthene	DETSC 3304	0.01	ug/l	< 0.01	0.11	< 0.01	0.03	0.06
Fluorene	DETSC 3304	0.01	ug/l	< 0.01	0.01	< 0.01	0.02	0.04
Phenanthrene	DETSC 3304	0.01	ug/l	< 0.01	0.04	0.04	0.03	0.28
Anthracene	DETSC 3304	0.01	ug/l	< 0.01	0.02	< 0.01	< 0.01	0.28
Fluoranthene	DETSC 3304	0.01	ug/l	< 0.01	0.13	0.06	0.04	6.7
Pyrene	DETSC 3304	0.01	ug/l	0.01	0.12	0.10	0.04	7.7
Benzo(a)anthracene	DETSC 3304	0.01	ug/l	< 0.01	0.05	0.05	0.02	6.5
Chrysene	DETSC 3304	0.01	ug/l	< 0.01	0.07	0.07	0.03	6.3
Benzo(b)fluoranthene	DETSC 3304	0.01	ug/l	< 0.01	0.13	0.11	0.06	17
Benzo(k)fluoranthene	DETSC 3304	0.01	ug/l	< 0.01	0.06	0.05	0.03	7.3
Benzo(a)pyrene	DETSC 3304	0.01	ug/l	< 0.01	0.08	0.07	0.03	11
Indeno(1,2,3-c,d)pyrene	DETSC 3304	0.01	ug/l	< 0.01	0.13	0.08	0.04	9.6
Dibenzo(a,h)anthracene	DETSC 3304	0.01	ug/l	< 0.01	0.02	< 0.01	< 0.01	2.0
Benzo(g,h,i)perylene	DETSC 3304	0.01	ug/l	< 0.01	0.15	0.08	0.04	9.7
PAH Total	DETSC 3304	0.04	ug/l	< 0.04	1.2	0.72	0.44	85

Summary of Chemical Analysis

Leachate Samples

Our Ref 4155 Combined Report

Client Ref 4155

The Former SSI Steelworks, Redcar - Ground
Investigation Contract - Priority Areas Within SSI
Landholdings, Contract 3

Contract Title

Lab No	1267374	1267375	1267376	1270261	1275451
Sample ID	S3 TPA09	S3-TPB19	S3-TPA21	S3-TPB41	S3-TPB03
Depth	0.20	0.50	0.50	0.50	2.70
Other ID	2	3	2	2	8
Sample Type	ES	ES	ES	ES	ES
Sampling Date	13/10/17	13/10/17	13/10/17	30/10/17	27/10/17
Sampling Time	n/s	n/s	n/s	n/s	n/s

Test	Method	LOD	Units					
Preparation								
BS EN 12457 10:1	DETS 036*			Y	Y	Y	Y	Y
Metals								
Antimony, Dissolved	DETSC 2306	0.17	ug/l					
Arsenic, Dissolved	DETSC 2306	0.16	ug/l	0.34	1.4	2.1	0.52	0.49
Barium, Dissolved	DETSC 2306	0.26	ug/l					
Beryllium, Dissolved	DETSC 2306*	0.1	ug/l					
Boron	DETSC 2123	100	ug/l	130	200	160	290	120
Cadmium, Dissolved	DETSC 2306	0.03	ug/l	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03
Chromium, Dissolved	DETSC 2306	0.25	ug/l	< 0.25	0.51	0.67	0.90	< 0.25
Copper, Dissolved	DETSC 2306	0.4	ug/l	0.8	1.0	1.7	1.3	< 0.4
Iron, Dissolved	DETSC 2306	5.5	ug/l					
Lead, Dissolved	DETSC 2306	0.09	ug/l	< 0.09	0.10	0.34	< 0.09	< 0.09
Manganese, Dissolved	DETSC 2306	0.22	ug/l					
Mercury, Dissolved	DETSC 2306	0.01	ug/l	< 0.01	0.02	0.03	0.02	< 0.01
Nickel, Dissolved	DETSC 2306	0.5	ug/l	< 0.5	< 0.5	< 0.5	1.4	< 0.5
Selenium, Dissolved	DETSC 2306	0.25	ug/l	0.40	0.68	0.41	1.5	0.60
Vanadium, Dissolved	DETSC 2306	0.6	ug/l					
Zinc, Dissolved	DETSC 2306	1.3	ug/l	1.7	< 1.3	< 1.3	< 1.3	< 1.3
Inorganics								
pH	DETSC 2008			7.3	7.4	7.5	11.1	7.5
Cyanide, Total	DETSC 2130	40	ug/l	< 40	< 40	< 40	< 40	< 40
Phenol - Monohydric	DETSC 2131	0.5	ug/l	< 0.5	< 0.5	< 0.5	< 0.5	4.8
Ammoniacal Nitrogen as N	DETSC 2207	0.015	mg/l					
Sulphate as SO4	DETSC 2055	0.1	mg/l	68	20	9.7	8.6	130

Summary of Chemical Analysis

Leachate Samples

Our Ref 4155 Combined Report

Client Ref 4155

The Former SSI Steelworks, Redcar - Ground
Investigation Contract - Priority Areas Within SSI
Landholdings, Contract 3

Contract Title

Lab No	1267374	1267375	1267376	1270261	1275451
Sample ID	S3 TPA09	S3-TPB19	S3-TPA21	S3-TPB41	S3-TPB03
Depth	0.20	0.50	0.50	0.50	2.70
Other ID	2	3	2	2	8
Sample Type	ES	ES	ES	ES	ES
Sampling Date	13/10/17	13/10/17	13/10/17	30/10/17	27/10/17
Sampling Time	n/s	n/s	n/s	n/s	n/s

Test	Method	LOD	Units					
Petroleum Hydrocarbons								
Aliphatic C5-C6	DETSC 3322	0.1	ug/l	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Aliphatic C6-C8	DETSC 3322	0.1	ug/l	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Aliphatic C8-C10	DETSC 3322	0.1	ug/l	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Aliphatic C10-C12	DETSC 3072*	1	ug/l	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aliphatic C12-C16	DETSC 3072*	1	ug/l	< 1.0	< 1.0	6.0	< 1.0	< 1.0
Aliphatic C16-C21	DETSC 3072*	1	ug/l	< 1.0	< 1.0	13	< 1.0	< 1.0
Aliphatic C21-C35	DETSC 3072*	1	ug/l	< 1.0	< 1.0	9.1	< 1.0	< 1.0
Aliphatic C5-C35	DETSC 3072*	10	ug/l	< 10	< 10	28	< 10	< 10
Aromatic C5-C7	DETSC 3322	0.1	ug/l	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Aromatic C7-C8	DETSC 3322	0.1	ug/l	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Aromatic C8-C10	DETSC 3322	0.1	ug/l	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Aromatic C10-C12	DETSC 3072*	1	ug/l	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aromatic C12-C16	DETSC 3072*	1	ug/l	< 1.0	< 1.0	8.4	< 1.0	< 1.0
Aromatic C16-C21	DETSC 3072*	1	ug/l	2.3	< 1.0	22	< 1.0	< 1.0
Aromatic C21-C35	DETSC 3072*	1	ug/l	5.2	< 1.0	3.4	< 1.0	< 1.0
Aromatic C5-C35	DETSC 3072*	10	ug/l	< 10	< 10	34	< 10	< 10
TPH Ali/Aro Total	DETSC 3072*	10	ug/l	< 10	< 10	62	< 10	< 10
PAHs								
Naphthalene	DETSC 3304	0.01	ug/l	< 0.01	0.04	0.01	1.4	0.02
Acenaphthylene	DETSC 3304	0.01	ug/l	0.15	0.11	0.06	0.05	< 0.01
Acenaphthene	DETSC 3304	0.01	ug/l	0.05	0.36	0.02	3.6	< 0.01
Fluorene	DETSC 3304	0.01	ug/l	0.03	0.29	0.03	0.70	< 0.01
Phenanthrene	DETSC 3304	0.01	ug/l	0.24	0.97	0.26	0.96	0.03
Anthracene	DETSC 3304	0.01	ug/l	0.19	0.21	0.07	0.10	< 0.01
Fluoranthene	DETSC 3304	0.01	ug/l	8.2	1.1	0.68	0.22	0.04
Pyrene	DETSC 3304	0.01	ug/l	9.0	0.92	0.56	0.15	0.03
Benzo(a)anthracene	DETSC 3304	0.01	ug/l	5.4	0.63	0.40	0.02	0.02
Chrysene	DETSC 3304	0.01	ug/l	4.8	0.71	0.44	0.03	0.02
Benzo(b)fluoranthene	DETSC 3304	0.01	ug/l	13	2.1	0.91	0.04	0.03
Benzo(k)fluoranthene	DETSC 3304	0.01	ug/l	4.1	0.61	0.39	0.02	< 0.01
Benzo(a)pyrene	DETSC 3304	0.01	ug/l	8.9	1.0	0.64	0.03	0.02
Indeno(1,2,3-c,d)pyrene	DETSC 3304	0.01	ug/l	5.1	0.81	0.53	0.04	0.01
Dibenzo(a,h)anthracene	DETSC 3304	0.01	ug/l	1.0	0.17	0.12	< 0.01	< 0.01
Benzo(g,h,i)perylene	DETSC 3304	0.01	ug/l	4.7	0.81	0.55	0.04	0.02
PAH Total	DETSC 3304	0.04	ug/l	65	11	5.7	7.3	0.23

Summary of Asbestos Analysis

Soil Samples

Our Ref 4155 Combined Report

Client Ref 4155

The Former SSI Steelworks, Redcar - Ground Investigation Contract - Priority Areas Within SSI Landholdings,
Contract 3

Contract Title

Lab No	Sample ID	Material Type	Result	Comment*	Analyst
1244877	S3-TPA09 2 0.20	SOIL	NAD	none	Colin Patrick
1244878	S3-TPA09 4 0.80	SOIL	NAD	none	Colin Patrick
1244879	S3-TPA10 4 1.00	SOIL	NAD	none	Colin Patrick
1244880	S3-TPA29 2 0.50	SOIL	NAD	none	Colin Patrick
1244881	S3-TPA32 4 1.00	SOIL	NAD	none	Colin Patrick
1244882	S3-TPB19 6 1.50	SOIL	NAD	none	Colin Patrick
1244883	S3-TPB20 6 1.70	SOIL	NAD	none	Colin Patrick
1244884	S3-TPB23 3 0.50	SOIL	NAD	none	Colin Patrick
1244885	S3-TPB28 6 1.50	SOIL	NAD	none	Colin Patrick
1244886	S3-TPA14 5 1.00	SOIL	NAD	none	Colin Patrick
1244887	S3-TPA16 2 0.20	SOIL	NAD	none	Colin Patrick
1244888	S3-TPA16 4 0.70	SOIL	NAD	none	Colin Patrick
1244889	S3-TPA19 3 0.50	SOIL	NAD	none	Colin Patrick
1244890	S3-TPA21 2 0.50	SOIL	NAD	none	Colin Patrick
1244891	S3-TPA21 5 1.40	SOIL	NAD	none	Colin Patrick
1244892	S3-TPB32 3 0.50	SOIL	NAD	none	Colin Patrick
1244893	S3-TPA23 2 0.70	SOIL	NAD	none	Colin Patrick
1244894	S3-TPA24 2 0.30	SOIL	NAD	none	Colin Patrick
1244895	S3-TPA24 7 1.50	SOIL	NAD	none	Colin Patrick
1244896	S3-TPA27 2 0.50	SOIL	NAD	none	Colin Patrick
1244897	S3-TPA27 5 1.20	SOIL	NAD	none	Colin Patrick
1244898	S3-TPA30 4 1.00	SOIL	NAD	none	Colin Patrick
1244899	S3-TPA30 7 2.00	SOIL	NAD	none	Colin Patrick
1245437	S3-TPA33 2 0.50	SOIL	Chrysotile	bundles of Chrysotile fibres	Rebecca Burgess
1245438	S3-TPA35 2 0.40	SOIL	Chrysotile	bundle of Chrysotile fibres	Rebecca Burgess
1245439	S3-TPA38 2 0.50	SOIL	NAD	none	Rebecca Burgess
1245440	S3-TPA40 2 0.40	SOIL	NAD	none	Rebecca Burgess
1245441	S3-TPB24 3 0.50	SOIL	Chrysotile	bundles of Chrysotile fibres	Rebecca Burgess
1245442	S3-TPB24 9 2.50	SOIL	NAD	none	Rebecca Burgess
1245443	S3-TPB24 11 3.30	SOIL	NAD	none	Rebecca Burgess
1245444	S3-TPB33 6 1.50	SOIL	NAD	none	Rebecca Burgess
1245445	S3-TPB34 6 1.50	SOIL	NAD	none	Rebecca Burgess
1245446	S3-TPB40 2 0.50	SOIL	Amosite	bundle of Amosite fibres	Rebecca Burgess
1248501	S3-TPA02 2 0.50	SOIL	Chrysotile	bundle of Chrysotile fibres	Rebecca Burgess
1248502	S3-TPA02 5 1.50	SOIL	Crocidolite	bundle of Crocidolite fibres	Rebecca Burgess
1248503	S3-TPA03 5 1.80	SOIL	Chrysotile	bundle of Chrysotile fibres	Rebecca Burgess
1248504	S3-TPA06 5 2.00	SOIL	Chrysotile	bundle of Chrysotile fibres	Rebecca Burgess
1248506	S3-TPA08 2 0.60	SOIL	NAD	none	Rebecca Burgess
1248507	S3-TPA11 7 2.00	SOIL	NAD	none	Rebecca Burgess
1248508	S3-TPA12 5 1.50	SOIL	NAD	none	Rebecca Burgess
1248509	S3-TPA13 6 2.00	SOIL	Amosite	bundle of Amosite fibres	Rebecca Burgess
1248510	S3-TPA13 9 3.00	SOIL	NAD	none	Rebecca Burgess
1248511	S3-TPB66 6 1.50	SOIL	NAD	none	Rebecca Burgess
1248512	S3-TPB68 5 1.00	SOIL	Chrysotile	bundles of Chrysotile fibres	Rebecca Burgess
1248513	S3-TPB69 2 0.20	SOIL	NAD	none	Rebecca Burgess
1248514	S3-TPB69 5 1.00	SOIL	NAD	none	Rebecca Burgess

Summary of Asbestos Analysis

Soil Samples

Our Ref 4155 Combined Report

Client Ref 4155

The Former SSI Steelworks, Redcar - Ground Investigation Contract - Priority Areas Within SSI Landholdings,
Contract 3

Contract Title

Lab No	Sample ID	Material Type	Result	Comment*	Analyst
1248515	S3-TPB71 6 1.50	SOIL	NAD	none	Rebecca Burgess
1248516	S3-TPB72 6 1.50	SOIL	NAD	none	Rebecca Burgess
1248517	S3-TPB72 9 2.50	SOIL	NAD	none	Rebecca Burgess
1248518	S3-TPB74 2 0.50	SOIL	NAD	none	Rebecca Burgess
1248519	S3-TPB75 2 0.50	SOIL	NAD	none	Rebecca Burgess
1248684	S3-TPA25 2 1.00	SOIL	Chrysotile Amosite	Amosite and Chrysotile present as small bundles	A Christodoulou
1248685	S3-TPA26 2 0.20	SOIL	Chrysotile	Chrysotile Present as small bundle	A Christodoulou
1248686	S3-TPA28 5 1.00	SOIL	Chrysotile	Chrysotile Present as small bundles	A Christodoulou
1248687	S3-TPA28 11 3.50	SOIL	Chrysotile	Chrysotile Present as bundles	A Christodoulou
1248688	S3-TPA31 5 0.80	SOIL	Chrysotile	Chrysotile Present as small bundles	A Christodoulou
1248689	S3-TPA31 8 2.00	SOIL	NAD	none	A Christodoulou
1248690	S3-TPA42 2 0.20	SOIL	Chrysotile	Chrysotile Present as bundles	A Christodoulou
1248691	S3-TPB44 5 1.50	SOIL	NAD	none	A Christodoulou
1248692	S3-TPB45 2 0.50	SOIL	NAD	none	A Christodoulou
1248693	S3-TPB50 5 1.30	SOIL	NAD	none	A Christodoulou
1248694	S3-TPB51 2 0.50	SOIL	NAD	none	A Christodoulou
1248695	S3-TPA15 3 1.00	SOIL	NAD	none	A Christodoulou
1248696	S3-TPA17 4 0.60	SOIL	Chrysotile Amosite	Amosite and Chrysotile present in loose fibrous asbestos debris	A Christodoulou
1248697	S3-TPA18 4 1.00	SOIL	NAD	none	A Christodoulou
1248698	S3-TPA18 7 1.55	SOIL	NAD	none	A Christodoulou
1248699	S3-TPA20 4 1.00	SOIL	NAD	none	A Christodoulou
1248700	S3-TPA22 3 0.60	SOIL	NAD	none	A Christodoulou
1248701	S3-TPA22 6 1.80	SOIL	Chrysotile	Chrysotile Present as small bundles	A Christodoulou
1248702	S3-TPB57 5 1.50	SOIL	NAD	none	A Christodoulou
1248703	S3-TPB58 2 0.50	SOIL	NAD	none	A Christodoulou
1248704	S3-TPB59 8 2.30	SOIL	NAD	none	A Christodoulou
1248705	S3-TPB67 2 0.20	SOIL	Chrysotile	Chrysotile Present as bundles	A Christodoulou
1248706	S3-TPB67 9 2.80	SOIL	NAD	none	A Christodoulou
1250105	S3-TPA01 6 1.40	SOIL	Chrysotile	Chrysotile present as fibrous debris	Jeff Cruddas
1250106	S3-TPA04 5 1.00	SOIL	NAD	none	Jeff Cruddas
1250107	S3-TPA05 2 0.50	SOIL	NAD	none	Jeff Cruddas
1250108	S3-TPA05 5 2.00	SOIL	NAD	none	Jeff Cruddas
1250109	S3-TPB63 2 0.50	SOIL	NAD	none	Jeff Cruddas
1250110	S3-TPB64 5 1.50	SOIL	NAD	none	Jeff Cruddas
1250111	S3-TPB65 6 1.50	SOIL	NAD	none	Jeff Cruddas
1250112	S3-TPB70 3 0.50	SOIL	NAD	none	Jeff Cruddas
1250312	S3-TPB06 2 0.50	SOIL	NAD	none	Jeff Cruddas
1250313	S3-TPB06 5 1.00	SOIL	NAD	none	Jeff Cruddas
1250314	S3-TPB12 5 0.60	SOIL	NAD	none	Jeff Cruddas
1250315	S3-TPB14 5 0.70	SOIL	NAD	none	Jeff Cruddas

Summary of Asbestos Analysis

Soil Samples

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Lab No	Sample ID	Material Type	Result	Comment*	Analyst
1250317	S3-TPB16 8 1.70	SOIL	Chrysotile	Chrysotile present as fibre bundles	Jeff Cruddas
1250318	S3-TPB54 6 1.50	SOIL	NAD	none	Jeff Cruddas
1250319	S3-TPB60 3 0.50	SOIL	NAD	none	Jeff Cruddas
1250320	S3-TPB61 5 1.50	SOIL	NAD	none	Jeff Cruddas
1250321	S3-TPB62 5 1.50	SOIL	NAD	none	Jeff Cruddas
1250322	S3-TPB62 7 1.70	SOIL	NAD	none	Jeff Cruddas
1251103	S3-TPA26 5 0.70	SOIL	NAD	none	D Wilkinson
1252170	S3-TPB03 2 0.70	SOIL	NAD	none	A Christodoulou
1252171	S3-TPB04 10 2.50	SOIL	Chrysotile	Chrysotile present in loose fibrous asbestos debris	A Christodoulou
1252172	S3-TPB05 6 2.00	SOIL	Chrysotile	Chrysotile Present as small bundles	A Christodoulou
1252173	S3-TPB07 5 1.20	SOIL	Chrysotile	Chrysotile present in loose fibrous asbestos debris	A Christodoulou
1252174	S3-TPB08 1 0.50	SOIL	NAD	none	A Christodoulou
1252175	S3-TPB09 1 0.20	SOIL	NAD	none	A Christodoulou
1252176	S3-TPB10 5 1.00	SOIL	NAD	none	A Christodoulou
1252177	S3-TPB10 8 2.00	SOIL	NAD	none	A Christodoulou
1252178	S3-TPB26 2 0.50	SOIL	NAD	none	A Christodoulou
1252179	S3-TPB35 2 0.50	SOIL	NAD	none	A Christodoulou
1252180	S3-TPB37 2 0.50	SOIL	Chrysotile	Chrysotile present in loose fibrous asbestos debris	A Christodoulou
1252181	S3-TPB37 5 1.50	SOIL	NAD	none	A Christodoulou
1252182	S3-TPB41 2 0.50	SOIL	Chrysotile	Chrysotile present in loose fibrous asbestos debris	A Christodoulou
1252183	S3-TPB46 3 0.40	SOIL	Chrysotile	Chrysotile Present as small bundles	A Christodoulou
1252184	S3-TPB47 5 1.50	SOIL	NAD	none	A Christodoulou
1252185	S3-TPB48 2 0.50	SOIL	NAD	none	A Christodoulou
1252186	S3-TPB48 5 1.50	SOIL	Chrysotile	Chrysotile Present as small bundle	A Christodoulou
1253426	S3-TPA34 2 0.80	SOIL	Chrysotile Amosite	Chrysotile & Amosite present as fibre bundles	Jeff Cruddas
1253427	S3-TPA36 2 0.50	SOIL	NAD	none	Jeff Cruddas
1253429	S3-TPA39 2 0.30	SOIL	NAD	none	Jeff Cruddas
1253430	S3-TPA39 5 0.80	SOIL	NAD	none	Jeff Cruddas
1253431	S3-TPB38 6 1.50	SOIL	Chrysotile	Chrysotile present as fibre bundles	Jeff Cruddas
1253432	S3-TPB39 1 0.50	MISC	NAD	none	Jeff Cruddas
1253433	S3-TPB43 8 2.50	SOIL	NAD	none	Jeff Cruddas
1253434	S3-TPB49 3 0.50	SOIL	Chrysotile Amosite	Chrysotile & Amosite present as microscopic fibrous debris	Jeff Cruddas
1253435	S3-TPB49 8 2.20	SOIL	NAD	none	Jeff Cruddas
1253579	S3-TPB01 2 0.10	SOIL	Chrysotile	Chrysotile Present as small bundles	A Christodoulou
1253580	S3-TPB52 5 1.55	SOIL	NAD	none	A Christodoulou
1253582	S3-TPB53 5 1.10	SOIL	NAD	none	A Christodoulou
1253583	S3-TPB55 3 0.50	SOIL	NAD	none	A Christodoulou

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Lab No	Sample ID	Material Type	Result	Comment*	Analyst
1253584	S3-TPB55 9 2.60	SOIL	Chrysotile	Chrysotile Present as small bundles	A Christodoulou
1253585	S3-TPB56 2 0.50	SOIL	NAD	none	A Christodoulou
1253586	S3-TPB56 5 1.50	SOIL	NAD	none	A Christodoulou
1253643	S3-TPA07 6 1.50	SOIL	NAD	none	Rebecca Burgess
1253644	S3-TPB11 1 0.20	SOIL	NAD	none	Rebecca Burgess
1253645	S3-TPB13 2 0.15	SOIL	NAD	none	Rebecca Burgess
1253646	S3-TPB13 11 2.00	SOIL	NAD	none	Rebecca Burgess
1253647	S3-TPB13 14 2.70	SOIL	NAD	none	Rebecca Burgess
1253648	S3-TPB15 4 0.50	SOIL	NAD	none	Rebecca Burgess
1253649	S3-TPB15 8 1.70	SOIL	NAD	none	Rebecca Burgess
1253650	S3-TPB17 2 0.20	SOIL	NAD	none	Rebecca Burgess
1253651	S3-TPB18 4 1.20	SOIL	NAD	none	Rebecca Burgess
1253652	S3-TPB18 10 2.20	SOIL	NAD	none	Rebecca Burgess
1253653	S3-TPB21 2 0.40	SOIL	NAD	none	Rebecca Burgess
1253654	S3-TPB22 2 0.70	SOIL	NAD	none	Rebecca Burgess
1253655	S3-TPB22 6 1.90	SOIL	NAD	none	Rebecca Burgess
1253656	S3-TPB25 6 1.50	SOIL	NAD	none	Rebecca Burgess
1253657	S3-TPB27 2 0.50	SOIL	NAD	none	Rebecca Burgess
1253658	S3-TPB29 2 0.50	SOIL	NAD	none	Rebecca Burgess
1253660	S3-TPB30 5 1.50	SOIL	Chrysotile	bundle of Chrysotile fibres	Rebecca Burgess
1253661	S3-TPB31 2 0.50	SOIL	NAD	none	Rebecca Burgess
1253662	S3-TPB36 6 1.50	SOIL	NAD	none	Rebecca Burgess
1253747	S3-TPB42 8 2.50	SOIL	NAD	none	A Christodoulou
1254714	S3-TPB03 9 2.70	SOIL	NAD	none	Jeff Cruddas
1256611	S3-BHB01 7 3.80	SOIL	NAD	none	Rebecca Burgess
1259305	S3-BHA01 4 3.50	SOIL	NAD	none	Steven Lambert
1263036	S3-TPA33 3 0.70	SOIL	NAD	none	Jeff Cruddas
1263037	S3-TPB34 4 1.00	SOIL	NAD	none	Jeff Cruddas
1263038	S3-TPB38 4 1.00	SOIL	NAD	none	Jeff Cruddas
1263039	S3-TPB49 4 1.00	SOIL	Amosite Chrysotile	Amosite & Chrysotile present as loose fibrous asbestos debris	Jeff Cruddas
1266625	S3-TPA01 7 1.60	SOIL	NAD	none	Chris Samms
1266626	S3-TPA02 6 1.80	SOIL	NAD	none	Chris Samms
1266627	S3-TPA03 6 2.20	SOIL	NAD	none	Chris Samms
1266628	S3-TPA13 7 2.30	SOIL	NAD	none	Chris Samms
1266629	S3-TPA22 4 0.80	SOIL	NAD	none	Chris Samms
1266630	S3-TPA22 7 3.70	SOIL	NAD	none	Chris Samms
1266631	S3-TPA25 3 1.20	SOIL	Amosite	Amosite present in bundles	Chris Samms
1266632	S3-TPA25 6 2.30	SOIL	Amosite	none	Chris Samms
1266633	S3-TPA31 6 1.00	SOIL	NAD	none	Chris Samms
1266634	S3-TPB16 9 2.00	SOIL	NAD	none	Chris Samms
1266635	S3-TPB38 7 2.00	SOIL	NAD	none	Chris Samms
1266636	S3-TPB40 6 2.00	SOIL	Chrysotile	Chrysotile present in bundles	Chris Samms
1266637	S3-TPB55 4 1.00	SOIL	NAD	none	Chris Samms
1266638	S3-TPB55 10 2.60	SOIL	NAD	none	Chris Samms

Summary of Asbestos Analysis Soil Samples

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Lab No	Sample ID	Material Type	Result	Comment*	Analyst
1266639	S3-TPB68 4 1.00	SOIL	NAD	none	Chris Samms
1275450	S3-TPB03 8 2.70	SOIL	NAD	none	Chris Samms

Crocidolite = Blue Asbestos, Amosite = Brown Asbestos, Chrysotile = White Asbestos. Anthophyllite, Actinolite and Tremolite are other forms of Asbestos. Samples are analysed by DETSC 1101 using polarised light microscopy in accordance with HSG248 and documented in-house methods. NAD = No Asbestos Detected. Where a sample is NAD, the result is based on analysis of at least 2 sub-samples and should be taken to mean 'no asbestos detected in sample'. Key: * -not included in laboratory scope of accreditation.

Summary of Asbestos Quantification Analysis

Soil Samples

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Contract Title

Test	Method	Units	Lab No	1245437	1245438	1245441	1245446
			Sample ID	S3-TPA33	S3-TPA35	S3-TPB24	S3-TPB40
			Depth	0.50	0.40	0.50	0.50
			Other ID	2	2	3	2
			Sample Type	SOIL	SOIL	SOIL	SOIL
			Sampling Date	16/10/17	16/10/17	16/10/17	16/10/17
			Sampling Time				
Total Mass% Asbestos (a+b+c)	DETSC 1102	Mass %		0.007	0.003	< 0.001	< 0.001
Gravimetric Quantification (a)	DETSC 1102	Mass %		na	na	na	na
Detailed Gravimetric Quantification (b)	DETSC 1102	Mass %		0.007	0.003	<0.001	<0.001
Quantification by PCOM (c)	DETSC 1102	Mass %		na	na	na	na
Potentially Respirable Fibres (d)	DETSC 1102	Fibres/g		na	na	na	na
Breakdown of Gravimetric Analysis (a)							
Mass of Sample		g		1013.82	1241.52	942.58	1198.65
ACMs present*		type					
Mass of ACM in sample		g					
% ACM by mass		%					
% asbestos in ACM		%					
% asbestos in sample		%					
Breakdown of Detailed Gravimetric Analysis (b)							
% Amphibole bundles in sample		Mass %		na	na	na	<0.001
% Chrysotile bundles in sample		Mass %		0.007	0.003	<0.001	na
Breakdown of PCOM Analysis (c)							
% Amphibole fibres in sample		Mass %		na	na	na	na
% Chrysotile fibres in sample		Mass %		na	na	na	na
Breakdown of Potentially Respirable Fibre Analysis (d)							
Amphibole fibres		Fibres/g		na	na	na	na
Chrysotile fibres		Fibres/g		na	na	na	na

* Denotes test or material description outside of UKAS accreditation.
% asbestos in Asbestos Containing Materials (ACMs) is determined by reference to HSG 264.
Recommended sample size for quantification is approximately 1kg
denotes deviating sample

Summary of Asbestos Quantification Analysis Soil Samples

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Contract Title

			Lab No	1248501	1248502	1248503	1248504
			Sample ID	S3-TPA02	S3-TPA02	S3-TPA03	S3-TPA06
			Depth	0.50	1.50	1.80	2.00
			Other ID	2	5	5	5
			Sample Type	SOIL	SOIL	SOIL	SOIL
			Sampling Date	23/10/17	23/10/17	23/10/17	23/10/17
			Sampling Time				
Test	Method	Units					
Total Mass% Asbestos (a+b+c)	DETSC 1102	Mass %	0.012	0.002	0.002	< 0.001	
Gravimetric Quantification (a)	DETSC 1102	Mass %	na	na	na	na	
Detailed Gravimetric Quantification (b)	DETSC 1102	Mass %	0.012	0.002	0.002	<0.001	
Quantification by PCOM (c)	DETSC 1102	Mass %	na	na	na	na	
Potentially Respirable Fibres (d)	DETSC 1102	Fibres/g	na	na	na	na	
Breakdown of Gravimetric Analysis (a)							
Mass of Sample		g	43.07	991.27	1125.53	1223.48	
ACMs present*		type					
Mass of ACM in sample		g					
% ACM by mass		%					
% asbestos in ACM		%					
% asbestos in sample		%					
Breakdown of Detailed Gravimetric Analysis (b)							
% Amphibole bundles in sample		Mass %	na	0.002	na	na	
% Chrysotile bundles in sample		Mass %	0.012	na	0.002	<0.001	
Breakdown of PCOM Analysis (c)							
% Amphibole fibres in sample		Mass %	na	na	na	na	
% Chrysotile fibres in sample		Mass %	na	na	na	na	
Breakdown of Potentially Respirable Fibre Analysis (d)							
Amphibole fibres		Fibres/g	na	na	na	na	
Chrysotile fibres		Fibres/g	na	na	na	na	

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Recommended sample size for quantification is approximately 1kg
denotes deviating sample

Summary of Asbestos Quantification Analysis Soil Samples

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Contract Title

			Lab No	1248509	1248512	1248684	1248685
			Sample ID	S3-TPA13	S3-TPB68	S3-TPA25	S3-TPA26
			Depth	2.00	1.00	1.00	0.20
			Other ID	6	5	2	2
			Sample Type	SOIL	SOIL	SOIL	SOIL
			Sampling Date	20/10/17	20/10/17	18/10/17	18/10/17
			Sampling Time				
Test	Method	Units					
Total Mass% Asbestos (a+b+c)	DETS 1102	Mass %	< 0.001	0.001	0.027	< 0.001	
Gravimetric Quantification (a)	DETS 1102	Mass %	na	na	na	na	
Detailed Gravimetric Quantification (b)	DETS 1102	Mass %	<0.001	0.001	0.027	<0.001	
Quantification by PCOM (c)	DETS 1102	Mass %	na	na	na	na	
Potentially Respirable Fibres (d)	DETS 1102	Fibres/g	na	na	na	na	
Breakdown of Gravimetric Analysis (a)							
Mass of Sample		g	804.78	1100.06	647.05	701.57	
ACMs present*		type					
Mass of ACM in sample		g					
% ACM by mass		%					
% asbestos in ACM		%					
% asbestos in sample		%					
Breakdown of Detailed Gravimetric Analysis (b)							
% Amphibole bundles in sample		Mass %	<0.001	na	0.011	na	
% Chrysotile bundles in sample		Mass %	na	0.001	0.016	<0.001	
Breakdown of PCOM Analysis (c)							
% Amphibole fibres in sample		Mass %	na	na	na	na	
% Chrysotile fibres in sample		Mass %	na	na	na	na	
Breakdown of Potentially Respirable Fibre Analysis (d)							
Amphibole fibres		Fibres/g	na	na	na	na	
Chrysotile fibres		Fibres/g	na	na	na	na	

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% asbestos in Asbestos Containing Materials (ACMs) is determined by reference to HSG 264.
Recommended sample size for quantification is approximately 1kg
denotes deviating sample

Summary of Asbestos Quantification Analysis Soil Samples

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Contract Title

			Lab No	1248686	1248687	1248688	1248690
			Sample ID	S3-TPA28	S3-TPA28	S3-TPA31	S3-TPA42
			Depth	1.00	3.50	0.80	0.20
			Other ID	5	11	5	2
			Sample Type	SOIL	SOIL	SOIL	SOIL
			Sampling Date	18/10/17	18/10/17	18/10/17	18/10/17
			Sampling Time				
Test	Method	Units					
Total Mass% Asbestos (a+b+c)	DETSC 1102	Mass %	0.007	0.033	0.004	0.003	
Gravimetric Quantification (a)	DETSC 1102	Mass %	na	na	na	na	
Detailed Gravimetric Quantification (b)	DETSC 1102	Mass %	0.007	0.033	0.004	0.003	
Quantification by PCOM (c)	DETSC 1102	Mass %	na	na	na	na	
Potentially Respirable Fibres (d)	DETSC 1102	Fibres/g	na	na	na	na	
Breakdown of Gravimetric Analysis (a)							
Mass of Sample		g	767.35	797.87	593.39	910.47	
ACMs present*		type					
Mass of ACM in sample		g					
% ACM by mass		%					
% asbestos in ACM		%					
% asbestos in sample		%					
Breakdown of Detailed Gravimetric Analysis (b)							
% Amphibole bundles in sample		Mass %	na	na	na	na	
% Chrysotile bundles in sample		Mass %	0.007	0.033	0.004	0.003	
Breakdown of PCOM Analysis (c)							
% Amphibole fibres in sample		Mass %	na	na	na	na	
% Chrysotile fibres in sample		Mass %	na	na	na	na	
Breakdown of Potentially Respirable Fibre Analysis (d)							
Amphibole fibres		Fibres/g	na	na	na	na	
Chrysotile fibres		Fibres/g	na	na	na	na	

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% asbestos in Asbestos Containing Materials (ACMs) is determined by reference to HSG 264.
Recommended sample size for quantification is approximately 1kg
denotes deviating sample

Summary of Asbestos Quantification Analysis Soil Samples

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Contract Title

			Lab No	1248696	1248701	1248705	1250105
			Sample ID	S3-TPA17	S3-TPA22	S3-TPB67	S3-TPA01
			Depth	0.60	1.80	0.20	1.40
			Other ID	4	6	2	6
			Sample Type	SOIL	SOIL	SOIL	SOIL
			Sampling Date	19/10/17	19/10/17	19/10/17	24/10/17
			Sampling Time				
Test	Method	Units					
Total Mass% Asbestos (a+b+c)	DETS 1102	Mass %	0.020	0.003	0.001	0.034	
Gravimetric Quantification (a)	DETS 1102	Mass %	0.016	na	na	0.034	
Detailed Gravimetric Quantification (b)	DETS 1102	Mass %	0.004	0.003	0.001	na	
Quantification by PCOM (c)	DETS 1102	Mass %	na	na	na	na	
Potentially Respirable Fibres (d)	DETS 1102	Fibres/g	na	na	na	na	
Breakdown of Gravimetric Analysis (a)							
Mass of Sample		g	603.83	798.90	336.26	987.41	
ACMs present*		type	LFAD			LFAD	
Mass of ACM in sample		g	0.10			0.40	
% ACM by mass		%	0.02			0.04	
% asbestos in ACM		%	100			85.00	
% asbestos in sample		%	0.016			0.03	
Breakdown of Detailed Gravimetric Analysis (b)							
% Amphibole bundles in sample		Mass %	<0.001	na	na	na	
% Chrysotile bundles in sample		Mass %	0.003	0.003	0.001	na	
Breakdown of PCOM Analysis (c)							
% Amphibole fibres in sample		Mass %	na	na	na	na	
% Chrysotile fibres in sample		Mass %	na	na	na	na	
Breakdown of Potentially Respirable Fibre Analysis (d)							
Amphibole fibres		Fibres/g	na	na	na	na	
Chrysotile fibres		Fibres/g	na	na	na	na	

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% asbestos in Asbestos Containing Materials (ACMs) is determined by reference to HSG 264.
Recommended sample size for quantification is approximately 1kg
denotes deviating sample

Summary of Asbestos Quantification Analysis Soil Samples

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Contract Title

			Lab No	1250317	1252171	1252172	1252173
			Sample ID	S3-TPB16	S3-TPB04	S3-TPB05	S3-TPB07
			Depth	1.70	2.50	2.00	1.20
			Other ID	8	10	6	5
			Sample Type	SOIL	SOIL	SOIL	SOIL
			Sampling Date	25/10/17	27/10/17	27/10/17	27/10/17
			Sampling Time				
Test	Method	Units					
Total Mass% Asbestos (a+b+c)	DETSC 1102	Mass %	< 0.001	0.003	0.001	< 0.001	
Gravimetric Quantification (a)	DETSC 1102	Mass %	na	0.003	na	0.001	
Detailed Gravimetric Quantification (b)	DETSC 1102	Mass %	<0.001	na	0.001	na	
Quantification by PCOM (c)	DETSC 1102	Mass %	na	na	na	na	
Potentially Respirable Fibres (d)	DETSC 1102	Fibres/g	na	na	na	na	
Breakdown of Gravimetric Analysis (a)							
Mass of Sample		g	1103.84	612.39	936.71	1053.20	
ACMs present*		type		LFAD		LFAD	
Mass of ACM in sample		g		0.02		0.01	
% ACM by mass		%		0.00		0.00	
% asbestos in ACM		%		100.00		100	
% asbestos in sample		%		0.00		0.001	
Breakdown of Detailed Gravimetric Analysis (b)							
% Amphibole bundles in sample		Mass %	na	na	na	na	
% Chrysotile bundles in sample		Mass %	<0.001	na	0.001	na	
Breakdown of PCOM Analysis (c)							
% Amphibole fibres in sample		Mass %	na	na	na	na	
% Chrysotile fibres in sample		Mass %	na	na	na	na	
Breakdown of Potentially Respirable Fibre Analysis (d)							
Amphibole fibres		Fibres/g	na	na	na	na	
Chrysotile fibres		Fibres/g	na	na	na	na	

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% asbestos in Asbestos Containing Materials (ACMs) is determined by reference to HSG 264.
Recommended sample size for quantification is approximately 1kg
denotes deviating sample

Summary of Asbestos Quantification Analysis Soil Samples

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Contract Title

			Lab No	1252180	1252182	1252183	1252186
			Sample ID	S3-TPB37	S3-TPB41	S3-TPB46	S3-TPB48
			Depth	0.50	0.50	0.40	1.50
			Other ID	2	2	3	5
			Sample Type	SOIL	SOIL	SOIL	SOIL
			Sampling Date	27/10/17	30/10/17	30/10/17	27/10/17
			Sampling Time				
Test	Method	Units					
Total Mass% Asbestos (a+b+c)	DETSC 1102	Mass %	< 0.001	< 0.001	< 0.001	0.004	
Gravimetric Quantification (a)	DETSC 1102	Mass %	0.000	0.001	na	na	
Detailed Gravimetric Quantification (b)	DETSC 1102	Mass %	na	na	<0.001	0.004	
Quantification by PCOM (c)	DETSC 1102	Mass %	na	na	na	na	
Potentially Respirable Fibres (d)	DETSC 1102	Fibres/g	na	na	na	na	
Breakdown of Gravimetric Analysis (a)							
Mass of Sample		g	959.45	453.24	513.94	404.74	
ACMs present*		type	LFAD	LFAD			
Mass of ACM in sample		g	0.00	0.00			
% ACM by mass		%	0.00	0.00			
% asbestos in ACM		%	100	100			
% asbestos in sample		%	0.000	0.001			
Breakdown of Detailed Gravimetric Analysis (b)							
% Amphibole bundles in sample		Mass %	na	na	na	na	
% Chrysotile bundles in sample		Mass %	na	na	<0.001	0.004	
Breakdown of PCOM Analysis (c)							
% Amphibole fibres in sample		Mass %	na	na	na	na	
% Chrysotile fibres in sample		Mass %	na	na	na	na	
Breakdown of Potentially Respirable Fibre Analysis (d)							
Amphibole fibres		Fibres/g	na	na	na	na	
Chrysotile fibres		Fibres/g	na	na	na	na	

* Denotes test or material description outside of UKAS accreditation.
% asbestos in Asbestos Containing Materials (ACMs) is determined by
by reference to HSG 264.
Recommended sample size for quantification is approximately 1kg
denotes deviating sample

Summary of Asbestos Quantification Analysis Soil Samples

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Contract Title

			Lab No	1253426	1253431	1253434	1253579
			Sample ID	S3-TPA34	S3-TPB38	S3-TPB49	S3-TPB01
			Depth	0.80	1.50	0.50	0.10
			Other ID	2	6	3	2
			Sample Type	SOIL	SOIL	SOIL	SOIL
			Sampling Date	17/10/17	17/10/17	17/10/17	26/10/17
			Sampling Time				
Test	Method	Units					
Total Mass% Asbestos (a+b+c)	DETSC 1102	Mass %	< 0.001	< 0.001	0.005	0.002	
Gravimetric Quantification (a)	DETSC 1102	Mass %	na	na	0.005	na	
Detailed Gravimetric Quantification (b)	DETSC 1102	Mass %	<0.001	<0.001	na	0.002	
Quantification by PCOM (c)	DETSC 1102	Mass %	na	na	na	na	
Potentially Respirable Fibres (d)	DETSC 1102	Fibres/g	na	na	na	na	
Breakdown of Gravimetric Analysis (a)							
Mass of Sample		g	1007.07	990.58	810.10	1136.68	
ACMs present*		type			LFAD		
Mass of ACM in sample		g			0.04		
% ACM by mass		%			0.01		
% asbestos in ACM		%			100		
% asbestos in sample		%			0.005		
Breakdown of Detailed Gravimetric Analysis (b)							
% Amphibole bundles in sample		Mass %	<0.001	na	na	na	
% Chrysotile bundles in sample		Mass %	<0.001	<0.001	na	0.002	
Breakdown of PCOM Analysis (c)							
% Amphibole fibres in sample		Mass %	na	na	na	na	
% Chrysotile fibres in sample		Mass %	na	na	na	na	
Breakdown of Potentially Respirable Fibre Analysis (d)							
Amphibole fibres		Fibres/g	na	na	na	na	
Chrysotile fibres		Fibres/g	na	na	na	na	

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% asbestos in Asbestos Containing Materials (ACMs) is determined by reference to HSG 264.
Recommended sample size for quantification is approximately 1kg
denotes deviating sample

Summary of Asbestos Quantification Analysis Soil Samples

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Contract Title

			Lab No	1253584	1253660	1252171	1252172
			Sample ID	S3-TPB55	S3-TPB30	S3-TPB04	S3-TPB05
			Depth	2.60	1.50	2.50	2.00
			Other ID	9	5	10	6
			Sample Type	SOIL	SOIL	SOIL	SOIL
			Sampling Date	26/10/17	31/10/17	27/10/17	27/10/17
			Sampling Time				
Test	Method	Units					
Total Mass% Asbestos (a+b+c)	DETSC 1102	Mass %	0.005	< 0.001	0.003	0.001	
Gravimetric Quantification (a)	DETSC 1102	Mass %	na	na	0.003	na	
Detailed Gravimetric Quantification (b)	DETSC 1102	Mass %	0.005	<0.001	na	0.001	
Quantification by PCOM (c)	DETSC 1102	Mass %	na	na	na	na	
Potentially Respirable Fibres (d)	DETSC 1102	Fibres/g	na	na	na	na	
Breakdown of Gravimetric Analysis (a)							
Mass of Sample		g	208.11	798.92	612.39	936.71	
ACMs present*		type			LFAD		
Mass of ACM in sample		g			0.02		
% ACM by mass		%			0.00		
% asbestos in ACM		%			100.00		
% asbestos in sample		%			0.00		
Breakdown of Detailed Gravimetric Analysis (b)							
% Amphibole bundles in sample		Mass %	na	na	na	na	
% Chrysotile bundles in sample		Mass %	0.005	<0.001	na	0.001	
Breakdown of PCOM Analysis (c)							
% Amphibole fibres in sample		Mass %	na	na	na	na	
% Chrysotile fibres in sample		Mass %	na	na	na	na	
Breakdown of Potentially Respirable Fibre Analysis (d)							
Amphibole fibres		Fibres/g	na	na	na	na	
Chrysotile fibres		Fibres/g	na	na	na	na	

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% asbestos in Asbestos Containing Materials (ACMs) is determined by reference to HSG 264.
Recommended sample size for quantification is approximately 1kg
denotes deviating sample

Summary of Asbestos Quantification Analysis Soil Samples

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Contract Title

			Lab No	1252173	1252180	1252182	1252183
			Sample ID	S3-TPB07	S3-TPB37	S3-TPB41	S3-TPB46
			Depth	1.20	0.50	0.50	0.40
			Other ID	5	2	2	3
			Sample Type	SOIL	SOIL	SOIL	SOIL
			Sampling Date	27/10/17	27/10/17	30/10/17	30/10/17
			Sampling Time				
Test	Method	Units					
Total Mass% Asbestos (a+b+c)	DETS 1102	Mass %	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Gravimetric Quantification (a)	DETS 1102	Mass %	0.001	0.000	0.001	na	na
Detailed Gravimetric Quantification (b)	DETS 1102	Mass %	na	na	na	<0.001	<0.001
Quantification by PCOM (c)	DETS 1102	Mass %	na	na	na	na	na
Potentially Respirable Fibres (d)	DETS 1102	Fibres/g	na	na	na	na	na
Breakdown of Gravimetric Analysis (a)							
Mass of Sample		g	1053.20	959.45	453.24	513.94	
ACMs present*		type	LFAD	LFAD	LFAD		
Mass of ACM in sample		g	0.01	0.00	0.00		
% ACM by mass		%	0.00	0.00	0.00		
% asbestos in ACM		%	100	100	100		
% asbestos in sample		%	0.001	0.000	0.001		
Breakdown of Detailed Gravimetric Analysis (b)							
% Amphibole bundles in sample		Mass %	na	na	na	na	na
% Chrysotile bundles in sample		Mass %	na	na	na	na	<0.001
Breakdown of PCOM Analysis (c)							
% Amphibole fibres in sample		Mass %	na	na	na	na	na
% Chrysotile fibres in sample		Mass %	na	na	na	na	na
Breakdown of Potentially Respirable Fibre Analysis (d)							
Amphibole fibres		Fibres/g	na	na	na	na	na
Chrysotile fibres		Fibres/g	na	na	na	na	na

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% asbestos in Asbestos Containing Materials (ACMs) is determined by reference to HSG 264.
Recommended sample size for quantification is approximately 1kg
denotes deviating sample

Summary of Asbestos Quantification Analysis Soil Samples

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Contract Title

Lab No	1252186
Sample ID	S3-TPB48
Depth	1.50
Other ID	5
Sample Type	SOIL
Sampling Date	27/10/17
Sampling Time	

Test	Method	Units	
Total Mass% Asbestos (a+b+c)	DETSC 1102	Mass %	0.004
Gravimetric Quantification (a)	DETSC 1102	Mass %	na
Detailed Gravimetric Quantification (b)	DETSC 1102	Mass %	0.004
Quantification by PCOM (c)	DETSC 1102	Mass %	na
Potentially Respirable Fibres (d)	DETSC 1102	Fibres/g	na

Breakdown of Gravimetric Analysis (a)

Mass of Sample		g	404.74
ACMs present*		type	
Mass of ACM in sample		g	
% ACM by mass		%	
% asbestos in ACM		%	
% asbestos in sample		%	

Breakdown of Detailed Gravimetric Analysis (b)

% Amphibole bundles in sample		Mass %	na
% Chrysotile bundles in sample		Mass %	0.004

Breakdown of PCOM Analysis (c)

% Amphibole fibres in sample		Mass %	na
% Chrysotile fibres in sample		Mass %	na

Breakdown of Potentially Respirable Fibre Analysis (d)

Amphibole fibres		Fibres/g	na
Chrysotile fibres		Fibres/g	na

* Denotes test or material description outside of UKAS accreditation.
% asbestos in Asbestos Containing Materials (ACMs) is determined by
by reference to HSG 264.
Recommended sample size for quantification is approximately 1kg
denotes deviating sample

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Containers Received & Deviating Samples

Lab No	Sample ID	Date Sampled	Containers Received	Holding time exceeded for tests	Inappropriate container for tests
1244877	S3-TPA09 0.20 SOIL	13/10/17	GJ 250ml x2, GJ 60ml x2, PT 1L x2		
1244878	S3-TPA09 0.80 SOIL	13/10/17	GJ 250ml x2, GJ 60ml x2, PT 1L x2		
1244879	S3-TPA10 1.00 SOIL	13/10/17	GJ 250ml x2, GJ 60ml x2, PT 1L x2		
1244880	S3-TPA29 0.50 SOIL	13/10/17	GJ 250ml x2, GJ 60ml x2, PT 1L x2		
1244881	S3-TPA32 1.00 SOIL	13/10/17	GJ 250ml x2, GJ 60ml x2, PT 1L x2		
1244882	S3-TPB19 1.50 SOIL	13/10/17	GJ 250ml x2, GJ 60ml x2, PT 1L x2		
1244883	S3-TPB20 1.70 SOIL	13/10/17	GJ 250ml x2, GJ 60ml x2, PT 1L x2		
1244884	S3-TPB23 0.50 SOIL	13/10/17	GJ 250ml x2, GJ 60ml x2, PT 1L x2		
1244885	S3-TPB28 1.50 SOIL	13/10/17	GJ 250ml x2, GJ 60ml x2, PT 1L x2		
1244886	S3-TPA14 1.00 SOIL	13/10/17	GJ 250ml x2, GV x2, PT 1L x2		
1244887	S3-TPA16 0.20 SOIL	13/10/17	GJ 250ml x2, GV x2, PT 1L x2		
1244888	S3-TPA16 0.70 SOIL	13/10/17	GJ 250ml x2, GV x2, PT 1L x2		
1244889	S3-TPA19 0.50 SOIL	13/10/17	GJ 250ml x2, GV x2, PT 1L x2		
1244890	S3-TPA21 0.50 SOIL	13/10/17	GJ 250ml x2, GV x2, PT 1L x2		
1244891	S3-TPA21 1.40 SOIL	13/10/17	GJ 250ml x2, GV x2, PT 1L x2		
1244892	S3-TPB32 0.50 SOIL	13/10/17	GJ 250ml x2, GV x2, PT 1L x2		
1244893	S3-TPA23 0.70 SOIL	10/10/17	GJ 250ml x2, GJ 60ml x2, PT 1L x2		
1244894	S3-TPA24 0.30 SOIL	10/10/17	GJ 250ml x2, GJ 60ml x2, PT 1L x2		
1244895	S3-TPA24 1.50 SOIL	10/10/17	GJ 250ml x2, GJ 60ml x2, PT 1L x2		
1244896	S3-TPA27 0.50 SOIL	10/10/17	GJ 250ml x2, GJ 60ml x2, PT 1L x2		
1244897	S3-TPA27 1.20 SOIL	10/10/17	GJ 250ml x2, GJ 60ml x2, PT 1L x2		
1244898	S3-TPA30 1.00 SOIL	10/10/17	GJ 250ml x2, GJ 60ml x2, PT 1L x2		
1244899	S3-TPA30 2.00 SOIL	10/10/17	GJ 250ml x2, GJ 60ml x2, PT 1L x2		
1244900	S3-TPA 10 1.00 LEACHATE	13/10/17	GJ 250ml x2, GJ 60ml x2, PT 1L x2		
1244901	S3-TPA 32 1.00 LEACHATE	13/10/17	GJ 250ml x2, GJ 60ml x2, PT 1L x2		
1244902	S3-TPB19 1.50 LEACHATE	13/10/17	GJ 250ml x2, GJ 60ml x2, PT 1L x2		
1244903	S3-TPB28 1.50 LEACHATE	13/10/17	GJ 250ml x2, GJ 60ml x2, PT 1L x2		

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1244904	S3-TPA14 1.00 LEACHATE	13/10/17	GJ 250ml x2, GV x2, PT 1L x2		
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Lab No	Sample ID	Date Sampled	Containers Received	Holding time exceeded for tests	Inappropriate container for tests
1244905	S3-TPA16 0.20 LEACHATE	13/10/17	GJ 250ml x2, GV x2, PT 1L x2		
1244906	S3-TPB32 0.50 LEACHATE	13/10/17	GJ 250ml x2, GV x2, PT 1L x2		
1244907	S3-TPA24 1.50 LEACHATE	10/10/17	GJ 250ml x2, GJ 60ml x2, PT 1L x2		
1245437	S3-TPA33 0.50 SOIL	16/10/17	GJ 250ml x2, GJ 60ml x2, PT 1L x2		
1245438	S3-TPA35 0.40 SOIL	16/10/17	GJ 250ml x2, GJ 60ml x2, PT 1L x2		
1245439	S3-TPA38 0.50 SOIL	16/10/17	GJ 250ml x2, GJ 60ml x2, PT 1L x2		
1245440	S3-TPA40 0.40 SOIL	16/10/17	GJ 250ml x2, GJ 60ml x2, PT 1L x2		
1245441	S3-TPB24 0.50 SOIL	16/10/17	GJ 250ml x2, GJ 60ml x2, PT 1L x2		
1245442	S3-TPB24 2.50 SOIL	16/10/17	GJ 250ml x2, GJ 60ml x2, PT 1L x2		
1245443	S3-TPB24 3.30 SOIL	16/10/17	GJ 250ml x2, GJ 60ml x2, PT 1L x2		
1245444	S3-TPB33 1.50 SOIL	16/10/17	GJ 250ml x2, GJ 60ml x2, PT 1L x2		
1245445	S3-TPB34 1.50 SOIL	16/10/17	GJ 250ml x2, GJ 60ml x2, PT 1L x2		
1245446	S3-TPB40 0.50 SOIL	16/10/17	GJ 250ml x2, GJ 60ml x2, PT 1L x2		
1245447	S3-TPB33 1.50 LEACHATE	16/10/17	GJ 250ml x2, GJ 60ml x2, PT 1L x2		
1248501	S3-TPA02 0.50 SOIL	23/10/17	GJ 250ml x2, GJ 60ml x2, PT 1L x2		
1248502	S3-TPA02 1.50 SOIL	23/10/17	GJ 250ml x2, GJ 60ml x2, PT 1L x2		
1248503	S3-TPA03 1.80 SOIL	23/10/17	GJ 250ml x2, GJ 60ml x2, PT 1L x2		
1248504	S3-TPA06 2.00 SOIL	23/10/17	GJ 250ml x2, GJ 60ml x2, PT 1L x2		
1248505	S3-TPA06 2.75 SOIL	23/10/17	GJ 250ml x2, GJ 60ml x2, PT 1L x2		
1248506	S3-TPA08 0.60 SOIL	20/10/17	GJ 250ml x2, GJ 60ml x2, PT 1L x2		
1248507	S3-TPA11 2.00 SOIL	20/10/17	GJ 250ml x2, GJ 60ml x2, PT 1L x2		
1248508	S3-TPA12 1.50 SOIL	20/10/17	GJ 250ml x2, GJ 60ml x2, PT 1L x2		
1248509	S3-TPA13 2.00 SOIL	20/10/17	GJ 250ml x2, GJ 60ml x2, PT 1L x2		
1248510	S3-TPA13 3.00 SOIL	20/10/17	GJ 250ml x2, GJ 60ml x2, PT 1L x2		

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1248511	S3-TPB66 1.50 SOIL	23/10/17	GJ 250ml x2, GJ 60ml x2, PT 1L x2		
1248512	S3-TPB68 1.00 SOIL	20/10/17	GJ 250ml x2, GJ 60ml x2, PT 1L x2		

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Lab No	Sample ID	Date Sampled	Containers Received	Holding time exceeded for tests	Inappropriate container for tests
1248513	S3-TPB69 0.20 SOIL	20/10/17	GJ 250ml x2, GJ 60ml x2, PT 1L x2		
1248514	S3-TPB69 1.00 SOIL	20/10/17	GJ 250ml x2, GJ 60ml x2, PT 1L x2		
1248515	S3-TPB71 1.50 SOIL	23/10/17	GJ 250ml x2, GJ 60ml x2, PT 1L x2		
1248516	S3-TPB72 1.50 SOIL	23/10/17	GJ 250ml x2, GJ 60ml x2, PT 1L x2		
1248517	S3-TPB72 2.50 SOIL	23/10/17	GJ 250ml x2, GJ 60ml x2, PT 1L x2		
1248518	S3-TPB74 0.50 SOIL	20/10/17	GJ 250ml x2, GJ 60ml x2, PT 1L x2		
1248519	S3-TPB75 0.50 SOIL	20/10/17	GJ 250ml x2, GJ 60ml x2, PT 1L x2		
1248684	S3-TPA25 1.00 SOIL	18/10/17	GJ 250ml x2, GJ 60ml x2, PT 1L x2	pH + Conductivity (7 days), VOC (7 days)	
1248685	S3-TPA26 0.20 SOIL	18/10/17	GJ 250ml x2, GJ 60ml x2, PT 1L x2	pH + Conductivity (7 days)	
1248686	S3-TPA28 1.00 SOIL	18/10/17	GJ 250ml x2, GJ 60ml x2, PT 1L x2	pH + Conductivity (7 days)	
1248687	S3-TPA28 3.50 SOIL	18/10/17	GJ 250ml x2, GJ 60ml x2, PT 1L x2	pH + Conductivity (7 days)	
1248688	S3-TPA31 0.80 SOIL	18/10/17	GJ 250ml x2, GJ 60ml x2, PT 1L x2	pH + Conductivity (7 days)	
1248689	S3-TPA31 2.00 SOIL	18/10/17	GJ 250ml x2, GJ 60ml x2, PT 1L x2	pH + Conductivity (7 days)	
1248690	S3-TPA42 0.20 SOIL	18/10/17	GJ 250ml x2, GJ 60ml x2, PT 1L x2	pH + Conductivity (7 days)	
1248691	S3-TPB44 1.50 SOIL	18/10/17	GJ 250ml x2, GJ 60ml x2, PT 1L x2	pH + Conductivity (7 days)	
1248692	S3-TPB45 0.50 SOIL	18/10/17	GJ 250ml x2, GJ 60ml x2, PT 1L x2	pH + Conductivity (7 days)	
1248693	S3-TPB50 1.30 SOIL	18/10/17	GJ 250ml x2, GJ 60ml x2, PT 1L x2	pH + Conductivity (7 days)	
1248694	S3-TPB51 0.50 SOIL	18/10/17	GJ 250ml x2, GJ 60ml x2, PT 1L x2	pH + Conductivity (7 days)	
1248695	S3-TPA15 1.00 SOIL	19/10/17	GJ 250ml x2, GJ 60ml x2, PT 1L x2		
1248696	S3-TPA17 0.60 SOIL	19/10/17	GJ 250ml x2, GJ 60ml x2, PT 1L x2		
1248697	S3-TPA18 1.00 SOIL	19/10/17	GJ 250ml x2, GJ 60ml x2, PT 1L x2		
1248698	S3-TPA18 1.55 SOIL	19/10/17	GJ 250ml x2, GJ 60ml x2, PT 1L x2		
1248699	S3-TPA20 1.00 SOIL	19/10/17	GJ 250ml x2, GJ 60ml x2, PT 1L x2		
1248700	S3-TPA22 0.60 SOIL	19/10/17	GJ 250ml x2, GJ 60ml x2, PT 1L x2		

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1248701	S3-TPA22 1.80 SOIL	19/10/17	GJ 250ml x2, GJ 60ml x2, PT 1L x2		
1248702	S3-TPB57 1.50 SOIL	19/10/17	GJ 250ml x2, GJ 60ml x2, PT 1L x2		

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Lab No	Sample ID	Date Sampled	Containers Received	Holding time exceeded for tests	Inappropriate container for tests
1248703	S3-TPB58 0.50 SOIL	19/10/17	GJ 250ml x2, GJ 60ml x2, PT 1L x2		
1248704	S3-TPB59 2.30 SOIL	19/10/17	GJ 250ml x2, GJ 60ml x2, PT 1L x2		
1248705	S3-TPB67 0.20 SOIL	19/10/17	GJ 250ml x2, GJ 60ml x2, PT 1L x2		
1248706	S3-TPB67 2.80 SOIL	19/10/17	GJ 250ml x2, GJ 60ml x2, PT 1L x2		
1248932	S3-TPA17 0.25 SOIL	19/10/17	GJ 250ml x2, GJ 60ml x2, PT 1L x2		
1250105	S3-TPA01 1.40 SOIL	24/10/17	GJ 250ml x2, GJ 60ml x2, PT 1L x2		
1250106	S3-TPA04 1.00 SOIL	24/10/17	GJ 250ml x2, GJ 60ml x2, PT 1L x2		
1250107	S3-TPA05 0.50 SOIL	24/10/17	GJ 250ml x2, GJ 60ml x2, PT 1L x2		
1250108	S3-TPA05 2.00 SOIL	24/10/17	GJ 250ml x2, GJ 60ml x2, PT 1L x2		
1250109	S3-TPB63 0.50 SOIL	24/10/17	GJ 250ml x2, GJ 60ml x2, PT 1L x2		
1250110	S3-TPB64 1.50 SOIL	24/10/17	GJ 250ml x2, GJ 60ml x2, PT 1L x2		
1250111	S3-TPB65 1.50 SOIL	24/10/17	GJ 250ml x2, GJ 60ml x2, PT 1L x2		
1250112	S3-TPB70 0.50 SOIL	24/10/17	GJ 250ml x2, GJ 60ml x2, PT 1L x2		
1250113	S3-TPB71 0.50 SOIL	23/10/17	GJ 250ml x2, GJ 60ml x2, PT 1L x2		
1250312	S3-TPB06 0.50 SOIL	25/10/17	GJ 250ml x2, GJ 60ml x2, PT 1L x2		
1250313	S3-TPB06 1.00 SOIL	25/10/17	GJ 250ml x2, GJ 60ml x2, PT 1L x2		
1250314	S3-TPB12 0.60 SOIL	25/10/17	GJ 250ml x2, GJ 60ml x2, PT 1L x2		
1250315	S3-TPB14 0.70 SOIL	25/10/17	GJ 250ml x2, GJ 60ml x2, PT 1L x2		
1250316	S3-TPB16 0.30 SOIL	25/10/17	GJ 250ml x2, GJ 60ml x2, PT 1L x2		
1250317	S3-TPB16 1.70 SOIL	25/10/17	GJ 250ml x2, GJ 60ml x2, PT 1L x2		
1250318	S3-TPB54 1.50 SOIL	25/10/17	GJ 250ml x2, GJ 60ml x2, PT 1L x2		
1250319	S3-TPB60 0.50 SOIL	25/10/17	GJ 250ml x2, GJ 60ml x2, PT 1L x2		
1250320	S3-TPB61 1.50 SOIL	25/10/17	GJ 250ml x2, GJ 60ml x2, PT 1L x2		
1250321	S3-TPB62 1.50 SOIL	25/10/17	GJ 250ml x2, GJ 60ml x2, PT 1L x2		

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1250322	S3-TPB62 1.70 SOIL	25/10/17	GJ 250ml x2, GJ 60ml x2, PT 1L x2		
1251103	S3-TPA26 0.70 SOIL	18/10/17	No containers logged	pH + Conductivity (7 days)	Cannot evaluate

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Contract

Lab No	Sample ID	Date Sampled	Containers Received	Holding time exceeded for tests	Inappropriate container for tests
1252170	S3-TPB03 0.70 SOIL	27/10/17	GJ 250ml x2, GJ 60ml x2, PT 1L x2		
1252171	S3-TPB04 2.50 SOIL	27/10/17	GJ 250ml x2, GJ 60ml x2, PT 1L x2		
1252172	S3-TPB05 2.00 SOIL	27/10/17	GJ 250ml x2, GJ 60ml x2, PT 1L x2		
1252173	S3-TPB07 1.20 SOIL	27/10/17	GJ 250ml x2, GJ 60ml x2, PT 1L x2		
1252174	S3-TPB08 0.50 SOIL	30/10/17	GJ 250ml x2, GJ 60ml x2, PT 1L x2		
1252175	S3-TPB09 0.20 SOIL	30/10/17	GJ 250ml x2, GJ 60ml x2, PT 1L x2		
1252176	S3-TPB10 1.00 SOIL	30/10/17	GJ 250ml x2, GJ 60ml x2, PT 1L x2		
1252177	S3-TPB10 2.00 SOIL	30/10/17	GJ 250ml x2, GJ 60ml x2, PT 1L x2		
1252178	S3-TPB26 0.50 SOIL	30/10/17	GJ 250ml x2, GJ 60ml x2, PT 1L x2		
1252179	S3-TPB35 0.50 SOIL	30/10/17	GJ 250ml x2, GJ 60ml x2, PT 1L x2		
1252180	S3-TPB37 0.50 SOIL	27/10/17	GJ 250ml x2, GJ 60ml x2, PT 1L x2		
1252181	S3-TPB37 1.50 SOIL	27/10/17	GJ 250ml x2, GJ 60ml x2, PT 1L x2		
1252182	S3-TPB41 0.50 SOIL	30/10/17	GJ 250ml x2, GJ 60ml x2, PT 1L x2		
1252183	S3-TPB46 0.40 SOIL	30/10/17	GJ 250ml x2, GJ 60ml x2, PT 1L x2		
1252184	S3-TPB47 1.50 SOIL	27/10/17	GJ 250ml x2, GJ 60ml x2, PT 1L x2		
1252185	S3-TPB48 0.50 SOIL	27/10/17	GJ 250ml x2, GJ 60ml x2, PT 1L x2		
1252186	S3-TPB48 1.50 SOIL	27/10/17	GJ 250ml x2, GJ 60ml x2, PT 1L x2		
1253426	S3-TPA34 0.80 SOIL	17/10/17	GJ 250ml x2, GJ 60ml x2, PT 1L x2		
1253427	S3-TPA36 0.50 SOIL	31/10/17	GJ 250ml x2, GJ 60ml x2, PT 1L x2		
1253428	S3-TPA37 0.70 SOIL	17/10/17	No containers logged		Cannot evaluate
1253429	S3-TPA39 0.30 SOIL	17/10/17	GJ 250ml x2, GJ 60ml x2, PT 1L x2		
1253430	S3-TPA39 0.80 SOIL	17/10/17	GJ 250ml x2, GJ 60ml x2, PT 1L x2		
1253431	S3-TPB38 1.50 SOIL	17/10/17	GJ 250ml x2, GJ 60ml x2, PT 1L x2		
1253432	S3-TPB39 0.50 MISC	17/10/17	PG		Aliphatics/Aromatics, BTEX, Naphthalene, PAH MS
1253433	S3-TPB43 2.50 SOIL	17/10/17	GJ 250ml x2, GJ 60ml x2, PT 1L x2		

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1253434	S3-TPB49 0.50 SOIL	17/10/17	GJ 250ml x2, GJ 60ml x2, PT 1L x2		
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Lab No	Sample ID	Date Sampled	Containers Received	Holding time exceeded for tests	Inappropriate container for tests
1253435	S3-TPB49 2.20 SOIL	17/10/17	GJ 250ml x2, GJ 60ml x2, PT 1L x2		
1253579	S3-TPB01 0.10 SOIL	26/10/17	GJ 250ml x2, GJ 60ml x2, PT 1L x2	pH + Conductivity (7 days)	
1253580	S3-TPB52 1.55 SOIL	26/10/17	GJ 250ml x2, GJ 60ml x2, PT 1L x2	pH + Conductivity (7 days), VOC (7 days)	
1253581	S3-TPB53 0.50 SOIL	26/10/17	GJ 250ml x2, GJ 60ml x2, PT 1L x2		
1253582	S3-TPB53 1.10 SOIL	26/10/17	GJ 250ml x2, GJ 60ml x2, PT 1L x2	pH + Conductivity (7 days)	
1253583	S3-TPB55 0.50 SOIL	26/10/17	GJ 250ml x2, GJ 60ml x2, PT 1L x2	pH + Conductivity (7 days)	
1253584	S3-TPB55 2.60 SOIL	26/10/17	GJ 250ml x2, GJ 60ml x2, PT 1L x2	pH + Conductivity (7 days)	
1253585	S3-TPB56 0.50 SOIL	26/10/17	GJ 250ml x2, GJ 60ml x2, PT 1L x2	pH + Conductivity (7 days)	
1253586	S3-TPB56 1.50 SOIL	26/10/17	GJ 250ml x2, GJ 60ml x2, PT 1L x2	pH + Conductivity (7 days)	
1253587	S3-TPB52 1.55 LEACHATE	26/10/17	GJ 250ml x2, GJ 60ml x2, PT 1L x2		
1253643	S3-TPA07 1.50 SOIL	01/11/17	GJ 250ml x2, GJ 60ml x2, PT 1L x2		
1253644	S3-TPB11 0.20 SOIL	31/10/17	GJ 250ml x2, GJ 60ml x2, PT 1L x2		
1253645	S3-TPB13 0.15 SOIL	31/10/17	GJ 250ml x2, GJ 60ml x2, PT 1L x2		
1253646	S3-TPB13 2.00 SOIL	31/10/17	GJ 250ml x2, GJ 60ml x2, PT 1L x2		
1253647	S3-TPB13 2.70 SOIL	31/10/17	GJ 250ml x2, GJ 60ml x2, PT 1L x2		
1253648	S3-TPB15 0.50 SOIL	31/10/17	GJ 250ml x2, GJ 60ml x2, PT 1L x2		
1253649	S3-TPB15 1.70 SOIL	31/10/17	GJ 250ml x2, GJ 60ml x2, PT 1L x2		
1253650	S3-TPB17 0.20 SOIL	31/10/17	GJ 250ml x2, GJ 60ml x2, PT 1L x2		
1253651	S3-TPB18 1.20 SOIL	31/10/17	GJ 250ml x2, GJ 60ml x2, PT 1L x2		
1253652	S3-TPB18 2.20 SOIL	31/10/17	GJ 250ml x2, GJ 60ml x2, PT 1L x2		
1253653	S3-TPB21 0.40 SOIL	01/11/17	GJ 250ml x2, GJ 60ml x2, PT 1L x2		
1253654	S3-TPB22 0.70 SOIL	01/11/17	GJ 250ml x2, GJ 60ml x2, PT 1L x2		
1253655	S3-TPB22 1.90 SOIL	01/11/17	GJ 250ml x2, GJ 60ml x2, PT 1L x2		
1253656	S3-TPB25 1.50 SOIL	01/11/17	GJ 250ml x2, GJ 60ml x2, PT 1L x2		

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1253657	S3-TPB27 0.50 SOIL	01/11/17	GJ 250ml x2, GJ 60ml x2, PT 1L x2		
1253658	S3-TPB29 0.50 SOIL	31/10/17	GJ 250ml x2, GJ 60ml x2, PT 1L x2		

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1253659	S3-TPB30 0.50 SOIL	31/10/17	GJ 250ml x2, GJ 60ml x2, PT 1L x2		
1253660	S3-TPB30 1.50 SOIL	31/10/17	GJ 250ml x2, GJ 60ml x2, PT 1L x2		
1253661	S3-TPB31 0.50 SOIL	31/10/17	GJ 250ml x2, GJ 60ml x2, PT 1L x2		
1253662	S3-TPB36 1.50 SOIL	31/10/17	GJ 250ml x2, GJ 60ml x2, PT 1L x2		
1253663	S3-TPB22 1.90 LEACHATE	01/11/17	GJ 250ml x2, GJ 60ml x2, PT 1L x2		
1253747	S3-TPB42 2.50 SOIL	27/10/17	GJ 250ml x2, GJ 60ml x2, PT 1L x2	pH + Conductivity (7 days), VOC (7 days)	
1254299	S3-TPA02 0.50 LEACHATE	23/10/17	No containers logged		Cannot evaluate
1254713	S3-TPB05 0.20 SOIL	27/10/17	GJ 250ml x2, GJ 60ml x2, PT 1L x2		
1254714	S3-TPB03 2.70 SOIL	27/10/17	GJ 250ml x2, GJ 60ml x2, PT 1L x2	pH + Conductivity (7 days), VOC (7 days)	
1256398	S3-TPA23 0.70 LEACHATE	10/10/17	GJ 250ml (250ml) x2, GJ 60ml (60ml) x2, PT 1L (1kg) x2		
1256399	S3-TPA29 0.50 LEACHATE	13/10/17	GJ 250ml (250ml) x2, GJ 60ml (60ml) x2, PT 1L (1kg) x2		
1256424	S3-TPA26 0.20 LEACHATE	18/10/17	GJ 250ml, GJ 60ml (60ml) x2, PT 1L (1kg) x2		
1256425	S3-TPA28 3.50 LEACHATE	18/10/17	GJ 250ml (250ml) x2, GJ 60ml (60ml) x2, PT 1L (1kg) x2		
1256426	S3-TPA42 0.20 LEACHATE	18/10/17	GJ 250ml (250ml) x2, GJ 60ml (60ml) x2, PT 1L (1kg) x2		
1256427	S3-TPB44 1.50 LEACHATE	18/10/17	GJ 250ml (250ml) x2, GJ 60ml (60ml) x2, PT 1L (1kg) x2		
1256428	S3-TPB51 0.50 LEACHATE	18/10/17	GJ 250ml (250ml) x2, GJ 60ml (60ml) x2, PT 1L (1kg) x2		
1256429	S3-TPA18 1.00 LEACHATE	19/10/17	GJ 250ml (250ml) x2, GJ 60ml (60ml) x2, PT 1L (1kg) x2		
1256430	S3-TPB59 2.30 LEACHATE	19/10/17	GJ 250ml (250ml) x2, GJ 60ml (60ml) x2, PT 1L (1kg) x2		
1256437	S3-TPB63 0.50 LEACHATE	24/10/17	GJ 250ml (250ml) x2, GJ 60ml (60ml) x2, PT 1L (1kg) x2		
1256438	S3-TPB64 1.50 LEACHATE	24/10/17	GJ 250ml (250ml) x2, GJ 60ml (60ml) x2, PT 1L (1kg) x2		
1256444	S3-TPB60 0.50 LEACHATE	25/10/17	GJ 250ml (250ml) x2, GJ 60ml (60ml) x2, PT 1L (1kg) x2		
1256611	S3-BHB01 3.80 SOIL	07/11/17	GJ 250ml x2, GJ 60ml x2, PT 1L x2		
1257800	S3-TPA35 0.60 SOIL	16/10/17	PG	pH + Conductivity (7 days)	
1257801	S3-TPB40 1.00 SOIL	16/10/17	PG	pH + Conductivity (7 days)	
1259305	S3-BHA01 3.50 SOIL	10/11/17	GJ 250ml x2, GJ 60ml x2, PT 1L x2		

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1261633	S3-TPA14 0.50 SOIL	12/10/17	PT 500ml	Organic Matter (Manual) (28 days), pH + Conductivity (7 days)	
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Lab No	Sample ID	Date Sampled	Containers Received	Holding time exceeded for tests	Inappropriate container for tests
1261634	S3-TPA19 1.60 SOIL	12/10/17	PT 500ml	Organic Matter (Manual) (28 days), pH + Conductivity (7 days)	
1261635	S3-TPA21 0.70 SOIL	12/10/17	PT 500ml	Organic Matter (Manual) (28 days), pH + Conductivity (7 days)	
1261636	S3-TPA23 1.00 SOIL	10/10/17	PT 500ml	Organic Matter (Manual) (28 days), pH + Conductivity (7 days)	
1261637	S3-TPA24 1.70 SOIL	10/10/17	PT 500ml	Organic Matter (Manual) (28 days), pH + Conductivity (7 days)	
1261638	S3-TPA27 0.70 SOIL	10/10/17	PT 500ml	Organic Matter (Manual) (28 days), pH + Conductivity (7 days)	
1261639	S3-TPA30 1.20 SOIL	10/10/17	PT 500ml	Organic Matter (Manual) (28 days), pH + Conductivity (7 days)	
1261640	S3-TPA34 1.20 SOIL	17/10/17	PT 500ml	Organic Matter (Manual) (28 days), pH + Conductivity (7 days)	
1261641	S3-TPA36 0.60 SOIL	17/10/17	PT 500ml	Organic Matter (Manual) (28 days), pH + Conductivity (7 days)	
1261642	S3-TPA37 0.50 SOIL	17/10/17	PT 500ml	Organic Matter (Manual) (28 days), pH + Conductivity (7 days)	
1261643	S3-TPA39 0.90 SOIL	17/10/17	PT 500ml	Organic Matter (Manual) (28 days), pH + Conductivity (7 days)	
1261644	S3-TPA40 0.70 SOIL	16/10/17	PT 500ml	Organic Matter (Manual) (28 days), pH + Conductivity (7 days)	
1261645	S3-TPA41 0.50 SOIL	17/10/17	PT 500ml	Organic Matter (Manual) (28 days), pH + Conductivity (7 days)	
1261646	S3-TPB19 1.00 SOIL	13/10/17	PT 500ml	Organic Matter (Manual) (28 days), pH + Conductivity (7 days)	
1261647	S3-TPB20 2.00 SOIL	13/10/17	PT 500ml	Organic Matter (Manual) (28 days), pH + Conductivity (7 days)	
1261648	S3-TPB23 1.00 SOIL	13/10/17	PT 500ml	Organic Matter (Manual) (28 days), pH + Conductivity (7 days)	
1261649	S3-TPB24 2.00 SOIL	16/10/17	PT 500ml	Organic Matter (Manual) (28 days), pH + Conductivity (7 days)	
1261650	S3-TPB28 1.00 SOIL	13/10/17	PT 500ml	pH + Conductivity (7 days)	

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Lab No	Sample ID	Date Sampled	Containers Received	Holding time exceeded for tests	Inappropriate container for tests
1261651	S3-TPB32 0.50 SOIL	12/10/17	PT 500ml	Organic Matter (Manual) (28 days), pH + Conductivity (7 days)	
1261652	S3-TPB33 2.00 SOIL	16/10/17	PT 500ml	Organic Matter (Manual) (28 days), pH + Conductivity (7 days)	
1261653	S3-TPB43 2.00 SOIL	17/10/17	PT 500ml	Organic Matter (Manual) (28 days), pH + Conductivity (7 days)	
1263036	S3-TPA33 0.70 SOIL	16/10/17	PG		
1263037	S3-TPB34 1.00 SOIL	16/10/17	PG		
1263038	S3-TPB38 1.00 SOIL	17/10/17	PG		
1263039	S3-TPB49 1.00 SOIL	17/10/17	PG	Organic Matter (Manual) (28 days), pH + Conductivity (7 days)	
1263237	S3-TPA39 0.30 LEACHATE	17/10/17	No containers logged		Cannot evaluate
1266625	S3-TPA01 1.60 SOIL	24/10/17	P(other)		
1266626	S3-TPA02 1.80 SOIL	23/10/17	P(other)		
1266627	S3-TPA03 2.20 SOIL	23/10/17	P(other)		
1266628	S3-TPA13 2.30 SOIL	20/10/17	P(other)		
1266629	S3-TPA22 0.80 SOIL	19/10/17	P(other)		
1266630	S3-TPA22 3.70 SOIL	19/10/17	P(other)		
1266631	S3-TPA25 1.20 SOIL	18/10/17	P(other)	Organic Matter (Manual) (28 days), pH + Conductivity (7 days)	
1266632	S3-TPA25 2.30 SOIL	18/10/17	P(other)		
1266633	S3-TPA31 1.00 SOIL	18/10/17	P(other)		
1266634	S3-TPB16 2.00 SOIL	25/10/17	P(other)		
1266635	S3-TPB38 2.00 SOIL	17/10/17	P(other)		
1266636	S3-TPB40 2.00 SOIL	16/10/17	P(other)		
1266637	S3-TPB55 1.00 SOIL	26/10/17	P(other)		
1266638	S3-TPB55 2.60 SOIL	26/10/17	P(other)		
1266639	S3-TPB68 1.00 SOIL	20/10/17	P(other)		
1267374	S3 TPA09 0.20 LEACHATE	13/10/17	No containers logged		Cannot evaluate
1267375	S3-TPB19 0.50 LEACHATE	13/10/17	No containers logged		Cannot evaluate
1267376	S3-TPA21 0.50 LEACHATE	13/10/17	No containers logged		Cannot evaluate
1268009	S3-TPA01 2.70 SOIL	24/10/17	PT 500ml	Organic Matter (Manual) (28 days), pH + Conductivity (7 days)	
1268010	S3-TPA04 0.70 SOIL	24/10/17	PT 500ml	Organic Matter (Manual) (28 days), pH + Conductivity (7 days)	
1268011	S3-TPA05 2.20 SOIL	24/10/17	PT 500ml	Organic Matter (Manual) (28 days), pH + Conductivity (7 days)	

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1268012	S3-TPA11 2.30 SOIL	20/10/17	PT 500ml	Organic Matter (Manual) (28 days), pH + Conductivity (7 days)	
1268013	S3-TPA15 1.30 SOIL	19/10/17	PT 500ml	Organic Matter (Manual) (28 days), pH + Conductivity (7 days)	
1268014	S3-TPA18 1.50 SOIL	19/10/17	PT 500ml	Organic Matter (Manual) (28 days), pH + Conductivity (7 days)	
1268015	S3-TPA20 1.50 SOIL	19/10/17	PT 500ml	Organic Matter (Manual) (28 days), pH + Conductivity (7 days)	
1268016	S3-TPA26 2.20 SOIL	19/10/17	PT 500ml	Organic Matter (Manual) (28 days), pH + Conductivity (7 days)	
1268017	S3-TPA28 0.30 SOIL	19/10/17	PT 500ml	Organic Matter (Manual) (28 days), pH + Conductivity (7 days)	
1268018	S3-TPA31 2.50 SOIL	19/10/17	PT 500ml	pH + Conductivity (7 days)	
1268019	S3-TPA42 1.00 SOIL	19/10/17	PT 500ml	Organic Matter (Manual) (28 days), pH + Conductivity (7 days)	
1268020	S3-TPB01 1.80 SOIL	26/10/17	PT 500ml	Organic Matter (Manual) (28 days), pH + Conductivity (7 days)	
1268021	S3-TPB05 2.50 SOIL	27/10/17	PT 500ml	pH + Conductivity (7 days)	
1268022	S3-TPB07 1.50 SOIL	27/10/17	PT 500ml	pH + Conductivity (7 days)	
1268023	S3-TPB10 2.50 SOIL	30/10/17	PT 500ml	pH + Conductivity (7 days)	
1268024	S3-TPB13 0.70 SOIL	31/10/17	PT 500ml	pH + Conductivity (7 days)	
1268025	S3-TPB14 2.20 SOIL	25/10/17	PT 500ml	pH + Conductivity (7 days)	
1268026	S3-TPB15 2.00 SOIL	31/10/17	PT 500ml	Organic Matter (Manual) (28 days), pH + Conductivity (7 days)	
1268027	S3-TPB17 0.60 SOIL	31/10/17	PT 500ml	pH + Conductivity (7 days)	
1268028	S3-TPB18 0.50 SOIL	31/10/17	PT 500ml	pH + Conductivity (7 days)	
1268029	S3-TPB21 1.10 SOIL	01/11/17	PT 500ml	pH + Conductivity (7 days)	
1268030	S3-TPB29 1.00 SOIL	31/10/17	PT 500ml	Organic Matter (Manual) (28 days), pH + Conductivity (7 days)	
1268031	S3-TPB31 1.00 SOIL	31/10/17	PT 500ml	Organic Matter (Manual) (28 days), pH + Conductivity (7 days)	
1268032	S3-TPB35 1.00 SOIL	30/10/17	PT 500ml	Organic Matter (Manual) (28 days), pH + Conductivity (7 days)	
1268033	S3-TPP37 2.00 SOIL	27/10/17	PT 500ml	Organic Matter (Manual) (28 days), pH + Conductivity (7 days)	

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1268034	S3-TPB42 2.00 SOIL	27/10/17	PT 500ml	Organic Matter (Manual) (28 days), pH + Conductivity (7 days)	
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1268035	S3-TPB44 1.00 SOIL	18/10/17	PT 500ml	Organic Matter (Manual) (28 days), pH + Conductivity (7 days)	
1268036	S3-TPB45 1.00 SOIL	18/10/17	PT 500ml	Organic Matter (Manual) (28 days), pH + Conductivity (7 days)	
1268037	S3-TPB47 1.00 SOIL	27/10/17	PT 500ml	Organic Matter (Manual) (28 days), pH + Conductivity (7 days)	
1268038	S3-TPB48 2.00 SOIL	27/10/17	PT 500ml	Organic Matter (Manual) (28 days), pH + Conductivity (7 days)	
1268039	S3-TPB51 2.50 SOIL	18/10/17	PT 500ml	pH + Conductivity (7 days)	
1268040	S3-TPB52 2.00 SOIL	26/10/17	PT 500ml	pH + Conductivity (7 days)	
1268041	S3-TPB53 1.00 SOIL	25/10/17	PT 500ml	Organic Matter (Manual) (28 days), pH + Conductivity (7 days)	
1268042	S3-TPB54 1.00 SOIL	25/10/17	PT 500ml	Organic Matter (Manual) (28 days), pH + Conductivity (7 days)	
1268043	S3-TPB56 1.00 SOIL	26/10/17	PT 500ml	Organic Matter (Manual) (28 days), pH + Conductivity (7 days)	
1268044	S3-TPB57 2.00 SOIL	19/10/17	PT 500ml	Organic Matter (Manual) (28 days), pH + Conductivity (7 days)	
1268045	S3-TPB57 2.40 SOIL	19/10/17	PT 500ml	pH + Conductivity (7 days)	
1268046	S3-TPB58 1.00 SOIL	19/10/17	PT 500ml	Organic Matter (Manual) (28 days), pH + Conductivity (7 days)	
1268047	S3-TPB59 2.00 SOIL	19/10/17	PT 500ml	Organic Matter (Manual) (28 days), pH + Conductivity (7 days)	
1268048	S3-TPB60 1.00 SOIL	25/10/17	PT 500ml	Organic Matter (Manual) (28 days), pH + Conductivity (7 days)	
1268049	S3-TPB61 1.00 SOIL	25/10/17	PT 500ml	Organic Matter (Manual) (28 days), pH + Conductivity (7 days)	
1268050	S3-TPB61 2.00 SOIL	25/10/17	PT 500ml	Organic Matter (Manual) (28 days), pH + Conductivity (7 days)	
1268051	S3-TPB62 1.00 SOIL	25/10/17	PT 500ml	Organic Matter (Manual) (28 days), pH + Conductivity (7 days)	
1268052	S3-TPB64 2.00 SOIL	24/10/17	PT 500ml	Organic Matter (Manual) (28 days), pH + Conductivity (7 days)	

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The Former SSI Steelworks, Redcar - Ground Investigation Contract - Priority Areas Within SSI Landholdings, Contract 3

Contract

1268053	S3-TPB65 1.00 SOIL	24/10/17	PT 500ml	Organic Matter (Manual) (28 days), pH + Conductivity (7 days)	
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Information in Support of the Analytical Results

Our Ref 4155 Combined Report

Client Ref 4155

The Former SSI Steelworks, Redcar - Ground Investigation Contract - Priority Areas Within SSI Landholdings, Contract 3

Contract

Lab No	Sample ID	Date Sampled	Containers Received	Holding time exceeded for tests	Inappropriate container for tests
1268054	S3-TPB65 2.00 SOIL	24/10/17	PT 500ml	pH + Conductivity (7 days)	
1268055	S3-TPB67 2.00 SOIL	19/10/17	PT 500ml	Organic Matter (Manual) (28 days), pH + Conductivity (7 days)	
1268056	S3-TPB70 2.00 SOIL	24/10/17	PT 500ml	Organic Matter (Manual) (28 days), pH + Conductivity (7 days)	
1268057	S3-TPB70 2.30 SOIL	24/10/17	PT 500ml	pH + Conductivity (7 days)	
1268058	S3-TPB74 1.00 SOIL	20/10/17	PT 500ml	Organic Matter (Manual) (28 days), pH + Conductivity (7 days)	
1268059	S3-TPB75 1.00 SOIL	20/10/17	PT 500ml	Organic Matter (Manual) (28 days), pH + Conductivity (7 days)	
1268093	S3-TPA33 0.70 SOIL	16/10/17	PT 500ml	Organic Matter (Manual) (28 days), pH + Conductivity (7 days)	
1269238	S3-TPA01 3.70 SOIL	24/10/17	PT 500ml	pH + Conductivity (7 days)	
1269239	S3-TPA04 2.40 SOIL	24/10/17	PT 500ml	pH + Conductivity (7 days)	
1269240	S3-TPA06 0.70 SOIL	23/10/17	PT 500ml	pH + Conductivity (7 days)	
1269241	S3-TPA07 1.70 SOIL	01/11/17	PT 500ml		
1269242	S3-TPA11 2.90 SOIL	20/10/17	PT 500ml	pH + Conductivity (7 days)	
1269243	S3-TPA12 1.70 SOIL	20/10/17	PT 500ml	pH + Conductivity (7 days)	
1269244	S3-TPA16 1.00 SOIL	12/10/17	PT 500ml	pH + Conductivity (7 days)	
1269245	S3-TPB01 2.60 SOIL	26/10/17	PT 500ml		
1269246	S3-TPB04 0.80 SOIL	27/10/17	PT 500ml		
1269247	S3-TPB06 0.70 SOIL	25/10/17	PT 500ml		
1269248	S3-TPB08 1.00 SOIL	30/10/17	PT 500ml		
1269249	S3-TPB14 0.80 SOIL	25/10/17	PT 500ml		
1269250	S3-TPB22 1.00 SOIL	01/11/17	PT 500ml		
1269251	S3-TPB25 1.00 SOIL	01/11/17	PT 500ml		
1269252	S3-TPB26 1.00 SOIL	30/10/17	PT 500ml		
1269253	S3-TPB26 1.70 SOIL	30/01/17	PT 500ml	Organic Matter (Manual) (28 days), pH + Conductivity (7 days)	
1269254	S3-TPB30 1.00 SOIL	31/10/17	PT 500ml		
1269255	S3-TPB36 2.00 SOIL	31/01/17	PT 500ml	Organic Matter (Manual) (28 days), pH + Conductivity (7 days)	
1269256	S3-TPB37 2.70 SOIL	27/10/17	PT 500ml		
1269257	S3-TPB41 1.00 SOIL	30/10/17	PT 500ml		
1269258	S3-TPB46 0.40 SOIL	30/10/17	PT 500ml		
1269259	S3-TPB50 1.00 SOIL	18/10/17	PT 500ml	pH + Conductivity (7 days)	
1269260	S3-TPB51 2.00 SOIL	18/10/17	PT 500ml	pH + Conductivity (7 days)	
1269261	S3-TPB52 1.00 SOIL	26/10/17	PT 500ml		
1269262	S3-TPB66 1.00 SOIL	23/10/17	PT 500ml	pH + Conductivity (7 days)	
1269263	S3-TPB69 1.00 SOIL	20/10/17	PT 500ml	pH + Conductivity (7 days)	
1269264	S3-TPB71 1.00 SOIL	23/10/17	PT 500ml	pH + Conductivity (7 days)	
1269265	S3-TPB72 1.00 SOIL	23/10/17	PT 500ml	pH + Conductivity (7 days)	

Information in Support of the Analytical Results

Our Ref 4155 Combined Report

Client Ref 4155

The Former SSI Steelworks, Redcar - Ground Investigation Contract - Priority Areas Within SSI Landholdings, Contract 3

Contract

1269266	S3-TPB73 1.00 SOIL	23/10/17	PT 500ml	pH + Conductivity (7 days)	
1269267	S3-TPB74 1.50 SOIL	20/10/17	PT 500ml	pH + Conductivity (7 days)	

Information in Support of the Analytical Results

Our Ref 4155 Combined Report

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The Former SSI Steelworks, Redcar - Ground Investigation Contract - Priority Areas Within SSI Landholdings, Contract 3
Contract

Lab No	Sample ID	Date Sampled	Containers Received	Holding time exceeded for tests	Inappropriate container for tests
1270261	S3-TPB41 0.50 LEACHATE	30/10/17	GJ 250ml x2, GJ 60ml x2, PT 1L x2		
1275450	S3-TPB03 2.70 SOIL	27/10/17	No containers logged	Aliphatics/Aromatics (14 days), BTEX (14 days), Naphthalene (14 days), Organic Matter (Manual) (28 days), PAH MS (14 days), pH + Conductivity (7 days), SVOC (14 days)	Cannot evaluate
1275451	S3-TPB03 2.70 LEACHATE	27/10/17	No containers logged		Cannot evaluate
1276865	S3-BHA01 6.50 SOIL		PT 500ml	Sample date not supplied, Anions 2:1 (365 days), pH + Conductivity (7 days)	
1276866	S3-BHB02 3.50 SOIL		PT 500ml	Sample date not supplied, Anions 2:1 (365 days), pH + Conductivity (7 days)	
1276867	S3-BHB02 6.50 SOIL		PT 500ml	Sample date not supplied, Anions 2:1 (365 days), pH + Conductivity (7 days)	
1276868	S3-BHB03 2.50 SOIL		PT 500ml	Sample date not supplied, Anions 2:1 (365 days), pH + Conductivity (7 days)	
1276869	S3-BHB03 8.00 SOIL		PT 500ml	Sample date not supplied, Anions 2:1 (365 days), pH + Conductivity (7 days)	
1276870	S3-BHB04 4.00 SOIL		PT 500ml	Sample date not supplied, Anions 2:1 (365 days), pH + Conductivity (7 days)	
1276871	S3-BHB04 6.50 SOIL		PT 500ml	Sample date not supplied, Anions 2:1 (365 days), pH + Conductivity (7 days)	
1276872	S3-TPB34 1.00 SOIL		PT 500ml	Sample date not supplied, Anions 2:1 (365 days), Total Sulphur ICP (365 days), Total Sulphate ICP (730 days), Metals ICP Prep (365 days), Organic Matter (Manual) (28 days), pH + Conductivity (7 days)	
1276873	S3-TPB38 1.00 SOIL		PT 500ml	Sample date not supplied, Anions 2:1 (365 days), Total Sulphur ICP (365 days), Total Sulphate ICP (730 days), Metals ICP Prep (365 days), Loss on Ignition (730 days), Organic Matter (Manual) (28 days), pH + Conductivity (7 days)	

Information in Support of the Analytical Results

Our Ref 4155 Combined Report

Client Ref 4155

The Former SSI Steelworks, Redcar - Ground Investigation Contract - Priority Areas Within SSI Landholdings, Contract 3

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1278011	S3-TPA02 1.80 SOIL	23/10/17	PT 500ml	Organic Matter (Manual) (28 days), pH + Conductivity (7 days)	
1278012	S3-TPA11 1.20 SOIL	20/10/17	PT 500ml	Organic Matter (Manual) (28 days), pH + Conductivity (7 days)	
1278013	S3-BHHB03 4.50 SOIL	10/11/17	PT 500ml	pH + Conductivity (7 days)	
1281643	S3-TPA17 2.30 SOIL	19/10/17	GJ 250ml x2, GJ 60ml x2, PT 1L x2	Organic Matter (Manual) (28 days), pH + Conductivity (7 days)	

Key: G-Glass P-Plastic J-Jar T-Tub V-Vial G-Bag

DETS cannot be held responsible for the integrity of samples received whereby the laboratory did not undertake the sampling. In this instance samples received may be deviating. Deviating Sample criteria are based on British and International standards and laboratory trials in conjunction with the UKAS note 'Guidance on Deviating Samples'. All samples received are listed above. However, those samples that have additional comments in relation to hold time, inappropriate containers etc are deviating due to the reasons stated. This means that the analysis is accredited where applicable, but results may be compromised due to sample deviations. If no sampled date (soils) or date+time (waters) has been supplied then samples are deviating. However, if you are able to supply a sampled date (and time for waters) this will prevent samples being reported as deviating where specific hold times are not exceeded and where the container supplied is suitable.

Soil Analysis Notes

Inorganic soil analysis was carried out on a dried sample, crushed to pass a 425µm sieve, in accordance with BS1377.

Organic soil analysis was carried out on an 'as received' sample. Organics results are corrected for moisture and expressed on a dry weight basis.

The Loss on Drying, used to express organics analysis on an air dried basis, is carried out at a temperature of 28°C +/-2°C.

Disposal

From the issue date of this test certificate, samples will be held for the following times prior to disposal :-

Soils - 1 month, Liquids - 2 weeks, Asbestos (test portion) - 6 months

Appendix A - Details of Analysis

Method	Parameter	Units	Limit of Detection	Sample Preparation	Sub-Contracted	UKAS	MCERTS
DETSC 2002	Organic matter	%	0.1	Air Dried	No	Yes	Yes
DETSC 2003	Loss on ignition	%	0.01	Air Dried	No	Yes	Yes
DETSC 2008	pH	pH Units	1	Air Dried	No	Yes	Yes
DETSC 2024	Sulphide	mg/kg	10	Air Dried	No	Yes	Yes
DETSC 2076	Sulphate Aqueous Extract as SO ₄	mg/l	10	Air Dried	No	Yes	Yes
DETSC 2084	Total Carbon	%	0.5	Air Dried	No	Yes	Yes
DETSC 2084	Total Organic Carbon	%	0.5	Air Dried	No	Yes	Yes
DETSC 2119	Ammoniacal Nitrogen as N	mg/kg	0.5	Air Dried	No	Yes	Yes
DETSC 2130	Cyanide free	mg/kg	0.1	Air Dried	No	Yes	Yes
DETSC 2130	Cyanide total	mg/kg	0.1	Air Dried	No	Yes	Yes
DETSC 2130	Phenol - Monohydric	mg/kg	0.3	Air Dried	No	Yes	Yes
DETSC 2130	Thiocyanate	mg/kg	0.6	Air Dried	No	Yes	Yes
DETSC 2321	Total Sulphate as SO ₄	%	0.01	Air Dried	No	Yes	Yes
DETSC 2325	Mercury	mg/kg	0.05	Air Dried	No	Yes	Yes
DETSC 3049	Sulphur (free)	mg/kg	0.75	Air Dried	No	Yes	Yes
DETSC2123	Boron (water soluble)	mg/kg	0.2	Air Dried	No	Yes	Yes
DETSC2301	Arsenic	mg/kg	0.2	Air Dried	No	Yes	Yes
DETSC2301	Barium	mg/kg	1.5	Air Dried	No	Yes	Yes
DETSC2301	Beryllium	mg/kg	0.2	Air Dried	No	Yes	Yes
DETSC2301	Cadmium Available	mg/kg	0.1	Air Dried	No	Yes	Yes
DETSC2301	Cadmium	mg/kg	0.1	Air Dried	No	Yes	Yes
DETSC2301	Cobalt	mg/kg	0.7	Air Dried	No	Yes	Yes
DETSC2301	Chromium	mg/kg	0.15	Air Dried	No	Yes	Yes
DETSC2301	Copper	mg/kg	0.2	Air Dried	No	Yes	Yes
DETSC2301	Manganese	mg/kg	20	Air Dried	No	Yes	Yes
DETSC2301	Molybdenum	mg/kg	0.4	Air Dried	No	Yes	Yes
DETSC2301	Nickel	mg/kg	1	Air Dried	No	Yes	Yes
DETSC2301	Lead	mg/kg	0.3	Air Dried	No	Yes	Yes
DETSC2301	Selenium	mg/kg	0.5	Air Dried	No	Yes	Yes
DETSC2301	Zinc	mg/kg	1	Air Dried	No	Yes	Yes
DETSC 3072	Ali/Aro C10-C35	mg/kg	10	As Received	No	Yes	Yes
DETSC 3072	Aliphatic C10-C12	mg/kg	1.5	As Received	No	Yes	Yes
DETSC 3072	Aliphatic C10-C12	mg/kg	10	As Received	No	Yes	Yes
DETSC 3072	Aliphatic C10-C35	mg/kg	10	As Received	No	Yes	Yes
DETSC 3072	Aliphatic C12-C16	mg/kg	1.2	As Received	No	Yes	Yes
DETSC 3072	Aliphatic C12-C16	mg/kg	10	As Received	No	Yes	Yes
DETSC 3072	Aliphatic C16-C21	mg/kg	1.5	As Received	No	Yes	Yes
DETSC 3072	Aliphatic C16-C21	mg/kg	10	As Received	No	Yes	Yes
DETSC 3072	Aliphatic C21-C35	mg/kg	3.4	As Received	No	Yes	Yes
DETSC 3072	Aliphatic C21-C35	mg/kg	3.4	As Received	No	Yes	Yes
DETSC 3072	Aromatic C10-C12	mg/kg	0.9	As Received	No	Yes	Yes
DETSC 3072	Aromatic C10-C12	mg/kg	10	As Received	No	Yes	Yes
DETSC 3072	Aromatic C10-C35	mg/kg	10	As Received	No	Yes	Yes
DETSC 3072	Aromatic C12-C16	mg/kg	0.5	As Received	No	Yes	Yes
DETSC 3072	Aromatic C12-C16	mg/kg	10	As Received	No	Yes	Yes
DETSC 3072	Aromatic C16-C21	mg/kg	0.6	As Received	No	Yes	Yes
DETSC 3072	Aromatic C16-C21	mg/kg	10	As Received	No	Yes	Yes
DETSC 3072	Aromatic C21-C35	mg/kg	1.4	As Received	No	Yes	Yes
DETSC 3072	Aromatic C21-C35	mg/kg	1.4	As Received	No	Yes	Yes
DETS 062	Benzene	mg/kg	0.01	As Received	No	Yes	Yes
DETS 062	Ethylbenzene	mg/kg	0.01	As Received	No	Yes	Yes
DETS 062	Toluene	mg/kg	0.01	As Received	No	Yes	Yes
DETS 062	Xylene	mg/kg	0.01	As Received	No	Yes	Yes
DETS 062	m+p Xylene	mg/kg	0.01	As Received	No	Yes	Yes
DETS 062	o Xylene	mg/kg	0.01	As Received	No	Yes	Yes
DETSC 3311	C10-C24 Diesel Range Organics (DRO)	mg/kg	10	As Received	No	Yes	Yes
DETSC 3311	C24-C40 Lube Oil Range Organics (LORO)	mg/kg	10	As Received	No	Yes	Yes
DETSC 3311	EPH (C10-C40)	mg/kg	10	As Received	No	Yes	Yes

Appendix A - Details of Analysis

Method	Parameter	Units	Limit of Detection	Sample Preparation	Sub-Contracted	UKAS	MCERTS
DETSC 3303	Acenaphthene	mg/kg	0.03	As Received	No	Yes	Yes
DETSC 3303	Acenaphthylene	mg/kg	0.03	As Received	No	Yes	Yes
DETSC 3303	Benzo(a)pyrene	mg/kg	0.03	As Received	No	Yes	Yes
DETSC 3303	Benzo(a)anthracene	mg/kg	0.03	As Received	No	Yes	Yes
DETSC 3303	Benzo(b)fluoranthene	mg/kg	0.03	As Received	No	Yes	Yes
DETSC 3303	Benzo(k)fluoranthene	mg/kg	0.03	As Received	No	Yes	Yes
DETSC 3303	Benzo(g,h,i)perylene	mg/kg	0.03	As Received	No	Yes	Yes
DETSC 3303	Dibenzo(a,h)anthracene	mg/kg	0.03	As Received	No	Yes	Yes
DETSC 3303	Fluoranthene	mg/kg	0.03	As Received	No	Yes	Yes
DETSC 3303	Indeno(1,2,3-c,d)pyrene	mg/kg	0.03	As Received	No	Yes	Yes
DETSC 3303	Naphthalene	mg/kg	0.03	As Received	No	Yes	Yes
DETSC 3303	Phenanthrene	mg/kg	0.03	As Received	No	Yes	Yes
DETSC 3303	Pyrene	mg/kg	0.03	As Received	No	Yes	Yes
DETSC 3401	PCB 28 + PCB 31	mg/kg	0.01	As Received	No	Yes	Yes
DETSC 3401	PCB 52	mg/kg	0.01	As Received	No	Yes	Yes
DETSC 3401	PCB 101	mg/kg	0.01	As Received	No	Yes	Yes
DETSC 3401	PCB 118	mg/kg	0.01	As Received	No	Yes	Yes
DETSC 3401	PCB 153	mg/kg	0.01	As Received	No	Yes	Yes
DETSC 3401	PCB 138	mg/kg	0.01	As Received	No	Yes	Yes
DETSC 3401	PCB 180	mg/kg	0.01	As Received	No	Yes	Yes
DETSC 3401	PCB Total	mg/kg	0.01	As Received	No	Yes	Yes

Method details are shown only for those determinands listed in Annex A of the MCERTS standard. Anything not included on this list falls outside the scope of MCERTS. No Recovery Factors are used in the determination of results. Results reported assume 100% recovery. Full method statements are available on request.



Quality Control

Quality Systems.

Derwentside Environmental Testing Services employs numerous measures to ensure high levels of confidence in the results produced. Our laboratory has been accredited by the United Kingdom Accreditation Service (UKAS) since its inception and operates in full compliance with the internationally recognised standard ISO17025 and the Environment Agency's MCERTS (Monitoring & Certification Scheme) standard for soils and waters, which provides greater assurance to all parties of the reliability of data from chemical analysis.

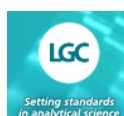
To obtain a copy of our full UKAS schedule visit the UKAS website at www.ukas.org and search for our laboratory number 2139.



2139

Proficiency Testing Schemes.

DETS participates in nine external proficiency testing schemes in order to monitor and ensure the continuing quality of analysis. These schemes are:



Contest



Internal Quality Control.

DETS runs a strict internal quality control system. A minimum of 5% of all samples that undergo analysis in our laboratories are quality control samples. This way we can ensure a high level of confidence in all of the analytical data produced. In addition, MCERTS accredited tests must meet strict, ongoing limits for precision and bias in order to maintain their accreditation status.

DETS INFO 001 – ANALYTICAL METHOD SUMMARY

Method Number	Title	Description	Reference	LOD	Accreditation Status
DETS 036	Leachate Preparation (NRA Method and BS EN 12457 Parts 1-3)	Leachates are prepared as per the NRA (1994) method and as per BS EN 12457 Parts 1 - 3 one and two stage leachate preparation.	Leaching Test Method for the Assessment of Contaminated Land, Interim Guidance, NRA(1994) BS EN 12457 Part 1,2 & 3	n/a	Not Accredited
DETS 073	Acid Neutralisation Capacity of Soils and Other Solids	ANC is a measure of the buffering capacity of soils and other waste materials. The analysis measures the amount of acid required to bring the sample to a fixed pH. The initial pH of the sample extract must be measured before analysis begins. Analysis is performed by the addition of acid in conjunction with pH measurement by pH meter until the specified pH has been reached as indicated by the meter. The result is expressed in mol/kg (dry wt).	Annex B (Preliminary determination of the acid/base consumption) – CEN/TC 292 – WI 292046 – Characterization of waste – Leaching behaviour tests – Acid and Base neutralization capacity test	1.0 mol/kg	Not Accredited
DETS 074	Low Level PAH by HPLC Fluorescence	PAH is extracted from one litre of filtered water sample by solid phase extraction. PAH is eluted from the SPE column with DCM evaporated to dryness under nitrogen and redissolved in acetonitrile. Analysis of samples is carried out by HPLC fluorescence.	EPA Method 550 The Analyst 2001, 126:1336-1331 Phenomonex Strata X Application Note for PAH by SPE	0.01ug/L each 5.0 ug/L Total	Not Accredited

DETS INFO 001 – ANALYTICAL METHOD SUMMARY

Method Number	Title	Description	Reference	LOD	Accreditation Status
DETSC 1001	Sample Pre-Treatment and Preparation of Solids	Solid samples are classified and identified. Samples requiring analysis for unstable or volatile determinands are analysed as received. Samples requiring analysis for stable and non-volatile determinands are dried at <30°C or 50°C, depending on requirements, for a minimum of 16hrs (overnight). Dried samples are crushed in a jaw crusher, if necessary, and then ground using a mechanical mixer mill and sieved through a 250µm sieve to ensure they are homogenous.	BS1377:1990 – Soils for Civil Engineering Purposes The preparation and pre-treatment of potentially contaminated soils prior to chemical analysis – MEWAM – 2006 – Environment Agency (Updated procedure under preparation)	n/a	Not Accredited
DETSC 1002	Description of Soil Sample Type	This method outlines the procedure used to describe soil samples with respect to basic type, predominant colour and inclusions. The procedure is carried out during the sample preparation stage.	BS 5930:Section 6:1999	n/a	Not Accredited
DETSC 1003	Stone and Glass / Metal / Plastic Content of Soil	This method outlines the procedure used to determine the Stone and Glass/Metal/Plastic content of soil samples. The procedure is carried out during the sample preparation stage.	BS 3882:2007 BS 1377:1990	0.1%	Not Accredited
DETSC 1004	Moisture Content/Loss on Drying of Soil	Loss on drying is determined by loss of mass on drying in an oven set at 28°C or 50°C. Moisture content is determined by loss of mass on drying in an oven set at 105°C. The procedure is carried out during the sample preparation stage.	Practical Environmental Analysis. Radojevic & Bashkin. RSC 1999 BS 1377: Part 2:1990 DETS drying time study	0.1%	Not Accredited
DETSC 1101	Asbestos - Bulk Analysis	Samples are examined visually for the presence of asbestos containing materials or asbestos fibres. Suspect fibres are removed from the sample and examined using polarised light microscopy to determine whether they are asbestos fibres. If no asbestos fibres are identified by the method after an adequate length of examination time, and after at least two small pinch samples have been examined, then the sample may be reported as 'NAD' (no asbestos detected).	HSG 248 Asbestos: The Analysis Guide for Sampling, Analysis and Clearance Procedures. 2005 McCrone W.C., Asbestos Identification (Second Edition), The McCrone Research Institute, 1987 LAB 30, Application of ISO/IEC17025 for Asbestos Sampling and Testing, UKAS, Edition 2, April 2008	n/a	UKAS

DETS INFO 001 – ANALYTICAL METHOD SUMMARY

Method Number	Title	Description	Reference	LOD	Accreditation Status
DETSC 1102	Quantification of asbestos in soils, loose aggregates and ballast	The method of quantification is divided into three procedures: Gravimetric analysis, detailed gravimetric analysis and PCOM analysis. The analysis may be affected by the client's requirements as determined by contract review, and by the nature of the asbestos found in the sample, e.g. whether ACMs are present, and whether fibre bundles large enough to pick out using tweezers have been found in the sample.	HSG 248 Asbestos: The Analysis Guide for Sampling, Analysis and Clearance Procedures. 2005 HSG264 Asbestos: The survey guide. HSE Books, 2010. Davies, L. S.T., Wetherill, G. Z., McIntosh, C., McGonagle, C., Addison, J. 1996. Development and validation of an analytical method to determine the amount of asbestos in soils and loose aggregates. HSE Contract Research Report N0. 83/1996. HSE Books	Gravimetric Analysis: 0.01% for 1kg sample Detailed Gravimetric Analysis: 0.001% for 50g sample PCOM Analysis: 0.001%	UKAS
DETSC 1103	Asbestos Water Absorption Test	This test involves a sample of the asbestos product being dried and weighed before being immersed in water for a period of time. The sample is then removed from the water and re-weighed. If the amount of water absorbed is <30% by weight, then the sample should be reported as 'Not Licensed'. If ≥30% water is absorbed then the sample should be reported as being 'Licensed', i.e. an asbestos material for which a licence is required to work on.	Work with Materials Containing Asbestos: Approved Code of Practice and Guidance. HSE Books, 2006.	n/a	UKAS
DETSC 2002	Organic matter content of soil	The procedure is based upon Walkley and Black's method. Organic matter in soil is oxidised with potassium dichromate in the presence of concentrated sulphuric acid. The excess dichromate is titrated with ferrous sulphate using diphenylamine as an external indicator. The organic matter content is calculated from the amount of dichromate used during the oxidation process based on an empirical relationship.	BS1377 : Part 3 : 1990 Method 3 BS1377 : Part 1 : 1990 BS 3882:2007	0.1%	UKAS MCERTS(Soils)

DETS INFO 001 – ANALYTICAL METHOD SUMMARY

DETSC 2003	Loss On Ignition	Soil is ignited at 440C and the amount of sample lost on ignition is determined gravimetrically. Other specified temperatures may be used but are not accredited.	BS1377 : Part 3 : 1990 Method 4 BS1377 : Part 1 : 1990	0.01%	UKAS MCERTS(Soils)
Method Number	Title	Description	Reference	LOD	Accreditation Status
DETSC 2004	Sulphate Content of Soil and Water	The sulphate in the soil is dissolved in dilute hydrochloric acid, or in an aqueous extract having a water:soil ratio of 2:1 and the insoluble residue is removed by filtration. Waters are also filtered prior to analysis. The sulphate in the filtrate is precipitated as barium sulphate which is then filtered, ignited and weighed.	BS1377 : Part 3 : 1990 Method 5 BS1377 : Part 1 : 1990 BRE SD1: 2005 Concrete in Aggressive Ground	Acid Soluble: 0.01% Water Soluble 100mg/l Waters 10mg/l	UKAS MCERTS(Soils)
DETSC 2005	Carbonate content of soil by Rapid Titration	The carbonate present in the soil reacts with a known excess of hydrochloric acid liberating carbon dioxide. The acid remaining after the reaction is determined by titration against sodium hydroxide. The result is calculated in terms of the equivalent proportion of carbon dioxide.	BS 1377: Part 1: 1990. BS 1377: Part 3: 1990: Method 5	1%	UKAS
DETSC 2006	Water Soluble Chloride Content of Soil & Chloride Content of Water	The chloride in the soil is dissolved in water and the insoluble material is removed by filtration. Waters are filtered before analysis. The chloride is analysed by Mohr's method. The chloride in a neutral solution is titrated against standard silver nitrate using potassium chromate as an indicator. The colour change is from yellow to brick red.	BS1377 : Part 3 : 1990 Method 7.2 BS1377: Part 1: 1990	Soil: 0.01% Water: 10mg/l	UKAS MCERTS(Soils)
DETSC 2007	Acid Soluble Chloride Content of Soil and Concrete	The chloride in the sample is dissolved in nitric acid and the insoluble material is removed by filtration. The dissolved chloride is analysed by Volhard's method. The chloride in solution is precipitated with a known excess of standard silver nitrate. The excess silver nitrate is titrated against standard ammonium thiocyanate using ferric alum as an indicator. The colour change is white to red.	BS1377 : Part 3 : 1990 Method 7.3 BS1377: Part 1: 1990 BS 1881-124:1988	0.01%	UKAS

DETS INFO 001 – ANALYTICAL METHOD SUMMARY

Method Number	Title	Description	Reference	LOD	Accreditation Status
DETSC 2008	pH Value of Soil and Water	The pH value of a soil suspension in water or a groundwater sample is determined electrometrically using a glass electrode.	BS1377: Part 3: 1990 – Soils for Civil Engineering Purposes – Chemical and Electrochemical Methods	n/a	UKAS (Soils + Waters) MCERTS (Soils + Waters-Trade Effluent only)
DETSC 2009	Electrical Conductivity of Soil & Water	<p>The electrical conductance of a soil suspension in water or of a water sample is determined by voltammetry using a conductivity meter.</p> <p>In some cases, the soil may need to be extracted with an aqueous solution of an inorganic salt e.g. the conductivity of topsoil is determined by preparing a suspension of the soil in saturated calcium sulphate.</p>	<p>Standard Methods for the Examination of water and Wastewater Part 2510B 21st Edition 2005 APHA, AWWA, WEF</p> <p>BS3882:2007 Specification for Topsoil</p>	1uS/cm	UKAS
DETSC 2019	Loose Packed Dry Soil Density	Dried, ground soil is transferred to a dry, tared measuring cylinder and the volume recorded. The cylinder and its contents are then weighed and the density of the soil calculated.	BS3882:2007 Specification for Topsoil	n/a	Not Accredited

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Method Number	Title	Description	Reference	LOD	Accreditation Status
DETSC 2024	Sulphide in Soil and Water by Iodometry	Hydrogen sulphide is liberated by acidification of the sample with hydrochloric acid in a steam distillation unit. The hydrogen sulphide produced is carried over with the steam and is absorbed in alkaline zinc acetate. The zinc sulphide produced reacts with iodine formed when iodate-iodide is acidified and the excess iodine titrated with standard thiosulphate.	<p>In House Method based on:</p> <p>Environment Agency The determination of easily liberated sulphide in soils and similar matrices (2010) - Blue Book 228 Method D - The determination of easily liberated sulphide in as received or air-dried samples following acid steam distillation with iodometric titration.</p> <p>Environment Agency The determination of sulphide in waters and associated materials (2007) Draft Method D - The determination of easily liberated sulphide in as received or air-dried samples following phosphoric acid steam distillation with iodometric titration.</p>	<p>Soils: 10mg/kg</p> <p>Waters: 250ug/l</p>	<p>Soils: UKAS MCERTS(Soils)</p> <p>Waters: Not Accredited</p>
DETSC 2030	Alkalinity in Water	Alkalinity of a water sample is determined by indicator end point titration with a strong acid from sample pH to pH8.3 (where applicable) and then to pH4.5. From the titres obtained the total alkalinity and concentrations and types of alkalinity present can be calculated.	<p>SCA Method ISBN 0 11 751601 5 The Determination of Alkalinity and Acidity in Water 1981</p> <p>Instruction Manual for Skalar SP50 Robotic Analyser</p>	20mg/l as CaCO ₃	<p>UKAS</p> <p>MCERTS(Waters) Trade Effluent only</p>
DETSC 2031	5 Day Biochemical Oxygen Demand	The sample, either diluted or undiluted, is placed in a BOD bottle and the initial dissolved oxygen content of the sample is measured using a dissolved oxygen meter. The bottle is placed in an incubator at 20°C in the dark for 5 days. After this time the bottle is removed and the residual dissolved oxygen content of the sample is measured. The BOD of the sample is calculated from the reduction in the concentration of dissolved oxygen over 5 days.	SCA Method ISBN 0 117522120 5 Day Biochemical Oxygen Demand (BOD5) Second Edition 1988	1 mg/l	<p>UKAS</p> <p>MCERTS(Waters)- Trade Effluent only</p>

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Method Number	Title	Description	Reference	LOD	Accreditation Status
DETSC 2032	Chemical Oxygen Demand	Oxidisable substances react with sulphuric acid – potassium dichromate solution in the presence of silver sulphate as a catalyst. Chloride is masked by mercury sulphate. The reduction in the yellow colouration of Cr ⁶⁺ is evaluated using a spectrophotometer for the low range tubes (LCK 314) whilst the green colouration of Cr ³⁺ is evaluated for the medium and high range tubes (LCK 014 and LCK 114).	Environment Agency The determination of chemical oxygen demand in waters and effluents (2007) Methods for the Examination of Waters and Associated Materials	10 mg/l	UKAS MCERTS(Waters)- Trade Effluent only
DETSC 2033	Total and Dissolved Organic Carbon in Water	The term TOC (Total Organic Carbon) is used to describe the total content of organically bound carbon in dissolved and undissolved compounds. The TOC content is expressed in mg/l. If DOC (Dissolved Organic Carbon) is required, samples are filtered through a 0.45µm filter paper prior to analysis. Inorganic carbon is expelled by acidification of the sample. TOC is then determined by digestion of the sample with sulphuric acid and peroxodisulphate. Carbon containing compounds are transformed into carbon dioxide. The carbon dioxide evolves and reacts with an indicator solution. The colour change is measured using a spectrophotometer.	Hach-Lange Technical Instructions: LCK 385, LCK 386, LCK 387	2 mg/l	UKAS
DETSC 2034	Suspended and Settleable Solids in Water	Suspended matter is removed from a measured volume of sample by filtration under reduced pressure through a pre-treated, pre-weighed glass fibre filter paper. The paper is washed with deionised water to remove dissolved salts and the total suspended matter is determined gravimetrically after drying at 105 ±5°C Settleable solids are determined by subtracting the solids left in suspension after settlement for 1 hour (or other agreed time) from the total suspended matter in the sample.	SCA Method ISBN 011 751957 X Suspended, Settleable and Total Dissolved Solids in Waters and Effluents 1980	5 mg/l	Suspended Solids: UKAS MCERTS(Waters)- Trade Effluent only Settleable Solids: Not Accredited

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Method Number	Title	Description	Reference	LOD	Accreditation Status
DETSC 2035	Total Dissolved Solids in Water	Water samples are pre-filtered to remove any suspended solids and evaporated in an oven at 180°C. The amount of residual dissolved solids is determined gravimetrically. An estimate of the total dissolved solids can be obtained by measuring the conductivity of the sample. This method is not accredited.	SCA Method ISBN 011 751957 X Suspended, Settleable and Total Dissolved Solids in Waters and Effluents 1980 BS1377: Part 3 : 1990 Section 8	5 mg/l	UKAS
DETSC 2047	Formaldehyde in Water	Formaldehyde in soil is extracted in water, with a water to soil ratio of 10:1. The insoluble residue is removed by filtration prior to analysis. Waters are filtered prior to analysis to remove any particulates in suspension. Formaldehyde in the extract or water sample reacts with chromotropic acid-sulphuric acid solution to form a purple coloured complex. The absorbance of the coloured solution is read at 580nm using a suitable visible spectrophotometer.	Formaldehyde by visible absorption spectrophotometry – Method 3500, Issue 2 – NIOSH Manual of Analytical Methods, Fourth edition, August 1994	Soil: 0.2mg/kg Water: 20µg/l	Not Accredited
DETSC 2048	Dissolved Oxygen Content of Water	The dissolved oxygen content of the sample is measured using a dissolved oxygen meter either electrochemically or by fluorescence, or by the titrimetric method developed by Winkler.	SCA Method ISBN 0.11 751442X Dissolved Oxygen in Natural and Waste Waters 1979	0.1 mg/l	Not Accredited
DETSC 2055	Anions in Water and Aqueous Soil Extracts by Ion Chromatography	Liquid samples and aqueous soil extracts are filtered through a 0.22µm syringe filter prior to analysis. The filtered samples are injected into an Ion Chromatograph. The anions of interest are separated on the basis of their affinity for the active sites of the column packing material. The separated anions are converted into their highly conductive acid forms and measured by conductivity. The anions are identified on the basis of retention time as compared to standards and quantisation is by measurement of peak area.	Standard Methods for the Examination of Water and Wastewater Section 4110 21st Edition 2005 APHA, AWWA, WEF	Soil: 1.0 mg/kg Water: 0.1 mg/L	UKAS

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Method Number	Title	Description	Reference	LOD	Accreditation Status
DETSC 2076	Sulphate and Magnesium Content of 2:1 Aqueous Extract of Soil by ICP-OES	The sulphate and magnesium in the soil are extracted in an aqueous extract having water: soil ratio of 2:1 and the insoluble material is removed by filtration. The concentrations of sulphate and magnesium in the filtrate are determined by Inductively Coupled Plasma Optical Emission Spectroscopy (ICP-OES). The wavelengths used for identification and quantification are 181.972nm for sulphate and 285.213nm for magnesium.	BS1377 : Part 3: 1990 Method 5 BS1377 : Part 1: 1990 TRL 447 Sulphate Specification for Structural Backfills 2005 BRE SD1:2005 Concrete in Aggressive Ground 2005	10mg/L	Sulphate: UKAS MCERTS(Soils) Magnesium: Not Accredited
DETSC 2084	Total Organic Carbon by PrimacATC Analyser	Soil samples are treated with phosphoric acid to expel any inorganic carbonates. The samples are then heated at high temperature in a continuous flow of air so that any organic carbon is oxidised to carbon dioxide. The gas is then allowed to cool and analysed by an infra-red detector.	PrimacsATC Analyser – User Manual, Skalar	0.47%	MCERTS(Soils)
DETSC 2085	Total and Dissolved Organic Carbon in Water	<p style="text-align: center;">Direct TOC Analysis</p> <p>The sample is acidified, stirred and purged to remove the IC before the sample is injected and handled as in the TC Analysis. The sample is filtered before acidification for DOC.</p> <p style="text-align: center;">TC Analysis</p> <p>The sample is injected by an automated septum less rotary port into a high temperature reactor. In the reactor, at a temperature of 750 - 950°C all organic and inorganic carbon is oxidized to the gaseous carbon dioxide (CO₂). The catalyst that is present in the reactor catalysis the oxidation to completion. A flow of air transports these oxidation products to the detectors. The oxygen required for reaction is taken from the airflow. The products are led into the non-dispersive infrared detector where the carbon dioxide is determined. The carbon dioxide is measured at a wavelength of 4.2 µm by NDIR detection.</p>	<p>Standard Methods for the Examination of Water and Wastewater Section 5310 B 21st Edition 2005 APHA, AWWA, WEF</p> <p>HMSO Methods for the Examination of Waters and Associated Materials – The Instrumental Determination of Total Organic Carbon and Related Determinands 1995</p>	1mg/l as C	UKAS

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Method Number	Title	Description	Reference	LOD	Accreditation Status
DETSC 2119	Exchangeable Ammonia in Soil	An intense blue-green complex, related to indophenol blue, is formed by the reaction of ammonia with hypochlorite and sodium salicylate, with sodium nitroprusside acting as a catalyst. The complex is measured at 655nm and is related to the ammonia concentration by means of a calibration curve. Sodium citrate is added to overcome interfering ions.	MAFF/ADAS Reference Book 427 – the Analysis of Agricultural Materials – Method 53, Ammonium, Nitrate and Nitrite-Nitrogen, Potassium Chloride Extractable	0.5mg/kg	UKAS MCERTS(Soils)
DETSC 2120	Ammonia in Water by Spectrophotometry	An intense blue-green complex, related to indophenol blue, is formed by the reaction of ammonia with hypochlorite and sodium salicylate, with sodium nitroprusside acting as a catalyst. The complex is measured at 655nm and is related to the ammonia concentration by means of a calibration curve. Sodium citrate is added to overcome interfering ions.	Environment Agency Ammonia in Waters 1981 ISBN 0117516139 Methods for the Examination of Waters and Associated Materials	20µg/l	UKAS
DETSC 2121	Total Kjeldahl Nitrogen Content of Soils and Waters	The sample is digested with sulphuric acid and a mixture of catalysts to convert organic nitrogen to ammonia. The sample is then distilled under alkaline conditions, and the distilled ammonia is absorbed in sulphuric acid. The ammonia content of the distillate is then determined colorimetrically either using the UV/vis spectrophotometer or the Konelab 60i. Ammonia reacts with hypochlorite ions generated by the alkaline hydrolysis of sodium dichloroisocyanurate to form monochloramine. Monochloramine reacts with salicylate ions in the presence of sodium nitroprusside at around pH 12.6 to form a blue compound. The absorbance of this compound is measured spectrophotometrically at wavelength 660nm	The Analysis of Agricultural Materials – MAFF/ADAS Reference Book 427 – HMSO BS 3882: 2007 Specification for topsoil Standard Methods for the Examination of Water and Wastewater Part 4500-N. 21st Edition 2005 APHA, WWA, WEF	Soil: 0.01% Water: 2mg/l	Not Accredited
DETSC 2123	Water Soluble Boron in Soil & Boron in Water	Boron in soil is extracted in boiling saline water. Waters are filtered prior to analysis to remove any particulates in suspension. The water soluble boron in the extract or filtrate reacts with azomethine-H to produce a yellow coloured complex. The resulting colour absorbance is measured at 420nm using a suitable visible spectrophotometer.	SecondSite Property (now National Grid Property Holdings) - Guidance for assessing and managing potential contamination on former gasworks and associated sites (Part I) (Version 3) Method 17.12 The analysis of Agricultural materials MAFF/ADAS – reference book 427	Soil: 0.2mg/kg Water: 100ug/L	UKAS MCERTS(Soils)

DETS INFO 001 – ANALYTICAL METHOD SUMMARY

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Method Number	Title	Description	Reference	LOD	Accreditation Status
DETSC 2130	Cyanides & Monohydric Phenols by Skalar	<p>Water samples are filtered through a 0.45µm syringe filter and solid samples are extracted with 1M caustic soda prior to analysis on the automated flow analyser.</p> <p>The method determines total cyanide, easily liberated cyanide, complex cyanide, thiocyanate and monohydric phenols</p>	<p>Skalar methods: I295-001 w/r+P7 I295-002 w/r+P7 293-902 w/r+P7 497-001</p>	<p>Soils mg/kg: Total & Free CN=0.1, Thio=0.6, Phenol=0.3</p> <p>Waters ug/L: Total CN=40, Free CN=20, Thio=20, Phenol=100</p>	UKAS MCERTS(Soils)
DETSC 2140	Sugar in Mixing Water for Cement	<p>Waters are filtered prior to analysis to remove any particulates in suspension.</p> <p>The sugar in the filtrate reacts with phenol and sulphuric acid to produce a yellow-orange coloured complex. The resulting colour absorbance is measured at 490nm using a suitable visible spectrophotometer.</p>	<p>Colorimetric Method for Determination of Sugars and Related Substances MICHEL DUBOIS, K. A. GILLES, J. K. HAMILTON, P. A. REBERS, and FRED SMITH - Division of Biochemistry, University of Minnesota, St. Paul, Minnesota.</p>	10mg/l	Not Accredited
DETSC 2201	Nitrite in Waters and Leachates by Konelab 60i	<p>Nitrite is determined colorimetrically using the Konelab60i autoanalyser. The nitrite colour reaction occurs at pH 2.0 to 2.5 by coupling diazotized Sulphanilamide with N-1-naphthyl-ethylenediamine. The absorbance of this compound is measured spectrophotometrically at 520nm.</p>	<p>Standard Methods for the Examination of Water and Wastewater Part 4500-NO2 B – 21st Edition 2005 APHA, AWWA, WEF</p> <p>Aquakem Method Nitrite in Waters Iss No 2</p> <p>Methods for the Examination of Water and Associated Materials Oxidised Nitrogen in Waters 1981.</p>	0.04mg/l (as N)	UKAS



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			EPA Method 354.1 Nitrite, spectrophotometric (Approved at 40 CFR Part 136, not approved at Part 141)		
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DETS INFO 001 – ANALYTICAL METHOD SUMMARY

Method Number	Title	Description	Reference	LOD	Accreditation Status
DETSC 2202	Total Oxidised Nitrogen in Waters and Leachates by Konelab 60i	Nitrate is reduced to nitrite by hydrazine under alkaline conditions. The total nitrite ions are then reacted with sulphanilamide and N-1-naphthylethylenediamine dihydrochloride under acidic conditions to form a reddish purple azo-dye. The absorbance of this compound is measured spectrophotometrically at 540 nm using the Konelab 60i autoanalyser.	Standard Methods for the Examination of Water and Wastewater Part 4500-NO ₂ B and Part 4500-NO ₃ H – 21st Edition 2005 APHA, AWWA, WEF Aquakem Method Total Oxidised Nitrogen. Methods for the Examination of Water and Associated Materials Oxidised Nitrogen in Waters 1981. EPA Method 353.1 Nitrate, Nitrite Colorimetric Automated Hydrazine Reduction (Approved at 40 CFR Part 136, Not approved at Part 141)	0.7mg/l (as N)	UKAS
DETSC 2203	Hexavalent Chromium in Waters and Leachates by Konelab 60i	Hexavalent Chromium is determined colorimetrically using the Konelab 60i autoanalyser. Hexavalent chromium reacts with diphenylcarbide in acid solution and produces a red-violet colour. The absorbance of this compound is measured spectrophotometrically at 540nm.	Standard Methods for the Examination of Water and Wastewater Part 3500-Cr – 21st Edition 2005 APHA, AWWA, WEF USEPA 7196-A Aquakem Method. Hexavalent Chromium	10µg/l	UKAS
DETSC 2204	Hexavalent Chromium in Soil by Konelab 60i	Hexavalent Chromium is determined colorimetrically using the Konelab 60i autoanalyser. Hexavalent chromium reacts with diphenylcarbide in acid solution and produces a red-violet colour. The absorbance of this compound is measured spectrophotometrically at 540nm.	Aquakem Method. Hexavalent Chromium	1mg/kg	Not Accredited

DETS INFO 001 – ANALYTICAL METHOD SUMMARY

Method Number	Title	Description	Reference	LOD	Accreditation Status
DETSC 2205	Reactive & Total Phosphorus in Waters and Leachates by Konelab 60i	Phosphate is determined colorimetrically using the Konelab60i autoanalyser. The orthophosphate ion reacts with ammonium molybdate and antimony potassium tartrate under acidic conditions to form a 12-molybdophosphoric acid complex. The complex is then reduced with ascorbic acid to form a blue heteropoly compound. The absorbance of this compound is measured spectrophotometrically at wavelength 880nm.	Standard Methods for the Examination of Water and Wastewater Part 4500-P E– 21st Edition 2005 APHA, AWWA, WEF Aquakem Method. Phosphate in Waters Issue 2	0.01mg/l	Reactive Phosphorus: UKAS MCERTS (Waters-Trade Effluent only) Total Phosphorus: Not Accredited
DETSC 2206	High Level Ammonia in Waters and Leachates by Konelab 60i	Ammonia is determined colorimetrically using the Konelab60i autoanalyser. Ammonia reacts with hypochlorite ions generated by the alkaline hydrolysis of sodium dichloroisocyanurate to form monochloramine. Monochloramine reacts with salicylate ions in the presence of sodium nitroprusside at around pH 12.6 to form a blue compound. The absorbance of this compound is measured spectrophotometrically at wavelength 660nm.	Methods for the Examination of Waters and Associated Materials Ammonia in Waters 1981 ISBN 0117516139. Aquakem Method. Ammonia in Waters Issue 2	0.8mg/l	UKAS
DETSC 2207	Low Level Ammonia in Waters and Leachates by Konelab 60i	Ammonia is determined colorimetrically using the Konelab60i autoanalyser. Ammonia reacts with hypochlorite ions generated by the alkaline hydrolysis of sodium dichloroisocyanurate to form monochloramine. Monochloramine reacts with salicylate ions in the presence of sodium nitroprusside at around pH 12.6 to form a blue compound. The absorbance of this compound is measured spectrophotometrically at wavelength 660nm.	Methods for the Examination of Waters and Associated Materials Ammonia in Waters 1981 ISBN 0117516139. Aquakem Method. Ammonia in Waters Issue 2	0.015mg/l	UKAS

DETS INFO 001 – ANALYTICAL METHOD SUMMARY

Method Number	Title	Description	Reference	LOD	Accreditation Status
DETSC 2208	Sulphide in Waters and Leachates by Konelab 60i	Sulphide is determined colorimetrically using the Konelab60i autoanalyser. Potassium Dichromate converts N-N-Diethyl-p-phenylenediamine to the free radical which reacts rapidly with sulphide to produce the coloured 'DPD Blue' or 'Ethylene Blue'. The absorbance can then be measured at wavelength 660nm.	The determination of sulphide in waters and associated materials (2007) - SCA - Draft (March 2007) Aquakem Method. Sulphide SP001 Issue 2 Standard Methods for the Examination of Water and Wastewater, 21st Edition 2005, Part 4500. ISBN0-87553-223-3	10µg/l	UKAS
DETSC 2210	Ferrous Iron in Waters and Leachates by Konelab 60i	Three molecules of phenanthroline chelate with each atom of ferrous iron to form an orange/red complex. The intensity of the coloured solution is stable between pH3 to pH9. Rapid colour development occurs between pH2.9 and pH3.5 in the presence of excess phenanthroline. The resulting colour absorbance is measured at 510nm	Aquakem Method Ferrous Iron FIR001 Issue 2	0.1mg/l	Not Accredited
DETSC 2211	Silicate in Waters and Leachates by Konelab 60i	Reactive forms of silicon in acid solution, below pH2, react with ammonium molybdate ions to form a yellow silicomolybdate. Ascorbic acid reduces the yellow silicomolybdate to produce a blue silicomolybdate complex. Oxalic acid is added to destroy any molybdophosphoric acid formed.	ASTM D7126 - 10 Standard Test Method for On-Line Colorimetric Measurement of Silica Aquakem Method Silica SIL Issue 2	0.1mg/l	Not Accredited
DETSC 2301	Metals in Soil by ICP-OES As, Ba, Be, Cd, Cr, Co, Cu, Fe, Mn, Mo, Ni, Pb, Se, V, Zn	Metals in soil are extracted using aqua regia and their concentrations are determined by Inductively Coupled Plasma Optical Emission Spectroscopy (ICP-OES). Any metals not listed can be determined but are not accredited under UKAS or MCERTS for soils.	Standard Methods for the Examination of Water and Wastewater Part 3120 B – 21st Edition 2005, AWWA, WEF	mg/kg: As, Be Cu, Ni =0.2, Ba=1.5, Cd=0.1, Cr=0.15, Co=0.7, Mn=20, Mo=0.4, Pb=0.3, Fe=1200, Se=0.5, V=0.8, Zn=1.0	UKAS (all listed) MCERTS (All soils listed except Fe)

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Method Number	Title	Description	Reference	LOD	Accreditation Status
DETSC 2302	Metals in Waters by ICP-OES Al, As, Ca, Cd, Cr, Cu, Fe, K, Mg, Mn, Na, Ni, Pb, Se, Zn	Concentrations of metals in water are determined by Inductively Coupled Plasma Optical Emission Spectroscopy (ICP-OES). Any metals not listed can be determined but are not accredited under UKAS or MCERTS for waters	Standard Methods for the Examination of Water and Wastewater Part 3120 B – 21st Edition 2005 APHA, AWWA, WEF	µg/l: Al=6.5, As= 7.1, Ca=100, Cd=0.3, Cr=0.75, Cu=0.75, Fe=70, K=20, Mg=5, Na=12, Ni=2.7, Pb=4, Se=11.3, Zn=3.8	Dissolved: UKAS (all listed) MCERTS(Waters)-Trade Effluent only (Al, Cd, Cr, Cu, Ni, Pb, Zn) Total: Not Accredited
DETSC 2303	Total Hardness (By Calculation)	The concentrations of calcium and magnesium are determined using the appropriate methodologies. The hardness is a measure of the sum of the calcium and magnesium concentration expressed as calcium carbonate.	Standard Methods for the Examination of Water and Wastewater Part 3120 B – 21st Edition 2005 APHA, AWWA, WEF	n/a	UKAS
DETSC 2304	Zinc Equivalent in Soil (By Calculation)	The concentrations of copper, nickel and zinc concentrations are determined using the appropriate methodologies. The zinc equivalent is a measure of the combined toxicity of the three metals, relative to the toxicity of zinc.	n/a	n/a	Not Accredited
DETSC 2306	Metals in Waters by ICP-MS Ag, Al, As, Ba, Ca, Cd, Co, Cr, Cu, Fe, Hg, K, Mg, Mn, Mo, Na, Ni, P, Pb, Sb, Se, Sn, V, Zn	Concentrations of metals in water are determined by Inductively Coupled Plasma Mass Spectroscopy (ICP-MS). Any metals not listed can be determined but are not accredited under UKAS.	Standard Methods for the Examination of Water and Wastewater Part 3125 B – 21st Edition 2005 APHA, AWWA, WEF	µg/l: Ag=0.13, Al=10.0, As=0.16, Ba=0.26, Ca=90, Cd=0.03, Co=0.16, Cr=0.25, Cu=0.40, Fe=5.50, Hg=0.01, K=80, Mg=20, Mn=0.22, Mo=1.1, Na=70, Ni=0.50, P=18.0, Pb=0.09, Sb=0.17, Se=0.25, Sn=0.40, V=0.60, Zn=1.3	Dissolved: UKAS (all listed) Total: Not Accredited

DETS INFO 001 – ANALYTICAL METHOD SUMMARY

Method Number	Title	Description	Reference	LOD	Accreditation Status
DETSC 2320	Total Sulphur in Soil by ICP	Sulphur compounds in soil are extracted using aqua regia and the insoluble residue is removed by filtration. The concentration of sulphur in the filtrate is determined by Inductively Coupled Plasma Optical Emission Spectroscopy (ICP-OES). Loss of sulphur as H ₂ S is prevented by oxidation of the sulphur compounds to sulphate by the aqua regia.	TRL 447 Sulphate Specification for Structural Backfills 2005 BRE SD1 Concrete in Aggressive Ground 2005	0.01%	UKAS
DETSC 2321	Total Sulphate content of Soil by ICP-OES	The sulphate in the soil is extracted in dilute hydrochloric acid and the insoluble residue is removed by filtration. The filtrate is made up to volume and the concentration of sulphate in the filtrate is determined by Inductively Coupled Plasma Optical Emission Spectroscopy (ICP-OES).	BS1377 : Part 3: 1990 Method 5 BS1377 : Part 1 : 1990	0.01%	UKAS MCERTS(Soils)
DETSC 2322	Total Potential Sulfate and Total Oxidisable Sulphur (By Calculation)	<p>Sulphur compounds in soil are extracted using aqua regia and the insoluble residue is removed by filtration. The concentration of sulphur in the filtrate is determined by Inductively Coupled Plasma Optical Emission Spectroscopy (ICP-OES). Loss of sulphur as H₂S is prevented by oxidation of the sulphur compounds to sulphate by the aqua regia. The wavelength used for identification and quantification of sulphate is 181.972nm.</p> <p>The sulphate in the soil is extracted in dilute hydrochloric acid and the insoluble residue is removed by filtration. The filtrate is made up to volume and the concentration of sulphate in the filtrate is determined by Inductively Coupled Plasma Optical Emission Spectroscopy (ICP-OES). The wavelength used for identification and quantification of sulphate is 181.972nm.</p> <p>The two results obtained from the above tests may then be combined to calculate the Total Potential Sulphate and Total Oxidisable Sulphur content</p>	<p>BS1377 : Part 3: 1990 Method 5</p> <p>BS1377 : Part 1 : 1990</p>	0.01%	Not Accredited

DETS INFO 001 – ANALYTICAL METHOD SUMMARY

Method Number	Title	Description	Reference	LOD	Accreditation Status
DETSC 2324	Mercury in Waters by Atomic Fluorescence Spectroscopy	Waters and aqueous samples are preserved by fixing with concentrated nitric acid. Treatment with tin (II) chloride reduces mercury (II) to mercury (0) vapour which is detected using atomic fluorescence spectrometry.	Standard Methods for the Examination of Water and Wastewater Part 3112 B – 21st Edition 2005 APHA, AWWA, WEF PSA Method – Millennium Merlin Method for Total Mercury in Drinking, Surface, Ground, Industrial and Domestic Wastewaters and Saline Waters	0.05µg/l	UKAS
DETSC 2325	Mercury in Soil Atomic Fluorescence Spectroscopy	The mercury is extracted from soil in aqua regia with gentle refluxing. The extract is filtered to remove particulates and diluted to volume. Treatment with tin (II) chloride reduces mercury (II) to mercury (0) vapour which is detected using atomic fluorescence spectrometry.	PSA Method – Millennium Merlin Method for Mercury in Sludge, Soils and Sediments	0.05 mg/kg	UKAS MCERTS(Soils)
DETSC 2332	Inorganic and Methyl Mercury Speciation	Soils are air-dried and crushed before being subjected to a two-stage microwave extraction procedure for Inorganic (Hg(II)) and Methyl (MeHg) mercury. Waters and aqueous samples are filtered to remove particulates. An aliquot is separated via HPLC before treatment with bromate-bromide and tin (II) chloride to generate mercury and the mercury is determined by atomic fluorescence spectroscopy.	USEPA Method 3200 – Mercury Species Fractionation and Quantification by Microwave Assisted Extraction. PSA Application Note 053 – Mercury Speciation Using The Millenium Merlin Speciation System	Soil: 100µg/kg Water: 1µg/l	Not Accredited
DETSC 2333	Elemental Mercury Speciation	Soils, waters and aqueous samples are tested on an as-received bases. A known quantity of sample is extracted using argon and the released elemental mercury is trapped. The trapped mercury is released upon heating in a scarifier module and determined by atomic fluorescence spectroscopy.		Soil: 0.6µg/kg Water: 1µg/l	Not Accredited

DETS INFO 001 – ANALYTICAL METHOD SUMMARY

Method Number	Title	Description	Reference	LOD	Accreditation Status
DETSC 2400	Unified Barge Bioaccessible Metals in Soils	<p>The Unified BARGE Method (UBM) is a an in vitro method for simulating the human digestive system. Synthetic digestive fluids are used to simulate the fluids present in the body.</p> <p>Both inorganic solutions (Containing inorganic salts such as KCl, NaCl etc), and organic solutions (Containing organic compounds such as Urea, Glucose etc) are mixed with enzymes to produce 4 Synthetic digestive fluids saliva (S), Gastric fluid (G), duodenal fluid (D) and bile (B). These solutions are then used to mimic the effect of a sample passing through a human gastro intestinal tract by shaking portions of the sample at 37°C, human body temperature (17.4).</p>	<p>EPA 9200.2-86 April 2012- Standard Operating Procedure for an In Vitro Bioaccessibility Assay for Lead in Soil</p> <p>BGS Chemical & Biological Hazards Programme Open Report OR/07/027 - Inter-laboratory Trial of a Unified Bioaccessibility Procedure</p>	<p>V = 1.0mg/kg Cr = 5.0mg/kg Co = 1.0mg/kg Ni = 5.0mg/kg As = 0.5mg/kg Se = 0.5mg/kg Cd = 0.5mg/kg Pb = 1.0mg/kg</p>	Not Accredited
DETSC 3001	Solvent Extractable Matter in Soil	<p>Soil samples are extracted with a water-immiscible solvent and filtered to remove the water. The solvent is evaporated and the amount of extractable matter in the sample is determined gravimetrically.</p>	<p>In-house method based on:- Problems Arising from the Redevelopment of Gas Works and Similar Sites - AERE Harwell Laboratory 1981.</p> <p>Environmental Agency The Determination of Material Extractable by Carbon Tetrachloride and of Certain Hydrocarbon Oil and Grease Components in sewage Sludge – 1978</p>	40mg/kg	<p>Toluene & Cyclohexane: UKAS</p> <p>Other Solvents: Not Accredited</p>
DETSC 3002	Oil & Grease/Solvent Extractable Matter in Waters	<p>A known volume of sample is acidified to pH<2 and extracted three times with an organic solvent, such as n-Hexane, in a separating funnel. The solvent is removed by evaporation and the amount of extractable matter in the sample is determined gravimetrically.</p>	<p>APHA 21st Edition, 2005 – Method 5520 B. Oil & Grease - Partition Gravimetric Method</p> <p>USEPA Method 1664, Revision A: n-Hexane Extractable Material (HEM: Oil & Grease) and Silica Treated N-Hexane Extractable Material (SGT-HEM; Non Polar Material) by Extraction and Gravimetry.</p>	1mg/l for 500ml sample	UKAS

DETS INFO 001 – ANALYTICAL METHOD SUMMARY

Method Number	Title	Description	Reference	LOD	Accreditation Status
DETSC 3049	Elemental Sulphur in Soils and Waters by HPLC	Soils are extracted in dichloromethane (DCM) by sonication. The elemental sulphur concentration is determined by high performance liquid chromatography (HPLC) with UV detection using a C ₁₈ (e.g. 250mm x 4.6mm) column and a mobile phase composed of 95% methanol and 5% water. Waters and aqueous extracts of soils are extracted using DCM in a separating funnel, filtered, and the concentration determined using HPLC.	National Grid Property Holdings Limited, Methods for the Collection and Analysis of Samples from National Grid Sites, Version 1, September 2006. Section 3.12 Soil Analysis: Elemental Sulphur.	Soil: 0.75mg/kg Waters: 90ug/l	Soil: UKAS MCERTS(Soils) Water: UKAS
DETSC 3072	Aliphatic / Aromatic TPH by GC-FID	Aliphatic and aromatic petroleum hydrocarbons (C ₁₀ -C ₃₅) are extracted from soil and water using n-Hexane. The fractions are separated by solid phase extraction using silica columns, whereby the aliphatic fraction is eluted first with n-Hexane and the aromatic portion is eluted second with dichloromethane. The total, aliphatic, and aromatic concentrations are determined by gas chromatography flame ionisation detection (GC-FID) using a capillary column and hydrogen as the carrier gas. The chromatographic data is further characterized by subdivision into approximate boiling point/carbon number ranges with respect to n-alkane retention time markers.	National Grid Property Holdings Limited, Methods for the Collection and Analysis of Samples from National Grid Sites, Version 1, September 2006. Section 3.12 Soil Analysis: Draft TNRCC Method 1006	Soil mg/kg: AL10-12 =1.5 AL12-16 =1.2 AL16-21 =1.5 AL21-35 =3.4 AR10-12 =0.9 AR12-16 =0.5 AR16-21 =0.6 AR21-35 =1.4 Water: 1ug/l	Soil: UKAS MCERTS(Soils) (C10-C35 only) Water: Not Accredited
DETSC 3301	PAH in Soil by GC-FID	Soils and associated materials are extracted in dichloromethane (DCM) using sonication. The PAH concentration is recorded both as “Total PAH” and as “Speciated PAH”, specified in terms of the 16 US EPA “Priority Pollutant” Polycyclic Aromatic Hydrocarbons. Concentrations are determined by gas chromatography using a BPX 50 (30m; 0.25µm ID; 0.25µm film) capillary column (or equivalent).	In-house method based on US EPA Method 8100, Polynuclear Aromatic Hydrocarbons	0.5 mg/kg each 1.6 mg/kg Total PAH	UKAS (16 PAH's only)
DETSC 3302	Hexane / Acetone Extracted PAH in Soil by GC-FID	Soils are extracted into hexane: acetone by shaking. The PAH concentration is recorded both as “Total PAH” and as “Speciated PAH”, specified in terms of the 16 US EPA “Priority Pollutant” Polycyclic Aromatic Hydrocarbons. Concentrations are determined by gas chromatography using a BPX 50 (30m; 0.25µm ID; 0.25µm film) capillary column (or equivalent).	In-house method based on US EPA Method 8100, Polynuclear Aromatic Hydrocarbons	0.1 mg/kg each 1.6 mg/kg Total PAH	Not Accredited

DETS INFO 001 – ANALYTICAL METHOD SUMMARY

Method Number	Title	Description	Reference	LOD	Accreditation Status
DETSC 3303	Polyaromatic Hydrocarbons in Soils by GC-MS	The PAHs in the soil sample are extracted into hexane: acetone by shaking. The PAHs in the extract are separated by gas chromatography and identified by the mass selective detector. The concentration of each PAH is determined by referencing individual mass peak areas to the appropriate internal standard mass peak area. Quantification is carried out within the instrument software.	In-house method based on EPA Method 8270- US EPA Method 8270, Revision C, Semivolatile Organic Compounds by Gas Chromatography – Mass Spectrometry (GC/MS)	0.03 mg/kg each 0.10 mg/kg Total PAH	UKAS (All 16 PAH's) MCERTS (not Fluorene, Anthracene, Chrysene or Total)
DETSC 3304	Polyaromatic Hydrocarbons in Waters by GC-MS	The PAHs in the water sample are extracted into dichloromethane by shaking. The PAHs in the extract are separated by gas chromatography and identified by the mass selective detector. The concentration of each PAH is determined by referencing individual mass peak areas to the appropriate internal standard mass peak area. Quantification is carried out within the Instrument software.	In-house method based on EPA Method 8270- US EPA Method 8270, Revision 3, Semivolatile Organic Compounds by Gas Chromatography – Mass Spectrometry (GC/MS) In-house method based on EPA Method 3510C- EPA Method 3510C, Revision 3, Separatory Funnel Liquid-Liquid Extraction	10 ng/l each	UKAS (16 PAH's only)
DETSC 3311	Extractable Petroleum Hydrocarbons (EPH) in Soil, Ballast and Water	This method is designed to determine total concentrations of extractable petroleum hydrocarbons (EPH) in solid and aqueous matrices. This method uses a dichloromethane (DCM) extraction followed by quantification using gas chromatography/flare ionisation detection (GC-FID) analysis using a 1:1 mixture of diesel and mineral oil as calibration standards and n-alkane markers to establish the boiling point ranges. This method is used for the quantitative analysis of “Total EPH” (C10-C40) and as “Speciated EPH”, specified in terms of the “diesel range” (C10-C24), and “mineral oil range” (C24-C40).	USEPA Method 3550C – Ultrasonic Extraction USEPA Method 8015B – Non-Halogenated Organics Using GC/FID	Soil: 10 mg/kg Ballast: 10mg/kg Water: 10µg/l	Soil: UKAS MCERTS(Soils) Water: UKAS

DETS INFO 001 – ANALYTICAL METHOD SUMMARY

Method Number	Title	Description	Reference	LOD	Accreditation Status
DETSC 3312	Hexane Extractable Petroleum Hydrocarbons (HPH)	This method is designed to determine total concentrations of extractable petroleum hydrocarbons (EPH) in solid matrices. This method uses a hexane: acetone (9.4) extraction followed by quantification using gas chromatography/flame ionisation detection (GC-FID) analysis using a 1:1 mixture of diesel and mineral oil as calibration standards and n-alkane markers to establish the boiling point ranges. This method is used for the quantitative analysis of “Total EPH” (C10-C40) and as “Speciated EPH”, specified in terms of the “diesel range” (C10- C24) and “mineral oil range” (C24-C40).	USEPA Method 8015B – Non-Halogenated Organics Using GC/FID	Soil: 5 mg/kg	Not Accredited
DETSC 3321	BTEX, MTBE & PRO in Soils by Headspace GC-FID	BTEX, MTBE and PRO in soils are determined via Headspace GC-FID. Individual aromatic compounds are quantified by external calibration against known standards. PRO range is banded using alkane markers to define retention time windows.	EPA Methods 5021 and 8015D	0.01 mg/kg	UKAS MCERTS(Soils) Not accredited for PRO range (C5-10)
DETSC 3322	BTEX, MTBE & PRO in Waters & Leachates by Headspace GC-FID	BTEX, MTBE and PRO in soils are determined via Headspace GC-FID. Individual aromatic compounds are quantified by external calibration against known standards. PRO range is banded using alkane markers to define retention time windows.	EPA Methods 5021 and 8015D	1 µg/l	UKAS
DETSC 3401	PCBs in Soils by GC-MS	An as-received soil sample is extracted in Hexane:Acetone (1:2) using sonication methodology. The sample is separated by gas chromatography and identified by mass selective detector. Quantification is carried out within the instrument software.	EPA Method 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography.	µg/kg PCB 28=1.25 PCB 52=1.12 PCB 101=1.32 PCB 118=1.43 PCB 153=2.08 PCB 138=1.35 PCB 180=1.42	UKAS MCERTS(Soils)

DETS INFO 001 – ANALYTICAL METHOD SUMMARY

Method Number	Title	Description	Reference	LOD	Accreditation Status
DETSC 3402	Polychlorinated Biphenols in Waters by GC/MS	The water sample is extracted in DCM on a reciprocal shaker. The sample is separated by gas chromatography and identified by mass selective detector. Quantification is carried out within the GC-MS software using an internal standard.	EPA Method 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography.	ng/l PCB 28=208 PCB 52=161 PCB 101=211 PCB 118+123=513 PCB 153=163 PCB 138=107 PCB 180=132 PCB 105=133 PCB 114=253 PCB 126=399 PCB 156=253 PCB 157=119 PCB 167=248 PCB 169=181 PCB 189=271 PCB 77=202 PCB 81=186	UKAS
DETSC 3432	Volatile Organic Compounds in Waters by Headspace GC-MS	The method covers the range of volatile organic compounds with boiling points up to 220°C. Water samples are heated and agitated in a crimp cap vial. This drives the volatile components in to the headspace. An aliquot of the headspace is taken and injected in to a gas chromatograph with mass selective detection (GC-MS). The detector operates in full scan mode and is calibrated with standards containing known concentrations of the compounds of interest.	USEPA Method 8260B Volatile Organic Compounds by Gas Chromatography/Mass Spectrometry (GC/MS), Revision 2, December 1996	1 ug/l except: DCM (27), 2,2-Dichloropropane (2), Bromochloromethane (4), Bromodichloromethane (4), m+p-Xylene (2), 1,3-Dichlorobenzene (2)	UKAS except: Trichlorofluoromethane, Methylene Chloride, 1,1,1-Trichloroethane,

DETS INFO 001 – ANALYTICAL METHOD SUMMARY

Method Number	Title	Description	Reference	LOD	Accreditation Status
DETSC 3433	Semi-Volatile Organic Compounds in Soils by GCMS	The SVOCs in the soil sample are extracted into DCM: Acetone by shaking. The SVOCs in the extract are separated by gas chromatography and identified by the mass selective detector. The concentration of each SVOC is determined by referencing individual mass peak areas to the appropriate internal standard mass peak area. Quantification is carried out within the instrument software.	In-house method based on EPA Method 8270- US EPA Method 8270, Revision 3, Semi volatile Organic Compounds by Gas Chromatography – Mass Spectrometry (GC/MS)	Individual SVOCs 0.1 mg/kg	UKAS
DETSC 5001	Ash Content of Coal	The ash content of the sample is determined gravimetrically. A known weight of the sample is placed in a prepared ash crucible and placed in a furnace. The furnace is heated to 750°C ±10°C where the temperature is maintained. Following combustion the crucible and sample are removed, cooled and reweighed.	ASTM D3174-11 BS 1016-104.4 1998 ISO 1171: 2010	0.1%	UKAS
DETSC 5002	Ash & LOI Content of Solid Biomass & Solid Recovered Fuels	The ash and LOI content of the sample is determined gravimetrically. A known weight of the sample is placed in a prepared ash crucible and placed in a furnace. The furnace is heated to 550°C ±10°C where the temperature is maintained. Following combustion the crucible and sample are removed, cooled and reweighed.	BS EN 14775:2009 BS EN 15403:2011	0.1%	UKAS
DETSC 5003	Volatile Matter Content of Solid Biomass, Solid Recovered Fuels and Coal	A known weight of the sample produced for volatile matter determination is placed in a suitable crucible fitted with a lid. The crucible and sample is weighed and heated in a furnace with a limited air through put at a temperature of 900°C ±10°C for 7 minutes. The sample and crucible are re-weighed and the volatile matter content determined by difference.	BSEN15148:2009 – Solid Biofuels Determination of the Content of Volatile Matter BS EN 15402:2011 - Solid Recovered Fuels - Determination of the Content of Volatile Matter	0.1%	UKAS

DETS INFO 001 – ANALYTICAL METHOD SUMMARY

Method Number	Title	Description	Reference	LOD	Accreditation Status
DETSC 5004	Total Moisture / Dry Solids Content of Solid Biomass & Solid Recovered Fuels & Coal	The sample produced for general analysis is placed into a suitable prepared and weighed tray and reweighed. The sample is dried at 105°C to constant weight and the total moisture / dry solids content is calculated from the reduction in weight.	BSEN 14774 Parts 1 & 2 2009 DD CEN/TS 15414 Parts 1 & 2: 2010	0.1%	UKAS
DETSC 5005	Analysis Moisture Content of Solid Biomass, Solid Recovered Fuels & Coal	The sample produced for total moisture determination in accordance with DETSC 5009 or DETSC 5010 is placed in a suitable pre-weighed tray and reweighed. The sample is then dried at 105°C ±2°C to constant weight and then weighed again. The analysis moisture content is calculated from the reduction in weight.	BS EN 14774-3 2009 BS EN 15414-3 2011 BS 1016-104.1 -1999 ISO 11722 – 1999	n/a	UKAS
DETSC 5007	Calorific Value of Solid Biomass, Solid Recovered Fuels & Coal	Calorific value of a material is determined in an Isoperbol calorimeter by burning it in pure oxygen in a combustion bomb. A known amount of sample is placed in a combustion bomb which is then pressurised to 30bar with oxygen. A calorimeter bucket is filled with a known amount of deionised water which is placed in the calorimeter and the bomb placed in the bucket. The system is allowed to equilibrate and the bomb fired by electrical connection. The difference in temperature of the water in the calorimeter bucket caused by the ignition of the material in the bomb is measured and the calorific value calculated	BS EN 14918: Solid biofuels – Determination of calorific value BS EN 15400: Solid recovered fuels - Determination of calorific value	1MJ/kg	UKAS
DETSC 5008	Calorific Value of Soil	A known amount of sample material is burnt in a combustion bomb that is immersed in water in a calorimeter and the difference in the water temperature before and after ignition measured. The calorific value of the sample material is calculated making any necessary corrections for heat generation not associated with the combusting sample. A gelatine capsule will be required to assist combustion which is also corrected for in the final calculations.	BS 1016-105 1992 ISO 19208 ASTM 5865	1MJ/kg	UKAS

DETS INFO 001 – ANALYTICAL METHOD SUMMARY

Method Number	Title	Description	Reference	LOD	Accreditation Status
DETSC 5009	Sample Preparation of Solid Biomass & Solid Recovered Fuels	If analysis is required on the original material (i.e. Bulk Density) a sub-sample will be taken after initial mixing after which the sample is then reduced by cutting/chopping oversized pieces of material. The material is then mixed and subdivided by manual means during which process representative samples are taken for analysis i.e. total moisture. The remainder of the sample is dried and then reduced to <1mm and again mixed and subdivided to produce the sample for laboratory analysis.	BS EN 14780:2011 BS EN 15413:2011	n/a	Not Accredited
DETSC 5010	Sample Preparation of Coal	If required the sample received is first mixed and a sample taken for bulk density or bulk density is carried out on the whole initial sample. The remaining sample or the whole sample used for bulk density is then reduced to <10mm preferably by jaw crushing. The material is then mixed and subdivided by mechanical or manual means during which process representative samples are taken for any analysis required at this stage i.e. total moisture, The remainder of the sample is again mixed and subdivided to produce the sample for laboratory analysis which may require drying prior to crushing to <212 microns. If there is excessive water content a pre- drying stage of the whole sample may have to be carried out before sample blending and subdivision commences.	BS ISO 13909-4: 2001	n/a	Not Accredited
DETSC 5011	Calculation of Fixed Carbon Content of Coal, SRF and Solid Biomass Fuels	The total moisture, analysis moisture, ash and volatile matter content are determined by approved methods. The values obtained are deducted from 100 and this gives the fixed carbon value of the fuel.	DD CENT/S 15296:2006 BS 1016.100:1994 BS ISO 17246:2005	0.1%	Not Accredited

DETS INFO 001 – ANALYTICAL METHOD SUMMARY

Method Number	Title	Description	Reference	LOD	Accreditation Status
DETSC 5012	Determination of Biomass Content of SRF	Approximately 5g of the sample is dissolved in 150ml of 78% Sulphuric Acid for 16 hours \pm 2 hours after which 35ml of 30% Hydrogen Peroxide is added and the sample left for an additional 5 hours \pm 1 hour. At the end of this period 300ml of deionised water is added to the sample and the residue remaining filtered off using a glass fibre filter paper, washing the residue with an additional 300ml of deionised water. The filter paper and residue are placed in a pre-weighed crucible and dried at 1500C until completely dry. The filter paper is reweighed after drying and the non biomass residue determined. Corrections for carbonates content is made by determining the ash content of the original sample and the non biomass residue remaining. The result can also be expressed by percentage calorific value by performing a calorific value on the solid captured on the filter paper.	BS EN 15440 Solid recovered fuels - Methods for the determination of biomass content	n/a	UKAS
DETSC 5013	Determination Of Carbon, Hydrogen, Nitrogen & Oxygen In Solid Biomass, Solid Recovered Fuels & Coal	A known mass of fuel is weighed into tin capsules which are dropped sequentially into the combustion reactor prior to the arrival of oxygen. The sample and tin capsule react with oxygen and combust at temperatures of 1700-1800 °C and the sample is broken down into its elemental components N ₂ , CO ₂ , and H ₂ O. High performance copper wires absorb the excess oxygen not used for sample combustion. The gases flow through the gas chromatographic (GC) separation column which is kept at a constant temperature. As they pass through the GC column, the gases are separated and are detected sequentially by the thermal conductivity detector (TCD). The TCD generates a signal, which is proportional to the amount of element in the sample. The instrument software compares the elemental peak to a known standard material (after calibration) and generates a report for each element on a weight basis. The oxygen is calculated by deducting these quantities from 100 along with the moisture, ash, sulphur & chlorine contents determined by other methods.	BS EN 15104:2011 Solid biofuels - Determination of total content of carbon, hydrogen and nitrogen - Instrumental methods BS EN 15407:2011 Solid recovered fuels - Methods for the determination of carbon (C), hydrogen (H) and nitrogen(N) content BS EN 15296:2011 Solid biofuels - Conversion of analytical results from one basis to another	Carbon 0.10% Nitrogen 0.30% Hydrogen 0.30% Oxygen 3.55%	UKAS

DETS INFO 001 – ANALYTICAL METHOD SUMMARY

Method Number	Title	Description	Reference	LOD	Accreditation Status
DETSC 5014	Metals in Coal, SRF and Biomass by ICP	Metals in coal, solid recovered fuel (SRF) and biomass samples are extracted by microwave using Hydrogen Peroxide (to oxidise and break down organic matter) and Aqua Regia (to dissolve the matrix and hold the metals in solution). Their concentrations are determined by Inductively Coupled Plasma Optical Emission Spectroscopy (ICP-OES).	BS EN 15410 - Solid recovered fuels - Methods for the determination of the content of major elements (Al, Ca, Fe, K, Mg, Na, P, Si, Ti) BS EN 15411 - Solid recovered fuels - Methods for the determination of the content of trace elements (As, Ba, Be, Cd, Co, Cr, Cu, Hg, Mo, Mn, Ni, Pb, Sb, Se, Tl, V and Zn) BS EN 15290 - Solid biofuels - Determination of major elements - Al, Ca, Fe, Mg, P, K, Si, Na and Ti BS EN 15297 - Solid biofuels - Determination of minor elements - As, Cd, Co, Cr, Cu, Hg, Mn, Mo, Ni, Pb, Sb, V and Zn	0.1 mg/kg: As, Be, Cd, Co, Mn, Ni, P, Pb, Sb, Se, Sn, Ti, V, Zn 0.2mg/kg: Cr, Cu, Tl 0.5mg/kg: Mo 1mg/kg: Al, Fe, K, Mg 5mg/kg: Ca 10mg/kg: Ag, Ba, Rh, Sr, Te	UKAS: Al, As (SRF only), Ca, Cd, Co, Cr, Cu, K, Mg, Mn, Na (SRF only), Ni, P, Pb, Se, Sn, Tl, V, Zn All other metals not accredited
DETSC 5015	Mercury in Coal, SRF and Biomass by Atomic Fluorescence Spectroscopy	The mercury is extracted from coal, SRF and biomass in aqua regia with gentle refluxing. The extract is filtered to remove particulates and diluted to volume. Treatment of the resulting solution with tin (II) chloride reduces mercury (II) to mercury (0) vapour which is then quantitatively detected using atomic fluorescence spectrometry.	PSA Method – Millennium Merlin Method for Mercury in Sludge, Soils and Sediments.	0.055mg/kg	UKAS

DETS INFO 001 – ANALYTICAL METHOD SUMMARY

Method Number	Title	Description	Reference	LOD	Accreditation Status
DETSC 5016	Total Sulphur Content Of Coal, SRF And Biomass	<p>Sulphur compounds in SRF and biomass are extracted using aqua regia / hydrogen peroxide and the insoluble residue is removed by filtration. The concentration of sulphur in the filtrate is determined by Inductively Coupled Plasma Optical Emission Spectroscopy (ICP-OES). Loss of sulphur as H₂S is prevented by oxidation of the sulphur compounds to sulphate by the aqua regia. The use of hydrogen peroxide enhances the oxidation properties of nitric acid especially in the digestion of organics.</p> <p>Sulphur compounds in coal are determined by ICP-OES from the aqueous washings of the combustion products after firing in a bomb calorimeter.</p>	TRL Report TRL447 (Updated) - Sulphate specification for structural backfills 2005	0.001mg/kg	UKAS
DETSC 5017	Sulphur, Chlorine, Fluorine & Bromine Content of Solid Biomass, Solid Recovered Fuels and Coal by IC	A known weight of fuel is burnt in a pressurised bomb in pure oxygen. After firing of the bomb, it is stood for a minimum of five minutes to allow the combustion products to settle then the oxygen is slowly released over a period of at least three minutes. The bomb is then taken apart and the bomb electrodes rinsed with deionised water into the inside of the bomb. These washings are then decanted into a 50ml volumetric flask. The inside of the bomb is rinsed with deionised water and the washings added to those in the volumetric flask. The contents of the volumetric flask are made up to volume with deionised water and stored for the analysis of sulphur, chloride, fluoride and bromide by ion chromatography.	<p>Operating Instruction Manual No. 442M 6200 Parr Oxygen Bomb Calorimeter</p> <p>Operating Instruction Manual No. 205M 1108 Oxygen Combustion Bomb</p> <p>Operating Instruction Manual No. 454M 6510 Water Handling System</p>	<p>0.01% Chlorine</p> <p>0.01% Fluorine</p> <p>0.01% Bromine</p> <p>0.04% Sulphur (Coal only)</p>	UKAS

DETS INFO 001 – ANALYTICAL METHOD SUMMARY

Method Number	Title	Description	Reference	LOD	Accreditation Status
DETSC 5018	XRF Analysis of Coal, Biomass, SRF and Cement	<p>When X-rays are targeted at a material they will cause electrons to be ejected from the component atoms (Ionisation). The ejection of electrons will cause the electronic structure of the component atoms to become unstable resulting in electrons from the higher energy outer orbitals “falling” into the inner orbitals to compensate. This causes a release of energy in the form of a photon equal to the energy difference between the two orbitals involved. Thus the material emits radiation which has energy characteristics of the atoms present.</p> <p>In energy dispersive X-ray fluorescence the fluorescent X-rays emitted are directed to a detector from which the data is processed by a multichannel analyser, producing a digital spectrum which is processed to obtain analytical data.</p> <p>The instrument analytical parameters are set up for the matrix type. A sample cell is prepared by placing a piece of prolene film over the outer cell and then inserting the inner cell. This gives a complete cell with a clear prolene base. A portion of the sample is placed into the cell and then analysed.</p>	Rigaku NEX CG EDXRF instruction manual	<p>Cement: 0.01% BaO, Cr₂O₃, CuO, PbO, Rb₂O, SrO, ZnO 0.02% Cl, V₂O₅ 0.05% TiO₂ 0.1% Mn₂O₃, P₂O₅, SO₃ 0.5% K₂O 1% Al₂O₃, CaO, CdO, Co₂O₃, Fe₂O₃, MgO, Na₂O, NiO, SiO₂, Y₂O₃ Fuel: 0.01% Co, Cr, Cu, I, Li, Mn, Ni, P, Pb, Sn, Ti, V, Zn 0.02% Al, Ba, S, Si 0.1% Mg 0.2% Ca 0.5% As, Cd, Hg, Mo, Na, Sb, Se, Th, Tl 1% Ag</p>	<p>UKAS Al, As, Ca, Cd, Co, Cr, Cu, Fe, Hg, K, Mg, Mn, Mo, Na, Ni, P, Sb, Si, Sn, Tl, Ti, V, Zn Al₂O₃, BaO, CaO, Cl, Cr₂O₃, CuO, Fe₂O₃, K₂O, MgO, Mn₂O₃, Na₂O, P₂O₅, PbO, Rb₂O, SiO₂, SO₃, SrO, TiO₂, V₂O₅, ZnO</p> <p>All other testing not accredited</p>
DETSC 5019	Determination of Biodegradable Municipal Waste Content (Compositional Analysis)	The method is based on handpicking the BMW fraction from the municipal waste sample, and then weighing the amount of BMW sorted and expressing this as a percentage on a wet weight basis of the weight of the whole municipal waste sample.	ENVIRONMENT AGENCY: Guidance on monitoring of MBT and other treatment processes for the landfill allowances schemes (LATS and LAS) for England and Wales	n/a	Not Accredited
DETSC 5020	Determination of Bulk Density in Solid Biomass and Solid Recovered Fuels	The test portion is filled into a standard container of a given size and shape and weighed afterwards. Bulk density is calculated from the net weight per standard volume and reported for the moisture content.	<p>BS EN 15103:2009 Solid Biofuels- Determination of bulk density</p> <p>BS EN 15401:2010 Solid Recovered Fuels- Determination of bulk density</p>	0.5kg/m ³	Not Accredited

DETS INFO 001 – ANALYTICAL METHOD SUMMARY

Method Number	Title	Description	Reference	LOD	Accreditation Status
DETSC 5021	Auto Ignition Temperature	A quantity of the sample is placed into a metal tray or crucible and placed into an oven or furnace. The temperature of the oven / furnace is increased in predefined increments and the temperature in which the sample ignites is noted.	None	25°C	Not Accredited

DETS INFO 008 – Sample Holding Time Information

Soil

Analyte	Container type	Minimum sample required	Reference	Maximum holding time from sampling	
				pre drying/extraction ¹	post drying/extraction ²
Aliphatic/Aromatic	Glass	20g	EPA Victoria	14 days	-
Ammonium	Glass or plastic	20g	E DIN 19746	3 days	30 days
Anions	Glass or plastic	20g	BS ISO18512:2007	1 month	3 years
Boron	Glass or plastic	50g	BS ISO18512:2007	6 months	30 years
BTEX	60ml glass jar	Full container	EPA SW-846 Chapter 4	14 days	-
Carbonate	Glass or plastic	20g	Lab Validation	4 weeks	1 year
Chloride	Glass or plastic	20g	BS ISO18512:2007	1 month	3 years
Conductivity	Glass or plastic	20g	BS ISO18512:2007	1 week	3 years
Cyanide	Glass or plastic	20g	EPA SW-846 Chapter 3	14 days	-
Heavy metals	Glass or plastic	10g	BS ISO18512:2007	6 months	30 years
Hexavalent chromium	Glass or plastic	20g	BS ISO18512:2007	30 days	
Loss on ignition	Glass or plastic	10g	EPA SW-846 Chapter 3	28 days	-
Mercury	Glass or plastic	10g	EPA SW-846 Chapter 3	28 days	-
OCP	Glass	20g	BS ISO18512:2007	1 month	
Oil & grease	Glass	20g	EPA SW-846 Chapter 3	28 days	-
Organic matter/TOC	Glass or plastic	20g	EPA SW-846 Chapter 3	28 days	-
PAH	Glass	20g	EPA Victoria	14 days	-
PCB	Glass	20g	BS ISO18512:2007	1 month	
pH	Glass or plastic	20g	BS ISO18512:2007	1 week	3 years
Phenols	Glass	20g	EPA Victoria	14 days	-
PRO	60ml glass jar	Full container	EPA SW-846 Chapter 4	14 days	-
Sulphate	Glass or plastic	50g	BS ISO18512:2007	1 month	3 years
Sulphide	Glass or plastic	20g	EPA SW-846 Chapter 3	7 days	-
SVOC	Glass	20g	EPA SW-846 Chapter 4	14 days	40 days
TEM/CEM	Glass	20g	EPA Victoria	14 days	-
Total sulphur	Glass or plastic	20g	EPA Victoria	7 days	-
TPH (C10-C40)	Glass	20g	EPA Victoria	14 days	-
VOC	60ml glass jar	Full container	EPA SW-846 Chapter 4	7 days	-

Sample storage environment 5 ± 3°C

¹ From sampling to extraction

² Once extracted

DETS INFO 008 – Sample Holding Time Information

Water

Analyte	Container type	Minimum sample required	Reference	Maximum holding time from sampling	
				pre drying/extraction ¹	post drying/extraction ²
Alkalinity	Glass or plastic	100	ISO 5667 3:2012	none	2 weeks
Aluminium (Reactive)			CIP 2 Tech Spec	none	5 days
Ammonium	Glass or plastic	20	ISO 5667 3:2012	Sulphuric acid	3 weeks
BOD	Glass or plastic	500	CIP 2 Tech Spec	none	5 days
Boron			ISO 5667 3:2012	HNO ₃	6 months
Bromide	Glass or plastic	20	ISO 5667 3:2012	none	1 month
BTEX	Glass vial	Full container	ISO 5667 3:2012	HCl / HNO ₃	7 days
Chloride	Glass or plastic	20	ISO 5667 3:2012	none	1 month
COD	Glass or plastic	20	ISO 5667 3:2012	Sulphuric acid	1 month
Conductivity/TDS	Glass or plastic	100	ISO 5667 3:2012	none	1 day
Cyanide	Glass or Plastic	50	EPA SW-846 Chapter 3	NaOH	14 days
Fluoride	Glass or plastic	20	ISO 5667 3:2012	none	1 month
Hexavalent chromium	Glass or plastic	20	ISO 5667 3:2012	none	4 days
Metals	Glass or plastic	20	CIP 2 Tech Spec	HNO ₃	6 months
Mercury	Glass or plastic	20	CIP 2 Tech Spec	Acid / dichromate	28 days
Nitrate	Glass or plastic	20	EPA SW-846 Chapter 3	none	28 days
Nitrite	Glass or plastic	20	EPA Victoria	none	48 hours
OCP	Glass	500	ISO 5667 3:2012	Dark Glass	7 days
Oil & grease	Glass	500 (Separate bottle)	ISO 5667 3:2012	HCl / HNO ₃ / H ₂ SO ₄	1 month
PAH	Glass	500	CIP 2 Tech Spec	none	5 days
pH	Glass or plastic	50	CIP 2 Tech Spec	none	2 days
PCB	Glass	500	EPA Victoria	none	7 days
Phenols	Glass	500	ISO 5667 3:2012	H ₃ PO ₄ / H ₂ SO ₄	21 days
Phosphate	Glass or plastic	20	CIP 2 Tech Spec	none	6 days
Phosphorus	Glass or plastic	20	CIP 2 Tech Spec	none	6 days
PRO	Glass vial	Full container	ISO 5667 3:2012	HCl / HNO ₃ / H ₂ SO ₄	7 days
Sulphate	Glass or plastic	20	ISO 5667 3:2012	none	1 month
Sulphide	Plastic	50	CIP 2 Tech Spec	Zinc acetate / Na ₂ CO ₃	5 days
Suspended solids	Glass or plastic	100	CIP 2 Tech Spec	none	5 days
SVOC	Glass	500	EPA SW-846 Chapter 4	none	7 days
TOC/DOC	Glass or plastic	20	CIP 2 Tech Spec	none	5 days
TON	Glass or plastic	20	CIP 2 Tech Spec	none	5 days
TPH/EPH	Glass	500 (Separate bottle)	ISO 5667 3:2012	none (HCl / HNO ₃)	4 days (1 Month)
VOC	Glass vial	Full container	ISO 5667 3:2012	HCl / HNO ₃ / H ₂ SO ₄	7 days

Sample Transport environment 5 ± 3°C

Sample Storage environment 3 ± 2°C

DETS INFO 008 – Sample Holding Time Information

Fuel

Due to the nature of fuel samples, no sample holding time is appropriate.

Asbestos

Due to the nature of asbestos samples, no sample holding time is appropriate.

Unaccredited Methods

As unaccredited methods may not have undertaken a full validation programme, no sample holding time study has been undertaken. A study will be conducted (if required) during the process of accreditation of the method.