



## REMEDiation AND ENABLING WORKS VALIDATION REPORT

**Parcel C**

**Former Prysmian Cable Works,  
Carr Lane,  
Prescot**

Prepared for:



**E3P Report: 10-021-R12-Rev 1  
Issued: February 2017**

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| REMARKS        | Final                         |
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| PROJECT NUMBER | 10-021-Parcel C               |

## Executive Summary

|                                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|----------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Site Address</b>                    | Parcel C - Land off Carr Lane, Prescott, L34 1JZ                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Grid Reference</b>                  | E346218, N391982,                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>Stated Objective</b>                | The primary purpose of this report is to document the implementation and subsequent validation of land remediation and enabling works completed as part of the construction of a series of land parcels, this report is focused solely on Parcel C within the wider Prescott Park development site.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>Site Remediation and Validation</b> | <p>All works at the site have been conducted in accordance with the agreed Remediation Strategy. The main outputs from the works are:</p> <ul style="list-style-type: none"> <li> Demolition of former site buildings;</li> <li> Excavation, processing of all surface slabs and hard materials;</li> <li> Replacement of materials in accordance with the E3P enabling specification &amp; engineering requirements;</li> <li> Cut Fill earthworks to prepare the proposed development platform;</li> <li> Validation of materials placement to confirm suitability;</li> <li> Investigation of recorded / unrecorded mine shafts;</li> <li> Completion of in-situ geotechnical testing;</li> <li> Restoration of site to required Enabling Works Level; and,</li> <li> All works to be undertaken in strict accordance with UK Environmental Permitting and Local Planning Authority Requirements and to the satisfaction of Knowsley MBC.</li> </ul> |
| <b>Geotechnical</b>                    | <p>The Remediation &amp; Enabling works have been designed, implemented and validated by E3P to ensure the construction of a development platform to meet the following criteria:</p> <ul style="list-style-type: none"> <li> Placement and engineering of up-fill materials to ensure suitability for Ground Improvement by the construction of Vibro Stone Columns;</li> <li> Engineering of the up-fill material to ensure compliance with the Highways Design Manual (Series 600) with a CBR &gt;5% in the sub-grade.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>Japanese knotweed</b>               | Japanese Knotweed has been eradicated from all development Parcels by a process of excavation and removal by McAuliffe with subsequent validation by their independent specialist.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>Coal Mining</b>                     | <p>A single mine entry (shafts) was identified at the south-east sector of the Parcel C Boundary during the site remediation and enabling works. The appointed mine stabilisation contractor, Groundshire have stabilisation works which included the drilling and grouting of this feature in accordance with the CA Permission and in due consideration of industry best practise CIRIA 665. Rockhead was proven at ~8.0m below remediated ground level, however while the shaft has been grouted it currently remains uncapped.</p> <p>No further evidence any other recorded mine entries has been identified during the intrusive drilling or site enabling works. It will therefore be necessary to ensure that all proposed structures and infrastructure are outside the calculated zone of radial influence of the identified shaft (20m of recorded position).</p> <p>The Bastian Coal (Wigan Five Feet) Seam outcrops within the south east of Parcel C beneath with a known thickness of &lt;1.50m dipping south and west. Workings are present within this seam of coal at ~11.0m below remediated ground level. All workings have been stabilised by Groundshire in accordance with the Coal Authority Permission and industry guidance CIRIA 32. Boreholes across the north and central sector confirmed the absence of coal and unrecorded workings.</p>                                                                                                                                                                                                                                                                                                                                         |

## Executive Summary

### Build Phase Development Works

Post remediation constraints for the site include:

-  Unrecorded historical workings have been proven within the Bastian Coal Seam that sub-crops within the southern portion of Parcel C dipping southwest. These workings have been stabilised by pressure grouting completed by Groundshire. NO further coal or workings are present beneath the wider parcel.
-  A mine entry is present in the south-east sector with an appropriate no build zone applied;
-  Sub surface concrete should be designed in accordance with Design Sulphate Class DS-1, Aggressive Chemical Environment for Concrete Classification (AC EC) Ac-1s in accordance with recommendations provided in BRE Special Digest 1 (2005);
-  Placement of clean sub-soil and topsoil in soft landscaped areas must be a minimum of 600mm;
-  Foundation strategies should take into account the properties of the strata left in-situ;
-  Dwellings to be constructed in due consideration of requirements of post remediation ground gas mitigation monitoring; and,
-  Due consideration of historical mine entries.

## Table of Contents

|       |                                                                 |    |
|-------|-----------------------------------------------------------------|----|
| 1.    | INTRODUCTION.....                                               | 5  |
| 1.1   | Limitations .....                                               | 5  |
| 1.2   | Correspondence with Regulatory Authorities .....                | 5  |
| 1.3   | Previous Works .....                                            | 5  |
| 1.4   | Confidentiality .....                                           | 6  |
| 2.    | SITE CHARACTERISTICS.....                                       | 7  |
| 2.1   | Site Details .....                                              | 7  |
| 2.2   | Summary of Parties Involved .....                               | 8  |
| 2.3   | Limitations .....                                               | 8  |
| 2.4   | Confidentiality .....                                           | 8  |
| 3.    | CONTAMINATION, REMEDIATION & ENABLING WORKS REQUIREMENTS.....   | 9  |
| 3.1   | Summary of Contamination Issues .....                           | 9  |
| 3.1.1 | Tier 1 Contamination Risk Assessment .....                      | 9  |
| 3.1.2 | Ground Gas .....                                                | 10 |
| 3.1.3 | Potable Water Supply Infrastructure .....                       | 10 |
| 3.2   | Correspondence with Regulatory Authorities .....                | 10 |
| 3.2.1 | Local Planning Authority – Human Health .....                   | 10 |
| 3.2.2 | Environment Agency – Controlled Water & Wider Environ .....     | 10 |
| 3.3   | Environmental Permit & Approvals .....                          | 11 |
| 3.3.1 | Local Authority Pollution Control – LAPC Part B Licensing ..... | 11 |
| 3.3.2 | Recovery of Materials – WRAP .....                              | 11 |
| 3.3.3 | CL:AIRE MMP – Definition of Waste.....                          | 12 |
| 4.    | SUMMARY OF REMEDIATION & ENABLING WORKS OBJECTIVES .....        | 13 |
| 4.1   | Remediation & Enabling Works Requirement .....                  | 13 |
| 4.2   | Second Phase Remediation & Enabling Works – Build Phase.....    | 14 |
| 4.3   | Implementation of Remediation & Enabling Works .....            | 15 |
| 5.    | POST REMEDIATION BUILD PHASE REQUIREMENTS .....                 | 21 |
| 5.1   | Overview of Build Phase Requirements.....                       | 21 |
| 5.2   | Chemical Analysis of Clean Cover System .....                   | 28 |
| 6.    | SCOPE OF MINE STABILISATION & CONSOLIDATION WORKS.....          | 34 |
| 6.1   | Drill & Grout Works.....                                        | 34 |
| 6.2   | Mine Entries .....                                              | 35 |

## APPENDICES

**Appendix I** Limitations

**Appendix II** Glossary

**Appendix III** Drawings

*E3P Drawing No 10-021-001*

*E3P Drawing No 10-021-015*

*E3P Drawing No 10-021-022*

*E3P Drawing No 10-021-031*

*E3P Drawing No 10-021-034*

*McAuliffe Drawing PRES-1265*

*McAuliffe Drawing PRES-1265*

*E3P Drawing No 10-021-037*

Site Location Plan

Remediation Master Plan

Boundary Treatment Plan

Coal Mining Plan REVB

Geotechnical Testing Locations

As-Built Survey

Turnover Levels

Ground Gas Validation Monitoring Location

**Appendix IV** Photographs of Remediation and Enabling Works

**Appendix V** Validation Chemical Analysis Results

**Appendix VI** Geotechnical Test Certificates

**Appendix VII** Groundshire Mine Stabilisation Completion Report

**Appendix VIII** Coal Authority Consultants Report

**Appendix IX** E3P Remediation Strategy

**Appendix X** E3P Specification for Abandoned Mine workings

**Appendix XI** Japanese Knotweed Eradication Validation

## 1. INTRODUCTION

This report details the remediation and enabling works operations that were undertaken by McAuliffe under the supervision of E3P for the proposed redevelopment of the far north western sector of the former Prysmian Cable Works off Carr lane in Prescott for residential end use.

E3P was appointed by Prescott Business Park as the Geo-Environmental Consultant for the site remediation and validation works.

Groundshire Ltd. have been appointed by Prescott Park to undertake supplementary investigation works to determine the location and condition of historical mine workings and where necessary undertake land stabilisation by consolidation through drill and grout and stabilisation to mine shafts as and where required.

It is intended that the central parcel of land of the wider Prysmian Cables site is to be redeveloped as a low rise residential housing with associated, landscaping, highways and infrastructure. The subject site is referred to as Parcel C within the wider Prescott Park Master Plan.

All acronyms used within this report are defined in the Glossary presented in Appendix II.

### 1.1 Limitations

The limitations of this report are present in Appendix I.

### 1.2 Correspondence with Regulatory Authorities

Prior to commencement of the remediation and enabling works, approval of the Remediation Strategy was sought from the Environmental Health department at Knowsley Metropolitan Borough Council (KMBC) and the Environment Agency.

All pre-commencement conditions were satisfied fully prior to commencement of the remediation and enabling works.

Throughout the remediation and enabling works, KMBC and their nominated specialist advisors from Merseyside Environmental Advisory Service (MEAS) have been consulted and invited to site to view the works, to confirm that all works are undertaken in accordance with regulatory approved methods.

A final phase of post remediation ground gas and groundwater monitoring was completed by the 30<sup>th</sup> June 2016 the results of which are documented herein.

### 1.3 Previous Works

The following phases of Geo-Environmental Assessment works have previously been carried out at the site:

-  **REC** – Geo-Environmental Investigation, Land at Carr Lane, Prescott, Report Reference 43875p2r0, dated May 2011;
-  **WSP** – Phase 1 Geo-Environmental Site Investigation, Report Reference 12121590/002, dated January 2008; and,

-  **WSP** – *Phase 2 Geo-Environmental Site Investigation, Report Reference 12121590/002 dated June 2008.*
-  **E3P** – *Remediation and Enabling Works Strategy, Prysmian Cables, Prescott, Report Reference 10-021-r4-RevA, dated June 2014.*
-  **E3P** – *Specification for Consolidation of Abandoned Mine Workings, Report Reference 10-021-r1 dated February 2014.*

The details of the above-mentioned reports are included within the E3P Remediation and Enabling Works Strategy.

All above mentioned reports have been submitted and approved by KMBC.

Pertinent points of the above mentioned reports are included in Section 2.0.

#### **1.4 Confidentiality**

E3P has prepared this report solely for the use of the Client and those parties with whom a warranty agreement has been executed, or with whom an assignment has been agreed. Should any third party wish to use or rely upon the contents of the report, written approval must be sought from E3P; a charge may be levied against such approval.

## 2. SITE CHARACTERISTICS

### 2.1 Site Details

|                                |                                                                                     |
|--------------------------------|-------------------------------------------------------------------------------------|
| <b>Site Address</b>            | Parcel C - Land off Carr Lane, Prescot, L34 1JZ                                     |
| <b>National Grid Reference</b> | E346218, N391982,                                                                   |
| <b>Parcel Plan</b>             |  |

A site location map is presented in Appendix III as Drawing 10-021-001.

Parcel C is located within the central sector of the wider development site to the southwest of parcel A, further ongoing development of commercial premises to the east of the parcel with a new retail development under construction and imminent residential development within the wider Prescot Park to the east, south and west.

The newly constructed adopted highway (spine road) forms the south and south western boundaries and provides access to the development parcel. The detailed construction design, independent Construction Quality Assurance (CQA) and corresponding regulatory approvals are available from the Prescot Park Development Managers.

Prior to the instigation of remediation and enabling works, Parcel C was a spilt level plateau with a re-enforced concrete retaining wall transecting north south through the centre with a large earth retaining embankment supporting the a portion of the large BICC (later) Prysmian Cables main manufacturing building that extended east and north across Parcels A&B.

Parcel C remained largely undeveloped throughout the 20<sup>th</sup> century with only the formal re-enforced concrete and earth retaining walls formally present. All such features have since been removed as part of the large scale remediation and enabling works documented herein.

The earth embankment and far western portion of Parcel C as a level plateau (higher elevation) was created by infilling the land with ash type materials in the late 1940's and early 1950's prior to the construction of the Prysmian Cable Facility that was predominantly located in Parcel A&B.

The former Prysmian Cables building was a large portal frame structure constructed in the 1950's with a cast in-situ floor slab, underground ducting and large pad foundations to support the superstructure.

The 'main' British Insulated Coated Cable (BICC) works was located circa 250m to the north east of the subject site within an area that is now occupied by the Cables Retail Park. The subject site formed a stand-alone facility ancillary to the main BICC works (to the north east) with a Rod Mill in the southwest (Parcel D), the cable coating facility in Parcel A and Parcel B. The former BICC office building was located within the retail sector with the majority of Parcel E having remained largely undeveloped with only access infrastructure and mounded topsoil.

The overarching aim of the remediation and enabling works was to 'civilise' the landform removing the large difference in elevation (and thus the retaining walls) to create a parcel suitable for residential development.

Upon completion of the remediation and enabling works, Parcel C is a continuous plateau with gradients falling from north east to the west with some localised undulation in the topography.

The newly developed Parcel of land slopes down from east to west at a level of circa 61.50m AOD to circa 52.00m AOD at the western boundary (adjoining Parcel D). it may be necessary to construct a retaining feature at the eastern boundary between Parcel A & C, however this will be a function of their detailed infrastructure design and reserved matters application to suit the final development layout.

## 2.2 Summary of Parties Involved

| NAME OF PARTY                                     | FUNCTION / INTEREST |
|---------------------------------------------------|---------------------|
| Land Owner                                        | Prescot Park        |
| Developer                                         | TBC                 |
| Geo-Environmental Consultant                      | E3P                 |
| Main Contractor                                   | McAuliffe           |
| Remediation Contractor                            | McAuliffe           |
| Human Health Regulator / Local Planning Authority | Knowsley MBC        |
| Controlled Waters Regulator                       | Environment Agency  |

## 2.3 Limitations

The limitations of this report are presented in Appendix I.

## 2.4 Confidentiality

E3P has prepared this report solely for the use of the Client and those parties with whom a warranty agreement has been executed, or with whom an assignment has been agreed. Should any third party wish to use or rely upon the contents of the report, written approval must be sought from E3P; a charge may be levied against such approval.

### 3. CONTAMINATION, REMEDIATION & ENABLING WORKS REQUIREMENTS

#### 3.1 Summary of Contamination Issues

##### 3.1.1 Tier 1 Contamination Risk Assessment

The Tier I Risk Assessment for the protection of human health and controlled waters confirmed the site would pose no unacceptable level of risk to future site occupants or the wider environ subject to the construction of the following mitigation measures:

-  Cover system to all gardens (subject to detailed design);
-  Ground gas mitigation measures (defined by post remediation assessment); and,
-  Suitable potable water supply infrastructure.

Asbestos fibres were identified within the anthropogenic soils and as such all earthworks needed to be managed in strict accordance with the methodologies presented within the E3P Remediation Strategy. Furthermore, all asbestos impacted soils required careful placement at depth (>1.50m bgl) below plot areas or areas of hardstanding where they will not be disturbed in the future with circa 1.50m bgl inert cover above.

The REC Tier 1 Controlled Waters Risk Assessment completed for the 'Upper' Portion of the subject site did not identify any potentially soluble / mobile contaminants of concern that would pose a significant level of risk to the wider environ. Furthermore, given the presence of the underlying coal measures within the bedrock, no viable aquifer receptor has been identified.

As part of the post remediation validation, the Environment Agency requested further groundwater analysis and risk assessment to confirm the findings of the original WSP and REC Controlled Waters Risk Assessment. This work has been completed in May / June 2016 and is currently with the EA as part of a paid consultation for review. However, for the avoidance of any doubt Parcel C was not the subject of any historic significant contaminated land uses and thus the controlled waters risk assessment is more pertinent to the wider development site.

Copper slags were identified as being present within the section of the site named the 'finger' originating from the former site processes. These have been determined to not leach, however they were also determined to be chemically unsuitable for retention within the upper 1m of garden areas. Therefore, there was a requirement to ensure all copper slag is placed at a depth below 2.00m where it will not pose an unacceptable risk to chronic human health for the future site users.

As part of the proposed land regeneration works, extensive validation sampling was required to confirm the absence of any potentially volatile / soluble phase contaminants of concern that could present an unacceptable level of risk to the wide environ.

Given the completion of the large scale remediation and enabling earthworks (as detailed within this report) and the requirement to lift, sort and re-engineer the vast majority of anthropogenic materials across the site, it is considered that the extensive validation testing and watching brief during earthworks was the most appropriate method to identify, delineate and remediate any previously unidentified sources of volatile / soluble constituents of concern.

### **3.1.2 Ground Gas**

During the historical monitoring visits completed to by REC & WSP, no significantly elevated concentrations of methane were recorded within any of the probeholes. Elevated levels of carbon dioxide (up to 7.0% v/v) were recorded in WS111 although this is also associated with flow rates of 0.1l/hr.

WS111 was located within the central / southern boundary within the area of up-fill / 'finger', of Parcel B.

The E3P Remediation Strategy required that due to the significant change in elevation and large scale cut / fill earthworks, the ground gas regime must be re-assessed in detail on completion of the post remediation validation monitoring.

The results of this supplementary investigation, monitoring and risk assessment will inform the detailed specification and design of suitable mitigation measures to be incorporated within the proposed development.

### **3.1.3 Potable Water Supply Infrastructure**

Following a process of cut fill earthworks, it is considered that Polyethylene pipeline will be suitable for the proposed potable water infrastructure in the near surface soils between 0.75 and 0.9m bgl.

## **3.2 Correspondence with Regulatory Authorities**

### **3.2.1 Local Planning Authority – Human Health**

Merseyside Environmental Advisory Service (acting as the statutory Human Health regulator on behalf of Knowsley MBC) approved the land remediation works by way of the removal of the pre-commencement condition for the Planning Approval that specifically dealt with the remediation and cut / fill of the site.

The Planning Approval requires that a Validation Report be submitted for each parcel / phase of the proposed development either as part of the clearance of a planning condition on the outline consent. In light of this requirement, this Validation Report will be submitted to KMBC in pursuance of satisfaction of the relevant planning condition.

### **3.2.2 Environment Agency – Controlled Water & Wider Environ**

The REC / WSP Consulting Risk assessment has not identified any significant source of viable exposure pathway to controlled waters or the wider environ within the previous phases of intrusive investigation.

As part of the wider approval process, E3P has instigated a 'Paid Consultation' with the EA to gain the necessary all-inclusive approval for the wider Prescott Park development whereby agreement is sought to confirm that the site poses no risk to controlled waters.

Given the size of the regeneration works, the EA requested further post remediation validation sampling to confirm that the site poses no risk to controlled waters and specifically the critical receptor designated as Prescott Brook circa 170m northwest of Parcel C

Parcel C is located over Bastian & Tenlands coal measures, the subject site is not underlain by an aquifer and as such the sensitivity of this receptor is reduced.

### **3.3 Environmental Permit & Approvals**

#### **3.3.1 Local Authority Pollution Control – LAPC Part B Licensing**

The demolition materials were processed using dedicated ‘crushing plant’ mobilised to site by the Remediation Contractor.

Prior to mobilisation the appropriate deployment notification was submitted by the operator to the Local Authority to ensure due notification of the intended arrival and operation of the Part B LAPC process.

Copies of the standard deployment notification are available from the operator directly.

#### **3.3.2 Recovery of Materials – WRAP**

The recycled aggregate (recovered in accordance with the WRAP Protocol) has been subject to geotechnical and chemical testing to confirm suitability for use. This process was set out within the remediation and enabling works strategy and geotechnical performance criteria submitted to KMBC for formal approval.

To ensure compliance with the WRAP Protocol, a recycled aggregate must meet the following key criteria:

Aggregate will normally be regarded as having ceased to be waste, and therefore no longer subject to waste management controls, provided:

-  It conforms to the requirements of the European standard appropriate to the use it is destined for in terms of the requisite materials performance specification;
-  The aggregate is produced under Factory Production Control as required by the European standard, which again requires compliance with the standards for a construction aggregate;
-  Within Factory Production Control, inputs are limited and controlled to ensure only inert waste streams defined as acceptable within Appendix C of the WRAP Protocol are utilised;
-  it requires no further processing, including size reduction, for the use it is destined for, i.e. the material is a graded product;
-  It is destined for a use within the designated market sectors;
-  It conforms with CE conformity marking requirements contained in the Construction Products Regulations, which will apply to all aggregates placed on the market to harmonised European Aggregates Standards from July 2013

In essence, to demonstrate compliance with the WRAP protocol a simplistic test must be met:

-  The materials utilised for the production must be inert in both chemical and structural composition and as such must not exceed the total permissible levels for PAH (Coal Tar) or indeed any other contaminants as defined within the assessment criteria within WM3;
-  The material must be processed by appropriately licensed equipment with the relevant permit to ensure compliance with factory conditions;
-  The material must meet the physical requirements for an engineered aggregate; and,
-  The material must have a definitive use / commercial value to demonstrate recovery; and,
-  Validation testing is required to demonstrate compliance with the above criteria.

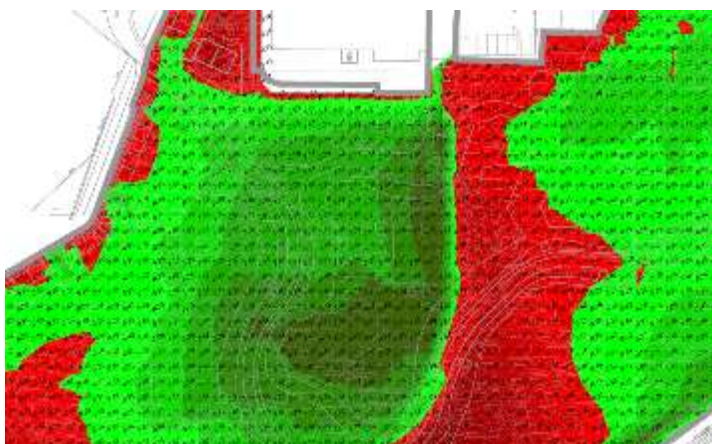
### 3.3.3 CL:AIRE MMP – Definition of Waste

A Materials Management Plan (MMP) was developed by MacAuliffe in accordance with the industry Code of Practice (Version 2) to document the proposed materials management operations and corresponding management objectives to demonstrate the safe, sustainable and legislatively compliant management and re-use of soils on-site.

The MMP was subject to review by an Qualified Person (QP) in accordance with the requirements of the CoP prior to the signed declaration being made to the CL:AIRE.

The eastern sector (area shaded red) of Parcel C was generally subject large earthwork exercise that required the removal of between 2-3 meters of historically placed fill that formally comprised a large earth embankment that sub-divided the upper and lower plateau. Subsequent to the cut operation, a turn-over of 3.0m was instigated with subsequent replacement of re-engineered material. In the western sector the landform was upfilled by circa 3.0 - 4.0 at the south west boundary to facilitate the construction of the appropriate road grade (area shaded green).

**Figure 3.1 – Extract of Cut / Fill Drawing**



## 4. SUMMARY OF REMEDIATION & ENABLING WORKS OBJECTIVES

The proposed remediation activities were detailed within the E3P Remediation Strategy and Enabling Works Plan (10-021-r1; dated June 2014) and supplementary supporting documentation provided by E3P.

This report has been prepared to document the completion of all necessary land remediation and enabling works and to record the presence of any variation in ground conditions or previously unidentified sources of potential contamination, environmental impact or potential nuisance to the wider environ.

### 4.1 Remediation & Enabling Works Requirement

-  Excavation and processing of all surface slabs and hard materials to a depth of 3.0m from the underside of proposed formation or the base of Made Ground (whichever is the shallower) across the entire site;
-  Breaking down and removal of all above ground structures including historic retaining walls;
-  Crushing, screening and processing of all Made Ground and subsequent replacement to ensure no oversized (>150mm) hard material is present within the upper 3.0m (from underside of enabling works level) of Made Ground across the entire development site;
-  Excavation and appropriate treatment / disposal of all deleterious Made Ground;
-  Excavation of any compressible organic alluvial deposits with subsequent stockpiling and chemical validation;
-  Major earthworks to cut /fill the site and achieve suitable development elevations in accordance with the agreed levels;
-  Importation of geotechnically suitable materials to build levels below proposed roadways and driveways;
-  Render the underlying stratum suitable for re-engineering through a process of Dynamic Compaction (NRG) and or Vibro Replacement Stone Columns;
-  Engineering of all roads, drives and proposed external hard-standing in accordance with the Highways Design Manual (Series 600) to ensure a minimum CBR Value of 5%;
-  Identification, treatment and remediation of any previously unidentified contamination hotspots in strict accordance with methodologies to be agreed with the regulatory authorities;
-  Replacement of materials in accordance with the E3P enabling specification & engineering requirements;
-  Post-remediation gas monitoring to confirm the ground gas regime for the site;
-  Validation of materials placement to confirm suitability; and,

All works to be undertaken in strict accordance with UK Environmental Permitting and Local Planning Authority Requirements and to the satisfaction.

## 4.2 Second Phase Remediation & Enabling Works – Build Phase

A second post demolition phase of works will be required to ensure the proposed development is constructed in a manner that incorporates the required mitigation measures to ensure the development is compliant with UK Building Regulations and the Local Authority Planning requirements.

Once the ground has been stabilised and rendered suitable for development, the builder will be required to undertake a second phase of remediation works to mitigate the identified theoretical risk to human health.

-  *Construction of all dwellings with appropriate ground gas mitigation measures;*
-  *Use of potable water supply designed in accordance with UKWIR;*
-  *Provide and place a 600mm thick soft growing medium to all garden and landscaped areas of the development (150mm imported topsoil, 450mm site won subsoil).*

### 4.3 Implementation of Remediation & Enabling Works

#### DEMOLITION OF EXISTING BUILDINGS

|                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|---------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Dates:</b>             | May 2014 - July 2014                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>Overview of Works:</b> | <p>The large variable height retaining wall / ramped access that transected north south through the central portion of the site supporting graded embankment leading to the lower level plateau that was broken down in a controlled manner in April 2014. The resulting historically filled stratum to the rear of the retaining wall was benched back to a safe 45% angle of repose, prior to the instigation of the main earthworks. For the avoidance of any doubt, no high walls or notable changes in natural stratum are present beneath Parcel C.</p> <p>The remains of the concrete pads were excavated and removed from beneath the former structure footprint in May 2014 with the resulting materials stockpiled within the central / southern sector of Parcel A/B for subsequent processing as a recycled aggregate in accordance with the WRAP Protocol.</p> <p>No further structures were present within Parcel C and no previously unidentified structures were encountered throughout the duration of the works to Parcel C.</p> |

#### CUT / FILL ENABLING WORKS

|                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|---------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Dates:</b>             | March 2015 – October 2015                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>Drawings:</b>          | <p><i>E3P Drawing 10-021-015</i> – Remediation Master Plan</p> <p><i>E3P Drawing 10-021-022</i> – Boundary Treatment Plan</p> <p><i>McAuliffe Drawing PRES-1256_HB_ASBLT</i> – As-Built Survey</p> <p><i>McAuliffe Drawing PRES-1256_HB_TURN</i> – Turnover Levels</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>Overview of Works:</b> | <p>Following the demolition of the existing site buildings, all concrete slabs, hardstand and relict sub-structures were lifted and stockpiled pending crushing and processing. In order to achieve the proposed development level, a fill level of circa 0-3m was required to grade the site to a suitable platform level in accordance with the E3P proposed contours issued within the E3P Remediation and Enabling Works Strategy.</p> <p>Given that the site has been the subject of a single phase of previous development, little historical unexpected obstructions / sub-structures were identified within the underlying soils / made ground.</p> <p>Due to the fill required, the re-engineered Made Ground soils were sorted through and deposited with in Parcel C the Parcel slopes from east to west. Made Ground present in the finger of the site was cut and placed within the fill areas in the eastern and central sector of the site. Furthermore, an element of fill was required in the southern perimeter of the site boundary to raise the formation levels to create the required development platform and remediation elevation.</p> |

**Overview of Works:**

Further cut in the south western sector of the wider site (parcel D) of natural drift and bedrock, was utilised to fill the southern sector. The backfill of materials was undertaken in accordance with the E3P Earthworks Remediation Specification (Ref: 10-021-r6).

All soils were inspected during the turnover by E3P in order to assess the potential for any previously unidentified contamination hotspots of areas of potential concern. For the avoidance of doubt, no evidence of potentially impacted soils was identified.

***Oversize Materials***

All existing hardstanding and any oversize materials were excavated from the Made Ground and stockpiled in the central sector of the upper plateau of the wider proposed development site for sorting and processing. Oversize materials within the Made Ground were very limited and only generally comprised relic foundations from existing and former buildings.

All below ground obstructions and hard materials were crushed to a 6F2 grade material along with the demolition rubble to be utilised within the earthworks at the site. The geotechnical testing certificates for these materials are included in Appendix VI.

E3P attended site to obtain samples of the crushed hard materials for chemical validation in accordance with the E3P Remediation Strategy. As shown above, ten samples of 6F2 were collected in total for chemical analysis.

Chemical analysis identified the crush materials to be chemically suitable for re-use within the earthworks. Although not specifically within the proposed Parcel C development site the adjacent spine road leading from Manchester Road in the north along the western boundary of the site was capped with 300mm of the aforementioned site generated 6F2 crush.

***Asbestos Containing Materials (ACM)***

Asbestos Containing Materials were identified within the general Made Ground materials across the entire Prysmian Cables site. Whilst not specifically identified within the proposed Parcel C sector, all soils were inspected and confirmed the absence of any visible ACM during the cut and fill enabling works.

The Remediation Contractor, McAuliffe Environmental opted to remove materials with notable visible ACM as oppose to a strategy of placement beneath buildings or hardstand. This option was necessary (in the main) due to the fact that no detailed development plan was available at the site of the remediation and enabling works. To this end, where possible all notable ACM has been removed to site in a highly controlled manner.

***Copper Slag***

Only isolated cobbles or copper slag was identified at sporadic locations, however no definitive evidence of concentration pockets was identified.

Within the McAuliffe Method Statement provision was made for the deployment and use of appropriate monitoring equipment in the event such material was identified, however given the isolated and relatively small quantities this was not deemed necessary.

## Compaction of Materials

|                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|---------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Overview of Works:</b> | <p>Within the northern / eastern sector of the Parcel C, the depth of Made Ground post remediation enabling works is &gt;3.0m bgl and such all anthropogenic materials have been lifted to a depth of 3.0m prior to the replacement in accordance with the compaction requirements for the material Type. The use of a Method Compaction specification required the pre-classification of materials generally (6N) prior to their placement in circa 250mm layers and compaction with &gt;5.5T smooth wheeled vibrating roller with &gt;8 passes on each and every layer.</p> <p>Within the southern / western sector of the site Made Ground generally extends to circa 3.0 to 6.0m below remediated ground level. In this instance the upper 3.0m below remediated platform was lifted, sorted and subsequently replaced in a controlled manner to ensure compliance with a Method Compaction specification.</p> |
|---------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

## IDENTIFICATION AND STABILISATION OF MINE SHAFT

|                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|---------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Dates:</b>             | May 2015                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>Drawings:</b>          | <p><i>E3P Drawing 10-021-031</i> – Coal Mining Plan</p> <p><i>Groundshire Drawing 12267-001</i> – Mineshaft Probe Plan (346392-019)</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>Overview of Works:</b> | <p>The Bastian Coal Seam out-crops at the southern site boundary transecting northwest / southeast dipping in a south westerly direction. The extent of coal workings within this seam is discussed in detail within a number of reports and specifically the Groundshire Mine Stabilisation Completion Report for the wider Prescott site.</p> <p>In summary the outcrop of the Bastian seam is proven to the north of the spine road at the southern extremity of Parcel C and as such extensive stabilisation works have been completed by Groundshire to ensure consolidation of all workings and ensure that land is stabilised for a future development. For the avoidance of any doubt, Groundshire have been commissioned by Prescott Park to consolidate all mine workings beneath the proposed development parcels in accordance with the E3P specification for mine stabilisation.</p> <p>A single mine entry is located at the southwestern sector of Parcel C, this feature has been located and stabilised by pressure grouting and capping in accordance with the Coal Authority Requirements. Full details of this work is documented within the Groundshire Completion Report.</p> <p>The appropriate 'No Build Zones' are denoted on the development layout plan where residential structures would be precluded, however it would be possible to construct adopted highways and infrastructure subject to consultation and approval from the appropriate authority.</p> |

### In Situ DCP Geotechnical Testing

|                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|---------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Dates:</b>             | April – June 2015                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Drawings:</b>          | <i>E3P Drawing 10-021-034</i> – Geotechnical Test Plan                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>Overview of Works:</b> | <p>Extensive in-situ Dynamic Cone Penetrometer (DCP) tests have been completed on a uniform grid across Parcel C. The DCP Test was generally advanced to 900mm below remediated level to assess the relative in-situ density and inform the calculation of an equivalent CBR Value. The results of the extensive DCP Testing confirmed CBR Values &gt;5% in the near surface increasing to 10% at circa 400mm bgl. The compactions methods undertaken during the remediation has generated a very compact development platform.</p> <p>In many instances the relative in-situ CBR was found to be in excess of 20% at circa 0.50m below remediated level indicating a very low modulus of sub-grade reaction and Youngs modulus confirming the potential for any long term differential settlement was non-existent.</p> |

### In Situ Plate Load Geotechnical Testing

|                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|---------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Dates:</b>             | April – June 2015                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>Drawings:</b>          | <i>E3P Drawing 10-021-034</i> – Geotechnical Test Plan                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Overview of Works:</b> | <p>In-situ Plate Load Tests have been completed on a uniform grid across Parcel C. The Plate Load test was completed at the remediated surface level to assess the relative instant settlement potential and inform the calculation of an equivalent CBR Value.</p> <p>The results of the Plate Load Testing confirmed CBR Values &gt;5% increasing to &gt;20%.</p> <p>Total recorded settlement under an applied load of 250kN/m<sup>2</sup> was less than 7mm in all instances confirm no settlement under loads that would significantly exceed the working load for a proposed structure.</p> <p>In many instances the relative in-situ CBR was found to be in excess of 20% at circa 0.50m below remediated level indicating a very low modulus of sub-grade reaction and Youngs modulus confirming the potential for any long term differential settlement was non-existent.</p> |

#### In Situ Zone Load - Geotechnical Testing

|                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|---------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Dates:</b>             | N/A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Drawings:</b>          | <i>E3P Drawing 10-021-034</i> – Geotechnical Test Plan                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Overview of Works:</b> | <p>The Zone Load Tests were positioned in accordance with BS1377: Part 9, Section 4.2 as per the E3P Zone Load Test Design and Method Statement, enclosed within this letter (Ref: Drawing 10-009-009). The base plate of each test was surveyed at each corner prior to loading and subsequent monitoring was completed at each 10kN/m<sup>2</sup> increment to the total loading of 70kN/m<sup>2</sup> was achieved. Each location was surveyed using a precise laser level to the accuracy of 0.01mm and calibrated on each visit using two fixed control points.</p> <p>The monitoring is ongoing and will be completed by March 2017.</p> <p>Initial monitoring completed in the wider site area confirmed that the materials beneath the site are generally uniform when taking the averages into consideration. The maximum deformation identified from tests across the wider site has been calculated at 13mm under an applied loading of 70kN/m<sup>2</sup>.</p> |

#### 4.4 Re-use of Materials & Compliance

With respect to samples Vibrostone 1-5, this material is stockpiled on-site in Parcel D and will be utilised within a Vibro Stone Column, the material form part of a building foundation and as such no future exposure pathway will exist.

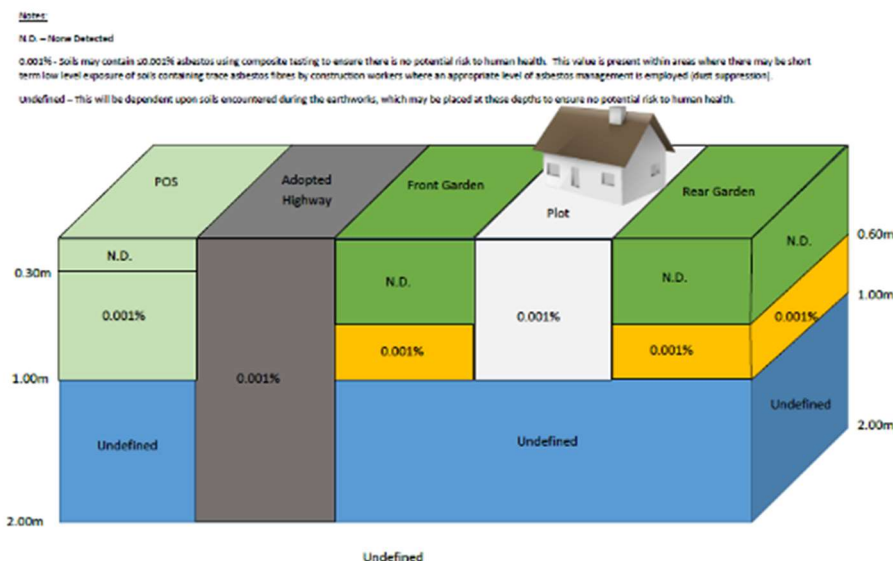
Prior to utilisation of this material, the contractor will undertake asbestos quantification analysis to demonstrate that the asbestos content is <0.001% by volume weight and as such it will not generate an airborne fibre concentration that will exceed the requirements of HSG 248 for the control of workplace exposure. However, for the avoidance of any doubt, the material will completely encapsulated and as such no potential for exposure to future residential site occupants is present.

Samples Subsoil 1-5 is representative of a stockpile of organic material currently located at the south west boundary within Parcel D. This material will be subject to asbestos quantification testing prior to placement within an area of no future sensitivity in accordance with the developed CSM.

For the avoidance of any doubt, all materials that will be utilised within the upper 600mm of a residential garden are to be subject to extensive laboratory testing and will be confirmed to be free of all detectable asbestos. The placement of the clean capping using certified materials will ensure no unacceptable risk to the identified receptors.

For clarity, E3P have included a diagrammatic CSM for the placement and management of asbestos impacted soils upon completion of the highly sensitive residential development.

**Figure 4.3 Asbestos Conceptual Site Model**



The developed CSM has been prepared in accordance with industry guidance CIRIA 733 with the works instigated in such a manner to ensure no future exposure to the critical residential receptor.

Given the former site use and nature of filled materials, it is self-evident that impact to all anthropogenic materials across the entire site, however given the quantities of material involved and the absence of any visible notifiable asbestos containing materials the overarching risk profile is reduced.

The implementation of the development in a manner that will ensure no future exposure pathway as set out within the CSM is sufficient to ensure the site is entirely suitable for the intended use.

Supplementary Validation Testing has been completed at the remediated surface at 13 No. locations across the site with quantification testing where a positive asbestos fibre result is detected. The results of this analysis are included within the I2 Analytical Report 17-42916 with the sample locations detailed within the drawing in Appendix III.

## 5. POST REMEDIATION BUILD PHASE REQUIREMENTS

### 5.1 Overview of Build Phase Requirements

This document details the construction works that are required to ensure full compliance with the remediation Strategy, Regulatory Authorities, Building Control & Warranty Providers;

The following should be implemented during the build phase of the development:

-  Laboratory testing of the imported topsoil;
-  Chemical validation of any additional subsoil imported for use within gardens;
-  Placement and validation of sub-soil (clean material) in a 450mm layer within any plots where the material was not placed during the Remediation & Enabling works;
-  Placement and chemical validation of imported topsoil within all gardens; and,
-  Installation and validation of ground gas protection measures.

### 5.2 Requirements for Further Works Prior to Substructure Construction

The following items remain to be addressed prior to construction of the development:

| ITEM                                          | DISCUSSION |
|-----------------------------------------------|------------|
| Submission of Validation Report to Regulators | N/A        |

### 5.3 Gas Mitigation Measures

The E3P Remediation Strategy required the installation of validation six ground gas monitoring wells across Parcel C to assess the post remediation ground gas regime.

The locations of the Ground Gas Monitoring wells are detailed within the E3P Drawing (ref: 10-021-040) included within Appendix III of this.

Concentrations of methane (CH<sub>4</sub>), carbon dioxide (CO<sub>2</sub>) and Oxygen (O<sub>2</sub>) were measured using an infra-red gas analyser (GFM435) calibrated to a reference standard (before and after each survey) and gas flow rates were measured using an attached flow pod.

Gas measurements were recorded for a minimum of sixty seconds at each location, at which point the maximum concentration of CH<sub>4</sub> and CO<sub>2</sub> together with the lowest concentration of O<sub>2</sub> were recorded. The results of the ground gas monitoring are presented in Table 5.1 (overleaf).

**Table 5.1 Summary of Ground Gas Monitoring Results**

| WELL  | DATE       | CH <sub>4</sub><br>INITIAL<br>%V/V | CH <sub>4</sub><br>STEADY<br>%V/V | CH <sub>4</sub><br>GSV<br>l/hr | CO <sub>2</sub><br>INITIAL<br>%V/V | CO <sub>2</sub><br>STEADY<br>%V/V | CO <sub>2</sub><br>GSV<br>l/hr | O <sub>2</sub><br>%V/V | ATMOS(<br>mB) | ATMOS.<br>DYNAMI<br>C | FLOW<br>(l/hr) | RESP<br>ONSE<br>ZONE<br>(mbgl) | DEPTH<br>TO<br>BASE<br>(mbgl) | DEPTH TO<br>WATER<br>(mbgl) |
|-------|------------|------------------------------------|-----------------------------------|--------------------------------|------------------------------------|-----------------------------------|--------------------------------|------------------------|---------------|-----------------------|----------------|--------------------------------|-------------------------------|-----------------------------|
| WS215 | 23/3/2016  | 0.1                                | 0.1                               | -0.00026                       | 0.6                                | 0.6                               | -0.00156                       | 2                      | 1011          | Rising                | -0.26          | 0.50-<br>3.0                   | 3.13                          | DRY                         |
|       | 01/04/2016 | 0.1                                | 0.1                               | 0.0001                         | 0.5                                | 0.5                               | 0.0005                         | 4.5                    | 1011          | Steady                | 0.1            |                                | 3.12                          | DRY                         |
|       | 08/04/2016 | 0.1                                | 0.1                               | -0.00052                       | 0.6                                | 0.6                               | -0.00312                       | 3.5                    | 1007          | Falling               | -0.52          |                                | 3.13                          | dry                         |
|       | 14/4/2016  | 0.1                                | 0.1                               | -0.00013                       | 0.5                                | 0.5                               | -0.00065                       | 3.9                    | 1003          | Steady                | -0.13          |                                | 3.13                          | dry                         |
|       | 22/04/2016 | 0.1                                | 0.1                               | -0.00026                       | 0.6                                | 0.6                               | -0.00156                       | 4                      | 1020          | Rising                | -0.26          |                                | 3.13                          | dry                         |
|       | 29/4/2016  | 0.1                                | 0.1                               | -0.00013                       | 0.5                                | 0.5                               | -0.00065                       | 3.8                    | 1006          | Falling               | -0.13          |                                | 3.13                          | dry                         |
| WS216 | 23/3/2016  | 1.9                                | 1.9                               | -0.00988                       | 0.8                                | 0.8                               | -0.00416                       | 1.7                    | 1011          | Rising                | -0.52          | 0.5-<br>5.0                    | 5.04                          | 4.79                        |
|       | 01/04/2016 | 0.2                                | 0.2                               | -0.00158                       | 0.3                                | 0.3                               | -0.00237                       | 4.8                    | 1011          | Steady                | -0.79          |                                | 5.03                          | 4.83                        |
|       | 08/04/2016 | 0.3                                | 0.3                               | -0.00156                       | 0.7                                | 0.7                               | -0.00364                       | 7.1                    | 1007          | Falling               | -0.52          |                                | 5.06                          | 5.06                        |
|       | 14/4/2016  | 0.2                                | 0.2                               | -0.00026                       | 0.6                                | 0.6                               | -0.00078                       | 6.9                    | 1003          | Steady                | -0.13          |                                | 5.05                          | 5.05                        |
|       | 22/04/2016 | 0.3                                | 0.3                               | -0.00156                       | 0.6                                | 0.6                               | -0.00312                       | 7                      | 1020          | Rising                | -0.52          |                                | 5.05                          | 5.05                        |
|       | 29/04/2016 | 0.1                                | 0.1                               | -0.00052                       | 0.1                                | 0.1                               | -0.00052                       | 20                     | 1006          | Falling               | -0.52          |                                | 5.07                          | 4.85                        |
| WS217 | 23/3/2016  | 1.4                                | 1.4                               | -0.09048                       | 0.5                                | 0.5                               | -0.0026                        | 2.8                    | 1011          | Rising                | -0.52          | 0.5-<br>4.0                    | 4.19                          | DRY                         |
|       | 01/04/2016 | 0.1                                | 0.1                               | -0.00079                       | 0.4                                | 0.4                               | -0.00316                       | 9.8                    | 1011          | Steady                | -0.79          |                                | 4.19                          | 4.19                        |
|       | 08/04/2016 | 0.1                                | 0.1                               | -0.00052                       | 0.3                                | 0.3                               | -0.00156                       | 9.1                    | 1007          | Falling               | -0.52          |                                | 4.2                           | dry                         |
|       | 14/4/2016  | 0.1                                | 0.1                               | -0.00052                       | 0.3                                | 0.3                               | -0.00156                       | 9.4                    | 1003          | Steady                | -0.52          |                                | 4.2                           | dry                         |
|       | 22/04/2016 | 0.1                                | 0.1                               | -0.00052                       | 0.4                                | 0.4                               | -0.00208                       | 8.2                    | 1020          | Rising                | -0.52          |                                | 4.2                           | dry                         |
|       | 29/4/2016  | 0.1                                | 0.1                               | -0.00052                       | 0.5                                | 0.5                               | -0.0026                        | 7.4                    | 1006          | Falling               | -0.52          |                                | 4.2                           | dry                         |
|       |            |                                    |                                   |                                |                                    |                                   |                                |                        |               |                       |                |                                |                               |                             |

**TABLE 5.1 Continued Summary of Ground Gas Monitoring Results**

| WELL  | DATE       | CH <sub>4</sub><br>INITIAL<br>%V/V | CH <sub>4</sub><br>STEADY<br>%V/V | CH <sub>4</sub><br>GSV<br>l/hr | CO <sub>2</sub><br>INITIAL<br>%V/V | CO <sub>2</sub><br>STEADY<br>%V/V | CO <sub>2</sub><br>GSV<br>l/hr | O <sub>2</sub><br>%V/V | ATMOS(<br>mB) | ATMOS.<br>DYNAMIC | FLOW<br>(l/hr) | RESP<br>ONSE<br>ZONE<br>(mbgl) | DEPTH<br>TO<br>BASE<br>(mbgl) | DEPTH TO<br>WATER<br>(mbgl) |
|-------|------------|------------------------------------|-----------------------------------|--------------------------------|------------------------------------|-----------------------------------|--------------------------------|------------------------|---------------|-------------------|----------------|--------------------------------|-------------------------------|-----------------------------|
| WS218 | 23/3/2016  | 1.2                                | 1.2                               | -0.01092                       | 0.9                                | 0.9                               | -0.00234                       | 6.5                    | 1011          | Rising            | -0.26          | 0.5-<br>4.0                    | 4.12                          | DRY                         |
|       | 01/04/2016 | 0.3                                | 0.3                               | -0.00156                       | 0.4                                | 0.4                               | -0.00208                       | 10.4                   | 1011          | Steady            | -0.52          |                                | 4.12                          | DRY                         |
|       | 08/04/2016 | 0.1                                | 0.1                               | -0.00079                       | 0.1                                | 0.1                               | -0.00079                       | 19.8                   | 1007          | Falling           | -0.79          |                                | 4.15                          | dry                         |
|       | 14/4/2016  | 0.1                                | 0.1                               | -0.00052                       | 0.2                                | 0.2                               | -0.00104                       | 19.4                   | 1003          | Steady            | -0.52          |                                | 4.13                          | dry                         |
|       | 22/04/2016 | 0.1                                | 0.1                               | -0.00052                       | 0.2                                | 0.2                               | -0.00104                       | 19.6                   | 1020          | Rising            | -0.52          |                                | 4.14                          | dry                         |
|       | 29/04/2016 | 0.1                                | 0.1                               | -0.00052                       | 0.1                                | 0.1                               | -0.00052                       | 19.9                   | 1006          | Falling           | -0.52          |                                | 4.15                          | dry                         |
| WS219 | 23/3/2016  | 3.5                                | 3.5                               | -0.0221                        | 0.9                                | 0.9                               | -0.00234                       | 1.5                    | 1011          | Rising            | -0.26          | 0.5-<br>4.0                    | 4.05                          | 4.05                        |
|       | 01/04/2016 | 0.1                                | 0.1                               | -0.00085                       | 0.4                                | 0.4                               | -0.0034                        | 11.5                   | 1011          | Steady            | -0.85          |                                | 4.05                          | 4.05                        |
|       | 08/04/2016 | 0.1                                | 0.1                               | -0.00079                       | 0.2                                | 0.2                               | -0.00158                       | 19.4                   | 1007          | Falling           | -0.79          |                                | 4.06                          | 4.06                        |
|       | 14/4/2016  | 0.1                                | 0.1                               | -0.0005                        | 0.3                                | 0.3                               | -0.0015                        | 18.9                   | 1003          | Steady            | -0.5           |                                | 4.06                          | 4.06                        |
|       | 22/04/2016 | 0.1                                | 0.1                               | -0.00026                       | 0.4                                | 0.4                               | -0.00104                       | 18.4                   | 1020          | Rising            | -0.26          |                                | 4.06                          | 4.06                        |
|       | 29/04/2016 | 0.1                                | 0.1                               | -0.00052                       | 0.3                                | 0.3                               | -0.00156                       | 18.8                   | 1006          | Falling           | -0.52          |                                | 4.06                          | dry                         |
| WS220 | 23/3/2016  | 0.7                                | 0.7                               | -0.00364                       | 0.4                                | 0.4                               | -0.00208                       | 8.5                    | 1011          | Rising            | -0.52          | 0.5-<br>2.50                   | 2.55                          | DRY                         |
|       | 01/04/2016 | 0.1                                | 0.1                               | 0.00079                        | 0.2                                | 0.2                               | 0.00158                        | 13.8                   | 1011          | Steady            | 0.79           |                                | 2.54                          | 1.95                        |
|       | 08/04/2016 | 0.1                                | 0.1                               | -0.00026                       | 0.2                                | 0.2                               | -0.00052                       | 17.2                   | 1007          | Falling           | -0.26          |                                | 2.54                          | 1.58                        |
|       | 14/4/2016  | 0.1                                | 0.1                               | -0.00052                       | 0.2                                | 0.2                               | -0.00104                       | 16.9                   | 1003          | Steady            | -0.52          |                                | 2.55                          | 1.6                         |
|       | 22/04/2016 | 0.1                                | 0.1                               | -0.0007                        | 0.1                                | 0.1                               | -0.0007                        | 17.1                   | 1020          | Rising            | -0.7           |                                | 2.55                          | 1.62                        |
|       | 29/04/2016 | 0.1                                | 0.1                               | -0.00026                       | 0.2                                | 0.2                               | -0.00052                       | 16.8                   | 1006          | Falling           | -0.26          |                                | 2.55                          | 1.6                         |
|       |            |                                    |                                   |                                |                                    |                                   |                                |                        |               |                   |                |                                |                               |                             |

The potential impact on the development from ground gases has been assessed with reference to standards and guidelines published in CIRIA Report 665 (*Assessing risks posed by hazardous ground gases to buildings*, 2007). However, it is recommended that the full ground gas assessment and recommended protection measures are agreed with the local authority prior to their adoption on-site. Furthermore, all protection measures adopted should be validated by a suitably qualified engineer.

The site characterisation report and subsequent land remediation and enabling works identified the following potential sources of ground gas:

-  Made Ground Deposits
-  Coal Seams

During the monitoring visits completed to date, no significantly elevated concentrations of methane or carbon dioxide were recorded within any of the Probeholes.

The monitoring of hazardous ground gasses has been completed at periods of falling and low barometric pressure which is the critical determining factor in the assessment of risk associated with potentially hazardous ground gasses to ensure the establishment of worst case scenario. It is noted that while pressures did not fall below 1000mb, the nature of a changing and falling weather condition is the overriding factor in ensuring monitoring of the worst-case scenario.

Site derived Made Ground was predominantly inert in composition comprising construction aggregates, combusted ash and rocks derived from the discard of copper ore. No notable putrescible material was recorded within the large earthworks operation. The material would therefore no be considered to represent a significant ground gas generation potential.

In accordance with the methodology outlined with the CIRIA publication C665, E3P have utilised the results of the ground gas monitoring surveys to calculate a tentative Gas Screening Value (GSV). The maximum GSV calculated for methane was 0.02 l/hr (WS219) and for carbon dioxide was 0.0041 l/hr (WS216).

The GSV has been compared to the criteria outlined with CIRIA C665 to determine the level of risk to the proposed development and to ensure the appropriate remedial options are incorporated into any future building design in this area.

Ground gas monitoring to date suggests that the site will fall into the bracket for Characteristic Situation 2 / Amber 1.

BS8485 requires that for Characteristic Situation 2 the proposed low rise development constructed using a cast in-situ (suspended) floor slab will require the following ground gas mitigation

Based on the monitoring results to date (6 No. Surveys) the site would be classified as CS2 which will require specialist mitigation measures to be constructed in accordance with BS8485 as summarised overleaf.

| GAS PROTECTION SCORES FOR THE STRUCTURAL BARRIER                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                       | SCORE                                                                                                                                                                                                                                                                                                                                           |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>a) Floor and substructure design</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                       |                                                                                                                                                                                                                                                                                                                                                 |
| Precast suspended segmental subfloor (i.e. beam and block).                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                       | 0                                                                                                                                                                                                                                                                                                                                               |
| Cast in situ ground bearing floor slab (with only nominal mesh reinforcement.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                       | 0.5                                                                                                                                                                                                                                                                                                                                             |
| Cast in situ monolithic reinforced ground bearing raft or reinforced cast in situ suspended floor slab with minimal penetrations.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                       | 1 or 1.5                                                                                                                                                                                                                                                                                                                                        |
| Basement floor and walls conforming to BS 8102:2009, Grade 2 waterproofing.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                       | 2                                                                                                                                                                                                                                                                                                                                               |
| Basement floor and walls conforming to BS 8102:2009, Grade 3 waterproofing.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                       | 2.5                                                                                                                                                                                                                                                                                                                                             |
| PROTECTION ELEMENT SYSTEM                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | SCORE                                                 | COMMENTS                                                                                                                                                                                                                                                                                                                                        |
| <b>Gas protection scores for ventilation protection measures</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                       |                                                                                                                                                                                                                                                                                                                                                 |
| (a) Pressure relief pathway (usually formed of low fines gravel or with a thin geocomposite blanket or strips terminating in a gravel trench external to the building)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 0.5                                                   | Whenever possible a pressure relief pathway (as a minimum) should be installed in all gas protection measures systems.<br><br>If the layer has a low permeability and / or is not terminated in a venting trench (or similar), then the score is zero.                                                                                          |
| (b) Passive sub floor dispersal layer:<br>Media used to provide the dispersal layer are:<br> Clear void<br> Polystyrene void former blanket<br> Geocomposite void former blanket<br> No-fines gravel layer with gas drains<br> No-fines gravel layer | Very good performance<br><br><br><br>Good performance | 2.5<br><br><br><br>1.5                                                                                                                                                                                                                                                                                                                          |
| (c) Active dispersal layer, usually comprising fans with active abstraction (suction) from a sub floor dilution layer, with roof level vents. The dilution layer may comprise a clear void or be formed of geocomposite or polystyrene void formers.                                                                                                                                                                                                                                                                                                                                                                                                                                | 1.5 to 2.5                                            | This system relies on continued serviceability of the pumps, therefore alarm and response systems should be in place.<br><br>There should be robust management systems in place to ensure the continued maintenance of the system, including pumps and vents. Active ventilation should always be designed to meet at least "good performance". |
| (d) Active positive pressurization by the creation of a blanket of external fresh air beneath the building floor slab by pumps supplying air to points across the central footprint of the building into a permeable layer, usually formed of a thin geocomposite blanket.                                                                                                                                                                                                                                                                                                                                                                                                          | 1.5 to 2.5                                            | This system relies on continued operation of the pumps, therefore alarm and response systems should be in place.<br><br>The score assigned should be based on the efficient "coverage" of the building footprint and the redundancy of the system. Active ventilation should always be designed to meet at least "good performance".            |

| PROTECTION ELEMENT SYSTEM                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | SCORE | COMMENTS                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| (e) Ventilated car park (floor slab of occupied part of the building under consideration is underlain by a basement or undercroft car park)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 4     | Assumes that the car park is vented to deal with car exhaust fumes, designed to <i>Buildings Regulations 2000, Approved Document F [9]</i> .                                                                                                                                                                                                                                                                                                                     |
| <b>Gas protection score for the gas resistant membrane</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <p>Gas resistant membrane meeting all of the following criteria:</p> <ul style="list-style-type: none"> <li> Sufficiently impervious to the gases with a methane gas transmission rate &lt;40.0 ml/day/m<sup>2</sup>/atm (average) for sheet and joints (tested in accordance with BS ISO 15105-1 manometric method_;</li> <li> Sufficiently durable to remain serviceable for the anticipated life of the building and duration of gas emissions;</li> <li> Sufficiently strong to withstand in-service stresses (eg settlement if placed below a floor slab);</li> <li> Sufficiently strong to withstand the installation process and following trades until covered (eg penetration from steel fibres in fibre reinforced concrete, penetration of reinforcement ties, tearing due to working above it, dropping tools etc);</li> <li> Capable, after installation, of providing a complete barrier to the entry of the relevant gas; and,</li> <li> Verified in accordance with CIRIA C735.</li> </ul> | 2     | <p>The performance of membranes is heavily dependent on the quality and design of the installation, resistance to damage after installation and integrity of joints.</p> <p>For example, a minimum 0.40mm thickness (equivalent to 370g/m<sup>2</sup> for polyethylene) reinforced membrane (virgin polymer) meets the performance criteria opposite.</p> <p>If a membrane is installed that does not meet all the criteria opposite then the score is zero.</p> |

The validation inspection is to include verification of the items below:

| INSPECTION                     | METHOD                                                                                                                                                                                                              |
|--------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Product Verification</b>    | Confirmation that suitable products have been installed to consist of photographs of product types, labels on packaging and delivery tickets.                                                                       |
| <b>Wall Cavity Inspection</b>  | Confirmation that gas membrane spans the external wall cavity above the periscopic vents.                                                                                                                           |
| <b>General Condition</b>       | The membrane is to be inspected to ensure there are no tears, punctures or rips.                                                                                                                                    |
| <b>Jointing</b>                | The engineer is to check the overlaps between membranes are correctly sealed with sufficient overlaps.                                                                                                              |
| <b>Service Entry Points</b>    | Verification of the presence of preformed tophats sealed to the pipe and membrane as per the construction detail.                                                                                                   |
| <b>Passive Venting Systems</b> | The engineer should verify the presence of vents at 2m centres on at least 3 of the external walls. Verification of the stone venting layer and presence of pipes to be supplied by photographic records from site. |

Examples of gas membrane verification (photographs include different membrane types for demonstrative purposes only – gas membranes are site specific):





*Photographs 1 and 2: Check general condition of membrane for punctures / tears etc*



*Photograph 3: Confirm membrane product type and check joints between rolls of membrane to ensure 150mm overlap and presence of double sided butyl tape (by touch – may not be visible) and girth jointing tape.*



*Photograph 4: Check top hat is sealed to membrane and pipework. If the formed top hat is not tight to the pipework then also confirm presence of jubilee clip beneath butyl tape.*

## 5.2 Chemical Analysis of Clean Cover System

The Remediation Strategy for the site, with respect to human health of the future site users includes the provision of a chemically suitable clean material to be installed in all garden and landscaped areas; the construction of the 600mm clean cover / placement of clean material shall consist of:

-  450mm subsoil; and,
-  150mm topsoil.

In accordance with the current requirements of the regulatory authorities, validation samples will be collected from all materials that are to be imported or re-used on site to confirm the proposed development will pose no unacceptable risk to human health or the wider environ.

Subsoil and topsoil shall be free of any deleterious materials, such as buildings materials, timber, plastics etc and conform to the requirements of BS 3882:2007.

The agreed sampling frequency for these materials is presented in Table 6.3 below.

**Table 5.3 - Specification of Materials Validation Laboratory Analysis**

| Material Use                                    | Testing Frequency              | Suite of Analysis |
|-------------------------------------------------|--------------------------------|-------------------|
| Site generated Sub-Soil<br>(450mm garden cover) | 1 Sample Per 100m <sup>3</sup> | A / B / C / D     |
| Imported Topsoil<br>(150mm garden cover)        | 1 sample per 50m <sup>3</sup>  | A / B / C / D     |

Notes – Table 5.3

Suites of Analysis

- A) Speciated PAH
- B) Banded TPH (C5-C35)
- C) Asbestos (ID)
- D) CLEA Inorganic

All analysis prescribed above to be completed by UKAS accredited laboratory.

Source testing certificates and validation testing of the imported materials shall be provided and is required to comply with the criteria set out in Table 6.4 overleaf.

**Table 5.4 Remediation Targets-Low rise residential end use**  
**Human Health Remediation Targets – Low Rise Residential End Use**

| Determinand                                      | Units | Within 600mm<br>Cover System<br>(Garden) | Hard<br>Standing<br>and<br>>600mm of<br>cover<br>system | Public<br>Open<br>Space<br>300mm<br>Cover | Public<br>Open<br>Space<br>>300mm | Pathway |
|--------------------------------------------------|-------|------------------------------------------|---------------------------------------------------------|-------------------------------------------|-----------------------------------|---------|
| Arsenic                                          | mg/kg | 37 <sup>(i)</sup>                        | 40 <sup>(ii)</sup>                                      | 79 <sup>(iii)</sup>                       | 640 <sup>(iv)</sup>               | 1       |
| Cadmium                                          | mg/kg | 11 <sup>(i)</sup>                        | 85 <sup>(ii)</sup>                                      | 120 <sup>(iii)</sup>                      | 532 <sup>(iv)</sup>               | 1       |
| Chromium (Hexavalent)                            | mg/kg | 6 <sup>(i)</sup>                         | 6 <sup>(ii)</sup>                                       | 7.7 <sup>(iii)</sup>                      | 220 <sup>(iv)</sup>               | 1       |
| Lead                                             | mg/kg | 210 <sup>(vi)</sup>                      | 330 <sup>(vii)</sup>                                    | 760 <sup>(viii)</sup>                     | 760 <sup>(viii)</sup>             | 1       |
| Elemental Mercury                                | mg/kg | 1.2 <sup>(i)</sup>                       | 1.2 <sup>(ii)</sup>                                     | 16 <sup>(iii)</sup>                       | 30 <sup>(iv)</sup>                | 2       |
| Nickel                                           | mg/kg | 180 <sup>(i)</sup>                       | 180 <sup>(ii)</sup>                                     | 230 <sup>(iii)</sup>                      | 3400 <sup>(iv)</sup>              | 1       |
| Selenium                                         | mg/kg | 250 <sup>(i)</sup>                       | 430 <sup>(ii)</sup>                                     | 1100 <sup>(iii)</sup>                     | 1800 <sup>(iv)</sup>              | 1       |
| Copper                                           | mg/kg | 2400 <sup>(i)</sup>                      | 7100 <sup>(ii)</sup>                                    | 12000 <sup>(iii)</sup>                    | 44000 <sup>(iv)</sup>             | 1       |
| Zinc                                             | mg/kg | 3700 <sup>(i)</sup>                      | 40000 <sup>(ii)</sup>                                   | 81000 <sup>(iii)</sup>                    | 170000 <sup>(iv)</sup>            | 1       |
| Phenol                                           | mg/kg | 280 <sup>(i)(xi)</sup>                   | 280 <sup>(xiv)(xi)</sup>                                | 760 <sup>(iii)(xi)</sup>                  | 760 <sup>(iv)(xi)</sup>           | 2       |
| Naphthalene                                      | mg/kg | 2.3 <sup>(i)(xi)</sup>                   | 2.3 <sup>(xiv)(xi)</sup>                                | 1200 <sup>(iv)(xi)</sup>                  | 1200 <sup>(iv)(xi)</sup>          | 2       |
| Acenaphthylene                                   | mg/kg | 170 <sup>(i)(xi)</sup>                   | 500 <sup>(v)</sup>                                      | 15000 <sup>(iii)(xi)</sup>                | 29000 <sup>(iv)(xi)</sup>         | 3       |
| Acenaphthene                                     | mg/kg | 210 <sup>(i)(xi)</sup>                   | 500 <sup>(v)</sup>                                      | 15000 <sup>(iii)(xi)</sup>                | 29000 <sup>(iv)(xi)</sup>         | 1       |
| Fluorene                                         | mg/kg | 170 <sup>(i)(xi)</sup>                   | 500 <sup>(v)</sup>                                      | 9900 <sup>(iii)(xi)</sup>                 | 20000 <sup>(iv)(xi)</sup>         | 1       |
| Phenanthrene                                     | mg/kg | 95 <sup>(i)(xi)</sup>                    | 500 <sup>(v)</sup>                                      | 3100 <sup>(iii)(xi)</sup>                 | 6200 <sup>(iv)(xi)</sup>          | 3       |
| Anthracene                                       | mg/kg | 500 <sup>(i)(xi)</sup>                   | 500 <sup>(v)</sup>                                      | 74000 <sup>(iii)(xi)</sup>                | 150000 <sup>(iv)(xi)</sup>        | 3       |
| Fluoranthene                                     | mg/kg | 280 <sup>(i)(xi)</sup>                   | 500 <sup>(v)</sup>                                      | 3100 <sup>(iii)(xi)</sup>                 | 6300 <sup>(iv)(xi)</sup>          | 3       |
| Pyrene                                           | mg/kg | 500 <sup>(i)(xi)</sup>                   | 500 <sup>(v)</sup>                                      | 7400 <sup>(iii)(xi)</sup>                 | 15000 <sup>(iv)(xi)</sup>         | 3       |
| Benzo(a)Anthracene <sup>(c)</sup>                | mg/kg | 7.2 <sup>(i)(xi)</sup>                   | 11 <sup>(ii)(xi)</sup>                                  | 29 <sup>(iii)(xi)</sup>                   | 49 <sup>(iv)(xi)</sup>            | 3       |
| Chrysene                                         | mg/kg | 15 <sup>(i)(xi)</sup>                    | 30 <sup>(ii)(xi)</sup>                                  | 57 <sup>(iii)(xi)</sup>                   | 93 <sup>(iv)(xi)</sup>            | 3       |
| Benzo(b)Fluoranthene <sup>(iii)</sup>            | mg/kg | 2.6 <sup>(i)(xi)</sup>                   | 3.9 <sup>(ii)(xi)</sup>                                 | 7.1 <sup>(iii)(xi)</sup>                  | 13 <sup>(iv)(xi)</sup>            | 3       |
| Benzo(k)Fluoranthene <sup>(iii)</sup>            | mg/kg | 77 <sup>(i)(xi)</sup>                    | 110 <sup>(ii)(xi)</sup>                                 | 190 <sup>(iii)(xi)</sup>                  | 370 <sup>(iv)(xi)</sup>           | 3       |
| Benzo(a)Pyrene <sup>(vii)</sup>                  | mg/kg | 2.2 <sup>(i)(xi)</sup>                   | 3.2 <sup>(ii)(xi)</sup>                                 | 5.7 <sup>(iii)(xi)</sup>                  | 11 <sup>(iv)(xi)</sup>            | 3       |
| Indeno(123-cd)Pyrene                             | mg/kg | 27 <sup>(i)(xi)</sup>                    | 45 <sup>(ii)(xi)</sup>                                  | 82 <sup>(iii)(xi)</sup>                   | 150 <sup>(iv)(xi)</sup>           | 3       |
| Dibenzo(a,h)Anthracene                           | mg/kg | 0.24 <sup>(i)(xi)</sup>                  | 0.31 <sup>(ii)(xi)</sup>                                | 0.57 <sup>(iii)(xi)</sup>                 | 1.1 <sup>(iv)(xi)</sup>           | 3       |
| Benzo(ghi)Perylene                               | mg/kg | 320 <sup>(i)(xi)</sup>                   | 360 <sup>(ii)(xi)</sup>                                 | 640 <sup>(iii)(xi)</sup>                  | 1400 <sup>(iv)(xi)</sup>          | 3       |
| TPH C <sub>5</sub> -C <sub>6</sub> (aliphatic)   | mg/kg | 42 <sup>(i)(xi)</sup>                    | 42 <sup>(ii)(xi)</sup>                                  | 42 <sup>(ii)(xi)</sup>                    | 10000 <sup>(xiv)(xi)</sup>        | 2       |
| TPH C <sub>6</sub> -C <sub>8</sub> (aliphatic)   | mg/kg | 100 <sup>(i)(xi)</sup>                   | 100 <sup>(ii)(xi)</sup>                                 | 100 <sup>(ii)(xi)</sup>                   | 10000 <sup>(xiv)(xi)</sup>        | 2       |
| TPH C <sub>8</sub> -C <sub>10</sub> (aliphatic)  | mg/kg | 27 <sup>(i)(xi)</sup>                    | 27 <sup>(ii)(xi)</sup>                                  | 27 <sup>(ii)(xi)</sup>                    | 10000 <sup>(xiv)(xi)</sup>        | 2       |
| TPH C <sub>10</sub> -C <sub>12</sub> (aliphatic) | mg/kg | 130 <sup>(i)(xi)</sup>                   | 130 <sup>(ii)(xi)</sup>                                 | 130 <sup>(ii)(xi)</sup>                   | 10000 <sup>(xiv)(xi)</sup>        | 2       |
| TPH C <sub>12</sub> -C <sub>16</sub> (aliphatic) | mg/kg | 1000 <sup>(xiv)(xi)</sup>                | 1000 <sup>(xiv)(xi)</sup>                               | 1000 <sup>(xiv)(xi)</sup>                 | 10000 <sup>(xiv)(xi)</sup>        | 1       |
| TPH C <sub>16</sub> -C <sub>21</sub> (aliphatic) | mg/kg | 500 <sup>(xiv)(xi)</sup>                 | 500 <sup>(xiv)(xi)</sup>                                | 500 <sup>(xiv)(xi)</sup>                  | 10000 <sup>(xiv)(xi)</sup>        | 1       |
| TPH C <sub>21</sub> -C <sub>35</sub> (aliphatic) | mg/kg |                                          |                                                         |                                           |                                   | 1       |
| TPH C <sub>5</sub> -C <sub>7</sub> (aromatic)    | mg/kg | 70 <sup>(i)(xi)</sup>                    | 70 <sup>(xiii)(xi)</sup>                                | 70 <sup>(xiii)(xi)</sup>                  | 10000 <sup>(xiv)(xi)</sup>        | 2       |
| TPH C <sub>7</sub> -C <sub>8</sub> (aromatic)    | mg/kg | 130 <sup>(i)(xi)</sup>                   | 130 <sup>(xiii)(xi)</sup>                               | 130 <sup>(xiii)(xi)</sup>                 | 10000 <sup>(xiv)(xi)</sup>        | 2       |
| TPH C <sub>8</sub> -C <sub>10</sub> (aromatic)   | mg/kg | 34 <sup>(i)(xi)</sup>                    | 34 <sup>(xiii)(xi)</sup>                                | 34 <sup>(xiii)(xi)</sup>                  | 10000 <sup>(xiv)(xi)</sup>        | 2       |
| TPH C <sub>10</sub> -C <sub>12</sub> (aromatic)  | mg/kg | 74 <sup>(i)(xi)</sup>                    | 74 <sup>(xiii)(xi)</sup>                                | 74 <sup>(xiii)(xi)</sup>                  | 10000 <sup>(xiv)(xi)</sup>        | 2       |
| TPH C <sub>12</sub> -C <sub>16</sub> (aromatic)  | mg/kg | 140 <sup>(i)(xi)</sup>                   | 140 <sup>(xiii)(xi)</sup>                               | 140 <sup>(xiii)(xi)</sup>                 | 10000 <sup>(xiv)(xi)</sup>        | 1       |
| TPH C <sub>16</sub> -C <sub>21</sub> (aromatic)  | mg/kg | 260 <sup>(i)(xi)</sup>                   | 260 <sup>(xiii)(xi)</sup>                               | 260 <sup>(xiii)(xi)</sup>                 | 10000 <sup>(xiv)(xi)</sup>        | 1       |
| TPH C <sub>21</sub> -C <sub>35</sub> (aromatic)  | mg/kg | 1000 <sup>(xiv)(xi)</sup>                | 1000 <sup>(xiv)(xi)</sup>                               | 1000 <sup>(xiv)(xi)</sup>                 | 10000 <sup>(xiv)(xi)</sup>        | 1       |

### Notes 1

Asbestos will be screened visually on-site by a qualified environmental consultant and where potential ACM is identified representative samples will be subject to quantitative analysis of volume by weight. Should any ACM be identified within the soil matrices, further detailed % assessment would be required when the reported laboratory result exceeds the limit of detection for the analytical method at 0.01% by volume (weight).

### Notes 2

Excludes matrices where free product is observed;  
Commercial Tier 1 GAC modelled to assume no exposure pathway; and,  
No viable exposure pathway beneath hard standing and cover system.

### Notes 3

Main Exposure Pathways: 1 = Soil Ingestion, 2 = Vapour Inhalation (indoor), 3 = Dermal Contact & Ingestion, 4 = Dust Inhalation.

Abbreviations: GAC = General Assessment Criteria, n = number of samples, MC = Maximum Concentration; NA – Not Applicable (no exceedance of assessment criteria); Loc of MC = Location of Exceedances

- (i) Value derived from LQM Sutable 4 Use Levels (S4ULs) for residential end use **with** plant uptake.
- (ii) Value derived from LQM Sutable 4 Use Levels (S4ULs) for residential end use **without** plant uptake – these levels used below 600mm cover system within residential gardens as soils will be present within a residential setting yet soils will not be disturbed and garden plants will not reach these soils.
- (iii) Value derived from LQM Sutable 4 Use Levels (S4ULs) for Public open Space (POS) residential.
- (iv) Value derived from LQM Sutable 4 Use Levels (S4ULs) for Public Open Space (POS) park – these levels used below 300mm POS cover system as soils will not be disturbed by any future site users and exposure to these soils will be similar to a park end use.
- (v) Value derived from LQM Sutable 4 Use Levels (S4ULs) alongside assessment with WM3 to ensure that materials remaining on site do not exceed the WM3 toxicity criteria for hazardous waste.
- (vi) Value derived from Category 4 Screening Levels (C4SL) for residential land use **with** homegrown produce.
- (vii) Value derived from Category 4 Screening Levels (C4SL) for residential land use **without** homegrown produce.
- (viii) Value derived from Category 4 Screening Levels (C4SL) for Public open Space (POS) residential.
- (ix) Value derived from Category 4 Screening Levels (C4SL) for Public Open Space (POS) park.
- (x) Mercury – Based on elemental Mercury.
- (xi) PAH and TPH levels used are for 1% SOM.
- (xii) Xylenes based on p-xylene (o-xylene 2600mg/kg, m-xylene 3500mg/kg) and is capped by its solubility.
- (xiii) Value derived from LQM Sutable 4 Use Levels (S4ULs) for residential end use **with** plant uptake due to the volatilisation risk.
- (xiv) BTEX is not SOM related due to inhalation pathway.

## 5.5 Placement of Chemically Suitable Cover System

Proposed garden and landscaped areas within the residential development require a 600mm chemically suitable cover system in order to break the exposure pathway between the end user and the contaminants.

### ***Procedure for Placement:***

-  *If proposed utilities are to be placed within the cover system, the clean cover should be placed prior to installation of these utilities;*
-  *If natural drift deposits are encountered, excavation can cease here;*
-  *Garden and landscaped areas need to be constructed with a suitable 600mm clean cover system that will comprise 450mm chemically validated subsoil, with 150mm topsoil overlaying this. **Topsoil & Subsoil is required to be confirmed as chemically suitable prior to placement.***

### ***Garden Validation Procedure***

The placement of 600mm of clean material will be undertaken during the build phase works of the project.

The placement of subsoil and corresponding validation will be documented within the Garden Validation Letters (to be issued on completion of the contractor's works).

Photographic evidence of the placement of 150mm of certified topsoil and 450mm of subsoil will be undertaken on completion of construction works which will constitute the completion of the 600mm clean cover.

This element will also be checked by the Building Control Officer as part of the site completion prior to issuing of a CML certificate.

| PROCEDURE                     | METHOD                                                                                                                                                                                                                                                                                                                                                  |
|-------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Chemical Validation</b>    | Imported sub-soils and topsoil will need to be chemically analysed to confirm suitability for use with the proposed cover system prior to installation and completion of the garden systems.<br><br>If acceptable the materials can be installed to the required depth at which time the plot will be deemed complete following a validation procedure. |
| <b>Trial Holes</b>            | Trial holes are deemed necessary for the all plots given that the 600mm cover system will need to be placed on each plot during the build phase.                                                                                                                                                                                                        |
| <b>Validation</b>             | Photographic evidence will be taken of the subsoil / topsoil placement demonstrating the depth of installed cover system and practical completion of works are required for each and every plot.                                                                                                                                                        |
| <b>Validation Certificate</b> | As and when certified sub-soil and topsoil has been placed, inspected and photographed for each plot, a validation completion certificate will be prepared to include plot specific photographs and laboratory test certification.                                                                                                                      |
| <b>Completion Report</b>      | Upon completion of all garden and landscaped areas within the development, a Completion Report will be issued providing the confirmation that all remediation requirements have been achieved.                                                                                                                                                          |



*Photographs 1 and 2: Examples of validation photographs demonstrating clean cover.*

## 5.6 Notes

If any of the procedures as outlined within the Build Phase Development Requirements Plan are not completed, this may result in a delay in obtaining a Warranty and Council for Mortgage Lenders and a Certificate of Completion.

Post Remediation Constraints for the site will include:

-  Topsoil to be supplied by the developer, with appropriate quality checks if any further topsoil is required;
-  Placement of clean subsoil and topsoil in soft landscaped areas must be a minimum of 600mm or natural ground (whichever is the shallower). The placement of this material will require independent validation;
-  The remediation and enabling works have been implemented in a manner to ensure suitability or Ground Improvement by the construction of Vibro Stone Columns;
-  All dwellings should be constructed with the appropriate Ground Gas Mitigation Measures;
-  Consultations will be completed with the Local Authority to enable the satisfactory discharge of planning conditions associated with the planning consent for the site.

## 6. SCOPE OF MINE STABILISATION & CONSOLIDATION WORKS

Based on the pre-commencement Ground Investigations, the Mine Stabilisation works instigated by the Specialist Mine Stabilisation Contractor (Groundshire) focused on the completion of two primary objectives:

-  Location of the Wigan Five Feet Outcrop within the wider Prescott Park development site and subsequent Drill & Grout works to stabilise known voids and ensure the risk associated with consolidation of abandoned mine workings and resulting subsidence at the surface was mitigated in full; and,
-  Investigation of all known mine entries by a process of probe drilling in a spiral formation from the recorded centre of a shaft location to locate the mine entry (where possible) and instigate stabilisation works by pressure grouting and capping in accordance with the E3P Performance Specification, Coal Authority Permission and industry best practice document CIRIA SP32.

All works completed by Groundshire were undertaken in accordance with the Coal Authority Permission, a copy of which is included within the Appendices of this Validation report.

### 6.1 Drill & Grout Works

Drilling and Grouting works commence within areas of known workings beneath Parcel C (south west sector) where historical workings had been proven at a shallow depth with insufficient rick cover (10x Seam Thickness). The boreholes were drilled on a 6m Grid with 4.5m diamond infill centres across the site as agreed with the Coal Authority and documented in detailed within the Groundshire Completion Report.

Drill holes were gradually and systematically advanced northwards to track the Wigan Five Feet Seam with the intention of locating the outcrop and ensuring consolidation of all mine workings in the process. This operation required the drilling of a significant number of holes on a close centre grid as detailed within the Groundshire Drawings 12267-001 Rev A Grout Layout Final (included within the Appendices of this report).

This systematic approach and process confirmed that the outcrop of the Wigan Five Feet Coal Seam is to the south of the conjectured position as inferred by the BGS and Coal Authority Mapping. To demonstrate the location of extent of drill holes where coal and workings have been identified, E3P has included a screenshot of the Groundshire Grout Layout Report as Figure 5.1 (overleaf).

Where the drill holes are denote by a red marker, coal and workings was confirmed, however where the drill hole is green no coal is present, as can be seen from this information, the location of the Wigan Five Feet seam and extent of workings has been clearly defined to be at the south of development Parcel C.

**Figure 6.1 Area of Drill & Grout Pertinent to Parcel C**



In light of the detailed information obtained from the Drill & Grout Operations, it was determined that the Wigan Five Feet Seam (Bastian) had been mispositioned by the BGS & Coal Authority as was suggested within the E3P Specification for the Consolidation of Abandoned Mine Workings.

To further disprove the presence of either a shallow coal seam or unrecorded workings beneath the untreated sector of the proposed development Parcel, 16 No. Boreholes were advanced by Groundshire within Parcel C, all of which confirmed the absence of any coal seam or unrecorded mine workings within the wider parcel that was not subject to stabilisation works.

Based on the extensive information provided as part of the Groundshire Drill & Grout Works and subsequent Ground Investigations across Parcel C, it is concluded that all recorded workings within the Wigan Five Feet seam immediately southwest of the outcrop have been stabilised in accordance with the Coal Authority Permission Process and industry best practise.

## **6.2 Mine Entries**

### **Unrecorded Mine Entry**

A single mine entry (shafts) was identified at the south-east sector of the Parcel C Boundary during the site remediation and enabling works.

The appointed mine stabilisation contractor, Groundshire have stabilisation works which included the drilling and grouting of this feature in accordance with the CA Permission and in due consideration of industry best practise CIRIA 665. Rockhead was proven at ~8.0m below remediated ground level, however while the shaft has been grouted it currently remains uncapped.

Rockhead is present at ~8.0m within the vicinity of the reported shaft and as such the conjectured radial zone of influence of in the event of any instability is <8.0m.

## APPENDIX I LIMITATIONS



1. This report and its findings should be considered in relation to the terms of reference and objectives agreed between E3P and the Client as indicated in Section 1.2.
2. For the work, reliance has been placed on publicly available data obtained from the sources identified. The information is not necessarily exhaustive and further information relevant to the site may be available from other sources. When using the information it has been assumed it is correct. No attempt has been made to verify the information.
3. This report has been produced in accordance with current UK policy and legislative requirements for land and groundwater contamination which are enforced by the local authority and the Environment Agency. Liabilities associated with land contamination are complex and requires advice from legal professionals.
4. During the site walkover reasonable effort has been made to obtain an overview of the site conditions. However, during the site walkover no attempt has been made to enter areas of the site that are unsafe or present a risk to health and safety, are locked, barricaded, overgrown, or the location of the area has not be made known or accessible.
5. Access considerations, the presence of services and the activities being carried out on the site limited the locations where sampling locations could be installed and the techniques that could be used.
6. Site sensitivity assessments have been made based on available information at the time of writing and are ultimately for the decision of the regulatory authorities.
7. Where mention has been made to the identification of Japanese Knotweed and other invasive plant species and asbestos or asbestos-containing materials this is for indicative purposes only and do not constitute or replace full and proper surveys.
8. The executive summary, conclusions and recommendations sections of the report provide an overview and guidance only and should not be specifically relied upon without considering the context of the report in full.
9. E3P cannot be held responsible for any use of the report or its contents for any purpose other than that for which it was prepared. The copyright in this report and other plans and documents prepared by E3P is owned by them and no such plans or documents may be reproduced, published or adapted without written consent. Complete copies of this may, however, be made and distributed by the client as is expected in dealing with matters related to its commission. Should the client pass copies of the report to other parties for information, the whole report should be copied, but no professional liability or warranties shall be extended to other parties by E3P in this connection without their explicit written agreement there to by E3P.
10. New information, revised practices or changes in legislation may necessitate the re-interpretation of the report, in whole or in part.



## APPENDIX II GLOSSARY



## TERMS

|              |                                                            |
|--------------|------------------------------------------------------------|
| AST          | Above Ground Storage Tank                                  |
| BGS          | British Geological Survey                                  |
| BSI          | British Standards Institute                                |
| BTEX         | Benzene, Toluene, Ethylbenzene, Xylenes                    |
| CIEH         | Chartered Institute of Environmental Health                |
| CIRIA        | Construction Industry Research Association                 |
| CLEA         | Contaminated Land Exposure Assessment                      |
| CSM          | Conceptual Site Model                                      |
| DNAPL        | Dense Non-Aqueous Phase Liquid (chlorinated solvents, PCB) |
| DWS          | Drinking Water Standard                                    |
| EA           | Environment Agency                                         |
| EQS          | Environmental Quality Standard                             |
| GAC          | General Assessment Criteria                                |
| GL           | Ground Level                                               |
| GSV          | Gas Screening Value                                        |
| HCV          | Health Criteria Value                                      |
| ICSM         | Initial Conceptual Site Model                              |
| LNAPL        | Light Non-Aqueous Phase Liquid (petrol, diesel, kerosene)  |
| ND           | Not Detected                                               |
| LMRL         | Lower Method Reporting Limit                               |
| NR           | Not Recorded                                               |
| PAH          | Poly Aromatic Hydrocarbon                                  |
| PCB          | Poly-Chlorinated Biphenyl                                  |
| PID          | Photo Ionisation Detector                                  |
| QA           | Quality Assurance                                          |
| SGV          | Soil Guideline Value                                       |
| SPH          | Separate Phase Hydrocarbon                                 |
| Sp.TPH (CWG) | Total Petroleum Hydrocarbon (Criteria Working Group)       |
| SPT          | Standard Penetration Test                                  |
| SVOC         | Semi Volatile Organic Compound                             |
| UST          | Underground Storage Tank                                   |
| VCCs         | Vibro Concrete Columns                                     |
| VOC          | Volatile Organic Compound                                  |
| WTE          | Water Table Elevation                                      |

## UNITS

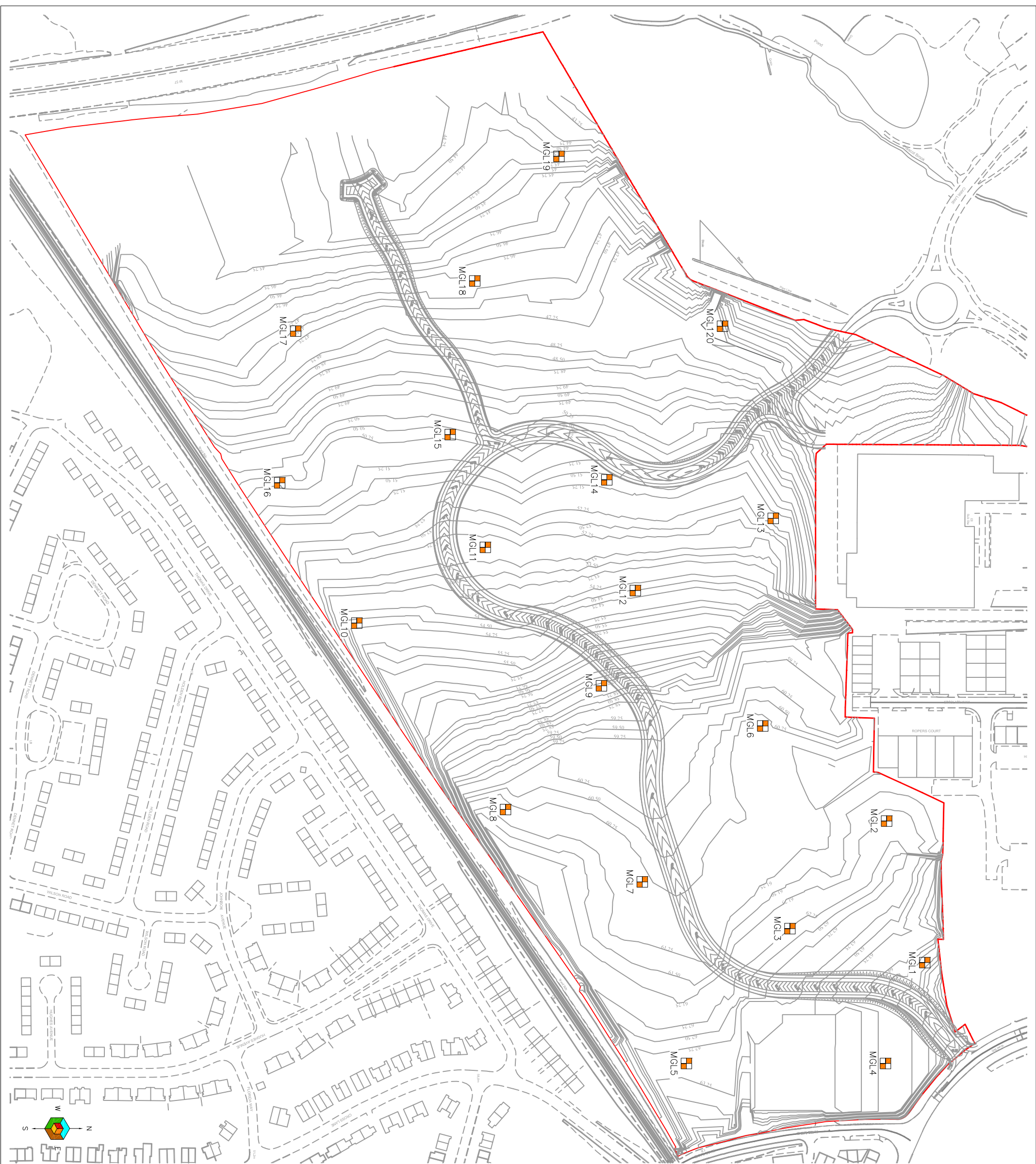
|      |                                          |
|------|------------------------------------------|
| m    | Metres                                   |
| km   | Kilometres                               |
| %    | Percent                                  |
| %v/v | Percent volume in air                    |
| mb   | Milli Bars (atmospheric pressure)        |
| l/hr | Litres per hour                          |
| µg/l | Micrograms per Litre (parts per billion) |

|                   |                                             |
|-------------------|---------------------------------------------|
| ppb               | Parts Per Billion                           |
| mg/kg             | Milligrams per kilogram (parts per million) |
| ppm               | Parts Per Million                           |
| mg/m <sup>3</sup> | Milligram per metre cubed                   |
| m bgl             | Metres Below Ground Level                   |
| m bcl             | Metre Below Cover Level                     |
| mAOD              | Metres Above Ordnance Datum (sea level)     |
| kN/m <sup>2</sup> | Kilo Newtons per metre squared              |
| µm                | Micro metre                                 |



## APPENDIX III DRAWINGS





Approximate Location of Leachate Sample Taken From Made Ground

|        |  |  |  |  |  |
|--------|--|--|--|--|--|
| Notes: |  |  |  |  |  |
|        |  |  |  |  |  |

|                                |          |            |                 |                    |            |
|--------------------------------|----------|------------|-----------------|--------------------|------------|
| P1                             | R0       | 16-08-2015 | Draft           | CB                 | MD         |
| Phase                          | Revision | Date       | Issue           | Drawn              | Authorised |
| Client: Prescott Business Park |          |            | Job No: 10-021  | Date: 18-08-2015   |            |
|                                |          |            | Drawing No: 032 | Scale: 1:2500 @ A3 |            |

|                                     |                                       |
|-------------------------------------|---------------------------------------|
| Job Title: Pysnian Cables, Prescott | Drawing Title: Leachate Sampling Plan |
|-------------------------------------|---------------------------------------|



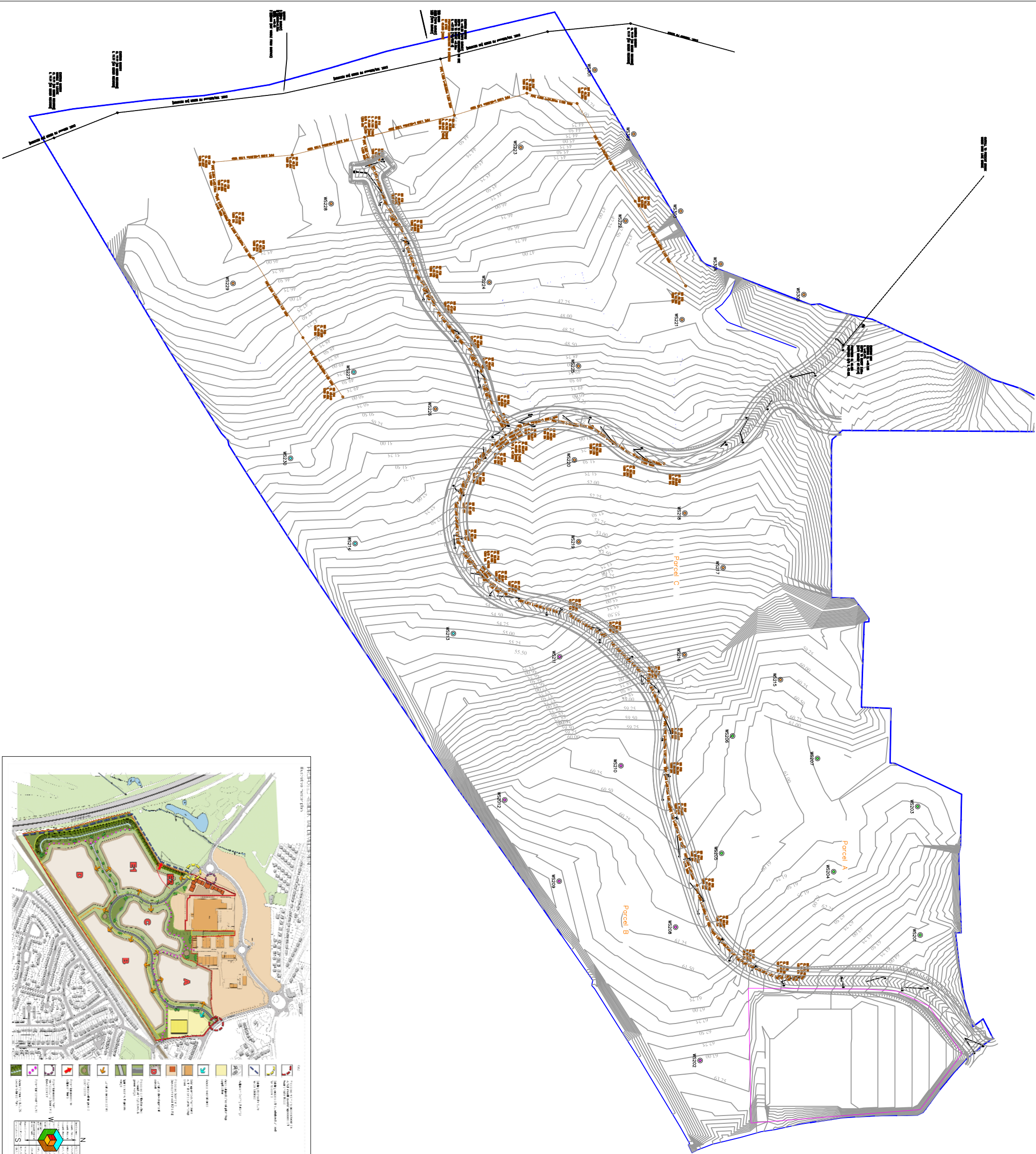
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Key:

Location Symbols

- WS201 Approximate Window Sample Probehole Location
- WS301 Approximate Window Sample Probehole Location (UU Land)
- WS201 Approximate Window Sample Probehole Location (25-01-2016)
- WS201 Approximate Window Sample Probehole Location (26-01-2016)
- WS201 Approximate Window Sample Probehole Location (27-01-2016)



| Volumetrics Between OGL And Design Foundation To Masterplan 1606.14 |             |              |             |              |             |
|---------------------------------------------------------------------|-------------|--------------|-------------|--------------|-------------|
| Design                                                              |             | Volume       |             | Drawing      |             |
| Origin                                                              | Destination | Car Material | Fill (Void) | Car Material | Fill (Void) |
| 4.0000                                                              | 271710.0000 | 271000.0000  | 400.0000    | 10000.0000   | 50000.0000  |

Notes:

|  |  |  |  |  |  |
|--|--|--|--|--|--|
|  |  |  |  |  |  |
|--|--|--|--|--|--|

|       |          |            |          |       |            |
|-------|----------|------------|----------|-------|------------|
| P1    | R1       | 12-02-2016 | REVISION | CB    | MD         |
| P1    | -        | 21-01-2016 | DRAFT    | JN    | MD         |
| Phase | Revision | Date       | Issue    | Drawn | Authorised |

|                       |             |             |
|-----------------------|-------------|-------------|
| Client:               | Job No:     | Date:       |
| Prescot Business Park | 10021       | 12-02-2016  |
|                       | Drawing No: | Scale:      |
|                       | 040         | 1:2500 @ A3 |

|                         |                                            |
|-------------------------|--------------------------------------------|
| Job Title:              | Drawing Title:                             |
| Pyramid Cables, Prescot | Supplementary Intrusive Investigation Plan |



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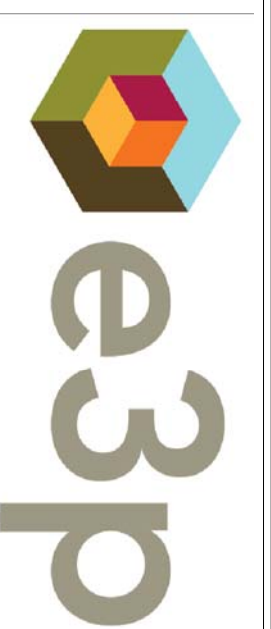


- Approximate Plate Load Test Location
- Approximate Dynamic Cone Penetrometer Test Location
- Approximate Hand Pit Location
- Approximate Plate Load Test Location (Unable to Investigate)
- Approximate Dynamic Cone Penetrometer Test Location (Unable to Investigate)

|       |          |            |          |       |            |
|-------|----------|------------|----------|-------|------------|
| P1    | R3       | 29-02-2016 | Revision | CB    | MD         |
| P1    | R2       | 22-12-2015 | Revision | CB    | MD         |
| P1    | R1       | 17-11-2015 | Revision | CB    | MD         |
| P1    | -        | 29-04-2015 | Draft    | CB    | MD         |
| Phase | Revision | Date       | Issue    | Drawn | Authorised |

|                       |             |            |
|-----------------------|-------------|------------|
| Client:               | Job No:     | Date:      |
| Prescot Business Park | 10-021      | 29-02-2016 |
| Drawing No:           | Scale:      |            |
| 034                   | 1:1500 @ A1 |            |

|                          |                                     |
|--------------------------|-------------------------------------|
| Job Title:               | Drawing Title:                      |
| Pyrsnian Cables, Prescot | Geo-Technical Testing Location Plan |



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## APPENDIX IV PHOTOGRAPHS





**PLATE 1 – POST REMOVAL OF VEGETATION OF PARCEL C**



**PLATE 2 – REMOVAL OF VEGETATION STRIP IN PROGRESS**





**PLATE 3 –PRE-REMEDIATION LOOKING EAST FROM CENTER OF PARCEL C**



**PLATE 4 - TURNOVER OF REMOVAL OF RELIC STRUCTURES IN UPPER EAST OF  
PARCEL C**





**PLATE 5 – COMMENCEMENT OF REMEDIATION WITHIN UPPER AREA OF  
PARCEL C**



**PLATE 6 – TURNOVER AND REMOVAL OF RELIC STRUCTURES**





**PLATE 7 – REMOVAL OF CONCRETE BELOW GROUND STORAGE TANK**



**PLATE 8 – LARGE UST BEING BROKEN TO AID IN THE REMOVAL OF THE TANK**





**PLATE 9 - LAST REMAINING AREA OF TURNOVER WITHIN UPPER PORTION OF  
PARCEL C**



**PLATE 10 – REMEDIATION AND TURNOVER COMPLETE IN UPPER AREA OF  
PARCEL C**





**PLATE 11 – SMALL RELIC FOUNDATIONS BEING REMOVED PRIOR TO  
TURNOVER**



**PLATE 12 – REMEDIATED SOILS BEING RE-GRADED TO FORMATION LEVELS**





**PLATE 13 – VIEW EAST FROM PARCEL C REMEDIATION COMPLETE**



**PLATE 14 – VIEW WEST OF LOWER PARCEL C WITH TURNOVER OF >1.50BGL COMPLETED TO NATURAL STRATUM**





**PLATE 15 – LOWER PARCEL C TURNOVER COMPLETE WITH SOILS BEING IMPORTED TO RAISE PARCEL**



**PLATE 16 – NORTHERN LOWER AREA OF PARCEL C WITH COMPOUND BEING CONSTRUCTED**





**PLATE 17 – LOWER PARCEL C AFTER REMEDIATION SITE RAISING IN PROGRESS**



**PLATE 18 – PARCEL C SOUTHERN BOUNDARY TURNOVER IN PROGRESS  
ADJACENT TO CONSTRUCTED SPINE ROAD**





**PLATE 19 – VEGETATION STRIP OF EMBANKMENT DISSECTING PARCEL C**



**PLATE 20 – TURNOVER OF THE EMBANKMENT AFTER RETAINING STRUCTURES REMOVED**





**PLATE 21 – TURNOVER OF EMBANKMENT TO REDUCE THE SITE INTO ONE PLATEAUX**



**PLATE 22 – CONCRETE STOCKPILE LOCATED ON PARCEL C**





**PLATE 23 – THE CENTRAL SECTOR OF PARCEL C BLENDING THE TWO SITE LEVELS INTO ONE**



**PLATE 24 – PARCEL C IN DISTANCE WITH REMEDIATION COMPLETE TO FORMATION LEVEL**



## APPENDIX V VALIDATION CHEMICAL ANALYSIS



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## **Analytical Report Number : 14-61115**

**Project / Site name:** Prysmian Cables, Prescott

**Samples received on:** 08/10/2014

**Your job number:** 10021

**Samples instructed on:** 08/10/2014

**Your order number:** 10021/860/ST

**Analysis completed by:** 15/10/2014

**Report Issue Number:** 1

**Report issued on:** 15/10/2014

**Samples Analysed:** 3 leachate samples - 26 soil samples

**Signed:**

Thurstan Plummer  
Organics Technical Manager  
**For & on behalf of i2 Analytical Ltd.**

**Signed:**

Rexona Rahman  
Reporting Manager  
**For & on behalf of i2 Analytical Ltd.**

Other office located at: ul. Pionierów 39, 41 -711 Ruda Śląska, Poland

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils - 4 weeks from reporting  
leachates - 2 weeks from reporting  
waters - 2 weeks from reporting  
asbestos - 6 months from reporting

Excel copies of reports are only valid when accompanied by this PDF certificate.

Analytical Report Number: 14-61115  
Project / Site name: Prysmian Cables, Prescott  
Your Order No: 10021/860/ST

| Lab Sample Number                       |  |  |  | 380006        | 380007                | 380008                  | 380009        | 380010        |
|-----------------------------------------|--|--|--|---------------|-----------------------|-------------------------|---------------|---------------|
| Sample Reference                        |  |  |  | TP116         | TP118                 | TP119                   | TP121         | TP123         |
| Sample Number                           |  |  |  | None Supplied | None Supplied         | None Supplied           | None Supplied | None Supplied |
| Depth (m)                               |  |  |  | 0.60          | 0.60                  | 2.40                    | 1.10          | 0.60          |
| Date Sampled                            |  |  |  | 02/10/2014    | 02/10/2014            | 02/10/2014              | 02/10/2014    | 02/10/2014    |
| Time Taken                              |  |  |  | None Supplied | None Supplied         | None Supplied           | None Supplied | None Supplied |
| Analytical Parameter<br>(Soil Analysis) |  |  |  | Units         | Limit of<br>detection | Accreditation<br>Status |               |               |
| Stone Content                           |  |  |  | %             | 0.1                   | NONE                    | < 0.1         | < 0.1         |
| Moisture Content                        |  |  |  | %             | N/A                   | NONE                    | 23            | 21            |
| Total mass of sample received           |  |  |  | kg            | 0.001                 | NONE                    | 0.39          | 0.46          |
|                                         |  |  |  |               |                       |                         | 0.53          | 0.51          |
|                                         |  |  |  |               |                       |                         |               | 0.46          |

|                                               |      |     |           |   |              |   |   |   |
|-----------------------------------------------|------|-----|-----------|---|--------------|---|---|---|
| Asbestos in Soil Screen / Identification Name | Type | N/A | ISO 17025 | - | -            | - | - | - |
| Asbestos in Soil                              | Type | N/A | ISO 17025 | - | Not-detected | - | - | - |

#### Speciated PAHs

|                        |       |      |        |   |   |   |   |   |
|------------------------|-------|------|--------|---|---|---|---|---|
| Naphthalene            | mg/kg | 0.05 | MCERTS | - | - | - | - | - |
| Acenaphthylene         | mg/kg | 0.1  | MCERTS | - | - | - | - | - |
| Acenaphthene           | mg/kg | 0.1  | MCERTS | - | - | - | - | - |
| Fluorene               | mg/kg | 0.1  | MCERTS | - | - | - | - | - |
| Phenanthrene           | mg/kg | 0.1  | MCERTS | - | - | - | - | - |
| Anthracene             | mg/kg | 0.1  | MCERTS | - | - | - | - | - |
| Fluoranthene           | mg/kg | 0.1  | MCERTS | - | - | - | - | - |
| Pyrene                 | mg/kg | 0.1  | MCERTS | - | - | - | - | - |
| Benzo(a)anthracene     | mg/kg | 0.1  | MCERTS | - | - | - | - | - |
| Chrysene               | mg/kg | 0.05 | MCERTS | - | - | - | - | - |
| Benzo(b)fluoranthene   | mg/kg | 0.1  | MCERTS | - | - | - | - | - |
| Benzo(k)fluoranthene   | mg/kg | 0.1  | MCERTS | - | - | - | - | - |
| Benzo(a)pyrene         | mg/kg | 0.1  | MCERTS | - | - | - | - | - |
| Indeno(1,2,3-cd)pyrene | mg/kg | 0.1  | MCERTS | - | - | - | - | - |
| Dibenz(a,h)anthracene  | mg/kg | 0.1  | MCERTS | - | - | - | - | - |
| Benzo(ghi)perylene     | mg/kg | 0.05 | MCERTS | - | - | - | - | - |

#### Total PAH

|                             |       |     |        |   |   |   |   |   |
|-----------------------------|-------|-----|--------|---|---|---|---|---|
| Speciated Total EPA-16 PAHs | mg/kg | 1.6 | MCERTS | - | - | - | - | - |
|-----------------------------|-------|-----|--------|---|---|---|---|---|

#### Petroleum Hydrocarbons

|                 |       |     |      |       |       |       |       |       |
|-----------------|-------|-----|------|-------|-------|-------|-------|-------|
| TPH (C5 - C6)   | mg/kg | 1   | NONE | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| TPH (C6 - C8)   | mg/kg | 0.1 | NONE | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 |
| TPH (C8 - C10)  | mg/kg | 0.1 | NONE | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 |
| TPH (C10 - C12) | mg/kg | 10  | NONE | < 10  | < 10  | < 10  | < 10  | < 10  |
| TPH (C12 - C16) | mg/kg | 1   | NONE | 26    | 7.0   | < 1.0 | < 1.0 | 40    |
| TPH (C16 - C21) | mg/kg | 1   | NONE | 120   | 16    | < 1.0 | < 1.0 | 450   |
| TPH (C21 - C35) | mg/kg | 1   | NONE | 380   | 33    | < 1.0 | < 1.0 | 2900  |



Analytical Report Number: 14-61115  
 Project / Site name: Prysmian Cables, Prescott  
 Your Order No: 10021/860/ST

| Lab Sample Number                       |       |                       |                         | 380006        | 380007        | 380008        | 380009        | 380010        |
|-----------------------------------------|-------|-----------------------|-------------------------|---------------|---------------|---------------|---------------|---------------|
| Sample Reference                        |       |                       |                         | TP116         | TP118         | TP119         | TP121         | TP123         |
| Sample Number                           |       |                       |                         | None Supplied | None Supplied | None Supplied | None Supplied | None Supplied |
| Depth (m)                               |       |                       |                         | 0.60          | 0.60          | 2.40          | 1.10          | 0.60          |
| Date Sampled                            |       |                       |                         | 02/10/2014    | 02/10/2014    | 02/10/2014    | 02/10/2014    | 02/10/2014    |
| Time Taken                              |       |                       |                         | None Supplied | None Supplied | None Supplied | None Supplied | None Supplied |
| Analytical Parameter<br>(Soil Analysis) | Units | Limit of<br>detection | Accreditation<br>Status |               |               |               |               |               |

#### VOCs

|                                       |       |   |           |   |       |   |   |   |
|---------------------------------------|-------|---|-----------|---|-------|---|---|---|
| Chloromethane                         | µg/kg | 1 | ISO 17025 | - | < 1.0 | - | - | - |
| Chloroethane                          | µg/kg | 1 | ISO 17025 | - | < 1.0 | - | - | - |
| Bromomethane                          | µg/kg | 1 | ISO 17025 | - | < 1.0 | - | - | - |
| Vinyl Chloride                        | µg/kg | 1 | ISO 17025 | - | < 1.0 | - | - | - |
| Trichlorofluoromethane                | µg/kg | 1 | ISO 17025 | - | < 1.0 | - | - | - |
| 1,1-Dichloroethene                    | µg/kg | 1 | MCERTS    | - | < 1.0 | - | - | - |
| 1,1,2-Trichloro 1,2,2-Trifluoroethane | µg/kg | 1 | ISO 17025 | - | < 1.0 | - | - | - |
| Cis-1,2-dichloroethene                | µg/kg | 1 | MCERTS    | - | < 1.0 | - | - | - |
| MTBE (Methyl Tertiary Butyl Ether)    | µg/kg | 1 | MCERTS    | - | < 1.0 | - | - | - |
| 1,1-Dichloroethane                    | µg/kg | 1 | MCERTS    | - | < 1.0 | - | - | - |
| 2,2-Dichloropropane                   | µg/kg | 1 | NONE      | - | < 1.0 | - | - | - |
| Trichloromethane                      | µg/kg | 1 | MCERTS    | - | < 1.0 | - | - | - |
| 1,1,1-Trichloroethane                 | µg/kg | 1 | MCERTS    | - | < 1.0 | - | - | - |
| 1,2-Dichloroethane                    | µg/kg | 1 | MCERTS    | - | < 1.0 | - | - | - |
| 1,1-Dichloropropene                   | µg/kg | 1 | NONE      | - | < 1.0 | - | - | - |
| Trans-1,2-dichloroethene              | µg/kg | 1 | NONE      | - | < 1.0 | - | - | - |
| Benzene                               | µg/kg | 1 | MCERTS    | - | < 1.0 | - | - | - |
| Tetrachloromethane                    | µg/kg | 1 | MCERTS    | - | < 1.0 | - | - | - |
| 1,2-Dichloropropane                   | µg/kg | 1 | MCERTS    | - | < 1.0 | - | - | - |
| Trichloroethene                       | µg/kg | 1 | MCERTS    | - | < 1.0 | - | - | - |
| Dibromomethane                        | µg/kg | 1 | MCERTS    | - | < 1.0 | - | - | - |
| Bromodichloromethane                  | µg/kg | 1 | NONE      | - | < 1.0 | - | - | - |
| Cis-1,3-dichloropropene               | µg/kg | 1 | ISO 17025 | - | < 1.0 | - | - | - |
| Trans-1,3-dichloropropene             | µg/kg | 1 | ISO 17025 | - | < 1.0 | - | - | - |
| Toluene                               | µg/kg | 1 | MCERTS    | - | < 1.0 | - | - | - |
| 1,1,2-Trichloroethane                 | µg/kg | 1 | MCERTS    | - | < 1.0 | - | - | - |
| 1,3-Dichloropropane                   | µg/kg | 1 | ISO 17025 | - | < 1.0 | - | - | - |
| Dibromochloromethane                  | µg/kg | 1 | ISO 17025 | - | < 1.0 | - | - | - |
| Tetrachloroethene                     | µg/kg | 1 | MCERTS    | - | < 1.0 | - | - | - |
| 1,2-Dibromoethane                     | µg/kg | 1 | ISO 17025 | - | < 1.0 | - | - | - |
| Chlorobenzene                         | µg/kg | 1 | MCERTS    | - | < 1.0 | - | - | - |
| 1,1,1,2-Tetrachloroethane             | µg/kg | 1 | NONE      | - | < 1.0 | - | - | - |
| Ethylbenzene                          | µg/kg | 1 | MCERTS    | - | < 1.0 | - | - | - |
| p & m-Xylene                          | µg/kg | 1 | MCERTS    | - | < 1.0 | - | - | - |
| Styrene                               | µg/kg | 1 | MCERTS    | - | < 1.0 | - | - | - |
| Tribromomethane                       | µg/kg | 1 | MCERTS    | - | < 1.0 | - | - | - |
| o-Xylene                              | µg/kg | 1 | MCERTS    | - | < 1.0 | - | - | - |
| 1,1,2,2-Tetrachloroethane             | µg/kg | 1 | MCERTS    | - | < 1.0 | - | - | - |
| Isopropylbenzene                      | µg/kg | 1 | NONE      | - | < 1.0 | - | - | - |
| Bromobenzene                          | µg/kg | 1 | MCERTS    | - | < 1.0 | - | - | - |
| n-Propylbenzene                       | µg/kg | 1 | ISO 17025 | - | < 1.0 | - | - | - |
| 2-Chlorotoluene                       | µg/kg | 1 | NONE      | - | < 1.0 | - | - | - |
| 4-Chlorotoluene                       | µg/kg | 1 | NONE      | - | < 1.0 | - | - | - |
| 1,3,5-Trimethylbenzene                | µg/kg | 1 | ISO 17025 | - | < 1.0 | - | - | - |
| tert-Butylbenzene                     | µg/kg | 1 | NONE      | - | < 1.0 | - | - | - |
| 1,2,4-Trimethylbenzene                | µg/kg | 1 | ISO 17025 | - | < 1.0 | - | - | - |
| sec-Butylbenzene                      | µg/kg | 1 | NONE      | - | < 1.0 | - | - | - |
| 1,3-Dichlorobenzene                   | µg/kg | 1 | ISO 17025 | - | < 1.0 | - | - | - |
| p-Isopropyltoluene                    | µg/kg | 1 | ISO 17025 | - | < 1.0 | - | - | - |
| 1,2-Dichlorobenzene                   | µg/kg | 1 | MCERTS    | - | < 1.0 | - | - | - |
| 1,4-Dichlorobenzene                   | µg/kg | 1 | MCERTS    | - | < 1.0 | - | - | - |
| Butylbenzene                          | µg/kg | 1 | NONE      | - | < 1.0 | - | - | - |
| 1,2-Dibromo-3-chloropropane           | µg/kg | 1 | ISO 17025 | - | < 1.0 | - | - | - |
| 1,2,4-Trichlorobenzene                | µg/kg | 1 | MCERTS    | - | < 1.0 | - | - | - |
| Hexachlorobutadiene                   | µg/kg | 1 | NONE      | - | < 1.0 | - | - | - |
| 1,2,3-Trichlorobenzene                | µg/kg | 1 | NONE      | - | < 1.0 | - | - | - |



4041



Environmental Science

Analytical Report Number: 14-61115

Project / Site name: Prysmian Cables, Prescot

Your Order No: 10021/860/ST

| Lab Sample Number                       |       |                       |                         | 380006        | 380007        | 380008        | 380009        | 380010        |
|-----------------------------------------|-------|-----------------------|-------------------------|---------------|---------------|---------------|---------------|---------------|
| Sample Reference                        |       |                       |                         | TP116         | TP118         | TP119         | TP121         | TP123         |
| Sample Number                           |       |                       |                         | None Supplied | None Supplied | None Supplied | None Supplied | None Supplied |
| Depth (m)                               |       |                       |                         | 0.60          | 0.60          | 2.40          | 1.10          | 0.60          |
| Date Sampled                            |       |                       |                         | 02/10/2014    | 02/10/2014    | 02/10/2014    | 02/10/2014    | 02/10/2014    |
| Time Taken                              |       |                       |                         | None Supplied | None Supplied | None Supplied | None Supplied | None Supplied |
| Analytical Parameter<br>(Soil Analysis) | Units | Limit of<br>detection | Accreditation<br>Status |               |               |               |               |               |

## SVOCs

|                             |       |      |           |   |        |   |        |        |
|-----------------------------|-------|------|-----------|---|--------|---|--------|--------|
| Aniline                     | mg/kg | 0.1  | NONE      | - | < 0.1  | - | < 0.1  | < 0.1  |
| Phenol                      | mg/kg | 0.2  | ISO 17025 | - | < 0.2  | - | < 0.2  | < 0.2  |
| 2-Chlorophenol              | mg/kg | 0.1  | MCERTS    | - | < 0.1  | - | < 0.1  | < 0.1  |
| Bis(2-chloroethyl)ether     | mg/kg | 0.2  | MCERTS    | - | < 0.2  | - | < 0.2  | < 0.2  |
| 1,3-Dichlorobenzene         | mg/kg | 0.2  | MCERTS    | - | < 0.2  | - | < 0.2  | < 0.2  |
| 1,2-Dichlorobenzene         | mg/kg | 0.1  | MCERTS    | - | < 0.1  | - | < 0.1  | < 0.1  |
| 1,4-Dichlorobenzene         | mg/kg | 0.2  | MCERTS    | - | < 0.2  | - | < 0.2  | < 0.2  |
| Bis(2-chloroisopropyl)ether | mg/kg | 0.1  | MCERTS    | - | < 0.1  | - | < 0.1  | < 0.1  |
| 2-Methylphenol              | mg/kg | 0.3  | MCERTS    | - | < 0.3  | - | < 0.3  | < 0.3  |
| Hexachloroethane            | mg/kg | 0.05 | MCERTS    | - | < 0.05 | - | < 0.05 | < 0.05 |
| Nitrobenzene                | mg/kg | 0.3  | MCERTS    | - | < 0.3  | - | < 0.3  | < 0.3  |
| 4-Methylphenol              | mg/kg | 0.2  | NONE      | - | < 0.2  | - | < 0.2  | < 0.2  |
| Isophorone                  | mg/kg | 0.2  | MCERTS    | - | < 0.2  | - | < 0.2  | < 0.2  |
| 2-Nitrophenol               | mg/kg | 0.3  | MCERTS    | - | < 0.3  | - | < 0.3  | < 0.3  |
| 2,4-Dimethylphenol          | mg/kg | 0.3  | MCERTS    | - | < 0.3  | - | < 0.3  | < 0.3  |
| Bis(2-chloroethoxy)methane  | mg/kg | 0.3  | MCERTS    | - | < 0.3  | - | < 0.3  | < 0.3  |
| 1,2,4-Trichlorobenzene      | mg/kg | 0.3  | MCERTS    | - | < 0.3  | - | < 0.3  | < 0.3  |
| Naphthalene                 | mg/kg | 0.1  | MCERTS    | - | < 0.10 | - | < 0.10 | < 0.10 |
| 2,4-Dichlorophenol          | mg/kg | 0.3  | MCERTS    | - | < 0.3  | - | < 0.3  | < 0.3  |
| 4-Chloroaniline             | mg/kg | 0.1  | NONE      | - | < 0.1  | - | < 0.1  | < 0.1  |
| Hexachlorobutadiene         | mg/kg | 0.1  | MCERTS    | - | < 0.1  | - | < 0.1  | < 0.1  |
| 4-Chloro-3-methylphenol     | mg/kg | 0.1  | NONE      | - | < 0.1  | - | < 0.1  | < 0.1  |
| 2,4,6-Trichlorophenol       | mg/kg | 0.1  | MCERTS    | - | < 0.1  | - | < 0.1  | < 0.1  |
| 2,4,5-Trichlorophenol       | mg/kg | 0.2  | MCERTS    | - | < 0.2  | - | < 0.2  | < 0.2  |
| 2-Methylnaphthalene         | mg/kg | 0.1  | NONE      | - | 0.3    | - | 0.4    | 0.5    |
| 2-Chloronaphthalene         | mg/kg | 0.1  | MCERTS    | - | < 0.1  | - | < 0.1  | < 0.1  |
| Dimethylphthalate           | mg/kg | 0.1  | MCERTS    | - | < 0.1  | - | < 0.1  | < 0.1  |
| 2,6-Dinitrotoluene          | mg/kg | 0.1  | MCERTS    | - | < 0.1  | - | < 0.1  | < 0.1  |
| Acenaphthylene              | mg/kg | 0.1  | MCERTS    | - | < 0.10 | - | < 0.10 | < 0.10 |
| Acenaphthene                | mg/kg | 0.1  | MCERTS    | - | < 0.10 | - | < 0.10 | 0.33   |
| 2,4-Dinitrotoluene          | mg/kg | 0.2  | MCERTS    | - | < 0.2  | - | < 0.2  | < 0.2  |
| Dibenzofuran                | mg/kg | 0.2  | MCERTS    | - | < 0.2  | - | < 0.2  | 0.2    |
| 4-Chlorophenyl phenyl ether | mg/kg | 0.3  | ISO 17025 | - | < 0.3  | - | < 0.3  | < 0.3  |
| Diethyl phthalate           | mg/kg | 0.2  | MCERTS    | - | < 0.2  | - | < 0.2  | < 0.2  |
| 4-Nitroaniline              | mg/kg | 0.2  | MCERTS    | - | < 0.2  | - | < 0.2  | < 0.2  |
| Fluorene                    | mg/kg | 0.1  | MCERTS    | - | < 0.10 | - | < 0.10 | 0.25   |
| Azobenzene                  | mg/kg | 0.3  | MCERTS    | - | < 0.3  | - | < 0.3  | < 0.3  |
| Bromophenyl phenyl ether    | mg/kg | 0.2  | MCERTS    | - | < 0.2  | - | < 0.2  | < 0.2  |
| Hexachlorobenzene           | mg/kg | 0.3  | MCERTS    | - | < 0.3  | - | < 0.3  | < 0.3  |
| Phenanthrene                | mg/kg | 0.1  | MCERTS    | - | 1.5    | - | 0.29   | 2.8    |
| Anthracene                  | mg/kg | 0.1  | MCERTS    | - | 0.22   | - | < 0.10 | 0.54   |
| Carbazole                   | mg/kg | 0.3  | MCERTS    | - | < 0.3  | - | < 0.3  | < 0.3  |
| Dibutyl phthalate           | mg/kg | 0.2  | MCERTS    | - | < 0.2  | - | < 0.2  | < 0.2  |
| Anthraquinone               | mg/kg | 0.3  | MCERTS    | - | < 0.3  | - | < 0.3  | < 0.3  |
| Fluoranthene                | mg/kg | 0.1  | MCERTS    | - | 2.1    | - | 0.23   | 4.7    |
| Pyrene                      | mg/kg | 0.1  | MCERTS    | - | 1.7    | - | 0.24   | 4.5    |
| Butyl benzyl phthalate      | mg/kg | 0.3  | ISO 17025 | - | < 0.3  | - | < 0.3  | < 0.3  |
| Benzo(a)anthracene          | mg/kg | 0.1  | MCERTS    | - | 0.97   | - | < 0.10 | 2.1    |
| Chrysene                    | mg/kg | 0.05 | MCERTS    | - | 0.79   | - | < 0.05 | 2.8    |
| Benzo(b)fluoranthene        | mg/kg | 0.1  | MCERTS    | - | 0.63   | - | < 0.10 | 2.7    |
| Benzo(k)fluoranthene        | mg/kg | 0.1  | MCERTS    | - | 0.41   | - | < 0.10 | 1.4    |
| Benzo(a)pyrene              | mg/kg | 0.1  | MCERTS    | - | 0.44   | - | < 0.10 | < 0.10 |
| Indeno(1,2,3-cd)pyrene      | mg/kg | 0.1  | MCERTS    | - | < 0.10 | - | < 0.10 | < 0.10 |
| Dibenz(a,h)anthracene       | mg/kg | 0.1  | MCERTS    | - | < 0.10 | - | < 0.10 | < 0.10 |
| Benzo(ghi)perylene          | mg/kg | 0.05 | MCERTS    | - | < 0.05 | - | < 0.05 | < 0.05 |

Analytical Report Number: 14-61115  
 Project / Site name: Prysmian Cables, Prescott  
 Your Order No: 10021/860/ST

| Lab Sample Number                       |       |                      |                         | 380011        | 380012        | 380013        | 380014        | 380015        |
|-----------------------------------------|-------|----------------------|-------------------------|---------------|---------------|---------------|---------------|---------------|
| Sample Reference                        |       |                      |                         | TP125         | TP127         | TP128         | TP128         | TP143         |
| Sample Number                           |       |                      |                         | None Supplied | None Supplied | None Supplied | None Supplied | None Supplied |
| Depth (m)                               |       |                      |                         | 0.55          | 1.90          | 0.30          | 1.70          | 0.70          |
| Date Sampled                            |       |                      |                         | 02/10/2014    | 02/10/2014    | 02/10/2014    | 02/10/2014    | 02/10/2014    |
| Time Taken                              |       |                      |                         | None Supplied | None Supplied | None Supplied | None Supplied | None Supplied |
| Analytical Parameter<br>(Soil Analysis) | Units | Unit of<br>detection | Accreditation<br>Status |               |               |               |               |               |
|                                         |       |                      |                         |               |               |               |               |               |
|                                         |       |                      |                         |               |               |               |               |               |
|                                         |       |                      |                         |               |               |               |               |               |
|                                         |       |                      |                         |               |               |               |               |               |
| Stone Content                           | %     | 0.1                  | NONE                    | < 0.1         | < 0.1         | < 0.1         | < 0.1         | < 0.1         |
| Moisture Content                        | %     | N/A                  | NONE                    | 17            | 21            | 12            | 7.3           | 17            |
| Total mass of sample received           | kg    | 0.001                | NONE                    | 0.48          | 0.54          | 0.49          | 0.52          | 0.38          |

|                                               |      |     |           |   |   |   |   |   |
|-----------------------------------------------|------|-----|-----------|---|---|---|---|---|
| Asbestos in Soil Screen / Identification Name | Type | N/A | ISO 17025 | - | - | - | - | - |
| Asbestos in Soil                              | Type | N/A | ISO 17025 | - | - | - | - | - |

#### Speciated PAHs

|                        |       |      |        |   |   |   |   |        |
|------------------------|-------|------|--------|---|---|---|---|--------|
| Naphthalene            | mg/kg | 0.05 | MCERTS | - | - | - | - | 0.47   |
| Acenaphthylene         | mg/kg | 0.1  | MCERTS | - | - | - | - | < 0.10 |
| Acenaphthene           | mg/kg | 0.1  | MCERTS | - | - | - | - | < 0.10 |
| Fluorene               | mg/kg | 0.1  | MCERTS | - | - | - | - | < 0.10 |
| Phenanthrene           | mg/kg | 0.1  | MCERTS | - | - | - | - | 1.0    |
| Anthracene             | mg/kg | 0.1  | MCERTS | - | - | - | - | 0.18   |
| Fluoranthene           | mg/kg | 0.1  | MCERTS | - | - | - | - | 0.22   |
| Pyrene                 | mg/kg | 0.1  | MCERTS | - | - | - | - | 0.26   |
| Benzo(a)anthracene     | mg/kg | 0.1  | MCERTS | - | - | - | - | < 0.10 |
| Chrysene               | mg/kg | 0.05 | MCERTS | - | - | - | - | < 0.05 |
| Benzo(b)fluoranthene   | mg/kg | 0.1  | MCERTS | - | - | - | - | < 0.10 |
| Benzo(k)fluoranthene   | mg/kg | 0.1  | MCERTS | - | - | - | - | < 0.10 |
| Benzo(a)pyrene         | mg/kg | 0.1  | MCERTS | - | - | - | - | < 0.10 |
| Indeno(1,2,3-cd)pyrene | mg/kg | 0.1  | MCERTS | - | - | - | - | < 0.10 |
| Dibenz(a,h)anthracene  | mg/kg | 0.1  | MCERTS | - | - | - | - | < 0.10 |
| Benzo(ghi)perylene     | mg/kg | 0.05 | MCERTS | - | - | - | - | < 0.05 |

#### Total PAH

|                             |       |     |        |   |   |   |   |      |
|-----------------------------|-------|-----|--------|---|---|---|---|------|
| Speciated Total EPA-16 PAHs | mg/kg | 1.6 | MCERTS | - | - | - | - | 2.14 |
|-----------------------------|-------|-----|--------|---|---|---|---|------|

#### Petroleum Hydrocarbons

|                 |       |     |      |       |   |   |       |       |
|-----------------|-------|-----|------|-------|---|---|-------|-------|
| TPH (C5 - C6)   | mg/kg | 1   | NONE | < 1.0 | - | - | < 1.0 | < 1.0 |
| TPH (C6 - C8)   | mg/kg | 0.1 | NONE | < 0.1 | - | - | < 0.1 | < 0.1 |
| TPH (C8 - C10)  | mg/kg | 0.1 | NONE | < 0.1 | - | - | < 0.1 | < 0.1 |
| TPH (C10 - C12) | mg/kg | 10  | NONE | < 10  | - | - | < 10  | 11    |
| TPH (C12 - C16) | mg/kg | 1   | NONE | 15    | - | - | < 1.0 | 51    |
| TPH (C16 - C21) | mg/kg | 1   | NONE | 72    | - | - | < 1.0 | 95    |
| TPH (C21 - C35) | mg/kg | 1   | NONE | 310   | - | - | < 1.0 | 120   |



4041



Environmental Science

Analytical Report Number: 14-61115

Project / Site name: Prysmian Cables, Prescot

Your Order No: 10021/860/ST

| Lab Sample Number                       |       |                       |                         | 380011        | 380012        | 380013        | 380014        | 380015        |
|-----------------------------------------|-------|-----------------------|-------------------------|---------------|---------------|---------------|---------------|---------------|
| Sample Reference                        |       |                       |                         | TP125         | TP127         | TP128         | TP128         | TP143         |
| Sample Number                           |       |                       |                         | None Supplied | None Supplied | None Supplied | None Supplied | None Supplied |
| Depth (m)                               |       |                       |                         | 0.55          | 1.90          | 0.30          | 1.70          | 0.70          |
| Date Sampled                            |       |                       |                         | 02/10/2014    | 02/10/2014    | 02/10/2014    | 02/10/2014    | 02/10/2014    |
| Time Taken                              |       |                       |                         | None Supplied | None Supplied | None Supplied | None Supplied | None Supplied |
| Analytical Parameter<br>(Soil Analysis) | Units | Limit of<br>detection | Accreditation<br>Status |               |               |               |               |               |
| <b>VOCs</b>                             |       |                       |                         |               |               |               |               |               |
| Chloromethane                           | µg/kg | 1                     | ISO 17025               | -             | < 1.0         | < 1.0         | -             | -             |
| Chloroethane                            | µg/kg | 1                     | ISO 17025               | -             | < 1.0         | < 1.0         | -             | -             |
| Bromomethane                            | µg/kg | 1                     | ISO 17025               | -             | < 1.0         | < 1.0         | -             | -             |
| Vinyl Chloride                          | µg/kg | 1                     | ISO 17025               | -             | < 1.0         | < 1.0         | -             | -             |
| Trichlorofluoromethane                  | µg/kg | 1                     | ISO 17025               | -             | < 1.0         | < 1.0         | -             | -             |
| 1,1-Dichloroethene                      | µg/kg | 1                     | MCERTS                  | -             | < 1.0         | < 1.0         | -             | -             |
| 1,1,2-Trichloro 1,2,2-Trifluoroethane   | µg/kg | 1                     | ISO 17025               | -             | < 1.0         | < 1.0         | -             | -             |
| Cis-1,2-dichloroethene                  | µg/kg | 1                     | MCERTS                  | -             | < 1.0         | < 1.0         | -             | -             |
| MTBE (Methyl Tertiary Butyl Ether)      | µg/kg | 1                     | MCERTS                  | -             | < 1.0         | < 1.0         | -             | -             |
| 1,1-Dichloroethane                      | µg/kg | 1                     | MCERTS                  | -             | < 1.0         | < 1.0         | -             | -             |
| 2,2-Dichloropropane                     | µg/kg | 1                     | NONE                    | -             | < 1.0         | < 1.0         | -             | -             |
| Trichloromethane                        | µg/kg | 1                     | MCERTS                  | -             | < 1.0         | < 1.0         | -             | -             |
| 1,1,1-Trichloroethane                   | µg/kg | 1                     | MCERTS                  | -             | < 1.0         | < 1.0         | -             | -             |
| 1,2-Dichloroethane                      | µg/kg | 1                     | MCERTS                  | -             | < 1.0         | < 1.0         | -             | -             |
| 1,1-Dichloropropene                     | µg/kg | 1                     | NONE                    | -             | < 1.0         | < 1.0         | -             | -             |
| Trans-1,2-dichloroethene                | µg/kg | 1                     | NONE                    | -             | < 1.0         | < 1.0         | -             | -             |
| Benzene                                 | µg/kg | 1                     | MCERTS                  | -             | < 1.0         | < 1.0         | -             | -             |
| Tetrachloromethane                      | µg/kg | 1                     | MCERTS                  | -             | < 1.0         | < 1.0         | -             | -             |
| 1,2-Dichloropropane                     | µg/kg | 1                     | MCERTS                  | -             | < 1.0         | < 1.0         | -             | -             |
| Trichloroethene                         | µg/kg | 1                     | MCERTS                  | -             | < 1.0         | < 1.0         | -             | -             |
| Dibromomethane                          | µg/kg | 1                     | MCERTS                  | -             | < 1.0         | < 1.0         | -             | -             |
| Bromodichloromethane                    | µg/kg | 1                     | NONE                    | -             | < 1.0         | < 1.0         | -             | -             |
| Cis-1,3-dichloropropene                 | µg/kg | 1                     | ISO 17025               | -             | < 1.0         | < 1.0         | -             | -             |
| Trans-1,3-dichloropropene               | µg/kg | 1                     | ISO 17025               | -             | < 1.0         | < 1.0         | -             | -             |
| Toluene                                 | µg/kg | 1                     | MCERTS                  | -             | < 1.0         | < 1.0         | -             | -             |
| 1,1,2-Trichloroethane                   | µg/kg | 1                     | MCERTS                  | -             | < 1.0         | < 1.0         | -             | -             |
| 1,3-Dichloropropane                     | µg/kg | 1                     | ISO 17025               | -             | < 1.0         | < 1.0         | -             | -             |
| Dibromochloromethane                    | µg/kg | 1                     | ISO 17025               | -             | < 1.0         | < 1.0         | -             | -             |
| Tetrachloroethene                       | µg/kg | 1                     | MCERTS                  | -             | < 1.0         | < 1.0         | -             | -             |
| 1,2-Dibromoethane                       | µg/kg | 1                     | ISO 17025               | -             | < 1.0         | < 1.0         | -             | -             |
| Chlorobenzene                           | µg/kg | 1                     | MCERTS                  | -             | < 1.0         | < 1.0         | -             | -             |
| 1,1,1,2-Tetrachloroethane               | µg/kg | 1                     | NONE                    | -             | < 1.0         | < 1.0         | -             | -             |
| Ethylbenzene                            | µg/kg | 1                     | MCERTS                  | -             | < 1.0         | < 1.0         | -             | -             |
| p & m-Xylene                            | µg/kg | 1                     | MCERTS                  | -             | < 1.0         | < 1.0         | -             | -             |
| Styrene                                 | µg/kg | 1                     | MCERTS                  | -             | < 1.0         | < 1.0         | -             | -             |
| Tribromomethane                         | µg/kg | 1                     | MCERTS                  | -             | < 1.0         | < 1.0         | -             | -             |
| o-Xylene                                | µg/kg | 1                     | MCERTS                  | -             | < 1.0         | < 1.0         | -             | -             |
| 1,1,2,2-Tetrachloroethane               | µg/kg | 1                     | MCERTS                  | -             | < 1.0         | < 1.0         | -             | -             |
| Isopropylbenzene                        | µg/kg | 1                     | NONE                    | -             | < 1.0         | < 1.0         | -             | -             |
| Bromobenzene                            | µg/kg | 1                     | MCERTS                  | -             | < 1.0         | < 1.0         | -             | -             |
| n-Propylbenzene                         | µg/kg | 1                     | ISO 17025               | -             | < 1.0         | < 1.0         | -             | -             |
| 2-Chlorotoluene                         | µg/kg | 1                     | NONE                    | -             | < 1.0         | < 1.0         | -             | -             |
| 4-Chlorotoluene                         | µg/kg | 1                     | NONE                    | -             | < 1.0         | < 1.0         | -             | -             |
| 1,3,5-Trimethylbenzene                  | µg/kg | 1                     | ISO 17025               | -             | < 1.0         | < 1.0         | -             | -             |
| tert-Butylbenzene                       | µg/kg | 1                     | NONE                    | -             | < 1.0         | < 1.0         | -             | -             |
| 1,2,4-Trimethylbenzene                  | µg/kg | 1                     | ISO 17025               | -             | < 1.0         | < 1.0         | -             | -             |
| sec-Butylbenzene                        | µg/kg | 1                     | NONE                    | -             | < 1.0         | < 1.0         | -             | -             |
| 1,3-Dichlorobenzene                     | µg/kg | 1                     | ISO 17025               | -             | < 1.0         | < 1.0         | -             | -             |
| p-Isopropyltoluene                      | µg/kg | 1                     | ISO 17025               | -             | < 1.0         | < 1.0         | -             | -             |
| 1,2-Dichlorobenzene                     | µg/kg | 1                     | MCERTS                  | -             | < 1.0         | < 1.0         | -             | -             |
| 1,4-Dichlorobenzene                     | µg/kg | 1                     | MCERTS                  | -             | < 1.0         | < 1.0         | -             | -             |
| Butylbenzene                            | µg/kg | 1                     | NONE                    | -             | < 1.0         | < 1.0         | -             | -             |
| 1,2-Dibromo-3-chloropropane             | µg/kg | 1                     | ISO 17025               | -             | < 1.0         | < 1.0         | -             | -             |
| 1,2,4-Trichlorobenzene                  | µg/kg | 1                     | MCERTS                  | -             | < 1.0         | < 1.0         | -             | -             |
| Hexachlorobutadiene                     | µg/kg | 1                     | NONE                    | -             | < 1.0         | < 1.0         | -             | -             |
| 1,2,3-Trichlorobenzene                  | µg/kg | 1                     | NONE                    | -             | < 1.0         | < 1.0         | -             | -             |



Environmental Science

Analytical Report Number: 14-61115

Project / Site name: Prysmian Cables, Prescot

Your Order No: 10021/860/ST

| Lab Sample Number                       |       |                       |                         | 380011        | 380012        | 380013        | 380014        | 380015        |
|-----------------------------------------|-------|-----------------------|-------------------------|---------------|---------------|---------------|---------------|---------------|
| Sample Reference                        |       |                       |                         | TP125         | TP127         | TP128         | TP128         | TP143         |
| Sample Number                           |       |                       |                         | None Supplied | None Supplied | None Supplied | None Supplied | None Supplied |
| Depth (m)                               |       |                       |                         | 0.55          | 1.90          | 0.30          | 1.70          | 0.70          |
| Date Sampled                            |       |                       |                         | 02/10/2014    | 02/10/2014    | 02/10/2014    | 02/10/2014    | 02/10/2014    |
| Time Taken                              |       |                       |                         | None Supplied | None Supplied | None Supplied | None Supplied | None Supplied |
| Analytical Parameter<br>(Soil Analysis) | Units | Limit of<br>detection | Accreditation<br>Status |               |               |               |               |               |
| <b>SVOCs</b>                            |       |                       |                         |               |               |               |               |               |
| Aniline                                 | mg/kg | 0.1                   | NONE                    | -             | < 0.1         | < 0.1         | -             | -             |
| Phenol                                  | mg/kg | 0.2                   | ISO 17025               | -             | < 0.2         | < 0.2         | -             | -             |
| 2-Chlorophenol                          | mg/kg | 0.1                   | MCERTS                  | -             | < 0.1         | < 0.1         | -             | -             |
| Bis(2-chloroethyl)ether                 | mg/kg | 0.2                   | MCERTS                  | -             | < 0.2         | < 0.2         | -             | -             |
| 1,3-Dichlorobenzene                     | mg/kg | 0.2                   | MCERTS                  | -             | < 0.2         | < 0.2         | -             | -             |
| 1,2-Dichlorobenzene                     | mg/kg | 0.1                   | MCERTS                  | -             | < 0.1         | < 0.1         | -             | -             |
| 1,4-Dichlorobenzene                     | mg/kg | 0.2                   | MCERTS                  | -             | < 0.2         | < 0.2         | -             | -             |
| Bis(2-chloroisopropyl)ether             | mg/kg | 0.1                   | MCERTS                  | -             | < 0.1         | < 0.1         | -             | -             |
| 2-Methylphenol                          | mg/kg | 0.3                   | MCERTS                  | -             | < 0.3         | < 0.3         | -             | -             |
| Hexachloroethane                        | mg/kg | 0.05                  | MCERTS                  | -             | < 0.05        | < 0.05        | -             | -             |
| Nitrobenzene                            | mg/kg | 0.3                   | MCERTS                  | -             | < 0.3         | < 0.3         | -             | -             |
| 4-Methylphenol                          | mg/kg | 0.2                   | NONE                    | -             | < 0.2         | < 0.2         | -             | -             |
| Isophorone                              | mg/kg | 0.2                   | MCERTS                  | -             | < 0.2         | < 0.2         | -             | -             |
| 2-Nitrophenol                           | mg/kg | 0.3                   | MCERTS                  | -             | < 0.3         | < 0.3         | -             | -             |
| 2,4-Dimethylphenol                      | mg/kg | 0.3                   | MCERTS                  | -             | < 0.3         | < 0.3         | -             | -             |
| Bis(2-chloroethoxy)methane              | mg/kg | 0.3                   | MCERTS                  | -             | < 0.3         | < 0.3         | -             | -             |
| 1,2,4-Trichlorobenzene                  | mg/kg | 0.3                   | MCERTS                  | -             | < 0.3         | < 0.3         | -             | -             |
| Naphthalene                             | mg/kg | 0.1                   | MCERTS                  | -             | 0.27          | 0.89          | -             | -             |
| 2,4-Dichlorophenol                      | mg/kg | 0.3                   | MCERTS                  | -             | < 0.3         | < 0.3         | -             | -             |
| 4-Chloroaniline                         | mg/kg | 0.1                   | NONE                    | -             | < 0.1         | < 0.1         | -             | -             |
| Hexachlorobutadiene                     | mg/kg | 0.1                   | MCERTS                  | -             | < 0.1         | < 0.1         | -             | -             |
| 4-Chloro-3-methylphenol                 | mg/kg | 0.1                   | NONE                    | -             | < 0.1         | < 0.1         | -             | -             |
| 2,4,6-Trichlorophenol                   | mg/kg | 0.1                   | MCERTS                  | -             | < 0.1         | < 0.1         | -             | -             |
| 2,4,5-Trichlorophenol                   | mg/kg | 0.2                   | MCERTS                  | -             | < 0.2         | < 0.2         | -             | -             |
| 2-Methylnaphthalene                     | mg/kg | 0.1                   | NONE                    | -             | 0.5           | 0.8           | -             | -             |
| 2-Chloronaphthalene                     | mg/kg | 0.1                   | MCERTS                  | -             | < 0.1         | < 0.1         | -             | -             |
| Dimethylphthalate                       | mg/kg | 0.1                   | MCERTS                  | -             | < 0.1         | < 0.1         | -             | -             |
| 2,6-Dinitrotoluene                      | mg/kg | 0.1                   | MCERTS                  | -             | < 0.1         | < 0.1         | -             | -             |
| Acenaphthylene                          | mg/kg | 0.1                   | MCERTS                  | -             | < 0.10        | < 0.10        | -             | -             |
| Acenaphthene                            | mg/kg | 0.1                   | MCERTS                  | -             | < 0.10        | 2.8           | -             | -             |
| 2,4-Dinitrotoluene                      | mg/kg | 0.2                   | MCERTS                  | -             | < 0.2         | < 0.2         | -             | -             |
| Dibenzofuran                            | mg/kg | 0.2                   | MCERTS                  | -             | < 0.2         | 1.4           | -             | -             |
| 4-Chlorophenyl phenyl ether             | mg/kg | 0.3                   | ISO 17025               | -             | < 0.3         | < 0.3         | -             | -             |
| Diethyl phthalate                       | mg/kg | 0.2                   | MCERTS                  | -             | < 0.2         | < 0.2         | -             | -             |
| 4-Nitroaniline                          | mg/kg | 0.2                   | MCERTS                  | -             | < 0.2         | < 0.2         | -             | -             |
| Fluorene                                | mg/kg | 0.1                   | MCERTS                  | -             | < 0.10        | 1.7           | -             | -             |
| Azobenzene                              | mg/kg | 0.3                   | MCERTS                  | -             | < 0.3         | < 0.3         | -             | -             |
| Bromophenyl phenyl ether                | mg/kg | 0.2                   | MCERTS                  | -             | < 0.2         | < 0.2         | -             | -             |
| Hexachlorobenzene                       | mg/kg | 0.3                   | MCERTS                  | -             | < 0.3         | < 0.3         | -             | -             |
| Phenanthrene                            | mg/kg | 0.1                   | MCERTS                  | -             | 0.54          | 10            | -             | -             |
| Anthracene                              | mg/kg | 0.1                   | MCERTS                  | -             | < 0.10        | 1.4           | -             | -             |
| Carbazole                               | mg/kg | 0.3                   | MCERTS                  | -             | < 0.3         | 0.5           | -             | -             |
| Dibutyl phthalate                       | mg/kg | 0.2                   | MCERTS                  | -             | < 0.2         | < 0.2         | -             | -             |
| Anthraquinone                           | mg/kg | 0.3                   | MCERTS                  | -             | < 0.3         | 0.8           | -             | -             |
| Fluoranthene                            | mg/kg | 0.1                   | MCERTS                  | -             | 0.65          | 5.7           | -             | -             |
| Pyrene                                  | mg/kg | 0.1                   | MCERTS                  | -             | 0.68          | 5.3           | -             | -             |
| Butyl benzyl phthalate                  | mg/kg | 0.3                   | ISO 17025               | -             | < 0.3         | < 0.3         | -             | -             |
| Benzo(a)anthracene                      | mg/kg | 0.1                   | MCERTS                  | -             | 0.54          | 2.8           | -             | -             |
| Chrysene                                | mg/kg | 0.05                  | MCERTS                  | -             | 0.67          | 3.4           | -             | -             |
| Benzo(b)fluoranthene                    | mg/kg | 0.1                   | MCERTS                  | -             | 0.75          | 3.1           | -             | -             |
| Benzo(k)fluoranthene                    | mg/kg | 0.1                   | MCERTS                  | -             | 0.35          | 1.3           | -             | -             |
| Benzo(a)pyrene                          | mg/kg | 0.1                   | MCERTS                  | -             | 0.43          | 2.2           | -             | -             |
| Indeno(1,2,3-cd)pyrene                  | mg/kg | 0.1                   | MCERTS                  | -             | < 0.10        | 0.89          | -             | -             |
| Dibenz(a,h)anthracene                   | mg/kg | 0.1                   | MCERTS                  | -             | < 0.10        | 0.37          | -             | -             |
| Benzo(ghi)perylene                      | mg/kg | 0.05                  | MCERTS                  | -             | < 0.05        | 0.92          | -             | -             |

Analytical Report Number: 14-61115  
Project / Site name: Prysmian Cables, Prescott  
Your Order No: 10021/860/ST

| Lab Sample Number                       | 380016        | 380017                | 380018                  | 380019        | 380020        |
|-----------------------------------------|---------------|-----------------------|-------------------------|---------------|---------------|
| Sample Reference                        | TP144         | TP145                 | TP146                   | TP147         | TP130         |
| Sample Number                           | None Supplied | None Supplied         | None Supplied           | None Supplied | None Supplied |
| Depth (m)                               | 0.75          | 0.20                  | 0.60                    | 0.30          | 1.20          |
| Date Sampled                            | 02/10/2014    | 02/10/2014            | 02/10/2014              | 02/10/2014    | 02/10/2014    |
| Time Taken                              | None Supplied | None Supplied         | None Supplied           | None Supplied | None Supplied |
| Analytical Parameter<br>(Soil Analysis) | Units         | Limit of<br>detection | Accreditation<br>Status |               |               |
| Stone Content                           | %             | 0.1                   | NONE                    | < 0.1         | < 0.1         |
| Moisture Content                        | %             | N/A                   | NONE                    | 16            | 13            |
| Total mass of sample received           | kg            | 0.001                 | NONE                    | 0.40          | 0.55          |

|                                               |      |     |           |   |   |   |   |              |
|-----------------------------------------------|------|-----|-----------|---|---|---|---|--------------|
| Asbestos in Soil Screen / Identification Name | Type | N/A | ISO 17025 | - | - | - | - | -            |
| Asbestos in Soil                              | Type | N/A | ISO 17025 | - | - | - | - | Not-detected |

#### Speciated PAHs

|                        |       |      |        |   |   |        |   |   |
|------------------------|-------|------|--------|---|---|--------|---|---|
| Naphthalene            | mg/kg | 0.05 | MCERTS | - | - | < 0.05 | - | - |
| Acenaphthylene         | mg/kg | 0.1  | MCERTS | - | - | < 0.10 | - | - |
| Acenaphthene           | mg/kg | 0.1  | MCERTS | - | - | < 0.10 | - | - |
| Fluorene               | mg/kg | 0.1  | MCERTS | - | - | < 0.10 | - | - |
| Phenanthrene           | mg/kg | 0.1  | MCERTS | - | - | < 0.10 | - | - |
| Anthracene             | mg/kg | 0.1  | MCERTS | - | - | < 0.10 | - | - |
| Fluoranthene           | mg/kg | 0.1  | MCERTS | - | - | < 0.10 | - | - |
| Pyrene                 | mg/kg | 0.1  | MCERTS | - | - | < 0.10 | - | - |
| Benzo(a)anthracene     | mg/kg | 0.1  | MCERTS | - | - | < 0.10 | - | - |
| Chrysene               | mg/kg | 0.05 | MCERTS | - | - | < 0.05 | - | - |
| Benzo(b)fluoranthene   | mg/kg | 0.1  | MCERTS | - | - | < 0.10 | - | - |
| Benzo(k)fluoranthene   | mg/kg | 0.1  | MCERTS | - | - | < 0.10 | - | - |
| Benzo(a)pyrene         | mg/kg | 0.1  | MCERTS | - | - | < 0.10 | - | - |
| Indeno(1,2,3-cd)pyrene | mg/kg | 0.1  | MCERTS | - | - | < 0.10 | - | - |
| Dibenz(a,h)anthracene  | mg/kg | 0.1  | MCERTS | - | - | < 0.10 | - | - |
| Benzo(ghi)perylene     | mg/kg | 0.05 | MCERTS | - | - | < 0.05 | - | - |

#### Total PAH

|                             |       |     |        |   |   |        |   |   |
|-----------------------------|-------|-----|--------|---|---|--------|---|---|
| Speciated Total EPA-16 PAHs | mg/kg | 1.6 | MCERTS | - | - | < 1.60 | - | - |
|-----------------------------|-------|-----|--------|---|---|--------|---|---|

#### Petroleum Hydrocarbons

|                 |       |     |      |       |       |       |       |   |
|-----------------|-------|-----|------|-------|-------|-------|-------|---|
| TPH (C5 - C6)   | mg/kg | 1   | NONE | < 1.0 | < 1.0 | < 1.0 | < 1.0 | - |
| TPH (C6 - C8)   | mg/kg | 0.1 | NONE | < 0.1 | < 0.1 | < 0.1 | < 0.1 | - |
| TPH (C8 - C10)  | mg/kg | 0.1 | NONE | < 0.1 | < 0.1 | < 0.1 | < 0.1 | - |
| TPH (C10 - C12) | mg/kg | 10  | NONE | < 10  | < 10  | < 10  | < 10  | - |
| TPH (C12 - C16) | mg/kg | 1   | NONE | 43    | < 1.0 | < 1.0 | 13    | - |
| TPH (C16 - C21) | mg/kg | 1   | NONE | 85    | < 1.0 | < 1.0 | 58    | - |
| TPH (C21 - C35) | mg/kg | 1   | NONE | 110   | < 1.0 | < 1.0 | 270   | - |



4041



Environmental Science

Analytical Report Number: 14-61115

Project / Site name: Prysmian Cables, Prescott

Your Order No: 10021/860/ST

| Lab Sample Number                       |       |                       |                         | 380016        | 380017        | 380018        | 380019        | 380020        |
|-----------------------------------------|-------|-----------------------|-------------------------|---------------|---------------|---------------|---------------|---------------|
| Sample Reference                        |       |                       |                         | TP144         | TP145         | TP146         | TP147         | TP130         |
| Sample Number                           |       |                       |                         | None Supplied | None Supplied | None Supplied | None Supplied | None Supplied |
| Depth (m)                               |       |                       |                         | 0.75          | 0.20          | 0.60          | 0.30          | 1.20          |
| Date Sampled                            |       |                       |                         | 02/10/2014    | 02/10/2014    | 02/10/2014    | 02/10/2014    | 02/10/2014    |
| Time Taken                              |       |                       |                         | None Supplied | None Supplied | None Supplied | None Supplied | None Supplied |
| Analytical Parameter<br>(Soil Analysis) | Units | Limit of<br>detection | Accreditation<br>Status |               |               |               |               |               |
| <b>VOCs</b>                             |       |                       |                         |               |               |               |               |               |
| Chloromethane                           | µg/kg | 1                     | ISO 17025               | < 1.0         | -             | < 1.0         | < 1.0         | -             |
| Chloroethane                            | µg/kg | 1                     | ISO 17025               | < 1.0         | -             | < 1.0         | < 1.0         | -             |
| Bromomethane                            | µg/kg | 1                     | ISO 17025               | < 1.0         | -             | < 1.0         | < 1.0         | -             |
| Vinyl Chloride                          | µg/kg | 1                     | ISO 17025               | < 1.0         | -             | < 1.0         | < 1.0         | -             |
| Trichlorofluoromethane                  | µg/kg | 1                     | ISO 17025               | < 1.0         | -             | < 1.0         | < 1.0         | -             |
| 1,1-Dichloroethene                      | µg/kg | 1                     | MCERTS                  | < 1.0         | -             | < 1.0         | < 1.0         | -             |
| 1,1,2-Trichloro 1,2,2-Trifluoroethane   | µg/kg | 1                     | ISO 17025               | < 1.0         | -             | < 1.0         | < 1.0         | -             |
| Cis-1,2-dichloroethene                  | µg/kg | 1                     | MCERTS                  | < 1.0         | -             | < 1.0         | < 1.0         | -             |
| MTBE (Methyl Tertiary Butyl Ether)      | µg/kg | 1                     | MCERTS                  | < 1.0         | -             | < 1.0         | < 1.0         | -             |
| 1,1-Dichloroethane                      | µg/kg | 1                     | MCERTS                  | < 1.0         | -             | < 1.0         | < 1.0         | -             |
| 2,2-Dichloropropane                     | µg/kg | 1                     | NONE                    | < 1.0         | -             | < 1.0         | < 1.0         | -             |
| Trichloromethane                        | µg/kg | 1                     | MCERTS                  | < 1.0         | -             | < 1.0         | < 1.0         | -             |
| 1,1,1-Trichloroethane                   | µg/kg | 1                     | MCERTS                  | < 1.0         | -             | < 1.0         | < 1.0         | -             |
| 1,2-Dichloroethane                      | µg/kg | 1                     | MCERTS                  | < 1.0         | -             | < 1.0         | 1.0           | -             |
| 1,1-Dichloropropene                     | µg/kg | 1                     | NONE                    | < 1.0         | -             | < 1.0         | < 1.0         | -             |
| Trans-1,2-dichloroethene                | µg/kg | 1                     | NONE                    | < 1.0         | -             | < 1.0         | < 1.0         | -             |
| Benzene                                 | µg/kg | 1                     | MCERTS                  | < 1.0         | -             | < 1.0         | < 1.0         | -             |
| Tetrachloromethane                      | µg/kg | 1                     | MCERTS                  | < 1.0         | -             | < 1.0         | < 1.0         | -             |
| 1,2-Dichloropropane                     | µg/kg | 1                     | MCERTS                  | < 1.0         | -             | < 1.0         | < 1.0         | -             |
| Trichloroethene                         | µg/kg | 1                     | MCERTS                  | < 1.0         | -             | < 1.0         | < 1.0         | -             |
| Dibromomethane                          | µg/kg | 1                     | MCERTS                  | < 1.0         | -             | < 1.0         | < 1.0         | -             |
| Bromodichloromethane                    | µg/kg | 1                     | NONE                    | < 1.0         | -             | < 1.0         | < 1.0         | -             |
| Cis-1,3-dichloropropene                 | µg/kg | 1                     | ISO 17025               | < 1.0         | -             | < 1.0         | < 1.0         | -             |
| Trans-1,3-dichloropropene               | µg/kg | 1                     | ISO 17025               | < 1.0         | -             | < 1.0         | < 1.0         | -             |
| Toluene                                 | µg/kg | 1                     | MCERTS                  | < 1.0         | -             | < 1.0         | < 1.0         | -             |
| 1,1,2-Trichloroethane                   | µg/kg | 1                     | MCERTS                  | < 1.0         | -             | < 1.0         | < 1.0         | -             |
| 1,3-Dichloropropane                     | µg/kg | 1                     | ISO 17025               | < 1.0         | -             | < 1.0         | < 1.0         | -             |
| Dibromochloromethane                    | µg/kg | 1                     | ISO 17025               | < 1.0         | -             | < 1.0         | < 1.0         | -             |
| Tetrachloroethene                       | µg/kg | 1                     | MCERTS                  | < 1.0         | -             | < 1.0         | < 1.0         | -             |
| 1,2-Dibromoethane                       | µg/kg | 1                     | ISO 17025               | < 1.0         | -             | < 1.0         | < 1.0         | -             |
| Chlorobenzene                           | µg/kg | 1                     | MCERTS                  | < 1.0         | -             | < 1.0         | < 1.0         | -             |
| 1,1,1,2-Tetrachloroethane               | µg/kg | 1                     | NONE                    | < 1.0         | -             | < 1.0         | < 1.0         | -             |
| Ethylbenzene                            | µg/kg | 1                     | MCERTS                  | < 1.0         | -             | < 1.0         | < 1.0         | -             |
| p & m-Xylene                            | µg/kg | 1                     | MCERTS                  | < 1.0         | -             | < 1.0         | < 1.0         | -             |
| Styrene                                 | µg/kg | 1                     | MCERTS                  | < 1.0         | -             | < 1.0         | < 1.0         | -             |
| Tribromomethane                         | µg/kg | 1                     | MCERTS                  | < 1.0         | -             | < 1.0         | < 1.0         | -             |
| o-Xylene                                | µg/kg | 1                     | MCERTS                  | < 1.0         | -             | < 1.0         | < 1.0         | -             |
| 1,1,2,2-Tetrachloroethane               | µg/kg | 1                     | MCERTS                  | < 1.0         | -             | < 1.0         | < 1.0         | -             |
| Isopropylbenzene                        | µg/kg | 1                     | NONE                    | < 1.0         | -             | < 1.0         | < 1.0         | -             |
| Bromobenzene                            | µg/kg | 1                     | MCERTS                  | < 1.0         | -             | < 1.0         | < 1.0         | -             |
| n-Propylbenzene                         | µg/kg | 1                     | ISO 17025               | < 1.0         | -             | < 1.0         | < 1.0         | -             |
| 2-Chlorotoluene                         | µg/kg | 1                     | NONE                    | < 1.0         | -             | < 1.0         | < 1.0         | -             |
| 4-Chlorotoluene                         | µg/kg | 1                     | NONE                    | < 1.0         | -             | < 1.0         | < 1.0         | -             |
| 1,3,5-Trimethylbenzene                  | µg/kg | 1                     | ISO 17025               | < 1.0         | -             | < 1.0         | < 1.0         | -             |
| tert-Butylbenzene                       | µg/kg | 1                     | NONE                    | < 1.0         | -             | < 1.0         | < 1.0         | -             |
| 1,2,4-Trimethylbenzene                  | µg/kg | 1                     | ISO 17025               | < 1.0         | -             | < 1.0         | < 1.0         | -             |
| sec-Butylbenzene                        | µg/kg | 1                     | NONE                    | < 1.0         | -             | < 1.0         | < 1.0         | -             |
| 1,3-Dichlorobenzene                     | µg/kg | 1                     | ISO 17025               | < 1.0         | -             | < 1.0         | < 1.0         | -             |
| p-Isopropyltoluene                      | µg/kg | 1                     | ISO 17025               | < 1.0         | -             | < 1.0         | < 1.0         | -             |
| 1,2-Dichlorobenzene                     | µg/kg | 1                     | MCERTS                  | < 1.0         | -             | < 1.0         | < 1.0         | -             |
| 1,4-Dichlorobenzene                     | µg/kg | 1                     | MCERTS                  | < 1.0         | -             | < 1.0         | < 1.0         | -             |
| Butylbenzene                            | µg/kg | 1                     | NONE                    | < 1.0         | -             | < 1.0         | < 1.0         | -             |
| 1,2-Dibromo-3-chloropropane             | µg/kg | 1                     | ISO 17025               | < 1.0         | -             | < 1.0         | < 1.0         | -             |
| 1,2,4-Trichlorobenzene                  | µg/kg | 1                     | MCERTS                  | < 1.0         | -             | < 1.0         | < 1.0         | -             |
| Hexachlorobutadiene                     | µg/kg | 1                     | NONE                    | < 1.0         | -             | < 1.0         | < 1.0         | -             |
| 1,2,3-Trichlorobenzene                  | µg/kg | 1                     | NONE                    | < 1.0         | -             | < 1.0         | < 1.0         | -             |



4041



Environmental Science

Analytical Report Number: 14-61115

Project / Site name: Prysmian Cables, Prescot

Your Order No: 10021/860/ST

| Lab Sample Number                       |       |                       |                         | 380016        | 380017        | 380018        | 380019        | 380020        |
|-----------------------------------------|-------|-----------------------|-------------------------|---------------|---------------|---------------|---------------|---------------|
| Sample Reference                        |       |                       |                         | TP144         | TP145         | TP146         | TP147         | TP130         |
| Sample Number                           |       |                       |                         | None Supplied | None Supplied | None Supplied | None Supplied | None Supplied |
| Depth (m)                               |       |                       |                         | 0.75          | 0.20          | 0.60          | 0.30          | 1.20          |
| Date Sampled                            |       |                       |                         | 02/10/2014    | 02/10/2014    | 02/10/2014    | 02/10/2014    | 02/10/2014    |
| Time Taken                              |       |                       |                         | None Supplied | None Supplied | None Supplied | None Supplied | None Supplied |
| Analytical Parameter<br>(Soil Analysis) | Units | Limit of<br>detection | Accreditation<br>Status |               |               |               |               |               |
| <b>SVOCs</b>                            |       |                       |                         |               |               |               |               |               |
| Aniline                                 | mg/kg | 0.1                   | NONE                    | < 0.1         | -             | -             | < 0.1         | < 0.1         |
| Phenol                                  | mg/kg | 0.2                   | ISO 17025               | < 0.2         | -             | -             | < 0.2         | < 0.2         |
| 2-Chlorophenol                          | mg/kg | 0.1                   | MCERTS                  | < 0.1         | -             | -             | < 0.1         | < 0.1         |
| Bis(2-chloroethyl)ether                 | mg/kg | 0.2                   | MCERTS                  | < 0.2         | -             | -             | < 0.2         | < 0.2         |
| 1,3-Dichlorobenzene                     | mg/kg | 0.2                   | MCERTS                  | < 0.2         | -             | -             | < 0.2         | < 0.2         |
| 1,2-Dichlorobenzene                     | mg/kg | 0.1                   | MCERTS                  | < 0.1         | -             | -             | < 0.1         | < 0.1         |
| 1,4-Dichlorobenzene                     | mg/kg | 0.2                   | MCERTS                  | < 0.2         | -             | -             | < 0.2         | < 0.2         |
| Bis(2-chloroisopropyl)ether             | mg/kg | 0.1                   | MCERTS                  | < 0.1         | -             | -             | < 0.1         | < 0.1         |
| 2-Methylphenol                          | mg/kg | 0.3                   | MCERTS                  | < 0.3         | -             | -             | < 0.3         | < 0.3         |
| Hexachloroethane                        | mg/kg | 0.05                  | MCERTS                  | < 0.05        | -             | -             | < 0.05        | < 0.05        |
| Nitrobenzene                            | mg/kg | 0.3                   | MCERTS                  | < 0.3         | -             | -             | < 0.3         | < 0.3         |
| 4-Methylphenol                          | mg/kg | 0.2                   | NONE                    | < 0.2         | -             | -             | < 0.2         | < 0.2         |
| Isophorone                              | mg/kg | 0.2                   | MCERTS                  | < 0.2         | -             | -             | < 0.2         | < 0.2         |
| 2-Nitrophenol                           | mg/kg | 0.3                   | MCERTS                  | < 0.3         | -             | -             | < 0.3         | < 0.3         |
| 2,4-Dimethylphenol                      | mg/kg | 0.3                   | MCERTS                  | < 0.3         | -             | -             | < 0.3         | < 0.3         |
| Bis(2-chloroethoxy)methane              | mg/kg | 0.3                   | MCERTS                  | < 0.3         | -             | -             | < 0.3         | < 0.3         |
| 1,2,4-Trichlorobenzene                  | mg/kg | 0.3                   | MCERTS                  | < 0.3         | -             | -             | < 0.3         | < 0.3         |
| Naphthalene                             | mg/kg | 0.1                   | MCERTS                  | 0.25          | -             | -             | < 0.10        | < 0.10        |
| 2,4-Dichlorophenol                      | mg/kg | 0.3                   | MCERTS                  | < 0.3         | -             | -             | < 0.3         | < 0.3         |
| 4-Chloroaniline                         | mg/kg | 0.1                   | NONE                    | < 0.1         | -             | -             | < 0.1         | < 0.1         |
| Hexachlorobutadiene                     | mg/kg | 0.1                   | MCERTS                  | < 0.1         | -             | -             | < 0.1         | < 0.1         |
| 4-Chloro-3-methylphenol                 | mg/kg | 0.1                   | NONE                    | < 0.1         | -             | -             | < 0.1         | < 0.1         |
| 2,4,6-Trichlorophenol                   | mg/kg | 0.1                   | MCERTS                  | < 0.1         | -             | -             | < 0.1         | < 0.1         |
| 2,4,5-Trichlorophenol                   | mg/kg | 0.2                   | MCERTS                  | < 0.2         | -             | -             | < 0.2         | < 0.2         |
| 2-Methylnaphthalene                     | mg/kg | 0.1                   | NONE                    | 0.7           | -             | -             | < 0.1         | 0.4           |
| 2-Chloronaphthalene                     | mg/kg | 0.1                   | MCERTS                  | < 0.1         | -             | -             | < 0.1         | < 0.1         |
| Dimethylphthalate                       | mg/kg | 0.1                   | MCERTS                  | < 0.1         | -             | -             | < 0.1         | < 0.1         |
| 2,6-Dinitrotoluene                      | mg/kg | 0.1                   | MCERTS                  | < 0.1         | -             | -             | < 0.1         | < 0.1         |
| Acenaphthylene                          | mg/kg | 0.1                   | MCERTS                  | < 0.10        | -             | -             | < 0.10        | < 0.10        |
| Acenaphthene                            | mg/kg | 0.1                   | MCERTS                  | < 0.10        | -             | -             | < 0.10        | < 0.10        |
| 2,4-Dinitrotoluene                      | mg/kg | 0.2                   | MCERTS                  | < 0.2         | -             | -             | < 0.2         | < 0.2         |
| Dibenzofuran                            | mg/kg | 0.2                   | MCERTS                  | 0.5           | -             | -             | < 0.2         | < 0.2         |
| 4-Chlorophenyl phenyl ether             | mg/kg | 0.3                   | ISO 17025               | < 0.3         | -             | -             | < 0.3         | < 0.3         |
| Diethyl phthalate                       | mg/kg | 0.2                   | MCERTS                  | < 0.2         | -             | -             | < 0.2         | < 0.2         |
| 4-Nitroaniline                          | mg/kg | 0.2                   | MCERTS                  | < 0.2         | -             | -             | < 0.2         | < 0.2         |
| Fluorene                                | mg/kg | 0.1                   | MCERTS                  | < 0.10        | -             | -             | < 0.10        | < 0.10        |
| Azobenzene                              | mg/kg | 0.3                   | MCERTS                  | < 0.3         | -             | -             | < 0.3         | < 0.3         |
| Bromophenyl phenyl ether                | mg/kg | 0.2                   | MCERTS                  | < 0.2         | -             | -             | < 0.2         | < 0.2         |
| Hexachlorobenzene                       | mg/kg | 0.3                   | MCERTS                  | < 0.3         | -             | -             | < 0.3         | < 0.3         |
| Phenanthrene                            | mg/kg | 0.1                   | MCERTS                  | 0.92          | -             | -             | < 0.10        | < 0.10        |
| Anthracene                              | mg/kg | 0.1                   | MCERTS                  | 0.18          | -             | -             | < 0.10        | < 0.10        |
| Carbazole                               | mg/kg | 0.3                   | MCERTS                  | < 0.3         | -             | -             | < 0.3         | < 0.3         |
| Dibutyl phthalate                       | mg/kg | 0.2                   | MCERTS                  | < 0.2         | -             | -             | < 0.2         | < 0.2         |
| Anthraquinone                           | mg/kg | 0.3                   | MCERTS                  | < 0.3         | -             | -             | < 0.3         | < 0.3         |
| Fluoranthene                            | mg/kg | 0.1                   | MCERTS                  | 0.17          | -             | -             | < 0.10        | < 0.10        |
| Pyrene                                  | mg/kg | 0.1                   | MCERTS                  | 0.20          | -             | -             | < 0.10        | < 0.10        |
| Butyl benzyl phthalate                  | mg/kg | 0.3                   | ISO 17025               | < 0.3         | -             | -             | < 0.3         | < 0.3         |
| Benzo(a)anthracene                      | mg/kg | 0.1                   | MCERTS                  | < 0.10        | -             | -             | < 0.10        | < 0.10        |
| Chrysene                                | mg/kg | 0.05                  | MCERTS                  | < 0.05        | -             | -             | < 0.05        | < 0.05        |
| Benzo(b)fluoranthene                    | mg/kg | 0.1                   | MCERTS                  | < 0.10        | -             | -             | < 0.10        | < 0.10        |
| Benzo(k)fluoranthene                    | mg/kg | 0.1                   | MCERTS                  | < 0.10        | -             | -             | < 0.10        | < 0.10        |
| Benzo(a)pyrene                          | mg/kg | 0.1                   | MCERTS                  | < 0.10        | -             | -             | < 0.10        | < 0.10        |
| Indeno(1,2,3-cd)pyrene                  | mg/kg | 0.1                   | MCERTS                  | < 0.10        | -             | -             | < 0.10        | < 0.10        |
| Dibenz(a,h)anthracene                   | mg/kg | 0.1                   | MCERTS                  | < 0.10        | -             | -             | < 0.10        | < 0.10        |
| Benzo(ghi)perylene                      | mg/kg | 0.05                  | MCERTS                  | < 0.05        | -             | -             | < 0.05        | < 0.05        |

Analytical Report Number: 14-61115  
 Project / Site name: Prysmian Cables, Prescott  
 Your Order No: 10021/860/ST

|                                         |  |  |  |               |                       |                         |               |               |
|-----------------------------------------|--|--|--|---------------|-----------------------|-------------------------|---------------|---------------|
| Lab Sample Number                       |  |  |  | 380021        | 380022                | 380023                  | 380024        | 380025        |
| Sample Reference                        |  |  |  | TP131         | TP133                 | TP136                   | TP101         | TP103         |
| Sample Number                           |  |  |  | None Supplied | None Supplied         | None Supplied           | None Supplied | None Supplied |
| Depth (m)                               |  |  |  | 1.90          | 3.20                  | 2.50                    | 2.20          | 2.60          |
| Date Sampled                            |  |  |  | 02/10/2014    | 02/10/2014            | 02/10/2014              | 02/10/2014    | 02/10/2014    |
| Time Taken                              |  |  |  | None Supplied | None Supplied         | None Supplied           | None Supplied | None Supplied |
| Analytical Parameter<br>(Soil Analysis) |  |  |  | Units         | Limit of<br>detection | Accreditation<br>Status |               |               |
| Stone Content                           |  |  |  | %             | 0.1                   | NONE                    | 15            | < 0.1         |
| Moisture Content                        |  |  |  | %             | N/A                   | NONE                    | 14            | 19            |
| Total mass of sample received           |  |  |  | kg            | 0.001                 | NONE                    | 0.43          | 0.46          |
|                                         |  |  |  |               |                       |                         | 0.40          | 0.54          |
|                                         |  |  |  |               |                       |                         |               | 14            |
|                                         |  |  |  |               |                       |                         |               | 0.50          |

|                                               |      |     |           |   |   |                                   |              |   |
|-----------------------------------------------|------|-----|-----------|---|---|-----------------------------------|--------------|---|
| Asbestos in Soil Screen / Identification Name | Type | N/A | ISO 17025 | - | - | Chrysotile-<br>Insulation lagging | -            | - |
| Asbestos in Soil                              | Type | N/A | ISO 17025 | - | - | Detected                          | Not-detected | - |

#### Speciated PAHs

|                        |       |      |        |   |   |   |   |   |
|------------------------|-------|------|--------|---|---|---|---|---|
| Naphthalene            | mg/kg | 0.05 | MCERTS | - | - | - | - | - |
| Acenaphthylene         | mg/kg | 0.1  | MCERTS | - | - | - | - | - |
| Acenaphthene           | mg/kg | 0.1  | MCERTS | - | - | - | - | - |
| Fluorene               | mg/kg | 0.1  | MCERTS | - | - | - | - | - |
| Phenanthrene           | mg/kg | 0.1  | MCERTS | - | - | - | - | - |
| Anthracene             | mg/kg | 0.1  | MCERTS | - | - | - | - | - |
| Fluoranthene           | mg/kg | 0.1  | MCERTS | - | - | - | - | - |
| Pyrene                 | mg/kg | 0.1  | MCERTS | - | - | - | - | - |
| Benzo(a)anthracene     | mg/kg | 0.1  | MCERTS | - | - | - | - | - |
| Chrysene               | mg/kg | 0.05 | MCERTS | - | - | - | - | - |
| Benzo(b)fluoranthene   | mg/kg | 0.1  | MCERTS | - | - | - | - | - |
| Benzo(k)fluoranthene   | mg/kg | 0.1  | MCERTS | - | - | - | - | - |
| Benzo(a)pyrene         | mg/kg | 0.1  | MCERTS | - | - | - | - | - |
| Indeno(1,2,3-cd)pyrene | mg/kg | 0.1  | MCERTS | - | - | - | - | - |
| Dibenz(a,h)anthracene  | mg/kg | 0.1  | MCERTS | - | - | - | - | - |
| Benzo(ghi)perylene     | mg/kg | 0.05 | MCERTS | - | - | - | - | - |

#### Total PAH

|                             |       |     |        |   |   |   |   |   |
|-----------------------------|-------|-----|--------|---|---|---|---|---|
| Speciated Total EPA-16 PAHs | mg/kg | 1.6 | MCERTS | - | - | - | - | - |
|-----------------------------|-------|-----|--------|---|---|---|---|---|

#### Petroleum Hydrocarbons

|                 |       |     |      |       |       |       |       |       |
|-----------------|-------|-----|------|-------|-------|-------|-------|-------|
| TPH (C5 - C6)   | mg/kg | 1   | NONE | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| TPH (C6 - C8)   | mg/kg | 0.1 | NONE | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 |
| TPH (C8 - C10)  | mg/kg | 0.1 | NONE | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 |
| TPH (C10 - C12) | mg/kg | 10  | NONE | < 10  | < 10  | < 10  | < 10  | < 10  |
| TPH (C12 - C16) | mg/kg | 1   | NONE | 33    | 19    | 14    | < 1.0 | < 1.0 |
| TPH (C16 - C21) | mg/kg | 1   | NONE | 190   | 38    | 52    | < 1.0 | < 1.0 |
| TPH (C21 - C35) | mg/kg | 1   | NONE | 800   | 79    | 140   | < 1.0 | < 1.0 |



Environmental Science

Analytical Report Number: 14-61115  
Project / Site name: Prysmian Cables, Prescot  
Your Order No: 10021/860/ST

| Lab Sample Number                       |       |                       |                         | 380021        | 380022        | 380023        | 380024        | 380025        |
|-----------------------------------------|-------|-----------------------|-------------------------|---------------|---------------|---------------|---------------|---------------|
| Sample Reference                        |       |                       |                         | TP131         | TP133         | TP136         | TP101         | TP103         |
| Sample Number                           |       |                       |                         | None Supplied | None Supplied | None Supplied | None Supplied | None Supplied |
| Depth (m)                               |       |                       |                         | 1.90          | 3.20          | 2.50          | 2.20          | 2.60          |
| Date Sampled                            |       |                       |                         | 02/10/2014    | 02/10/2014    | 02/10/2014    | 02/10/2014    | 02/10/2014    |
| Time Taken                              |       |                       |                         | None Supplied | None Supplied | None Supplied | None Supplied | None Supplied |
| Analytical Parameter<br>(Soil Analysis) | Units | Limit of<br>detection | Accreditation<br>Status |               |               |               |               |               |
| <b>VOCs</b>                             |       |                       |                         |               |               |               |               |               |
| Chloromethane                           | µg/kg | 1                     | ISO 17025               | -             | < 1.0         | -             | < 1.0         | -             |
| Chloroethane                            | µg/kg | 1                     | ISO 17025               | -             | < 1.0         | -             | < 1.0         | -             |
| Bromomethane                            | µg/kg | 1                     | ISO 17025               | -             | < 1.0         | -             | < 1.0         | -             |
| Vinyl Chloride                          | µg/kg | 1                     | ISO 17025               | -             | < 1.0         | -             | < 1.0         | -             |
| Trichlorofluoromethane                  | µg/kg | 1                     | ISO 17025               | -             | < 1.0         | -             | < 1.0         | -             |
| 1,1,1-Dichloroethene                    | µg/kg | 1                     | MCERTS                  | -             | < 1.0         | -             | < 1.0         | -             |
| 1,1,2-Trichloro 1,2,2-Trifluoroethane   | µg/kg | 1                     | ISO 17025               | -             | < 1.0         | -             | < 1.0         | -             |
| Cis-1,2-dichloroethene                  | µg/kg | 1                     | MCERTS                  | -             | < 1.0         | -             | < 1.0         | -             |
| MTBE (Methyl Tertiary Butyl Ether)      | µg/kg | 1                     | MCERTS                  | -             | < 1.0         | -             | < 1.0         | -             |
| 1,1-Dichloroethane                      | µg/kg | 1                     | MCERTS                  | -             | < 1.0         | -             | < 1.0         | -             |
| 2,2-Dichloropropane                     | µg/kg | 1                     | NONE                    | -             | < 1.0         | -             | < 1.0         | -             |
| Trichloromethane                        | µg/kg | 1                     | MCERTS                  | -             | < 1.0         | -             | < 1.0         | -             |
| 1,1,1-Trichloroethane                   | µg/kg | 1                     | MCERTS                  | -             | < 1.0         | -             | < 1.0         | -             |
| 1,2-Dichloroethane                      | µg/kg | 1                     | MCERTS                  | -             | < 1.0         | -             | < 1.0         | -             |
| 1,1-Dichloropropene                     | µg/kg | 1                     | NONE                    | -             | < 1.0         | -             | < 1.0         | -             |
| Trans-1,2-dichloroethene                | µg/kg | 1                     | NONE                    | -             | < 1.0         | -             | < 1.0         | -             |
| Benzene                                 | µg/kg | 1                     | MCERTS                  | -             | < 1.0         | -             | < 1.0         | -             |
| Tetrachloromethane                      | µg/kg | 1                     | MCERTS                  | -             | < 1.0         | -             | < 1.0         | -             |
| 1,2-Dichloropropane                     | µg/kg | 1                     | MCERTS                  | -             | < 1.0         | -             | < 1.0         | -             |
| Trichloroethene                         | µg/kg | 1                     | MCERTS                  | -             | < 1.0         | -             | < 1.0         | -             |
| Dibromomethane                          | µg/kg | 1                     | MCERTS                  | -             | < 1.0         | -             | < 1.0         | -             |
| Bromodichloromethane                    | µg/kg | 1                     | NONE                    | -             | < 1.0         | -             | < 1.0         | -             |
| Cis-1,3-dichloropropene                 | µg/kg | 1                     | ISO 17025               | -             | < 1.0         | -             | < 1.0         | -             |
| Trans-1,3-dichloropropene               | µg/kg | 1                     | ISO 17025               | -             | < 1.0         | -             | < 1.0         | -             |
| Toluene                                 | µg/kg | 1                     | MCERTS                  | -             | < 1.0         | -             | < 1.0         | -             |
| 1,1,2-Trichloroethane                   | µg/kg | 1                     | MCERTS                  | -             | < 1.0         | -             | < 1.0         | -             |
| 1,3-Dichloropropane                     | µg/kg | 1                     | ISO 17025               | -             | < 1.0         | -             | < 1.0         | -             |
| Dibromochloromethane                    | µg/kg | 1                     | ISO 17025               | -             | < 1.0         | -             | < 1.0         | -             |
| Tetrachloroethene                       | µg/kg | 1                     | MCERTS                  | -             | < 1.0         | -             | < 1.0         | -             |
| 1,2-Dibromoethane                       | µg/kg | 1                     | ISO 17025               | -             | < 1.0         | -             | < 1.0         | -             |
| Chlorobenzene                           | µg/kg | 1                     | MCERTS                  | -             | < 1.0         | -             | < 1.0         | -             |
| 1,1,1,2-Tetrachloroethane               | µg/kg | 1                     | NONE                    | -             | < 1.0         | -             | < 1.0         | -             |
| Ethylbenzene                            | µg/kg | 1                     | MCERTS                  | -             | < 1.0         | -             | < 1.0         | -             |
| p & m-Xylene                            | µg/kg | 1                     | MCERTS                  | -             | < 1.0         | -             | < 1.0         | -             |
| Styrene                                 | µg/kg | 1                     | MCERTS                  | -             | < 1.0         | -             | < 1.0         | -             |
| Tribromomethane                         | µg/kg | 1                     | MCERTS                  | -             | < 1.0         | -             | < 1.0         | -             |
| o-Xylene                                | µg/kg | 1                     | MCERTS                  | -             | < 1.0         | -             | < 1.0         | -             |
| 1,1,2,2-Tetrachloroethane               | µg/kg | 1                     | MCERTS                  | -             | < 1.0         | -             | < 1.0         | -             |
| Isopropylbenzene                        | µg/kg | 1                     | NONE                    | -             | < 1.0         | -             | < 1.0         | -             |
| Bromobenzene                            | µg/kg | 1                     | MCERTS                  | -             | < 1.0         | -             | < 1.0         | -             |
| n-Propylbenzene                         | µg/kg | 1                     | ISO 17025               | -             | < 1.0         | -             | < 1.0         | -             |
| 2-Chlorotoluene                         | µg/kg | 1                     | NONE                    | -             | < 1.0         | -             | < 1.0         | -             |
| 4-Chlorotoluene                         | µg/kg | 1                     | NONE                    | -             | < 1.0         | -             | < 1.0         | -             |
| 1,3,5-Trimethylbenzene                  | µg/kg | 1                     | ISO 17025               | -             | < 1.0         | -             | < 1.0         | -             |
| tert-Butylbenzene                       | µg/kg | 1                     | NONE                    | -             | < 1.0         | -             | < 1.0         | -             |
| 1,2,4-Trimethylbenzene                  | µg/kg | 1                     | ISO 17025               | -             | < 1.0         | -             | < 1.0         | -             |
| sec-Butylbenzene                        | µg/kg | 1                     | NONE                    | -             | < 1.0         | -             | < 1.0         | -             |
| 1,3-Dichlorobenzene                     | µg/kg | 1                     | ISO 17025               | -             | < 1.0         | -             | < 1.0         | -             |
| p-Isopropyltoluene                      | µg/kg | 1                     | ISO 17025               | -             | < 1.0         | -             | < 1.0         | -             |
| 1,2-Dichlorobenzene                     | µg/kg | 1                     | MCERTS                  | -             | < 1.0         | -             | < 1.0         | -             |
| 1,4-Dichlorobenzene                     | µg/kg | 1                     | MCERTS                  | -             | < 1.0         | -             | < 1.0         | -             |
| Butylbenzene                            | µg/kg | 1                     | NONE                    | -             | < 1.0         | -             | < 1.0         | -             |
| 1,2-Dibromo-3-chloropropane             | µg/kg | 1                     | ISO 17025               | -             | < 1.0         | -             | < 1.0         | -             |
| 1,2,4-Trichlorobenzene                  | µg/kg | 1                     | MCERTS                  | -             | < 1.0         | -             | < 1.0         | -             |
| Hexachlorobutadiene                     | µg/kg | 1                     | NONE                    | -             | < 1.0         | -             | < 1.0         | -             |
| 1,2,3-Trichlorobenzene                  | µg/kg | 1                     | NONE                    | -             | < 1.0         | -             | < 1.0         | -             |



Environmental Science

Analytical Report Number: 14-61115

Project / Site name: Prysmian Cables, Prescot

Your Order No: 10021/860/ST

| Lab Sample Number                       |       |                       |                         | 380021        | 380022        | 380023        | 380024        | 380025        |
|-----------------------------------------|-------|-----------------------|-------------------------|---------------|---------------|---------------|---------------|---------------|
| Sample Reference                        |       |                       |                         | TP131         | TP133         | TP136         | TP101         | TP103         |
| Sample Number                           |       |                       |                         | None Supplied | None Supplied | None Supplied | None Supplied | None Supplied |
| Depth (m)                               |       |                       |                         | 1.90          | 3.20          | 2.50          | 2.20          | 2.60          |
| Date Sampled                            |       |                       |                         | 02/10/2014    | 02/10/2014    | 02/10/2014    | 02/10/2014    | 02/10/2014    |
| Time Taken                              |       |                       |                         | None Supplied | None Supplied | None Supplied | None Supplied | None Supplied |
| Analytical Parameter<br>(Soil Analysis) | Units | Limit of<br>detection | Accreditation<br>Status |               |               |               |               |               |
| <b>SVOCs</b>                            |       |                       |                         |               |               |               |               |               |
| Aniline                                 | mg/kg | 0.1                   | NONE                    | -             | < 0.1         | < 0.1         | < 0.1         | -             |
| Phenol                                  | mg/kg | 0.2                   | ISO 17025               | -             | < 0.2         | < 0.2         | < 0.2         | -             |
| 2-Chlorophenol                          | mg/kg | 0.1                   | MCERTS                  | -             | < 0.1         | < 0.1         | < 0.1         | -             |
| Bis(2-chloroethyl)ether                 | mg/kg | 0.2                   | MCERTS                  | -             | < 0.2         | < 0.2         | < 0.2         | -             |
| 1,3-Dichlorobenzene                     | mg/kg | 0.2                   | MCERTS                  | -             | < 0.2         | < 0.2         | < 0.2         | -             |
| 1,2-Dichlorobenzene                     | mg/kg | 0.1                   | MCERTS                  | -             | < 0.1         | < 0.1         | < 0.1         | -             |
| 1,4-Dichlorobenzene                     | mg/kg | 0.2                   | MCERTS                  | -             | < 0.2         | < 0.2         | < 0.2         | -             |
| Bis(2-chloroisopropyl)ether             | mg/kg | 0.1                   | MCERTS                  | -             | < 0.1         | < 0.1         | < 0.1         | -             |
| 2-Methylphenol                          | mg/kg | 0.3                   | MCERTS                  | -             | < 0.3         | < 0.3         | < 0.3         | -             |
| Hexachloroethane                        | mg/kg | 0.05                  | MCERTS                  | -             | < 0.05        | < 0.05        | < 0.05        | -             |
| Nitrobenzene                            | mg/kg | 0.3                   | MCERTS                  | -             | < 0.3         | < 0.3         | < 0.3         | -             |
| 4-Methylphenol                          | mg/kg | 0.2                   | NONE                    | -             | < 0.2         | < 0.2         | < 0.2         | -             |
| Isophorone                              | mg/kg | 0.2                   | MCERTS                  | -             | < 0.2         | < 0.2         | < 0.2         | -             |
| 2-Nitrophenol                           | mg/kg | 0.3                   | MCERTS                  | -             | < 0.3         | < 0.3         | < 0.3         | -             |
| 2,4-Dimethylphenol                      | mg/kg | 0.3                   | MCERTS                  | -             | < 0.3         | < 0.3         | < 0.3         | -             |
| Bis(2-chloroethoxy)methane              | mg/kg | 0.3                   | MCERTS                  | -             | < 0.3         | < 0.3         | < 0.3         | -             |
| 1,2,4-Trichlorobenzene                  | mg/kg | 0.3                   | MCERTS                  | -             | < 0.3         | < 0.3         | < 0.3         | -             |
| Naphthalene                             | mg/kg | 0.1                   | MCERTS                  | -             | < 0.10        | < 0.10        | < 0.10        | -             |
| 2,4-Dichlorophenol                      | mg/kg | 0.3                   | MCERTS                  | -             | < 0.3         | < 0.3         | < 0.3         | -             |
| 4-Chloroaniline                         | mg/kg | 0.1                   | NONE                    | -             | < 0.1         | < 0.1         | < 0.1         | -             |
| Hexachlorobutadiene                     | mg/kg | 0.1                   | MCERTS                  | -             | < 0.1         | < 0.1         | < 0.1         | -             |
| 4-Chloro-3-methylphenol                 | mg/kg | 0.1                   | NONE                    | -             | < 0.1         | < 0.1         | < 0.1         | -             |
| 2,4,6-Trichlorophenol                   | mg/kg | 0.1                   | MCERTS                  | -             | < 0.1         | < 0.1         | < 0.1         | -             |
| 2,4,5-Trichlorophenol                   | mg/kg | 0.2                   | MCERTS                  | -             | < 0.2         | < 0.2         | < 0.2         | -             |
| 2-Methylnaphthalene                     | mg/kg | 0.1                   | NONE                    | -             | 0.5           | < 0.1         | < 0.1         | -             |
| 2-Chloronaphthalene                     | mg/kg | 0.1                   | MCERTS                  | -             | < 0.1         | < 0.1         | < 0.1         | -             |
| Dimethylphthalate                       | mg/kg | 0.1                   | MCERTS                  | -             | < 0.1         | < 0.1         | < 0.1         | -             |
| 2,6-Dinitrotoluene                      | mg/kg | 0.1                   | MCERTS                  | -             | < 0.1         | < 0.1         | < 0.1         | -             |
| Acenaphthylene                          | mg/kg | 0.1                   | MCERTS                  | -             | < 0.10        | < 0.10        | < 0.10        | -             |
| Acenaphthene                            | mg/kg | 0.1                   | MCERTS                  | -             | < 0.10        | < 0.10        | < 0.10        | -             |
| 2,4-Dinitrotoluene                      | mg/kg | 0.2                   | MCERTS                  | -             | < 0.2         | < 0.2         | < 0.2         | -             |
| Dibenzofuran                            | mg/kg | 0.2                   | MCERTS                  | -             | < 0.2         | < 0.2         | < 0.2         | -             |
| 4-Chlorophenyl phenyl ether             | mg/kg | 0.3                   | ISO 17025               | -             | < 0.3         | < 0.3         | < 0.3         | -             |
| Diethyl phthalate                       | mg/kg | 0.2                   | MCERTS                  | -             | < 0.2         | < 0.2         | < 0.2         | -             |
| 4-Nitroaniline                          | mg/kg | 0.2                   | MCERTS                  | -             | < 0.2         | < 0.2         | < 0.2         | -             |
| Fluorene                                | mg/kg | 0.1                   | MCERTS                  | -             | < 0.10        | < 0.10        | < 0.10        | -             |
| Azobenzene                              | mg/kg | 0.3                   | MCERTS                  | -             | < 0.3         | < 0.3         | < 0.3         | -             |
| Bromophenyl phenyl ether                | mg/kg | 0.2                   | MCERTS                  | -             | < 0.2         | < 0.2         | < 0.2         | -             |
| Hexachlorobenzene                       | mg/kg | 0.3                   | MCERTS                  | -             | < 0.3         | < 0.3         | < 0.3         | -             |
| Phenanthrene                            | mg/kg | 0.1                   | MCERTS                  | -             | 0.55          | 0.48          | < 0.10        | -             |
| Anthracene                              | mg/kg | 0.1                   | MCERTS                  | -             | 0.11          | < 0.10        | < 0.10        | -             |
| Carbazole                               | mg/kg | 0.3                   | MCERTS                  | -             | < 0.3         | < 0.3         | < 0.3         | -             |
| Dibutyl phthalate                       | mg/kg | 0.2                   | MCERTS                  | -             | < 0.2         | < 0.2         | < 0.2         | -             |
| Anthraquinone                           | mg/kg | 0.3                   | MCERTS                  | -             | < 0.3         | < 0.3         | < 0.3         | -             |
| Fluoranthene                            | mg/kg | 0.1                   | MCERTS                  | -             | 0.56          | 0.97          | < 0.10        | -             |
| Pyrene                                  | mg/kg | 0.1                   | MCERTS                  | -             | 0.52          | 0.76          | < 0.10        | -             |
| Butyl benzyl phthalate                  | mg/kg | 0.3                   | ISO 17025               | -             | < 0.3         | < 0.3         | < 0.3         | -             |
| Benzo(a)anthracene                      | mg/kg | 0.1                   | MCERTS                  | -             | 0.43          | 0.68          | < 0.10        | -             |
| Chrysene                                | mg/kg | 0.05                  | MCERTS                  | -             | 0.48          | 0.91          | < 0.05        | -             |
| Benzo(b)fluoranthene                    | mg/kg | 0.1                   | MCERTS                  | -             | 0.37          | 0.91          | < 0.10        | -             |
| Benzo(k)fluoranthene                    | mg/kg | 0.1                   | MCERTS                  | -             | 0.21          | 0.48          | < 0.10        | -             |
| Benzo(a)pyrene                          | mg/kg | 0.1                   | MCERTS                  | -             | 0.25          | 0.30          | < 0.10        | -             |
| Indeno(1,2,3-cd)pyrene                  | mg/kg | 0.1                   | MCERTS                  | -             | < 0.10        | < 0.10        | < 0.10        | -             |
| Dibenz(a,h)anthracene                   | mg/kg | 0.1                   | MCERTS                  | -             | < 0.10        | < 0.10        | < 0.10        | -             |
| Benzo(ghi)perylene                      | mg/kg | 0.05                  | MCERTS                  | -             | < 0.05        | < 0.05        | < 0.05        | -             |

Analytical Report Number: 14-61115  
 Project / Site name: Prysmian Cables, Prescot  
 Your Order No: 10021/860/ST

| Lab Sample Number                       | 380026        | 380027                | 380028                  | 380029        | 380030        |
|-----------------------------------------|---------------|-----------------------|-------------------------|---------------|---------------|
| Sample Reference                        | TP105         | TP107                 | TP107                   | TP108         | TP111         |
| Sample Number                           | None Supplied | None Supplied         | None Supplied           | None Supplied | None Supplied |
| Depth (m)                               | 0.60          | 1.10                  | 2.50                    | 0.10          | 0.20          |
| Date Sampled                            | 02/10/2014    | 02/10/2014            | 02/10/2014              | 02/10/2014    | 02/10/2014    |
| Time Taken                              | None Supplied | None Supplied         | None Supplied           | None Supplied | None Supplied |
| Analytical Parameter<br>(Soil Analysis) | Units         | Limit of<br>detection | Accreditation<br>Status |               |               |
| Stone Content                           | %             | 0.1                   | NONE                    | < 0.1         | < 0.1         |
| Moisture Content                        | %             | N/A                   | NONE                    | 13            | 19            |
| Total mass of sample received           | kg            | 0.001                 | NONE                    | 0.47          | 0.49          |

|                                               |      |     |           |   |              |   |   |   |
|-----------------------------------------------|------|-----|-----------|---|--------------|---|---|---|
| Asbestos in Soil Screen / Identification Name | Type | N/A | ISO 17025 | - | -            | - | - | - |
| Asbestos in Soil                              | Type | N/A | ISO 17025 | - | Not-detected | - | - | - |

#### Speciated PAHs

|                        |       |      |        |   |   |   |   |        |
|------------------------|-------|------|--------|---|---|---|---|--------|
| Naphthalene            | mg/kg | 0.05 | MCERTS | - | - | - | - | 0.70   |
| Acenaphthylene         | mg/kg | 0.1  | MCERTS | - | - | - | - | < 0.10 |
| Acenaphthene           | mg/kg | 0.1  | MCERTS | - | - | - | - | < 0.10 |
| Fluorene               | mg/kg | 0.1  | MCERTS | - | - | - | - | < 0.10 |
| Phenanthrene           | mg/kg | 0.1  | MCERTS | - | - | - | - | 0.59   |
| Anthracene             | mg/kg | 0.1  | MCERTS | - | - | - | - | < 0.10 |
| Fluoranthene           | mg/kg | 0.1  | MCERTS | - | - | - | - | 0.48   |
| Pyrene                 | mg/kg | 0.1  | MCERTS | - | - | - | - | 0.41   |
| Benzo(a)anthracene     | mg/kg | 0.1  | MCERTS | - | - | - | - | 0.37   |
| Chrysene               | mg/kg | 0.05 | MCERTS | - | - | - | - | 0.37   |
| Benzo(b)fluoranthene   | mg/kg | 0.1  | MCERTS | - | - | - | - | 0.42   |
| Benzo(k)fluoranthene   | mg/kg | 0.1  | MCERTS | - | - | - | - | 0.15   |
| Benzo(a)pyrene         | mg/kg | 0.1  | MCERTS | - | - | - | - | < 0.10 |
| Indeno(1,2,3-cd)pyrene | mg/kg | 0.1  | MCERTS | - | - | - | - | < 0.10 |
| Dibenz(a,h)anthracene  | mg/kg | 0.1  | MCERTS | - | - | - | - | < 0.10 |
| Benzo(ghi)perylene     | mg/kg | 0.05 | MCERTS | - | - | - | - | < 0.05 |

#### Total PAH

|                             |       |     |        |   |   |   |   |      |
|-----------------------------|-------|-----|--------|---|---|---|---|------|
| Speciated Total EPA-16 PAHs | mg/kg | 1.6 | MCERTS | - | - | - | - | 3.49 |
|-----------------------------|-------|-----|--------|---|---|---|---|------|

#### Petroleum Hydrocarbons

|                 |       |     |      |       |   |       |       |   |
|-----------------|-------|-----|------|-------|---|-------|-------|---|
| TPH (C5 - C6)   | mg/kg | 1   | NONE | < 1.0 | - | < 1.0 | < 1.0 | - |
| TPH (C6 - C8)   | mg/kg | 0.1 | NONE | < 0.1 | - | < 0.1 | < 0.1 | - |
| TPH (C8 - C10)  | mg/kg | 0.1 | NONE | < 0.1 | - | < 0.1 | < 0.1 | - |
| TPH (C10 - C12) | mg/kg | 10  | NONE | < 10  | - | < 10  | < 10  | - |
| TPH (C12 - C16) | mg/kg | 1   | NONE | 21    | - | < 1.0 | 36    | - |
| TPH (C16 - C21) | mg/kg | 1   | NONE | 150   | - | < 1.0 | 450   | - |
| TPH (C21 - C35) | mg/kg | 1   | NONE | 290   | - | < 1.0 | 1300  | - |



4041



Environmental Science

Analytical Report Number: 14-61115

Project / Site name: Prysmian Cables, Prescot

Your Order No: 10021/860/ST

| Lab Sample Number                       |       |                       |                         | 380026        | 380027        | 380028        | 380029        | 380030        |
|-----------------------------------------|-------|-----------------------|-------------------------|---------------|---------------|---------------|---------------|---------------|
| Sample Reference                        |       |                       |                         | TP105         | TP107         | TP107         | TP108         | TP111         |
| Sample Number                           |       |                       |                         | None Supplied | None Supplied | None Supplied | None Supplied | None Supplied |
| Depth (m)                               |       |                       |                         | 0.60          | 1.10          | 2.50          | 0.10          | 0.20          |
| Date Sampled                            |       |                       |                         | 02/10/2014    | 02/10/2014    | 02/10/2014    | 02/10/2014    | 02/10/2014    |
| Time Taken                              |       |                       |                         | None Supplied | None Supplied | None Supplied | None Supplied | None Supplied |
| Analytical Parameter<br>(Soil Analysis) | Units | Limit of<br>detection | Accreditation<br>Status |               |               |               |               |               |
| <b>VOCs</b>                             |       |                       |                         |               |               |               |               |               |
| Chloromethane                           | µg/kg | 1                     | ISO 17025               | < 1.0         | < 1.0         | -             | -             | -             |
| Chloroethane                            | µg/kg | 1                     | ISO 17025               | < 1.0         | < 1.0         | -             | -             | -             |
| Bromomethane                            | µg/kg | 1                     | ISO 17025               | < 1.0         | < 1.0         | -             | -             | -             |
| Vinyl Chloride                          | µg/kg | 1                     | ISO 17025               | < 1.0         | < 1.0         | -             | -             | -             |
| Trichlorofluoromethane                  | µg/kg | 1                     | ISO 17025               | < 1.0         | < 1.0         | -             | -             | -             |
| 1,1-Dichloroethene                      | µg/kg | 1                     | MCERTS                  | < 1.0         | < 1.0         | -             | -             | -             |
| 1,1,2-Trichloro 1,2,2-Trifluoroethane   | µg/kg | 1                     | ISO 17025               | < 1.0         | < 1.0         | -             | -             | -             |
| Cis-1,2-dichloroethene                  | µg/kg | 1                     | MCERTS                  | < 1.0         | < 1.0         | -             | -             | -             |
| MTBE (Methyl Tertiary Butyl Ether)      | µg/kg | 1                     | MCERTS                  | < 1.0         | < 1.0         | -             | -             | -             |
| 1,1-Dichloroethane                      | µg/kg | 1                     | MCERTS                  | < 1.0         | < 1.0         | -             | -             | -             |
| 2,2-Dichloropropane                     | µg/kg | 1                     | NONE                    | < 1.0         | < 1.0         | -             | -             | -             |
| Trichloromethane                        | µg/kg | 1                     | MCERTS                  | < 1.0         | < 1.0         | -             | -             | -             |
| 1,1,1-Trichloroethane                   | µg/kg | 1                     | MCERTS                  | < 1.0         | < 1.0         | -             | -             | -             |
| 1,2-Dichloroethane                      | µg/kg | 1                     | MCERTS                  | < 1.0         | < 1.0         | -             | -             | -             |
| 1,1-Dichloropropene                     | µg/kg | 1                     | NONE                    | < 1.0         | < 1.0         | -             | -             | -             |
| Trans-1,2-dichloroethene                | µg/kg | 1                     | NONE                    | < 1.0         | < 1.0         | -             | -             | -             |
| Benzene                                 | µg/kg | 1                     | MCERTS                  | < 1.0         | < 1.0         | -             | -             | -             |
| Tetrachloromethane                      | µg/kg | 1                     | MCERTS                  | < 1.0         | < 1.0         | -             | -             | -             |
| 1,2-Dichloropropane                     | µg/kg | 1                     | MCERTS                  | < 1.0         | < 1.0         | -             | -             | -             |
| Trichloroethene                         | µg/kg | 1                     | MCERTS                  | < 1.0         | < 1.0         | -             | -             | -             |
| Dibromomethane                          | µg/kg | 1                     | MCERTS                  | < 1.0         | < 1.0         | -             | -             | -             |
| Bromodichloromethane                    | µg/kg | 1                     | NONE                    | < 1.0         | < 1.0         | -             | -             | -             |
| Cis-1,3-dichloropropene                 | µg/kg | 1                     | ISO 17025               | < 1.0         | < 1.0         | -             | -             | -             |
| Trans-1,3-dichloropropene               | µg/kg | 1                     | ISO 17025               | < 1.0         | < 1.0         | -             | -             | -             |
| Toluene                                 | µg/kg | 1                     | MCERTS                  | < 1.0         | < 1.0         | -             | -             | -             |
| 1,1,2-Trichloroethane                   | µg/kg | 1                     | MCERTS                  | < 1.0         | < 1.0         | -             | -             | -             |
| 1,3-Dichloropropane                     | µg/kg | 1                     | ISO 17025               | < 1.0         | < 1.0         | -             | -             | -             |
| Dibromochloromethane                    | µg/kg | 1                     | ISO 17025               | < 1.0         | < 1.0         | -             | -             | -             |
| Tetrachloroethene                       | µg/kg | 1                     | MCERTS                  | < 1.0         | < 1.0         | -             | -             | -             |
| 1,2-Dibromoethane                       | µg/kg | 1                     | ISO 17025               | < 1.0         | < 1.0         | -             | -             | -             |
| Chlorobenzene                           | µg/kg | 1                     | MCERTS                  | < 1.0         | < 1.0         | -             | -             | -             |
| 1,1,1,2-Tetrachloroethane               | µg/kg | 1                     | NONE                    | < 1.0         | < 1.0         | -             | -             | -             |
| Ethylbenzene                            | µg/kg | 1                     | MCERTS                  | < 1.0         | < 1.0         | -             | -             | -             |
| p & m-Xylene                            | µg/kg | 1                     | MCERTS                  | < 1.0         | < 1.0         | -             | -             | -             |
| Styrene                                 | µg/kg | 1                     | MCERTS                  | < 1.0         | < 1.0         | -             | -             | -             |
| Tribromomethane                         | µg/kg | 1                     | MCERTS                  | < 1.0         | < 1.0         | -             | -             | -             |
| o-Xylene                                | µg/kg | 1                     | MCERTS                  | < 1.0         | < 1.0         | -             | -             | -             |
| 1,1,1,2,2-Tetrachloroethane             | µg/kg | 1                     | MCERTS                  | < 1.0         | < 1.0         | -             | -             | -             |
| Isopropylbenzene                        | µg/kg | 1                     | NONE                    | < 1.0         | < 1.0         | -             | -             | -             |
| Bromobenzene                            | µg/kg | 1                     | MCERTS                  | < 1.0         | < 1.0         | -             | -             | -             |
| n-Propylbenzene                         | µg/kg | 1                     | ISO 17025               | < 1.0         | < 1.0         | -             | -             | -             |
| 2-Chlorotoluene                         | µg/kg | 1                     | NONE                    | < 1.0         | < 1.0         | -             | -             | -             |
| 4-Chlorotoluene                         | µg/kg | 1                     | NONE                    | < 1.0         | < 1.0         | -             | -             | -             |
| 1,3,5-Trimethylbenzene                  | µg/kg | 1                     | ISO 17025               | < 1.0         | < 1.0         | -             | -             | -             |
| tert-Butylbenzene                       | µg/kg | 1                     | NONE                    | < 1.0         | < 1.0         | -             | -             | -             |
| 1,2,4-Trimethylbenzene                  | µg/kg | 1                     | ISO 17025               | < 1.0         | < 1.0         | -             | -             | -             |
| sec-Butylbenzene                        | µg/kg | 1                     | NONE                    | < 1.0         | < 1.0         | -             | -             | -             |
| 1,3-Dichlorobenzene                     | µg/kg | 1                     | ISO 17025               | < 1.0         | < 1.0         | -             | -             | -             |
| p-Isopropyltoluene                      | µg/kg | 1                     | ISO 17025               | < 1.0         | < 1.0         | -             | -             | -             |
| 1,2-Dichlorobenzene                     | µg/kg | 1                     | MCERTS                  | < 1.0         | < 1.0         | -             | -             | -             |
| 1,4-Dichlorobenzene                     | µg/kg | 1                     | MCERTS                  | < 1.0         | < 1.0         | -             | -             | -             |
| Butylbenzene                            | µg/kg | 1                     | NONE                    | < 1.0         | < 1.0         | -             | -             | -             |
| 1,2-Dibromo-3-chloropropane             | µg/kg | 1                     | ISO 17025               | < 1.0         | < 1.0         | -             | -             | -             |
| 1,2,4-Trichlorobenzene                  | µg/kg | 1                     | MCERTS                  | < 1.0         | < 1.0         | -             | -             | -             |
| Hexachlorobutadiene                     | µg/kg | 1                     | NONE                    | < 1.0         | < 1.0         | -             | -             | -             |
| 1,2,3-Trichlorobenzene                  | µg/kg | 1                     | NONE                    | < 1.0         | < 1.0         | -             | -             | -             |



4041



Environmental Science

Analytical Report Number: 14-61115

Project / Site name: Prysmian Cables, Prescot

Your Order No: 10021/860/ST

| Lab Sample Number                       |       |                       |                         | 380026        | 380027        | 380028        | 380029        | 380030        |
|-----------------------------------------|-------|-----------------------|-------------------------|---------------|---------------|---------------|---------------|---------------|
| Sample Reference                        |       |                       |                         | TP105         | TP107         | TP107         | TP108         | TP111         |
| Sample Number                           |       |                       |                         | None Supplied | None Supplied | None Supplied | None Supplied | None Supplied |
| Depth (m)                               |       |                       |                         | 0.60          | 1.10          | 2.50          | 0.10          | 0.20          |
| Date Sampled                            |       |                       |                         | 02/10/2014    | 02/10/2014    | 02/10/2014    | 02/10/2014    | 02/10/2014    |
| Time Taken                              |       |                       |                         | None Supplied | None Supplied | None Supplied | None Supplied | None Supplied |
| Analytical Parameter<br>(Soil Analysis) | Units | Limit of<br>detection | Accreditation<br>Status |               |               |               |               |               |
| <b>SVOCs</b>                            |       |                       |                         |               |               |               |               |               |
| Aniline                                 | mg/kg | 0.1                   | NONE                    | < 0.1         | < 0.1         | -             | -             | -             |
| Phenol                                  | mg/kg | 0.2                   | ISO 17025               | < 0.2         | < 0.2         | -             | -             | -             |
| 2-Chlorophenol                          | mg/kg | 0.1                   | MCERTS                  | < 0.1         | < 0.1         | -             | -             | -             |
| Bis(2-chloroethyl)ether                 | mg/kg | 0.2                   | MCERTS                  | < 0.2         | < 0.2         | -             | -             | -             |
| 1,3-Dichlorobenzene                     | mg/kg | 0.2                   | MCERTS                  | < 0.2         | < 0.2         | -             | -             | -             |
| 1,2-Dichlorobenzene                     | mg/kg | 0.1                   | MCERTS                  | < 0.1         | < 0.1         | -             | -             | -             |
| 1,4-Dichlorobenzene                     | mg/kg | 0.2                   | MCERTS                  | < 0.2         | < 0.2         | -             | -             | -             |
| Bis(2-chloroisopropyl)ether             | mg/kg | 0.1                   | MCERTS                  | < 0.1         | < 0.1         | -             | -             | -             |
| 2-Methylphenol                          | mg/kg | 0.3                   | MCERTS                  | < 0.3         | < 0.3         | -             | -             | -             |
| Hexachloroethane                        | mg/kg | 0.05                  | MCERTS                  | < 0.05        | < 0.05        | -             | -             | -             |
| Nitrobenzene                            | mg/kg | 0.3                   | MCERTS                  | < 0.3         | < 0.3         | -             | -             | -             |
| 4-Methylphenol                          | mg/kg | 0.2                   | NONE                    | < 0.2         | < 0.2         | -             | -             | -             |
| Isophorone                              | mg/kg | 0.2                   | MCERTS                  | < 0.2         | < 0.2         | -             | -             | -             |
| 2-Nitrophenol                           | mg/kg | 0.3                   | MCERTS                  | < 0.3         | < 0.3         | -             | -             | -             |
| 2,4-Dimethylphenol                      | mg/kg | 0.3                   | MCERTS                  | < 0.3         | < 0.3         | -             | -             | -             |
| Bis(2-chloroethoxy)methane              | mg/kg | 0.3                   | MCERTS                  | < 0.3         | < 0.3         | -             | -             | -             |
| 1,2,4-Trichlorobenzene                  | mg/kg | 0.3                   | MCERTS                  | < 0.3         | < 0.3         | -             | -             | -             |
| Naphthalene                             | mg/kg | 0.1                   | MCERTS                  | < 0.10        | 0.25          | -             | -             | -             |
| 2,4-Dichlorophenol                      | mg/kg | 0.3                   | MCERTS                  | < 0.3         | < 0.3         | -             | -             | -             |
| 4-Chloroaniline                         | mg/kg | 0.1                   | NONE                    | < 0.1         | < 0.1         | -             | -             | -             |
| Hexachlorobutadiene                     | mg/kg | 0.1                   | MCERTS                  | < 0.1         | < 0.1         | -             | -             | -             |
| 4-Chloro-3-methylphenol                 | mg/kg | 0.1                   | NONE                    | < 0.1         | < 0.1         | -             | -             | -             |
| 2,4,6-Trichlorophenol                   | mg/kg | 0.1                   | MCERTS                  | < 0.1         | < 0.1         | -             | -             | -             |
| 2,4,5-Trichlorophenol                   | mg/kg | 0.2                   | MCERTS                  | < 0.2         | < 0.2         | -             | -             | -             |
| 2-Methylnaphthalene                     | mg/kg | 0.1                   | NONE                    | < 0.1         | 0.9           | -             | -             | -             |
| 2-Chloronaphthalene                     | mg/kg | 0.1                   | MCERTS                  | < 0.1         | < 0.1         | -             | -             | -             |
| Dimethylphthalate                       | mg/kg | 0.1                   | MCERTS                  | < 0.1         | < 0.1         | -             | -             | -             |
| 2,6-Dinitrotoluene                      | mg/kg | 0.1                   | MCERTS                  | < 0.1         | < 0.1         | -             | -             | -             |
| Acenaphthylene                          | mg/kg | 0.1                   | MCERTS                  | < 0.10        | < 0.10        | -             | -             | -             |
| Acenaphthene                            | mg/kg | 0.1                   | MCERTS                  | < 0.10        | < 0.10        | -             | -             | -             |
| 2,4-Dinitrotoluene                      | mg/kg | 0.2                   | MCERTS                  | < 0.2         | < 0.2         | -             | -             | -             |
| Dibenzofuran                            | mg/kg | 0.2                   | MCERTS                  | < 0.2         | 0.4           | -             | -             | -             |
| 4-Chlorophenyl phenyl ether             | mg/kg | 0.3                   | ISO 17025               | < 0.3         | < 0.3         | -             | -             | -             |
| Diethyl phthalate                       | mg/kg | 0.2                   | MCERTS                  | < 0.2         | < 0.2         | -             | -             | -             |
| 4-Nitroaniline                          | mg/kg | 0.2                   | MCERTS                  | < 0.2         | < 0.2         | -             | -             | -             |
| Fluorene                                | mg/kg | 0.1                   | MCERTS                  | < 0.10        | < 0.10        | -             | -             | -             |
| Azobenzene                              | mg/kg | 0.3                   | MCERTS                  | < 0.3         | < 0.3         | -             | -             | -             |
| Bromophenyl phenyl ether                | mg/kg | 0.2                   | MCERTS                  | < 0.2         | < 0.2         | -             | -             | -             |
| Hexachlorobenzene                       | mg/kg | 0.3                   | MCERTS                  | < 0.3         | < 0.3         | -             | -             | -             |
| Phenanthrene                            | mg/kg | 0.1                   | MCERTS                  | 0.76          | 0.69          | -             | -             | -             |
| Anthracene                              | mg/kg | 0.1                   | MCERTS                  | 0.18          | 0.10          | -             | -             | -             |
| Carbazole                               | mg/kg | 0.3                   | MCERTS                  | < 0.3         | < 0.3         | -             | -             | -             |
| Dibutyl phthalate                       | mg/kg | 0.2                   | MCERTS                  | < 0.2         | < 0.2         | -             | -             | -             |
| Anthraquinone                           | mg/kg | 0.3                   | MCERTS                  | < 0.3         | < 0.3         | -             | -             | -             |
| Fluoranthene                            | mg/kg | 0.1                   | MCERTS                  | 0.99          | 0.18          | -             | -             | -             |
| Pyrene                                  | mg/kg | 0.1                   | MCERTS                  | 0.93          | 0.19          | -             | -             | -             |
| Butyl benzyl phthalate                  | mg/kg | 0.3                   | ISO 17025               | < 0.3         | < 0.3         | -             | -             | -             |
| Benzo(a)anthracene                      | mg/kg | 0.1                   | MCERTS                  | 0.54          | < 0.10        | -             | -             | -             |
| Chrysene                                | mg/kg | 0.05                  | MCERTS                  | 0.52          | < 0.05        | -             | -             | -             |
| Benzo(b)fluoranthene                    | mg/kg | 0.1                   | MCERTS                  | 0.41          | < 0.10        | -             | -             | -             |
| Benzo(k)fluoranthene                    | mg/kg | 0.1                   | MCERTS                  | 0.23          | < 0.10        | -             | -             | -             |
| Benzo(a)pyrene                          | mg/kg | 0.1                   | MCERTS                  | 0.38          | < 0.10        | -             | -             | -             |
| Indeno(1,2,3-cd)pyrene                  | mg/kg | 0.1                   | MCERTS                  | < 0.10        | < 0.10        | -             | -             | -             |
| Dibenz(a,h)anthracene                   | mg/kg | 0.1                   | MCERTS                  | < 0.10        | < 0.10        | -             | -             | -             |
| Benzo(ghi)perylene                      | mg/kg | 0.05                  | MCERTS                  | < 0.05        | < 0.05        | -             | -             | -             |

Analytical Report Number: 14-61115  
 Project / Site name: Prysmian Cables, Prescott  
 Your Order No: 10021/860/ST

| Lab Sample Number                       |       |                       |                         | 380031        |  |  |  |  |
|-----------------------------------------|-------|-----------------------|-------------------------|---------------|--|--|--|--|
| Sample Reference                        |       |                       |                         | TP113         |  |  |  |  |
| Sample Number                           |       |                       |                         | None Supplied |  |  |  |  |
| Depth (m)                               |       |                       |                         | 0.75          |  |  |  |  |
| Date Sampled                            |       |                       |                         | 02/10/2014    |  |  |  |  |
| Time Taken                              |       |                       |                         | None Supplied |  |  |  |  |
| Analytical Parameter<br>(Soil Analysis) | Units | Limit of<br>detection | Accreditation<br>Status |               |  |  |  |  |
| Stone Content                           | %     | 0.1                   | NONE                    | 18            |  |  |  |  |
| Moisture Content                        | %     | N/A                   | NONE                    | 18            |  |  |  |  |
| Total mass of sample received           | kg    | 0.001                 | NONE                    | 0.46          |  |  |  |  |

|                                               |      |     |           |                                 |  |  |  |  |
|-----------------------------------------------|------|-----|-----------|---------------------------------|--|--|--|--|
| Asbestos in Soil Screen / Identification Name | Type | N/A | ISO 17025 | Amosite-<br>Insulation lagging, |  |  |  |  |
| Asbestos in Soil                              | Type | N/A | ISO 17025 | Detected                        |  |  |  |  |

#### Speciated PAHs

|                        |       |      |        |   |  |  |  |  |
|------------------------|-------|------|--------|---|--|--|--|--|
| Naphthalene            | mg/kg | 0.05 | MCERTS | - |  |  |  |  |
| Acenaphthylene         | mg/kg | 0.1  | MCERTS | - |  |  |  |  |
| Acenaphthene           | mg/kg | 0.1  | MCERTS | - |  |  |  |  |
| Fluorene               | mg/kg | 0.1  | MCERTS | - |  |  |  |  |
| Phenanthrene           | mg/kg | 0.1  | MCERTS | - |  |  |  |  |
| Anthracene             | mg/kg | 0.1  | MCERTS | - |  |  |  |  |
| Fluoranthene           | mg/kg | 0.1  | MCERTS | - |  |  |  |  |
| Pyrene                 | mg/kg | 0.1  | MCERTS | - |  |  |  |  |
| Benzo(a)anthracene     | mg/kg | 0.1  | MCERTS | - |  |  |  |  |
| Chrysene               | mg/kg | 0.05 | MCERTS | - |  |  |  |  |
| Benzo(b)fluoranthene   | mg/kg | 0.1  | MCERTS | - |  |  |  |  |
| Benzo(k)fluoranthene   | mg/kg | 0.1  | MCERTS | - |  |  |  |  |
| Benzo(a)pyrene         | mg/kg | 0.1  | MCERTS | - |  |  |  |  |
| Indeno(1,2,3-cd)pyrene | mg/kg | 0.1  | MCERTS | - |  |  |  |  |
| Dibenz(a,h)anthracene  | mg/kg | 0.1  | MCERTS | - |  |  |  |  |
| Benzo(ghi)perylene     | mg/kg | 0.05 | MCERTS | - |  |  |  |  |

#### Total PAH

|                             |       |     |        |   |  |  |  |  |
|-----------------------------|-------|-----|--------|---|--|--|--|--|
| Speciated Total EPA-16 PAHs | mg/kg | 1.6 | MCERTS | - |  |  |  |  |
|-----------------------------|-------|-----|--------|---|--|--|--|--|

#### Petroleum Hydrocarbons

|                 |       |     |      |       |  |  |  |  |
|-----------------|-------|-----|------|-------|--|--|--|--|
| TPH (C5 - C6)   | mg/kg | 1   | NONE | < 1.0 |  |  |  |  |
| TPH (C6 - C8)   | mg/kg | 0.1 | NONE | < 0.1 |  |  |  |  |
| TPH (C8 - C10)  | mg/kg | 0.1 | NONE | < 0.1 |  |  |  |  |
| TPH (C10 - C12) | mg/kg | 10  | NONE | < 10  |  |  |  |  |
| TPH (C12 - C16) | mg/kg | 1   | NONE | 6.8   |  |  |  |  |
| TPH (C16 - C21) | mg/kg | 1   | NONE | 12    |  |  |  |  |
| TPH (C21 - C35) | mg/kg | 1   | NONE | 56    |  |  |  |  |

Analytical Report Number: 14-61115  
 Project / Site name: Prysmian Cables, Prescott  
 Your Order No: 10021/860/ST

| Lab Sample Number                       |       |                       |                         | 380031        |  |  |  |  |  |
|-----------------------------------------|-------|-----------------------|-------------------------|---------------|--|--|--|--|--|
| Sample Reference                        |       |                       |                         | TP113         |  |  |  |  |  |
| Sample Number                           |       |                       |                         | None Supplied |  |  |  |  |  |
| Depth (m)                               |       |                       |                         | 0.75          |  |  |  |  |  |
| Date Sampled                            |       |                       |                         | 02/10/2014    |  |  |  |  |  |
| Time Taken                              |       |                       |                         | None Supplied |  |  |  |  |  |
| Analytical Parameter<br>(Soil Analysis) | Units | Limit of<br>detection | Accreditation<br>Status |               |  |  |  |  |  |
| <b>VOCs</b>                             |       |                       |                         |               |  |  |  |  |  |
| Chloromethane                           | µg/kg | 1                     | ISO 17025               | -             |  |  |  |  |  |
| Chloroethane                            | µg/kg | 1                     | ISO 17025               | -             |  |  |  |  |  |
| Bromomethane                            | µg/kg | 1                     | ISO 17025               | -             |  |  |  |  |  |
| Vinyl Chloride                          | µg/kg | 1                     | ISO 17025               | -             |  |  |  |  |  |
| Trichlorofluoromethane                  | µg/kg | 1                     | ISO 17025               | -             |  |  |  |  |  |
| 1,1-Dichloroethene                      | µg/kg | 1                     | MCERTS                  | -             |  |  |  |  |  |
| 1,1,2-Trichloro 1,2,2-Trifluoroethane   | µg/kg | 1                     | ISO 17025               | -             |  |  |  |  |  |
| Cis-1,2-dichloroethene                  | µg/kg | 1                     | MCERTS                  | -             |  |  |  |  |  |
| MTBE (Methyl Tertiary Butyl Ether)      | µg/kg | 1                     | MCERTS                  | -             |  |  |  |  |  |
| 1,1-Dichloroethane                      | µg/kg | 1                     | MCERTS                  | -             |  |  |  |  |  |
| 2,2-Dichloropropane                     | µg/kg | 1                     | NONE                    | -             |  |  |  |  |  |
| Trichloromethane                        | µg/kg | 1                     | MCERTS                  | -             |  |  |  |  |  |
| 1,1,1-Trichloroethane                   | µg/kg | 1                     | MCERTS                  | -             |  |  |  |  |  |
| 1,2-Dichloroethane                      | µg/kg | 1                     | MCERTS                  | -             |  |  |  |  |  |
| 1,1-Dichloropropene                     | µg/kg | 1                     | NONE                    | -             |  |  |  |  |  |
| Trans-1,2-dichloroethene                | µg/kg | 1                     | NONE                    | -             |  |  |  |  |  |
| Benzene                                 | µg/kg | 1                     | MCERTS                  | -             |  |  |  |  |  |
| Tetrachloromethane                      | µg/kg | 1                     | MCERTS                  | -             |  |  |  |  |  |
| 1,2-Dichloropropane                     | µg/kg | 1                     | MCERTS                  | -             |  |  |  |  |  |
| Trichloroethene                         | µg/kg | 1                     | MCERTS                  | -             |  |  |  |  |  |
| Dibromomethane                          | µg/kg | 1                     | MCERTS                  | -             |  |  |  |  |  |
| Bromodichloromethane                    | µg/kg | 1                     | NONE                    | -             |  |  |  |  |  |
| Cis-1,3-dichloropropene                 | µg/kg | 1                     | ISO 17025               | -             |  |  |  |  |  |
| Trans-1,3-dichloropropene               | µg/kg | 1                     | ISO 17025               | -             |  |  |  |  |  |
| Toluene                                 | µg/kg | 1                     | MCERTS                  | -             |  |  |  |  |  |
| 1,1,2-Trichloroethane                   | µg/kg | 1                     | MCERTS                  | -             |  |  |  |  |  |
| 1,3-Dichloropropane                     | µg/kg | 1                     | ISO 17025               | -             |  |  |  |  |  |
| Dibromochloromethane                    | µg/kg | 1                     | ISO 17025               | -             |  |  |  |  |  |
| Tetrachloroethene                       | µg/kg | 1                     | MCERTS                  | -             |  |  |  |  |  |
| 1,2-Dibromoethane                       | µg/kg | 1                     | ISO 17025               | -             |  |  |  |  |  |
| Chlorobenzene                           | µg/kg | 1                     | MCERTS                  | -             |  |  |  |  |  |
| 1,1,1,2-Tetrachloroethane               | µg/kg | 1                     | NONE                    | -             |  |  |  |  |  |
| Ethylbenzene                            | µg/kg | 1                     | MCERTS                  | -             |  |  |  |  |  |
| p & m-Xylene                            | µg/kg | 1                     | MCERTS                  | -             |  |  |  |  |  |
| Styrene                                 | µg/kg | 1                     | MCERTS                  | -             |  |  |  |  |  |
| Tribromomethane                         | µg/kg | 1                     | MCERTS                  | -             |  |  |  |  |  |
| o-Xylene                                | µg/kg | 1                     | MCERTS                  | -             |  |  |  |  |  |
| 1,1,2,2-Tetrachloroethane               | µg/kg | 1                     | MCERTS                  | -             |  |  |  |  |  |
| Isopropylbenzene                        | µg/kg | 1                     | NONE                    | -             |  |  |  |  |  |
| Bromobenzene                            | µg/kg | 1                     | MCERTS                  | -             |  |  |  |  |  |
| n-Propylbenzene                         | µg/kg | 1                     | ISO 17025               | -             |  |  |  |  |  |
| 2-Chlorotoluene                         | µg/kg | 1                     | NONE                    | -             |  |  |  |  |  |
| 4-Chlorotoluene                         | µg/kg | 1                     | NONE                    | -             |  |  |  |  |  |
| 1,3,5-Trimethylbenzene                  | µg/kg | 1                     | ISO 17025               | -             |  |  |  |  |  |
| tert-Butylbenzene                       | µg/kg | 1                     | NONE                    | -             |  |  |  |  |  |
| 1,2,4-Trimethylbenzene                  | µg/kg | 1                     | ISO 17025               | -             |  |  |  |  |  |
| sec-Butylbenzene                        | µg/kg | 1                     | NONE                    | -             |  |  |  |  |  |
| 1,3-Dichlorobenzene                     | µg/kg | 1                     | ISO 17025               | -             |  |  |  |  |  |
| p-Isopropyltoluene                      | µg/kg | 1                     | ISO 17025               | -             |  |  |  |  |  |
| 1,2-Dichlorobenzene                     | µg/kg | 1                     | MCERTS                  | -             |  |  |  |  |  |
| 1,4-Dichlorobenzene                     | µg/kg | 1                     | MCERTS                  | -             |  |  |  |  |  |
| Butylbenzene                            | µg/kg | 1                     | NONE                    | -             |  |  |  |  |  |
| 1,2-Dibromo-3-chloropropane             | µg/kg | 1                     | ISO 17025               | -             |  |  |  |  |  |
| 1,2,4-Trichlorobenzene                  | µg/kg | 1                     | MCERTS                  | -             |  |  |  |  |  |
| Hexachlorobutadiene                     | µg/kg | 1                     | NONE                    | -             |  |  |  |  |  |
| 1,2,3-Trichlorobenzene                  | µg/kg | 1                     | NONE                    | -             |  |  |  |  |  |



4041



Environmental Science

Analytical Report Number: 14-61115

Project / Site name: Prysmian Cables, Prescot

Your Order No: 10021/860/ST

| Lab Sample Number                       |       |                       |                         | 380031        |  |  |  |  |
|-----------------------------------------|-------|-----------------------|-------------------------|---------------|--|--|--|--|
| Sample Reference                        |       |                       |                         | TP113         |  |  |  |  |
| Sample Number                           |       |                       |                         | None Supplied |  |  |  |  |
| Depth (m)                               |       |                       |                         | 0.75          |  |  |  |  |
| Date Sampled                            |       |                       |                         | 02/10/2014    |  |  |  |  |
| Time Taken                              |       |                       |                         | None Supplied |  |  |  |  |
| Analytical Parameter<br>(Soil Analysis) | Units | Limit of<br>detection | Accreditation<br>Status |               |  |  |  |  |
| <b>SVOCs</b>                            |       |                       |                         |               |  |  |  |  |
| Aniline                                 | mg/kg | 0.1                   | NONE                    | -             |  |  |  |  |
| Phenol                                  | mg/kg | 0.2                   | ISO 17025               | -             |  |  |  |  |
| 2-Chlorophenol                          | mg/kg | 0.1                   | MCERTS                  | -             |  |  |  |  |
| Bis(2-chloroethyl)ether                 | mg/kg | 0.2                   | MCERTS                  | -             |  |  |  |  |
| 1,3-Dichlorobenzene                     | mg/kg | 0.2                   | MCERTS                  | -             |  |  |  |  |
| 1,2-Dichlorobenzene                     | mg/kg | 0.1                   | MCERTS                  | -             |  |  |  |  |
| 1,4-Dichlorobenzene                     | mg/kg | 0.2                   | MCERTS                  | -             |  |  |  |  |
| Bis(2-chloroisopropyl)ether             | mg/kg | 0.1                   | MCERTS                  | -             |  |  |  |  |
| 2-Methylphenol                          | mg/kg | 0.3                   | MCERTS                  | -             |  |  |  |  |
| Hexachloroethane                        | mg/kg | 0.05                  | MCERTS                  | -             |  |  |  |  |
| Nitrobenzene                            | mg/kg | 0.3                   | MCERTS                  | -             |  |  |  |  |
| 4-Methylphenol                          | mg/kg | 0.2                   | NONE                    | -             |  |  |  |  |
| Isophorone                              | mg/kg | 0.2                   | MCERTS                  | -             |  |  |  |  |
| 2-Nitrophenol                           | mg/kg | 0.3                   | MCERTS                  | -             |  |  |  |  |
| 2,4-Dimethylphenol                      | mg/kg | 0.3                   | MCERTS                  | -             |  |  |  |  |
| Bis(2-chloroethoxy)methane              | mg/kg | 0.3                   | MCERTS                  | -             |  |  |  |  |
| 1,2,4-Trichlorobenzene                  | mg/kg | 0.3                   | MCERTS                  | -             |  |  |  |  |
| Naphthalene                             | mg/kg | 0.1                   | MCERTS                  | -             |  |  |  |  |
| 2,4-Dichlorophenol                      | mg/kg | 0.3                   | MCERTS                  | -             |  |  |  |  |
| 4-Chloroaniline                         | mg/kg | 0.1                   | NONE                    | -             |  |  |  |  |
| Hexachlorobutadiene                     | mg/kg | 0.1                   | MCERTS                  | -             |  |  |  |  |
| 4-Chloro-3-methylphenol                 | mg/kg | 0.1                   | NONE                    | -             |  |  |  |  |
| 2,4,6-Trichlorophenol                   | mg/kg | 0.1                   | MCERTS                  | -             |  |  |  |  |
| 2,4,5-Trichlorophenol                   | mg/kg | 0.2                   | MCERTS                  | -             |  |  |  |  |
| 2-Methylnaphthalene                     | mg/kg | 0.1                   | NONE                    | -             |  |  |  |  |
| 2-Chloronaphthalene                     | mg/kg | 0.1                   | MCERTS                  | -             |  |  |  |  |
| Dimethylphthalate                       | mg/kg | 0.1                   | MCERTS                  | -             |  |  |  |  |
| 2,6-Dinitrotoluene                      | mg/kg | 0.1                   | MCERTS                  | -             |  |  |  |  |
| Acenaphthylene                          | mg/kg | 0.1                   | MCERTS                  | -             |  |  |  |  |
| Acenaphthene                            | mg/kg | 0.1                   | MCERTS                  | -             |  |  |  |  |
| 2,4-Dinitrotoluene                      | mg/kg | 0.2                   | MCERTS                  | -             |  |  |  |  |
| Dibenzofuran                            | mg/kg | 0.2                   | MCERTS                  | -             |  |  |  |  |
| 4-Chlorophenyl phenyl ether             | mg/kg | 0.3                   | ISO 17025               | -             |  |  |  |  |
| Diethyl phthalate                       | mg/kg | 0.2                   | MCERTS                  | -             |  |  |  |  |
| 4-Nitroaniline                          | mg/kg | 0.2                   | MCERTS                  | -             |  |  |  |  |
| Fluorene                                | mg/kg | 0.1                   | MCERTS                  | -             |  |  |  |  |
| Azobenzene                              | mg/kg | 0.3                   | MCERTS                  | -             |  |  |  |  |
| Bromophenyl phenyl ether                | mg/kg | 0.2                   | MCERTS                  | -             |  |  |  |  |
| Hexachlorobenzene                       | mg/kg | 0.3                   | MCERTS                  | -             |  |  |  |  |
| Phenanthrene                            | mg/kg | 0.1                   | MCERTS                  | -             |  |  |  |  |
| Anthracene                              | mg/kg | 0.1                   | MCERTS                  | -             |  |  |  |  |
| Carbazole                               | mg/kg | 0.3                   | MCERTS                  | -             |  |  |  |  |
| Dibutyl phthalate                       | mg/kg | 0.2                   | MCERTS                  | -             |  |  |  |  |
| Anthraquinone                           | mg/kg | 0.3                   | MCERTS                  | -             |  |  |  |  |
| Fluoranthene                            | mg/kg | 0.1                   | MCERTS                  | -             |  |  |  |  |
| Pyrene                                  | mg/kg | 0.1                   | MCERTS                  | -             |  |  |  |  |
| Butyl benzyl phthalate                  | mg/kg | 0.3                   | ISO 17025               | -             |  |  |  |  |
| Benzo(a)anthracene                      | mg/kg | 0.1                   | MCERTS                  | -             |  |  |  |  |
| Chrysene                                | mg/kg | 0.05                  | MCERTS                  | -             |  |  |  |  |
| Benzo(b)fluoranthene                    | mg/kg | 0.1                   | MCERTS                  | -             |  |  |  |  |
| Benzo(k)fluoranthene                    | mg/kg | 0.1                   | MCERTS                  | -             |  |  |  |  |
| Benzo(a)pyrene                          | mg/kg | 0.1                   | MCERTS                  | -             |  |  |  |  |
| Indeno(1,2,3-cd)pyrene                  | mg/kg | 0.1                   | MCERTS                  | -             |  |  |  |  |
| Dibenz(a,h)anthracene                   | mg/kg | 0.1                   | MCERTS                  | -             |  |  |  |  |
| Benzo(ghi)perylene                      | mg/kg | 0.05                  | MCERTS                  | -             |  |  |  |  |



Analytical Report Number: 14-61115

Project / Site name: Prysmian Cables, Prescott

Your Order No: 10021/860/ST

|                                             |               |                       |                         |  |  |
|---------------------------------------------|---------------|-----------------------|-------------------------|--|--|
| Lab Sample Number                           | 380032        | 380033                | 380034                  |  |  |
| Sample Reference                            | TP107         | TP109                 | TP111                   |  |  |
| Sample Number                               | None Supplied | None Supplied         | None Supplied           |  |  |
| Depth (m)                                   | 1.10          | 1.40                  | 1.40                    |  |  |
| Date Sampled                                | 02/10/2014    | 02/10/2014            | 02/10/2014              |  |  |
| Time Taken                                  | None Supplied | None Supplied         | None Supplied           |  |  |
| Analytical Parameter<br>(Leachate Analysis) | Units         | Limit of<br>detection | Accreditation<br>Status |  |  |

#### Petroleum Hydrocarbons

|                 |      |    |      |      |      |      |  |  |
|-----------------|------|----|------|------|------|------|--|--|
| TPH (C5 - C6)   | µg/l | 10 | NONE | < 10 | < 10 | < 10 |  |  |
| TPH (C8 - C10)  | µg/l | 10 | NONE | < 10 | < 10 | < 10 |  |  |
| TPH (C10 - C12) | µg/l | 10 | NONE | < 10 | < 10 | < 10 |  |  |
| TPH (C12 - C16) | µg/l | 10 | NONE | < 10 | < 10 | < 10 |  |  |
| TPH (C16 - C21) | µg/l | 10 | NONE | < 10 | < 10 | < 10 |  |  |
| TPH (C21 - C35) | µg/l | 10 | NONE | < 10 | < 10 | < 10 |  |  |

#### VOCs

|                                       |      |     |      |   |       |       |  |  |
|---------------------------------------|------|-----|------|---|-------|-------|--|--|
| Chloromethane                         | µg/l | 1   | NONE | - | < 1.0 | < 1.0 |  |  |
| Chloroethane                          | µg/l | 1   | NONE | - | < 1.0 | < 1.0 |  |  |
| Bromomethane                          | µg/l | 1   | NONE | - | < 1.0 | < 1.0 |  |  |
| Vinyl Chloride                        | µg/l | 1   | NONE | - | < 1.0 | < 1.0 |  |  |
| 1,1-dichloroethene                    | µg/l | 1   | NONE | - | < 1.0 | < 1.0 |  |  |
| 1,1,2-Trichloro 1,2,2-Trifluoroethane | µg/l | 1   | NONE | - | < 1.0 | < 1.0 |  |  |
| Cis-1,2-dichloroethene                | µg/l | 1   | NONE | - | < 1.0 | < 1.0 |  |  |
| MTBE (Methyl Tertiary Butyl Ether)    | µg/l | 1   | NONE | - | < 1.0 | < 1.0 |  |  |
| 1,1-dichloroethane                    | µg/l | 1   | NONE | - | < 1.0 | < 1.0 |  |  |
| 2,2-Dichloropropane                   | µg/l | 1   | NONE | - | < 1.0 | < 1.0 |  |  |
| Trichloromethane                      | µg/l | 1   | NONE | - | < 1.0 | < 1.0 |  |  |
| 1,1,1-Trichloroethane                 | µg/l | 1   | NONE | - | < 1.0 | < 1.0 |  |  |
| 1,2-dichloroethane                    | µg/l | 1   | NONE | - | < 1.0 | < 1.0 |  |  |
| 1,1-Dichloropropene                   | µg/l | 1   | NONE | - | < 1.0 | < 1.0 |  |  |
| Trans-1,2-dichloroethene              | µg/l | 1   | NONE | - | < 1.0 | < 1.0 |  |  |
| Benzene                               | µg/l | 1   | NONE | - | < 1.0 | < 1.0 |  |  |
| Tetrachloromethane                    | µg/l | 1   | NONE | - | < 1.0 | < 1.0 |  |  |
| 1,2-dichloropropane                   | µg/l | 1   | NONE | - | < 1.0 | < 1.0 |  |  |
| Trichloroethene                       | µg/l | 1   | NONE | - | < 1.0 | < 1.0 |  |  |
| Dibromomethane                        | µg/l | 1   | NONE | - | < 1.0 | < 1.0 |  |  |
| Bromodichloromethane                  | µg/l | 1   | NONE | - | < 1.0 | < 1.0 |  |  |
| Cis-1,3-dichloropropene               | µg/l | 1   | NONE | - | < 1.0 | < 1.0 |  |  |
| Trans-1,3-dichloropropene             | µg/l | 1   | NONE | - | < 1.0 | < 1.0 |  |  |
| Toluene                               | µg/l | 1   | NONE | - | < 1.0 | < 1.0 |  |  |
| 1,1,2-Trichloroethane                 | µg/l | 1   | NONE | - | < 1.0 | < 1.0 |  |  |
| 1,3-Dichloropropane                   | µg/l | 1   | NONE | - | < 1.0 | < 1.0 |  |  |
| Dibromochloromethane                  | µg/l | 1   | NONE | - | < 1.0 | < 1.0 |  |  |
| Tetrachloroethene                     | µg/l | 1   | NONE | - | < 1.0 | < 1.0 |  |  |
| 1,2-Dibromoethane                     | µg/l | 1   | NONE | - | < 1.0 | < 1.0 |  |  |
| Chlorobenzene                         | µg/l | 1   | NONE | - | < 1.0 | < 1.0 |  |  |
| 1,1,1,2-Tetrachloroethane             | µg/l | 1   | NONE | - | < 1.0 | < 1.0 |  |  |
| Ethylbenzene                          | µg/l | 1   | NONE | - | < 1.0 | < 1.0 |  |  |
| p & m-xylene                          | µg/l | 1   | NONE | - | < 1.0 | < 1.0 |  |  |
| Styrene                               | µg/l | 1   | NONE | - | < 1.0 | < 1.0 |  |  |
| Tribromomethane                       | µg/l | 1   | NONE | - | < 1.0 | < 1.0 |  |  |
| o-xylene                              | µg/l | 1   | NONE | - | < 1.0 | < 1.0 |  |  |
| 1,1,2,2-Tetrachloroethane             | µg/l | 1   | NONE | - | < 1.0 | < 1.0 |  |  |
| Isopropylbenzene                      | µg/l | 1   | NONE | - | < 1.0 | < 1.0 |  |  |
| Bromobenzene                          | µg/l | 1   | NONE | - | < 1.0 | < 1.0 |  |  |
| N-Propylbenzene                       | µg/l | 1   | NONE | - | < 1.0 | < 1.0 |  |  |
| 2-Chlorotoluene                       | µg/l | 1   | NONE | - | < 1.0 | < 1.0 |  |  |
| 4-Chlorotoluene                       | µg/l | 1   | NONE | - | < 1.0 | < 1.0 |  |  |
| 1,3,5-Trimethylbenzene                | µg/l | 1   | NONE | - | < 1.0 | < 1.0 |  |  |
| Tert-Butylbenzene                     | µg/l | 1   | NONE | - | < 1.0 | < 1.0 |  |  |
| 1,2,4-Trimethylbenzene                | µg/l | 1   | NONE | - | < 1.0 | < 1.0 |  |  |
| Sec-Butylbenzene                      | µg/l | 1   | NONE | - | < 1.0 | < 1.0 |  |  |
| 1,3-dichlorobenzene                   | µg/l | 1   | NONE | - | < 1.0 | < 1.0 |  |  |
| P-Isopropyltoluene                    | µg/l | 1   | NONE | - | < 1.0 | < 1.0 |  |  |
| 1,2-dichlorobenzene                   | µg/l | 1   | NONE | - | < 1.0 | < 1.0 |  |  |
| 1,4-dichlorobenzene                   | µg/l | 1   | NONE | - | < 1.0 | < 1.0 |  |  |
| Butylbenzene                          | µg/l | 1   | NONE | - | < 1.0 | < 1.0 |  |  |
| 1,2-Dibromo-3-chloropropane           | µg/l | 1   | NONE | - | < 1.0 | < 1.0 |  |  |
| 1,2,4-Trichlorobenzene                | µg/l | 1   | NONE | - | < 1.0 | < 1.0 |  |  |
| Hexachlorobutadiene                   | µg/l | 0.1 | NONE | - | < 0.1 | < 0.1 |  |  |
| 1,2,3-Trichlorobenzene                | µg/l | 1   | NONE | - | < 1.0 | < 1.0 |  |  |



Analytical Report Number: 14-61115  
Project / Site name: Prysmian Cables, Prescott

Your Order No: 10021/860/ST

|                                             |               |                       |                         |  |  |
|---------------------------------------------|---------------|-----------------------|-------------------------|--|--|
| Lab Sample Number                           | 380032        | 380033                | 380034                  |  |  |
| Sample Reference                            | TP107         | TP109                 | TP111                   |  |  |
| Sample Number                               | None Supplied | None Supplied         | None Supplied           |  |  |
| Depth (m)                                   | 1.10          | 1.40                  | 1.40                    |  |  |
| Date Sampled                                | 02/10/2014    | 02/10/2014            | 02/10/2014              |  |  |
| Time Taken                                  | None Supplied | None Supplied         | None Supplied           |  |  |
| Analytical Parameter<br>(Leachate Analysis) | Units         | Limit of<br>detection | Accreditation<br>Status |  |  |

#### SVOCs

|                             |      |      |      |   |        |        |  |  |
|-----------------------------|------|------|------|---|--------|--------|--|--|
| Aniline                     | µg/l | 0.05 | NONE | - | < 0.05 | < 0.05 |  |  |
| Phenol                      | µg/l | 0.05 | NONE | - | < 0.05 | < 0.05 |  |  |
| 2-Chlorophenol              | µg/l | 0.05 | NONE | - | < 0.05 | < 0.05 |  |  |
| Bis(2-chloroethyl)ether     | µg/l | 0.05 | NONE | - | < 0.05 | < 0.05 |  |  |
| 1,3-Dichlorobenzene         | µg/l | 0.05 | NONE | - | < 0.05 | < 0.05 |  |  |
| 1,2-Dichlorobenzene         | µg/l | 0.05 | NONE | - | < 0.05 | < 0.05 |  |  |
| 1,4-Dichlorobenzene         | µg/l | 0.05 | NONE | - | < 0.05 | < 0.05 |  |  |
| Bis(2-chloroisopropyl)ether | µg/l | 0.05 | NONE | - | < 0.05 | < 0.05 |  |  |
| 2-Methylphenol              | µg/l | 0.05 | NONE | - | < 0.05 | < 0.05 |  |  |
| Hexachloroethane            | µg/l | 0.05 | NONE | - | < 0.05 | < 0.05 |  |  |
| Nitrobenzene                | µg/l | 0.05 | NONE | - | < 0.05 | < 0.05 |  |  |
| 4-Methylphenol              | µg/l | 0.05 | NONE | - | < 0.05 | < 0.05 |  |  |
| Isophorone                  | µg/l | 0.05 | NONE | - | < 0.05 | < 0.05 |  |  |
| 2-Nitrophenol               | µg/l | 0.05 | NONE | - | < 0.05 | < 0.05 |  |  |
| 2,4-Dimethylphenol          | µg/l | 0.05 | NONE | - | < 0.05 | < 0.05 |  |  |
| Bis(2-chloroethoxy)methane  | µg/l | 0.05 | NONE | - | < 0.05 | < 0.05 |  |  |
| 1,2,4-Trichlorobenzene      | µg/l | 0.05 | NONE | - | < 0.05 | < 0.05 |  |  |
| Naphthalene                 | µg/l | 0.01 | NONE | - | < 0.01 | < 0.01 |  |  |
| 2,4-Dichlorophenol          | µg/l | 0.05 | NONE | - | < 0.05 | < 0.05 |  |  |
| 4-Chloroaniline             | µg/l | 0.05 | NONE | - | < 0.05 | < 0.05 |  |  |
| Hexachlorobutadiene         | µg/l | 0.05 | NONE | - | < 0.05 | < 0.05 |  |  |
| 4-Chloro-3-methylphenol     | µg/l | 0.05 | NONE | - | < 0.05 | < 0.05 |  |  |
| 2,4,6-Trichlorophenol       | µg/l | 0.05 | NONE | - | < 0.05 | < 0.05 |  |  |
| 2,4,5-Trichlorophenol       | µg/l | 0.05 | NONE | - | < 0.05 | < 0.05 |  |  |
| 2-Methylnaphthalene         | µg/l | 0.05 | NONE | - | < 0.05 | < 0.05 |  |  |
| 2-Chloronaphthalene         | µg/l | 0.05 | NONE | - | < 0.05 | < 0.05 |  |  |
| Dimethylphthalate           | µg/l | 0.05 | NONE | - | < 0.05 | < 0.05 |  |  |
| 2,6-Dinitrotoluene          | µg/l | 0.05 | NONE | - | < 0.05 | < 0.05 |  |  |
| Acenaphthylene              | µg/l | 0.01 | NONE | - | < 0.01 | < 0.01 |  |  |
| Acenaphthene                | µg/l | 0.01 | NONE | - | < 0.01 | < 0.01 |  |  |
| 2,4-Dinitrotoluene          | µg/l | 0.05 | NONE | - | < 0.05 | < 0.05 |  |  |
| Dibenzofuran                | µg/l | 0.05 | NONE | - | < 0.05 | < 0.05 |  |  |
| 4-Chlorophenyl phenyl ether | µg/l | 0.05 | NONE | - | < 0.05 | < 0.05 |  |  |
| Diethyl phthalate           | µg/l | 0.05 | NONE | - | < 0.05 | < 0.05 |  |  |
| 4-Nitroaniline              | µg/l | 0.05 | NONE | - | < 0.05 | < 0.05 |  |  |
| Fluorene                    | µg/l | 0.01 | NONE | - | < 0.01 | < 0.01 |  |  |
| Azobenzene                  | µg/l | 0.05 | NONE | - | < 0.05 | < 0.05 |  |  |
| Bromophenyl phenyl ether    | µg/l | 0.05 | NONE | - | < 0.05 | < 0.05 |  |  |
| Hexachlorobenzene           | µg/l | 0.02 | NONE | - | < 0.02 | < 0.02 |  |  |
| Phenanthrene                | µg/l | 0.01 | NONE | - | < 0.01 | < 0.01 |  |  |
| Anthracene                  | µg/l | 0.01 | NONE | - | < 0.01 | < 0.01 |  |  |
| Carbazole                   | µg/l | 0.05 | NONE | - | < 0.05 | < 0.05 |  |  |
| Dibutyl phthalate           | µg/l | 0.05 | NONE | - | < 0.05 | < 0.05 |  |  |
| Anthraquinone               | µg/l | 0.05 | NONE | - | < 0.05 | < 0.05 |  |  |
| Fluoranthene                | µg/l | 0.01 | NONE | - | < 0.01 | < 0.01 |  |  |
| Pyrene                      | µg/l | 0.01 | NONE | - | < 0.01 | < 0.01 |  |  |
| Butyl benzyl phthalate      | µg/l | 0.05 | NONE | - | < 0.05 | < 0.05 |  |  |
| Benzo(a)anthracene          | µg/l | 0.01 | NONE | - | < 0.01 | < 0.01 |  |  |
| Chrysene                    | µg/l | 0.01 | NONE | - | < 0.01 | < 0.01 |  |  |
| Benzo(b)fluoranthene        | µg/l | 0.01 | NONE | - | < 0.01 | < 0.01 |  |  |
| Benzo(k)fluoranthene        | µg/l | 0.01 | NONE | - | < 0.01 | < 0.01 |  |  |
| Benzo(a)pyrene              | µg/l | 0.01 | NONE | - | < 0.01 | < 0.01 |  |  |
| Indeno(1,2,3-cd)pyrene      | µg/l | 0.01 | NONE | - | < 0.01 | < 0.01 |  |  |
| Dibenz(a,h)anthracene       | µg/l | 0.01 | NONE | - | < 0.01 | < 0.01 |  |  |
| Benzo(ghi)perylene          | µg/l | 0.01 | NONE | - | < 0.01 | < 0.01 |  |  |

**Analytical Report Number : 14-61115**

**Project / Site name: Prysmian Cables, Prescott**

\* These descriptions are only intended to act as a cross check if sample identities are questioned. The major constituent of the sample is intended to act with respect to MCERTS validation. The laboratory is accredited for sand, clay and topsoil/loam soil types. Data for unaccredited types of solid should be interpreted with care.

Stone content

of a sample is calculated as the % weight of the stones not passing a 2 mm sieve. Results are not corrected for stone content.

| Lab Sample Number | Sample Reference | Sample Number | Depth (m) | Sample Description *                               |
|-------------------|------------------|---------------|-----------|----------------------------------------------------|
| 380006            | TP116            | None Supplied | 0.60      | Brown sandy topsoil with gravel.                   |
| 380007            | TP118            | None Supplied | 0.60      | Brown sandy clay.                                  |
| 380008            | TP119            | None Supplied | 2.40      | Light brown sand.                                  |
| 380009            | TP121            | None Supplied | 1.10      | Grey clay and sand.                                |
| 380010            | TP123            | None Supplied | 0.60      | Brown clay and sand with gravel.                   |
| 380011            | TP125            | None Supplied | 0.55      | Brown clay and topsoil with gravel and vegetation. |
| 380012            | TP127            | None Supplied | 1.90      | Grey clay and sand.                                |
| 380013            | TP128            | None Supplied | 0.30      | Red topsoil and sand with brick.                   |
| 380014            | TP128            | None Supplied | 1.70      | Light brown sandy clay.                            |
| 380015            | TP143            | None Supplied | 0.70      | Black clay and gravel.                             |
| 380016            | TP144            | None Supplied | 0.75      | Black clay and gravel with vegetation.             |
| 380017            | TP145            | None Supplied | 0.20      | Brown topsoil and sand with gravel and vegetation. |
| 380018            | TP146            | None Supplied | 0.60      | Brown topsoil and clay with vegetation.            |
| 380019            | TP147            | None Supplied | 0.30      | Light brown sandy topsoil with rubble.             |
| 380020            | TP130            | None Supplied | 1.20      | Grey clay.                                         |
| 380021            | TP131            | None Supplied | 1.90      | Black topsoil and sand with gravel and stones.     |
| 380022            | TP133            | None Supplied | 3.20      | Grey clay and sand with gravel.                    |
| 380023            | TP136            | None Supplied | 2.50      | Grey gravelly sand.                                |
| 380024            | TP101            | None Supplied | 2.20      | Light brown sand.                                  |
| 380025            | TP103            | None Supplied | 2.60      | Light brown clay and sand.                         |
| 380026            | TP105            | None Supplied | 0.60      | Brown topsoil and clay with gravel.                |
| 380027            | TP107            | None Supplied | 1.10      | Grey clay.                                         |
| 380028            | TP107            | None Supplied | 2.50      | Light brown clay and sand.                         |
| 380029            | TP108            | None Supplied | 0.10      | Brown topsoil and clay with vegetation.            |
| 380030            | TP111            | None Supplied | 0.20      | Brown topsoil and clay with gravel.                |
| 380031            | TP113            | None Supplied | 0.75      | Brown topsoil and clay with gravel and stones.     |

**Analytical Report Number : 14-61115**

**Project / Site name: Prysmian Cables, Prescott**

**Water matrix abbreviations: Surface Water (SW) Potable Water (PW) Ground Water (GW)**

| Analytical Test Name                        | Analytical Method Description                                                                                                                                                                                                                                | Analytical Method Reference                                                      | Method number | Wet / Dry Analysis | Accreditation Status |
|---------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------|---------------|--------------------|----------------------|
| Asbestos identification in soil             | Asbestos Identification with the use of polarised light microscopy in conjunction with disperion staining techniques.                                                                                                                                        | In house method based on HSG 248                                                 | A001-PL       | D                  | ISO 17025            |
| Moisture Content                            | Moisture content, determined gravimetrically.                                                                                                                                                                                                                | In-house method based on BS1377 Part 3, 1990, Chemical and Electrochemical Tests | L019-UK/PL    | W                  | NONE                 |
| Semi-volatile organic compounds in leachate | Determination of semi-volatile organic compounds in leachate by extraction in dichloromethane followed by GC-MS.                                                                                                                                             | In-house method based on USEPA 8270                                              | L070-PL       | D                  | NONE                 |
| Semi-volatile organic compounds in soil     | Determination of semi-volatile organic compounds in soil by extraction in dichloromethane and hexane followed by GC-MS.                                                                                                                                      | In-house method based on USEPA 8270                                              | L064-PL       | D                  | MCERTS               |
| Speciated EPA-16 PAHs in soil               | Determination of PAH compounds in soil by extraction in dichloromethane and hexane followed by GC-MS with the use of surrogate and internal standards.                                                                                                       | In-house method based on USEPA 8270                                              | L064-PL       | D                  | MCERTS               |
| Stones content of soil                      | Standard preparation for all samples unless otherwise detailed. Stones not passing through a 10 mm sieve is determined gravimetrically and reported as a percentage of the dry weight. Sample results are not corrected for the stone content of the sample. | In-house method based on British Standard Methods and MCERTS requirements.       | L019-UK/PL    | D                  | NONE                 |
| TPH in (Water)                              | Determination of dichloromethane extractable hydrocarbons in leachate by GC-MS.                                                                                                                                                                              | In-house method                                                                  | L070-PL       | W                  | NONE                 |
| Volatile organic compounds in leachate      |                                                                                                                                                                                                                                                              | In-house method based on USEPA8260                                               | L036-UK       |                    | NONE                 |
| Volatile organic compounds in soil          | Determination of volatile organic compounds in soil by headspace GC-MS.                                                                                                                                                                                      | In-house method based on USEPA8260                                               | L073S-PL      | W                  | MCERTS               |

**For method numbers ending in 'UK' analysis have been carried out in our laboratory in the United Kingdom.**

**For method numbers ending in 'PL' analysis have been carried out in our laboratory in Poland.**

**Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.**

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## **Analytical Report Number : 15-74636**

|                             |                     |                               |            |
|-----------------------------|---------------------|-------------------------------|------------|
| <b>Project / Site name:</b> | Prescot             | <b>Samples received on:</b>   | 02/07/2015 |
| <b>Your job number:</b>     | 10021               | <b>Samples instructed on:</b> | 03/07/2015 |
| <b>Your order number:</b>   | 10021/1984/MW       | <b>Analysis completed by:</b> | 09/07/2015 |
| <b>Report Issue Number:</b> | 1                   | <b>Report issued on:</b>      | 09/07/2015 |
| <b>Samples Analysed:</b>    | 20 leachate samples |                               |            |

**Signed:**

Rexona Rahman  
Reporting Manager  
**For & on behalf of i2 Analytical Ltd.**

**Signed:**

Emma Winter  
Assistant Reporting Manager  
**For & on behalf of i2 Analytical Ltd.**

Other office located at: ul. Pionierów 39, 41 -711 Ruda Śląska, Poland

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

|           |                           |
|-----------|---------------------------|
| soils     | - 4 weeks from reporting  |
| leachates | - 2 weeks from reporting  |
| waters    | - 2 weeks from reporting  |
| asbestos  | - 6 months from reporting |

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Analytical Report Number: 15-74636

Project / Site name: Prescott

Your Order No: 10021/1984/MW

|                                             |               |                       |                         |               |               |
|---------------------------------------------|---------------|-----------------------|-------------------------|---------------|---------------|
| Lab Sample Number                           | 461146        | 461147                | 461148                  | 461149        | 461150        |
| Sample Reference                            | MGL 1         | MGL 2                 | MGL 3                   | MGL 4         | MGL 5         |
| Sample Number                               | None Supplied | None Supplied         | None Supplied           | None Supplied | None Supplied |
| Depth (m)                                   | None Supplied | None Supplied         | None Supplied           | None Supplied | None Supplied |
| Date Sampled                                | 30/06/2015    | 30/06/2015            | 30/06/2015              | 30/06/2015    | 30/06/2015    |
| Time Taken                                  | None Supplied | None Supplied         | None Supplied           | None Supplied | None Supplied |
| Analytical Parameter<br>(Leachate Analysis) | Units         | Limit of<br>detection | Accreditation<br>Status |               |               |

#### General Inorganics

|               |          |     |           |      |      |      |     |      |
|---------------|----------|-----|-----------|------|------|------|-----|------|
| pH            | pH Units | N/A | ISO 17025 | 7.3  | 7.2  | 7.7  | 7.5 | 7.6  |
| Total Cyanide | µg/l     | 10  | ISO 17025 | < 10 | < 10 | < 10 | 23  | < 10 |

#### Total Phenols

|                            |      |    |           |      |      |      |      |      |
|----------------------------|------|----|-----------|------|------|------|------|------|
| Total Phenols (monohydric) | µg/l | 10 | ISO 17025 | < 10 | < 10 | < 10 | < 10 | < 10 |
|----------------------------|------|----|-----------|------|------|------|------|------|

#### Speciated PAHs

|                        |      |      |      |        |        |        |        |        |
|------------------------|------|------|------|--------|--------|--------|--------|--------|
| Naphthalene            | µg/l | 0.01 | NONE | < 0.01 | < 0.01 | < 0.01 | < 0.01 | < 0.01 |
| Acenaphthylene         | µg/l | 0.01 | NONE | < 0.01 | < 0.01 | < 0.01 | < 0.01 | < 0.01 |
| Acenaphthene           | µg/l | 0.01 | NONE | < 0.01 | < 0.01 | < 0.01 | < 0.01 | < 0.01 |
| Fluorene               | µg/l | 0.01 | NONE | < 0.01 | < 0.01 | < 0.01 | < 0.01 | < 0.01 |
| Phenanthrene           | µg/l | 0.01 | NONE | < 0.01 | < 0.01 | < 0.01 | < 0.01 | < 0.01 |
| Anthracene             | µg/l | 0.01 | NONE | < 0.01 | < 0.01 | < 0.01 | < 0.01 | < 0.01 |
| Fluoranthene           | µg/l | 0.01 | NONE | < 0.01 | < 0.01 | < 0.01 | < 0.01 | < 0.01 |
| Pyrene                 | µg/l | 0.01 | NONE | < 0.01 | < 0.01 | < 0.01 | < 0.01 | < 0.01 |
| Benzo(a)anthracene     | µg/l | 0.01 | NONE | < 0.01 | < 0.01 | < 0.01 | < 0.01 | < 0.01 |
| Chrysene               | µg/l | 0.01 | NONE | < 0.01 | < 0.01 | < 0.01 | < 0.01 | < 0.01 |
| Benzo(b)fluoranthene   | µg/l | 0.01 | NONE | < 0.01 | < 0.01 | < 0.01 | < 0.01 | < 0.01 |
| Benzo(k)fluoranthene   | µg/l | 0.01 | NONE | < 0.01 | < 0.01 | < 0.01 | < 0.01 | < 0.01 |
| Benzo(a)pyrene         | µg/l | 0.01 | NONE | < 0.01 | < 0.01 | < 0.01 | < 0.01 | < 0.01 |
| Indeno(1,2,3-cd)pyrene | µg/l | 0.01 | NONE | < 0.01 | < 0.01 | < 0.01 | < 0.01 | < 0.01 |
| Dibenz(a,h)anthracene  | µg/l | 0.01 | NONE | < 0.01 | < 0.01 | < 0.01 | < 0.01 | < 0.01 |
| Benzo(ghi)perylene     | µg/l | 0.01 | NONE | < 0.01 | < 0.01 | < 0.01 | < 0.01 | < 0.01 |

#### Total PAH

|                   |      |     |      |       |       |       |       |       |
|-------------------|------|-----|------|-------|-------|-------|-------|-------|
| Total EPA-16 PAHs | µg/l | 0.2 | NONE | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 |
|-------------------|------|-----|------|-------|-------|-------|-------|-------|

#### Heavy Metals / Metalloids

|                       |      |      |           |       |       |       |        |       |
|-----------------------|------|------|-----------|-------|-------|-------|--------|-------|
| Arsenic (dissolved)   | µg/l | 1.1  | ISO 17025 | 8.9   | 1.8   | 6.6   | 6.3    | 2.8   |
| Cadmium (dissolved)   | µg/l | 0.08 | ISO 17025 | 0.58  | 0.15  | 0.67  | < 0.08 | 0.81  |
| Chromium (hexavalent) | µg/l | 5    | NONE      | < 5.0 | < 5.0 | < 5.0 | < 5.0  | < 5.0 |
| Chromium (dissolved)  | µg/l | 0.4  | ISO 17025 | 2.9   | 3.0   | 1.2   | 3.7    | 2.2   |
| Copper (dissolved)    | µg/l | 0.7  | ISO 17025 | 52    | 24    | 120   | 17     | 55    |
| Lead (dissolved)      | µg/l | 1    | ISO 17025 | 3.2   | 2.4   | 2.4   | < 1.0  | 19    |
| Mercury (dissolved)   | µg/l | 0.5  | ISO 17025 | < 0.5 | < 0.5 | < 0.5 | < 0.5  | < 0.5 |
| Nickel (dissolved)    | µg/l | 0.3  | ISO 17025 | 4.2   | 1.0   | 1.6   | 1.8    | 1.8   |
| Selenium (dissolved)  | µg/l | 4    | ISO 17025 | < 4.0 | < 4.0 | < 4.0 | < 4.0  | < 4.0 |
| Zinc (dissolved)      | µg/l | 0.4  | ISO 17025 | 7.4   | 3.3   | 7.5   | 2.3    | 10    |



Analytical Report Number: 15-74636

Project / Site name: Prescott

Your Order No: 10021/1984/MW

|                                             |               |                       |                         |               |               |
|---------------------------------------------|---------------|-----------------------|-------------------------|---------------|---------------|
| Lab Sample Number                           | 461146        | 461147                | 461148                  | 461149        | 461150        |
| Sample Reference                            | MGL 1         | MGL 2                 | MGL 3                   | MGL 4         | MGL 5         |
| Sample Number                               | None Supplied | None Supplied         | None Supplied           | None Supplied | None Supplied |
| Depth (m)                                   | None Supplied | None Supplied         | None Supplied           | None Supplied | None Supplied |
| Date Sampled                                | 30/06/2015    | 30/06/2015            | 30/06/2015              | 30/06/2015    | 30/06/2015    |
| Time Taken                                  | None Supplied | None Supplied         | None Supplied           | None Supplied | None Supplied |
| Analytical Parameter<br>(Leachate Analysis) | Units         | Limit of<br>detection | Accreditation<br>Status |               |               |

#### Monoaromatics

|                                    |      |    |      |       |       |       |       |       |
|------------------------------------|------|----|------|-------|-------|-------|-------|-------|
| Benzene                            | µg/l | 1  | NONE | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| Toluene                            | µg/l | 1  | NONE | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| Ethylbenzene                       | µg/l | 1  | NONE | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| p & m-xylene                       | µg/l | 1  | NONE | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| o-xylene                           | µg/l | 1  | NONE | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| MTBE (Methyl Tertiary Butyl Ether) | µg/l | 10 | NONE | < 10  | < 10  | < 10  | < 10  | < 10  |

#### Petroleum Hydrocarbons

|                                |      |    |      |      |      |      |      |      |
|--------------------------------|------|----|------|------|------|------|------|------|
| TPH1 (C10 - C40)               | µg/l | 10 | NONE | < 10 | < 10 | < 10 | < 10 | < 10 |
| TPH-CWG - Aliphatic >C5 - C6   | µg/l | 10 | NONE | < 10 | < 10 | < 10 | < 10 | < 10 |
| TPH-CWG - Aliphatic >C6 - C8   | µg/l | 10 | NONE | < 10 | < 10 | < 10 | < 10 | < 10 |
| TPH-CWG - Aliphatic >C8 - C10  | µg/l | 10 | NONE | < 10 | < 10 | < 10 | < 10 | < 10 |
| TPH-CWG - Aliphatic >C10 - C12 | µg/l | 10 | NONE | < 10 | < 10 | < 10 | < 10 | < 10 |
| TPH-CWG - Aliphatic >C12 - C16 | µg/l | 10 | NONE | < 10 | < 10 | < 10 | < 10 | < 10 |
| TPH-CWG - Aliphatic >C16 - C21 | µg/l | 10 | NONE | < 10 | < 10 | < 10 | < 10 | < 10 |
| TPH-CWG - Aliphatic >C21 - C35 | µg/l | 10 | NONE | < 10 | < 10 | < 10 | < 10 | < 10 |
| TPH-CWG - Aliphatic (C5 - C35) | µg/l | 10 | NONE | < 10 | < 10 | < 10 | < 10 | < 10 |
| TPH-CWG - Aromatic >C5 - C7    | µg/l | 10 | NONE | < 10 | < 10 | < 10 | < 10 | < 10 |
| TPH-CWG - Aromatic >C7 - C8    | µg/l | 10 | NONE | < 10 | < 10 | < 10 | < 10 | < 10 |
| TPH-CWG - Aromatic >C8 - C10   | µg/l | 10 | NONE | < 10 | < 10 | < 10 | < 10 | < 10 |
| TPH-CWG - Aromatic >C10 - C12  | µg/l | 10 | NONE | < 10 | < 10 | < 10 | < 10 | < 10 |
| TPH-CWG - Aromatic >C12 - C16  | µg/l | 10 | NONE | < 10 | < 10 | < 10 | < 10 | < 10 |
| TPH-CWG - Aromatic >C16 - C21  | µg/l | 10 | NONE | < 10 | < 10 | < 10 | < 10 | < 10 |
| TPH-CWG - Aromatic >C21 - C35  | µg/l | 10 | NONE | < 10 | < 10 | < 10 | < 10 | < 10 |
| TPH-CWG - Aromatic (C5 - C35)  | µg/l | 10 | NONE | < 10 | < 10 | < 10 | < 10 | < 10 |



Analytical Report Number: 15-74636

Project / Site name: Prescott

Your Order No: 10021/1984/MW

|                                             |               |                       |                         |               |               |
|---------------------------------------------|---------------|-----------------------|-------------------------|---------------|---------------|
| Lab Sample Number                           | 461151        | 461152                | 461153                  | 461154        | 461155        |
| Sample Reference                            | MGL 6         | MGL 7                 | MGL 8                   | MGL 9         | MGL 10        |
| Sample Number                               | None Supplied | None Supplied         | None Supplied           | None Supplied | None Supplied |
| Depth (m)                                   | None Supplied | None Supplied         | None Supplied           | None Supplied | None Supplied |
| Date Sampled                                | 30/06/2015    | 30/06/2015            | 30/06/2015              | 30/06/2015    | 30/06/2015    |
| Time Taken                                  | None Supplied | None Supplied         | None Supplied           | None Supplied | None Supplied |
| Analytical Parameter<br>(Leachate Analysis) | Units         | Limit of<br>detection | Accreditation<br>Status |               |               |

#### General Inorganics

|               |          |     |           |      |      |      |      |      |
|---------------|----------|-----|-----------|------|------|------|------|------|
| pH            | pH Units | N/A | ISO 17025 | 7.5  | 7.6  | 7.7  | 8.6  | 7.9  |
| Total Cyanide | µg/l     | 10  | ISO 17025 | < 10 | < 10 | < 10 | < 10 | < 10 |

#### Total Phenols

|                            |      |    |           |      |      |      |      |      |
|----------------------------|------|----|-----------|------|------|------|------|------|
| Total Phenols (monohydric) | µg/l | 10 | ISO 17025 | < 10 | < 10 | < 10 | < 10 | < 10 |
|----------------------------|------|----|-----------|------|------|------|------|------|

#### Speciated PAHs

|                        |      |      |      |        |        |        |        |        |
|------------------------|------|------|------|--------|--------|--------|--------|--------|
| Naphthalene            | µg/l | 0.01 | NONE | < 0.01 | < 0.01 | < 0.01 | < 0.01 | < 0.01 |
| Acenaphthylene         | µg/l | 0.01 | NONE | < 0.01 | < 0.01 | < 0.01 | < 0.01 | < 0.01 |
| Acenaphthene           | µg/l | 0.01 | NONE | < 0.01 | < 0.01 | < 0.01 | < 0.01 | < 0.01 |
| Fluorene               | µg/l | 0.01 | NONE | < 0.01 | < 0.01 | < 0.01 | < 0.01 | < 0.01 |
| Phenanthrene           | µg/l | 0.01 | NONE | < 0.01 | < 0.01 | < 0.01 | < 0.01 | < 0.01 |
| Anthracene             | µg/l | 0.01 | NONE | < 0.01 | < 0.01 | < 0.01 | < 0.01 | < 0.01 |
| Fluoranthene           | µg/l | 0.01 | NONE | < 0.01 | < 0.01 | < 0.01 | < 0.01 | < 0.01 |
| Pyrene                 | µg/l | 0.01 | NONE | < 0.01 | < 0.01 | < 0.01 | < 0.01 | < 0.01 |
| Benzo(a)anthracene     | µg/l | 0.01 | NONE | < 0.01 | < 0.01 | < 0.01 | < 0.01 | < 0.01 |
| Chrysene               | µg/l | 0.01 | NONE | < 0.01 | < 0.01 | < 0.01 | < 0.01 | < 0.01 |
| Benzo(b)fluoranthene   | µg/l | 0.01 | NONE | < 0.01 | < 0.01 | < 0.01 | < 0.01 | < 0.01 |
| Benzo(k)fluoranthene   | µg/l | 0.01 | NONE | < 0.01 | < 0.01 | < 0.01 | < 0.01 | < 0.01 |
| Benzo(a)pyrene         | µg/l | 0.01 | NONE | < 0.01 | < 0.01 | < 0.01 | < 0.01 | < 0.01 |
| Indeno(1,2,3-cd)pyrene | µg/l | 0.01 | NONE | < 0.01 | < 0.01 | < 0.01 | < 0.01 | < 0.01 |
| Dibenz(a,h)anthracene  | µg/l | 0.01 | NONE | < 0.01 | < 0.01 | < 0.01 | < 0.01 | < 0.01 |
| Benzo(ghi)perylene     | µg/l | 0.01 | NONE | < 0.01 | < 0.01 | < 0.01 | < 0.01 | < 0.01 |

#### Total PAH

|                   |      |     |      |       |       |       |       |       |
|-------------------|------|-----|------|-------|-------|-------|-------|-------|
| Total EPA-16 PAHs | µg/l | 0.2 | NONE | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 |
|-------------------|------|-----|------|-------|-------|-------|-------|-------|

#### Heavy Metals / Metalloids

|                       |      |      |           |       |       |       |       |       |
|-----------------------|------|------|-----------|-------|-------|-------|-------|-------|
| Arsenic (dissolved)   | µg/l | 1.1  | ISO 17025 | 7.0   | 8.7   | 8.7   | 17    | 7.1   |
| Cadmium (dissolved)   | µg/l | 0.08 | ISO 17025 | 0.13  | 0.49  | 9.6   | 0.59  | 0.73  |
| Chromium (hexavalent) | µg/l | 5    | NONE      | < 5.0 | < 5.0 | 9.2   | < 5.0 | < 5.0 |
| Chromium (dissolved)  | µg/l | 0.4  | ISO 17025 | 0.7   | 2.2   | 9.9   | 4.4   | 4.6   |
| Copper (dissolved)    | µg/l | 0.7  | ISO 17025 | 62    | 47    | 180   | 80    | 74    |
| Lead (dissolved)      | µg/l | 1    | ISO 17025 | 4.9   | 7.6   | 15    | 13    | 11    |
| Mercury (dissolved)   | µg/l | 0.5  | ISO 17025 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 0.5 |
| Nickel (dissolved)    | µg/l | 0.3  | ISO 17025 | 0.8   | < 0.3 | 1.2   | 2.1   | 0.7   |
| Selenium (dissolved)  | µg/l | 4    | ISO 17025 | < 4.0 | < 4.0 | < 4.0 | < 4.0 | < 4.0 |
| Zinc (dissolved)      | µg/l | 0.4  | ISO 17025 | 7.5   | 9.4   | 21    | 12    | 14    |



Analytical Report Number: 15-74636

Project / Site name: Prescott

Your Order No: 10021/1984/MW

|                                             |               |                       |                         |               |               |
|---------------------------------------------|---------------|-----------------------|-------------------------|---------------|---------------|
| Lab Sample Number                           | 461151        | 461152                | 461153                  | 461154        | 461155        |
| Sample Reference                            | MGL 6         | MGL 7                 | MGL 8                   | MGL 9         | MGL 10        |
| Sample Number                               | None Supplied | None Supplied         | None Supplied           | None Supplied | None Supplied |
| Depth (m)                                   | None Supplied | None Supplied         | None Supplied           | None Supplied | None Supplied |
| Date Sampled                                | 30/06/2015    | 30/06/2015            | 30/06/2015              | 30/06/2015    | 30/06/2015    |
| Time Taken                                  | None Supplied | None Supplied         | None Supplied           | None Supplied | None Supplied |
| Analytical Parameter<br>(Leachate Analysis) | Units         | Limit of<br>detection | Accreditation<br>Status |               |               |

#### Monoaromatics

|                                    |      |    |      |       |       |       |       |       |
|------------------------------------|------|----|------|-------|-------|-------|-------|-------|
| Benzene                            | µg/l | 1  | NONE | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| Toluene                            | µg/l | 1  | NONE | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| Ethylbenzene                       | µg/l | 1  | NONE | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| p & m-xylene                       | µg/l | 1  | NONE | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| o-xylene                           | µg/l | 1  | NONE | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| MTBE (Methyl Tertiary Butyl Ether) | µg/l | 10 | NONE | < 10  | < 10  | < 10  | < 10  | < 10  |

#### Petroleum Hydrocarbons

|                                |      |    |      |      |      |      |      |      |
|--------------------------------|------|----|------|------|------|------|------|------|
| TPH1 (C10 - C40)               | µg/l | 10 | NONE | < 10 | < 10 | < 10 | < 10 | < 10 |
| TPH-CWG - Aliphatic >C5 - C6   | µg/l | 10 | NONE | < 10 | < 10 | < 10 | < 10 | < 10 |
| TPH-CWG - Aliphatic >C6 - C8   | µg/l | 10 | NONE | < 10 | < 10 | < 10 | < 10 | < 10 |
| TPH-CWG - Aliphatic >C8 - C10  | µg/l | 10 | NONE | < 10 | < 10 | < 10 | < 10 | < 10 |
| TPH-CWG - Aliphatic >C10 - C12 | µg/l | 10 | NONE | < 10 | < 10 | < 10 | < 10 | < 10 |
| TPH-CWG - Aliphatic >C12 - C16 | µg/l | 10 | NONE | < 10 | < 10 | < 10 | < 10 | < 10 |
| TPH-CWG - Aliphatic >C16 - C21 | µg/l | 10 | NONE | < 10 | < 10 | < 10 | < 10 | < 10 |
| TPH-CWG - Aliphatic >C21 - C35 | µg/l | 10 | NONE | < 10 | < 10 | < 10 | < 10 | < 10 |
| TPH-CWG - Aliphatic (C5 - C35) | µg/l | 10 | NONE | < 10 | < 10 | < 10 | < 10 | < 10 |
| TPH-CWG - Aromatic >C5 - C7    | µg/l | 10 | NONE | < 10 | < 10 | < 10 | < 10 | < 10 |
| TPH-CWG - Aromatic >C7 - C8    | µg/l | 10 | NONE | < 10 | < 10 | < 10 | < 10 | < 10 |
| TPH-CWG - Aromatic >C8 - C10   | µg/l | 10 | NONE | < 10 | < 10 | < 10 | < 10 | < 10 |
| TPH-CWG - Aromatic >C10 - C12  | µg/l | 10 | NONE | < 10 | < 10 | < 10 | < 10 | < 10 |
| TPH-CWG - Aromatic >C12 - C16  | µg/l | 10 | NONE | < 10 | < 10 | < 10 | < 10 | < 10 |
| TPH-CWG - Aromatic >C16 - C21  | µg/l | 10 | NONE | < 10 | < 10 | < 10 | < 10 | < 10 |
| TPH-CWG - Aromatic >C21 - C35  | µg/l | 10 | NONE | < 10 | < 10 | < 10 | < 10 | < 10 |
| TPH-CWG - Aromatic (C5 - C35)  | µg/l | 10 | NONE | < 10 | < 10 | < 10 | < 10 | < 10 |



Analytical Report Number: 15-74636

Project / Site name: Prescott

Your Order No: 10021/1984/MW

|                                             |               |                       |                         |               |               |
|---------------------------------------------|---------------|-----------------------|-------------------------|---------------|---------------|
| Lab Sample Number                           | 461156        | 461157                | 461158                  | 461159        | 461160        |
| Sample Reference                            | MGL 11        | MGL 12                | MGL 13                  | MGL 14        | MGL 15        |
| Sample Number                               | None Supplied | None Supplied         | None Supplied           | None Supplied | None Supplied |
| Depth (m)                                   | None Supplied | None Supplied         | None Supplied           | None Supplied | None Supplied |
| Date Sampled                                | 30/06/2015    | 30/06/2015            | 01/07/2015              | 01/07/2015    | 01/07/2015    |
| Time Taken                                  | None Supplied | None Supplied         | None Supplied           | None Supplied | None Supplied |
| Analytical Parameter<br>(Leachate Analysis) | Units         | Limit of<br>detection | Accreditation<br>Status |               |               |

#### General Inorganics

|               |          |     |           |      |      |     |      |      |
|---------------|----------|-----|-----------|------|------|-----|------|------|
| pH            | pH Units | N/A | ISO 17025 | 8.0  | 8.4  | 9.8 | 10.0 | 8.3  |
| Total Cyanide | µg/l     | 10  | ISO 17025 | < 10 | < 10 | 11  | < 10 | < 10 |

#### Total Phenols

|                            |      |    |           |      |      |      |      |      |
|----------------------------|------|----|-----------|------|------|------|------|------|
| Total Phenols (monohydric) | µg/l | 10 | ISO 17025 | < 10 | < 10 | < 10 | < 10 | < 10 |
|----------------------------|------|----|-----------|------|------|------|------|------|

#### Speciated PAHs

|                        |      |      |      |        |        |        |        |        |
|------------------------|------|------|------|--------|--------|--------|--------|--------|
| Naphthalene            | µg/l | 0.01 | NONE | < 0.01 | < 0.01 | < 0.01 | < 0.01 | < 0.01 |
| Acenaphthylene         | µg/l | 0.01 | NONE | < 0.01 | < 0.01 | < 0.01 | < 0.01 | < 0.01 |
| Acenaphthene           | µg/l | 0.01 | NONE | < 0.01 | < 0.01 | < 0.01 | < 0.01 | < 0.01 |
| Fluorene               | µg/l | 0.01 | NONE | < 0.01 | < 0.01 | < 0.01 | < 0.01 | < 0.01 |
| Phenanthrene           | µg/l | 0.01 | NONE | < 0.01 | < 0.01 | < 0.01 | < 0.01 | < 0.01 |
| Anthracene             | µg/l | 0.01 | NONE | < 0.01 | < 0.01 | < 0.01 | < 0.01 | < 0.01 |
| Fluoranthene           | µg/l | 0.01 | NONE | < 0.01 | < 0.01 | < 0.01 | < 0.01 | < 0.01 |
| Pyrene                 | µg/l | 0.01 | NONE | < 0.01 | < 0.01 | < 0.01 | < 0.01 | < 0.01 |
| Benzo(a)anthracene     | µg/l | 0.01 | NONE | < 0.01 | < 0.01 | < 0.01 | < 0.01 | < 0.01 |
| Chrysene               | µg/l | 0.01 | NONE | < 0.01 | < 0.01 | < 0.01 | < 0.01 | < 0.01 |
| Benzo(b)fluoranthene   | µg/l | 0.01 | NONE | < 0.01 | < 0.01 | < 0.01 | < 0.01 | < 0.01 |
| Benzo(k)fluoranthene   | µg/l | 0.01 | NONE | < 0.01 | < 0.01 | < 0.01 | < 0.01 | < 0.01 |
| Benzo(a)pyrene         | µg/l | 0.01 | NONE | < 0.01 | < 0.01 | < 0.01 | < 0.01 | < 0.01 |
| Indeno(1,2,3-cd)pyrene | µg/l | 0.01 | NONE | < 0.01 | < 0.01 | < 0.01 | < 0.01 | < 0.01 |
| Dibenz(a,h)anthracene  | µg/l | 0.01 | NONE | < 0.01 | < 0.01 | < 0.01 | < 0.01 | < 0.01 |
| Benzo(ghi)perylene     | µg/l | 0.01 | NONE | < 0.01 | < 0.01 | < 0.01 | < 0.01 | < 0.01 |

#### Total PAH

|                   |      |     |      |       |       |       |       |       |
|-------------------|------|-----|------|-------|-------|-------|-------|-------|
| Total EPA-16 PAHs | µg/l | 0.2 | NONE | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 |
|-------------------|------|-----|------|-------|-------|-------|-------|-------|

#### Heavy Metals / Metalloids

|                       |      |      |           |       |       |        |       |       |
|-----------------------|------|------|-----------|-------|-------|--------|-------|-------|
| Arsenic (dissolved)   | µg/l | 1.1  | ISO 17025 | 11    | 11    | 9.2    | 12    | 1.9   |
| Cadmium (dissolved)   | µg/l | 0.08 | ISO 17025 | 0.47  | 1.2   | < 0.08 | 0.13  | 0.17  |
| Chromium (hexavalent) | µg/l | 5    | NONE      | < 5.0 | < 5.0 | 12     | < 5.0 | < 5.0 |
| Chromium (dissolved)  | µg/l | 0.4  | ISO 17025 | 5.1   | 3.8   | 17     | 11    | 1.8   |
| Copper (dissolved)    | µg/l | 0.7  | ISO 17025 | 130   | 130   | 48     | 160   | 18    |
| Lead (dissolved)      | µg/l | 1    | ISO 17025 | 5.4   | 12    | 1.3    | 23    | 1.8   |
| Mercury (dissolved)   | µg/l | 0.5  | ISO 17025 | < 0.5 | < 0.5 | < 0.5  | < 0.5 | < 0.5 |
| Nickel (dissolved)    | µg/l | 0.3  | ISO 17025 | 2.0   | 1.9   | 10     | 3.9   | 1.7   |
| Selenium (dissolved)  | µg/l | 4    | ISO 17025 | < 4.0 | < 4.0 | < 4.0  | < 4.0 | < 4.0 |
| Zinc (dissolved)      | µg/l | 0.4  | ISO 17025 | 13    | 27    | 2.7    | 19    | 2.6   |



Analytical Report Number: 15-74636

Project / Site name: Prescott

Your Order No: 10021/1984/MW

|                                             |               |                       |                         |               |               |
|---------------------------------------------|---------------|-----------------------|-------------------------|---------------|---------------|
| Lab Sample Number                           | 461156        | 461157                | 461158                  | 461159        | 461160        |
| Sample Reference                            | MGL 11        | MGL 12                | MGL 13                  | MGL 14        | MGL 15        |
| Sample Number                               | None Supplied | None Supplied         | None Supplied           | None Supplied | None Supplied |
| Depth (m)                                   | None Supplied | None Supplied         | None Supplied           | None Supplied | None Supplied |
| Date Sampled                                | 30/06/2015    | 30/06/2015            | 01/07/2015              | 01/07/2015    | 01/07/2015    |
| Time Taken                                  | None Supplied | None Supplied         | None Supplied           | None Supplied | None Supplied |
| Analytical Parameter<br>(Leachate Analysis) | Units         | Limit of<br>detection | Accreditation<br>Status |               |               |

#### Monoaromatics

|                                    |      |    |      |       |       |       |       |       |
|------------------------------------|------|----|------|-------|-------|-------|-------|-------|
| Benzene                            | µg/l | 1  | NONE | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| Toluene                            | µg/l | 1  | NONE | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| Ethylbenzene                       | µg/l | 1  | NONE | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| p & m-xylene                       | µg/l | 1  | NONE | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| o-xylene                           | µg/l | 1  | NONE | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| MTBE (Methyl Tertiary Butyl Ether) | µg/l | 10 | NONE | < 10  | < 10  | < 10  | < 10  | < 10  |

#### Petroleum Hydrocarbons

|                                |      |    |      |      |      |      |      |      |
|--------------------------------|------|----|------|------|------|------|------|------|
| TPH1 (C10 - C40)               | µg/l | 10 | NONE | < 10 | < 10 | < 10 | < 10 | < 10 |
| TPH-CWG - Aliphatic >C5 - C6   | µg/l | 10 | NONE | < 10 | < 10 | < 10 | < 10 | < 10 |
| TPH-CWG - Aliphatic >C6 - C8   | µg/l | 10 | NONE | < 10 | < 10 | < 10 | < 10 | < 10 |
| TPH-CWG - Aliphatic >C8 - C10  | µg/l | 10 | NONE | < 10 | < 10 | < 10 | < 10 | < 10 |
| TPH-CWG - Aliphatic >C10 - C12 | µg/l | 10 | NONE | < 10 | < 10 | < 10 | < 10 | < 10 |
| TPH-CWG - Aliphatic >C12 - C16 | µg/l | 10 | NONE | < 10 | < 10 | < 10 | < 10 | < 10 |
| TPH-CWG - Aliphatic >C16 - C21 | µg/l | 10 | NONE | < 10 | < 10 | < 10 | < 10 | < 10 |
| TPH-CWG - Aliphatic >C21 - C35 | µg/l | 10 | NONE | < 10 | < 10 | < 10 | < 10 | < 10 |
| TPH-CWG - Aliphatic (C5 - C35) | µg/l | 10 | NONE | < 10 | < 10 | < 10 | < 10 | < 10 |
| TPH-CWG - Aromatic >C5 - C7    | µg/l | 10 | NONE | < 10 | < 10 | < 10 | < 10 | < 10 |
| TPH-CWG - Aromatic >C7 - C8    | µg/l | 10 | NONE | < 10 | < 10 | < 10 | < 10 | < 10 |
| TPH-CWG - Aromatic >C8 - C10   | µg/l | 10 | NONE | < 10 | < 10 | < 10 | < 10 | < 10 |
| TPH-CWG - Aromatic >C10 - C12  | µg/l | 10 | NONE | < 10 | < 10 | < 10 | < 10 | < 10 |
| TPH-CWG - Aromatic >C12 - C16  | µg/l | 10 | NONE | < 10 | < 10 | < 10 | < 10 | < 10 |
| TPH-CWG - Aromatic >C16 - C21  | µg/l | 10 | NONE | < 10 | < 10 | < 10 | < 10 | < 10 |
| TPH-CWG - Aromatic >C21 - C35  | µg/l | 10 | NONE | < 10 | < 10 | < 10 | < 10 | < 10 |
| TPH-CWG - Aromatic (C5 - C35)  | µg/l | 10 | NONE | < 10 | < 10 | < 10 | < 10 | < 10 |



Analytical Report Number: 15-74636

Project / Site name: Prescott

Your Order No: 10021/1984/MW

|                                             |               |                       |                         |               |               |
|---------------------------------------------|---------------|-----------------------|-------------------------|---------------|---------------|
| Lab Sample Number                           | 461161        | 461162                | 461163                  | 461164        | 461165        |
| Sample Reference                            | MGL 16        | MGL 17                | MGL 18                  | MGL 19        | MGL 20        |
| Sample Number                               | None Supplied | None Supplied         | None Supplied           | None Supplied | None Supplied |
| Depth (m)                                   | None Supplied | None Supplied         | None Supplied           | None Supplied | None Supplied |
| Date Sampled                                | 01/07/2015    | 01/07/2015            | 01/07/2015              | 01/07/2015    | 01/07/2015    |
| Time Taken                                  | None Supplied | None Supplied         | None Supplied           | None Supplied | None Supplied |
| Analytical Parameter<br>(Leachate Analysis) | Units         | Limit of<br>detection | Accreditation<br>Status |               |               |

#### General Inorganics

|               |          |     |           |      |      |      |      |      |
|---------------|----------|-----|-----------|------|------|------|------|------|
| pH            | pH Units | N/A | ISO 17025 | 8.3  | 7.9  | 7.8  | 7.8  | 7.6  |
| Total Cyanide | µg/l     | 10  | ISO 17025 | < 10 | < 10 | < 10 | < 10 | < 10 |

#### Total Phenols

|                            |      |    |           |      |      |      |      |      |
|----------------------------|------|----|-----------|------|------|------|------|------|
| Total Phenols (monohydric) | µg/l | 10 | ISO 17025 | < 10 | < 10 | < 10 | < 10 | < 10 |
|----------------------------|------|----|-----------|------|------|------|------|------|

#### Speciated PAHs

|                        |      |      |      |        |        |        |        |        |
|------------------------|------|------|------|--------|--------|--------|--------|--------|
| Naphthalene            | µg/l | 0.01 | NONE | < 0.01 | < 0.01 | < 0.01 | < 0.01 | < 0.01 |
| Acenaphthylene         | µg/l | 0.01 | NONE | < 0.01 | < 0.01 | < 0.01 | < 0.01 | < 0.01 |
| Acenaphthene           | µg/l | 0.01 | NONE | < 0.01 | < 0.01 | < 0.01 | < 0.01 | < 0.01 |
| Fluorene               | µg/l | 0.01 | NONE | < 0.01 | < 0.01 | < 0.01 | < 0.01 | < 0.01 |
| Phenanthrene           | µg/l | 0.01 | NONE | < 0.01 | < 0.01 | < 0.01 | < 0.01 | < 0.01 |
| Anthracene             | µg/l | 0.01 | NONE | < 0.01 | < 0.01 | < 0.01 | < 0.01 | < 0.01 |
| Fluoranthene           | µg/l | 0.01 | NONE | < 0.01 | < 0.01 | < 0.01 | < 0.01 | < 0.01 |
| Pyrene                 | µg/l | 0.01 | NONE | < 0.01 | < 0.01 | < 0.01 | < 0.01 | < 0.01 |
| Benzo(a)anthracene     | µg/l | 0.01 | NONE | < 0.01 | < 0.01 | < 0.01 | < 0.01 | < 0.01 |
| Chrysene               | µg/l | 0.01 | NONE | < 0.01 | < 0.01 | < 0.01 | < 0.01 | < 0.01 |
| Benzo(b)fluoranthene   | µg/l | 0.01 | NONE | < 0.01 | < 0.01 | < 0.01 | < 0.01 | < 0.01 |
| Benzo(k)fluoranthene   | µg/l | 0.01 | NONE | < 0.01 | < 0.01 | < 0.01 | < 0.01 | < 0.01 |
| Benzo(a)pyrene         | µg/l | 0.01 | NONE | < 0.01 | < 0.01 | < 0.01 | < 0.01 | < 0.01 |
| Indeno(1,2,3-cd)pyrene | µg/l | 0.01 | NONE | < 0.01 | < 0.01 | < 0.01 | < 0.01 | < 0.01 |
| Dibenz(a,h)anthracene  | µg/l | 0.01 | NONE | < 0.01 | < 0.01 | < 0.01 | < 0.01 | < 0.01 |
| Benzo(ghi)perylene     | µg/l | 0.01 | NONE | < 0.01 | < 0.01 | < 0.01 | < 0.01 | < 0.01 |

#### Total PAH

|                   |      |     |      |       |       |       |       |       |
|-------------------|------|-----|------|-------|-------|-------|-------|-------|
| Total EPA-16 PAHs | µg/l | 0.2 | NONE | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 |
|-------------------|------|-----|------|-------|-------|-------|-------|-------|

#### Heavy Metals / Metalloids

|                       |      |      |           |       |       |       |       |       |
|-----------------------|------|------|-----------|-------|-------|-------|-------|-------|
| Arsenic (dissolved)   | µg/l | 1.1  | ISO 17025 | 5.6   | 13    | 5.4   | < 1.1 | < 1.1 |
| Cadmium (dissolved)   | µg/l | 0.08 | ISO 17025 | 0.11  | 0.23  | 1.3   | 1.7   | 0.40  |
| Chromium (hexavalent) | µg/l | 5    | NONE      | < 5.0 | < 5.0 | < 5.0 | < 5.0 | < 5.0 |
| Chromium (dissolved)  | µg/l | 0.4  | ISO 17025 | 9.9   | 3.4   | 1.3   | 1.3   | 1.3   |
| Copper (dissolved)    | µg/l | 0.7  | ISO 17025 | 39    | 79    | 38    | 9.8   | 9.3   |
| Lead (dissolved)      | µg/l | 1    | ISO 17025 | < 1.0 | 6.7   | 7.1   | 1.2   | < 1.0 |
| Mercury (dissolved)   | µg/l | 0.5  | ISO 17025 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 0.5 |
| Nickel (dissolved)    | µg/l | 0.3  | ISO 17025 | 1.9   | 1.4   | 1.7   | 0.5   | 1.1   |
| Selenium (dissolved)  | µg/l | 4    | ISO 17025 | < 4.0 | < 4.0 | < 4.0 | < 4.0 | < 4.0 |
| Zinc (dissolved)      | µg/l | 0.4  | ISO 17025 | 2.5   | 7.4   | 22    | 2.7   | 2.9   |



Analytical Report Number: 15-74636

Project / Site name: Prescott

Your Order No: 10021/1984/MW

|                                             |               |                       |                         |               |               |
|---------------------------------------------|---------------|-----------------------|-------------------------|---------------|---------------|
| Lab Sample Number                           | 461161        | 461162                | 461163                  | 461164        | 461165        |
| Sample Reference                            | MGL 16        | MGL 17                | MGL 18                  | MGL 19        | MGL 20        |
| Sample Number                               | None Supplied | None Supplied         | None Supplied           | None Supplied | None Supplied |
| Depth (m)                                   | None Supplied | None Supplied         | None Supplied           | None Supplied | None Supplied |
| Date Sampled                                | 01/07/2015    | 01/07/2015            | 01/07/2015              | 01/07/2015    | 01/07/2015    |
| Time Taken                                  | None Supplied | None Supplied         | None Supplied           | None Supplied | None Supplied |
| Analytical Parameter<br>(Leachate Analysis) | Units         | Limit of<br>detection | Accreditation<br>Status |               |               |

#### Monoaromatics

|                                    |      |    |      |       |       |       |       |       |
|------------------------------------|------|----|------|-------|-------|-------|-------|-------|
| Benzene                            | µg/l | 1  | NONE | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| Toluene                            | µg/l | 1  | NONE | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| Ethylbenzene                       | µg/l | 1  | NONE | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| p & m-xylene                       | µg/l | 1  | NONE | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| o-xylene                           | µg/l | 1  | NONE | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| MTBE (Methyl Tertiary Butyl Ether) | µg/l | 10 | NONE | < 10  | < 10  | < 10  | < 10  | < 10  |

#### Petroleum Hydrocarbons

|                                |      |    |      |      |      |      |      |      |
|--------------------------------|------|----|------|------|------|------|------|------|
| TPH1 (C10 - C40)               | µg/l | 10 | NONE | < 10 | < 10 | < 10 | < 10 | < 10 |
| TPH-CWG - Aliphatic >C5 - C6   | µg/l | 10 | NONE | < 10 | < 10 | < 10 | < 10 | < 10 |
| TPH-CWG - Aliphatic >C6 - C8   | µg/l | 10 | NONE | < 10 | < 10 | < 10 | < 10 | < 10 |
| TPH-CWG - Aliphatic >C8 - C10  | µg/l | 10 | NONE | < 10 | < 10 | < 10 | < 10 | < 10 |
| TPH-CWG - Aliphatic >C10 - C12 | µg/l | 10 | NONE | < 10 | < 10 | < 10 | < 10 | < 10 |
| TPH-CWG - Aliphatic >C12 - C16 | µg/l | 10 | NONE | < 10 | < 10 | < 10 | < 10 | < 10 |
| TPH-CWG - Aliphatic >C16 - C21 | µg/l | 10 | NONE | < 10 | < 10 | < 10 | < 10 | < 10 |
| TPH-CWG - Aliphatic >C21 - C35 | µg/l | 10 | NONE | < 10 | < 10 | < 10 | < 10 | < 10 |
| TPH-CWG - Aliphatic (C5 - C35) | µg/l | 10 | NONE | < 10 | < 10 | < 10 | < 10 | < 10 |
| TPH-CWG - Aromatic >C5 - C7    | µg/l | 10 | NONE | < 10 | < 10 | < 10 | < 10 | < 10 |
| TPH-CWG - Aromatic >C7 - C8    | µg/l | 10 | NONE | < 10 | < 10 | < 10 | < 10 | < 10 |
| TPH-CWG - Aromatic >C8 - C10   | µg/l | 10 | NONE | < 10 | < 10 | < 10 | < 10 | < 10 |
| TPH-CWG - Aromatic >C10 - C12  | µg/l | 10 | NONE | < 10 | < 10 | < 10 | < 10 | < 10 |
| TPH-CWG - Aromatic >C12 - C16  | µg/l | 10 | NONE | < 10 | < 10 | < 10 | < 10 | < 10 |
| TPH-CWG - Aromatic >C16 - C21  | µg/l | 10 | NONE | < 10 | < 10 | < 10 | < 10 | < 10 |
| TPH-CWG - Aromatic >C21 - C35  | µg/l | 10 | NONE | < 10 | < 10 | < 10 | < 10 | < 10 |
| TPH-CWG - Aromatic (C5 - C35)  | µg/l | 10 | NONE | < 10 | < 10 | < 10 | < 10 | < 10 |



**Analytical Report Number : 15-74636**

**Project / Site name: Prescott**

**Water matrix abbreviations: Surface Water (SW) Potable Water (PW) Ground Water (GW)**

| Analytical Test Name              | Analytical Method Description                                                                                                                   | Analytical Method Reference                                                                                     | Method number | Wet / Dry Analysis | Accreditation Status |
|-----------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------|---------------|--------------------|----------------------|
| BTEX and MTBE in leachates        | Determination of BTEX and MTBE in leachates by headspace GC-MS.                                                                                 | In-house method based on USEPA8260                                                                              | L073W-PL      | W                  | NONE                 |
| Hexavalent chromium in leachate   | Determination of hexavalent chromium in leachate by acidification, addition of 1,5 diphenylcarbazide followed by colorimetry.                   | In-house method                                                                                                 | L080-PL       | W                  | NONE                 |
| Metals by ICP-OES in leachate     | Determination of metals in leachate by acidification followed by ICP-OES.                                                                       | In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.                            | L039-PL       | W                  | ISO 17025            |
| Monohydric phenols in leachate    | Determination of phenols in leachate by distillation followed by colorimetry.                                                                   | In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar) | L080-PL       | W                  | ISO 17025            |
| pH in leachate                    | Determination of pH in leachate by electrometric measurement.                                                                                   | In-house method based on BS1377 Part 3, 1990, Chemical and Electrochemical Tests                                | L005-PL       | W                  | ISO 17025            |
| Speciated EPA-16 PAHs in leachate | Determination of PAH compounds in leachate by extraction in dichloromethane followed by GC-MS with the use of surrogate and internal standards. | In-house method based on USEPA 8270                                                                             | L070-PL       | W                  | NONE                 |
| Total cyanide in leachate         | Determination of total cyanide by distillation followed by colorimetry.                                                                         | In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar) | L080-PL       | W                  | ISO 17025            |
| TPH1 (Leachates)                  | Determination of dichloromethane extractable hydrocarbons in leachate by GC-MS.                                                                 | In-house method                                                                                                 | L070-PL       | W                  | NONE                 |

**For method numbers ending in 'UK' analysis have been carried out in our laboratory in the United Kingdom.**

**For method numbers ending in 'PL' analysis have been carried out in our laboratory in Poland.**

**Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.**



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## **Analytical Report Number : 16-14370**

|                             |                    |                               |            |
|-----------------------------|--------------------|-------------------------------|------------|
| <b>Project / Site name:</b> | Prescot            | <b>Samples received on:</b>   | 22/03/2016 |
| <b>Your job number:</b>     | 10-021             | <b>Samples instructed on:</b> | 31/03/2016 |
| <b>Your order number:</b>   | 10021-3410-MW      | <b>Analysis completed by:</b> | 06/04/2016 |
| <b>Report Issue Number:</b> | 1                  | <b>Report issued on:</b>      | 06/04/2016 |
| <b>Samples Analysed:</b>    | 8 leachate samples |                               |            |

**Signed:**

Rexona Rahman  
Reporting Manager  
**For & on behalf of i2 Analytical Ltd.**

**Signed:**

Emma Winter  
Assistant Reporting Manager  
**For & on behalf of i2 Analytical Ltd.**

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41 -711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

|                                                                                    |           |                           |
|------------------------------------------------------------------------------------|-----------|---------------------------|
| Standard sample disposal times, unless otherwise agreed with the laboratory, are : | soils     | - 4 weeks from reporting  |
|                                                                                    | leachates | - 2 weeks from reporting  |
|                                                                                    | waters    | - 2 weeks from reporting  |
|                                                                                    | asbestos  | - 6 months from reporting |

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Analytical Report Number: 16-14370

Project / Site name: Prescot

Your Order No: 10021-3410-MW

| Lab Sample Number                           |  |  |  | 555464        | 555465                | 555466                  | 555467        | 555468        |
|---------------------------------------------|--|--|--|---------------|-----------------------|-------------------------|---------------|---------------|
| Sample Reference                            |  |  |  | WS 215        | WS 216                | WS 218                  | WS 219        | WS 220        |
| Sample Number                               |  |  |  | None Supplied | None Supplied         | None Supplied           | None Supplied | None Supplied |
| Depth (m)                                   |  |  |  | 3.80          | 3.40                  | 2.50                    | 3.70          | 2.40          |
| Date Sampled                                |  |  |  | 17/03/2016    | 17/03/2016            | 17/03/2016              | 17/03/2016    | 17/03/2016    |
| Time Taken                                  |  |  |  | None Supplied | None Supplied         | None Supplied           | None Supplied | None Supplied |
| Analytical Parameter<br>(Leachate Analysis) |  |  |  | Units         | Limit of<br>detection | Accreditation<br>Status |               |               |

#### General Inorganics

|               |          |     |           |      |      |      |      |      |
|---------------|----------|-----|-----------|------|------|------|------|------|
| pH            | pH Units | N/A | ISO 17025 | 7.4  | 7.7  | 7.7  | 7.7  | 7.3  |
| Total Cyanide | µg/l     | 10  | ISO 17025 | < 10 | < 10 | < 10 | < 10 | < 10 |

#### Total Phenols

|                            |      |    |           |      |      |      |      |      |
|----------------------------|------|----|-----------|------|------|------|------|------|
| Total Phenols (monohydric) | µg/l | 10 | ISO 17025 | < 10 | < 10 | < 10 | < 10 | < 10 |
|----------------------------|------|----|-----------|------|------|------|------|------|

#### Speciated PAHs

|                        |      |      |      |        |        |        |        |        |
|------------------------|------|------|------|--------|--------|--------|--------|--------|
| Naphthalene            | µg/l | 0.01 | NONE | < 0.01 | < 0.01 | < 0.01 | < 0.01 | < 0.01 |
| Acenaphthylene         | µg/l | 0.01 | NONE | < 0.01 | < 0.01 | < 0.01 | < 0.01 | < 0.01 |
| Acenaphthene           | µg/l | 0.01 | NONE | < 0.01 | < 0.01 | < 0.01 | < 0.01 | < 0.01 |
| Fluorene               | µg/l | 0.01 | NONE | < 0.01 | < 0.01 | < 0.01 | < 0.01 | < 0.01 |
| Phenanthrene           | µg/l | 0.01 | NONE | < 0.01 | < 0.01 | < 0.01 | < 0.01 | < 0.01 |
| Anthracene             | µg/l | 0.01 | NONE | < 0.01 | < 0.01 | < 0.01 | < 0.01 | < 0.01 |
| Fluoranthene           | µg/l | 0.01 | NONE | < 0.01 | < 0.01 | < 0.01 | < 0.01 | < 0.01 |
| Pyrene                 | µg/l | 0.01 | NONE | < 0.01 | < 0.01 | < 0.01 | < 0.01 | < 0.01 |
| Benzo(a)anthracene     | µg/l | 0.01 | NONE | < 0.01 | < 0.01 | < 0.01 | < 0.01 | < 0.01 |
| Chrysene               | µg/l | 0.01 | NONE | < 0.01 | < 0.01 | < 0.01 | < 0.01 | < 0.01 |
| Benzo(b)fluoranthene   | µg/l | 0.01 | NONE | < 0.01 | < 0.01 | < 0.01 | < 0.01 | < 0.01 |
| Benzo(k)fluoranthene   | µg/l | 0.01 | NONE | < 0.01 | < 0.01 | < 0.01 | < 0.01 | < 0.01 |
| Benzo(a)pyrene         | µg/l | 0.01 | NONE | < 0.01 | < 0.01 | < 0.01 | < 0.01 | < 0.01 |
| Indeno(1,2,3-cd)pyrene | µg/l | 0.01 | NONE | < 0.01 | < 0.01 | < 0.01 | < 0.01 | < 0.01 |
| Dibenz(a,h)anthracene  | µg/l | 0.01 | NONE | < 0.01 | < 0.01 | < 0.01 | < 0.01 | < 0.01 |
| Benzo(ghi)perylene     | µg/l | 0.01 | NONE | < 0.01 | < 0.01 | < 0.01 | < 0.01 | < 0.01 |

#### Total PAH

|                   |      |     |      |       |       |       |       |       |
|-------------------|------|-----|------|-------|-------|-------|-------|-------|
| Total EPA-16 PAHs | µg/l | 0.2 | NONE | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 |
|-------------------|------|-----|------|-------|-------|-------|-------|-------|

#### Heavy Metals / Metalloids

|                       |      |      |           |       |       |       |       |       |
|-----------------------|------|------|-----------|-------|-------|-------|-------|-------|
| Arsenic (dissolved)   | µg/l | 1.1  | ISO 17025 | < 1.1 | 7.5   | 4.7   | 16    | 12    |
| Cadmium (dissolved)   | µg/l | 0.08 | ISO 17025 | 0.25  | 0.67  | 0.21  | 0.19  | 1.1   |
| Chromium (hexavalent) | µg/l | 5    | NONE      | < 5.0 | < 5.0 | < 5.0 | < 5.0 | < 5.0 |
| Chromium (dissolved)  | µg/l | 0.4  | ISO 17025 | 0.5   | < 0.4 | 3.7   | 5.5   | 3.3   |
| Copper (dissolved)    | µg/l | 0.7  | ISO 17025 | 8.7   | 56    | 28    | 56    | 35    |
| Lead (dissolved)      | µg/l | 1    | ISO 17025 | < 1.0 | < 1.0 | 1.9   | 6.5   | 5.0   |
| Mercury (dissolved)   | µg/l | 0.5  | ISO 17025 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 0.5 |
| Nickel (dissolved)    | µg/l | 0.3  | ISO 17025 | 6.0   | 4.1   | 1.7   | 0.8   | 2.0   |
| Selenium (dissolved)  | µg/l | 4    | ISO 17025 | < 4.0 | < 4.0 | < 4.0 | 4.1   | < 4.0 |
| Zinc (dissolved)      | µg/l | 0.4  | ISO 17025 | 68    | 55    | 13    | 20    | 22    |



Analytical Report Number: 16-14370

Project / Site name: Prescot

Your Order No: 10021-3410-MW

| Lab Sample Number                           |  |  |  | 555464        | 555465                | 555466                  | 555467        | 555468        |
|---------------------------------------------|--|--|--|---------------|-----------------------|-------------------------|---------------|---------------|
| Sample Reference                            |  |  |  | WS 215        | WS 216                | WS 218                  | WS 219        | WS 220        |
| Sample Number                               |  |  |  | None Supplied | None Supplied         | None Supplied           | None Supplied | None Supplied |
| Depth (m)                                   |  |  |  | 3.80          | 3.40                  | 2.50                    | 3.70          | 2.40          |
| Date Sampled                                |  |  |  | 17/03/2016    | 17/03/2016            | 17/03/2016              | 17/03/2016    | 17/03/2016    |
| Time Taken                                  |  |  |  | None Supplied | None Supplied         | None Supplied           | None Supplied | None Supplied |
| Analytical Parameter<br>(Leachate Analysis) |  |  |  | Units         | Limit of<br>detection | Accreditation<br>Status |               |               |

#### Monoaromatics

|                                    |      |    |      |       |       |       |       |       |
|------------------------------------|------|----|------|-------|-------|-------|-------|-------|
| Benzene                            | µg/l | 1  | NONE | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| Toluene                            | µg/l | 1  | NONE | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| Ethylbenzene                       | µg/l | 1  | NONE | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| p & m-xylene                       | µg/l | 1  | NONE | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| o-xylene                           | µg/l | 1  | NONE | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| MTBE (Methyl Tertiary Butyl Ether) | µg/l | 10 | NONE | < 10  | < 10  | < 10  | < 10  | < 10  |

#### Petroleum Hydrocarbons

|                                |      |    |      |      |      |      |      |      |
|--------------------------------|------|----|------|------|------|------|------|------|
| TPH1 (C10 - C40)               | µg/l | 10 | NONE | < 10 | < 10 | < 10 | < 10 | < 10 |
| TPH-CWG - Aliphatic >C5 - C6   | µg/l | 10 | NONE | < 10 | < 10 | < 10 | < 10 | < 10 |
| TPH-CWG - Aliphatic >C6 - C8   | µg/l | 10 | NONE | < 10 | < 10 | < 10 | < 10 | < 10 |
| TPH-CWG - Aliphatic >C8 - C10  | µg/l | 10 | NONE | < 10 | < 10 | < 10 | < 10 | < 10 |
| TPH-CWG - Aliphatic >C10 - C12 | µg/l | 10 | NONE | < 10 | < 10 | < 10 | < 10 | < 10 |
| TPH-CWG - Aliphatic >C12 - C16 | µg/l | 10 | NONE | < 10 | < 10 | < 10 | < 10 | < 10 |
| TPH-CWG - Aliphatic >C16 - C21 | µg/l | 10 | NONE | < 10 | < 10 | < 10 | < 10 | < 10 |
| TPH-CWG - Aliphatic >C21 - C35 | µg/l | 10 | NONE | < 10 | < 10 | < 10 | < 10 | < 10 |
| TPH-CWG - Aliphatic (C5 - C35) | µg/l | 10 | NONE | < 10 | < 10 | < 10 | < 10 | < 10 |
| TPH-CWG - Aromatic >C5 - C7    | µg/l | 10 | NONE | < 10 | < 10 | < 10 | < 10 | < 10 |
| TPH-CWG - Aromatic >C7 - C8    | µg/l | 10 | NONE | < 10 | < 10 | < 10 | < 10 | < 10 |
| TPH-CWG - Aromatic >C8 - C10   | µg/l | 10 | NONE | < 10 | < 10 | < 10 | < 10 | < 10 |
| TPH-CWG - Aromatic >C10 - C12  | µg/l | 10 | NONE | < 10 | < 10 | < 10 | < 10 | < 10 |
| TPH-CWG - Aromatic >C12 - C16  | µg/l | 10 | NONE | < 10 | < 10 | < 10 | < 10 | < 10 |
| TPH-CWG - Aromatic >C16 - C21  | µg/l | 10 | NONE | < 10 | < 10 | < 10 | < 10 | < 10 |
| TPH-CWG - Aromatic >C21 - C35  | µg/l | 10 | NONE | < 10 | < 10 | < 10 | < 10 | < 10 |
| TPH-CWG - Aromatic (C5 - C35)  | µg/l | 10 | NONE | < 10 | < 10 | < 10 | < 10 | < 10 |



Analytical Report Number: 16-14370

Project / Site name: Prescott

Your Order No: 10021-3410-MW

|                                             |       |                       |                         |               |               |               |  |  |
|---------------------------------------------|-------|-----------------------|-------------------------|---------------|---------------|---------------|--|--|
| Lab Sample Number                           |       |                       |                         | 555469        | 555470        | 555471        |  |  |
| Sample Reference                            |       |                       |                         | WS 221        | WS 223        | WS 225        |  |  |
| Sample Number                               |       |                       |                         | None Supplied | None Supplied | None Supplied |  |  |
| Depth (m)                                   |       |                       |                         | 1.80          | 1.60          | 1.20          |  |  |
| Date Sampled                                |       |                       |                         | 17/03/2016    | 17/03/2016    | 17/03/2016    |  |  |
| Time Taken                                  |       |                       |                         | None Supplied | None Supplied | None Supplied |  |  |
| Analytical Parameter<br>(Leachate Analysis) | Units | Limit of<br>detection | Accreditation<br>Status |               |               |               |  |  |

#### General Inorganics

|               |          |     |           |      |      |      |  |  |
|---------------|----------|-----|-----------|------|------|------|--|--|
| pH            | pH Units | N/A | ISO 17025 | 7.3  | 7.6  | 7.8  |  |  |
| Total Cyanide | µg/l     | 10  | ISO 17025 | < 10 | < 10 | < 10 |  |  |

#### Total Phenols

|                            |      |    |           |      |      |      |  |  |
|----------------------------|------|----|-----------|------|------|------|--|--|
| Total Phenols (monohydric) | µg/l | 10 | ISO 17025 | < 10 | < 10 | < 10 |  |  |
|----------------------------|------|----|-----------|------|------|------|--|--|

#### Speciated PAHs

|                        |      |      |      |        |        |        |  |  |
|------------------------|------|------|------|--------|--------|--------|--|--|
| Naphthalene            | µg/l | 0.01 | NONE | < 0.01 | < 0.01 | < 0.01 |  |  |
| Acenaphthylene         | µg/l | 0.01 | NONE | < 0.01 | < 0.01 | < 0.01 |  |  |
| Acenaphthene           | µg/l | 0.01 | NONE | < 0.01 | < 0.01 | < 0.01 |  |  |
| Fluorene               | µg/l | 0.01 | NONE | < 0.01 | < 0.01 | < 0.01 |  |  |
| Phenanthrene           | µg/l | 0.01 | NONE | < 0.01 | < 0.01 | < 0.01 |  |  |
| Anthracene             | µg/l | 0.01 | NONE | < 0.01 | < 0.01 | < 0.01 |  |  |
| Fluoranthene           | µg/l | 0.01 | NONE | < 0.01 | < 0.01 | < 0.01 |  |  |
| Pyrene                 | µg/l | 0.01 | NONE | < 0.01 | < 0.01 | < 0.01 |  |  |
| Benzo(a)anthracene     | µg/l | 0.01 | NONE | < 0.01 | < 0.01 | < 0.01 |  |  |
| Chrysene               | µg/l | 0.01 | NONE | < 0.01 | < 0.01 | < 0.01 |  |  |
| Benzo(b)fluoranthene   | µg/l | 0.01 | NONE | < 0.01 | < 0.01 | < 0.01 |  |  |
| Benzo(k)fluoranthene   | µg/l | 0.01 | NONE | < 0.01 | < 0.01 | < 0.01 |  |  |
| Benzo(a)pyrene         | µg/l | 0.01 | NONE | < 0.01 | < 0.01 | < 0.01 |  |  |
| Indeno(1,2,3-cd)pyrene | µg/l | 0.01 | NONE | < 0.01 | < 0.01 | < 0.01 |  |  |
| Dibenz(a,h)anthracene  | µg/l | 0.01 | NONE | < 0.01 | < 0.01 | < 0.01 |  |  |
| Benzo(ghi)perylene     | µg/l | 0.01 | NONE | < 0.01 | < 0.01 | < 0.01 |  |  |

#### Total PAH

|                   |      |     |      |       |       |       |  |  |
|-------------------|------|-----|------|-------|-------|-------|--|--|
| Total EPA-16 PAHs | µg/l | 0.2 | NONE | < 0.2 | < 0.2 | < 0.2 |  |  |
|-------------------|------|-----|------|-------|-------|-------|--|--|

#### Heavy Metals / Metalloids

|                       |      |      |           |       |        |       |  |  |
|-----------------------|------|------|-----------|-------|--------|-------|--|--|
| Arsenic (dissolved)   | µg/l | 1.1  | ISO 17025 | 5.0   | 4.3    | 23    |  |  |
| Cadmium (dissolved)   | µg/l | 0.08 | ISO 17025 | 1.5   | < 0.08 | 0.71  |  |  |
| Chromium (hexavalent) | µg/l | 5    | NONE      | < 5.0 | < 5.0  | < 5.0 |  |  |
| Chromium (dissolved)  | µg/l | 0.4  | ISO 17025 | 3.8   | < 0.4  | < 0.4 |  |  |
| Copper (dissolved)    | µg/l | 0.7  | ISO 17025 | 52    | 36     | 150   |  |  |
| Lead (dissolved)      | µg/l | 1    | ISO 17025 | 19    | 11     | 6.7   |  |  |
| Mercury (dissolved)   | µg/l | 0.5  | ISO 17025 | < 0.5 | < 0.5  | < 0.5 |  |  |
| Nickel (dissolved)    | µg/l | 0.3  | ISO 17025 | 6.2   | 1.0    | 3.8   |  |  |
| Selenium (dissolved)  | µg/l | 4    | ISO 17025 | < 4.0 | 8.0    | 75    |  |  |
| Zinc (dissolved)      | µg/l | 0.4  | ISO 17025 | 130   | 26     | < 0.4 |  |  |



Analytical Report Number: 16-14370

Project / Site name: Prescot

Your Order No: 10021-3410-MW

|                                             |       |                       |                         |               |               |               |  |  |
|---------------------------------------------|-------|-----------------------|-------------------------|---------------|---------------|---------------|--|--|
| Lab Sample Number                           |       |                       |                         | 555469        | 555470        | 555471        |  |  |
| Sample Reference                            |       |                       |                         | WS 221        | WS 223        | WS 225        |  |  |
| Sample Number                               |       |                       |                         | None Supplied | None Supplied | None Supplied |  |  |
| Depth (m)                                   |       |                       |                         | 1.80          | 1.60          | 1.20          |  |  |
| Date Sampled                                |       |                       |                         | 17/03/2016    | 17/03/2016    | 17/03/2016    |  |  |
| Time Taken                                  |       |                       |                         | None Supplied | None Supplied | None Supplied |  |  |
| Analytical Parameter<br>(Leachate Analysis) | Units | Limit of<br>detection | Accreditation<br>Status |               |               |               |  |  |

#### Monoaromatics

|                                    |      |    |      |       |       |       |  |  |
|------------------------------------|------|----|------|-------|-------|-------|--|--|
| Benzene                            | µg/l | 1  | NONE | < 1.0 | < 1.0 | < 1.0 |  |  |
| Toluene                            | µg/l | 1  | NONE | < 1.0 | < 1.0 | < 1.0 |  |  |
| Ethylbenzene                       | µg/l | 1  | NONE | < 1.0 | < 1.0 | < 1.0 |  |  |
| p & m-xylene                       | µg/l | 1  | NONE | < 1.0 | < 1.0 | < 1.0 |  |  |
| o-xylene                           | µg/l | 1  | NONE | < 1.0 | < 1.0 | < 1.0 |  |  |
| MTBE (Methyl Tertiary Butyl Ether) | µg/l | 10 | NONE | < 10  | < 10  | < 10  |  |  |

#### Petroleum Hydrocarbons

|                  |      |    |      |      |      |      |  |  |
|------------------|------|----|------|------|------|------|--|--|
| TPH1 (C10 - C40) | µg/l | 10 | NONE | < 10 | < 10 | < 10 |  |  |
|------------------|------|----|------|------|------|------|--|--|

|                                |      |    |      |      |      |      |  |  |
|--------------------------------|------|----|------|------|------|------|--|--|
| TPH-CWG - Aliphatic >C5 - C6   | µg/l | 10 | NONE | < 10 | < 10 | < 10 |  |  |
| TPH-CWG - Aliphatic >C6 - C8   | µg/l | 10 | NONE | < 10 | < 10 | < 10 |  |  |
| TPH-CWG - Aliphatic >C8 - C10  | µg/l | 10 | NONE | < 10 | < 10 | < 10 |  |  |
| TPH-CWG - Aliphatic >C10 - C12 | µg/l | 10 | NONE | < 10 | < 10 | < 10 |  |  |
| TPH-CWG - Aliphatic >C12 - C16 | µg/l | 10 | NONE | < 10 | < 10 | < 10 |  |  |
| TPH-CWG - Aliphatic >C16 - C21 | µg/l | 10 | NONE | < 10 | < 10 | < 10 |  |  |
| TPH-CWG - Aliphatic >C21 - C35 | µg/l | 10 | NONE | < 10 | < 10 | < 10 |  |  |
| TPH-CWG - Aliphatic (C5 - C35) | µg/l | 10 | NONE | < 10 | < 10 | < 10 |  |  |

|                               |      |    |      |      |      |      |  |  |
|-------------------------------|------|----|------|------|------|------|--|--|
| TPH-CWG - Aromatic >C5 - C7   | µg/l | 10 | NONE | < 10 | < 10 | < 10 |  |  |
| TPH-CWG - Aromatic >C7 - C8   | µg/l | 10 | NONE | < 10 | < 10 | < 10 |  |  |
| TPH-CWG - Aromatic >C8 - C10  | µg/l | 10 | NONE | < 10 | < 10 | < 10 |  |  |
| TPH-CWG - Aromatic >C10 - C12 | µg/l | 10 | NONE | < 10 | < 10 | < 10 |  |  |
| TPH-CWG - Aromatic >C12 - C16 | µg/l | 10 | NONE | < 10 | < 10 | < 10 |  |  |
| TPH-CWG - Aromatic >C16 - C21 | µg/l | 10 | NONE | < 10 | < 10 | < 10 |  |  |
| TPH-CWG - Aromatic >C21 - C35 | µg/l | 10 | NONE | < 10 | < 10 | < 10 |  |  |
| TPH-CWG - Aromatic (C5 - C35) | µg/l | 10 | NONE | < 10 | < 10 | < 10 |  |  |



**Analytical Report Number : 16-14370**

**Project / Site name: Prescott**

**Water matrix abbreviations: Surface Water (SW) Potable Water (PW) Ground Water (GW)**

| Analytical Test Name                       | Analytical Method Description                                                                                                                   | Analytical Method Reference                                                                                     | Method number | Wet / Dry Analysis | Accreditation Status |
|--------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------|---------------|--------------------|----------------------|
| BTEX and MTBE in leachates (Monoaromatics) | Determination of BTEX and MTBE in leachates by headspace GC-MS.                                                                                 | In-house method based on USEPA8260                                                                              | L073B-PL      | W                  | NONE                 |
| Hexavalent chromium in leachate            | Determination of hexavalent chromium in leachate by acidification, addition of 1,5 diphenylcarbazide followed by colorimetry.                   | In-house method                                                                                                 | L080-PL       | W                  | NONE                 |
| Metals by ICP-OES in leachate              | Determination of metals in leachate by acidification followed by ICP-OES.                                                                       | In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.                            | L039-PL       | W                  | ISO 17025            |
| Monohydric phenols in leachate             | Determination of phenols in leachate by distillation followed by colorimetry.                                                                   | In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar) | L080-PL       | W                  | ISO 17025            |
| pH in leachate                             | Determination of pH in leachate by electrometric measurement.                                                                                   | In-house method based on BS1377 Part 3, 1990, Chemical and Electrochemical Tests                                | L005-PL       | W                  | ISO 17025            |
| Speciated EPA-16 PAHs in leachate          | Determination of PAH compounds in leachate by extraction in dichloromethane followed by GC-MS with the use of surrogate and internal standards. | In-house method based on USEPA 8270                                                                             | L070-PL       | W                  | NONE                 |
| Total cyanide in leachate                  | Determination of total cyanide by distillation followed by colorimetry.                                                                         | In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar) | L080-PL       | W                  | ISO 17025            |
| TPH1 (Leachates)                           | Determination of dichloromethane extractable hydrocarbons in leachate by GC-MS.                                                                 | In-house method                                                                                                 | L070-PL       | W                  | NONE                 |

**For method numbers ending in 'UK' analysis have been carried out in our laboratory in the United Kingdom.**

**For method numbers ending in 'PL' analysis have been carried out in our laboratory in Poland.**

**Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.**

## APPENDIX VI GEOTECHNICAL TESTING CERTIFICATES





## Vertical Deformation Test-Equivalent CBR Value

In Accordance with BS1377: Part 9:1990

|                                                |           |                     |                    |
|------------------------------------------------|-----------|---------------------|--------------------|
| Site Name:                                     | Prescot   | Test Date:          | 28/06/2015         |
| Site Ref:                                      | 10021     | Type of Kentledge:  | 13 Tonne Excavator |
| Test No.:                                      | PC CBR101 | Test Depth (m bgl): | GL                 |
| Plate Diameter (mm)                            | 450       | Easting:            | N/A                |
| Maximum Applied Pressure (kN/m <sup>2</sup> ): | 370.09    | Northing:           | N/A                |
| Maximum Deformation (mm):                      | -6.28     | Weather:            | Dry                |
| Strata Description:                            | 6F2       |                     |                    |



### Equivalent CBR Value of 10%

#### Comments

|  |
|--|
|  |
|--|

|                |             |            |              |            |
|----------------|-------------|------------|--------------|------------|
| Site Engineer: | Checked By: | Date:      | Approved By: | Date:      |
| J. James       | S. Towers   | 09/06/2015 | M. Dyer      | 09/06/2015 |



## Vertical Deformation Test-Equivalent CBR Value

*In Accordance with BS1377: Part 9:1990*

|                                                     |          |                            |                    |
|-----------------------------------------------------|----------|----------------------------|--------------------|
| <b>Site Name:</b>                                   | Prescot  | <b>Test Date:</b>          | 24/06/2016         |
| <b>Site Ref:</b>                                    | 10021    | <b>Type of Kentledge:</b>  | 13 Tonne Excavator |
| <b>Test No.:</b>                                    | PACBR102 | <b>Test Depth (m bgl):</b> | GL                 |
| <b>Plate Diameter (mm)</b>                          | 450      | <b>Easting:</b>            | N/A                |
| <b>Maximum Applied Pressure (kN/m<sup>2</sup>):</b> | 370.09   | <b>Northing:</b>           | N/A                |
| <b>Maximum Deformation (mm):</b>                    | -4.71    | <b>Weather:</b>            | Sunny              |
| <b>Strata Description:</b>                          | 6F2      |                            |                    |



### Equivalent CBR Value of 13%

#### Comments

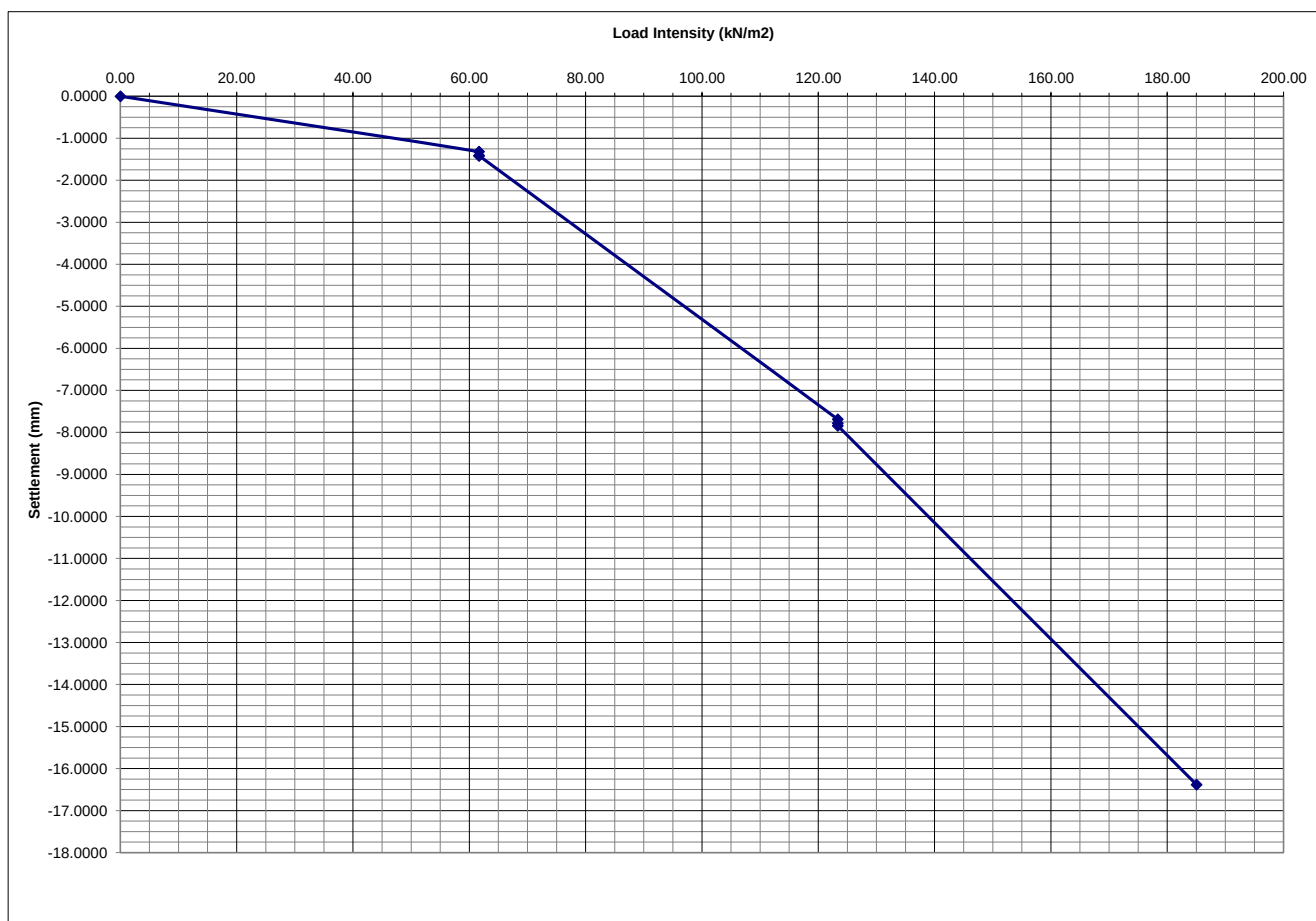
|                       |                    |              |                     |              |
|-----------------------|--------------------|--------------|---------------------|--------------|
| <b>Site Engineer:</b> | <b>Checked By:</b> | <b>Date:</b> | <b>Approved By:</b> | <b>Date:</b> |
| J. James              | S. Towers          | 15/02/2016   | M. Dyer             | 15/02/2016   |



## Vertical Deformation Test-Equivalent CBR Value

*In Accordance with BS1377: Part 9:1990*

|                                                     |           |                            |                    |
|-----------------------------------------------------|-----------|----------------------------|--------------------|
| <b>Site Name:</b>                                   | Prescot   | <b>Test Date:</b>          | 28/06/2015         |
| <b>Site Ref:</b>                                    | 10021     | <b>Type of Kentledge:</b>  | 13 Tonne Excavator |
| <b>Test No.:</b>                                    | PC CBR103 | <b>Test Depth (m bgl):</b> | GL                 |
| <b>Plate Diameter (mm)</b>                          | 450       | <b>Easting:</b>            | N/A                |
| <b>Maximum Applied Pressure (kN/m<sup>2</sup>):</b> | 185.04    | <b>Northing:</b>           | N/A                |
| <b>Maximum Deformation (mm):</b>                    | -16.38    | <b>Weather:</b>            | Dry                |
| <b>Strata Description:</b>                          | 6F2       |                            |                    |



## Equivalent CBR Value of 3%

### Comments

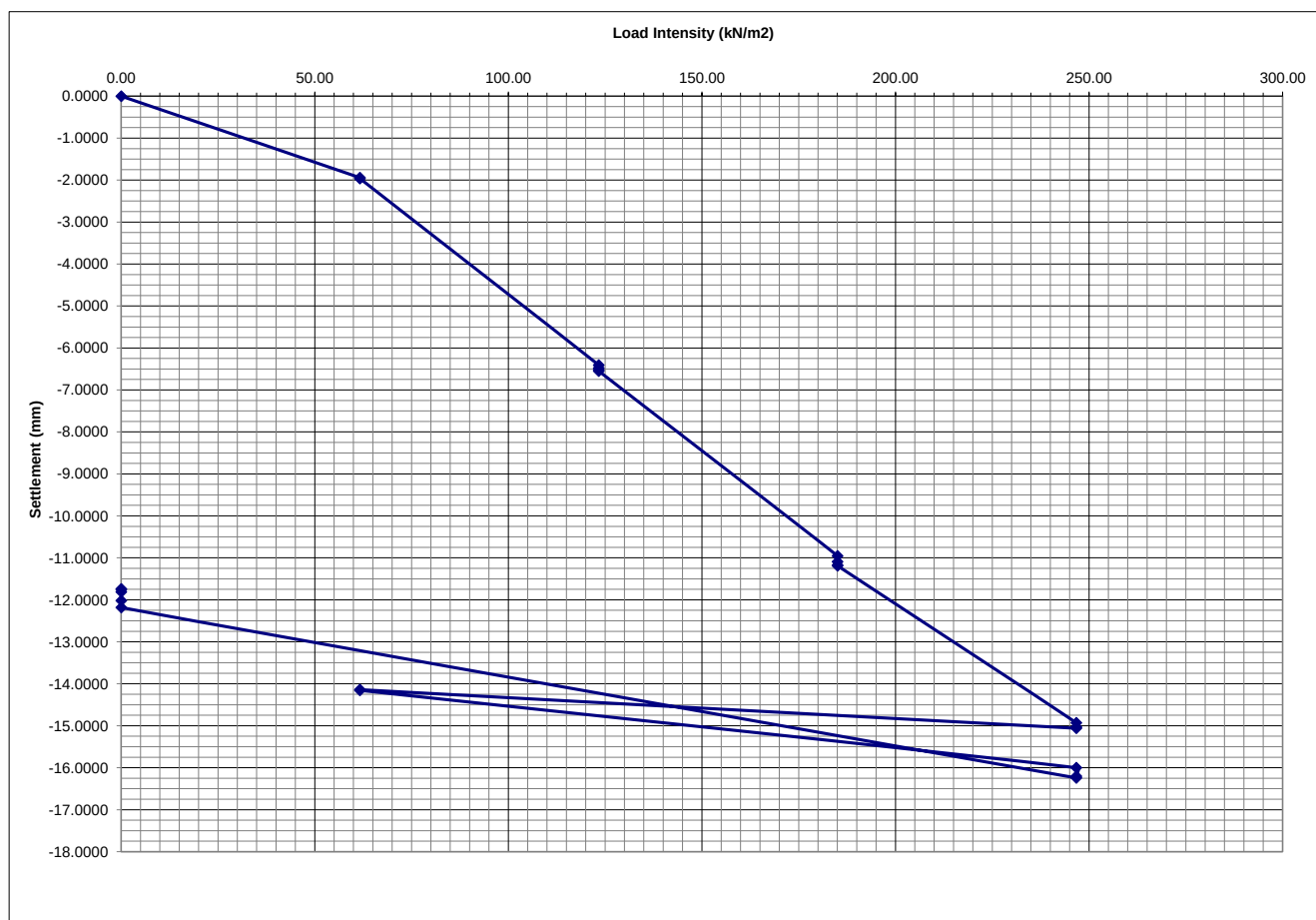
|                       |                    |              |                     |              |
|-----------------------|--------------------|--------------|---------------------|--------------|
| <b>Site Engineer:</b> | <b>Checked By:</b> | <b>Date:</b> | <b>Approved By:</b> | <b>Date:</b> |
| J. James              | S. Towers          | 09/06/2015   | M. Dyer             | 09/06/2015   |



## Vertical Deformation Test-Equivalent CBR Value

In Accordance with BS1377: Part 9:1990

|                                                |           |                     |                    |
|------------------------------------------------|-----------|---------------------|--------------------|
| Site Name:                                     | Prescot   | Test Date:          | 28/06/2015         |
| Site Ref:                                      | 10021     | Type of Kettle:     | 13 Tonne Excavator |
| Test No.:                                      | PC CBR104 | Test Depth (m bgl): | GL                 |
| Plate Diameter (mm)                            | 450       | Easting:            | N/A                |
| Maximum Applied Pressure (kN/m <sup>2</sup> ): | 246.73    | Northing:           | N/A                |
| Maximum Deformation (mm):                      | -16.24    | Weather:            | Dry                |
| Strata Description:                            | 6F2       |                     |                    |



## Equivalent CBR Value of 2%

### Comments

|  |
|--|
|  |
|--|

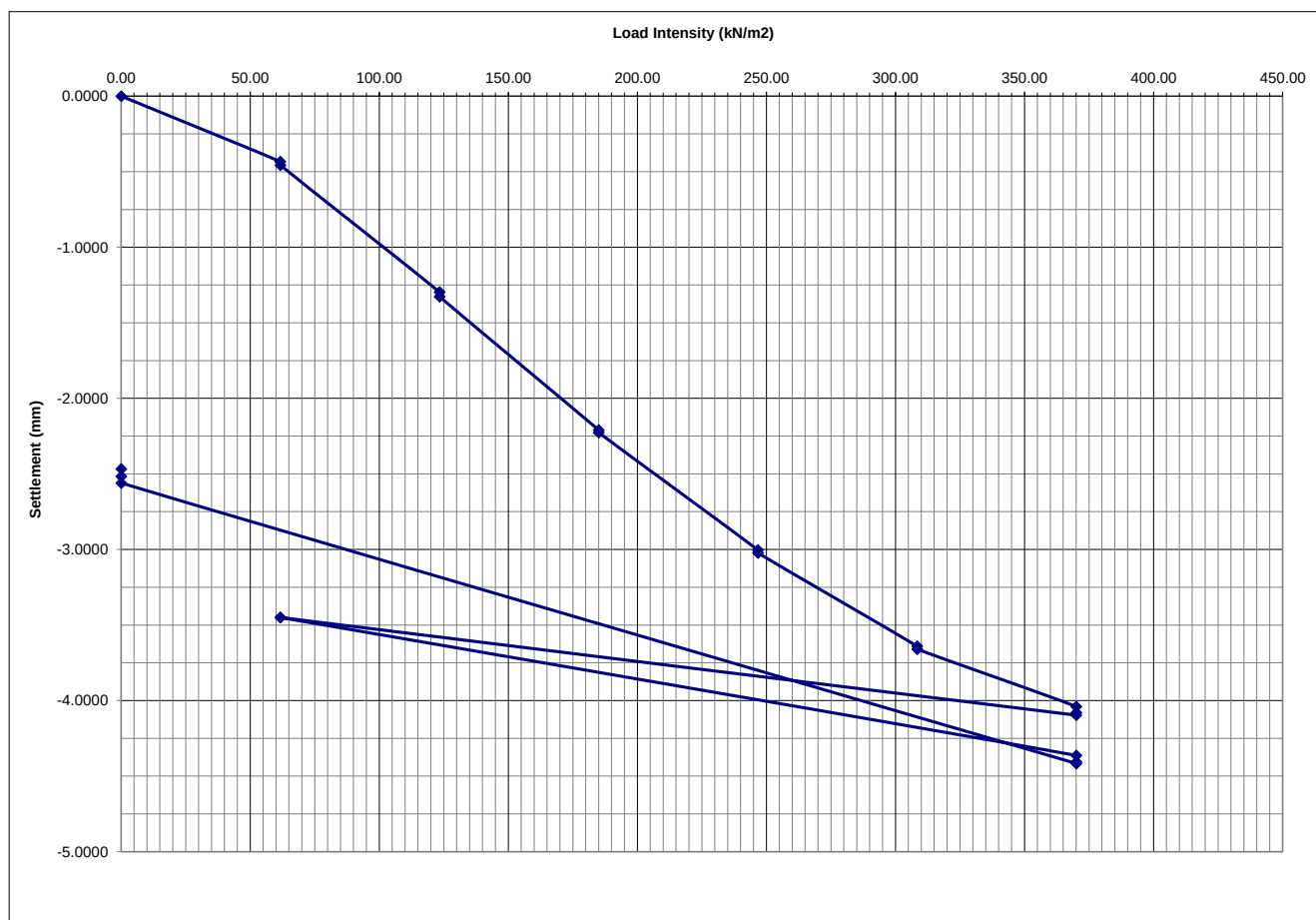
|                |             |            |              |            |
|----------------|-------------|------------|--------------|------------|
| Site Engineer: | Checked By: | Date:      | Approved By: | Date:      |
| J. James       | S. Towers   | 09/06/2015 | M. Dyer      | 09/06/2015 |



## Vertical Deformation Test-Equivalent CBR Value

*In Accordance with BS1377: Part 9:1990*

|                                                |           |                     |                    |
|------------------------------------------------|-----------|---------------------|--------------------|
| Site Name:                                     | Prescot   | Test Date:          | 28/06/2015         |
| Site Ref:                                      | 10021     | Type of Kentledge:  | 13 Tonne Excavator |
| Test No.:                                      | PC CBR105 | Test Depth (m bgl): | #REF!              |
| Plate Diameter (mm)                            | 450       | Easting:            | N/A                |
| Maximum Applied Pressure (kN/m <sup>2</sup> ): | 370.09    | Northing:           | N/A                |
| Maximum Deformation (mm):                      | -4.42     | Weather:            | Dry                |
| Strata Description:                            | 6F2       |                     |                    |



**Equivalent CBR Value of 13%**

### Comments

|  |
|--|
|  |
|--|

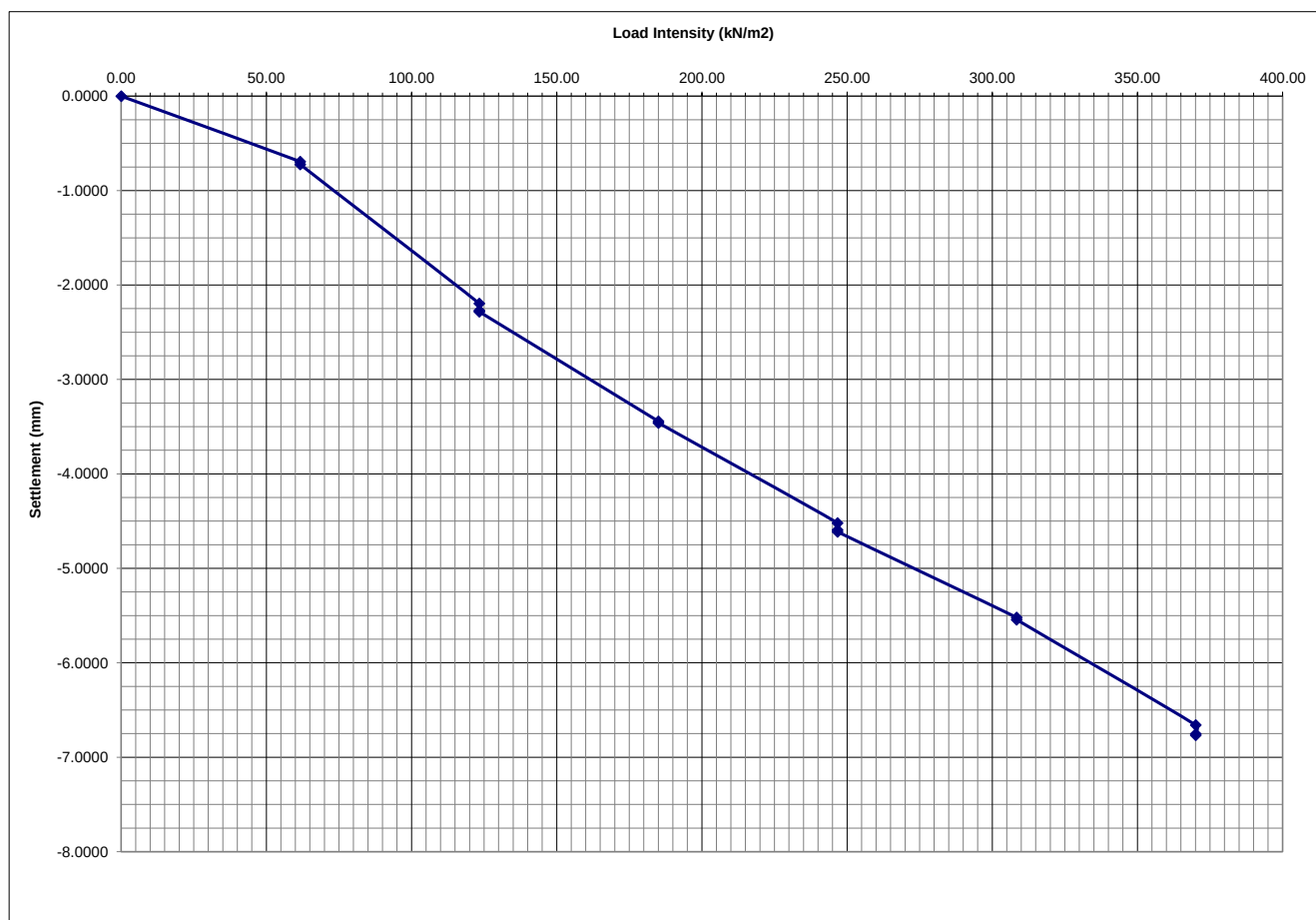
|                |             |            |              |            |
|----------------|-------------|------------|--------------|------------|
| Site Engineer: | Checked By: | Date:      | Approved By: | Date:      |
| J. James       | S. Towers   | 09/06/2015 | M. Dyer      | 09/06/2015 |



## Vertical Deformation Test-Equivalent CBR Value

*In Accordance with BS1377: Part 9:1990*

|                                                     |           |                            |                    |
|-----------------------------------------------------|-----------|----------------------------|--------------------|
| <b>Site Name:</b>                                   | Prescot   | <b>Test Date:</b>          | 28/06/2015         |
| <b>Site Ref:</b>                                    | 10021     | <b>Type of Kentledge:</b>  | 13 Tonne Excavator |
| <b>Test No.:</b>                                    | PC CBR106 | <b>Test Depth (m bgl):</b> | GL                 |
| <b>Plate Diameter (mm)</b>                          | 450       | <b>Easting:</b>            | N/A                |
| <b>Maximum Applied Pressure (kN/m<sup>2</sup>):</b> | 370.09    | <b>Northing:</b>           | N/A                |
| <b>Maximum Deformation (mm):</b>                    | -6.77     | <b>Weather:</b>            | Dry                |
| <b>Strata Description:</b>                          | 6F2       |                            |                    |



## Equivalent CBR Value of 7%

### Comments

|  |
|--|
|  |
|--|

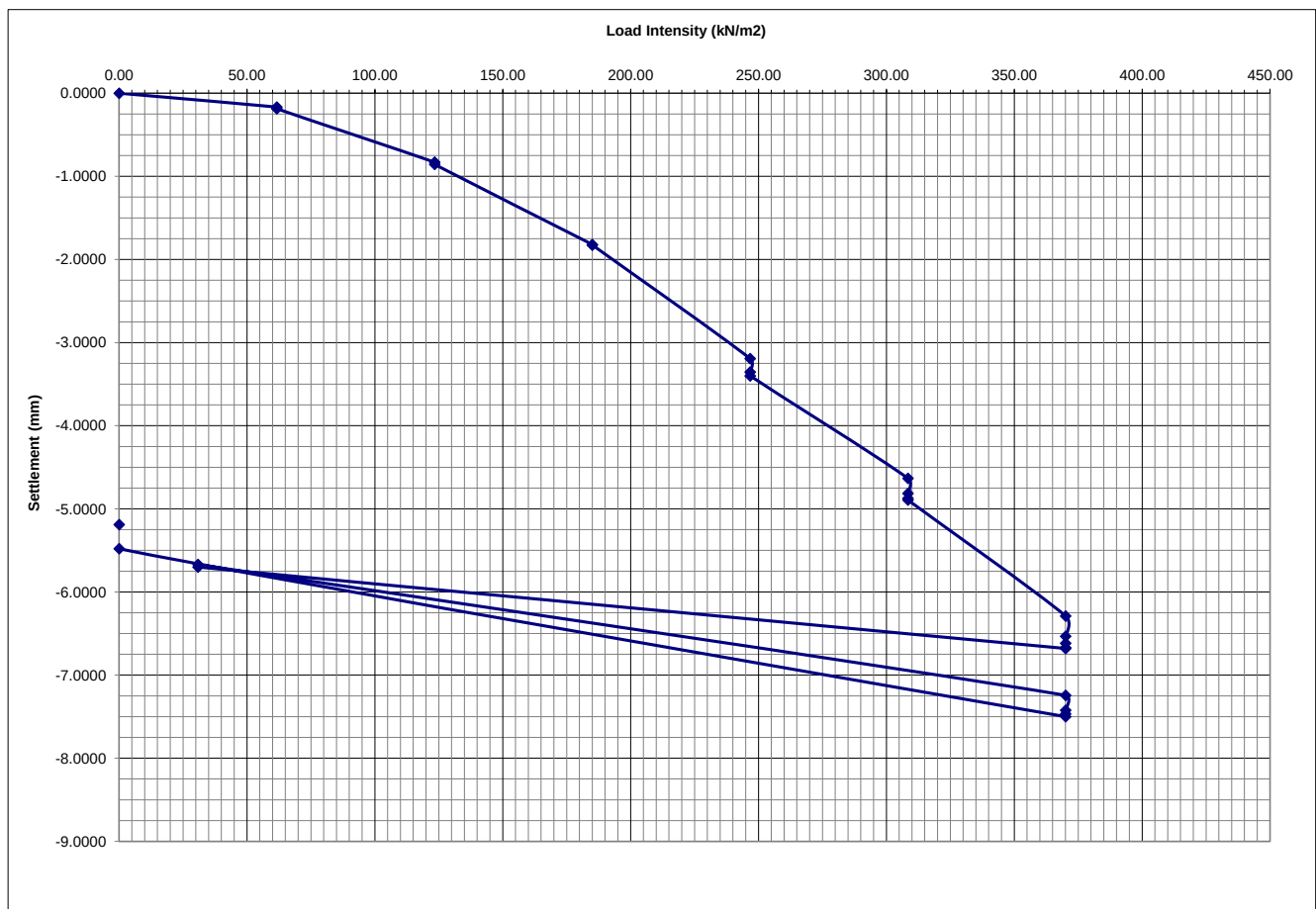
|                       |                    |              |                     |              |
|-----------------------|--------------------|--------------|---------------------|--------------|
| <b>Site Engineer:</b> | <b>Checked By:</b> | <b>Date:</b> | <b>Approved By:</b> | <b>Date:</b> |
| J. James              | S. Towers          | 09/06/2015   | M. Dyer             | 09/06/2015   |



## Vertical Deformation Test-Equivalent CBR Value

In Accordance with BS1377: Part 9:1990

|                                                |          |                     |                    |
|------------------------------------------------|----------|---------------------|--------------------|
| Site Name:                                     | Prescot  | Test Date:          | 24/06/2016         |
| Site Ref:                                      | 10021    | Type of Kentledge:  | 13 Tonne Excavator |
| Test No.:                                      | PACBR107 | Test Depth (m bgl): | GL                 |
| Plate Diameter (mm)                            | 450      | Easting:            | N/A                |
| Maximum Applied Pressure (kN/m <sup>2</sup> ): | 370.09   | Northing:           | N/A                |
| Maximum Deformation (mm):                      | -7.50    | Weather:            | Sunny              |
| Strata Description:                            | 6F2      |                     |                    |



**Equivalent CBR Value of 17%**

### Comments

|                |             |            |              |            |
|----------------|-------------|------------|--------------|------------|
| Site Engineer: | Checked By: | Date:      | Approved By: | Date:      |
| J. James       | S. Towers   | 15/02/2016 | M. Dyer      | 15/02/2016 |

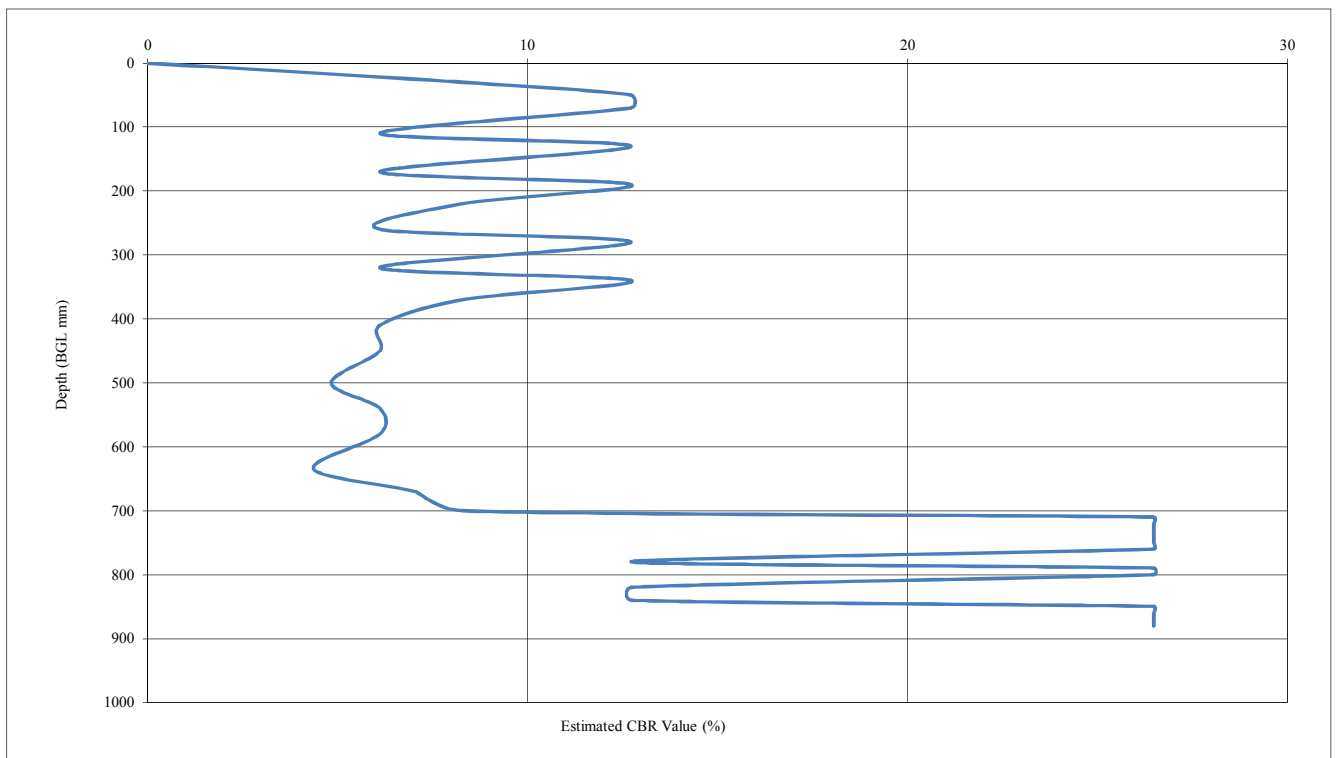


## Determination of Dynamic Cone Penetrometer - Estimated CBR Value (%)

In Accordance with TRL Report PR/INT/277/04

|                         |            |                |            |
|-------------------------|------------|----------------|------------|
| Site Name               | Prescot    | Test Date:     | 15/07/2015 |
| Site Ref                | 10021      | Test Location: | Prescot    |
| Test No.:               | PC DCP 104 | Easting:       | N/A        |
| Initial Depth (mm BGL): | 0          | Northing:      | N/A        |
| Final Depth (mm BGL):   | 880        |                |            |

### Estimated California Bearing Ratio Graph



| Start Depth (mm) BGL | Finish Depth (mm) BGL | No. of Blows | Blows Per Layer | DCP mm/Blows | Ave Estimated Layer (CBR %) |
|----------------------|-----------------------|--------------|-----------------|--------------|-----------------------------|
| 0                    | 370                   | 13           | 13              | 28.46        | 8.77                        |
| 370                  | 700                   | 21           | 8               | 41.25        | 5.92                        |
| 700                  | 880                   | 36           | 15              | 12.00        | 21.84                       |
|                      |                       |              |                 |              |                             |
|                      |                       |              |                 |              |                             |

#### Comments

|                |             |            |              |            |
|----------------|-------------|------------|--------------|------------|
| Site Engineer: | Checked By: | Date:      | Approved By: | Date:      |
| AT             | ST          | 24/11/2015 | MD           | 24/11/2015 |

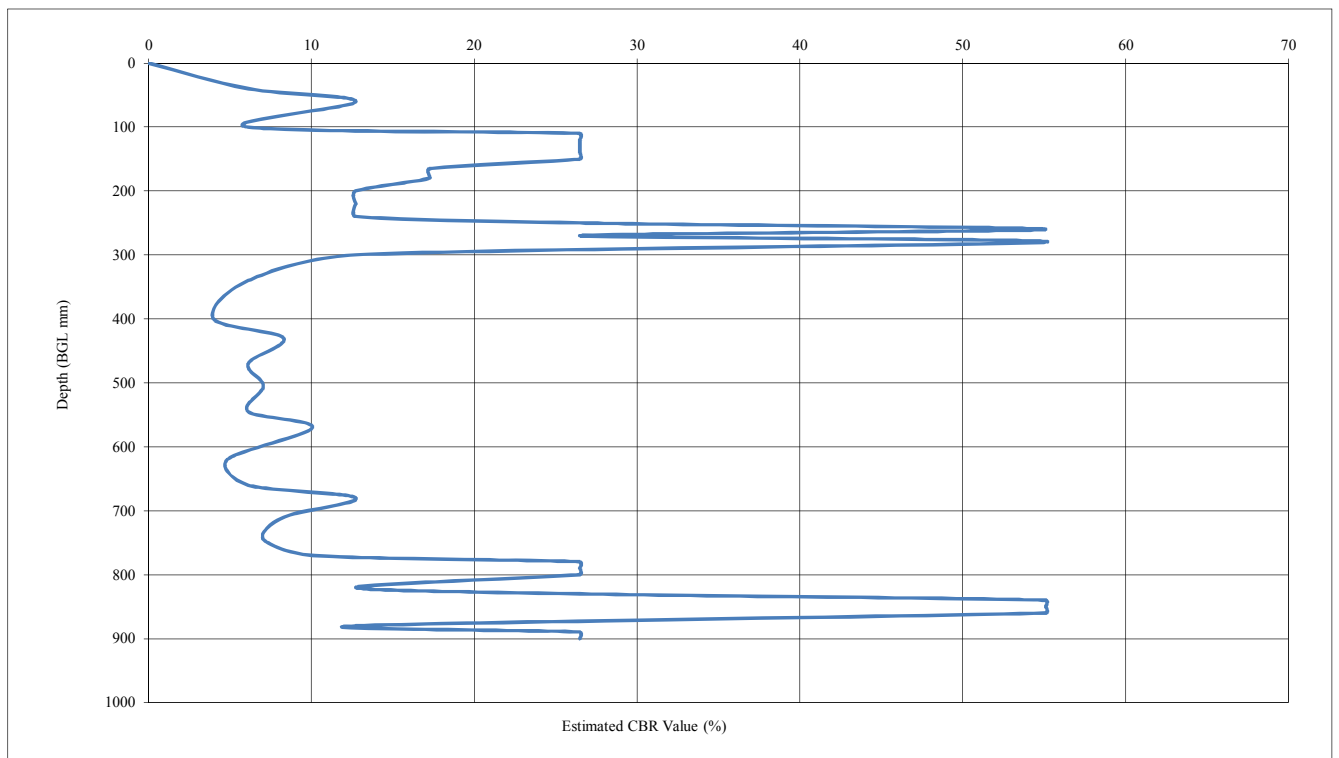


## Determination of Dynamic Cone Penetrometer - Estimated CBR Value (%)

In Accordance with TRL Report PR/INT/277/04

|                         |            |                |            |
|-------------------------|------------|----------------|------------|
| Site Name               | Prescot    | Test Date:     | 15/07/2015 |
| Site Ref                | 10021      | Test Location: | Prescot    |
| Test No.:               | PC DCP 105 | Easting:       | N/A        |
| Initial Depth (mm BGL): | 0          | Northing:      | N/A        |
| Final Depth (mm BGL):   | 900        |                |            |

### Estimated California Bearing Ratio Graph



| Start Depth (mm) BGL | Finish Depth (mm) BGL | No. of Blows | Blows Per Layer | DCP mm/Blows | Ave Estimated Layer (CBR %) |
|----------------------|-----------------------|--------------|-----------------|--------------|-----------------------------|
| 0                    | 100                   | 3            | 3               | 33.33        | 7.42                        |
| 100                  | 300                   | 20           | 17              | 11.76        | 22.30                       |
| 300                  | 745                   | 32           | 12              | 37.08        | 6.63                        |
| 745                  | 820                   | 37           | 5               | 15.00        | 17.25                       |
| 820                  | 900                   | 47           | 10              | 8.00         | 33.53                       |

#### Comments

|                |             |            |              |            |
|----------------|-------------|------------|--------------|------------|
| Site Engineer: | Checked By: | Date:      | Approved By: | Date:      |
| AT             | ST          | 24/11/2015 | MD           | 24/11/2015 |

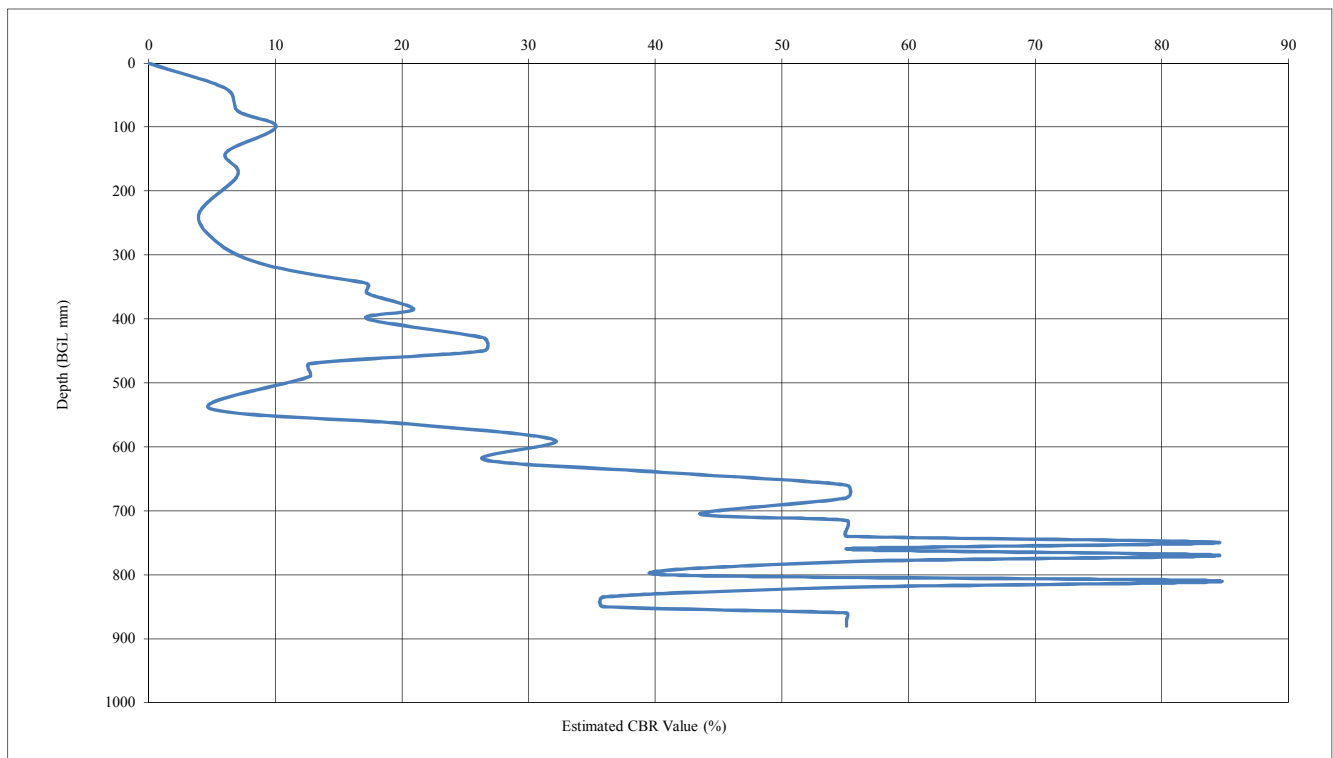


## Determination of Dynamic Cone Penetrometer - Estimated CBR Value (%)

*In Accordance with TRL Report PR/INT/277/04*

|                                |            |                       |            |
|--------------------------------|------------|-----------------------|------------|
| <b>Site Name</b>               | Prescot    | <b>Test Date:</b>     | 15/07/2015 |
| <b>Site Ref</b>                | 10021      | <b>Test Location:</b> | Prescot    |
| <b>Test No.:</b>               | PC DCP 106 | <b>Easting:</b>       | N/A        |
| <b>Initial Depth (mm BGL):</b> | 0          | <b>Northing:</b>      | N/A        |
| <b>Final Depth (mm BGL):</b>   | 880        |                       |            |

### Estimated California Bearing Ratio Graph



| Start Depth (mm) BGL | Finish Depth (mm) BGL | No. of Blows | Blows Per Layer | DCP mm/Blows | Ave Estimated Layer (CBR %) |
|----------------------|-----------------------|--------------|-----------------|--------------|-----------------------------|
| 0                    | 280                   | 7            | 7               | 40.00        | 6.12                        |
| 280                  | 540                   | 22           | 15              | 17.33        | 14.81                       |
| 540                  | 620                   | 30           | 8               | 10.00        | 26.49                       |
| 620                  | 705                   | 45           | 15              | 5.67         | 48.28                       |
| 705                  | 880                   | 80           | 35              | 5.00         | 55.10                       |

#### Comments

|                       |                    |              |                     |              |
|-----------------------|--------------------|--------------|---------------------|--------------|
| <b>Site Engineer:</b> | <b>Checked By:</b> | <b>Date:</b> | <b>Approved By:</b> | <b>Date:</b> |
| AT                    | ST                 | 24/11/2015   | MD                  | 24/11/2015   |

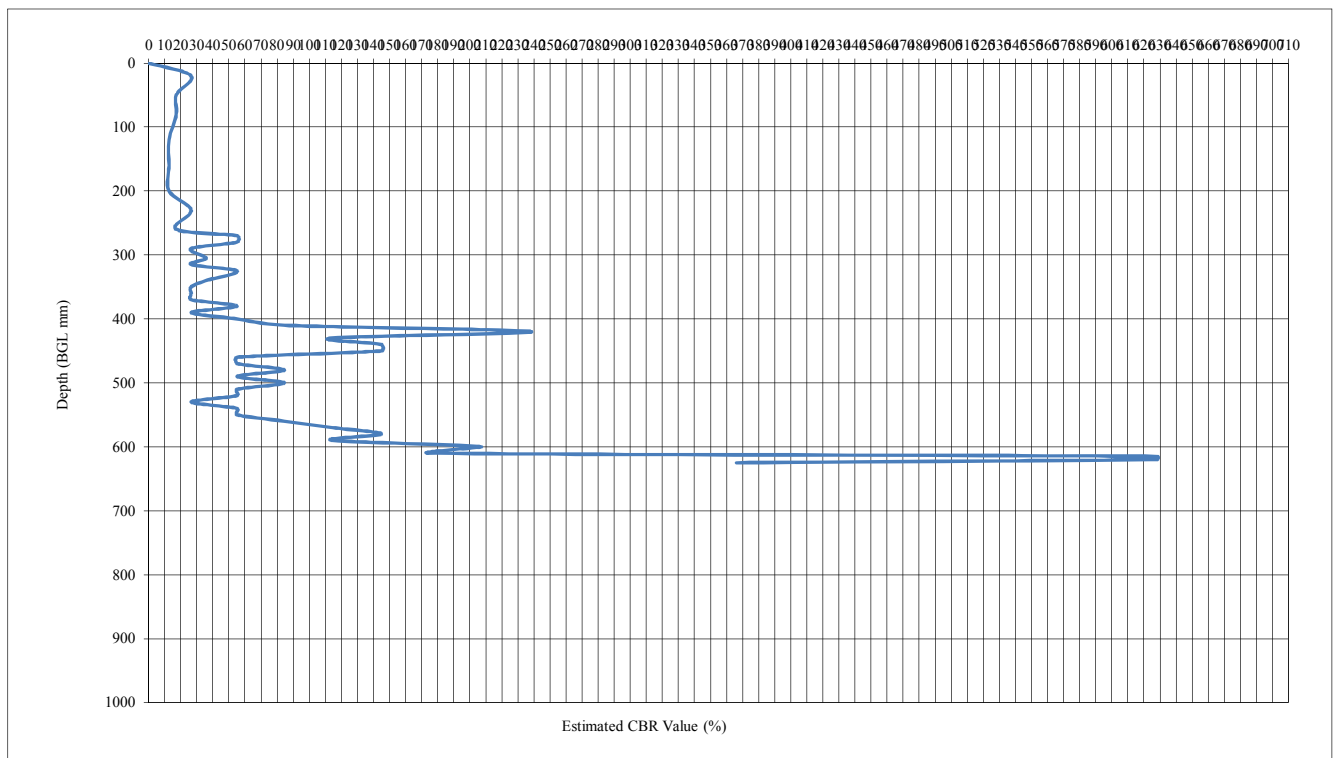


## Determination of Dynamic Cone Penetrometer - Estimated CBR Value (%)

*In Accordance with TRL Report PR/INT/277/04*

|                                |            |                       |            |
|--------------------------------|------------|-----------------------|------------|
| <b>Site Name</b>               | Prescot    | <b>Test Date:</b>     | 15/07/2015 |
| <b>Site Ref</b>                | 10021      | <b>Test Location:</b> | Prescot    |
| <b>Test No.:</b>               | PC DCP 107 | <b>Easting:</b>       | N/A        |
| <b>Initial Depth (mm BGL):</b> | 0          | <b>Northing:</b>      | N/A        |
| <b>Final Depth (mm BGL):</b>   | 625        |                       |            |

### Estimated California Bearing Ratio Graph



| Start Depth (mm) BGL | Finish Depth (mm) BGL | No. of Blows | Blows Per Layer | DCP mm/Blows | Ave Estimated Layer (CBR %) |
|----------------------|-----------------------|--------------|-----------------|--------------|-----------------------------|
| 0                    | 390                   | 35           | 35              | 11.14        | 23.62                       |
| 390                  | 470                   | 66           | 31              | 2.58         | 110.87                      |
| 470                  | 590                   | 99           | 33              | 3.64         | 77.16                       |
| 590                  | 625                   | 138          | 39              | 0.90         | 338.59                      |
|                      |                       |              |                 |              |                             |

#### Comments

|                       |                    |              |                     |              |
|-----------------------|--------------------|--------------|---------------------|--------------|
| <b>Site Engineer:</b> | <b>Checked By:</b> | <b>Date:</b> | <b>Approved By:</b> | <b>Date:</b> |
| JJ                    | ST                 | 24/11/2015   | MD                  | 24/11/2015   |

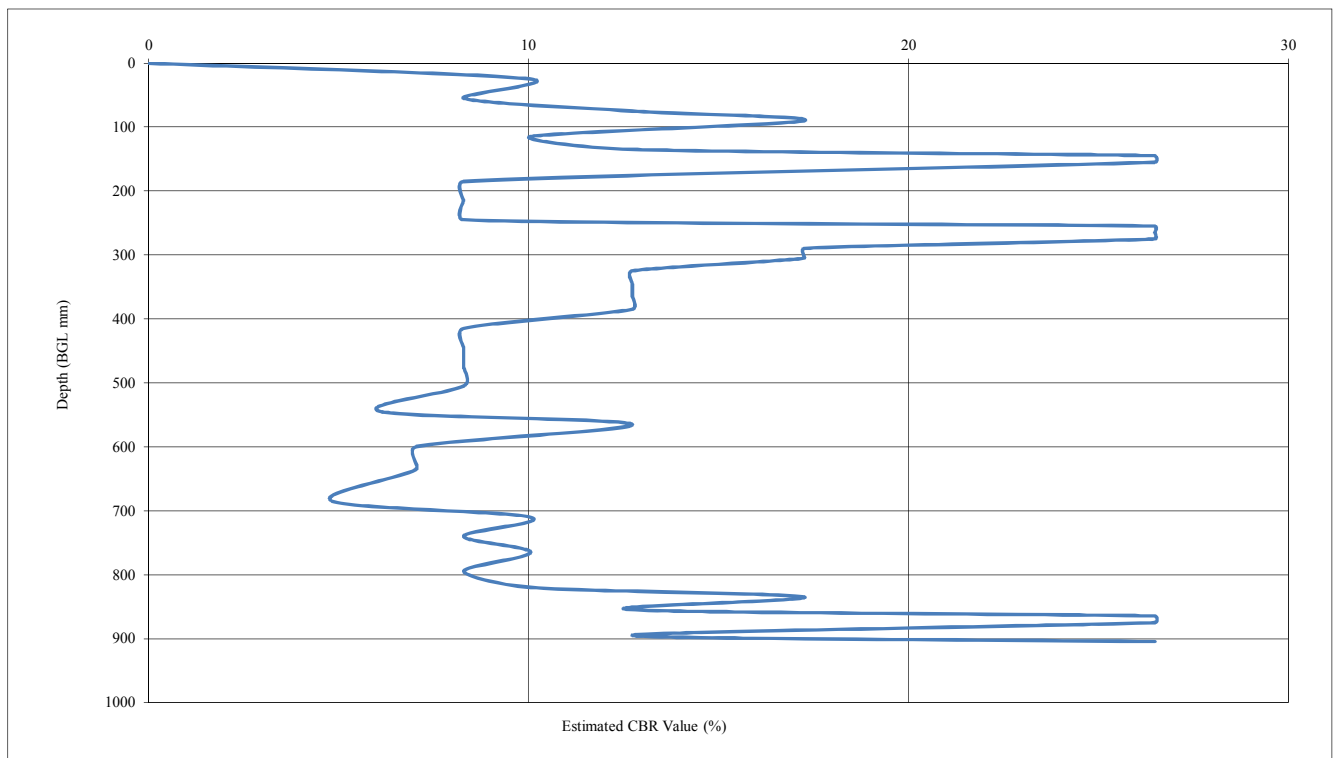


## Determination of Dynamic Cone Penetrometer - Estimated CBR Value (%)

In Accordance with TRL Report PR/INT/277/04

|                         |            |                |            |
|-------------------------|------------|----------------|------------|
| Site Name               | Prescot    | Test Date:     | 15/07/2015 |
| Site Ref                | 10021      | Test Location: | Prescot    |
| Test No.:               | PC DCP 108 | Easting:       | N/A        |
| Initial Depth (mm BGL): | 0          | Northing:      | N/A        |
| Final Depth (mm BGL):   | 905        |                |            |

### Estimated California Bearing Ratio Graph



| Start Depth (mm) BGL | Finish Depth (mm) BGL | No. of Blows | Blows Per Layer | DCP mm/Blows | Ave Estimated Layer (CBR %) |
|----------------------|-----------------------|--------------|-----------------|--------------|-----------------------------|
| 0                    | 115                   | 5            | 5               | 23.00        | 10.98                       |
| 115                  | 325                   | 17           | 12              | 17.50        | 14.66                       |
| 325                  | 795                   | 33           | 16              | 29.38        | 8.48                        |
| 795                  | 905                   | 40           | 7               | 15.71        | 16.43                       |
|                      |                       |              |                 |              |                             |

#### Comments

|                |             |            |              |            |
|----------------|-------------|------------|--------------|------------|
| Site Engineer: | Checked By: | Date:      | Approved By: | Date:      |
| AT             | ST          | 24/11/2015 | MD           | 24/11/2015 |

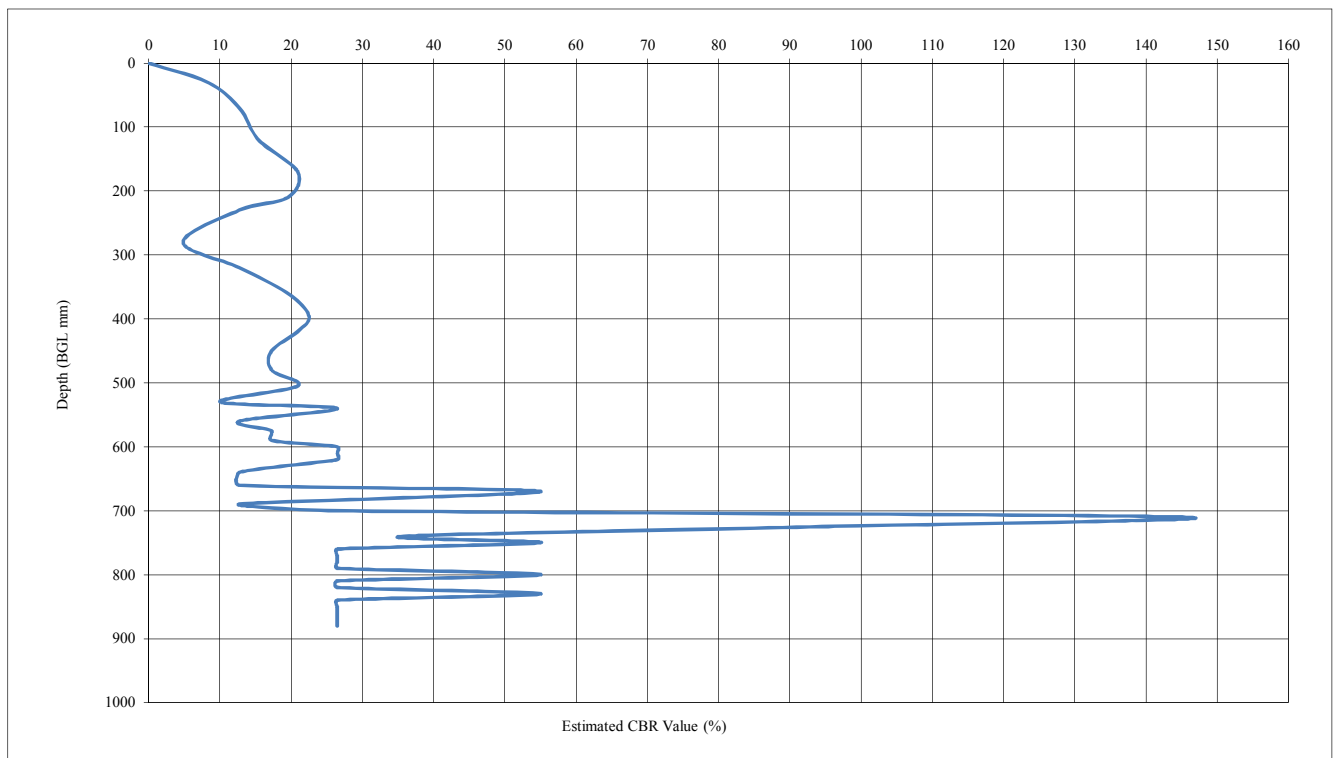


## Determination of Dynamic Cone Penetrometer - Estimated CBR Value (%)

*In Accordance with TRL Report PR/INT/277/04*

|                                |            |                       |            |
|--------------------------------|------------|-----------------------|------------|
| <b>Site Name</b>               | Prescot    | <b>Test Date:</b>     | 15/07/2015 |
| <b>Site Ref</b>                | 10021      | <b>Test Location:</b> | Prescot    |
| <b>Test No.:</b>               | PC DCP 109 | <b>Easting:</b>       | N/A        |
| <b>Initial Depth (mm BGL):</b> | 0          | <b>Northing:</b>      | N/A        |
| <b>Final Depth (mm BGL):</b>   | 880        |                       |            |

### Estimated California Bearing Ratio Graph



| Start Depth (mm) BGL | Finish Depth (mm) BGL | No. of Blows | Blows Per Layer | DCP mm/Blows | Ave Estimated Layer (CBR %) |
|----------------------|-----------------------|--------------|-----------------|--------------|-----------------------------|
| 0                    | 660                   | 41           | 41              | 16.10        | 16.01                       |
| 660                  | 690                   | 44           | 3               | 10.00        | 26.49                       |
| 690                  | 880                   | 74           | 30              | 6.33         | 42.92                       |
|                      |                       |              |                 |              |                             |
|                      |                       |              |                 |              |                             |

#### Comments

|                       |                    |              |                     |              |
|-----------------------|--------------------|--------------|---------------------|--------------|
| <b>Site Engineer:</b> | <b>Checked By:</b> | <b>Date:</b> | <b>Approved By:</b> | <b>Date:</b> |
| AT                    | ST                 | 24/11/2015   | MD                  | 24/11/2015   |

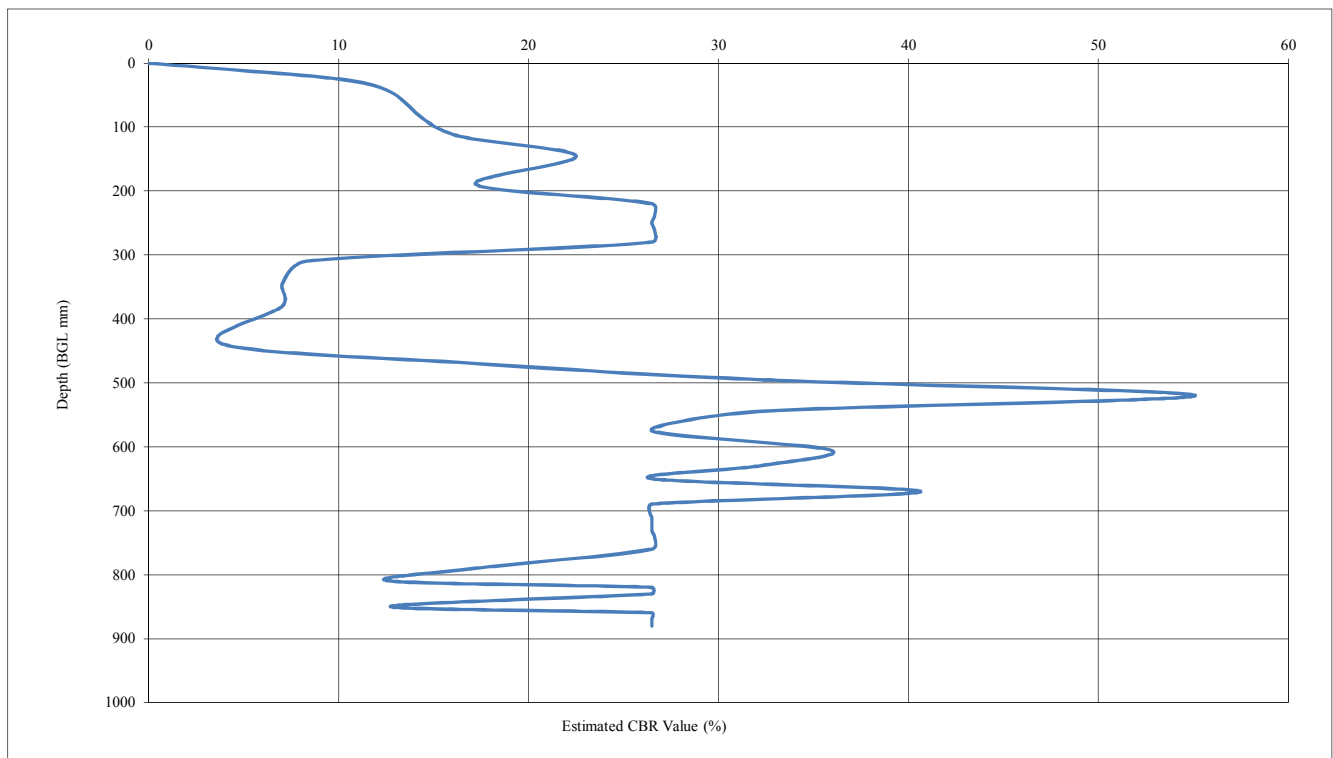


## Determination of Dynamic Cone Penetrometer - Estimated CBR Value (%)

*In Accordance with TRL Report PR/INT/277/04*

|                         |            |                |            |
|-------------------------|------------|----------------|------------|
| Site Name               | Prescot    | Test Date:     | 15/07/2015 |
| Site Ref                | 10021      | Test Location: | Prescot    |
| Test No.:               | PC DCP 110 | Easting:       | N/A        |
| Initial Depth (mm BGL): | 0          | Northing:      | N/A        |
| Final Depth (mm BGL):   | 880        |                |            |

### Estimated California Bearing Ratio Graph



| Start Depth (mm) BGL | Finish Depth (mm) BGL | No. of Blows | Blows Per Layer | DCP mm/Blows | Ave Estimated Layer (CBR %) |
|----------------------|-----------------------|--------------|-----------------|--------------|-----------------------------|
| 0                    | 310                   | 22           | 22              | 14.09        | 18.43                       |
| 310                  | 440                   | 25           | 3               | 43.33        | 5.62                        |
| 440                  | 575                   | 41           | 16              | 8.44         | 31.70                       |
| 575                  | 690                   | 55           | 14              | 8.21         | 32.61                       |
| 690                  | 880                   | 71           | 16              | 11.88        | 22.09                       |

#### Comments

|                |             |            |              |            |
|----------------|-------------|------------|--------------|------------|
| Site Engineer: | Checked By: | Date:      | Approved By: | Date:      |
| AT             | ST          | 24/11/2015 | MD           | 24/11/2015 |

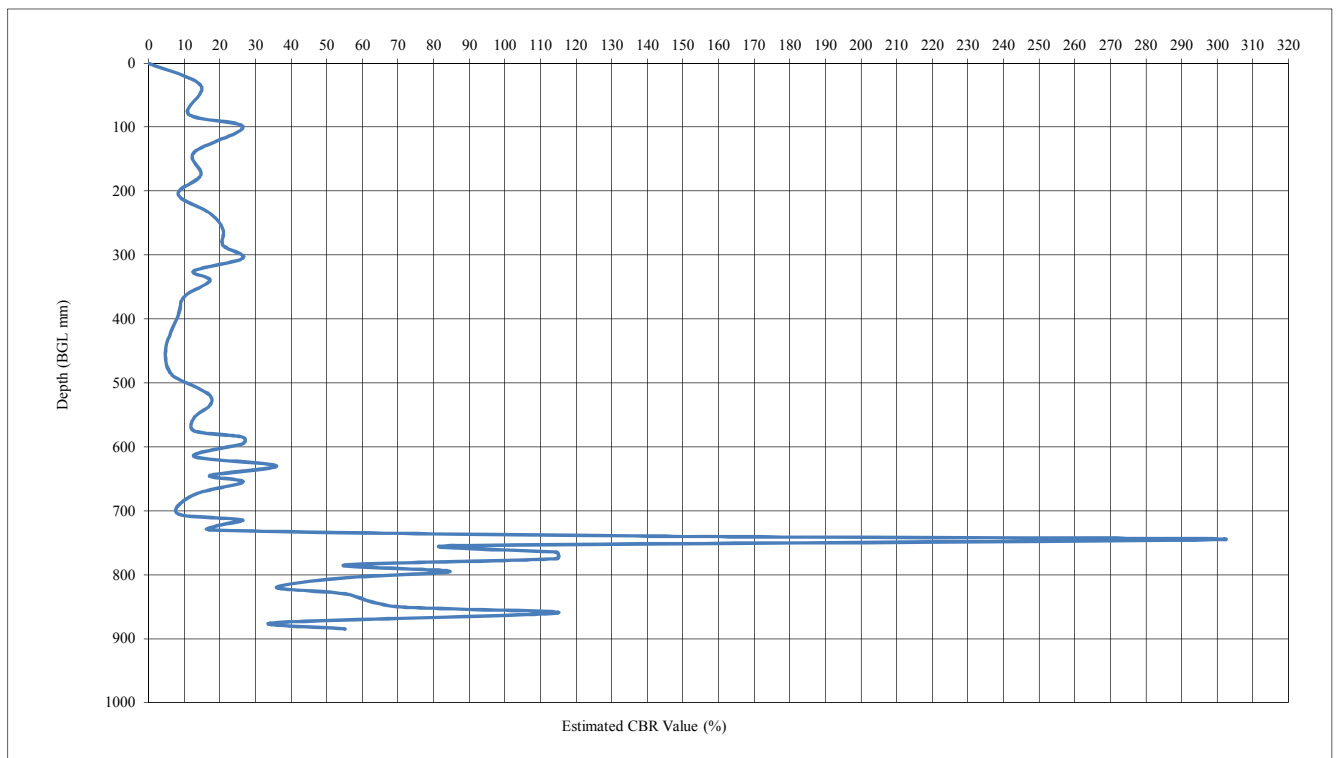


## Determination of Dynamic Cone Penetrometer - Estimated CBR Value (%)

In Accordance with TRL Report PR/INT/277/04

|                         |            |                |            |
|-------------------------|------------|----------------|------------|
| Site Name               | Prescot    | Test Date:     | 15/07/2015 |
| Site Ref                | 10021      | Test Location: | Prescot    |
| Test No.:               | PC DCP 111 | Easting:       | N/A        |
| Initial Depth (mm BGL): | 0          | Northing:      | N/A        |
| Final Depth (mm BGL):   | 885        |                |            |

### Estimated California Bearing Ratio Graph



| Start Depth (mm) BGL | Finish Depth (mm) BGL | No. of Blows | Blows Per Layer | DCP mm/Blows | Ave Estimated Layer (CBR %) |
|----------------------|-----------------------|--------------|-----------------|--------------|-----------------------------|
| 0                    | 730                   | 41           | 41              | 17.80        | 14.39                       |
| 730                  | 820                   | 71           | 30              | 3.00         | 94.55                       |
| 820                  | 885                   | 86           | 15              | 4.33         | 64.10                       |
|                      |                       |              |                 |              |                             |
|                      |                       |              |                 |              |                             |

#### Comments

|                |             |            |              |            |
|----------------|-------------|------------|--------------|------------|
| Site Engineer: | Checked By: | Date:      | Approved By: | Date:      |
| AT             | ST          | 24/11/2015 | MD           | 24/11/2015 |

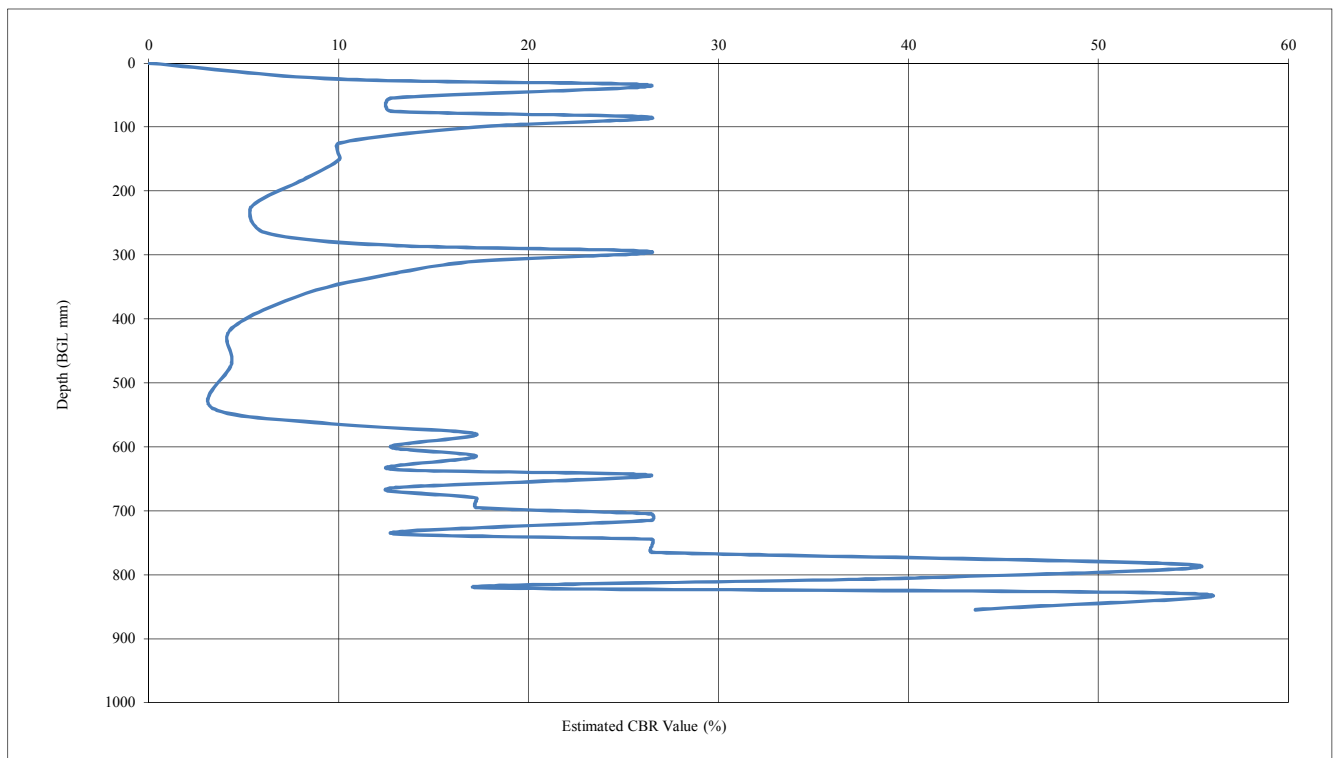


## Determination of Dynamic Cone Penetrometer - Estimated CBR Value (%)

*In Accordance with TRL Report PR/INT/277/04*

|                                |            |                       |            |
|--------------------------------|------------|-----------------------|------------|
| <b>Site Name</b>               | Prescot    | <b>Test Date:</b>     | 15/07/2015 |
| <b>Site Ref</b>                | 10021      | <b>Test Location:</b> | Prescot    |
| <b>Test No.:</b>               | PC DCP 112 | <b>Easting:</b>       | N/A        |
| <b>Initial Depth (mm BGL):</b> | 0          | <b>Northing:</b>      | N/A        |
| <b>Final Depth (mm BGL):</b>   | 855        |                       |            |

### Estimated California Bearing Ratio Graph



| Start Depth (mm) BGL | Finish Depth (mm) BGL | No. of Blows | Blows Per Layer | DCP mm/Blows | Ave Estimated Layer (CBR %) |
|----------------------|-----------------------|--------------|-----------------|--------------|-----------------------------|
| 0                    | 125                   | 7            | 7               | 17.86        | 14.35                       |
| 125                  | 265                   | 11           | 4               | 35.00        | 7.05                        |
| 265                  | 415                   | 17           | 6               | 25.00        | 10.05                       |
| 415                  | 745                   | 32           | 15              | 22.00        | 11.51                       |
| 745                  | 855                   | 48           | 16              | 6.88         | 39.36                       |

#### Comments

|                       |                    |              |                     |              |
|-----------------------|--------------------|--------------|---------------------|--------------|
| <b>Site Engineer:</b> | <b>Checked By:</b> | <b>Date:</b> | <b>Approved By:</b> | <b>Date:</b> |
| AT                    | ST                 | 24/11/2015   | MD                  | 24/11/2015   |

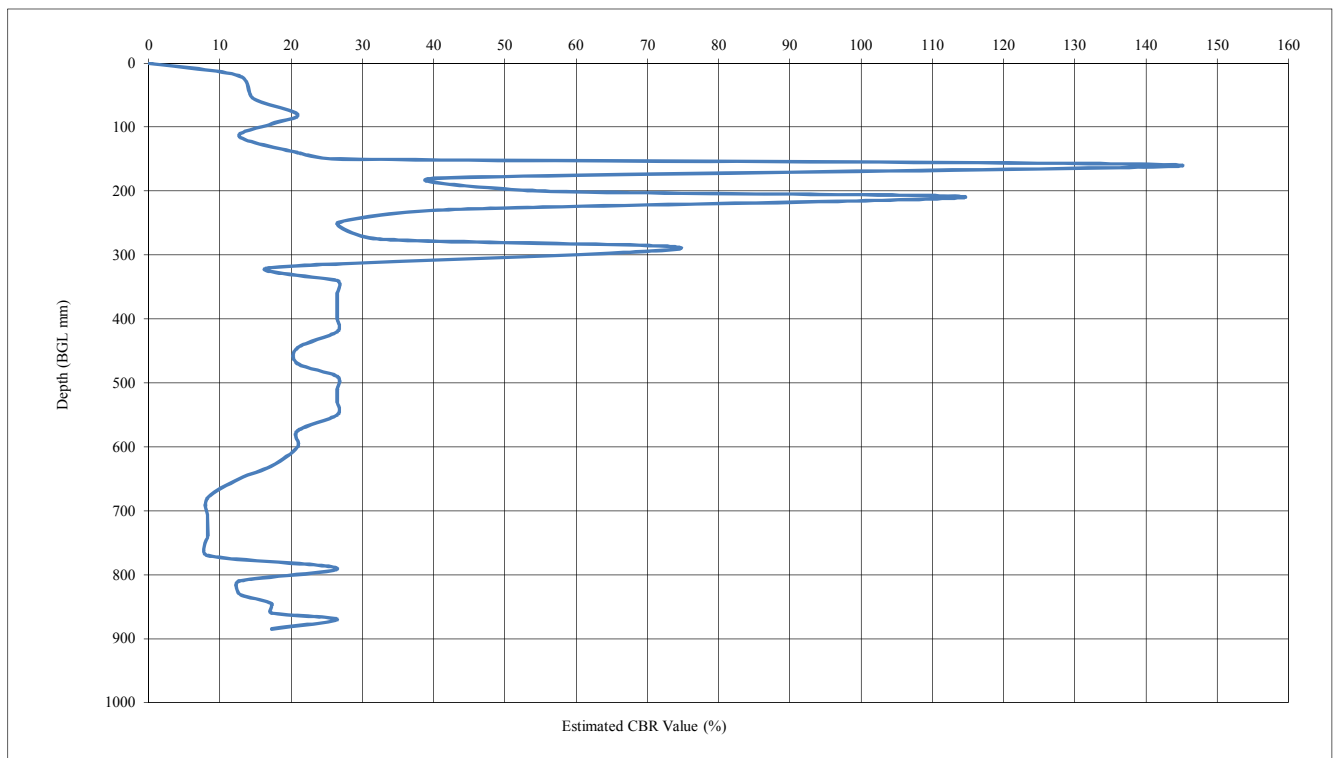


## Determination of Dynamic Cone Penetrometer - Estimated CBR Value (%)

*In Accordance with TRL Report PR/INT/277/04*

|                                |            |                       |            |
|--------------------------------|------------|-----------------------|------------|
| <b>Site Name</b>               | Prescot    | <b>Test Date:</b>     | 15/07/2015 |
| <b>Site Ref</b>                | 10021      | <b>Test Location:</b> | Prescot    |
| <b>Test No.:</b>               | PC DCP 120 | <b>Easting:</b>       | N/A        |
| <b>Initial Depth (mm BGL):</b> | 0          | <b>Northing:</b>      | N/A        |
| <b>Final Depth (mm BGL):</b>   | 885        |                       |            |

### Estimated California Bearing Ratio Graph



| Start Depth (mm) BGL | Finish Depth (mm) BGL | No. of Blows | Blows Per Layer | DCP mm/Blows | Ave Estimated Layer (CBR %) |
|----------------------|-----------------------|--------------|-----------------|--------------|-----------------------------|
| 0                    | 150                   | 10           | 10              | 15.00        | 17.25                       |
| 150                  | 180                   | 18           | 8               | 3.75         | 74.69                       |
| 180                  | 250                   | 31           | 13              | 5.38         | 50.95                       |
| 250                  | 320                   | 40           | 9               | 7.78         | 34.54                       |
| 320                  | 885                   | 81           | 41              | 13.78        | 18.87                       |

#### Comments

|                       |                    |              |                     |              |
|-----------------------|--------------------|--------------|---------------------|--------------|
| <b>Site Engineer:</b> | <b>Checked By:</b> | <b>Date:</b> | <b>Approved By:</b> | <b>Date:</b> |
| AT                    | ST                 | 24/11/2015   | MD                  | 24/11/2015   |

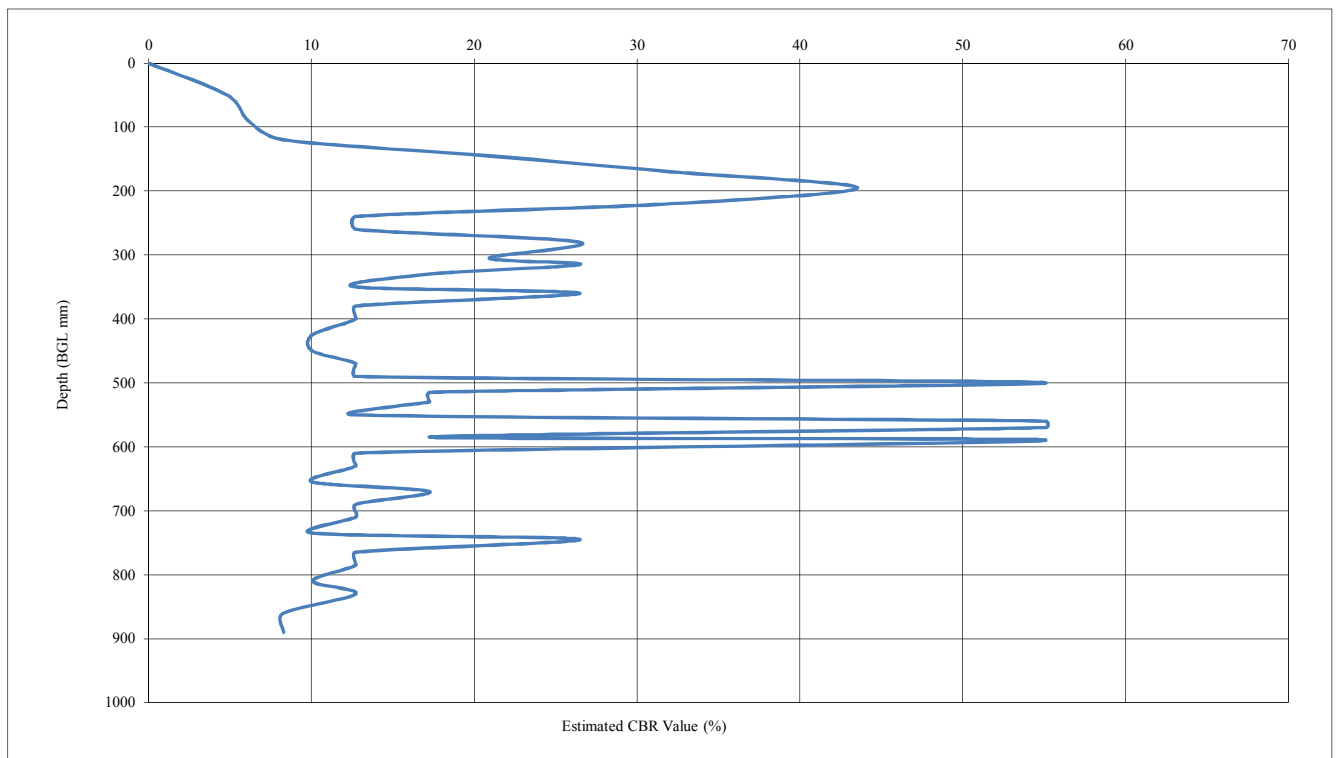


## Determination of Dynamic Cone Penetrometer - Estimated CBR Value (%)

In Accordance with TRL Report PR/INT/277/04

|                         |            |                |            |
|-------------------------|------------|----------------|------------|
| Site Name               | Prescot    | Test Date:     | 15/07/2015 |
| Site Ref                | 10021      | Test Location: | Prescot    |
| Test No.:               | PC DCP 121 | Easting:       | N/A        |
| Initial Depth (mm BGL): | 0          | Northing:      | N/A        |
| Final Depth (mm BGL):   | 890        |                |            |

### Estimated California Bearing Ratio Graph



| Start Depth (mm) BGL | Finish Depth (mm) BGL | No. of Blows | Blows Per Layer | DCP mm/Blows | Ave Estimated Layer (CBR %) |
|----------------------|-----------------------|--------------|-----------------|--------------|-----------------------------|
| 0                    | 240                   | 16           | 16              | 15.00        | 17.25                       |
| 240                  | 470                   | 30           | 14              | 16.43        | 15.67                       |
| 470                  | 610                   | 43           | 13              | 10.77        | 24.49                       |
| 610                  | 765                   | 51           | 8               | 19.38        | 13.16                       |
| 765                  | 890                   | 56           | 5               | 25.00        | 10.05                       |

#### Comments

|                |             |            |              |            |
|----------------|-------------|------------|--------------|------------|
| Site Engineer: | Checked By: | Date:      | Approved By: | Date:      |
| AT             | ST          | 24/11/2015 | MD           | 24/11/2015 |

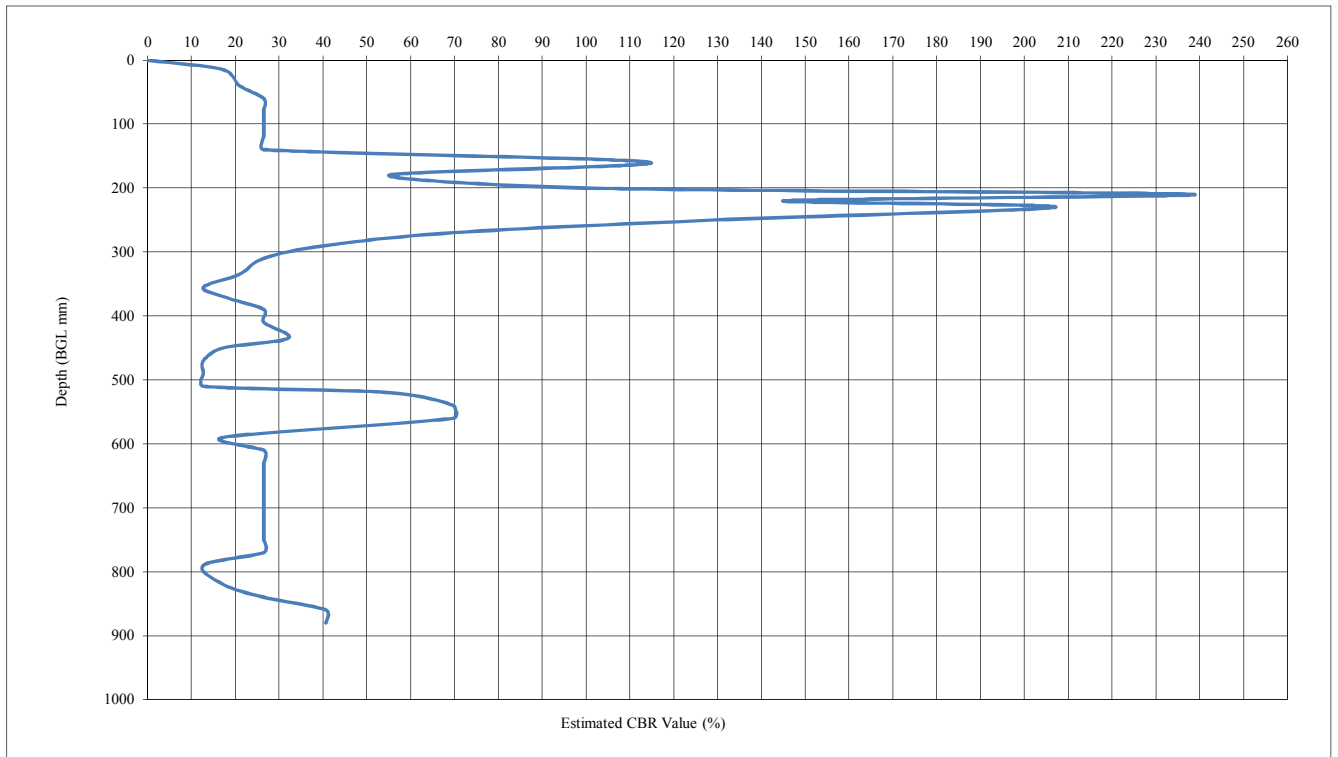


## Determination of Dynamic Cone Penetrometer - Estimated CBR Value (%)

In Accordance with TRL Report PR/INT/277/04

|                         |            |                |            |
|-------------------------|------------|----------------|------------|
| Site Name               | Prescot    | Test Date:     | 15/07/2015 |
| Site Ref                | 10021      | Test Location: | Prescot    |
| Test No.:               | PC DCP 127 | Easting:       | N/A        |
| Initial Depth (mm BGL): | 0          | Northing:      | N/A        |
| Final Depth (mm BGL):   | 880        |                |            |

### Estimated California Bearing Ratio Graph



| Start Depth (mm) BGL | Finish Depth (mm) BGL | No. of Blows | Blows Per Layer | DCP mm/Blows | Ave Estimated Layer (CBR %) |
|----------------------|-----------------------|--------------|-----------------|--------------|-----------------------------|
| 0                    | 140                   | 13           | 13              | 10.77        | 24.49                       |
| 140                  | 180                   | 25           | 12              | 3.33         | 84.59                       |
| 180                  | 355                   | 74           | 49              | 3.57         | 78.64                       |
| 355                  | 590                   | 100          | 26              | 9.04         | 29.47                       |
| 590                  | 880                   | 129          | 29              | 10.00        | 26.49                       |

#### Comments

|                |             |            |              |            |
|----------------|-------------|------------|--------------|------------|
| Site Engineer: | Checked By: | Date:      | Approved By: | Date:      |
| AT             | ST          | 24/11/2015 | MD           | 24/11/2015 |

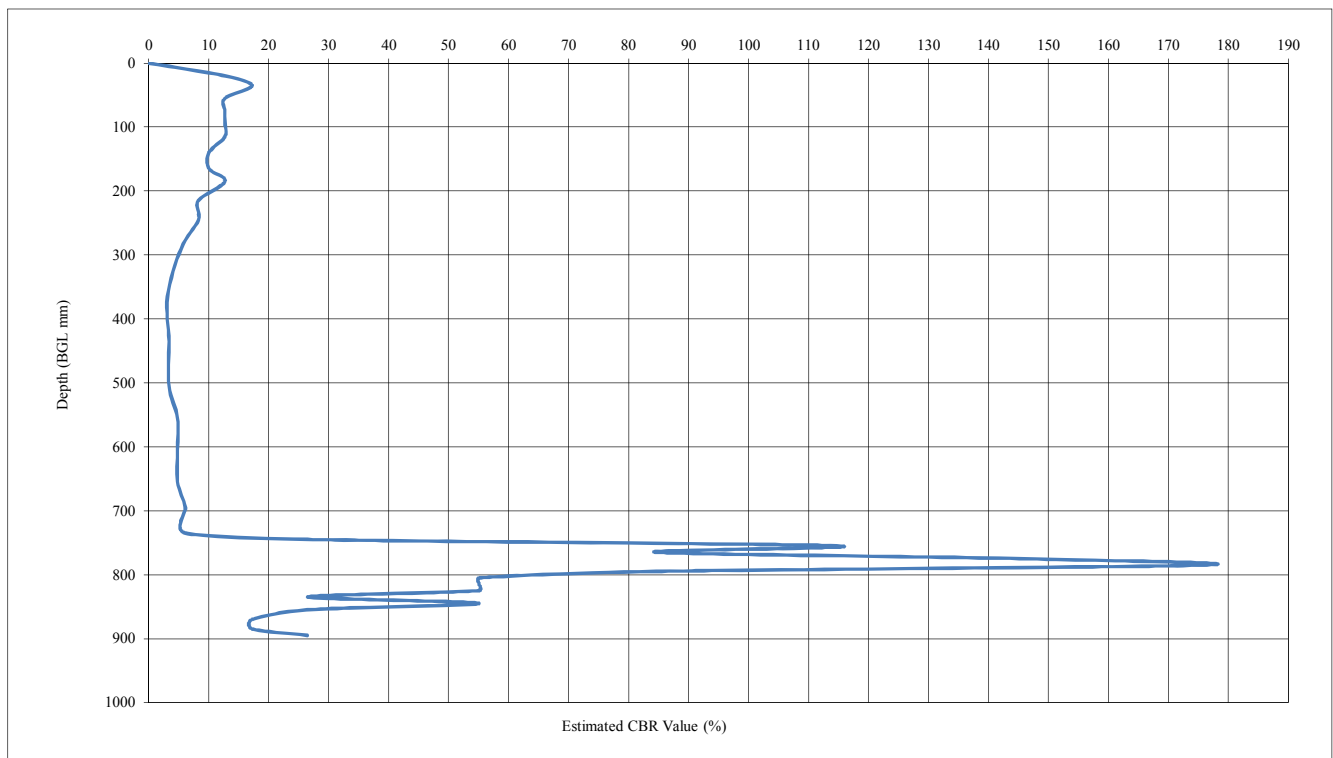


## Determination of Dynamic Cone Penetrometer - Estimated CBR Value (%)

*In Accordance with TRL Report PR/INT/277/04*

|                                |            |                       |            |
|--------------------------------|------------|-----------------------|------------|
| <b>Site Name</b>               | Prescot    | <b>Test Date:</b>     | 15/07/2015 |
| <b>Site Ref</b>                | 10021      | <b>Test Location:</b> | Prescot    |
| <b>Test No.:</b>               | PC DCP 128 | <b>Easting:</b>       | N/A        |
| <b>Initial Depth (mm BGL):</b> | 0          | <b>Northing:</b>      | N/A        |
| <b>Final Depth (mm BGL):</b>   | 895        |                       |            |

### Estimated California Bearing Ratio Graph



| Start Depth (mm) BGL | Finish Depth (mm) BGL | No. of Blows | Blows Per Layer | DCP mm/Blows | Ave Estimated Layer (CBR %) |
|----------------------|-----------------------|--------------|-----------------|--------------|-----------------------------|
| 0                    | 215                   | 10           | 10              | 21.50        | 11.79                       |
| 215                  | 735                   | 20           | 10              | 52.00        | 4.64                        |
| 735                  | 895                   | 55           | 35              | 4.57         | 60.58                       |
|                      |                       |              |                 |              |                             |
|                      |                       |              |                 |              |                             |

#### Comments

|                       |                    |              |                     |              |
|-----------------------|--------------------|--------------|---------------------|--------------|
| <b>Site Engineer:</b> | <b>Checked By:</b> | <b>Date:</b> | <b>Approved By:</b> | <b>Date:</b> |
| AT                    | ST                 | 24/11/2015   | MD                  | 24/11/2015   |

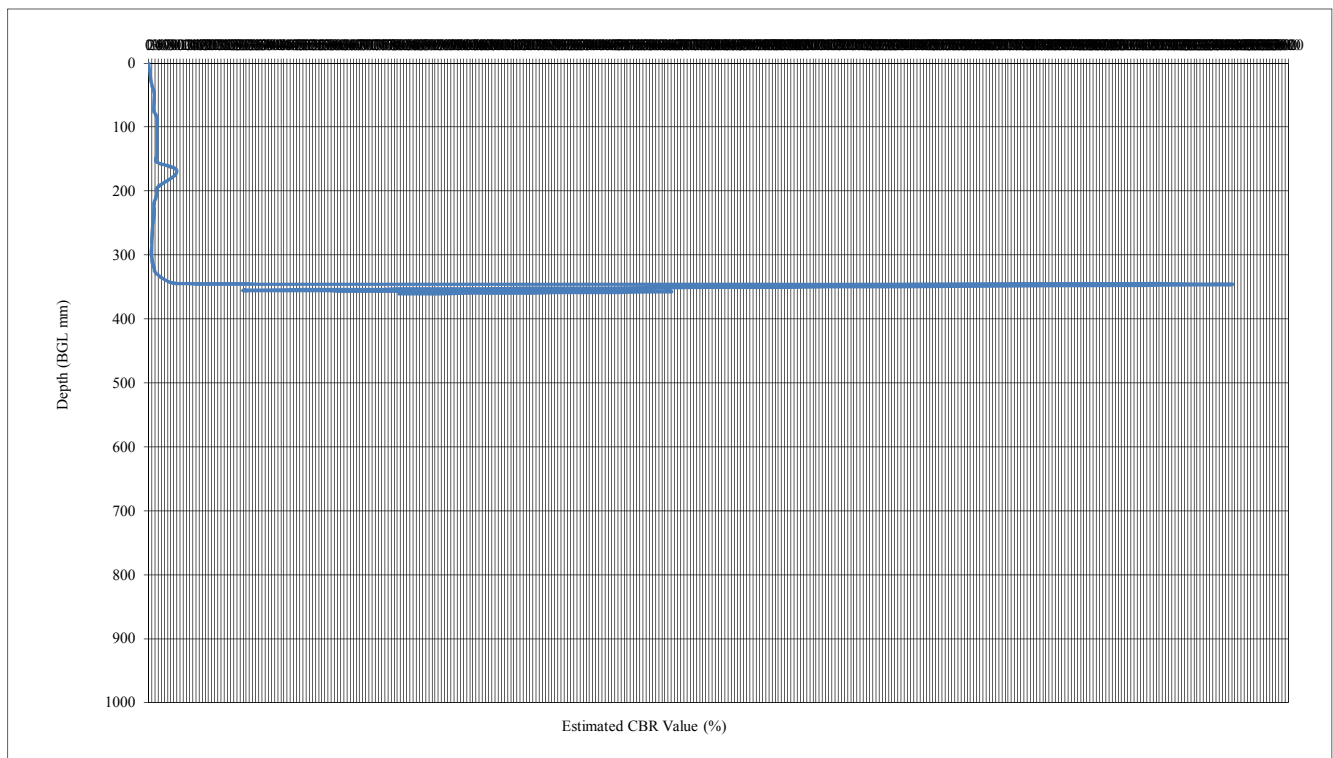


## Determination of Dynamic Cone Penetrometer - Estimated CBR Value (%)

*In Accordance with TRL Report PR/INT/277/04*

|                         |            |                |            |
|-------------------------|------------|----------------|------------|
| Site Name               | Prescot    | Test Date:     | 15/07/2015 |
| Site Ref                | 10021      | Test Location: | Prescot    |
| Test No.:               | PC DCP 129 | Easting:       | N/A        |
| Initial Depth (mm BGL): | 0          | Northing:      | N/A        |
| Final Depth (mm BGL):   | 361        |                |            |

### Estimated California Bearing Ratio Graph



| Start Depth (mm) BGL | Finish Depth (mm) BGL | No. of Blows | Blows Per Layer | DCP mm/Blows | Ave Estimated Layer (CBR %) |
|----------------------|-----------------------|--------------|-----------------|--------------|-----------------------------|
| 0                    | 155                   | 12           | 12              | 12.92        | 20.21                       |
| 155                  | 195                   | 21           | 9               | 4.44         | 62.41                       |
| 195                  | 330                   | 29           | 8               | 16.88        | 15.23                       |
| 330                  | 361                   | 74           | 45              | 0.69         | 447.79                      |
|                      |                       |              |                 |              |                             |

#### Comments

|                |             |            |              |            |
|----------------|-------------|------------|--------------|------------|
| Site Engineer: | Checked By: | Date:      | Approved By: | Date:      |
| AT             | ST          | 24/11/2015 | MD           | 24/11/2015 |

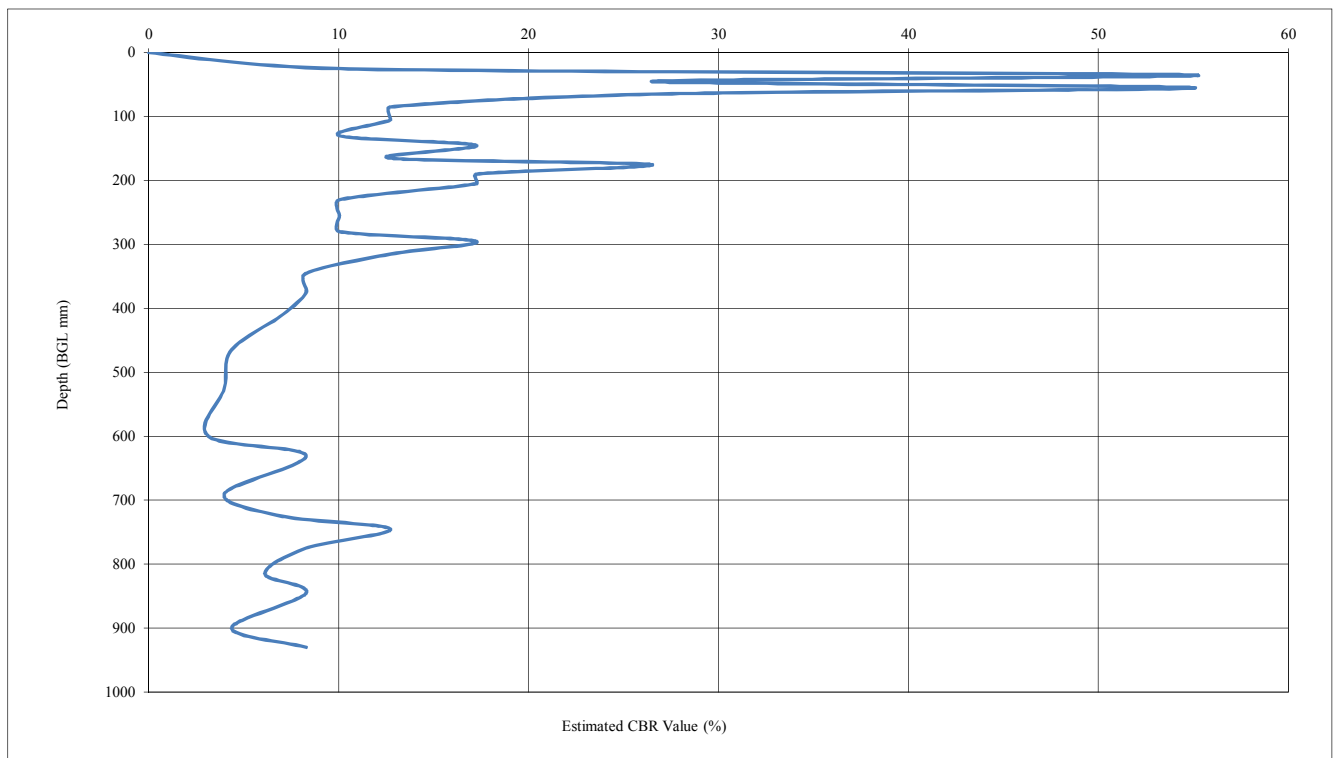


## Determination of Dynamic Cone Penetrometer - Estimated CBR Value (%)

*In Accordance with TRL Report PR/INT/277/04*

|                                |            |                       |            |
|--------------------------------|------------|-----------------------|------------|
| <b>Site Name</b>               | Prescot    | <b>Test Date:</b>     | 15/07/2015 |
| <b>Site Ref</b>                | 10021      | <b>Test Location:</b> | Prescot    |
| <b>Test No.:</b>               | PC DCP 131 | <b>Easting:</b>       | N/A        |
| <b>Initial Depth (mm BGL):</b> | 0          | <b>Northing:</b>      | N/A        |
| <b>Final Depth (mm BGL):</b>   | 930        |                       |            |

### Estimated California Bearing Ratio Graph



| Start Depth (mm) BGL | Finish Depth (mm) BGL | No. of Blows | Blows Per Layer | DCP mm/Blows | Ave Estimated Layer (CBR %) |
|----------------------|-----------------------|--------------|-----------------|--------------|-----------------------------|
| 0                    | 130                   | 10           |                 | #DIV/0!      | #DIV/0!                     |
| 130                  | 230                   | 16           | 6               | 16.67        | 15.43                       |
| 230                  | 345                   | 21           | 5               | 23.00        | 10.98                       |
| 345                  | 600                   | 26           | 5               | 51.00        | 4.73                        |
| 600                  | 930                   | 930          | 904             | 0.37         | 876.20                      |

#### Comments

|                       |                    |              |                     |              |
|-----------------------|--------------------|--------------|---------------------|--------------|
| <b>Site Engineer:</b> | <b>Checked By:</b> | <b>Date:</b> | <b>Approved By:</b> | <b>Date:</b> |
| AT                    | ST                 | 24/11/2015   | MD                  | 24/11/2015   |

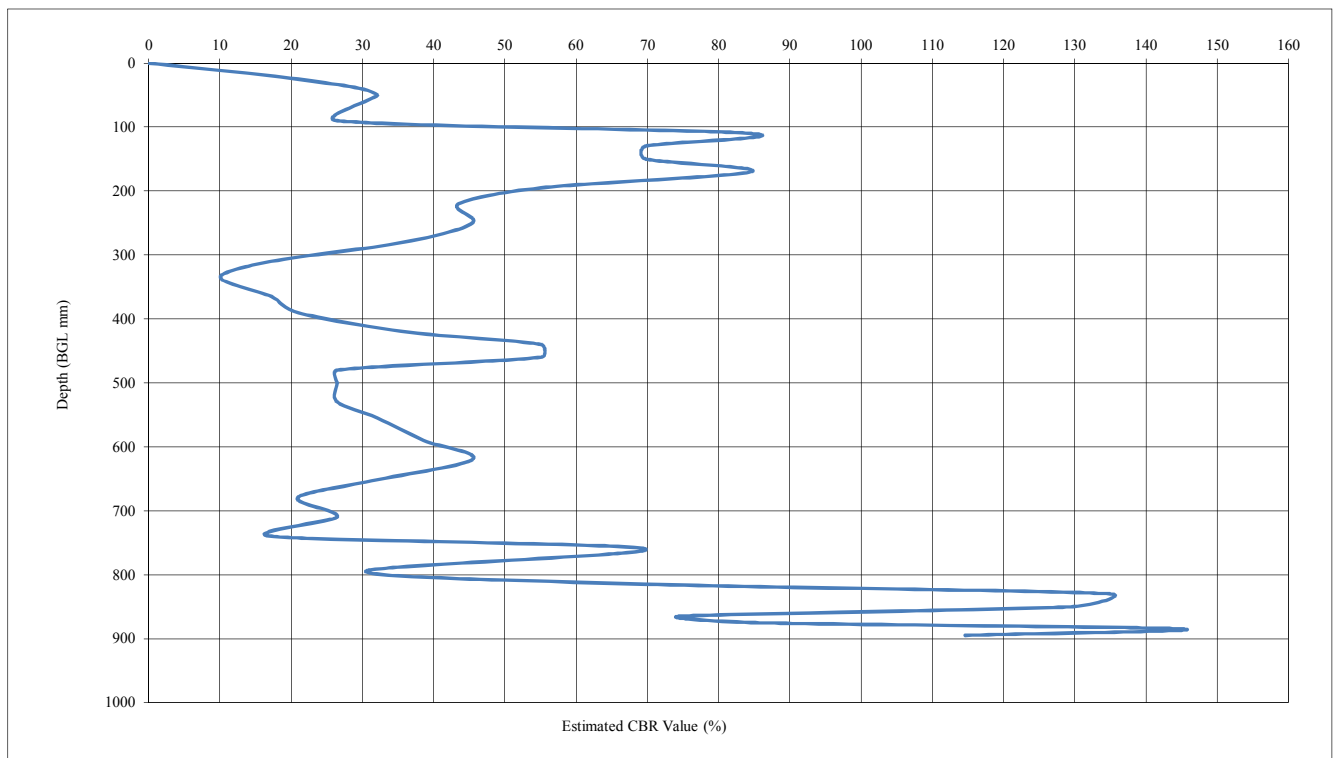


## Determination of Dynamic Cone Penetrometer - Estimated CBR Value (%)

*In Accordance with TRL Report PR/INT/277/04*

|                                |            |                       |            |
|--------------------------------|------------|-----------------------|------------|
| <b>Site Name</b>               | Prescot    | <b>Test Date:</b>     | 15/07/2015 |
| <b>Site Ref</b>                | 10021      | <b>Test Location:</b> | Prescot    |
| <b>Test No.:</b>               | PC DCP 132 | <b>Easting:</b>       | N/A        |
| <b>Initial Depth (mm BGL):</b> | 0          | <b>Northing:</b>      | N/A        |
| <b>Final Depth (mm BGL):</b>   | 895        |                       |            |

### Estimated California Bearing Ratio Graph



| Start Depth (mm) BGL | Finish Depth (mm) BGL | No. of Blows | Blows Per Layer | DCP mm/Blows | Ave Estimated Layer (CBR %) |
|----------------------|-----------------------|--------------|-----------------|--------------|-----------------------------|
| 0                    | 335                   | 52           | 52              | 6.44         | 42.15                       |
| 335                  | 480                   | 70           | 18              | 8.06         | 33.29                       |
| 480                  | 740                   | 99           | 29              | 8.97         | 29.73                       |
| 740                  | 795                   | 108          | 9               | 6.11         | 44.57                       |
| 795                  | 895                   | 145          | 37              | 2.70         | 105.58                      |

#### Comments

|                       |                    |              |                     |              |
|-----------------------|--------------------|--------------|---------------------|--------------|
| <b>Site Engineer:</b> | <b>Checked By:</b> | <b>Date:</b> | <b>Approved By:</b> | <b>Date:</b> |
| AT                    | ST                 | 24/11/2015   | MD                  | 24/11/2015   |

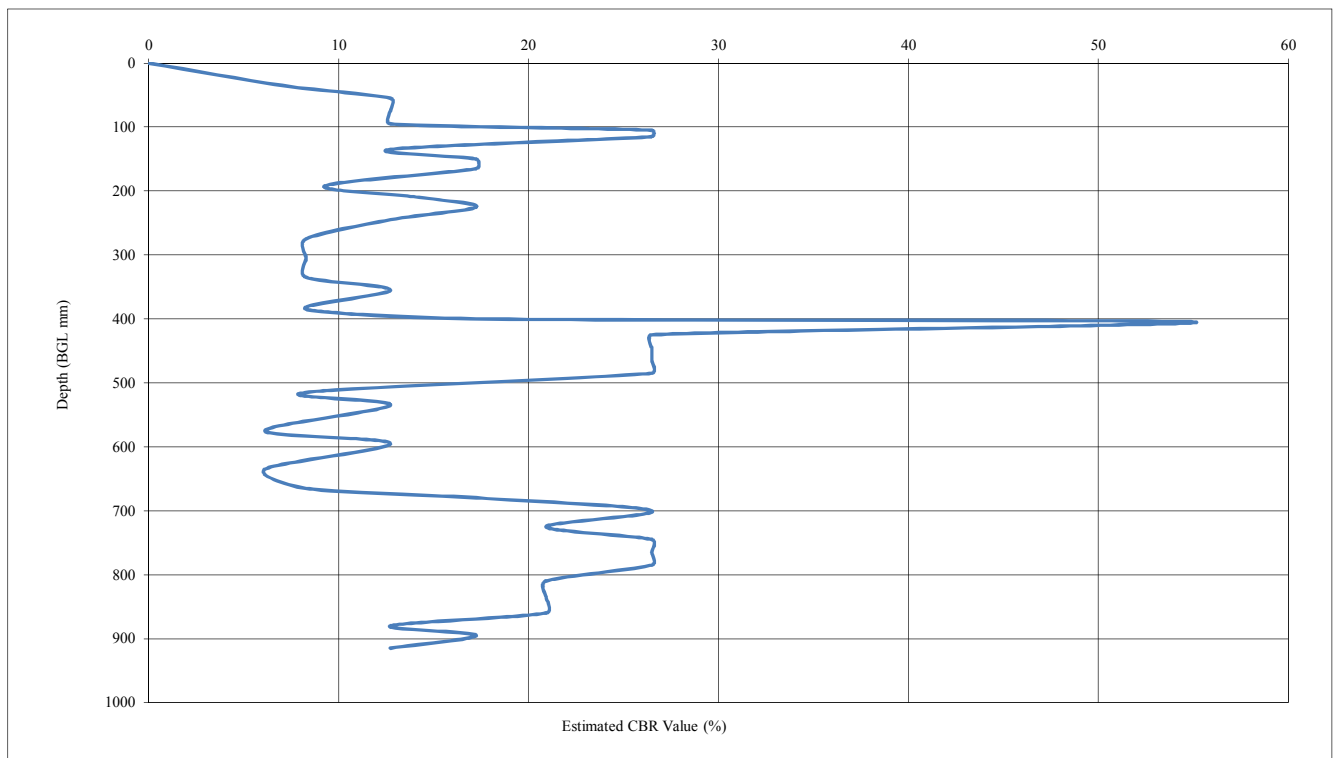


## Determination of Dynamic Cone Penetrometer - Estimated CBR Value (%)

*In Accordance with TRL Report PR/INT/277/04*

|                                |            |                       |            |
|--------------------------------|------------|-----------------------|------------|
| <b>Site Name</b>               | Prescot    | <b>Test Date:</b>     | 15/07/2015 |
| <b>Site Ref</b>                | 10021      | <b>Test Location:</b> | Prescot    |
| <b>Test No.:</b>               | PC DCP 133 | <b>Easting:</b>       | N/A        |
| <b>Initial Depth (mm BGL):</b> | 0          | <b>Northing:</b>      | N/A        |
| <b>Final Depth (mm BGL):</b>   | 915        |                       |            |

### Estimated California Bearing Ratio Graph



| Start Depth (mm) BGL | Finish Depth (mm) BGL | No. of Blows | Blows Per Layer | DCP mm/Blows | Ave Estimated Layer (CBR %) |
|----------------------|-----------------------|--------------|-----------------|--------------|-----------------------------|
| 0                    | 135                   | 7            | 7               | 19.29        | 13.23                       |
| 135                  | 385                   | 18           | 11              | 22.73        | 11.12                       |
| 385                  | 485                   | 28           | 10              | 10.00        | 26.49                       |
| 635                  | 915                   | 54           | 26              | 10.77        | 24.49                       |
|                      |                       |              |                 |              |                             |

#### Comments

|                       |                    |              |                     |              |
|-----------------------|--------------------|--------------|---------------------|--------------|
| <b>Site Engineer:</b> | <b>Checked By:</b> | <b>Date:</b> | <b>Approved By:</b> | <b>Date:</b> |
| AT                    | ST                 | 24/11/2015   | MD                  | 24/11/2015   |

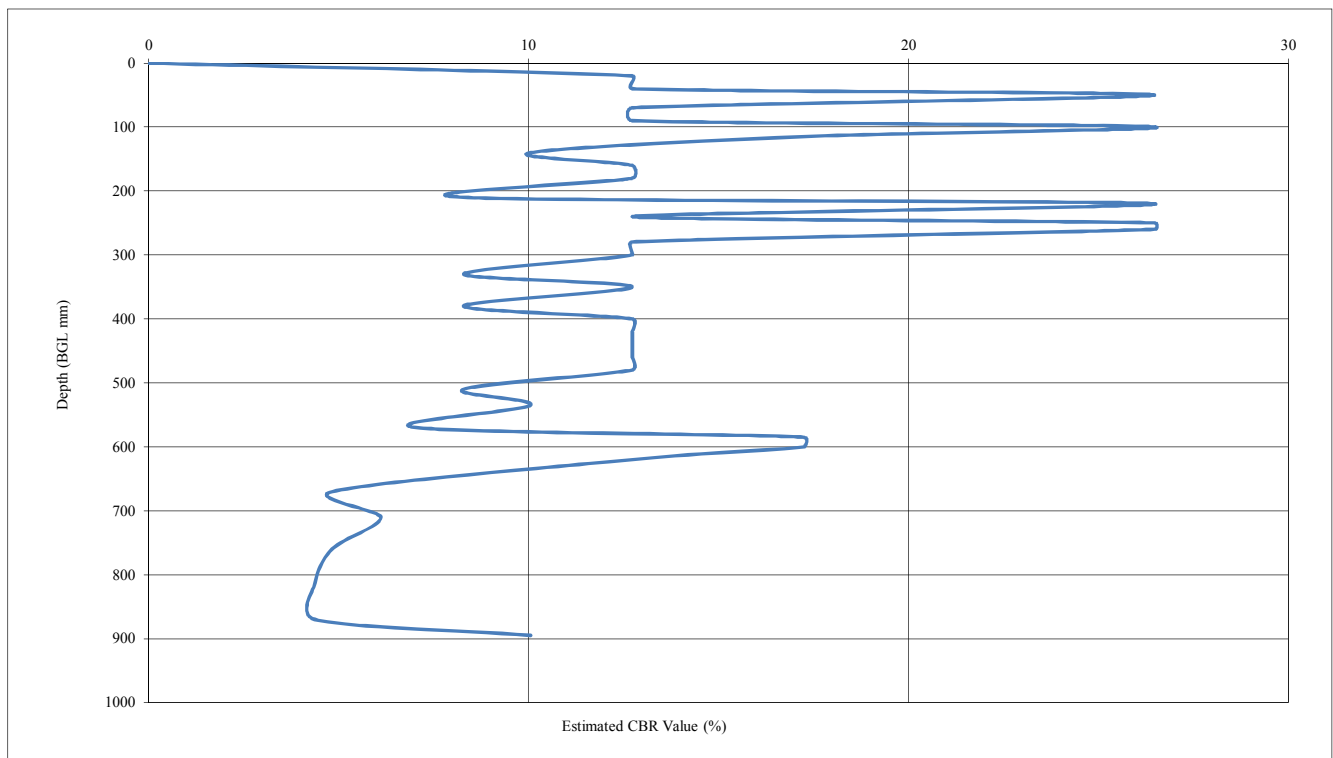


## Determination of Dynamic Cone Penetrometer - Estimated CBR Value (%)

*In Accordance with TRL Report PR/INT/277/04*

|                                |            |                       |            |
|--------------------------------|------------|-----------------------|------------|
| <b>Site Name</b>               | Prescot    | <b>Test Date:</b>     | 15/07/2015 |
| <b>Site Ref</b>                | 10021      | <b>Test Location:</b> | Prescot    |
| <b>Test No.:</b>               | PC DCP 134 | <b>Easting:</b>       | N/A        |
| <b>Initial Depth (mm BGL):</b> | 0          | <b>Northing:</b>      | N/A        |
| <b>Final Depth (mm BGL):</b>   | 895        |                       |            |

### Estimated California Bearing Ratio Graph



| Start Depth (mm) BGL | Finish Depth (mm) BGL | No. of Blows | Blows Per Layer | DCP mm/Blows | Ave Estimated Layer (CBR %) |
|----------------------|-----------------------|--------------|-----------------|--------------|-----------------------------|
| 0                    | 140                   | 8            | 8               | 17.50        | 14.66                       |
| 140                  | 210                   | 11           | 3               | 23.33        | 10.82                       |
| 210                  | 330                   | 18           | 7               | 17.14        | 14.98                       |
| 330                  | 570                   | 28           | 10              | 24.00        | 10.50                       |
| 570                  | 895                   | 37           | 9               | 36.11        | 6.82                        |

#### Comments

|                       |                    |              |                     |              |
|-----------------------|--------------------|--------------|---------------------|--------------|
| <b>Site Engineer:</b> | <b>Checked By:</b> | <b>Date:</b> | <b>Approved By:</b> | <b>Date:</b> |
| AT                    | ST                 | 24/11/2015   | MD                  | 24/11/2015   |

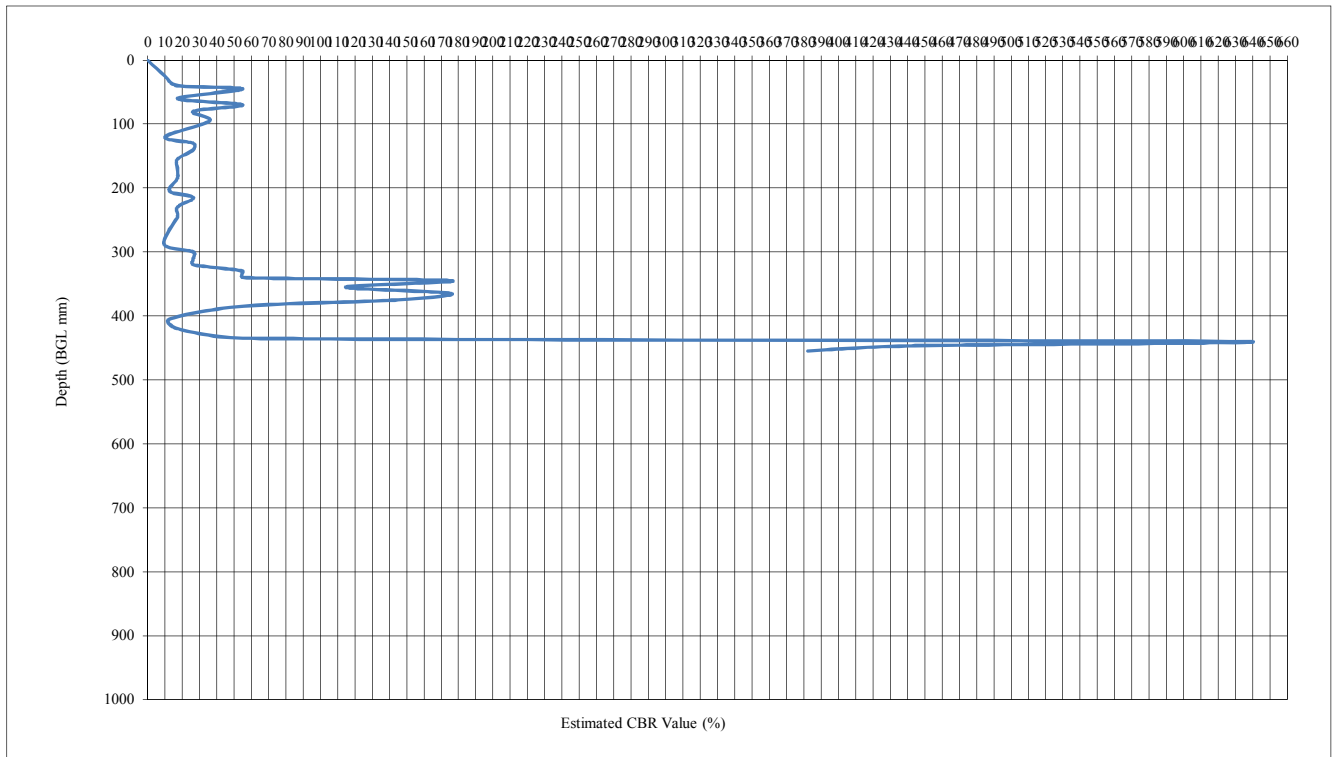


## Determination of Dynamic Cone Penetrometer - Estimated CBR Value (%)

In Accordance with TRL Report PR/INT/277/04

|                         |            |                |            |
|-------------------------|------------|----------------|------------|
| Site Name               | Prescot    | Test Date:     | 15/07/2015 |
| Site Ref                | 10021      | Test Location: | Prescot    |
| Test No.:               | PC DCP 135 | Easting:       | N/A        |
| Initial Depth (mm BGL): | 0          | Northing:      | N/A        |
| Final Depth (mm BGL):   | 480        |                |            |

### Estimated California Bearing Ratio Graph



| Start Depth (mm) BGL | Finish Depth (mm) BGL | No. of Blows | Blows Per Layer | DCP mm/Blows | Ave Estimated Layer (CBR %) |
|----------------------|-----------------------|--------------|-----------------|--------------|-----------------------------|
| 0                    | 80                    | 7            | 7               | 11.43        | 23.00                       |
| 80                   | 290                   | 21           | 14              | 15.00        | 17.25                       |
| 290                  | 405                   | 49           | 28              | 4.11         | 67.84                       |
| 405                  | 455                   | 83           | 34              | 1.47         | 200.89                      |
|                      |                       |              |                 |              |                             |

#### Comments

|                |             |            |              |            |
|----------------|-------------|------------|--------------|------------|
| Site Engineer: | Checked By: | Date:      | Approved By: | Date:      |
| AT             | ST          | 24/11/2015 | MD           | 24/11/2015 |

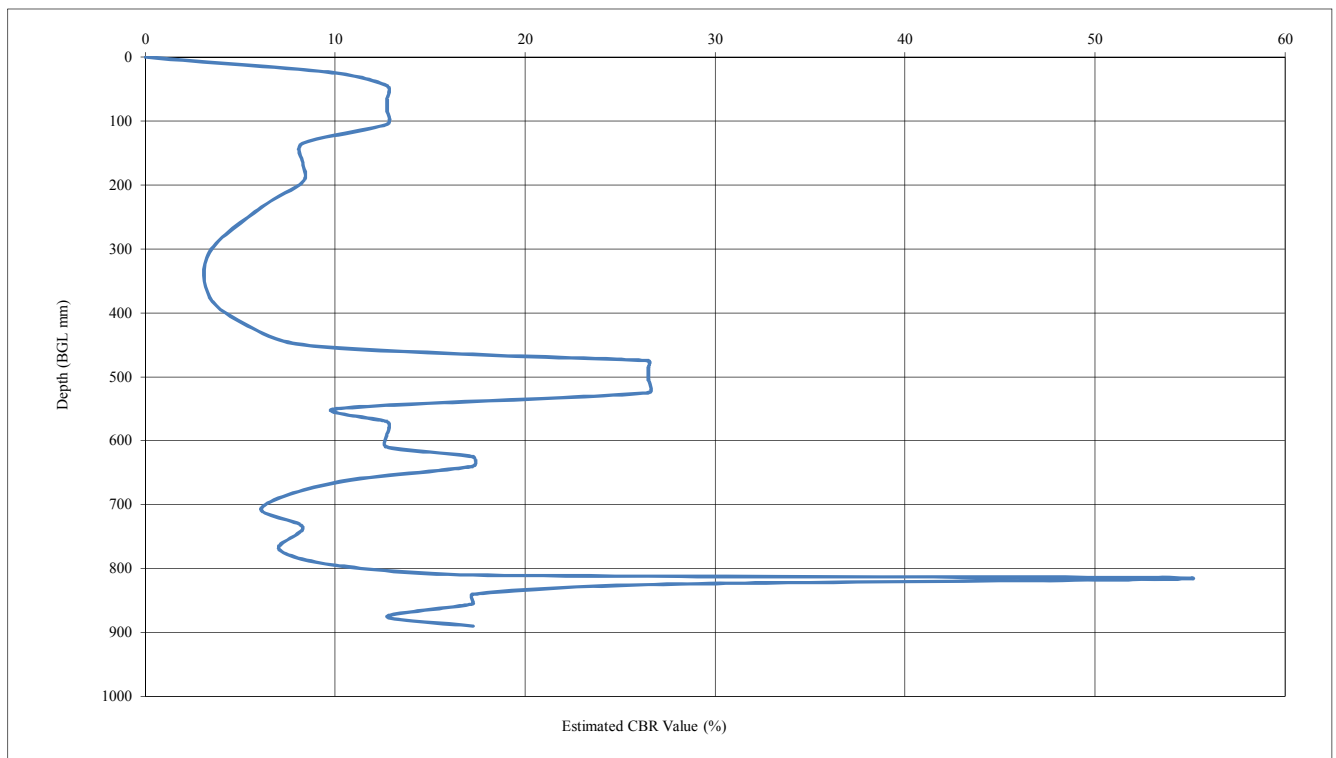


## Determination of Dynamic Cone Penetrometer - Estimated CBR Value (%)

In Accordance with TRL Report PR/INT/277/04

|                         |            |                |            |
|-------------------------|------------|----------------|------------|
| Site Name               | Prescot    | Test Date:     | 15/07/2015 |
| Site Ref                | 10021      | Test Location: | Prescot    |
| Test No.:               | PC DCP 136 | Easting:       | N/A        |
| Initial Depth (mm BGL): | 0          | Northing:      | N/A        |
| Final Depth (mm BGL):   | 890        |                |            |

### Estimated California Bearing Ratio Graph



| Start Depth (mm) BGL | Finish Depth (mm) BGL | No. of Blows | Blows Per Layer | DCP mm/Blows | Ave Estimated Layer (CBR %) |
|----------------------|-----------------------|--------------|-----------------|--------------|-----------------------------|
| 0                    | 135                   | 6            | 6               | 22.50        | 11.24                       |
| 135                  | 450                   | 13           | 7               | 45.00        | 5.40                        |
| 450                  | 550                   | 21           | 8               | 12.50        | 20.92                       |
| 550                  | 795                   | 31           | 10              | 24.50        | 10.27                       |
| 795                  | 890                   | 38           | 7               | 13.57        | 19.18                       |

#### Comments

|                |             |            |              |            |
|----------------|-------------|------------|--------------|------------|
| Site Engineer: | Checked By: | Date:      | Approved By: | Date:      |
| AT             | ST          | 24/11/2015 | MD           | 24/11/2015 |

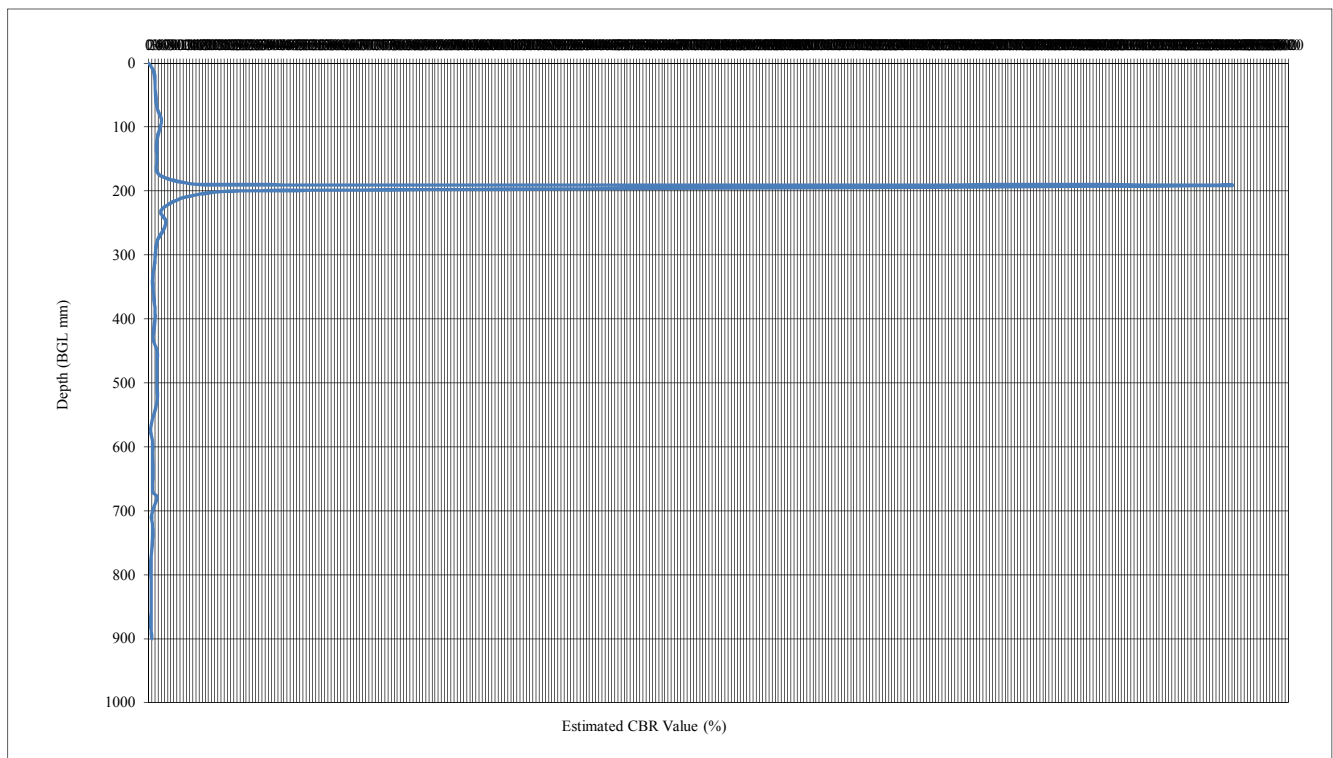


## Determination of Dynamic Cone Penetrometer - Estimated CBR Value (%)

*In Accordance with TRL Report PR/INT/277/04*

|                         |            |                |            |
|-------------------------|------------|----------------|------------|
| Site Name               | Prescot    | Test Date:     | 15/07/2015 |
| Site Ref                | 10021      | Test Location: | Prescot    |
| Test No.:               | PC DCP 137 | Easting:       | N/A        |
| Initial Depth (mm BGL): | 0          | Northing:      | N/A        |
| Final Depth (mm BGL):   | 900        |                |            |

### Estimated California Bearing Ratio Graph



| Start Depth (mm) BGL | Finish Depth (mm) BGL | No. of Blows | Blows Per Layer | DCP mm/Blows | Ave Estimated Layer (CBR %) |
|----------------------|-----------------------|--------------|-----------------|--------------|-----------------------------|
| 0                    | 170                   | 17           |                 | #DIV/0!      | #DIV/0!                     |
| 170                  | 230                   | 50           | 33              | 1.82         | 160.53                      |
| 230                  | 900                   | 92           | 42              | 15.95        | 16.17                       |
|                      |                       |              |                 |              |                             |
|                      |                       |              |                 |              |                             |

#### Comments

|                |             |            |              |            |
|----------------|-------------|------------|--------------|------------|
| Site Engineer: | Checked By: | Date:      | Approved By: | Date:      |
| AT             | ST          | 24/11/2015 | MD           | 24/11/2015 |