Addendum to Contract Completion Report

Former Bayer CropScience Site
Hauxton
Cambridgeshire

December 2012

On behalf of:

Harrow Estates Plc

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REPORT TITLE: **Addendum to Contract Completion Report, Former Bayer CropScience Site, Hauxton, Cambridgeshire**

REPORT NUMBER: 907BRI/RevB

CLIENT NAME: **Harrow Estates Plc**

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Project Manager	Signed	Date
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QA Approved	Signed	Date
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Issue:1	Final Revision A	13/8/12
Issue:2	Final Revision B	11/12/12

Contents

Appendices

1 Introduction

1.1 General

Vertase FLI Limited (VertaseFLI) was appointed by Harrow Estates (Client) to undertake remedial works at the Former Bayer Crop Science Agrochemical Works, Cambridge Road, Hauxton, Cambridgeshire (the Site). The site was used for the storage and production of agrochemicals (pesticides and herbicides) from the 1940's through to ceasing production in 2004. The site was determined as a Special Site under Part 2a of the Environmental Protection Act (EPA) 1990 due to the identified significant pollutant linkages with respect to groundwater and surface water resulting from the former use of the site.

The main remedial works were undertaken between March 2010 and December 2011 and comprised the following:

- The excavation of contaminated soil material;
- The treatment of excavated soil material via the formation of biopiles or treatment beds (including the addition of organic matter) and turning of the contaminated soil material;
- The recovery, treatment and discharge of contaminated groundwater; and
- The reinstatement of the remediated soil material.

Due to the size and complexity of the remedial works undertaken at the site, a number of reports have been produced which together with this report comprise a full validation of the remediation works undertaken at the site:

- VertaseFLI (2012a) 'Contract Completion Report, Former Bayer Crop Science Site, Hauxton, Cambridgeshire', December 2012 – Revision B.
  Detailing all work undertaken during the remedial works including all chemical analysis results and site conditions on completion.
- VertaseFLI (2012b) 'Post Remediation Quantitative Risk Assessment for Controlled Waters, Former Bayer Crop Science Site, Hauxton, Cambridgeshire', December 2012 – Revision B.
  Including the final post-remediation site model and detailed quantitative assessment of risks to controlled waters (the Riddy Brook) from the reinstated remediated soil material on completion of remediation.

- VertaseFLI (2012d) 'Validation Completion Report, Former Bayer Crop Science Site, Hauxton, Cambridgeshire', December 2012 – Revision B.

  Presenting the results of the six month post remediation groundwater monitoring and also provides assessment and detailed quantitative assessment of the potential for risks to the Riddy Brook from the identified Contaminants of Concern (CoCs) present within groundwater.

The purpose of this report is to present factual information on additional works that were carried out at the site between 26/07/12-03/08/2012, detailing the methods employed and the validation data collected by VertaseFLI, including:

- The removal of a manhole, associated pipe-work and low level contaminated soils identified outside of the original remediation boundary in grid-square B16, adjacent to the Riddy Brook, following site investigation works in this grid-square.
- The reinstatement of one stockpile (TB179). This type B material could not be reinstated before the completion of the main phase of works in December 2011. This material was confirmed to be suitable for reuse below the capping layer.

This report is an addendum to VertaseFLI (2012a) 'Contract Completion Report, Former Bayer Crop Science Site, Hauxton, Cambridgeshire', December 2012 – Revision B.

1.2 Relevant Reports

It is assumed that the reader is familiar with all relevant reports for the site detailed below:

- VertaseFLI (2009), 'Remediation Method Statement – Former Bayer Crop Science Site, Hauxton Cambridgeshire', April 2009 – Revision 6.
- VertaseFLI (2011a), 'Validation Protocol, Former Bayer Crop Science Site, Hauxton, Cambridgeshire', February 2011 – Revision 4.
- VertaseFLI (2011b), 'Remediation Proposal for the Bentonite Wall, Former Bayer Crop Science Site, Hauxton, Cambridgeshire', April 2011.
- VertaseFLI (2011c), 'Further Quantitative Risk Assessment for Controlled Waters and Preliminary Post Remediation Validation Model, Former Bayer Crop Science Site, Hauxton, Cambridgeshire', July 2011 – Revision B.
- VertaseFLI (2011d) 'Further Quantitative Risk Assessment for Contaminants Not Previously Identified, Former Bayer Crop Science Site, Hauxton, Cambridgeshire', November 2011.
- VertaseFLI (2012c) 'Groundwater Validation Addendum Report, Former Bayer Crop Science Site, Hauxton, Cambridgeshire', December 2012 – Revision B

In addition to the reports listed above, the client's independent environmental consultant Atkins Global (Atkins) has produced the following reports which all relate to Contaminants Not Previously Identified (hereafter referred to as CNPI):

- Atkins Ltd (2010), 'Former Bayer Crop Science, Hauxton, Harrow Estates, Protocol for assessment and reporting of Characterisation Samples showing Contaminants Not Previously Identified', July 2010 – Revision 0.
- Atkins Ltd (2010), 'Former Bayer Crop Science, Hauxton: Risk Assessment of Contaminants Not Previously Identified', 8th July 2010.
- Atkins Ltd (2010), 'Former Bayer Crop Science, Hauxton: Risk Assessment of Contaminants Not Previously Identified; Grid Cells H10,I10, J10, K10 NAPL, K11, K12, K13 sand & gravel, K13 chalk, L11, L12 and L13', 18th August 2010.
- Atkins Ltd (2010), 'Former Bayer Crop Science, Hauxton: Risk Assessment of Contaminants Not Previously Identified; Grid Cells J12, J13', 14th September 2010.
- Atkins Ltd (2010), 'Former Bayer Crop Science, Hauxton: Risk Assessment of Contaminants Not Previously Identified; Grid Cells H14, H15, I11, I12, I13, I14, I15 and J14', 22nd September 2010.
- Atkins Ltd (2010), 'Former Bayer Crop Science, Hauxton: Risk Assessment of Contaminants Not Previously Identified; Grid Cell H11, H12, H13 and J15 (CNPI Letter No. 5)', 27th October 2010.
- Atkins Ltd (2010), 'Former Bayer Crop Science, Hauxton: Risk Assessment of Contaminants Not Previously Identified; Grid Cells G12, G13, G14, G17 and H17 (CNPI letter No. 6)', 22nd November 2010.
- Atkins Ltd (2010), 'Former Bayer Crop Science, Hauxton: Risk Assessment of Contaminants Not Previously Identified; Grid Cells G10-G11, G15, I6, L4-L5, M4-M9, N3-N6 (CNPI Letter No. 7)', 30th November 2010.
- Atkins Ltd (2011), 'Former Bayer Crop Science, Hauxton: Risk Assessment of Contaminants Not Previously Identified; Grid Cells D14, D15, E12, E13, E14, E15, F11, F12, F13, F15 and F16 (CNPI letter No. 8)', 21st February 2011.
- Atkins Ltd (2011), 'Former Bayer Crop Science, Hauxton: Risk Assessment of Contaminants Not Previously Identified; Treatment Bed TB100 and Grid Cells J13, K12 and K13 (CNPI letter No. 9)', 24th May 2011.

2 Pre Remediation Conditions

2.1 Pre Remediation Ground Conditions

The pre-remediation ground conditions at the site are summarised in Table 1.

Table 1: Ground Conditions

Description	Thickness
Made Ground (consisting of reworked sand and gravel, chalk marl, alluvium, brick rubble and clinker), foundations, drainage features and voids	Typically up to 2 mbgl, with a maximum thickness of 5 m
Superficial Deposits – Alluvium and River Terrace Gravels typically comprising	Generally <3 m thick where present. Completely replaced by Made Ground in parts of the site
West Melbury Marly Chalk Formation (WMMCF) – typically comprising stiff clay with thin isolated discontinuous lenses of sand and gravel	Present in the south and northwest of the Site only. Typically less than 3 m thick with a maximum thickness of 7 m in some areas.
Cambridge Greensand	Not identified in available logs/data.
Gault Formation (Gault Clay)	Typically present at a depth of 5 mbgl underlying Made Ground/Superficial Deposits/WMMCF, the thickness is understood to be up to 50 m.
Woburn Sands Formation (Lower Greensand)	Not encountered but typically between 15 – 20 m thick based on the BGS solid and drift map.

Prior to remediation, groundwater was typically present at depths between 0.69 and 2.42 m below ground level (mbgl) with an average depth on the site of 1.3 mbgl. Based on the available site investigation data pre-remediation, groundwater flow was assumed to occur within the granular Made Ground and drift deposits, site infrastructure, and within the discontinuous sand and gravel lenses within the underlying WMMCF.

2.2 Remediation Approach

The methodology for undertaking the remedial work was set out in the VertaseFLI Remediation Method Statement – Rev 6 (VertaseFLI 2009), which in summary was to:

- Remove all uncertainty relating soils and groundwater within the site area by excavation, characterisation and treatment of all ground and groundwater;
- Break all preferential contaminant pathways (such as migration through existing site infrastructure); and
- Reduce the contaminant mass within soils as far as the practical limits of cost effective technology permitted to be protective of both the environment (controlled waters) and future users of the site.

Due to the size of the site and the magnitude of the excavation works anticipated, a site grid referencing system was established in order to facilitate the collection and representation of data, as described in the RMS. Each grid is 22 by 22 metres in size. The site grid and VertaseFLI DQRA zones are displayed in drawing D907_163 in Appendix A of Vertase 2012a for reference.

2.3 Remediation Works Summary

Full details of the remediation works are given in the completion report (VertaseFLI 2012a). The remedial works comprised the following activities:

- Breaking, uplifting, crushing and sampling of concrete slabs;
- Excavation, breaking crushing and sampling of underground obstructions;
- Pumping and treatment of shallow groundwater and perched waters;
- Services diversions;
- Excavation of contaminated soils;
- Sorting, classification, processing and segregation of soils;
- Preparation of soils for treatment;
- Treatment of contaminated soils;
- Removal of all preferential pathways e.g. pipelines, drainage runs; and
- Re-instatement of soils.

Materials were excavated under and were segregated according to their material type as follows:

- Type A – Granular Made Ground and sand and gravel;

- Type B – Cohesive Made Ground and WMMCF; and
- Type C – Gault Clay Formation

Soils were further segregated based on visual and olfactory evidence of contamination. A total of approximately 171,983 m^3 soil material was excavated during the remediation works. 116,561 m^3 of the excavated soils required treatment prior to reinstatement and 2,000 m^3 was not suitable for treatment and exported from site for off-site disposal.

All materials requiring treatment were constructed into treatment beds for biological treatment. Beds were mechanically turned in order to: further homogenise materials by breaking down larger soil clasts, increasing the surface area of material to aeration; and ensure regular aeration of the materials. Amendments were added to a number of treatment beds to enhance the remediation process.

Soil material was reinstated in 250 mm layers and compacted to comply with earthworks specification. The placement of soil material was based on remedial targets derived in VertaseFLI 2011c and 2011d.

3 Post Remediation Ground Conditions

During the remediation works, a buffer zone of a minimum of 20 m (Zone 1) was set from the site boundary with the Riddy Brook in which the most stringent remedial targets were set. Zone 1 was reinstated with type B and Type C materials, with the exception of an area of type A materials (see Vertase 2012a and Vertase 2012b).

Outside of the buffer zone, reinstatement of the remediated soil material replicated the naturally occurring strata as closely as possible so that Type A material was placed over Type B material over Type C material. Additionally, a hard to dig layer of crushed concrete was placed over the reinstated soil material. The thickness of each unit is as follows:

- No Dig Layer – Placed at surface
- Type A material – The Type A material was reinstated in discrete discontinuous zones across the site. Where present the reinstated Type A material is typically up to 0.5 m thick with a maximum thickness of 1 m in some locations. As described above, clean sand and gravel was also reinstated within Zone 1 to depths typically between 1 and 2.5 mbgl along a portion of the eastern site boundary (adjacent to the Riddy Brook) with the thickness increasing towards the Riddy Brook (See VertaseFLI 2012a, Section 9.4.3).
- Type B material – Thickness of the reinstated material is between 0.25 to 3.75 m thick with a typical thickness of approximately 2.0 m. Thickness of WMMCF remaining *in-situ* in the south of the site is in the order of 5 m. It should be noted that the excavation and remediation resulted in the homogenisation of the soils and in the case of the WMMCF. As a result the lenses of sand and gravel observed in the WMMCF in the pre-remediation investigations are not present in the reinstated soils; and
- Type C material – The total thickness of Gault Formation underlying the site is understood to be up to 50 m.

4 Additional Works July 2012

4.1 Summary

The purpose of this section of the report is to provide a factual account of all excavation, validation and restoration works carried out between 26/07/12 and 03/08/12.

4.2 B16 Manhole Excavation

4.2.1 General

Historically there has been a number of seepages identified along the length of the Riddy Brook which have been sampled and monitored throughout the works. In January 2012 it became evident from post completion monitoring and assessment that one of these such seepages in the bank of the Riddy Brook (drawing D907_231) was continuing to seep with several contaminants of concern being present even following remediation of the main site. This seepage was sampled in January 2012, identifying the low level presence of Dimefox, Hempa, Schradan, Ethofumesate, Simazine, Dicamba, Tetrachloroethene, Trichloroethene (TCE) and Cis-1,2-Dichloroethene. TCE being the most significant. At the time of sampling the source of the contamination was unknown although it appeared to occur beyond the original remediation boundary in un-remediated soils. Full details of this can be found in VertaseFLI 2012c.

4.2.2 Site Investigation

In March 2012, site investigation works were carried out in an area of un-remediated soils adjacent to the seepage in the Riddy Brook (drawing D907_231, Appendix A). Vegetation was cleared from the area under the supervision of an ecologist prior to site investigation works.

Three trial pits were excavated within the un-remediated offsite area to a maximum depth of 2.0 mbgl. Soil samples were taken at appropriate intervals in each trial pit and tested for the Hauxton Soil Suite of contaminants. The results of this analysis are included in Appendix C. During the trial pitting exercise a metal-shuttered concrete chamber was identified in the face of trial pit 2 (see *figure 1* in Appendix B). Further excavation of surface soils revealed this to be a hollow circular chamber, approximately 2.5 metres in diameter with a base approximately 1.5 mbgl (see *figure 2* in Appendix B). This was suspected to be a former underground storage tank (UST). Due to the unknown origin of this structure and the potential for localised contamination, it was not excavated at this time and was subsequently covered with polythene to prevent continued surface water infiltration through a potential contaminant source.

4.2.3 Excavation

Excavation of grid square B16 was carried out on 26/07/12. The location of the excavation is displayed on drawing D907_230. Excavation was carried out to a maximum depth of 2.0 mbgl. A standoff of 1m from the boundary fence was maintained to the north (adjacent to the Riddy Brook) and the east (adjacent to a public footpath) as displayed in Drawing D907_231 in Appendix A. To the south and west excavation extended to the original site backfill, with all natural strata/Made Ground being removed to 2 mbgl. Excavation was not undertaken below 2 mbgl due to the proximity of the Riddy Brook and the potential for the collapse of unconsolidated materials in the faces of the excavation.

All type B materials were removed from around the concrete structure at the centre of the excavation. The concrete structure was identified as a manhole which was excavated along with an outfall pipe (*figure 3* and *figure 4*, Appendix B). As shown in drawing D907_231 in Appendix A, the manhole outfall ran from the manhole to the north-east, towards the Riddy Brook. The outfall was excavated to the edge of the excavation as displayed in drawing D907_231 in Appendix A and in *figure 5* in Appendix B.

The manhole outfall was filled with bentonite prior to reinstatement (see *figure 6* in Appendix B). Following reinstatement of the excavation, a trial pit was excavated down to the face of the pipe and a bentonite plug was installed along the full length of the pipe and the surrounding pea gravel in order to provide additional confidence that this preferential pathway to the Riddy Brook had been cut at the site boundary (*figure 7* in Appendix B). Bentonite was hydrated in situ prior to backfill of type B materials.

The concrete manhole and outfall were broken up using a mechanical breaker and added to the existing crush concrete pile as shown in drawing D907_233 (Appendix A).

In addition to the manhole and outfall, a steel pipe was identified approximately 0.5 mbgl along the southern edge of the excavation (see *figure 8* in Appendix B). The fall of this pipe was west to east along the original site boundary, exiting site on the east boundary beneath the public footpath as shown in drawing D907_231 in Appendix A. The steel pipe was fully excavated onsite to the edge of the site boundary but could not be excavated beyond the site boundary.

The steel pipe was cut at the site boundary as displayed in drawing D907_231 in Appendix A.The steel pipe was filled with bentonite which was hydrated in situ. Bentonite was placed around the outside of the pipe prior to reinstatement (*figure 9* in Appendix B).

A cast iron pipe was identified running from south to north approximately 0.4 mbgl within the excavation. The pipe terminates above the Riddy Brook as shown in *figure 10* and *11* in Appendix B. This pipe was fully excavated onsite and was cut at the site boundary as shown in drawing D907_231. The pipe was left within the bank of the Riddy Brook, beyond the remediation boundary, so as not to disturb the bank of the Brook.

One monitoring borehole (BH B16) was decommissioned and excavated as part of the works.

4.2.4 Geology and Hydrogeology

The southern and western faces of the excavation comprised of reinstated clean site won type B material as detailed in Vertase 2012a. Materials in the north and east faces of the excavation comprised of intermittent bands of sand/gravel, fluvial sediments (type A) and marl (type B). The base of the excavation was comprised of marl and sand and gravel.

The strata around the manhole outfall pipe was generally consolidated marl with limited sand and gravel, however, a preferential pathway was present as the pipe had been installed with pea gravel around the outside.

Excavated materials comprised of sand/gravel, fluvial sediments (type A) and marl (type B).

Groundwater was encountered approximately 1.9 mbgl. It should be noted that the groundwater was encountered below the base of the Riddy Brook (approximately 1.7mbgl) at this location.

4.2.5 Contamination

There was no visual or olfactory evidence of contamination in the excavation faces, however, the strata at the base of the excavation had a very slight solvent odour. No elevated readings for total volatiles were recorded on the handheld photo ionisation detector (PID).

4.2.6 Validation

Validation of the south and west faces of the excavation was not necessary as this material had been validated prior to its reinstatement in the main phase of works completed in December 2011 (see VertaseFLI 2012a) and there was no further evidence of contamination. Validation samples were taken from the north and east faces of the excavation. Two base validations were sent for analysis. Validation results can be viewed in Appendix C.

The excavated material had been previously tested in the March 2012 site investigation through trial pit sampling (see section 4.3.2). Excavation was necessary, despite chemical analysis showing only low levels of COC, due to the proximity of the area to the Riddy Brook and the concern for the presence of direct pathways. This material was suitable for reinstatement within the remediation boundary, outside of the 20 m buffer zone beneath the capping layer and was sent for immediate reinstatement along with TB179 (see section 4.4.3).

4.3 Reinstatement

4.3.1 General

All excavations onsite were restored following validation. Soil material was typically reinstated in 200-250 mm layers and compacted to comply with earthworks specification as per the Vertase 2006, Appendix F.

4.3.2 B16 excavations

Materials reinstated within B16 excavations were required to be clean due to the proximity of these two areas to the receptor. Type B material was imported from an offsite source. Import of this material was agreed with South Cambridgeshire District Council. Material was sampled and assessed by VertaseFLI along with representatives of SCDC prior to import. Samples were tested for the Hauxton COC suite, the Hauxton Screen Suite (to identify any CNPI) and a general human health/land assessment suite. The sampling frequency of imported materials was agreed with SCDC. All sample results were provided to SCDC in accordance with planning condition 12 and 13 of planning permission S2307/06/F. Materials were managed under a Materials Management Plan (MMP) under the CL:AIRE Code Of Practice for Development (COP). Validation data for this material is included in Appendix C.

4.3.3 Treatment Bed 179

As stated in section 10.2 of the Completion Report, a stockpile (TB179) of remediated type B material remained onsite after the main phase of Remediation was completed in December 2011. Excavation of this material was held up due to a delay in the disconnection of services beneath Mill Lane. Subsequently, this material could not be reinstated before the completion of the main phase of works in December 2011 due to poor weather conditions. Validation results included in VertaseFLI 2012a confirm the treatment bed to be suitable for reuse below the capping layer.

Drawing D907_230 in Appendix A shows the grid squares in which TB179 was reinstated (between grid squares L8-J8-L12-J11). The crush concrete capping layer was removed from these grids and stockpiled. Treatment Bed 179 was reinstated in a single 250 mm layer over this area, before reinstatement of the crushed concrete capping layer in a layer approximately 300 mm thick.

In order to provide confidence that this treatment bed was appropriate for reinstatement beneath the capping layer, an additional sample was taken from TB179 for each grid into which it was reinstated (14 samples in total). Samples were tested for the Hauxton COC suite and additional CNPIs identified in the applicable grid square characterisation samples as detailed in Vertase 2012a. Validation results are included in Appendix C. A photo log of the reinstatement works is included between *figures 12* and *18* in Appendix B.

An updated soil audit is included in Appendix D that includes the reinstatement details for TB179.

As part of the reinstatement works, one stockpile of type B material suitable for Zone 1 that was retained in the east corner of site (drawing D907_196 in VertaseFLI 2012a) was reinstated in grid squares A17/A18/B17/B18 (drawing D907_230 in Appendix A). This material could not be reinstated during the main phase of works ending in December 2011, as it had a high moisture content at that time. A retaining bund was placed around this area post reinstatement to prevent surface waters from flowing offsite (*figures 19* to *22* in Appendix B).

4.4 As built Geology

As built features on site are as per section 9.4 of Vertase 2012a, with the exception of grid squares in which TB179 and material excavated from B16 was reinstated, which has raised levels of type B materials by 200-250 mm on average across the area (drawing D907_232 in Appendix A). A final as-

built drawing showing the new topography together with any residual features is enclosed in Appendix A (D907_233). A selection of as-built photographs following the completion of additional works are included between *figures 19* and *26* in Appendix B.

5 Summary

Remedial works were undertaken at the former Bayer Cropscience site in Hauxton, Cambridgeshire between March 2010 and December 2011. This document is a factual report of additional site works that took place between July 2012 and August 2012, including:

- The excavation of a manhole, associated pipework and low-level contaminated materials around the manhole, outside of the remediation boundary adjacent to the Riddy Brook.
- Reinstatement of one stockpile of zone 1 material and one treatment bed that were retained onsite after the main phase of works ended in December 2011 and the reinstatement of imported clean zone 1 material within the area of the manhole excavation.

With the completion of the site works detailed in this report, all site works are now completed. Full validation of the site is included in a number of reports:

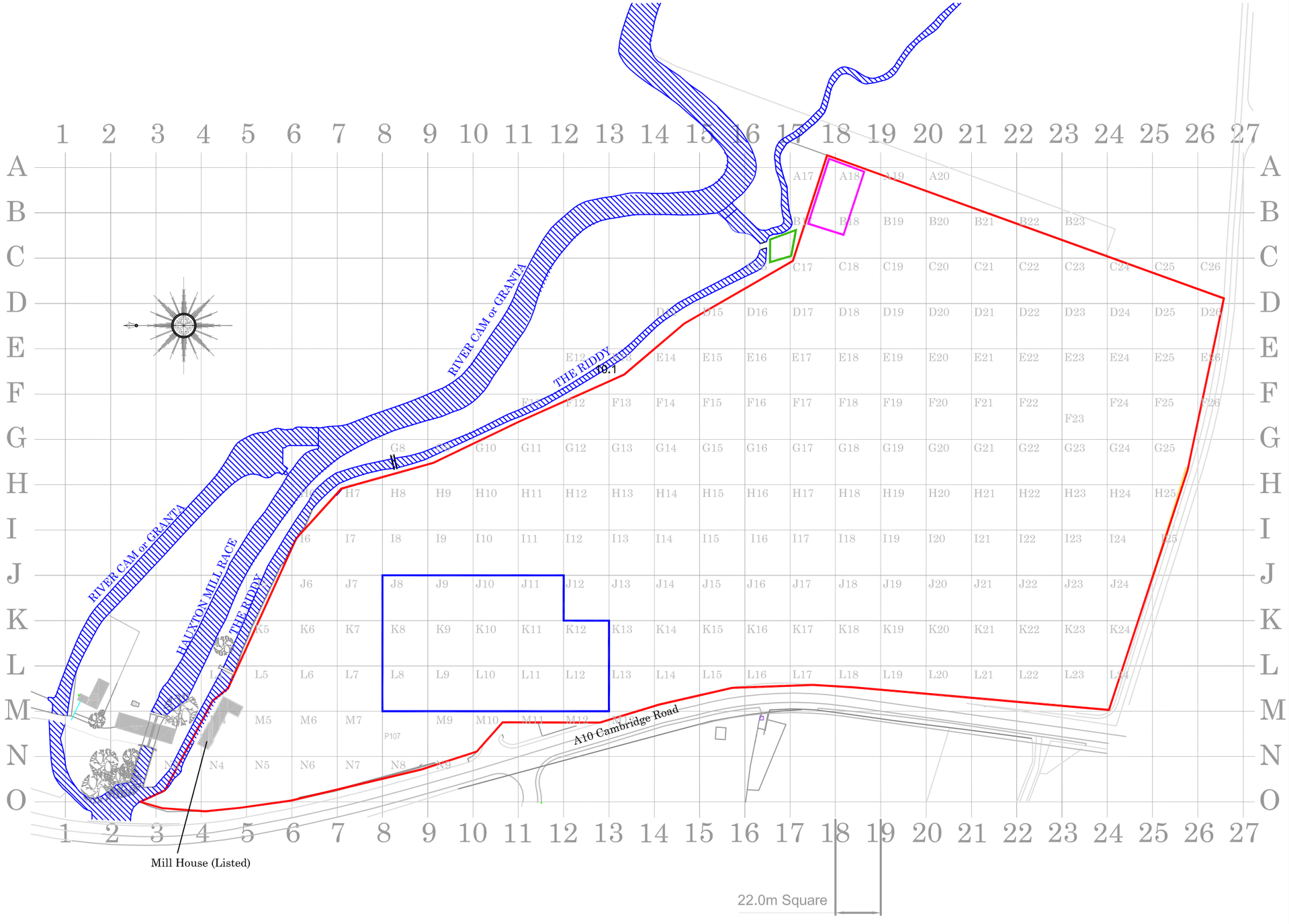
- VertaseFLI (2012a) 'Contract Completion Report, Former Bayer Crop Science Site, Hauxton, Cambridgeshire', May 2012 – Revision A.
- VertaseFLI (2012b) 'Post Remediation Quantitative Risk Assessment for Controlled Waters, Former Bayer Crop Science Site, Hauxton, Cambridgeshire', June 2012 – Revision A.
- VertaseFLI (2012d) 'Draft Validation Completion Report, Former Bayer Crop Science Site, Hauxton, Cambridgeshire', July 2012 – Revision A.
- VertaseFLI (2012e) 'Draft Addendum to the Completion Report, Former Bayer Crop Science Site, Hauxton, Cambridgeshire', August 2012 – Revision A.

All previous assessments of post remediation site conditions take account of the materials reinstated in the final phase of works reported on in this document. It should be noted that this report is an addendum to the Completion Report (Vertase 2012a) only.

Appendix A

Drawings

A3



Legend

- Site Boundary
- Buildings To Remain
- Water Course
- B16 Excavation Works
- Reinstatement Area TB179
- Zone 1 Stockpile Reinstatement

Rev.	Description	Revised By	Date
	FIRST ISSUE		11-08-12

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Rev:

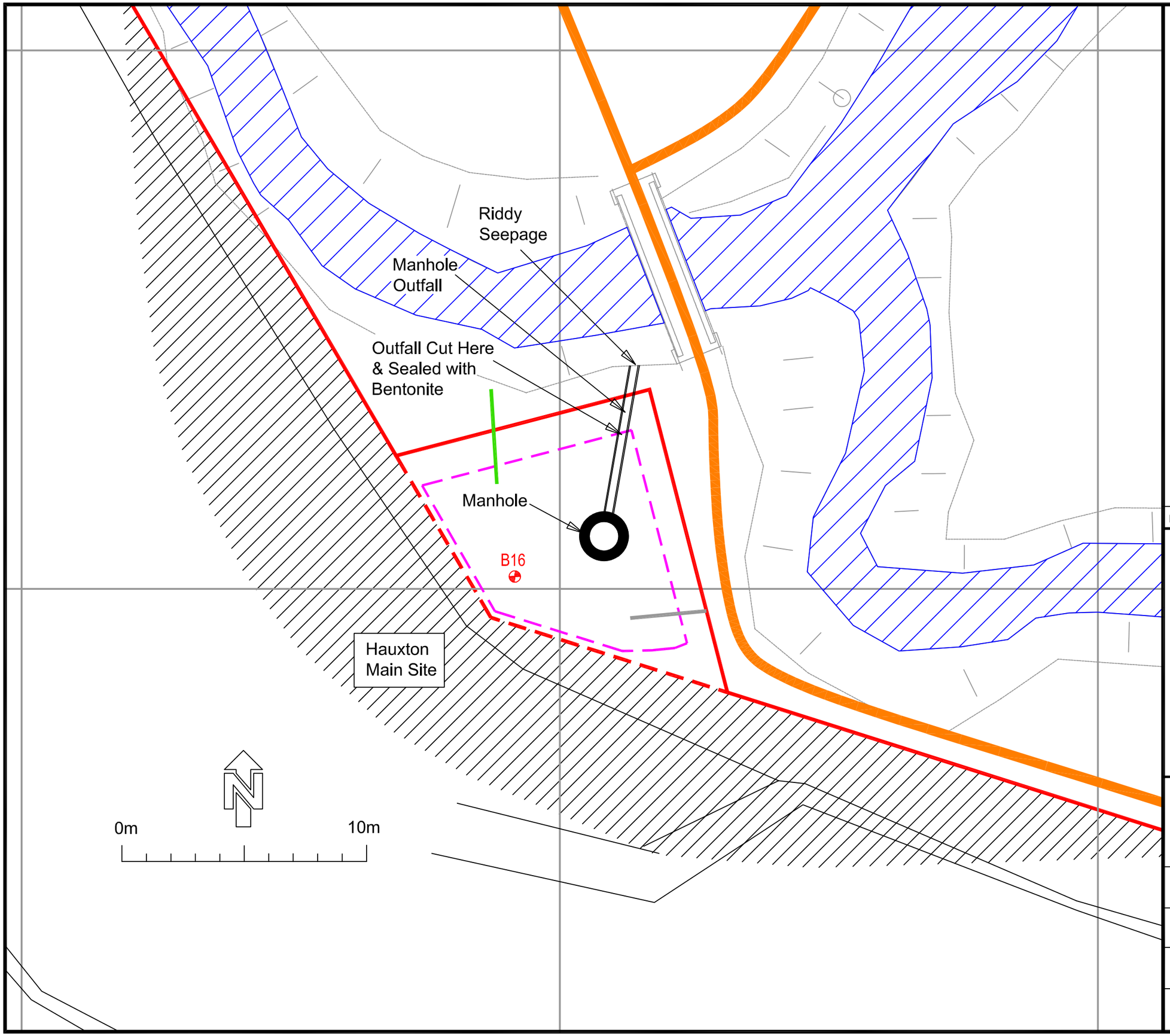
Site Address:

Bayer Site
Hauxton
Cambridge

Title: Site Grid & Location of July 2012 Additional Works

Client: Harrow Estates

Drawn: MRG	Checked: IS	Approved: SE
Dwg: D907_230	Contract: 907 BRI	Scale: 1:2000



A3

Legend

- Boundary Fence
- Original Location of Boundary Fence
- Excavated Area
- Public Footpath
- Excavated Cast Iron Pipe
- Excavated Steel Pipe
- Riddy Brook
- B16 Excavated Borehole B16

Rev.	Description	Revised By	Date
	FIRST ISSUE		24-09-12

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Rev:

Site Address:

Bayer Site
Hauxton
Cambridge

Title: B16 Offsite Excavation

Client: Harrow Estates

Drawn: MRG	Checked: IS	Approved: SE
Dwg: D907_231	Contract: 907BRI	Scale: 1:150

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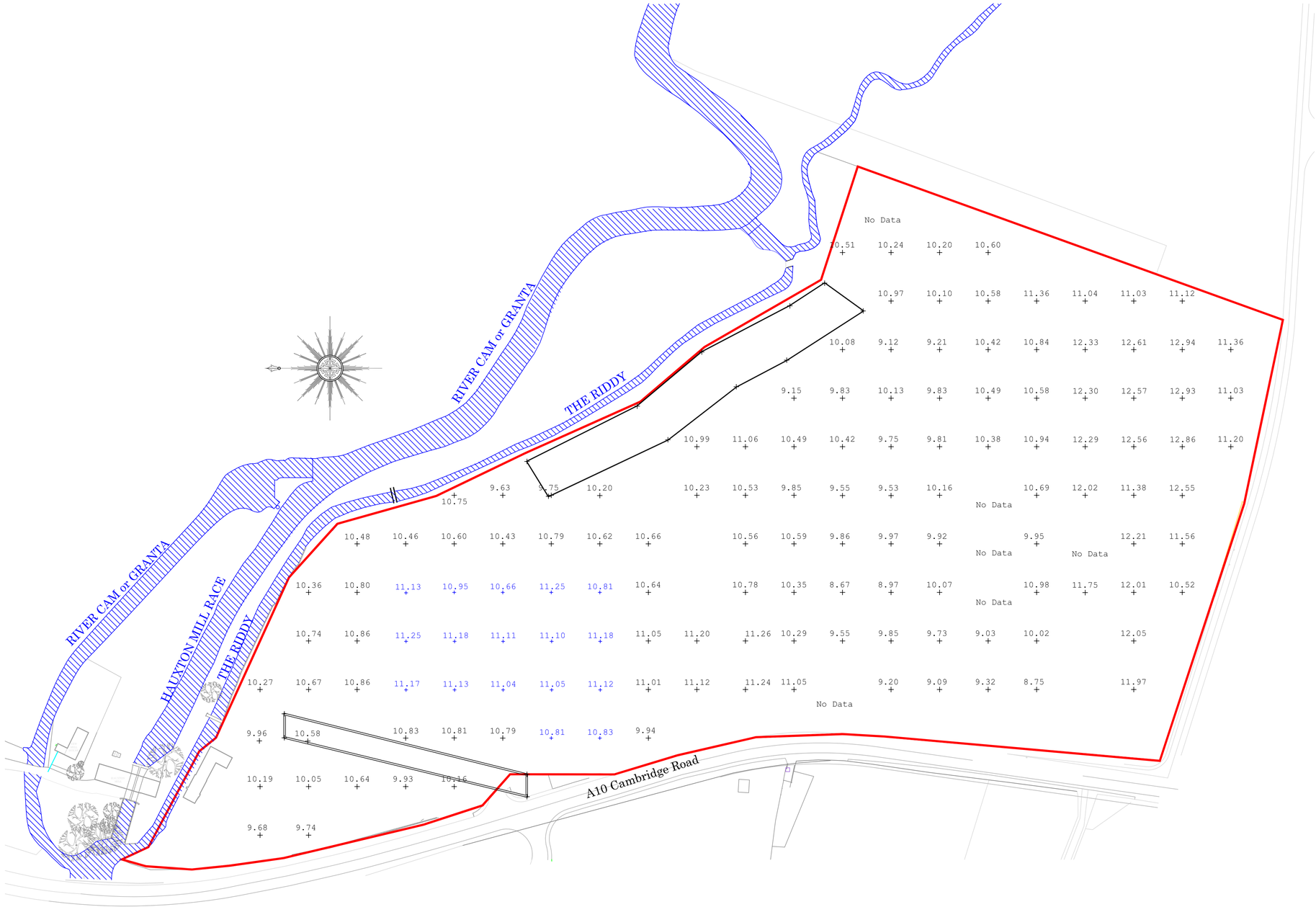

Legend

- Site Boundary
- Water Course
- 10.20 Spot Level (As-Built Level Minus Concrete Crush Layer Minus Sand Thickness)
- 11.17 Spot Level (Post Reinstatement of TB179) Minus Concrete Crush Layer

Rev.	Description	Revised By	Date
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Site Address:

Bayer Site
Hauxton
Cambridge

Rev:

Title: Post Additional Works Levels of Type B Material

Client: Harrow Estates

Drawn: MRG	Checked: IS	Approved: SE
Dwg: D907_232	Contract: 907 BRI	Scale: 1:1000

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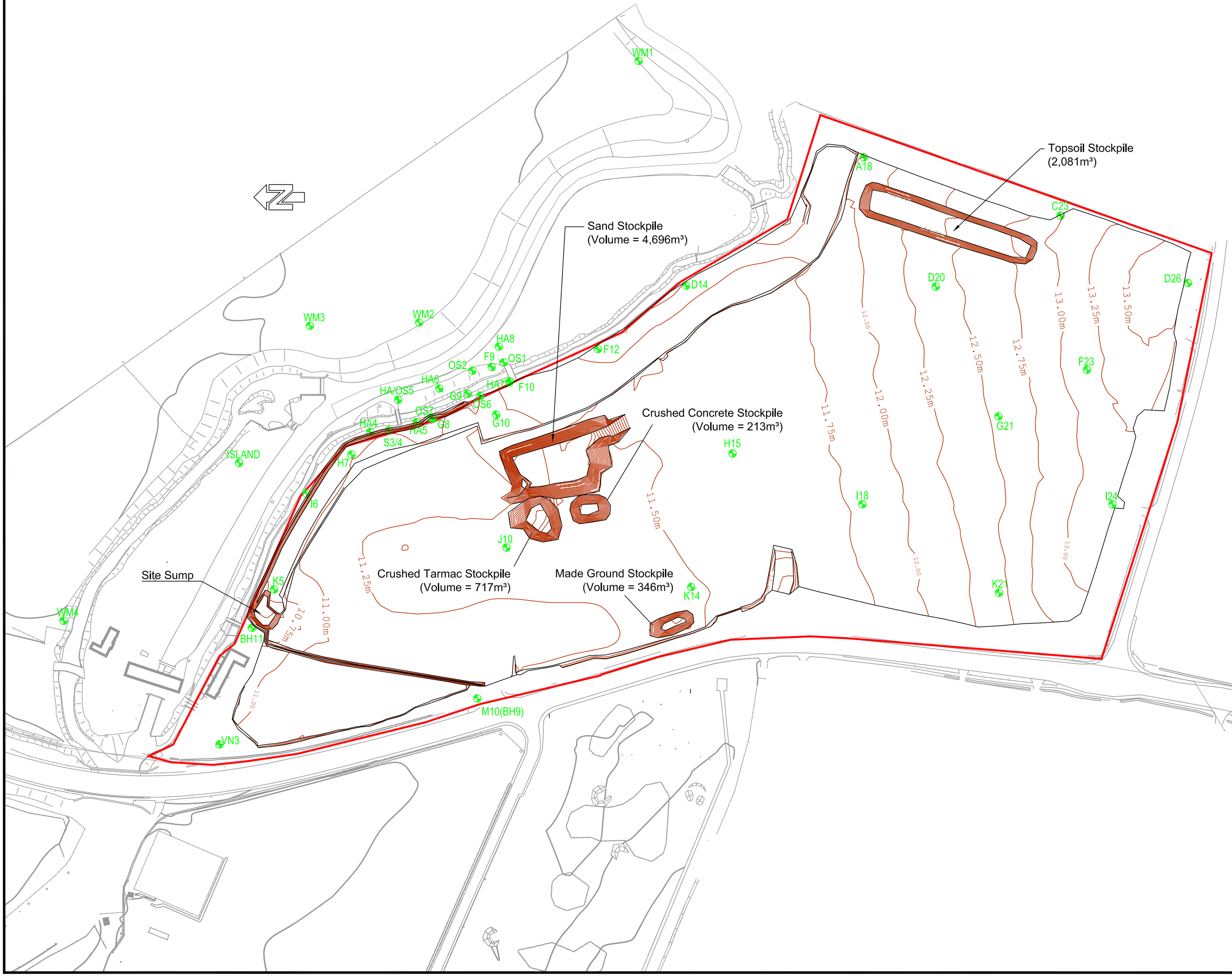

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Site Address:

Bayer Site
Hauxton
Cambridge

Rev:

Title: As Built Site Post July 2012 Additional Works

Client: Harrow Estates

Drawn: JWH	Checked: MA	Approved: SE
Dwg: D907_233	Contract: 907BRI	Scale: 1:1250

Appendix B

Figures

Figure 1. Manhole exposed in face of Trial Pit 2.

Figure 2. Manhole exposed by excavator during site investigation in March 2012.

Figure 3. Manhole post excavation.

Figure 4. Manhole outfall pipe and excavated steel pipe.

Figure 5. Manhole outfall excavated to site boundary.

Figure 6. Manhole outfall fully filled with bentonite behind marl plug.

Figure 7. Bentonite plug being installed along full width of outfall pipe and pea gravel.

Figure 8. Steel pipe exposed in south face of excavation.

Figure 9. Steel pipe filled with bentonite prior to backfill in offsite area.

Figure 10. Cast iron pipe exiting site in top right of picture. Pipe is excavated to site boundary.

Figure 11. Close up of cast iron pipe.

Figure 12. Caterpillar D6 grading up crush concrete to stockpile prior to reinstatement of TB179.

Figure 13. Caterpillar D6 grading up crush concrete to stockpile prior to reinstatement of TB179.

Figure 14. TB179 being loaded into dumper truck for reinstatement. Bed remained covered to face in order to control any unexpected odours.

Figure 15. Caterpillar D6 laying down TB179 in single layer.

Figure 16. Sheep's foot roller compacting TB179.

Figure 17. Final section of TB179 being reinstated.

Figure 18. Caterpillar D6 reinstating crush concrete cap on top of TB179.

Figure 19. Zone 1 stockpile reinstated in grids A17, A18 B17, B18.

Figure 20. Retaining bund around reinstated material in A17, A18, B17, B18.

Figure 21. Retaining bund around reinstated material in A17, A18, B17, B18.

Figure 22. Reinstated off-site (B16) area with retaining bund around edge of reinstatement.

Figure 23. As-built: Former location of TB179.

Figure 24. As built: Area of reinstatement of TB179 (retained tarmac stockpile in foreground).

Figure 25. As built: Area of reinstatement of TB179 (retained tarmac stockpile in foreground).

Figure 26. As built: Area of reinstatement of TB179 (retained tarmac stockpile to right, retained made ground stockpile to left, retained crush concrete stockpile (relocated) in background).

Appendix C

Analytical Sample Results

Imported Material

Report Date	Report Number	Sample Reference	Electrical Conductivity µS/cm	pH	% Moisture %	Dimefox µg/kg	Ethofumesate µg/kg	Hempa µg/kg	Schradan µg/kg	Simazine µg/kg	Dicamba µg/kg	Phenoxy Acetic acid herbicide: Dichlorprop µg/kg	Phenoxy Acetic acid herbicide: MCPA µg/kg	Phenoxy Acetic acid herbicide: Mecoprop µg/kg	2,4,6-Trichlorophenol µg/kg	2-Methyl-4,6-dinitrophenol µg/kg	4-Chloro-2-methylphenol µg/kg	Bis (2-chloroethyl) ether µg/kg
01/05/2012	275991	SW1	2000	8.5	18	<10	<10	<10	<10	<10	<10	<10	<10	<10	<100	<100	<100	<100
01/05/2012	275991	SW2	2100	8.6	14	<10	<10	<10	<10	<10	<10	<10	<10	<10	<100	<100	<100	<100
01/05/2012	275991	SW3	2000	8.3	16	<10	<10	<10	<10	<10	<10	<10	<10	<10	<100	<100	<100	<100
21/05/2012	278879	SW1		8.2	17													
21/05/2012	278879	SW2		8.2	14													
21/05/2012	278879	SW3		9.4	17													
20/06/2012	282523	IMPORT 1	2000	7.9	23	<10	<10	<10	<10	<10	<10	<10	<10	<10	<100	<100	<100	<100
08/08/2012	289240	B16 BACKFILL 1	1400	7.8	10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<100	<100	<100	<100
08/08/2012	289240	B16 BACKFILL 2	1300	8.1	9.2	<10	<10	<10	<10	<10	<10	<10	<10	<10	<100	<100	<100	<100
08/08/2012	289240	B16 BACKFILL 3	1300	9	10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<100	<100	<100	<100

Imported Material

Phenol µg/kg	1,2-Dichlorobenzene µg/kg	1,2-Dichloroethane µg/kg	Cis-1,2-Dichloroethylene µg/kg	Cyclohexanone µg/kg	Tetrachloroethylene µg/kg	Toluene µg/kg	Trichloroethylene µg/kg	Vinyl chloride monomer µg/kg	Xylene (Total) µg/kg	SVOC Screen Hauxton µg/kg	VOC Screen Hauxton µg/kg	Arsenic mg/kg	Cadmium mg/kg	Chromium mg/kg	Chromium VI mg/kg	Copper mg/kg	Lead mg/kg	Mercury mg/kg	Nickel mg/kg	Selenium mg/kg
<100	<5	<5	<5	<10	<5	<1	<5	<5	<1	<2000	<200									
<100	<5	<5	<5	<10	<5	<1	<5	<5	<1	<2000	<200									
<100	<5	<5	<5	<10	<5	<1	<5	<5	<1	<2000	<200									
												5	<1	5	<1	4	4	<1	5	<3
												11	<1	12	<1	11	10	<1	14	<3
												5	<1	5	<1	4	4	<1	6	<3
<100	<5	<5	<5	<10	<5	1	<5	<5	<1	<2000	<200	4	<1	5	<1	5	4	10	<1	4
<100	<5	<5	<5	<10	<5	<1	<5	<5	<1	<2000	<200	7.6	<1.0	8.3	<1	8	21	<1.0	7.4	<3.0
<100	<5	<5	<5	<10	<5	<1	<5	<5	<1	<2000	<200	7.8	<1.0	9.8	<1	13	46	<1.0	9.6	<3.0
<100	<5	<5	<5	<10	<5	<1	<5	<5	<1	<2000	<200	11	<1.0	12	<1	17	56	<1.0	14	<3.0

Imported Material

Zinc mg/kg	SO^4 (Total) %	Fraction Organic Carbon (foc) %	Total Organic Carbon %	Benzene µg/kg	Toluene µg/kg	Ethylbenzene µg/kg	M/P Xylene µg/kg	O Xylene µg/kg	TPH (C5-C6 aliphatic) mg/kg	TPH (C6-C8 aliphatic) mg/kg	TPH (C8-C10 aliphatic) mg/kg	TPH (C10-C12 aliphatic) mg/kg	TPH (C12-C16 aliphatic) mg/kg	TPH (C16-C21 aliphatic) mg/kg	TPH (C21-C35 aliphatic) mg/kg	TPH (C6-C7 aromatic) mg/kg	TPH (C7-C8 aromatic) mg/kg	TPH (C8-C10 aromatic) mg/kg	TPH (C10-C12 aromatic) mg/kg	TPH (C12-C16 aromatic) mg/kg
18	0.05	3	0.4	<1	<1	<1	<1	<1	<0.010	<0.010	<0.010	<1	<1	<1	<1	<0.010	<0.010	<0.010	<1	<1
47	0.05	6	0.4	<1	<1	<1	<1	<1	<0.010	<0.010	<0.010	<1	<1	<1	<1	<0.010	<0.010	<0.010	<1	<1
20	0.06	2	0.2	<1	<1	<1	<1	<1	<0.010	<0.010	<0.010	<1	<1	<1	<1	<0.010	<0.010	<0.010	<1	<1
<3	0.09	0.5	33	<1	<1	<1	<1	<1	<0.010	<0.010	<0.010	<1	<1	<1	<1	<0.010	<0.010	<0.010	<1	<1
40	0.2	6	0.4	<1	<1	<1	<1	<1	<0.010	<0.010	<0.010	<1	<1	<1	2	<0.010	<0.010	<0.010	<1	<1
46	0.09	8	0.5	<1	<1	<1	<1	<1	<0.010	<0.010	<0.010	<1	<1	<1	<1	<0.010	<0.010	<0.010	<1	<1
92	0.13	19	1.2	<1	<1	<1	<1	<1	<0.010	<0.010	<0.010	<10	<10	<10	<10	<0.010	<0.010	<0.010	<10	<10

Imported Material

TPH (C16-C21 aromatic) mg/kg	TPH (C21-C35 aromatic) mg/kg	Naphthalene mg/kg	Acenaphthalyne mg/kg	Acenaphthene mg/kg	Fluorene mg/kg	Phenanthrene mg/kg	Anthracene mg/kg	Fluoranthene mg/kg	Pyrene mg/kg	Beno(a)Anthracene mg/kg	Chrysene mg/kg	Benzo(b/k)Fluoranthene mg/kg	Benzo(a)pyrene mg/kg	Indeno(123-cd)Pyrene mg/kg	Dibenzo(ah)Anthracene mg/kg	Benzo(ghi)Perylene mg/kg	PAH (total) mg/kg
<1	<1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.2	0.2	<0.1	<0.1	<0.1	<0.1	0.4
1	2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.1	0.1	<0.1	<0.1	<0.1	<0.1	0.2
<1	<1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
<1	<1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2	5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
<1	3	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
39	58	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.1

B16 Validation Samples

Report Date	Report Number	Sample Reference	Electrical Conductivity µS/cm	pH	Moisture %	Dimefox µg/kg	Ethofumesate µg/kg	Hempa µg/kg	Schradan µg/kg	Simazine µg/kg	Dicamba µg/kg	Phenoxy Acetic acid herbicide: Dichlorprop µg/kg	Phenoxy Acetic acid herbicide: MCPA µg/kg	Phenoxy Acetic acid herbicide: Mecoprop µg/kg	2,4,6-Trichlorophenol µg/kg	2-Methyl-4,6-dinitrophenol µg/kg	4-Chloro-2-methylphenol µg/kg	Bis (2-chloroethyl) ether µg/kg
07/08/2012	289237	B16 SV N	1400	8	14	<10	<10	<10	<10	<10	<10	<10	<10	<10	<100	<100	<100	<100
07/08/2012	289237	B16 SV E	1400	8	13	<10	<10	<10	<10	<10	<10	<10	<10	<10	<100	<100	<100	<100
07/08/2012	289243	B16 BV 1	1400	8.1	13	<10	<10	<10	<10	<10	<10	<10	<10	<10	<100	<100	<100	<100
07/08/2012	289239	B16 BV A	2000	8	13	<10	<10	<10	<10	<10	<10	<10	<10	<10	<100	<100	<100	<100

B16 Validation Samples

Phenol µg/kg	1,2-Dichlorobenzene µg/kg	1,2-Dichloroethane µg/kg	Cis-1,2-Dichloroethylene µg/kg	Cyclohexanone µg/kg	Tetrachloroethylene µg/kg	Toluene µg/kg	Trichloroethylene µg/kg	Vinyl chloride monomer µg/kg	Xylene (Total) µg/kg
<100	<5	<5	<5	<10	<5	<1	10	<5	<1
<100	<5	<5	<5	<10	<5	<1	<5	<5	<1
<100	<25	<25	<25	<50	<25	<5	<25	<25	<5
<100	<5	<5	<5	<10	11	<1	40	<5	<1

TB179 Samples

Report Date	Report Number	Sample Reference	Electrical Conductivity µS/cm	pH	Moisture %	Dimefox µg/kg	Ethofumesate µg/kg	Hempa µg/kg	Schradan µg/kg	Simazine µg/kg	Dicamba µg/kg	Phenoxy Acetic acid herbicide: Dichlorprop µg/kg	Phenoxy Acetic acid herbicide: MCPA µg/kg	Phenoxy Acetic acid herbicide: Mecoprop µg/kg	2,4,6-Trichlorophenol µg/kg	2-Methyl-4,6-dinitrophenol µg/kg	4-Chloro-2-methylphenol µg/kg	Bis (2-chloroethyl) ether µg/kg
13/08/2012	289635	L8	2200	8.1	12	<10	<10	<10	<10	<10	20	<10	<10	<10	<100	<100	<100	430
13/08/2012	289635	K8	1800	9.8	13	<10	60	<10	<10	30	10	<10	<10	<10	<100	<100	<100	<100
13/08/2012	289635	J8	2600	8.4	14	<10	<10	<10	<10	<10	20	<10	<10	<10	<100	<100	<100	<100
13/08/2012	289635	L9	2200	8.5	11	<10	<10	<10	<10	<10	<10	<10	<10	<10	<100	<100	<100	<100
13/08/2012	289635	K9	2300	8.7	14	<10	<10	<10	<10	<10	10	<10	<10	<10	<100	<100	<100	110
13/08/2012	289635	J9	2200	8.1	12	<10	<10	<10	<10	<10	<10	10	<10	290	<100	<100	<100	3500
13/08/2012	289635	L10	2800	8.8	11	<10	<10	<10	<10	<10	70	10	<10	480	<100	<100	<100	<100
13/08/2012	289634	L12	2000	9	12	<10	<10	<10	<10	<10	10	<10	<10	<10	<100	<100	<100	<100
13/08/2012	289634	K12	2000	8.7	15	<10	<10	<10	<10	<10	<10	<10	<10	<10	<100	<100	<100	<100
13/08/2012	289634	L11	1700	8.8	11	<10	70	<10	<10	<10	<10	<10	<10	<10	<100	<100	<100	340
13/08/2012	289634	J11	2200	8.2	11	<10	180	<10	<10	<10	<10	<10	<10	<10	120	<100	<100	660
13/08/2012	289634	K11	2200	8.4	14	<10	<10	<10	<10	<10	<10	<10	<10	<10	<100	<100	<100	<100
13/08/2012	289634	J10	2000	8.2	17	<10	<10	<10	<10	<10	<10	<10	<10	<10	<100	<100	<100	<100
13/08/2012	289634	K10	1900	9	11	<10	30	<10	<10	<10	<10	<10	<10	<10	<100	<100	<100	<100

TB179 Samples

Phenol µg/kg	1,2-Dichlorobenzene µg/kg	1,2-Dichloroethane µg/kg	Cis-1,2-Dichloroethylene µg/kg	Cyclohexanone µg/kg	Tetrachloroethylene µg/kg	Toluene µg/kg	Trichloroethylene µg/kg	Vinyl chloride monomer µg/kg	Xylene (Total) µg/kg	Bis(2-ethylhexyl) Maleate µg/kg	Dichloromethylphenol µg/kg	Dichlorotoluene µg/kg	Trichlorotoluene µg/kg
<100	<5	<5	<5	<10	24	<1	<5	<5	<1	<100	<100	<100	<100
<100	<5	<5	<5	<10	<5	<1	<5	<5	<1	<100	<100	<100	<100
<100	<5	<5	<5	<10	8	<1	<5	<5	<1	<100	<100	<100	<100
<100	<5	<5	<5	<10	33	2	<5	<5	2	<100	230	<100	<100
<100	<5	<5	40	<10	120	<1	22	<5	<1	<100	<100	<100	<100
<100	<25	<25	<25	<50	50	11	<25	<25	11	<100	<100	<100	<100
<100	<5	<5	<5	<10	<5	<1	<5	<5	<1	<100	<100	<100	<100
<100	<5	<5	<5	<10	150	<1	9	<5	<1	<100	<100	<100	<100
<100	<5	<5	<5	<10	<5	<1	<5	<5	<1	<100	<100	<100	<100
<100	<5	<5	<5	<10	38	<1	<5	<5	<1	<100	<100	<100	<100
<100	<5	<5	<5	<10	<5	<1	<5	<5	<1	<100	<100	<100	<100
<100	<5	<5	<5	<10	<5	<1	<5	<5	<1	<100	<100	<100	<100
<100	<5	<5	<5	<10	<5	<1	<5	<5	<1	<100	<100	<100	170
<100	<5	<5	<5	<10	6	4	<5	<5	<1	<100	<100	<100	<100

Appendix D

Soil Audit

Hauxton Treatment Bed Soil Audit

Treatment Bed Origin and Characteristics								Treatment					Reinstatement		
TB REF	Grid of Excavation	Geology	DQRA Material Type	RMS Material Classification	CNPIs	Date Excavated/ Formed	Volume (cubic metres)	Total Turns	Total volume turned (cubic metres)	20% Concrete Fines	Mushroom Compost Added	Forced Vent Treatment	Offsite Disposal	DQRA Zone	Grid	Layer
TB 1	K14 K15 J14 J8 J9 K8 K9	SAGR	A	2	✔	28/03/10	487	9	4,383					3	F24 F22 E24 D23 D22	4/16
														3	F23	4/18
														3	E23	4/17
														3	E22	4/15
														Partially emalgamated w. **SP B** prior to Reinstatement		
TB 2	C16	WMMCF + SAGR	B	4		29/03/10	152	14	2,128					2N	K6 K7	15/25
														2N	K8	12/25
TB 3	J8 J9 K8 K9	SAGR	A	2		30/03/10	379	8	3,032					3	F24 F22 E24 D23 D22	4/16
														3	F23	4/18
														3	E23	4/17
														3	E22	4/15
TB 4	J16 K14 K15 K16	SAGR + WMMCF	B	4	✔	07/04/10	595	12	7,140					2N	I7 K7	23/25
														2N	J7	23/25 17/25
														2N	J8	22/25
														2N	K6	17/24
														2N	K8	23/25
TB 5	K14 K15 K16	WMMCF + SAGR	B	4		14/04/10	290	24	6,960					2N	I7	16/25 14/25
														2N	I8	14/15
														2N	J6	7/24
														2N	J7 K7 K8	14/25
														2N	J8	14/25 12/25
TB 6	K9 K10 K11 K12 K13	SAGR	A	2	✔	14/04/10	195	14	2,730		21/07/10	✔		3	J21 J22	2/2
														Partially emalgamated w. **SP C** prior to Reinstatement		
TB 7	K15 K16	Gault Clay	C	4		14/04/10	381	11	4,191					1	G9 H7	1/11
														1	H6	1/13
														1	I6	2/14-1/14
														1	J6	2/7-1/7
TB 8	K14	Gault Clay	C	4		14/04/10	398	11	4,378					1	G9 H7	1/11
														1	H6	1/13
														1	I6	2/14-1/14
														1	J6	2/7-1/7
TB 9	K7	WMMCF	B	4	✔	21/04/10	336	10	3,360					2N	I7 J7 K7	16/25
														2N	J6 K6	9/24
														2N	K8	16/25-13/25
TB 10	K7	WMMCF	B	4	✔	21/04/10	281	20	5,620					2N	I7 K7	11/25
														2N	I7	11/15
														2N	J6	11/24
														2N	J7	15/25 11/25
														2N	J8	15/25 13/25 11/25
														2N	K6	4/24
														2N	K8	13/25 11/25
TB 11	L7 K7	WMMCF	B	4	✔	27/04/10	377	10	3,770		28/07/10			2N	J6 K6	13/24
														2N	J8	23/25
TB 12	K7	WMMCF	B	4	✔	27/04/10	382	12	4,584					2N	I7 J8 K7 K8	25/25
														2N	J6 K6	15/24-14/24
														2N	J7	25/25 20/25-19/25
														2N	K6	20/24-19/24
TB 13A	L7 k7	WMMCF	B	4	✔	28/04/10	228	10	2,280					2N	I7	15/25
														2N	I8	15/15
														2N	J6	8/24
														2N	J8	15/25-14/25 12/25
														2N	K8	14/25-13/25
TB 13B	K7	WMMCF	B	4	✔	28/04/10	353	10	3,530					2N	I7	15/25
														2N	I8	15/15
														2N	J6	8/24
														2N	J8	15/25-14/25 12/25
														2N	K8	14/25-13/25
TB 15	K8	WMMCF	B	4		30/04/10	260	12	3,120	✔	28/07/10			2N	I7 I8 J6 J7 J8 K6 K7 K8	Combined with other beds compacted in this grid
TB 16	K8	WMMCF	B	4		30/04/10	414	8	3,312		21/07/10	✔		2N	I7 J8 K7 K8	20/25
														2N	J6	7/24
														2N	J7	20/25 13/25
														2N	K6	13/24 7/24
TB 17	L7 L8 K7 K8	SAGR	A	2	✔	30/04/10	247	5	1,235					Emalgamated w. **SP C** prior to Reinstatement		
TB 18	L8	WMMCF	B	4	✔	04/05/10	134	10	1,340					2N	J6	19/24-17/24
															J7 K6 K7	Combined with other beds compacted in this grid
TB 19	K8	WMMCF	B	4		04/05/10	580	7	4,060					2N	I7 I8 J6 J7 J8 K6 K7 K8	Combined with other beds compacted in this grid
TB 20	K8	WMMCF	B	4		04/05/10	229	10	2,290					2N	I7 I8 J6 J7 J8 K6 K7 K8	Combined with other beds compacted in this grid
TB 21	L10	SAGR	A	2		14/04/10	176	3	528					Emalgamated w. **SP B** prior to Reinstatement		
TB 22	K8	WMMCF	B	4		07/05/10	263	8	2,104		26/07/10			2N	I7 K7 K8	19/25
														2N	J7	19/25 12/25
														2N	K6	12/24
TB 23	L8	WMMCF	B	4	✔	10/05/10	308	11	3,388					2N	J8	10/25
														2N	K6	7/24
														2N	K8	11/25-10/25
TB 24	J7	WMMCF + SAGR	B	4		10/05/10	547	12	6,564					2N	J7 J8 K7 K8	18/25
TB 25	J7	WMMCF	B	4		10/05/10	509	9	4,581		21/07/10	✔		2N	I9	8/13-6/13
														2N	J9	6/17-4/17
														2N	K9	10/18-8/18
														2N	L9	9/16-7/16
TB 26	J7	WMMCF	B	4		11/05/10	805	5	4,025					2N	I7 J7 J8 K7 K8	13/25-12/25
														2N	I8	13/15-12/15
														2N	J6	6/24
														2N	K6	6/24-5/24
TB 27	J7	WMMCF	B	4		11/05/10	298	11	3,278					2N	J9 J10 K9 K10 L10 L11	Combined with other beds compacted in this grid
TB 28	J8	WMMCF	B	4		12/05/10	515	9	4,635					2N	J6	5/24
															J7 K6 K7	Combined with other beds compacted in this grid
TB 29	K8	WMMCF	B	4		12/05/10	501	12	6,012		05/07/10			2N	I7 K7	11/25
														2N	I8	11/15
														2N	J6	11/24
														2N	J7	15/25 10/25
														2N	J8	15/25 13/25 11/25
														2N	K6	4/24
TB 30	K7 K8 L7 L8	Gault Clay	C	4	✔	12/05/10	295	15	4,425		02/07/10			2N	I9	2/13-1/13
														2N	J10 K10	2/19-1/19
TB 31	L8	WMMCF	B	4	✔	13/05/10	352	10	3,520					2N	J9 J10 K9 K10 L10 L11 L12	Combined with other beds compacted in this grid
TB 32	J8	WMMCF	B	4		13/05/10	304	9	2,736		01/07/10			2N	J6 K6	6/24
														2N	J8	19/25
TB 33	L9	WMMCF	B	4		13/05/10	271	10	2,710		01/07/10			2N	J6	5/24
															J7 K6 K7	Combined with other beds compacted in this grid
														2N	I9	8/13-6/13

TB 34	K9	WMMCF	B	4		14/05/10	222	8	1,776		21/07/10	✔		2N	J9 6/17-4/17
														2N	K9 10/18-8/18
														2N	L9 9/16-7/16
TB 35 A	K9	WMMCF	B	4		14/05/10	293	17	4,981		02/07/10			2N	I7 18/25-17/25
														2N	J7 17/25 11/25
														2N	J8 K7 K8 17/25
														2N	K6 11/24-10/24
TB 35 B	L9	WMMCF	B	4		14/05/10	230	17	3,910		02/07/10			2N	I7 18/25-17/25
														2N	J7 17/25 11/25
														2N	J8 K7 K8 17/25
														2N	K6 11/24-10/24
TB 37	J8 J7	Gault Clay	C	4		17/05/10	300	10	3,000		02/07/10			Emalgamated w. **SP A** prior to Reinstatement	
TB 38	K8 J8	WMMCF	B	4		17/05/10	132	8	1,056					2N	J7 16/25
														2N	K6 12/24 16/25
														2N	K7 22/25
TB 39	J8	Gault Clay + SAGR	C	4		17/05/10	363	14	5,082					Emalgamated w. **SP A** prior to Reinstatement	
TB 40	J9	WMMCF	B	4		20/05/10	405	7	2,835		21/07/10	✔		2N	I9 8/13-6/13
														2N	J9 6/17-4/17
														2N	K9 10/18-8/18
														2N	L9 9/16-7/16
TB 41	J9 K9	Gault Clay	C	4		21/05/10	435	11	4,785		05/07/10			Emalgamated w. **SP A** prior to Reinstatement	
TB 42	J9	WMMCF	B	4		21/05/10	327	13	4,251					2S	I14 I15 J14 J15 K14 Combined with other beds compacted in this grid
TB 43	J9	WMMCF	B	4		22/05/10	333	15	4,995					2N	L8 8/16
TB 44	J9	WMMCF	B	4		22/05/10	297	7	2,079					2N	J9 J10 K9 K10 L10 L11 Combined with other beds compacted in this grid
TB 45	J9	Gault Clay	C	4		22/05/10	328	10	3,280		05/08/10			Emalgamated w. **SP A** prior to Reinstatement	
TB 46	I9	WMMCF	B	4	✔	24/05/10	483	9	4,347					2N	I7 J8 K8 22/25
														2N	J6 11/24-10/24
														2N	J7 22/25 15/25
														2N	K6 15/24 11/24
TB 47	I9	WMMCF	B	4	✔	24/05/10	253	8	2,024					2N	J7 K6 18/25
														2N	K8 23/25
TB 48	I7	WMMCF + SAGR	B	4		26/05/10	511	9	4,599		05/08/10			2N	J9 J10 K9 K10 L10 L11 Combined with other beds compacted in this grid
TB 49	I7	WMMCF + SAGR	B	4		27/05/10	524	11	5,764		02/08/10			2N	I10 12/14
														2S	I11 I12 12/14
														2S	I13 7/9
TB 50	H7	WMMCF + SAGR	B	4	✔	27/05/10	354	16	5,664					3	F24 F22 2/16
														3	F23 2/18
														3	E22 2/15
TB 51	H7	WMMCF + SAGR	B	4	✔	28/05/10	417	9	3,753		21/07/10			2N	J6 20/24 16/24
														2N	K6 24/24-23/24 21/24
														2N	L8 9/16
TB 52	I8	WMMCF	B	4		28/05/10	326	13	4,238		04/08/10			2N	L10 L11 L12 Combined with other beds compacted in this grid
TB 53	I7 H7	WMMCF	B	4	✔	01/06/10	197	10	1,970		30/07/10			3	E24 D23 D22 2/16
														3	E23 2/17
TB 54	I8	WMMCF	B	4		01/06/10	356	13	4,628		02/08/10			2S	G11 G12 10/15
														2S	H13 4/7
TB 55BC	I8	WMMCF	B	4		02/06/10	398	11	4,378		05/08/10			2S	H10 13/16
														2S	H11 H12 11/14
TB 56	I8	WMMCF	B	4		02/06/10	604	16	9,664					2N	J11 8/10
														2	J12 8/10
														2	J13 2/11
TB 5755A	I8 H8	WMMCF + SAGR	B	4		02/06/10	570	17	9,690		08/03/11			2N	I9 12/13-9/13
														2N	J9 9/17-7/17
														2N	K9 14/18-11/18
														2N	L9 12/13-9/13 7/13
TB 58	H8	WMMCF + SAGR	B	4		03/06/10	436	9	3,924					2N	H8 H9 13/14
TB 59	I9	WMMCF	B	4	✔	04/06/10	428	11	4,708		06/07/210			2N	I7 I8 J6 J7 J8 K6 K7 K8 Combined with other beds compacted in this grid
TB 60	I8 I9 H8 H9	WMMCF + SAGR	B	4	✔	04/06/10	346	13	4,498					2N	K11 14/17
														2N	K12 L12 9/12
														2S	K13 9/12
TB 61	H9	WMMCF	B	4	✔	07/06/10	318	7	636					2S	H13 H14 I14 I15 9/10
														2S	J14 J15 K14 9/11
TB 62	H9	WMMCF	B	4	✔	07/06/10	315	5	1,575		05/08/10			2S	H13 H14 I14 I15 9/10
														2S	J14 J15 K14 9/11
TB 63	I8 I9 H8 H9	WMMCF + SAGR	B	4	✔	09/06/10	532	11	5,852					2S	H11 H12 14/14
														2S	H13 7/7
TB 64	L9 L10	WMMCF + SAGR	B	4		15/06/10	892	14	12,488					2N	J6 12/24
														2N	K6 11/24
														2N	L8 16/16-14/16
TB 65	L9 L10	WMMCF + SAGR	B	4		15/06/10	906	17	15,402		26/07/10			2N	J6 K6 Combined with other beds compacted in this grid
TB 66	J7 J8 K8	Gault Clay	C	4		16/06/10	1,725	10	17,250					2N	I7 J7 J8 K7 K8 8/25-6/25
														2N	I8 8/15-6/15
														2N	J6 2/24
TB 67	K7 K8 L7 L8	Gault Clay	C	4	✔	17/06/10	1,875	15	28,125					2N	L7 3 - 2
														2N	L8 7/16-1/16
														2N	L9 7/13-1/13
TB 68	K9 L9	Gault Clay	C	4		15/06/10	352	10	3,520		12/07/10			2N	L9 6/13-4/13
TB 69 A	L10 K10	WMMCF + SAGR	B	4	✔	16/06/10	500	11	5,500	✔	14/10/10			2N	J11 20/21-18/21
TB 69 B	L10 K10	WMMCF + SAGR	B	4	✔	16/06/10	500	11	5,500	✔	28/10/10			2N	L10 L11 L12 Combined with other beds compacted in this grid
TB 69 C	L10 K10	WMMCF + SAGR	B	4	✔	16/06/10	500	21	10,500	✔	05/01/11	✔		3	F24 10/16 4/16
														3	F23 11/18 4/18
														3	F22 E24 D23 D22 11/16 4/16
														3	E23 11/17 4/17
														3	E22 11/15 4/15
TB 69 D	L10 K10	WMMCF + SAGR	B	4	✔	16/06/10	500	22	11,000	✔	05/01/11	✔		3	F24 10/16 4/16
														3	F23 11/18 4/18
														3	F22 E24 D23 D22 11/16 4/16
														3	E23 11/17 4/17
														3	E22 11/15 4/15
TB 69 E	L10 K10	WMMCF + SAGR	B	4	✔	16/06/10	500	20	10,000	✔	05/01/11	✔		3	F24 10/16 4/16
														3	F23 11/18 4/18
														3	F22 E24 D23 D22 11/16 4/16
														3	E23 11/17 4/17
														3	E22 11/15 4/15
TB 69 F	L10 K10	WMMCF + SAGR	B	4	✔	16/06/10	500	20	10,000	✔	05/01/11	✔		3	F24 10/16 4/16
														3	F23 11/18 4/18
														3	F22 E24 D23 D22 11/16 4/16
														3	E23 11/17 4/17
														3	E22 11/15 4/15
TB 70A	L7 L8 L9 K8	Gault Clay	C	4	✔	17/06/10	667	12	8,004					2N	I7 J7 J8 K7 K8 5/25-2/25
														2N	I8 5/15-2/15
														2N	J6 1/24
TB 70B	K9 L8 L9	Gault Clay	C	4	✔	24/06/10	238	13	3,094					2N	I7 J7 J8 K7 K8 5/25-2/25
														2N	I8 5/15-2/15
														2N	J6 1/24
TB 71	L10 K10	Gault Clay	C	4	✔	24/06/10	346	8	2,768					2N	J10 K10 L10 I9 Combined with other beds compacted in this grid
TB 73	K10	SAGR + WMMCF + GC	B	4	✔	24/06/10	313	8	2,504					2N	J6 16/24
														2N	K6 22/24-21/24 16/24
TB 74	K9	WMMCF + SAGR	B	4		25/06/10	672	6	4,032					2N	J10 K10 9/19
														2N	L10 8/18

TB 75	K9	WMMCF + SAGR	B	4		25/06/10	455	8	3,640		11/03/11			2N	J11	Combined with other beds compacted in this grid
														2S	J12	Combined with other beds compacted in this grid
TB 76	K9 J9	SAGR + WMMCF	B	4		01/07/10	886	15	13,290	✔	02/08/11	✔		3	I23	3/20-1/20
														3	H23 G23 G22	11/15-1/15
														3	H22	11/14-1/14
TB 77	J10	Gault Clay	C	4	✔	05/07/10	670	10	6,700					2N	J9	1/17
														2N	K9	1/18
														2N	L8	5/16
TB 78	K9 K10	Gault Clay	C	4	✔	06/07/10	333	17	5,661					Emalgamated w. **SP A** prior to Reinstatement		
TB 79	K10 L10	Gault Clay	C	4	✔	07/07/10	664	4	2,656					2N	I7 J7 J8 K7 K8	10/25-9/25
														2N	I8	10/15-9/15
														2N	J6	4/24-3/24
														2N	J9	4/17-2/17
														2N	K6	3/24-2/24
														2N	K9	4/18-2/18
TB 80	K10 K11 L10 L11	Gault Clay	C	4	✔	08/07/10	1,453	10	14,530					2N	J6 K6	5/24-1/24
														2N	J9	9/17-6/17
														2N	K9	9/18-6/18
TB 82	Crush Concrete SP	Concrete Fines	A	2		14/07/10	334	4	1,336					Emalgamated with **TB95** during treatment		
TB 83	H9 H10	WMMCF + SAGR	B	4	✔	19/07/10	2,189	17	37,213					2S	G11 G12	9/15
														2S	H10	12/16
														2S	H11 H12	10/14
														2S	H13	3/7
														2N	I10	11/14
														2S	I11 I12	11/14
														2S	I13	6/9
TB 84 A	I9 I10	WMMCF + SAGR	B	4	✔	20/07/10	587	4	2,348		09/12/10		✔			
TB 84 B	I9 I10	WMMCF + SAGR	B	4	✔	20/07/10	587	2	1,174		16/12/10		✔			
TB 84 C	I9 I10	WMMCF + SAGR	B	4	✔	20/07/10	587	1	587				✔			
TB 85	K11 K12	SAGR + GC	B	4	✔	26/07/10	713	10	7,130		08/11/10			2N	L9 K9 J9 I9	Combined with other beds compacted in this grid
TB 86	L 11 L12	SAGR + GC	B	4	✔	26/07/10	801	12	9,612		17/11/10			2N	I7 J8 K7	24/25 21/25
														2N	J6 K6	9/24-8/24
														2N	J7	24/25 21/25 14/25
														2N	K6	14/24
														2N	K8	24/25
TB 87	K12 K13 L12 L13	WMMCF + SAGR	B	4	✔	27/07/10	859	14	12,026	✔	02/08/11	✔		3	I23	12/20-7/20
														3	H23 G23	10/15-7/15
TB 88	J11	WMMCF + SAGR	B	4	✔	28/07/10	966	12	11,592	✔	02/08/11	✔		3	I23	3/20-1/20
														3	H23 G23 G22	11/15-1/15
														3	H22 G22	11/14-1/14
TB 89	L10	Gault Clay	C	4		28/07/10	499	12	5,988					Emalgamated w. **SP A** prior to Reinstatement		
TB 90	L10	Gault Clay	C	4		28/07/10	450	12	5,400					Emalgamated w. **SP A** prior to Reinstatement		
TB 91	K10	Gault Clay	C	4	✔	28/07/10	330	11	3,630					Emalgamated w. **SP A** prior to Reinstatement		
TB 92	K10	Gault Clay	C	4	✔	28/07/10	312	11	3,432					Emalgamated w. **SP A** prior to Reinstatement		
TB 93	J11 K11	WMMCF + MG	B	4	✔	02/08/10	709	12	8,508	✔	02/08/11	✔		3	I23	12/20-7/20
														3	H23 G23	10/15-7/15
														3	H22 G22	10/14-7/14
TB 94	K12 K13	MG + WMMCF	B	4	✔	02/08/10	495	15	7,425					2N	I9 J9 J10	Combined with other beds compacted in this grid
TB 95	J11	WMMCF + MG	B	4	✔	04/08/10	760	15	11,400	✔	03/03/11			2S	G11 G12	8/15
														2S	H11 H12	9/14
														2S	H13	2/7
														2S	H13	5/9
TB 96	J12 K12 K13	WMMCF + GC	B	4	✔	04/08/10	481	8	3,848					2N	J10 K10	12/19-11/19
														2N	L11	5/19-4/19
														2N	L10	11/18-10/18
TB 97	J10 J11 J12	MG + WMMCF + GC	B	4	✔	05/08/10	492	10	4,920					2S	J13	3/11
														2N	K11	8/17
														2N	K12	3/12
														2S	K13 L12	3/12
TB 98	J11 J12	SAGR + WMMCF	B	4	✔	05/08/10	352	6	2,112					2S	L11	16/19
TB 99	K12 K13 L12	MG + WMMCF + GC	B	4	✔	06/08/10	903	8	7,224	✔				2S	G11 G12	6/15
														2S	H10	9/16
														2N	I10	9/14
														2S	I11 I12	9/14
														2S	I13	2/9-1/9
TB 100	J13 K12 K13	MG + WMMCF + GC	B	4	✔	09/08/10	921	5	4,605	✔	05/11/10		✔			
TB 101	J12 J13	MG + WMMCF + GC	B	4	✔	09/08/10	815	8	6,520	✔	28/02/11			2N	J10	13/19
TB 102	I12 I13 J11 J12	MG + WMMCF + GC	B	4	✔	12/08/10	597	6	3,582	✔	28/02/11			2N	H8 H9 I9	Combined with other beds compacted in this grid
TB 103	J15	MG + WMMCF + GC	B	4		16/08/10	1,069	10	10,690	✔	08/03/11			2N	J9	10/17
TB 104	I11 I12	MG + WMMCF + GC	B	4	✔	17/08/10	807	7	5,649	✔	28/02/11			2N	J9	10/17
TB 105	J13 J14	MG + WMMCF + GC	B	4	✔	20/08/10	260	8	2,080		24/02/11			2S	I15	8/10
														2N	L9	6/13-5/13
TB 106	I14 I15	MG + WMMCF + GC	B	4	✔	23/08/10	315	6	1,890		23/09/10			2N	J6 K6	Combined with other beds compacted in this grid
TB 107	J15 J16	MG	A	2	✔	23/08/10	170	1	170					Emalgamated w. **SP C** prior to Reinstatement		
TB 108	I13 I14 I15	MG + WMMCF + GC	B	4	✔	27/08/10	498	8	3,984	✔	24/02/11			2S	H13	8/10
														2S	J15 K14	8/11
														2N	K6	10/24
														2N	K8	21/25
TB 109	I13 I14 I15	MG + WMMCF + GC	B	4	✔	27/08/10	727	12	8,724		08/03/11			2N	I9	13/13
TB 110	H11	MG + WMMCF	B	4		01/09/10	553	6	3,318					2N	H8 H9 I9 J10	Combined with other beds compacted in this grid
TB 111	I13 H13 H14	MG + WMMCF + GC	B	4	✔	06/09/10	711	10	7,110	✔	28/02/11			2N	I7 I8 H8	Combined with other beds compacted in this grid
TB 112A	H13 H14	MG + WMMCF + GC	B	4	✔	10/09/10	739	14	10,346	✔	08/03/11			2S	H11 H12 I11 I12	Combined with other beds compacted in this grid
TB 112B	H13 H14	MG + WMMCF + GC	B	4	✔	10/09/10	429	14	6,006	✔	08/03/11			2N	J6 K6	Combined with other beds compacted in this grid
TB 113A	I11 I12 H11 H12	WMMCF + MG + GC	B	4	✔	21/09/10	715	13	9,295	✔	09/12/10			3	F24 F22 E24	5/16
														3	F23	5/18
														3	E23	5/17 3/17
														3	E22	5/15 3/15
														3	D23 D22	5/16 3/16
TB 113B	I11 I12 H11 H12	WMMCF + MG + GC	B	4	✔	21/09/10	715	14	10,010	✔	09/12/10			3	F24 F22 E24	5/16
														3	F23	5/18
														3	E23	5/17 3/17
														3	E22	5/15 3/15
														3	D23 D22	5/16 3/16
TB 114	H10 H11 H12	WMMCF + MG + GC	B	4	✔	22/09/10	762	9	6,858	✔	08/03/11			3	F24	7/16
														3	F23	7/18
														3	F22 D22	7/16
														3	E24 D23	7/16 6/16
														3	E23	7/17 6/17
														3	E22	7/15
TB 115 A	H13 H14 G14 G13	WMMCF + MG	B	4	✔	30/09/10	301	15	4,515	✔	08/03/11			2N	J11	16/21
														2S	J12	17/18
														2S	J13	10/11
														2N	K11	17/17
														2N	K12 L12	K13
														2S	K13	K13
														2N	L11	19/19
														2N	J11	16/21
														2S	J12	17/18

TB 115 B	H13 H14 G14 G13	WMMCF + MG	B	4	✔	30/09/10	301	14	4,214	✔	08/03/11			2S	J13	10/11
														2N	K11	17/17
														2N	K12 L12	12/12
														2S	K13	12/12
														2N	L11	19/19
TB 115 C + D	H13 H14 G14 G13	WMMCF + MG	B	4	✔	30/09/10	301	13	3,913	✔	08/03/11			3	F24	12/16 11/16 8/16 3/16
														3	F23	13/18 12/18 8/18 3/18
														3	F22	13/16 12/16 8/16 3/16
														3	E24	13/16 12/16 8/16
														3	E23	13/17 12/17 9/17 8/17
														3	E22	13/15 12/15 8/15
														3	D23	13/16 12/16 9/16 8/16
														3	D22	13/16 12/16 8/16
TB 116	H12 H11	WMMCF + MG	B	4	✔	07/10/10	878	8	7,024	✔	08/03/11			3	F24 D22	6/16
														3	F23	6/18
														3	F22	6/16
														3	E22	6/15
TB 117	G14	WMMCF + MG	B	4		12/10/10	696	5	3,480		11/03/11			2N	J6 K6	Combined with other beds compacted in this grid
TB 118AB	G12 G13	WMMCF + MG	B	4	✔	13/10/11	400	10	4,000	✔	10/03/11			2S	G11 G12	12/15 7/15
														2S	H10	15/16 11/16-10/16
														2S	H11 H12	13/14 8/14
														2S	H13	6/7 1/7
														2S	I11 I12	10/14
														2N	I10	10/14
														2S	I13	4/9-3/9
TB 118CD	G12 G13	WMMCF + MG	B	4	✔	13/10/10	831	12	9,972	✔	10/03/11			3	F23	9/18
														3	F22 D22	9/16
														3	E22	9/15
TB 119	G11 G10	WMMCF + MG	B	4	✔	14/10/10	956	11	10,516	✔				3	F24	9/16
														3	F23	10/18
														3	F22 E24 D23 D22	10/16
														3	E23	10/17
														3	E22	10/15
TB 120A	H17	SAGR	A	2		20/10/10	615	2	1,230					Emalgamated with **TB160, TB162** during treatment		
TB 120BC	H17	SAGR	A	2		20/10/10	615	4	2,460					Emalgamated with **TB160, TB162** during treatment		
TB 121	G17	SAGR	A	2		22/10/10	596	6	3,576					Emalgamated with **TB160, TB162** during treatment		
TB 122	G15 H15 I15	WMMCF + SAGR	B	4	✔	25/10/10	903	7	6,321					2N	J11	9/10
														2S	J12	9/10
														2N	K11	9/17
														2N	K12 L12	4/12
														2	K13	4/12
TB 123	G15 H15 I15	WMMCF + SAGR	B	4	✔	25/10/10	487	7	3,409					Emalgamated w. **SP B** prior to Reinstatement		
TB 124	G16 G17	SAGR	A	2		01/11/10	484	2	968					2S	G16 G17 H16 H17	Combined with other beds compacted in this grid
TB 125	G16 H16	WMMCF + SAGR	B	4		04/11/10	745	5	3,725					2N	J11	17/21
														2S	J12	18/18
														2S	J13	11/11
TB 126	K14 K15	MG	A	2		10/11/10	159	4	636					Emalgamated with **TB56** during treatment		
TB 127	C17 E17 D17	SAGR	A	2		18/11/10	1,133	1	1,133					2S	G16 G17 H16 H17	Combined with other beds compacted in this grid
TB 128	E11 E12 E13 F11 F12 F13	SAGR + WMMCF	A	2	✔	27/11/10	1,144	11	12,584					2S	G11 G12	14/15-13/15 11/15
														2S	H10	16/16 14/16
														2S	H11 H12	12/14
														2S	H13	5/7
														2S	I11 I12	14/14-13/14
														2N	I10	14/14-13/14
														2S	I13	9/9-8/9
TB 129	D14 D15 E14 E15	SAGR + WMMCF	B	4		15/12/10	811	3	2,433					2N	H8 H9	12/14-11/14
														2N	I9 L9	13/13
														2N	J9	12/17-11/17
														2N	J10 K10	10/19
														2N	K9	15/18-14/18
														2N	L11	3/19-1/19
														2N	L10	9/18
TB130	F15	WMMCF + SAGR	B	4		16/12/10	620	6	3,720					2S	G15 H15 H16	11/11-9/11
TB 131	F15 F16	SAGR + WMMCF	B	4		05/01/11	1,237	6	7,422					2N	L12	5/12
TB 132	F15 F16	SAGR	B	4		10/01/11	866	4	3,464					2S	G16 G17 H16 H17	Combined with other beds compacted in this grid
TB 133	I6 H6 J5 J6	SAGR + WMMCF	A	2		24/01/11	1,845	7	12,915	✔	21/02/11			2S	G15 H15 H16	9/11
														2N	H8 H9	14/14
TB 134	I6 H6 H7	WMMCF	B	4		25/01/11	1,099	7	7,693	✔	25/03/11			2N	J9	16/17
														2N	J10	18/19
TB 135	J5 J6	WMMCF	B	4		31/01/11	923	6	5,538					2N	J6	24/24
														2N	L8	13/16-10/16
TB 136	H6 J5 J6	WMMCF	B	4		10/02/11	1,411	7	9,877	✔	20/02/11			2S	H14 I14 J14	Combined with other beds compacted in this grid
TB 137	J5 J6 J7	WMMCF + SAGR	B	4		15/02/11	1,581	6	9,486	✔	21/02/11			2S	H13 H14 I14	10/10
														2S	I15	8/10
														2S	J14 J15 K14	11/11-10/11
TB 138	J5 J6 K6	WMMCF	B	4		17/02/11	907	8	7,256	✔	21/02/11			2N	J9 J10 K9 K10 L10 L11	Combined with other beds compacted in this grid
TB 139	K6 K7	WMMCF	B	4	✔	21/02/11	1,183	5	5,915					2N	H8 H9	10/14-8/14
														2N	J9	17/17
														2N	J10 K10	19/19
														2N	K9	18/18
														2N	L11	12/19
														2N	L10	18/18
TB 140	H6 I5 I6 J5 J6	Gault Clay	C	4		02/03/11	831	6	4,986					2N	J10	6/19 2/19-1/19
														2N	J11	2/10-1/10
														2S	J12	2/10-1/10
														2N	K10	6/19
														2N	K11	2/17-1/17
														2N	K12	1/5
														2N	L10	6/18
TB 141	L9 L10	Gault Clay	C	4		13/04/11	792	1	792					2N	J10	6/19 2/19-1/19
														2N	J11	2/10-1/10
														2S	J12	2/10-1/10
														2N	K10	6/19
														2N	K11	2/17-1/17
														2N	K12	1/5
														2N	L10	6/18
TB 142	J10 K10 I9	Gault Clay	C	4		28/04/11	983	4	3,932					2S	H11 H12 I11 I12	Combined with other beds compacted in this grid
TB 143	L7 L8 L9	MG	A	2	✔	11/05/11	631	1	631					2S	G11 G12	14/15-13/15
														2S	H10	16/16
														2S	H11 H12	14/14
														2S	H13	7/7
TB 144	L7 L8 L9	WMMCF	B	4	✔	12/05/11	979	1	979					2N	J11	7/10-6/10
														2S	J12	7/10-6/10
														2S	J13	1/11
														2N	K11	7/17-6/17
														2S	K13	2/12-1/12
														2N	K12 L12	2/12-1/12
TB 145	H14 H15 I14 I15	Gault Clay	C	4	✔	13/05/11	427	3	1,281					2N	L10 L11 L12	Combined with other beds compacted in this grid
TB 146	L7 L8 L9	Gault Clay	C	4	✔	17/05/11	699	2	1,398					2N	J11	4/10-3/10
														2S	J12	4/10-3/10

														2N	K11	4/17-3/17
TB 147	J15	MG + WMMCF	A	2		01/05/11	296	2	592					2N	L11 L12	Combined with other beds compacted in this grid
TB148	K14 K15	SAGR + WMMCF	A	2		26/06/11	198	2	396					2S	G11 G12	14/15-13/15
														2S	H10	16/16
														2S	H11 H12	14/14
														2S	H13	7/7
TB 149	J14 J15	Gault Clay	C	4	✔	01/05/11	231	1	231					2N	J6 K6	Combined with other beds compacted in this grid
TB 150	G15 H15	WMMCF + SAGR + Gault	B	4	✔	06/06/11	352	3	1,056					2N	J11	14/21
														2S	J12	15/18
TB 151	K14 K15 validation base	Gault Clay	C	3		26/06/11	223	0	0					Emalgamated w. **SP A** prior to Reinstatement		
TB 152	G16 H16	WMMCF + SAGR	B	4		06/06/11	639	3	1,917					2N	K11	16/17
														2N	K12 L12	11/12
														2S	K13	11/12
														2N	L11	18/19
														Partially emalgamated w. **SP C** prior to Reinstatement		
TB 153	J10 J11	Gault Clay	C	4	✔	27/06/11	1919	5	9,595					2S	G11 G12	5/15-1/15
														2S	H10	6/16-5/16
														2S	I10	5/14
TB 154	J11	Gault Clay	C	4	✔	28/06/11	1456	10	14,560					2S	H10	2/16-1/16
														2N	I10	2/14-1/14
														2S	H11 H12 I11 I12	2/14-1/14
TB 155	J12 K11 K12	Gault Clay	C	4	✔	29/06/11	1456	10	14,560					2S	H10	4/16-3/16
														2S	H11 H12	4/14-3/14
														2N	I10	
														2S	I11 I12	4/14-3/14
TB 156	K11 K12	Gault Clay	C	4	✔	29/06/11	426	1	426					2S	G13	6/16
														2S	G14 G15	7/16-5/16
TB 157	J13 K12	Gault Clay	C	4	✔	30/06/11	1162	5	5,810					3	F24 F22 E24 D23 D22	1/16
														3	F23	1/18
														3	E23	1/17
														3	E22	1/15
														2S	G14 G15	2/16-1/16
TB 158	H10 H11 I10 I11	Gault Clay	C	4	✔	19/07/11	1185	5	5,925					2S	G14 G15	4/16-3/16
TB 159	H12 I12	Gault Clay	C	4	✔	20/07/11	1234	3	3,702					2S	G13	7/16 5/16-1/16
														2S	G14 G15	11/16 9/16-8/16
TB 160	H7 G8	WMMCF	B	4	✔	21/07/11	1593	2	3,186		02/08/11			3	H23 G22	2/15-1/15
														3	H22	2/14-1/14
														2S	G11 G12	15/15
														2S	G13	9/16-8/16
														2S	G14 G15	13/16-12/16
TB 161	G9 G11 G10	WMMCF	B	4	✔	22/07/11	2025	6	12,150		02/08/11			3	K23 J23 I23	13/20 11/20 9/20 8/20 7/20 6/20 5/20 4/20
														3	H23 G22	13/15-11/15
														3	H22	12/14-11/14
														3	G23	13/14-11/14
TB 162	G12 G13	WMMCF	B	4	✔	25/07/11	1619	4	6,476		02/08/11			3	H23 G22	6/15-3/15
														3	H22	6/14-3/14
														3	F24 F22	15/16 14/16
														3	F23	16/18 15/18
														3	E24 D23 D22	15/16
														3	E23	15/17
														2S	G13	11/16-10/16
														2S	G14 G15	15/16-14/16
TB 163	I12	Gault Clay	C	4	✔	04/08/11	452	2	904					2S	G14 G15	10/16
TB 164	H7 G8 G9 G10	Gault Clay	C	4	✔	12/08/11	496	1	496					2S	G14 G15 F14	Combined with other beds compacted in this grid
TB 165	G10	WMMCF + Bentonite	B	4	✔	16/08/11	509	1	509					3	F24	13/16
														3	F23	14/18
														3	F22 E24 D23 D22	14/16
														3	E23	14/17
														3	E22	14/15
TB 166	H6	MG + WMMCF + Bentonite	A	1		16/08/11	350	1	350					2S	G11 G12	15/15
														2S	G13	9/16-8/16
														2S	G14	13/16-12/16
TB 167	F11 F12	MG	A	2		23/08/11	312	2	624					3	K23 J23 I23	19/20
														3	H23	15/15
TB 168	F12	WMMCF	B	4		23/08/11	347	2	694					2S	G14 G15 F14	Combined with other beds compacted in this grid
TB 169		WMMCF	B	3	✔	25/08/11	180	1	180					3	F24	13/16
														3	F23	14/18
														3	F22 E24 D23 D22	14/16
														3	E23	14/17
														3	E22	14/15
TB 170	G8 G9	WMMCF + Bentonite	B	4		31/08/11	1341	5	6,705					3	K23 J23 I23	16/20
TB 171	G9 G10 G11 G12	Gault Clay	C	4	✔	05/09/11	325	1	325					3	K23 J23	1/20
TB 172	G14 G15	Gault Clay	C	4	✔	06/09/11	261	2	522					3	K23 J23	1/20
														3	G22	15/15
TB 173	G13 G14 G15	WMMCF/Gault	B	4	✔	12/09/11	1566	2	3,132	✔				2S	G20 H20	9/9-7/9
														2S	G21 H19	2/2-1/2
														2S	I17	4/5-1/5
														2S	I18	1/2
														3	I19	6/6-4/6
														3	I20	7/7-5/7
														2S	J15	2/7-1/7
														2S	J17	4/5-1/5
														3	J18	8/8-3/8
														3	K18	6/7-3/7
TB 174	E19	SAGR + WMMCF	A	2	✔	14/09/11	161	2	322					2S	G20 H20	3/9
TB 175	E13 C16	WMMCF	B	4	✔	20/09/11	202	3	606					3	K23 J23	4/20 3/20 2/20
														2S	G20 H20	5/9 3/9 1/9
														3	I19	1/6
														3	I20	2/7-1/7
TB 176	F19	SAGR + WMMCF	A	1	✔	30/09/11	319	1	319					2S	H18	2/2-1/2
TB 177	E19	WMMCF	B	4	✔	04/10/11	230	2	460					Retained Onsite awaiting Reinstatement or Disposal		
TB 178	M10 M11 L12 L13	MG	A	2	✔	11/10/11	330	2	660					3	I23 J23 K23	Combined with other beds compacted in this grid
TB 179	L5 L6 L7 M8 M9 M10	WMMCF + MG	B	4		22/11/11	1265	1	1,265					Retained Onsite awaiting Reinstatement or Disposal		
			TOTALS				116,561	1628	956,712							
			Average				617	8.52								

Hauxton Stockpile Soil Audit - no treatment required

Stockpile Origin and Characteristics

Reinstatement

STOCKPILE REF	ORIGIN: TREATMENT BEDS OR GRID SQUARE EXCAVATION	Geology	Stockpile type (see section 8.0 Completion Report)	DQRA Material Type	RMS Material Classiication	DATE FORMED	VOLUME (Cubic metres)	Location of validation data	DQRA Zone	Grid	Layer
SP A	**TB: 37, 39, 41, 45, 78, 89, 90, 91, 92, 151**. TBs combined post treatment, prior to reinstatement in order to free space on site.	Gault Clay	1	C	4	15/06/2011	3,573	See results for stockpiles of origin.	2	I9	5/13-3/13
									2	J9	3/17-2/17
									2	J10 K10	7/19-3/19
									2	K9	8/18-2/18
									2	L9	6/13-1/13
									2	L10	3/18-1/18
SP B	**TB1, 21, 123.** Used as blinding layer to protect liner once treated.	SAGR	1	A	2	15/05/2011	1,150	See results for stockpiles of origin.	Blinding layer emalgamated w. **TB: 153, 154, 155, 157, 158** during treatment		
SP C	**TB6, 17, 107, 152.** Emalgamated post treatment.	WMMCF + SAGR	1	B	4	15/06/2011	1,251	See results for stockpiles of origin.	2	J11	15/21
									2	J12	16/21
									2	J13	9/11
									2	K11	15/17
									2	K12 K13 L12	10/12
									2	L11	17/19
SP D	**C21 D22 D23 D24 E22 E23 E24 F22 F23 F24 G22 G23 G24. WMMCF from borrow pit.**	WMMCF	3	B	3	11/08/2011 - 26/08/11	c. 1800	See validation trial pit data for each grid of origin (table 8 and 9 in appendix E).	1	G8 G10	9/9-1/9
									1	G9, H7	11/11-2/11
									1	H6	13/13-2/13
									1	I6	14/14-3/14
									1	J5	14/14-1/14
									1	J6	7/7-3/7
									1	K5	14/14-5/14 4/14-3/14
									2	J11	21/21
SP E	H6 WMMCF from bentonite wall excavation in H6.	WMMCF + Bentonite	3	B	3	16/08/2011	c. 385	See validation trial pit data for each grid of origin (table 8 and 9 in appendix E). Reports: 221364; 220115	Emalgamated w. SP G prior to reinstatement		
SP F	**F11, F12 + Lower Sand SP**	WMMCF + SAGR	3	B	3	23/08/11	c. 2904	See validation trial pit data for each grid of origin (table 8 and 9 in appendix E). Reports: 221370	3	K23	18/18
									3	H23 G23 G22	14/15
									3	H22	13/14
									3	F24 F22 E24	16/16
									3	F23	17/18
									3	E23	16/17
									3	E22	15/15
									2S	H10	8/16-7/16
									2S	H11 H12	7/14-5/14
									2N	I10	8/14-6/14
									2S	I11 I12	8/14-5/14
SP G	I6 J5 WMMCF from bentonite wall excavation in I6 and J5.	WMMCF + Bentonite	3	B	3	17/08/11	c. 770	See validation trial pit data for each grid of origin (table 8 and 9 in appendix E). Reports: 242714; 221364; 220115	3	K23	18/18
									3	H23 G23 G22	14/15
									3	H22	13/14
									3	F24 F22 E24	16/16
									3	F23	17/18
									3	E23	16/17
									3	E22	15/15
									2S	G10	6/14
									2S	G11 G12	7/15
									2S	G13 G14 G15	16/16
									2S	G20 H20	4/9
									2S	H11 H12	7/14-5/14
									2N	I10	8/14-6/14
									2S	I11 I12	8/14-5/14
									2S	I13	4/9-3/9
SP H	C21 D22 D23 D24 E22 E23 E24 F22 F23 F24 G22 G23 G24. WMMCF and SAGR from borrow pit.	WMMCF + SAGR	3	B	3	11/08/2011 - 26/08/11	c. 750	See validation trial pit data for each grid of origin (table 8 and 9 in appendix E).	3	D23 D22	16/16
									2S	E19 F19	6/6-4/6
									2S	G20 H20	2/9
SP H2	C21 D22 D23 D24 E22 E23 E24 F22 F23 F24 G22 G23 G24. WMMCF and SAGR from borrow pit.	WMMCF + SAGR	3	B	3	11/08/2011 - 26/08/11	c. 250	See validation trial pit data for each grid of origin (table 8 and 9 in appendix E).	2S	E19 F19	2/6
SP I 1	**K5 WMMCF from bentonite wall excavation in K5.**	WMMCF + Bentonite	3	B	3	24/08/2011	c. 192	See validation trial pit data for each grid of origin (table 8 and 9 in appendix E). Reports: 242714; 221364; 220115; 219458	2S	I19	2/5
									3	I20	3/7
SP I 2, 3	K5 MG +WMMCF from bentonite wall excavation in K5.	MG + WMMCF	3	A	1	24/08/2011	c. 192	See validation trial pit data for each grid of origin (table 8 and 9 in appendix E). Reports: 242714; 221364; 220115; 219458	Emalgamated w. **SP I 1** prior to reinstatement		
SP J	**G22 G23 G24** Garden Bund	Top soil	2	A	1	24/08/2011	2,080	See stockpile validation spreadsheet (appendix F)	Retained in **SP** onsite		
SP K	**F13 E13 E14 D14 E15 D15**	WMMCF	3	B	3	31/08/11	c. 6300	See validation trial pit data for each grid of origin (table 8 and 9 in appendix E). Reports: 221373; 223851; 223853	3	I23, J23, K23	18/18
									3	H23 G23 G22	14/15
									3	H22	13/14
									3	F24 F22 E24	16/16
									3	F23	17/18
									3	E23	16/17
									3	E22	15/15
									2S	G20 H20	
								Reduced level works from validated	2S	E14 E15 F15	1/1

SP L	**F15 F16** Reduced level excavation	WMMCF + Fines	3	B	**3**	20/09/2011	<500	Reduced level works from validated and reinstated material - no validation reaquired.	2S	F14	1/12
									2S	I16	6/7-1/7
SP M	**H23 H24 I23 J23 K23 WMMCF from Borrow Pit**	WMMCF	3	B	**3**	27/09/11 - 05/10/11	c. 8500	See validation trial pit data for each grid of origin (table 8 and 9 in appendix E).	1	D14 D15 E13 E14 F11 F12 G11	9/9-1/9
									1	K5	5/14
SP N	**I7 J7 K7 I8 J8 K8** Reduced level dig from reinstated material.	WMMCF	3	B	**3**	03/10/2011	<500	Reduced level works from validated and reinstated material - no validation reaquired.	2S	G17 G18 H17 H18	Top layer
SP O	**I22 I23**	Clay	2	C	**3**	03/10/2011	<500	See stockpile validation spreadsheet (appendix F)	3	H23 H24 I23 J23 K23	Base
Lower Sand SP	**C21 D22 D23 D24 E22 E23 E24 F22 F23 F24 G22 G23 G24 Clean Sand stripped for access to WMMCF Borrow Pit**	SAGR	3	A	**1**	11/08/2011 - 26/08/11	2,348	See validation trial pit data for each grid of origin (table 8 and 9 in appendix E). Note upper 2 samples in each report relate to sand.	Retained in **SP** onsite		
Upper Sand SP	**H23 H24 I23 J23 K23 Clean Sand stripped for access to WMMCF Borrow Pit**	SAGR	3	A	**1**	27/09/11 - 05/10/11	2,348	See stockpile validation spreadsheet (appendix F)	Retained in **SP** onsite		
Concrete SP	All concrete excavated	Crush Concrete	2	A	5	March 2010 - September 2011	25,590	See stockpile validation spreadsheet (appendix F)	Reinstated as capping layer over entire site		
Concrete Fines	Concrete excavated from site grid columns 5 through 16	Crush Concrete Fines	2	A	1	March 2010 - December 2010	c. 3000	See stockpile validation spreadsheet (appendix F)	Emalgamated with Treatment Beds during bed treatment. See TB Soil Audit.		
Tarmac SP 1	**J5 J6 N4 N5 L6**	Crush Tarmac	2		6	07/03/2011	c. 363	See stockpile validation spreadsheet (appendix F)	Offsite Disposal		
Tarmac SP 2	**M7 M8**	Crush Tarmac	2		6	10/05/2011	c. 145	See stockpile validation spreadsheet (appendix F)	Retained in **SP** onsite		
Tarmac SP 3	**N4 N5 N6 N7 M5 M6 M7**	Crush Tarmac	2		6	15/09/2011	c. 363	See stockpile validation spreadsheet (appendix F)	Retained in **SP** onsite		

Appendix E

SAL Certificates

Scientific Analysis Laboratories is a
limited company registered in England and
Wales (No 2514788) whose address is at
Hadfield House, Hadfield Street, Manchester M16 9FE

Scientific Analysis Laboratories Ltd

Certificate of Analysis

Hadfield House
Hadfield Street
Cornbrook
Manchester
M16 9FE
Tel : 0161 874 2400
Fax : 0161 874 2468

Report Number: 275991-1

Date of Report: 01-May-2012

Customer: VertaseFLI Limited
19 Napier Court
Barlborough Links
Barlborough
S43 4PZ

Customer Contact: The Project Management

Customer Job Reference: 907 BRI
Customer Purchase Order: 907 BRI
Date Job Received at SAL: 21-Apr-2012
Date Analysis Started: 23-Apr-2012
Date Analysis Completed: 30-Apr-2012

The results reported relate to samples received in the laboratory
Opinions and interpretations expressed herein are outside the scope of UKAS accreditation
This report should not be reproduced except in full without the written approval of the laboratory
Tests covered by this certificate were conducted in accordance with SAL SOPs

UKAS TESTING
1549

Report checked
and authorised by :
Mr Ross Walker
Customer Services Manager
(Land)

Issued by :
Mr Ross Walker
Customer Services Manager
(Land)

SAL Reference: 275991
Customer Reference: 907 BRI

Soil Analysed as Soil
Hauxton Screen Suite

				SAL Reference	**275991 001**	**275991 002**	**275991 003**
				Customer Sample Reference	**SW1**	**SW2**	**SW3**
				Date Sampled	**19-APR-2012**	**19-APR-2012**	**19-APR-2012**
Determinand	**Method**	**Test Sample**	**LOD**	**Units**			
Electrical Conductivity	T7	AR	10	µS/cm	**2000**	**2100**	**2000**
pH	T7	AR			**8.5**	**8.6**	**8.3**
Moisture	T277	AR	0.1	%	**18**	**14**	**16**

SAL Reference: 275991
Customer Reference: 907 BRI

Soil Analysed as Soil
Vertase Hauxton OP/ON Suite

				SAL Reference	**275991 001**	**275991 002**	**275991 003**
				Customer Sample Reference	**SW1**	**SW2**	**SW3**
				Date Sampled	**19-APR-2012**	**19-APR-2012**	**19-APR-2012**
Determinand	**Method**	**Test Sample**	**LOD**	**Units**			
Dimefox	T16	AR	10	µg/kg	<10	<10	<10
Ethofumesate	T16	AR	10	µg/kg	<10	<10	<10
Hempa	T16	AR	10	µg/kg	<10	<10	<10
Schradan	T16	AR	10	µg/kg	<10	<10	<10
Simazine	T16	AR	10	µg/kg	<10	<10	<10

SAL Reference: 275991
Customer Reference: 907 BRI

Soil Analysed as Soil
Vertase Hauxton Phenoxy Acid Herbs Suite

				SAL Reference	**275991 001**	**275991 002**	**275991 003**
				Customer Sample Reference	**SW1**	**SW2**	**SW3**
				Date Sampled	**19-APR-2012**	**19-APR-2012**	**19-APR-2012**
Determinand	**Method**	**Test Sample**	**LOD**	**Units**			
Dicamba	T16	AR	10	µg/kg	<10	<10	<10
Dichlorprop	T16	AR	10	µg/kg	<10	<10	<10
Phenoxy Acetic acid herbicide: MCPA	T16	AR	10	µg/kg	<10	<10	<10
Mecoprop	T16	AR	10	µg/kg	<10	<10	<10

SAL Reference: 275991
Customer Reference: 907 BRI

Soil Analysed as Soil
Vertase Hauxton SVOC Suite

				SAL Reference	**275991 001**	**275991 002**	**275991 003**
				Customer Sample Reference	**SW1**	**SW2**	**SW3**
				Date Sampled	**19-APR-2012**	**19-APR-2012**	**19-APR-2012**
Determinand	**Method**	**Test Sample**	**LOD**	**Units**			
2,4,6-Trichlorophenol	T16	AR	100	µg/kg	<100	<100	<100
2-Methyl-4,6-dinitrophenol	T16	AR	100	µg/kg	<100	<100	<100
4-Chloro-2-methylphenol	T16	AR	100	µg/kg	<100	<100	<100
Bis (2-chloroethyl) ether	T16	AR	100	µg/kg	<100	<100	<100
Phenol	T16	AR	100	µg/kg	<100	<100	<100

SAL Reference: 275991
Customer Reference: 907 BRI

Soil Analysed as Soil
Vertase Hauxton VOC Suite

SAL Reference	**275991 001**	**275991 002**	**275991 003**
Customer Sample Reference	**SW1**	**SW2**	**SW3**
Date Sampled	**19-APR-2012**	**19-APR-2012**	**19-APR-2012**

Determinand	Method	Test Sample	LOD	Units			
1,2-Dichlorobenzene	T54	AR	5	µg/kg	<5	<5	<5
1,2-Dichloroethane	T54	AR	5	µg/kg	<5	<5	<5
Cis-1,2-Dichloroethylene	T54	AR	5	µg/kg	<5	<5	<5
Cyclohexanone	T54	AR	10	µg/kg	<10	<10	<10
Tetrachloroethene	T54	AR	5	µg/kg	<5	<5	<5
Toluene	T54	AR	1	µg/kg	<1	<1	<1
Trichloroethene	T54	AR	5	µg/kg	<5	<5	<5
Vinyl chloride	T54	AR	5	µg/kg	<5	<5	<5
Xylene (Total)	T54	AR	1	µg/kg	<1	<1	<1

SAL Reference: 275991
Customer Reference: 907 BRI

Soil Analysed as Soil
Screens

SAL Reference	**275991 001**	**275991 002**	**275991 003**
Customer Sample Reference	**SW1**	**SW2**	**SW3**
Date Sampled	**19-APR-2012**	**19-APR-2012**	**19-APR-2012**

Determinand	Method	Test Sample	LOD	Units			
SVOC screen hauxton	T16	AR	2000	µg/kg	<2000	<2000	<2000
VOC screen hauxton	T54	AR	200	µg/kg	<200	<200	<200

Index to symbols used in 275991-1

Value	Description
AR	As Received
U	Analysis is UKAS accredited
N	Analysis is not UKAS accredited

Method Index

Value	Description
T7	Probe
T277	Grav (1 Dec) (40 C)
T16	GC/MS
T54	GC/MS (Headspace)

Accreditation Summary

Determinand	Method	Test Sample	LOD	Units	Symbol	SAL References
Electrical Conductivity	T7	AR	10	µS/cm	N	001-003
pH	T7	AR			U	001-003
Moisture	T277	AR	0.1	%	N	001-003
Dimefox	T16	AR	10	µg/kg	N	001-003
Ethofumesate	T16	AR	10	µg/kg	N	001-003
Hempa	T16	AR	10	µg/kg	N	001-003
Schradan	T16	AR	10	µg/kg	N	001-003
Simazine	T16	AR	10	µg/kg	N	001-003
Dicamba	T16	AR	10	µg/kg	N	001-003
Dichlorprop	T16	AR	10	µg/kg	N	001-003
Phenoxy Acetic acid herbicide: MCPA	T16	AR	10	µg/kg	N	001-003
Mecoprop	T16	AR	10	µg/kg	N	001-003
2,4,6-Trichlorophenol	T16	AR	100	µg/kg	U	001-003
2-Methyl-4,6-dinitrophenol	T16	AR	100	µg/kg	N	001-003
4-Chloro-2-methylphenol	T16	AR	100	µg/kg	N	001-003

Determinand	Method	Test Sample	LOD	Units	Symbol	SAL References
Bis (2-chloroethyl) ether	T16	AR	100	µg/kg	U	001-003
Phenol	T16	AR	100	µg/kg	U	001-003
1,2-Dichlorobenzene	T54	AR	5	µg/kg	U	001-003
1,2-Dichloroethane	T54	AR	5	µg/kg	U	001-003
Cis-1,2-Dichloroethylene	T54	AR	5	µg/kg	U	001-003
Cyclohexanone	T54	AR	10	µg/kg	N	001-003
Tetrachloroethene	T54	AR	5	µg/kg	U	001-003
Toluene	T54	AR	1	µg/kg	U	001-003
Trichloroethene	T54	AR	5	µg/kg	U	001-003
Vinyl chloride	T54	AR	5	µg/kg	U	001-003
Xylene (Total)	T54	AR	1	µg/kg	U	001-003
SVOC screen hauxton	T16	AR	2000	µg/kg	N	001-003
VOC screen hauxton	T54	AR	200	µg/kg	N	001-003

Scientific Analysis Laboratories is a limited company registered in England and Wales (No 2514788) whose address is at Hadfield House, Hadfield Street, Manchester M16 9FE

Scientific Analysis Laboratories Ltd

Certificate of Analysis

Hadfield House
Hadfield Street
Cornbrook
Manchester
M16 9FE
Tel : 0161 874 2400
Fax : 0161 874 2468

Report Number: 278879-1

Date of Report: 21-May-2012

Customer: VertaseFLI Limited
19 Napier Court
Barlborough Links
Barlborough
S43 4PZ

Customer Contact: The Project Management

Customer Job Reference: 907BRI
Customer Purchase Order: 907BRI
Date Job Received at SAL: 21-Apr-2012
Date Analysis Started: 15-May-2012
Date Analysis Completed: 18-May-2012

The results reported relate to samples received in the laboratory
Opinions and interpretations expressed herein are outside the scope of UKAS accreditation

Tests covered by this certificate were conducted in accordance with SAL SOPs

UKAS TESTING
1549

mCERTS THE ENVIRONMENT AGENCY'S MONITORING CERTIFICATION SCHEME

Report checked and authorised by :
Caroline Haworth
Assistant Customer Service Manager

Issued by :
Mr Ross Walker
Customer Services Manager (Land)

SAL Reference: 278879
Customer Reference: 907BRI

Soil Analysed as Soil
MCERTS Preparation

				SAL Reference	**278879 001**	**278879 002**	**278879 003**
				Customer Sample Reference	**SW1 275991-1**	**SW2 275991-2**	**SW3 275991-3**
				Date Sampled	**19-MAY-2012**	**19-MAY-2012**	**19-MAY-2012**
				Type	**Sandy Soil**	**Sandy Soil**	**Sandy Soil**
Determinand	**Method**	**Test Sample**	**LOD**	**Units**			
Moisture	T277	AR	0.1	%	**17**	**14**	**17**
Moisture @ 105 C	T162	AR	0.1	%	**19**	**14**	**14**
pH	T7	AR			**8.2**	**8.2**	**9.4**
Arsenic	T6	M40	2	mg/kg	**5**	**11**	**5**
Cadmium	T6	M40	1	mg/kg	<1	<1	<1
Chromium	T6	M40	1	mg/kg	**5**	**12**	**5**
Chromium VI	T6	AR	1	mg/kg	<1	<1	<1
Copper	T6	M40	1	mg/kg	**4**	**11**	**4**
Lead	T6	M40	1	mg/kg	**4**	**10**	**4**
Mercury	T6	M40	1	mg/kg	<1	<1	<1
Nickel	T6	M40	1	mg/kg	**5**	**14**	**6**
Selenium	T6	M40	3	mg/kg	<3	<3	<3
Zinc	T6	M40	1	mg/kg	**18**	**47**	**20**
SO4(Total)	T6	M40	0.01	%	**0.05**	**0.05**	**0.06**
Fraction Organic Carbon - F(oc)	T21	M40	1	%	**3**	**6**	**2**
Total Organic Carbon	T21	M40	0.1	%	**0.4**	**0.4**	**0.2**
Benzene	T54	AR	1	µg/kg	(13) <1	(13) <1	(13) <1
Toluene	T54	AR	1	µg/kg	<1	<1	<1
EthylBenzene	T54	AR	1	µg/kg	<1	<1	<1
M/P Xylene	T54	AR	1	µg/kg	<1	<1	<1
O Xylene	T54	AR	1	µg/kg	<1	<1	<1
TPH (C5-C6 aliphatic)	T54	AR	0.010	mg/kg	<0.010	<0.010	<0.010
TPH (C6-C8 aliphatic)	T54	AR	0.010	mg/kg	<0.010	<0.010	<0.010
TPH (C8-C10 aliphatic)	T54	AR	0.010	mg/kg	<0.010	<0.010	<0.010
TPH (C10-C12 aliphatic)	T8	AR	1	mg/kg	<1	<1	<1
TPH (C12-C16 aliphatic)	T8	AR	1	mg/kg	<1	<1	<1
TPH (C16-C21 aliphatic)	T8	AR	1	mg/kg	<1	<1	<1
TPH (C21-C35 aliphatic)	T8	AR	1	mg/kg	<1	<1	<1
TPH (C6-C7 aromatic)	T54	AR	0.010	mg/kg	<0.010	<0.010	<0.010
TPH (C7-C8 aromatic)	T54	AR	0.010	mg/kg	<0.010	<0.010	<0.010
TPH (C8-C10 aromatic)	T54	AR	0.010	mg/kg	<0.010	<0.010	<0.010
TPH (C10-C12 aromatic)	T8	AR	1	mg/kg	<1	<1	<1
TPH (C12-C16 aromatic)	T8	AR	1	mg/kg	<1	<1	<1
TPH (C16-C21 aromatic)	T8	AR	1	mg/kg	<1	**1**	<1
TPH (C21-C35 aromatic)	T8	AR	1	mg/kg	<1	**2**	<1
Naphthalene	T207	M105	0.1	mg/kg	<0.1	<0.1	<0.1
Acenaphthylene	T207	M105	0.1	mg/kg	<0.1	<0.1	<0.1
Acenaphthene	T207	M105	0.1	mg/kg	<0.1	<0.1	<0.1
Fluorene	T207	M105	0.1	mg/kg	<0.1	<0.1	<0.1
Phenanthrene	T207	M105	0.1	mg/kg	<0.1	<0.1	<0.1
Anthracene	T207	M105	0.1	mg/kg	<0.1	<0.1	<0.1
Fluoranthene	T207	M105	0.1	mg/kg	<0.1	<0.1	<0.1
Pyrene	T207	M105	0.1	mg/kg	<0.1	<0.1	<0.1
Benzo(a)Anthracene	T207	M105	0.1	mg/kg	<0.1	<0.1	<0.1
Chrysene	T207	M105	0.1	mg/kg	**0.2**	**0.1**	<0.1
Benzo(b/k)Fluoranthene	T207	M105	0.1	mg/kg	**0.2**	**0.1**	<0.1
Benzo(a)Pyrene	T207	M105	0.1	mg/kg	<0.1	<0.1	<0.1
Indeno(123-cd)Pyrene	T207	M105	0.1	mg/kg	<0.1	<0.1	<0.1
Dibenzo(ah)Anthracene	T207	M105	0.1	mg/kg	<0.1	<0.1	<0.1
Benzo(ghi)Perylene	T207	M105	0.1	mg/kg	<0.1	<0.1	<0.1
PAH(total)	T207	M105	0.1	mg/kg	**0.4**	**0.2**	<0.1

Index to symbols used in 278879-1

Value	Description
M105	Analysis conducted on an "as received" aliquot. Results are reported on a dry weight basis where moisture content was determined by assisted drying of sample at 105C
AR	As Received
M40	Analysis conducted on sample assisted dried at no more than 40C. Results are reported on a dry weight basis.
13	Results have been blank corrected.
M	Analysis is MCERTS accredited
U	Analysis is UKAS accredited
N	Analysis is not UKAS accredited

Method Index

Value	Description
T277	Grav (1 Dec) (40 C)
T162	Grav (1 Dec) (105 C)
T6	ICP/OES
T54	GC/MS (Headspace)
T21	OX/IR
T8	GC/FID
T207	GC/MS(MCERTS)
T7	Probe

Accreditation Summary

Determinand	Method	Test Sample	LOD	Units	Symbol	SAL References
Moisture	T277	AR	0.1	%	N	001-003
Moisture @ 105 C	T162	AR	0.1	%	N	001-003
pH	T7	AR			M	001-003
Arsenic	T6	M40	2	mg/kg	M	001-003
Cadmium	T6	M40	1	mg/kg	M	001-003
Chromium	T6	M40	1	mg/kg	M	001-003
Chromium VI	T6	AR	1	mg/kg	N	001-003
Copper	T6	M40	1	mg/kg	M	001-003
Lead	T6	M40	1	mg/kg	M	001-003
Mercury	T6	M40	1	mg/kg	M	001-003
Nickel	T6	M40	1	mg/kg	M	001-003
Selenium	T6	M40	3	mg/kg	M	001-003
Zinc	T6	M40	1	mg/kg	M	001-003
SO4(Total)	T6	M40	0.01	%	N	001-003
Fraction Organic Carbon - F(oc)	T21	M40	1	%	N	001-003
Total Organic Carbon	T21	M40	0.1	%	N	001-003
Benzene	T54	AR	1	µg/kg	U	001-003
Toluene	T54	AR	1	µg/kg	U	001-003
EthylBenzene	T54	AR	1	µg/kg	U	001-003
M/P Xylene	T54	AR	1	µg/kg	U	001-003
O Xylene	T54	AR	1	µg/kg	U	001-003
TPH (C5-C6 aliphatic)	T54	AR	0.010	mg/kg	N	001-003
TPH (C6-C8 aliphatic)	T54	AR	0.010	mg/kg	N	001-003
TPH (C8-C10 aliphatic)	T54	AR	0.010	mg/kg	N	001-003
TPH (C10-C12 aliphatic)	T8	AR	1	mg/kg	N	001-003
TPH (C12-C16 aliphatic)	T8	AR	1	mg/kg	N	001-003
TPH (C16-C21 aliphatic)	T8	AR	1	mg/kg	N	001-003
TPH (C21-C35 aliphatic)	T8	AR	1	mg/kg	N	001-003
TPH (C6-C7 aromatic)	T54	AR	0.010	mg/kg	N	001-003
TPH (C7-C8 aromatic)	T54	AR	0.010	mg/kg	N	001-003
TPH (C8-C10 aromatic)	T54	AR	0.010	mg/kg	N	001-003
TPH (C10-C12 aromatic)	T8	AR	1	mg/kg	N	001-003
TPH (C12-C16 aromatic)	T8	AR	1	mg/kg	N	001-003
TPH (C16-C21 aromatic)	T8	AR	1	mg/kg	N	001-003
TPH (C21-C35 aromatic)	T8	AR	1	mg/kg	N	001-003
Naphthalene	T207	M105	0.1	mg/kg	M	001-003
Acenaphthylene	T207	M105	0.1	mg/kg	U	001-003
Acenaphthene	T207	M105	0.1	mg/kg	M	001-003
Fluorene	T207	M105	0.1	mg/kg	M	001-003
Phenanthrene	T207	M105	0.1	mg/kg	M	001-003
Anthracene	T207	M105	0.1	mg/kg	U	001-003

Determinand	Method	Test Sample	LOD	Units	Symbol	SAL References
Fluoranthene	T207	M105	0.1	mg/kg	M	001-003
Pyrene	T207	M105	0.1	mg/kg	M	001-003
Benzo(a)Anthracene	T207	M105	0.1	mg/kg	M	001-003
Chrysene	T207	M105	0.1	mg/kg	M	001-003
Benzo(b/k)Fluoranthene	T207	M105	0.1	mg/kg	M	001-003
Benzo(a)Pyrene	T207	M105	0.1	mg/kg	M	001-003
Indeno(123-cd)Pyrene	T207	M105	0.1	mg/kg	M	001-003
Dibenzo(ah)Anthracene	T207	M105	0.1	mg/kg	M	001-003
Benzo(ghi)Perylene	T207	M105	0.1	mg/kg	M	001-003
PAH(total)	T207	M105	0.1	mg/kg	U	001-003

Scientific Analysis Laboratories is a
limited company registered in England and
Wales (No 2514788) whose address is at
Hadfield House, Hadfield Street, Manchester M16 9FE

Scientific Analysis Laboratories Ltd

Certificate of Analysis

Hadfield House
Hadfield Street
Cornbrook
Manchester
M16 9FE
Tel : 0161 874 2400
Fax : 0161 874 2468

Report Number: 282523-1

Date of Report: 20-Jun-2012

Customer: VertaseFLI Limited
19 Napier Court
Barlborough Links
Barlborough
S43 4PZ

Customer Contact: The Project Management

Customer Job Reference: 907 BRI
Customer Purchase Order: 907 BRI
Date Job Received at SAL: 11-Jun-2012
Date Analysis Started: 13-Jun-2012
Date Analysis Completed: 19-Jun-2012

The results reported relate to samples received in the laboratory
Opinions and interpretations expressed herein are outside the scope of UKAS accreditation

Tests covered by this certificate were conducted in accordance with SAL SOPs

UKAS TESTING
1549

mCERTS THE ENVIRONMENT AGENCY'S MONITORING CERTIFICATION SCHEME

Report checked
and authorised by :
Mrs Emma Thickbroom
Senior Project Manager

Issued by :
Mrs Emma Thickbroom
Senior Project Manager

SAL Reference: 282523
Customer Reference: 907 BRI

Soil Analysed as Soil
MCERTS Preparation

SAL Reference	**282523 001**
Customer Sample Reference	**IMPORT 1**
Date Sampled	**08-JUN-2012**
Type	**Clay**

Determinand	Method	Test Sample	LOD	Units	
Moisture	T277	AR	0.1	%	**23**
Moisture @ 105 C	T162	AR	0.1	%	**24**

SAL Reference: 282523
Customer Reference: 907 BRI

Soil Analysed as Soil
Hauxton Screen Suite

SAL Reference	**282523 001**
Customer Sample Reference	**IMPORT 1**
Date Sampled	**08-JUN-2012**
Type	**Clay**

Determinand	Method	Test Sample	LOD	Units	
Electrical Conductivity	T7	AR	10	µS/cm	**2000**
pH	T7	AR			**7.9**
Moisture	T277	AR	0.1	%	**23**

SAL Reference: 282523
Customer Reference: 907 BRI

Soil Analysed as Soil
Vertase Hauxton OP/ON Suite

SAL Reference	**282523 001**
Customer Sample Reference	**IMPORT 1**
Date Sampled	**08-JUN-2012**
Type	**Clay**

Determinand	Method	Test Sample	LOD	Units	
Dimefox	T16	AR	0.01	mg/kg	<0.01
Ethofumesate	T16	AR	0.01	mg/kg	<0.01
Hempa	T16	AR	0.01	mg/kg	<0.01
Schradan	T16	AR	0.01	mg/kg	<0.01
Simazine	T16	AR	0.01	mg/kg	<0.01

SAL Reference: 282523
Customer Reference: 907 BRI

Soil Analysed as Soil
Vertase Hauxton Phenoxy Acid Herbs Suite

SAL Reference	**282523 001**
Customer Sample Reference	**IMPORT 1**
Date Sampled	**08-JUN-2012**
Type	**Clay**

Determinand	Method	Test Sample	LOD	Units	
Dicamba	T16	AR	0.01	mg/kg	<0.01
Dichlorprop	T16	AR	0.01	mg/kg	<0.01
Phenoxy Acetic acid herbicide: MCPA	T16	AR	0.01	mg/kg	<0.01
Mecoprop	T16	AR	0.01	mg/kg	<0.01

SAL Reference: 282523
Customer Reference: 907 BRI

Soil Analysed as Soil
Vertase Hauxton SVOC Suite

SAL Reference	**282523 001**
Customer Sample Reference	**IMPORT 1**
Date Sampled	**08-JUN-2012**
Type	**Clay**

Determinand	Method	Test Sample	LOD	Units	
2,4,6-Trichlorophenol	T16	AR	0.1	mg/kg	<0.1
2-Methyl-4,6-dinitrophenol	T16	AR	0.1	mg/kg	<0.1
4-Chloro-2-methylphenol	T16	AR	0.1	mg/kg	<0.1
Bis (2-chloroethyl) ether	T16	AR	0.1	mg/kg	<0.1
Phenol	T16	AR	0.1	mg/kg	<0.1

SAL Reference: 282523
Customer Reference: 907 BRI

Soil Analysed as Soil
Vertase Hauxton VOC Suite

SAL Reference	**282523 001**
Customer Sample Reference	**IMPORT 1**
Date Sampled	**08-JUN-2012**
Type	**Clay**

Determinand	Method	Test Sample	LOD	Units	
1,2-Dichlorobenzene	T54	AR	5	µg/kg	<5
1,2-Dichloroethane	T54	AR	5	µg/kg	<5
Cis-1,2-Dichloroethylene	T54	AR	5	µg/kg	<5
Cyclohexanone	T54	AR	10	µg/kg	<10
Tetrachloroethene	T54	AR	5	µg/kg	<5
Toluene	T54	AR	1	µg/kg	**1**
Trichloroethene	T54	AR	5	µg/kg	<5
Vinyl chloride	T54	AR	5	µg/kg	<5
Xylene (Total)	T54	AR	1	µg/kg	<1

SAL Reference: 282523
Customer Reference: 907 BRI

Soil Analysed as Soil
Hauxton SVOC/VOC Screen

SAL Reference	**282523 001**
Customer Sample Reference	**IMPORT 1**
Date Sampled	**08-JUN-2012**
Type	**Clay**

Determinand	Method	Test Sample	LOD	Units	
SVOC screen hauxton	T16	AR	2.0	mg/kg	<2.0
VOC screen hauxton	T54	AR	0.2	mg/kg	<0.2

SAL Reference: 282523
Customer Reference: 907 BRI

Soil Analysed as Soil
Hauxton SVOC/VOC Screen per peak

SAL Reference	**282523 001**
Customer Sample Reference	**IMPORT 1**
Date Sampled	**08-JUN-2012**
Type	**Clay**

Determinand	Method	Test Sample	LOD	Units	
Hauxton SVOC Screen (Top 5 additional peaks)	T5	AR			N.D.
Hauxton VOC Screen (Top 5 additional peaks)	T5	AR			N.D.

SAL Reference: 282523
Customer Reference: 907 BRI

Soil Analysed as Soil
Miscellaneous

SAL Reference	**282523 001**
Customer Sample Reference	**IMPORT 1**
Date Sampled	**08-JUN-2012**
Type	**Clay**

Determinand	Method	Test Sample	LOD	Units	
Arsenic	T6	M40	2	mg/kg	**4**
Cadmium	T6	M40	1	mg/kg	<1
Chromium	T6	M40	1	mg/kg	**5**
Chromium VI	T6	AR	1	mg/kg	<1
Copper	T6	M40	1	mg/kg	**5**
Fraction Organic Carbon - F(oc)	T21	M40	1	%	**4**
Lead	T6	M40	1	mg/kg	**10**
Mercury	T6	M40	1	mg/kg	<1
Nickel	T6	M40	1	mg/kg	**4**
pH	T7	AR			**7.9**
Selenium	T6	M40	3	mg/kg	<3
SO4(Total)	T6	M40	0.01	%	**0.09**
Total Organic Carbon	T21	M40	0.1	%	**0.5**
Zinc	T6	M40	1	mg/kg	**33**

SAL Reference: 282523
Customer Reference: 907 BRI

Soil Analysed as Soil
Total and Speciated USEPA16 PAH

SAL Reference	**282523 001**
Customer Sample Reference	**IMPORT 1**
Date Sampled	**08-JUN-2012**
Type	**Clay**

Determinand	Method	Test Sample	LOD	Units	
Naphthalene	T207	M105	0.1	mg/kg	<0.1
Acenaphthylene	T207	M105	0.1	mg/kg	<0.1
Acenaphthene	T207	M105	0.1	mg/kg	<0.1
Fluorene	T207	M105	0.1	mg/kg	<0.1
Phenanthrene	T207	M105	0.1	mg/kg	<0.1
Anthracene	T207	M105	0.1	mg/kg	<0.1
Fluoranthene	T207	M105	0.1	mg/kg	<0.1
Pyrene	T207	M105	0.1	mg/kg	<0.1
Benzo(a)Anthracene	T207	M105	0.1	mg/kg	<0.1
Chrysene	T207	M105	0.1	mg/kg	<0.1
Benzo(b/k)Fluoranthene	T207	M105	0.1	mg/kg	<0.1
Benzo(a)Pyrene	T207	M105	0.1	mg/kg	<0.1
Indeno(123-cd)Pyrene	T207	M105	0.1	mg/kg	<0.1
Dibenzo(ah)Anthracene	T207	M105	0.1	mg/kg	<0.1
Benzo(ghi)Perylene	T207	M105	0.1	mg/kg	<0.1
PAH(total)	T207	M105	0.1	mg/kg	<0.1

SAL Reference: 282523
Customer Reference: 907 BRI

Soil Analysed as Soil
TPH CWG

SAL Reference	**282523 001**
Customer Sample Reference	**IMPORT 1**
Date Sampled	**08-JUN-2012**
Type	**Clay**

Determinand	Method	Test Sample	LOD	Units	
Benzene	T54	AR	1	µg/kg	(13) <1
EthylBenzene	T54	AR	1	µg/kg	<1
M/P Xylene	T54	AR	1	µg/kg	<1
O Xylene	T54	AR	1	µg/kg	<1
Toluene	T54	AR	1	µg/kg	**1**
TPH (C5-C6 aliphatic)	T54	AR	0.010	mg/kg	<0.010
TPH (C6-C8 aliphatic)	T54	AR	0.010	mg/kg	<0.010
TPH (C8-C10 aliphatic)	T54	AR	0.010	mg/kg	<0.010
TPH (C10-C12 aliphatic)	T8	AR	1	mg/kg	<1
TPH (C12-C16 aliphatic)	T8	AR	1	mg/kg	<1
TPH (C16-C21 aliphatic)	T8	AR	1	mg/kg	<1
TPH (C21-C35 aliphatic)	T8	AR	1	mg/kg	<1
TPH (C6-C7 aromatic)	T54	AR	0.010	mg/kg	<0.010
TPH (C7-C8 aromatic)	T54	AR	0.010	mg/kg	<0.010
TPH (C8-C10 aromatic)	T54	AR	0.010	mg/kg	<0.010
TPH (C10-C12 aromatic)	T8	AR	1	mg/kg	<1
TPH (C12-C16 aromatic)	T8	AR	1	mg/kg	<1
TPH (C16-C21 aromatic)	T8	AR	1	mg/kg	<1
TPH (C21-C35 aromatic)	T8	AR	1	mg/kg	<1

Index to symbols used in 282523-1

Value	Description
AR	As Received
M40	Analysis conducted on sample assisted dried at no more than 40C. Results are reported on a dry weight basis.
M105	Analysis conducted on an "as received" aliquot. Results are reported on a dry weight basis where moisture content was determined by assisted drying of sample at 105C
N.D.	Not Detected
13	Results have been blank corrected.
M	Analysis is MCERTS accredited
U	Analysis is UKAS accredited
N	Analysis is not UKAS accredited

Method Index

Value	Description
T5	Suite
T207	GC/MS(MCERTS)
T162	Grav (1 Dec) (105 C)
T54	GC/MS (Headspace)
T7	Probe
T6	ICP/OES
T16	GC/MS
T277	Grav (1 Dec) (40 C)
T21	OX/IR
T8	GC/FID

Accreditation Summary

Determinand	Method	Test Sample	LOD	Units	Symbol	SAL References
Moisture @ 105 C	T162	AR	0.1	%	N	001
Electrical Conductivity	T7	AR	10	µS/cm	N	001
Moisture	T277	AR	0.1	%	N	001

Determinand	Method	Test Sample	LOD	Units	Symbol	SAL References
Dimefox	T16	AR	0.01	mg/kg	N	001
Ethofumesate	T16	AR	0.01	mg/kg	N	001
Hempa	T16	AR	0.01	mg/kg	N	001
Schradan	T16	AR	0.01	mg/kg	N	001
Simazine	T16	AR	0.01	mg/kg	N	001
Dicamba	T16	AR	0.01	mg/kg	N	001
Dichlorprop	T16	AR	0.01	mg/kg	N	001
Phenoxy Acetic acid herbicide: MCPA	T16	AR	0.01	mg/kg	N	001
Mecoprop	T16	AR	0.01	mg/kg	N	001
2,4,6-Trichlorophenol	T16	AR	0.1	mg/kg	U	001
2-Methyl-4,6-dinitrophenol	T16	AR	0.1	mg/kg	N	001
4-Chloro-2-methylphenol	T16	AR	0.1	mg/kg	N	001
Bis (2-chloroethyl) ether	T16	AR	0.1	mg/kg	U	001
Phenol	T16	AR	0.1	mg/kg	U	001
1,2-Dichlorobenzene	T54	AR	5	µg/kg	U	001
1,2-Dichloroethane	T54	AR	5	µg/kg	U	001
Cis-1,2-Dichloroethylene	T54	AR	5	µg/kg	U	001
Cyclohexanone	T54	AR	10	µg/kg	N	001
Tetrachloroethene	T54	AR	5	µg/kg	U	001
Toluene	T54	AR	1	µg/kg	U	001
Trichloroethene	T54	AR	5	µg/kg	U	001
Vinyl chloride	T54	AR	5	µg/kg	U	001
Xylene (Total)	T54	AR	1	µg/kg	U	001
SVOC screen hauxton	T16	AR	2.0	mg/kg	N	001
VOC screen hauxton	T54	AR	0.2	mg/kg	N	001
Hauxton SVOC Screen (Top 5 additional peaks)	T5	AR			N	001
Hauxton VOC Screen (Top 5 additional peaks)	T5	AR			N	001
Arsenic	T6	M40	2	mg/kg	M	001
Cadmium	T6	M40	1	mg/kg	M	001
Chromium	T6	M40	1	mg/kg	M	001
Chromium VI	T6	AR	1	mg/kg	N	001
Copper	T6	M40	1	mg/kg	M	001
Fraction Organic Carbon - F(oc)	T21	M40	1	%	N	001
Lead	T6	M40	1	mg/kg	M	001
Mercury	T6	M40	1	mg/kg	M	001
Nickel	T6	M40	1	mg/kg	M	001
pH	T7	AR			U	001
pH	T7	AR			M	001
Selenium	T6	M40	3	mg/kg	M	001
SO4(Total)	T6	M40	0.01	%	N	001
Total Organic Carbon	T21	M40	0.1	%	N	001
Zinc	T6	M40	1	mg/kg	M	001
Naphthalene	T207	M105	0.1	mg/kg	M	001
Acenaphthylene	T207	M105	0.1	mg/kg	U	001
Acenaphthene	T207	M105	0.1	mg/kg	M	001
Fluorene	T207	M105	0.1	mg/kg	M	001
Phenanthrene	T207	M105	0.1	mg/kg	M	001
Anthracene	T207	M105	0.1	mg/kg	U	001
Fluoranthene	T207	M105	0.1	mg/kg	M	001
Pyrene	T207	M105	0.1	mg/kg	M	001
Benzo(a)Anthracene	T207	M105	0.1	mg/kg	M	001
Chrysene	T207	M105	0.1	mg/kg	M	001
Benzo(b/k)Fluoranthene	T207	M105	0.1	mg/kg	M	001
Benzo(a)Pyrene	T207	M105	0.1	mg/kg	M	001
Indeno(123-cd)Pyrene	T207	M105	0.1	mg/kg	M	001
Dibenzo(ah)Anthracene	T207	M105	0.1	mg/kg	M	001
Benzo(ghi)Perylene	T207	M105	0.1	mg/kg	M	001
PAH(total)	T207	M105	0.1	mg/kg	U	001
Benzene	T54	AR	1	µg/kg	U	001
EthylBenzene	T54	AR	1	µg/kg	U	001
M/P Xylene	T54	AR	1	µg/kg	U	001
O Xylene	T54	AR	1	µg/kg	U	001
TPH (C5-C6 aliphatic)	T54	AR	0.010	mg/kg	N	001
TPH (C6-C8 aliphatic)	T54	AR	0.010	mg/kg	N	001
TPH (C8-C10 aliphatic)	T54	AR	0.010	mg/kg	N	001
TPH (C10-C12 aliphatic)	T8	AR	1	mg/kg	N	001
TPH (C12-C16 aliphatic)	T8	AR	1	mg/kg	N	001
TPH (C16-C21 aliphatic)	T8	AR	1	mg/kg	N	001
TPH (C21-C35 aliphatic)	T8	AR	1	mg/kg	N	001
TPH (C6-C7 aromatic)	T54	AR	0.010	mg/kg	N	001

Determinand	Method	Test Sample	LOD	Units	Symbol	SAL References
TPH (C7-C8 aromatic)	T54	AR	0.010	mg/kg	N	001
TPH (C8-C10 aromatic)	T54	AR	0.010	mg/kg	N	001
TPH (C10-C12 aromatic)	T8	AR	1	mg/kg	N	001
TPH (C12-C16 aromatic)	T8	AR	1	mg/kg	N	001
TPH (C16-C21 aromatic)	T8	AR	1	mg/kg	N	001
TPH (C21-C35 aromatic)	T8	AR	1	mg/kg	N	001

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Hadfield House, Hadfield Street, Manchester M16 9FE

Scientific Analysis Laboratories Ltd

Certificate of Analysis

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Tel : 0161 874 2400
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Report Number: 289237-1

Date of Report: 07-Aug-2012

Customer: VertaseFLI Limited
19 Napier Court
Barlborough Links
Barlborough
S43 4PZ

Customer Contact: The Project Management

Customer Job Reference:
Customer Site Reference: Hauxton
Date Job Received at SAL: 30-Jul-2012
Date Analysis Started: 31-Jul-2012
Date Analysis Completed: 07-Aug-2012

The results reported relate to samples received in the laboratory
Opinions and interpretations expressed herein are outside the scope of UKAS accreditation
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Tests covered by this certificate were conducted in accordance with SAL SOPs

UKAS TESTING
1549

Report checked
and authorised by :
Mrs Emma Thickbroom
Senior Project Manager

Issued by :
Mrs Emma Thickbroom
Senior Project Manager

SAL Reference: 289237
Project Site: Hauxton
Customer Reference:

Soil Analysed as Soil
Vertase Hauxton Suite

				SAL Reference	**289237 001**	**289237 002**
				Customer Sample Reference	**B16 SV N**	**B16 SV E**
				Date Sampled	**26-JUL-2012**	**26-JUL-2012**
Determinand	**Method**	**Test Sample**	**LOD**	**Units**		
Electrical Conductivity	T7	AR	10	µS/cm	**1400**	**1400**
Moisture	T277	AR	0.1	%	**14**	**13**
pH	T7	AR			**8.0**	**8.0**

SAL Reference: 289237
Project Site: Hauxton
Customer Reference:

Soil Analysed as Soil
Vertase Hauxton OP/ON Suite

				SAL Reference	**289237 001**	**289237 002**
				Customer Sample Reference	**B16 SV N**	**B16 SV E**
				Date Sampled	**26-JUL-2012**	**26-JUL-2012**
Determinand	**Method**	**Test Sample**	**LOD**	**Units**		
Dimefox	T16	AR	10	µg/kg	<10	<10
Hempa	T16	AR	10	µg/kg	<10	<10
Schradan	T16	AR	10	µg/kg	<10	<10
Simazine	T16	AR	10	µg/kg	<10	<10
Ethofumesate	T16	AR	10	µg/kg	<10	<10

SAL Reference: 289237
Project Site: Hauxton
Customer Reference:

Soil Analysed as Soil
Vertase Hauxton Phenoxy Acid Herbs Suite

				SAL Reference	**289237 001**	**289237 002**
				Customer Sample Reference	**B16 SV N**	**B16 SV E**
				Date Sampled	**26-JUL-2012**	**26-JUL-2012**
Determinand	**Method**	**Test Sample**	**LOD**	**Units**		
Dicamba	T16	AR	10	µg/kg	<10	<10
Mecoprop	T16	AR	10	µg/kg	<10	<10
Phenoxy Acetic acid herbicide: MCPA	T16	AR	10	µg/kg	<10	<10
Dichlorprop	T16	AR	10	µg/kg	<10	<10

SAL Reference: 289237
Project Site: Hauxton
Customer Reference:

Soil Analysed as Soil
Vertase Hauxton SVOC Suite

				SAL Reference	**289237 001**	**289237 002**
				Customer Sample Reference	**B16 SV N**	**B16 SV E**
				Date Sampled	**26-JUL-2012**	**26-JUL-2012**
Determinand	**Method**	**Test Sample**	**LOD**	**Units**		
Phenol	T16	AR	100	µg/kg	<100	<100
Bis (2-chloroethyl) ether	T16	AR	100	µg/kg	<100	<100
4-Chloro-2-methylphenol	T16	AR	100	µg/kg	<100	<100
2,4,6-Trichlorophenol	T16	AR	100	µg/kg	<100	<100
2-Methyl-4,6-dinitrophenol	T16	AR	100	µg/kg	<100	<100

SAL Reference: 289237
Project Site: Hauxton
Customer Reference:

Soil Analysed as Soil
Vertase Hauxton VOC Suite

SAL Reference	**289237 001**	**289237 002**
Customer Sample Reference	**B16 SV N**	**B16 SV E**
Date Sampled	**26-JUL-2012**	**26-JUL-2012**

Determinand	Method	Test Sample	LOD	Units		
1,2-Dichlorobenzene	T54	AR	5	µg/kg	<5	<5
1,2-Dichloroethane	T54	AR	5	µg/kg	<5	<5
Cis-1,2-Dichloroethylene	T54	AR	5	µg/kg	<5	<5
Cyclohexanone	T54	AR	10	µg/kg	<10	<10
Tetrachloroethene	T54	AR	5	µg/kg	<5	<5
Toluene	T54	AR	1	µg/kg	<1	<1
Trichloroethene	T54	AR	5	µg/kg	**10**	<5
Vinyl chloride	T54	AR	5	µg/kg	<5	<5
Xylene (Total)	T54	AR	1	µg/kg	<1	<1

Index to symbols used in 289237-1

Value	Description
AR	As Received
U	Analysis is UKAS accredited
N	Analysis is not UKAS accredited

Method Index

Value	Description
T54	GC/MS (Headspace)
T7	Probe
T277	Grav (1 Dec) (40 C)
T16	GC/MS

Accreditation Summary

Determinand	Method	Test Sample	LOD	Units	Symbol	SAL References
Dicamba	T16	AR	10	µg/kg	N	001-002
Mecoprop	T16	AR	10	µg/kg	N	001-002
Phenoxy Acetic acid herbicide: MCPA	T16	AR	10	µg/kg	N	001-002
Dichlorprop	T16	AR	10	µg/kg	N	001-002
Dimefox	T16	AR	10	µg/kg	N	001-002
Hempa	T16	AR	10	µg/kg	N	001-002
Schradan	T16	AR	10	µg/kg	N	001-002
Simazine	T16	AR	10	µg/kg	N	001-002
Ethofumesate	T16	AR	10	µg/kg	N	001-002
1,2-Dichlorobenzene	T54	AR	5	µg/kg	U	001-002
1,2-Dichloroethane	T54	AR	5	µg/kg	U	001-002
Cis-1,2-Dichloroethylene	T54	AR	5	µg/kg	U	001-002
Cyclohexanone	T54	AR	10	µg/kg	N	001-002
Tetrachloroethene	T54	AR	5	µg/kg	U	001-002
Toluene	T54	AR	1	µg/kg	U	001-002
Trichloroethene	T54	AR	5	µg/kg	U	001-002
Vinyl chloride	T54	AR	5	µg/kg	U	001-002
Xylene (Total)	T54	AR	1	µg/kg	U	001-002
Phenol	T16	AR	100	µg/kg	U	001-002
Bis (2-chloroethyl) ether	T16	AR	100	µg/kg	U	001-002
4-Chloro-2-methylphenol	T16	AR	100	µg/kg	N	001-002
2,4,6-Trichlorophenol	T16	AR	100	µg/kg	U	001-002
2-Methyl-4,6-dinitrophenol	T16	AR	100	µg/kg	N	001-002
Electrical Conductivity	T7	AR	10	µS/cm	N	001-002
Moisture	T277	AR	0.1	%	N	001-002
pH	T7	AR			U	001-002

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Scientific Analysis Laboratories Ltd

Certificate of Analysis

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Report Number: 289239-1

Date of Report: 07-Aug-2012

Customer: VertaseFLI Limited
19 Napier Court
Barlborough Links
Barlborough
S43 4PZ

Customer Contact: The Project Management

Customer Job Reference: 907 BRI
Customer Purchase Order: 907 BRI
Date Job Received at SAL: 30-Jul-2012
Date Analysis Started: 31-Jul-2012
Date Analysis Completed: 07-Aug-2012

The results reported relate to samples received in the laboratory
Opinions and interpretations expressed herein are outside the scope of UKAS accreditation

Tests covered by this certificate were conducted in accordance with SAL SOPs

UKAS TESTING
1549

Report checked
and authorised by :
Mrs Emma Thickbroom
Senior Project Manager

Issued by :
Mrs Emma Thickbroom
Senior Project Manager

SAL Reference: 289239
Customer Reference: 907 BRI

Soil Analysed as Soil
Vertase Hauxton Suite

SAL Reference	**289239 001**
Customer Sample Reference	**B16 BV A**
Date Sampled	**26-JUL-2012**

Determinand	Method	Test Sample	LOD	Units	
Electrical Conductivity	T7	AR	10	µS/cm	**2000**
pH	T7	AR			**8.0**
Moisture	T277	AR	0.1	%	**13**

SAL Reference: 289239
Customer Reference: 907 BRI

Soil Analysed as Soil
Vertase Hauxton OP/ON Suite

SAL Reference	**289239 001**
Customer Sample Reference	**B16 BV A**
Date Sampled	**26-JUL-2012**

Determinand	Method	Test Sample	LOD	Units	
Dimefox	T16	AR	10	µg/kg	<10
Hempa	T16	AR	10	µg/kg	<10
Schradan	T16	AR	10	µg/kg	<10
Simazine	T16	AR	10	µg/kg	<10
Ethofumesate	T16	AR	10	µg/kg	<10

SAL Reference: 289239
Customer Reference: 907 BRI

Soil Analysed as Soil
Vertase Hauxton Phenoxy Acid Herbs Suite

SAL Reference	**289239 001**
Customer Sample Reference	**B16 BV A**
Date Sampled	**26-JUL-2012**

Determinand	Method	Test Sample	LOD	Units	
Dicamba	T16	AR	10	µg/kg	<10
Mecoprop	T16	AR	10	µg/kg	<10
Phenoxy Acetic acid herbicide: MCPA	T16	AR	10	µg/kg	<10
Dichlorprop	T16	AR	10	µg/kg	<10

SAL Reference: 289239
Customer Reference: 907 BRI

Soil Analysed as Soil
Vertase Hauxton SVOC Suite

SAL Reference	**289239 001**
Customer Sample Reference	**B16 BV A**
Date Sampled	**26-JUL-2012**

Determinand	Method	Test Sample	LOD	Units	
Phenol	T16	AR	100	µg/kg	<100
Bis (2-chloroethyl) ether	T16	AR	100	µg/kg	<100
4-Chloro-2-methylphenol	T16	AR	100	µg/kg	<100
2,4,6-Trichlorophenol	T16	AR	100	µg/kg	<100
2-Methyl-4,6-dinitrophenol	T16	AR	100	µg/kg	<100

SAL Reference: 289239
Customer Reference: 907 BRI

Soil Analysed as Soil
Vertase Hauxton VOC Suite

SAL Reference	**289239 001**
Customer Sample Reference	**B16 BV A**
Date Sampled	**26-JUL-2012**

Determinand	Method	Test Sample	LOD	Units	
Vinyl chloride	T54	AR	5	µg/kg	<5
Cis-1,2-Dichloroethylene	T54	AR	5	µg/kg	<5
1,2-Dichloroethane	T54	AR	5	µg/kg	<5
Trichloroethene	T54	AR	5	µg/kg	**40**
Toluene	T54	AR	1	µg/kg	<1
Tetrachloroethene	T54	AR	5	µg/kg	**11**
Xylene (Total)	T54	AR	1	µg/kg	<1
1,2-Dichlorobenzene	T54	AR	5	µg/kg	<5
Cyclohexanone	T54	AR	10	µg/kg	<10

Index to symbols used in 289239-1

Value	Description
AR	As Received
U	Analysis is UKAS accredited
N	Analysis is not UKAS accredited

Method Index

Value	Description
T16	GC/MS
T7	Probe
T54	GC/MS (Headspace)
T277	Grav (1 Dec) (40 C)

Accreditation Summary

Determinand	Method	Test Sample	LOD	Units	Symbol	SAL References
Dicamba	T16	AR	10	µg/kg	N	001
Mecoprop	T16	AR	10	µg/kg	N	001
Phenoxy Acetic acid herbicide: MCPA	T16	AR	10	µg/kg	N	001
Dichlorprop	T16	AR	10	µg/kg	N	001
Dimefox	T16	AR	10	µg/kg	N	001
Hempa	T16	AR	10	µg/kg	N	001
Schradan	T16	AR	10	µg/kg	N	001
Simazine	T16	AR	10	µg/kg	N	001
Ethofumesate	T16	AR	10	µg/kg	N	001
Vinyl chloride	T54	AR	5	µg/kg	U	001
Cis-1,2-Dichloroethylene	T54	AR	5	µg/kg	U	001
1,2-Dichloroethane	T54	AR	5	µg/kg	U	001
Trichloroethene	T54	AR	5	µg/kg	U	001
Toluene	T54	AR	1	µg/kg	U	001
Tetrachloroethene	T54	AR	5	µg/kg	U	001
Xylene (Total)	T54	AR	1	µg/kg	U	001
1,2-Dichlorobenzene	T54	AR	5	µg/kg	U	001
Cyclohexanone	T54	AR	10	µg/kg	N	001
Phenol	T16	AR	100	µg/kg	U	001
Bis (2-chloroethyl) ether	T16	AR	100	µg/kg	U	001
4-Chloro-2-methylphenol	T16	AR	100	µg/kg	N	001
2,4,6-Trichlorophenol	T16	AR	100	µg/kg	U	001
2-Methyl-4,6-dinitrophenol	T16	AR	100	µg/kg	N	001
Electrical Conductivity	T7	AR	10	µS/cm	N	001
pH	T7	AR			U	001
Moisture	T277	AR	0.1	%	N	001

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Wales (No 2514788) whose address is at
Hadfield House, Hadfield Street, Manchester M16 9FE

Scientific Analysis Laboratories Ltd

Certificate of Analysis

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Report Number: Supplement to 289240-2

Date of Report: 13-Aug-2012

Customer: VertaseFLI Limited
19 Napier Court
Barlborough Links
Barlborough
S43 4PZ

Customer Contact: The Project Management

Customer Job Reference: 907 BRI
Date Job Received at SAL: 30-Jul-2012
Date Analysis Started: 31-Jul-2012
Date Analysis Completed: 08-Aug-2012

The results reported relate to samples received in the laboratory
Opinions and interpretations expressed herein are outside the scope of UKAS accreditation
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Tests covered by this certificate were conducted in accordance with SAL SOPs

UKAS TESTING
1549

Report checked
and authorised by :
Lianne Bromiley
Project Manager

Issued by :
Lianne Bromiley
Project Manager

SAL Reference: 289240
Customer Reference: 907 BRI

Soil Analysed as Soil
MCERTS Preparation

				SAL Reference	**289240 001**	**289240 002**	**289240 003**
				Customer Sample Reference	**B16 BACKFILL 1**	**B16 BACKFILL 2**	**B16 BACKFILL 3**
				Date Sampled	**28-JUL-2012**	**28-JUL-2012**	**28-JUL-2012**
				Type	**Fill**	**Fill**	**Fill**
Determinand	**Method**	**Test Sample**	**LOD**	**Units**			
Moisture	T277	AR	0.1	%	**10**	**9.2**	**10**
Moisture @ 105 C	T162	AR	0.1	%	**18**	**13**	**16**

SAL Reference: 289240
Customer Reference: 907 BRI

Soil Analysed as Soil
Miscellaneous

				SAL Reference	**289240 001**	**289240 002**	**289240 003**
				Customer Sample Reference	**B16 BACKFILL 1**	**B16 BACKFILL 2**	**B16 BACKFILL 3**
				Date Sampled	**28-JUL-2012**	**28-JUL-2012**	**28-JUL-2012**
				Type	**Fill**	**Fill**	**Fill**
Determinand	**Method**	**Test Sample**	**LOD**	**Units**			
Electrical Conductivity	T7	AR	10	µS/cm	**1400**	**1300**	**1300**
pH	T7	AR			**7.8**	**8.1**	**9.0**

SAL Reference: 289240
Customer Reference: 907 BRI

Soil Analysed as Soil
Vertase Hauxton OP/ON Suite

				SAL Reference	**289240 001**	**289240 002**	**289240 003**
				Customer Sample Reference	**B16 BACKFILL 1**	**B16 BACKFILL 2**	**B16 BACKFILL 3**
				Date Sampled	**28-JUL-2012**	**28-JUL-2012**	**28-JUL-2012**
				Type	**Fill**	**Fill**	**Fill**
Determinand	**Method**	**Test Sample**	**LOD**	**Units**			
Dimefox	T16	AR	10	µg/kg	<10	<10	<10
Ethofumesate	T16	AR	10	µg/kg	<10	<10	<10
Hempa	T16	AR	10	µg/kg	<10	<10	<10
Schradan	T16	AR	10	µg/kg	<10	<10	<10
Simazine	T16	AR	10	µg/kg	<10	<10	<10

SAL Reference: 289240
Customer Reference: 907 BRI

Soil Analysed as Soil
Vertase Hauxton Phenoxy Acid Herbs Suite

				SAL Reference	**289240 001**	**289240 002**	**289240 003**
				Customer Sample Reference	**B16 BACKFILL 1**	**B16 BACKFILL 2**	**B16 BACKFILL 3**
				Date Sampled	**28-JUL-2012**	**28-JUL-2012**	**28-JUL-2012**
				Type	**Fill**	**Fill**	**Fill**
Determinand	**Method**	**Test Sample**	**LOD**	**Units**			
Dicamba	T16	AR	10	µg/kg	<10	<10	<10
Dichlorprop	T16	AR	10	µg/kg	<10	<10	<10
Phenoxy Acetic acid herbicide: MCPA	T16	AR	10	µg/kg	<10	<10	<10
Mecoprop	T16	AR	10	µg/kg	<10	<10	<10

SAL Reference: 289240
Customer Reference: 907 BRI

Soil Analysed as Soil
Vertase Hauxton SVOC Suite

				SAL Reference	**289240 001**	**289240 002**	**289240 003**
				Customer Sample Reference	**B16 BACKFILL 1**	**B16 BACKFILL 2**	**B16 BACKFILL 3**
				Date Sampled	**28-JUL-2012**	**28-JUL-2012**	**28-JUL-2012**
				Type	**Fill**	**Fill**	**Fill**
Determinand	**Method**	**Test Sample**	**LOD**	**Units**			
2,4,6-Trichlorophenol	T16	AR	100	µg/kg	<100	<100	<100
2-Methyl-4,6-dinitrophenol	T16	AR	100	µg/kg	<100	<100	<100
4-Chloro-2-methylphenol	T16	AR	100	µg/kg	<100	<100	<100
Bis (2-chloroethyl) ether	T16	AR	100	µg/kg	<100	<100	<100
Phenol	T16	AR	100	µg/kg	<100	<100	<100

SAL Reference: 289240
Customer Reference: 907 BRI

Soil Analysed as Soil
Vertase Hauxton VOC Suite

				SAL Reference	**289240 001**	**289240 002**	**289240 003**
				Customer Sample Reference	**B16 BACKFILL 1**	**B16 BACKFILL 2**	**B16 BACKFILL 3**
				Date Sampled	**28-JUL-2012**	**28-JUL-2012**	**28-JUL-2012**
				Type	**Fill**	**Fill**	**Fill**
Determinand	**Method**	**Test Sample**	**LOD**	**Units**			
1,2-Dichlorobenzene	T54	AR	5	µg/kg	<5	<5	<5
1,2-Dichloroethane	T54	AR	5	µg/kg	<5	<5	<5
Cis-1,2-Dichloroethylene	T54	AR	5	µg/kg	<5	<5	<5
Cyclohexanone	T54	AR	10	µg/kg	<10	<10	<10
Tetrachloroethene	T54	AR	5	µg/kg	<5	<5	<5
Toluene	T54	AR	1	µg/kg	<1	<1	<1
Trichloroethene	T54	AR	5	µg/kg	<5	<5	<5
Vinyl chloride	T54	AR	5	µg/kg	<5	<5	<5
Xylene (Total)	T54	AR	1	µg/kg	<1	<1	<1

SAL Reference: 289240
Customer Reference: 907 BRI

Soil Analysed as Soil
Hauxton Screen Suite

				SAL Reference	**289240 001**	**289240 002**	**289240 003**
				Customer Sample Reference	**B16 BACKFILL 1**	**B16 BACKFILL 2**	**B16 BACKFILL 3**
				Date Sampled	**28-JUL-2012**	**28-JUL-2012**	**28-JUL-2012**
				Type	**Fill**	**Fill**	**Fill**
Determinand	**Method**	**Test Sample**	**LOD**	**Units**			
SVOC screen hauxton	T16	AR	2000	µg/kg	<2000	<2000	<2000
VOC screen hauxton	T54	AR	200	µg/kg	<200	<200	<200

SAL Reference: 289240
Customer Reference: 907 BRI

Soil Analysed as Soil
Vertase Suite 2011

					SAL Reference	289240 001	289240 002	289240 003
					Customer Sample Reference	B16 BACKFILL 1	B16 BACKFILL 2	B16 BACKFILL 3
					Date Sampled	28-JUL-2012	28-JUL-2012	28-JUL-2012
					Type	Fill	Fill	Fill
Determinand	**Method**	**Test Sample**	**LOD**	**Units**				
Arsenic	T6	M40	2.0	mg/kg	**7.6**	**7.8**	**11**
Cadmium	T6	M40	1.0	mg/kg	<1.0	<1.0	<1.0
Chromium	T6	M40	1.0	mg/kg	**8.3**	**9.8**	**12**
Chromium VI	T6	AR	1	mg/kg	<1	<1	<1
Copper	T6	M40	1.0	mg/kg	**8.0**	**13**	**17**
Lead	T6	M40	1.0	mg/kg	**21**	**46**	**56**
Mercury	T6	M40	1.0	mg/kg	<1.0	<1.0	<1.0
Nickel	T6	M40	1.0	mg/kg	**7.4**	**9.6**	**14**
Selenium	T6	M40	3.0	mg/kg	<3.0	<3.0	<3.0
Zinc	T6	M40	1.0	mg/kg	**40**	**46**	**92**
SO4(Total)	T6	M40	0.01	%	**0.20**	**0.09**	**0.13**
pH	T7	AR			**7.8**	**8.1**	**8.0**
Total Organic Carbon	T21	M40	0.1	%	**0.4**	**0.5**	**1.2**
Fraction Organic Carbon - F(oc)	T21	M40	1	%	**6**	**8**	**19**

SAL Reference: 289240
Customer Reference: 907 BRI

Soil Analysed as Soil
Total and Speciated USEPA16 PAH

					SAL Reference	289240 001	289240 002	289240 003
					Customer Sample Reference	B16 BACKFILL 1	B16 BACKFILL 2	B16 BACKFILL 3
					Date Sampled	28-JUL-2012	28-JUL-2012	28-JUL-2012
					Type	Fill	Fill	Fill
Determinand	**Method**	**Test Sample**	**LOD**	**Units**				
Naphthalene	T207	M105	0.1	mg/kg	<0.1	<0.1	<0.1
Acenaphthylene	T207	M105	0.1	mg/kg	<0.1	<0.1	<0.1
Acenaphthene	T207	M105	0.1	mg/kg	<0.1	<0.1	<0.1
Fluorene	T207	M105	0.1	mg/kg	<0.1	<0.1	<0.1
Phenanthrene	T207	M105	0.1	mg/kg	<0.1	<0.1	<0.1
Anthracene	T207	M105	0.1	mg/kg	<0.1	<0.1	<0.1
Fluoranthene	T207	M105	0.1	mg/kg	<0.1	<0.1	**0.1**
Pyrene	T207	M105	0.1	mg/kg	<0.1	<0.1	<0.1
Benzo(a)Anthracene	T207	M105	0.1	mg/kg	<0.1	<0.1	<0.1
Chrysene	T207	M105	0.1	mg/kg	<0.1	<0.1	<0.1
Benzo(b/k)Fluoranthene	T207	M105	0.1	mg/kg	<0.1	<0.1	<0.1
Benzo(a)Pyrene	T207	M105	0.1	mg/kg	<0.1	<0.1	<0.1
Indeno(123-cd)Pyrene	T207	M105	0.1	mg/kg	<0.1	<0.1	<0.1
Dibenzo(ah)Anthracene	T207	M105	0.1	mg/kg	<0.1	<0.1	<0.1
Benzo(ghi)Perylene	T207	M105	0.1	mg/kg	<0.1	<0.1	<0.1
PAH(total)	T207	M105	0.1	mg/kg	<0.1	<0.1	**0.1**

SAL Reference: 289240
Customer Reference: 907 BRI

Soil Analysed as Soil
Total Petroleum Hydrocarbons (C6-C35 aliphatic/aromatic)

				SAL Reference	**289240 001**	**289240 002**	**289240 003**
				Customer Sample Reference	**B16 BACKFILL 1**	**B16 BACKFILL 2**	**B16 BACKFILL 3**
				Date Sampled	**28-JUL-2012**	**28-JUL-2012**	**28-JUL-2012**
				Type	**Fill**	**Fill**	**Fill**
Determinand	**Method**	**Test Sample**	**LOD**	**Units**			
Benzene	T54	AR	1	µg/kg	(13) <1	(13) <1	(13) <1
EthylBenzene	T54	AR	1	µg/kg	<1	<1	<1
M/P Xylene	T54	AR	1	µg/kg	<1	<1	<1
O Xylene	T54	AR	1	µg/kg	<1	<1	<1
Toluene	T54	AR	1	µg/kg	<1	<1	<1
TPH (C5-C6 aliphatic)	T54	AR	0.010	mg/kg	<0.010	<0.010	<0.010
TPH (C6-C8 aliphatic)	T54	AR	0.010	mg/kg	<0.010	<0.010	<0.010
TPH (C8-C10 aliphatic)	T54	AR	0.010	mg/kg	<0.010	<0.010	<0.010
TPH (C10-C12 aliphatic)	T8	AR	1	mg/kg	<1	<1	(9) <10
TPH (C12-C16 aliphatic)	T8	AR	1	mg/kg	<1	<1	(9) <10
TPH (C16-C21 aliphatic)	T8	AR	1	mg/kg	<1	<1	(9) <10
TPH (C21-C35 aliphatic)	T8	AR	1	mg/kg	**2**	<1	(9) <10
TPH (C6-C7 aromatic)	T54	AR	0.010	mg/kg	<0.010	<0.010	<0.010
TPH (C7-C8 aromatic)	T54	AR	0.010	mg/kg	<0.010	<0.010	<0.010
TPH (C8-C10 aromatic)	T54	AR	0.010	mg/kg	<0.010	<0.010	<0.010
TPH (C10-C12 aromatic)	T8	AR	1	mg/kg	<1	<1	(9) <10
TPH (C12-C16 aromatic)	T8	AR	1	mg/kg	<1	<1	(9) <10
TPH (C16-C21 aromatic)	T8	AR	1	mg/kg	**2**	<1	**39**
TPH (C21-C35 aromatic)	T8	AR	1	mg/kg	**5**	**3**	**58**

Index to symbols used in Supplement to 289240-2

Value	Description
AR	As Received
M105	Analysis conducted on an "as received" aliquot. Results are reported on a dry weight basis where moisture content was determined by assisted drying of sample at 105C
M40	Analysis conducted on sample assisted dried at no more than 40C. Results are reported on a dry weight basis.
13	Results have been blank corrected.
9	LOD raised due to dilution of sample
U	Analysis is UKAS accredited
N	Analysis is not UKAS accredited

Notes

Samples marked as "FILL" fall outside our scope of Mcerts accreditation. Results therefore are UKAS only.
Supplement issued to remove sample 004 at customers request

Method Index

Value	Description
T277	Grav (1 Dec) (40 C)
T6	ICP/OES
T21	OX/IR
T207	GC/MS(MCERTS)
T7	Probe
T8	GC/FID
T16	GC/MS
T54	GC/MS (Headspace)
T162	Grav (1 Dec) (105 C)

Accreditation Summary

Determinand	Method	Test Sample	LOD	Units	Symbol	SAL References
Moisture	T277	AR	0.1	%	N	001-003
Moisture @ 105 C	T162	AR	0.1	%	N	001-003
Electrical Conductivity	T7	AR	10	µS/cm	N	001-003
Dimefox	T16	AR	10	µg/kg	N	001-003
Ethofumesate	T16	AR	10	µg/kg	N	001-003
Hempa	T16	AR	10	µg/kg	N	001-003
Schradan	T16	AR	10	µg/kg	N	001-003
Simazine	T16	AR	10	µg/kg	N	001-003
Dicamba	T16	AR	10	µg/kg	N	001-003
Dichlorprop	T16	AR	10	µg/kg	N	001-003
Phenoxy Acetic acid herbicide: MCPA	T16	AR	10	µg/kg	N	001-003
Mecoprop	T16	AR	10	µg/kg	N	001-003
2,4,6-Trichlorophenol	T16	AR	100	µg/kg	U	001-003
2-Methyl-4,6-dinitrophenol	T16	AR	100	µg/kg	N	001-003
4-Chloro-2-methylphenol	T16	AR	100	µg/kg	N	001-003
Bis (2-chloroethyl) ether	T16	AR	100	µg/kg	U	001-003
Phenol	T16	AR	100	µg/kg	U	001-003
1,2-Dichlorobenzene	T54	AR	5	µg/kg	U	001-003
1,2-Dichloroethane	T54	AR	5	µg/kg	U	001-003
Cis-1,2-Dichloroethylene	T54	AR	5	µg/kg	U	001-003
Cyclohexanone	T54	AR	10	µg/kg	N	001-003
Tetrachloroethene	T54	AR	5	µg/kg	U	001-003
Toluene	T54	AR	1	µg/kg	U	001-003
Trichloroethene	T54	AR	5	µg/kg	U	001-003
Vinyl chloride	T54	AR	5	µg/kg	U	001-003
Xylene (Total)	T54	AR	1	µg/kg	U	001-003
SVOC screen hauxton	T16	AR	2000	µg/kg	N	001-003
VOC screen hauxton	T54	AR	200	µg/kg	N	001-003
Arsenic	T6	M40	2.0	mg/kg	U	001-003
Cadmium	T6	M40	1.0	mg/kg	U	001-003
Chromium	T6	M40	1.0	mg/kg	U	001-003
Chromium VI	T6	AR	1	mg/kg	N	001-003
Copper	T6	M40	1.0	mg/kg	U	001-003
Lead	T6	M40	1.0	mg/kg	U	001-003
Mercury	T6	M40	1.0	mg/kg	U	001-003
Nickel	T6	M40	1.0	mg/kg	U	001-003
Selenium	T6	M40	3.0	mg/kg	U	001-003
Zinc	T6	M40	1.0	mg/kg	U	001-003
SO4(Total)	T6	M40	0.01	%	N	001-003
pH	T7	AR			U	001-003
Total Organic Carbon	T21	M40	0.1	%	N	001-003
Fraction Organic Carbon - F(oc)	T21	M40	1	%	N	001-003
Naphthalene	T207	M105	0.1	mg/kg	U	001-003
Acenaphthylene	T207	M105	0.1	mg/kg	U	001-003
Acenaphthene	T207	M105	0.1	mg/kg	U	001-003
Fluorene	T207	M105	0.1	mg/kg	U	001-003
Phenanthrene	T207	M105	0.1	mg/kg	U	001-003
Anthracene	T207	M105	0.1	mg/kg	U	001-003
Fluoranthene	T207	M105	0.1	mg/kg	U	001-003
Pyrene	T207	M105	0.1	mg/kg	U	001-003
Benzo(a)Anthracene	T207	M105	0.1	mg/kg	U	001-003
Chrysene	T207	M105	0.1	mg/kg	U	001-003
Benzo(b/k)Fluoranthene	T207	M105	0.1	mg/kg	U	001-003
Benzo(a)Pyrene	T207	M105	0.1	mg/kg	U	001-003
Indeno(123-cd)Pyrene	T207	M105	0.1	mg/kg	U	001-003
Dibenzo(ah)Anthracene	T207	M105	0.1	mg/kg	U	001-003
Benzo(ghi)Perylene	T207	M105	0.1	mg/kg	U	001-003
PAH(total)	T207	M105	0.1	mg/kg	U	001-003
Benzene	T54	AR	1	µg/kg	U	001-003
EthylBenzene	T54	AR	1	µg/kg	U	001-003
M/P Xylene	T54	AR	1	µg/kg	U	001-003
O Xylene	T54	AR	1	µg/kg	U	001-003
TPH (C5-C6 aliphatic)	T54	AR	0.010	mg/kg	N	001-003
TPH (C6-C8 aliphatic)	T54	AR	0.010	mg/kg	N	001-003
TPH (C8-C10 aliphatic)	T54	AR	0.010	mg/kg	N	001-003
TPH (C10-C12 aliphatic)	T8	AR	1	mg/kg	N	001-003
TPH (C12-C16 aliphatic)	T8	AR	1	mg/kg	N	001-003
TPH (C16-C21 aliphatic)	T8	AR	1	mg/kg	N	001-003
TPH (C21-C35 aliphatic)	T8	AR	1	mg/kg	N	001-003
TPH (C6-C7 aromatic)	T54	AR	0.010	mg/kg	N	001-003

Determinand	Method	Test Sample	LOD	Units	Symbol	SAL References
TPH (C7-C8 aromatic)	T54	AR	0.010	mg/kg	N	001-003
TPH (C8-C10 aromatic)	T54	AR	0.010	mg/kg	N	001-003
TPH (C10-C12 aromatic)	T8	AR	1	mg/kg	N	001-003
TPH (C12-C16 aromatic)	T8	AR	1	mg/kg	N	001-003
TPH (C16-C21 aromatic)	T8	AR	1	mg/kg	N	001-003
TPH (C21-C35 aromatic)	T8	AR	1	mg/kg	N	001-003

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Scientific Analysis Laboratories Ltd

Certificate of Analysis

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Report Number: 289243-1

Date of Report: 07-Aug-2012

Customer: VertaseFLI Limited
19 Napier Court
Barlborough Links
Barlborough
S43 4PZ

Customer Contact: Mr Mike Allsobrook

Customer Job Reference: 907BRI
Customer Purchase Order: 907BRI
Customer Site Reference: Hauxton
Date Job Received at SAL: 30-Jul-2012
Date Analysis Started: 01-Aug-2012
Date Analysis Completed: 07-Aug-2012

The results reported relate to samples received in the laboratory
Opinions and interpretations expressed herein are outside the scope of UKAS accreditation
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Tests covered by this certificate were conducted in accordance with SAL SOPs

UKAS TESTING
1549

Report checked
and authorised by :
Mrs Emma Thickbroom
Senior Project Manager

Issued by :
Mrs Emma Thickbroom
Senior Project Manager

SAL Reference: 289243
Project Site: Hauxton
Customer Reference: 907BRI

Soil Analysed as Soil
Vertase Hauxton Suite

SAL Reference	**289243 001**
Customer Sample Reference	**B16 BV 1**
Date Sampled	**25-JUL-2012**

Determinand	Method	Test Sample	LOD	Units	
Electrical Conductivity	T7	AR	10	µS/cm	**1400**
pH	T7	AR			**8.1**
Moisture	T277	AR	0.1	%	**13**

SAL Reference: 289243
Project Site: Hauxton
Customer Reference: 907BRI

Soil Analysed as Soil
Vertase Hauxton OP/ON Suite

SAL Reference	**289243 001**
Customer Sample Reference	**B16 BV 1**
Date Sampled	**25-JUL-2012**

Determinand	Method	Test Sample	LOD	Units	
Dimefox	T16	AR	10	µg/kg	<10
Ethofumesate	T16	AR	10	µg/kg	<10
Hempa	T16	AR	10	µg/kg	<10
Schradan	T16	AR	10	µg/kg	<10
Simazine	T16	AR	10	µg/kg	<10

SAL Reference: 289243
Project Site: Hauxton
Customer Reference: 907BRI

Soil Analysed as Soil
Vertase Hauxton Phenoxy Acid Herbs Suite

SAL Reference	**289243 001**
Customer Sample Reference	**B16 BV 1**
Date Sampled	**25-JUL-2012**

Determinand	Method	Test Sample	LOD	Units	
Dicamba	T16	AR	10	µg/kg	<10
Dichlorprop	T16	AR	10	µg/kg	<10
Phenoxy Acetic acid herbicide: MCPA	T16	AR	10	µg/kg	<10
Mecoprop	T16	AR	10	µg/kg	<10

SAL Reference: 289243
Project Site: Hauxton
Customer Reference: 907BRI

Soil Analysed as Soil
Vertase Hauxton SVOC Suite

SAL Reference	**289243 001**
Customer Sample Reference	**B16 BV 1**
Date Sampled	**25-JUL-2012**

Determinand	Method	Test Sample	LOD	Units	
2,4,6-Trichlorophenol	T16	AR	100	µg/kg	<100
2-Methyl-4,6-dinitrophenol	T16	AR	100	µg/kg	<100
4-Chloro-2-methylphenol	T16	AR	100	µg/kg	<100
Bis (2-chloroethyl) ether	T16	AR	100	µg/kg	<100
Phenol	T16	AR	100	µg/kg	<100

SAL Reference: 289243
Project Site: Hauxton
Customer Reference: 907BRI

Soil Analysed as Soil
Vertase Hauxton VOC Suite

SAL Reference	**289243 001**
Customer Sample Reference	**B16 BV 1**
Date Sampled	**25-JUL-2012**

Determinand	Method	Test Sample	LOD	Units	
1,2-Dichlorobenzene	T54	AR	5	µg/kg	(2) <25
1,2-Dichloroethane	T54	AR	5	µg/kg	(2) <25
Cis-1,2-Dichloroethylene	T54	AR	5	µg/kg	(2) <25
Cyclohexanone	T54	AR	10	µg/kg	(2) <50
Tetrachloroethene	T54	AR	5	µg/kg	(2) <25
Toluene	T54	AR	1	µg/kg	(2) <5
Trichloroethene	T54	AR	5	µg/kg	(2) <25
Vinyl chloride	T54	AR	5	µg/kg	(2) <25
Xylene (Total)	T54	AR	1	µg/kg	(2) <5

Index to symbols used in 289243-1

Value	Description
AR	As Received
2	LOD Raised Due to Matrix Interference
U	Analysis is UKAS accredited
N	Analysis is not UKAS accredited

Method Index

Value	Description
T277	Grav (1 Dec) (40 C)
T7	Probe
T16	GC/MS
T54	GC/MS (Headspace)

Accreditation Summary

Determinand	Method	Test Sample	LOD	Units	Symbol	SAL References
Dicamba	T16	AR	10	µg/kg	N	001
Dichlorprop	T16	AR	10	µg/kg	N	001
Phenoxy Acetic acid herbicide: MCPA	T16	AR	10	µg/kg	N	001
Mecoprop	T16	AR	10	µg/kg	N	001
Dimefox	T16	AR	10	µg/kg	N	001
Ethofumesate	T16	AR	10	µg/kg	N	001
Hempa	T16	AR	10	µg/kg	N	001
Schradan	T16	AR	10	µg/kg	N	001
Simazine	T16	AR	10	µg/kg	N	001
1,2-Dichlorobenzene	T54	AR	5	µg/kg	U	001
1,2-Dichloroethane	T54	AR	5	µg/kg	U	001
Cis-1,2-Dichloroethylene	T54	AR	5	µg/kg	U	001
Cyclohexanone	T54	AR	10	µg/kg	N	001
Tetrachloroethene	T54	AR	5	µg/kg	U	001
Toluene	T54	AR	1	µg/kg	U	001
Trichloroethene	T54	AR	5	µg/kg	U	001
Vinyl chloride	T54	AR	5	µg/kg	U	001
Xylene (Total)	T54	AR	1	µg/kg	U	001
2,4,6-Trichlorophenol	T16	AR	100	µg/kg	U	001
2-Methyl-4,6-dinitrophenol	T16	AR	100	µg/kg	N	001
4-Chloro-2-methylphenol	T16	AR	100	µg/kg	N	001
Bis (2-chloroethyl) ether	T16	AR	100	µg/kg	U	001
Phenol	T16	AR	100	µg/kg	U	001
Electrical Conductivity	T7	AR	10	µS/cm	N	001
pH	T7	AR			U	001
Moisture	T277	AR	0.1	%	N	001

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Scientific Analysis Laboratories Ltd

Certificate of Analysis

Hadfield House
Hadfield Street
Cornbrook
Manchester
M16 9FE
Tel : 0161 874 2400
Fax : 0161 874 2468

Report Number: 289634-1

Date of Report: 13-Aug-2012

Customer: VertaseFLI Limited
19 Napier Court
Barlborough Links
Barlborough
S43 4PZ

Customer Contact: The Project Management

Customer Job Reference: 907 BRI
Customer Purchase Order: 907 BRI
Date Job Received at SAL: 01-Aug-2012
Date Analysis Started: 02-Aug-2012
Date Analysis Completed: 10-Aug-2012

The results reported relate to samples received in the laboratory
Opinions and interpretations expressed herein are outside the scope of UKAS accreditation

Tests covered by this certificate were conducted in accordance with SAL SOPs

UKAS TESTING
1549

Report checked and authorised by :
Lianne Bromiley
Project Manager

Issued by :
Lianne Bromiley
Project Manager

SAL Reference: 289634
Customer Reference: 907 BRI

Soil Analysed as Soil
Vertase Hauxton Suite

					SAL Reference	**289634 001**	**289634 002**	**289634 003**	**289634 004**	**289634 005**	**289634 006**	**289634 007**
					Customer Sample Reference	**L12**	**K12**	**L11**	**J11**	**K11**	**J10**	**K10**
					Date Sampled	**30-JUL-2012**	**30-JUL-2012**	**30-JUL-2012**	**30-JUL-2012**	**30-JUL-2012**	**30-JUL-2012**	**30-JUL-2012**
Determinand	**Method**	**Test Sample**	**LOD**	**Units**								
Electrical Conductivity	T7	AR	10	µS/cm		**2000**	**2000**	**1700**	**2200**	**2200**	**2000**	**1900**
pH	T7	AR				**9.0**	**8.7**	**8.8**	**8.2**	**8.4**	**8.2**	**9.0**
Moisture	T277	AR	0.1	%		**12**	**15**	**11**	**11**	**14**	**17**	**11**

SAL Reference: 289634
Customer Reference: 907 BRI

Soil Analysed as Soil
Vertase Hauxton OP/ON Suite

					SAL Reference	**289634 001**	**289634 002**	**289634 003**	**289634 004**	**289634 005**	**289634 006**	**289634 007**
					Customer Sample Reference	**L12**	**K12**	**L11**	**J11**	**K11**	**J10**	**K10**
					Date Sampled	**30-JUL-2012**	**30-JUL-2012**	**30-JUL-2012**	**30-JUL-2012**	**30-JUL-2012**	**30-JUL-2012**	**30-JUL-2012**
Determinand	**Method**	**Test Sample**	**LOD**	**Units**								
Dimefox	T16	AR	10	µg/kg		<10	<10	<10	<10	<10	<10	<10
Ethofumesate	T16	AR	10	µg/kg		<10	<10	**70**	**180**	<10	<10	**30**
Hempa	T16	AR	10	µg/kg		<10	<10	<10	<10	<10	<10	<10
Schradan	T16	AR	10	µg/kg		<10	<10	<10	<10	<10	<10	<10
Simazine	T16	AR	10	µg/kg		<10	<10	<10	<10	<10	<10	<10

SAL Reference: 289634
Customer Reference: 907 BRI

Soil Analysed as Soil
Vertase Hauxton Phenoxy Acid Herbs Suite

					SAL Reference	**289634 001**	**289634 002**	**289634 003**	**289634 004**	**289634 005**	**289634 006**	**289634 007**
					Customer Sample Reference	**L12**	**K12**	**L11**	**J11**	**K11**	**J10**	**K10**
					Date Sampled	**30-JUL-2012**	**30-JUL-2012**	**30-JUL-2012**	**30-JUL-2012**	**30-JUL-2012**	**30-JUL-2012**	**30-JUL-2012**
Determinand	**Method**	**Test Sample**	**LOD**	**Units**								
Dicamba	T16	AR	10	µg/kg		**10**	<10	<10	<10	<10	<10	<10
Dichlorprop	T16	AR	10	µg/kg		<10	<10	<10	<10	<10	<10	<10
Phenoxy Acetic acid herbicide: MCPA	T16	AR	10	µg/kg		<10	<10	<10	<10	<10	<10	<10
Mecoprop	T16	AR	10	µg/kg		<10	<10	<10	<10	<10	<10	<10

SAL Reference: 289634
Customer Reference: 907 BRI

Soil Analysed as Soil
Vertase Hauxton SVOC Suite

					SAL Reference	**289634 001**	**289634 002**	**289634 003**	**289634 004**	**289634 005**	**289634 006**	**289634 007**
					Customer Sample Reference	**L12**	**K12**	**L11**	**J11**	**K11**	**J10**	**K10**
					Date Sampled	**30-JUL-2012**	**30-JUL-2012**	**30-JUL-2012**	**30-JUL-2012**	**30-JUL-2012**	**30-JUL-2012**	**30-JUL-2012**
Determinand	**Method**	**Test Sample**	**LOD**	**Units**								
2,4,6-Trichlorophenol	T16	AR	100	µg/kg		<100	<100	<100	**120**	<100	<100	<100
2-Methyl-4,6-dinitrophenol	T16	AR	100	µg/kg		<100	<100	<100	<100	<100	<100	<100
4-Chloro-2-methylphenol	T16	AR	100	µg/kg		<100	<100	<100	<100	<100	<100	<100
Bis (2-chloroethyl) ether	T16	AR	100	µg/kg		<100	<100	**340**	**660**	<100	<100	<100
Phenol	T16	AR	100	µg/kg		<100	<100	<100	<100	<100	<100	<100

SAL Reference: 289634
Customer Reference: 907 BRI

Soil Analysed as Soil
Vertase Hauxton VOC Suite

	SAL Reference	289634 001	289634 002	289634 003	289634 004	289634 005	289634 006	289634 007
	Customer Sample Reference	L12	K12	L11	J11	K11	J10	K10
	Date Sampled	30-JUL-2012	30-JUL-2012	30-JUL-2012	30-JUL-2012	30-JUL-2012	30-JUL-2012	30-JUL-2012
Determinand	Method / Test Sample / LOD / Units							
1,2-Dichlorobenzene	T54 / AR / 5 / µg/kg	<5	<5	<5	<5	<5	<5	<5
1,2-Dichloroethane	T54 / AR / 5 / µg/kg	<5	<5	<5	<5	<5	<5	<5
Cis-1,2-Dichloroethylene	T54 / AR / 5 / µg/kg	<5	<5	<5	<5	<5	<5	<5
Cyclohexanone	T54 / AR / 10 / µg/kg	<10	<10	<10	<10	<10	<10	<10
Tetrachloroethene	T54 / AR / 5 / µg/kg	**150**	<5	**38**	<5	<5	<5	**6**
Toluene	T54 / AR / 1 / µg/kg	<1	<1	<1	<1	<1	<1	**4**
Trichloroethene	T54 / AR / 5 / µg/kg	**9**	<5	<5	<5	<5	<5	<5
Vinyl chloride	T54 / AR / 5 / µg/kg	<5	<5	<5	<5	<5	<5	<5
Xylene (Total)	T54 / AR / 1 / µg/kg	<1	<1	<1	<1	<1	<1	<1

SAL Reference: 289634
Customer Reference: 907 BRI

Soil Analysed as Soil
Hauxton Extra Determinands Screen

	SAL Reference	289634 001	289634 002	289634 003	289634 004	289634 005	289634 006	289634 007
	Customer Sample Reference	L12	K12	L11	J11	K11	J10	K10
	Date Sampled	30-JUL-2012	30-JUL-2012	30-JUL-2012	30-JUL-2012	30-JUL-2012	30-JUL-2012	30-JUL-2012
Determinand	Method / Test Sample / LOD / Units							
Bis(2-ethylhexyl) maleate	T16 / AR / 100 / µg/kg	<100	<100	<100	<100	<100	<100	<100
Dichloromethyl phenol	T16 / AR / 100 / µg/kg	<100	<100	<100	<100	<100	<100	<100
Dichlorotoluene	T16 / AR / 100 / µg/kg	<100	<100	<100	<100	<100	<100	<100
Trichloro methyl benzene	T16 / AR / 100 / µg/kg	<100	<100	<100	<100	<100	**170**	<100

Index to symbols used in 289634-1

Value	Description
AR	As Received
U	Analysis is UKAS accredited
N	Analysis is not UKAS accredited

Method Index

Value	Description
T7	Probe
T277	Grav (1 Dec) (40 C)
T54	GC/MS (Headspace)
T16	GC/MS

Accreditation Summary

Determinand	Method	Test Sample	LOD	Units	Symbol	SAL References
Electrical Conductivity	T7	AR	10	µS/cm	N	001-007
pH	T7	AR			U	001-007
Moisture	T277	AR	0.1	%	N	001-007
Dimefox	T16	AR	10	µg/kg	N	001-007
Ethofumesate	T16	AR	10	µg/kg	N	001-007
Hempa	T16	AR	10	µg/kg	N	001-007
Schradan	T16	AR	10	µg/kg	N	001-007
Simazine	T16	AR	10	µg/kg	N	001-007
Dicamba	T16	AR	10	µg/kg	N	001-007
Dichlorprop	T16	AR	10	µg/kg	N	001-007
Phenoxy Acetic acid herbicide: MCPA	T16	AR	10	µg/kg	N	001-007
Mecoprop	T16	AR	10	µg/kg	N	001-007
2,4,6-Trichlorophenol	T16	AR	100	µg/kg	U	001-007

Determinand	Method	Test Sample	LOD	Units	Symbol	SAL References
2-Methyl-4,6-dinitrophenol	T16	AR	100	µg/kg	N	001-007
4-Chloro-2-methylphenol	T16	AR	100	µg/kg	N	001-007
Bis (2-chloroethyl) ether	T16	AR	100	µg/kg	U	001-007
Phenol	T16	AR	100	µg/kg	U	001-007
1,2-Dichlorobenzene	T54	AR	5	µg/kg	U	001-007
1,2-Dichloroethane	T54	AR	5	µg/kg	U	001-007
Cis-1,2-Dichloroethylene	T54	AR	5	µg/kg	U	001-007
Cyclohexanone	T54	AR	10	µg/kg	N	001-007
Tetrachloroethene	T54	AR	5	µg/kg	U	001-007
Toluene	T54	AR	1	µg/kg	U	001-007
Trichloroethene	T54	AR	5	µg/kg	U	001-007
Vinyl chloride	T54	AR	5	µg/kg	U	001-007
Xylene (Total)	T54	AR	1	µg/kg	U	001-007
Bis(2-ethylhexyl) maleate	T16	AR	100	µg/kg	N	001-007
Dichloromethyl phenol	T16	AR	100	µg/kg	N	001-007
Dichlorotoluene	T16	AR	100	µg/kg	N	001-007
Trichloro methyl benzene	T16	AR	100	µg/kg	N	001-007

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Scientific Analysis Laboratories Ltd

Certificate of Analysis

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Tel : 0161 874 2400
Fax : 0161 874 2468

Report Number: 289635-1

Date of Report: 13-Aug-2012

Customer: VertaseFLI Limited
19 Napier Court
Barlborough Links
Barlborough
S43 4PZ

Customer Contact: The Project Management

Customer Job Reference: 907 BRI
Customer Purchase Order: 907 BRI
Date Job Received at SAL: 01-Aug-2012
Date Analysis Started: 02-Aug-2012
Date Analysis Completed: 10-Aug-2012

The results reported relate to samples received in the laboratory
Opinions and interpretations expressed herein are outside the scope of UKAS accreditation

Tests covered by this certificate were conducted in accordance with SAL SOPs

UKAS TESTING
1549

Report checked and authorised by :
Lianne Bromiley
Project Manager

Issued by :
Lianne Bromiley
Project Manager

SAL Reference: 289635
Customer Reference: 907 BRI

Soil Analysed as Soil
Vertase Hauxton Suite

				SAL Reference	**289635 001**	**289635 002**	**289635 003**	**289635 004**	**289635 005**	**289635 006**	**289635 007**
				Customer Sample Reference	**L8**	**K8**	**J8**	**L9**	**K9**	**J9**	**L10**
				Date Sampled	**31-JUL-2012**	**31-JUL-2012**	**31-JUL-2012**	**31-JUL-2012**	**31-JUL-2012**	**31-JUL-2012**	**31-JUL-2012**
Determinand	**Method**	**Test Sample**	**LOD**	**Units**							
Electrical Conductivity	T7	AR	10	µS/cm	**2200**	**1800**	**2600**	**2200**	**2300**	**2200**	**2800**
pH	T7	AR			**8.1**	**9.8**	**8.4**	**8.5**	**8.7**	**8.1**	**8.8**
Moisture	T277	AR	0.1	%	**12**	**13**	**14**	**11**	**14**	**12**	**11**

SAL Reference: 289635
Customer Reference: 907 BRI

Soil Analysed as Soil
Vertase Hauxton OP/ON Suite

				SAL Reference	**289635 001**	**289635 002**	**289635 003**	**289635 004**	**289635 005**	**289635 006**	**289635 007**
				Customer Sample Reference	**L8**	**K8**	**J8**	**L9**	**K9**	**J9**	**L10**
				Date Sampled	**31-JUL-2012**	**31-JUL-2012**	**31-JUL-2012**	**31-JUL-2012**	**31-JUL-2012**	**31-JUL-2012**	**31-JUL-2012**
Determinand	**Method**	**Test Sample**	**LOD**	**Units**							
Dimefox	T16	AR	10	µg/kg	<10	<10	<10	<10	<10	<10	<10
Ethofumesate	T16	AR	10	µg/kg	<10	**60**	<10	<10	<10	<10	<10
Hempa	T16	AR	10	µg/kg	<10	<10	<10	<10	<10	<10	<10
Schradan	T16	AR	10	µg/kg	<10	<10	<10	<10	<10	<10	<10
Simazine	T16	AR	10	µg/kg	<10	**30**	<10	<10	<10	<10	<10

SAL Reference: 289635
Customer Reference: 907 BRI

Soil Analysed as Soil
Vertase Hauxton Phenoxy Acid Herbs Suite

				SAL Reference	**289635 001**	**289635 002**	**289635 003**	**289635 004**	**289635 005**	**289635 006**	**289635 007**
				Customer Sample Reference	**L8**	**K8**	**J8**	**L9**	**K9**	**J9**	**L10**
				Date Sampled	**31-JUL-2012**	**31-JUL-2012**	**31-JUL-2012**	**31-JUL-2012**	**31-JUL-2012**	**31-JUL-2012**	**31-JUL-2012**
Determinand	**Method**	**Test Sample**	**LOD**	**Units**							
Dicamba	T16	AR	10	µg/kg	**20**	**10**	**20**	<10	**10**	<10	**70**
Dichlorprop	T16	AR	10	µg/kg	<10	<10	<10	<10	<10	**10**	**10**
Phenoxy Acetic acid herbicide: MCPA	T16	AR	10	µg/kg	<10	<10	<10	<10	<10	<10	<10
Mecoprop	T16	AR	10	µg/kg	<10	<10	<10	<10	<10	**290**	**480**

SAL Reference: 289635
Customer Reference: 907 BRI

Soil Analysed as Soil
Vertase Hauxton SVOC Suite

				SAL Reference	**289635 001**	**289635 002**	**289635 003**	**289635 004**	**289635 005**	**289635 006**	**289635 007**
				Customer Sample Reference	**L8**	**K8**	**J8**	**L9**	**K9**	**J9**	**L10**
				Date Sampled	**31-JUL-2012**	**31-JUL-2012**	**31-JUL-2012**	**31-JUL-2012**	**31-JUL-2012**	**31-JUL-2012**	**31-JUL-2012**
Determinand	**Method**	**Test Sample**	**LOD**	**Units**							
2,4,6-Trichlorophenol	T16	AR	100	µg/kg	<100	<100	<100	<100	<100	<100	<100
2-Methyl-4,6-dinitrophenol	T16	AR	100	µg/kg	<100	<100	<100	<100	<100	<100	<100
4-Chloro-2-methylphenol	T16	AR	100	µg/kg	<100	<100	<100	<100	<100	<100	<100
Bis (2-chloroethyl) ether	T16	AR	100	µg/kg	**430**	<100	<100	<100	**110**	**3500**	<100
Phenol	T16	AR	100	µg/kg	<100	<100	<100	<100	<100	<100	<100

SAL Reference: 289635
Customer Reference: 907 BRI

Soil Analysed as Soil
Vertase Hauxton VOC Suite

	SAL Reference	289635 001	289635 002	289635 003	289635 004	289635 005	289635 006	289635 007
	Customer Sample Reference	L8	K8	J8	L9	K9	J9	L10
	Date Sampled	31-JUL-2012	31-JUL-2012	31-JUL-2012	31-JUL-2012	31-JUL-2012	31-JUL-2012	31-JUL-2012
Determinand	Method / Test Sample / LOD / Units							
1,2-Dichlorobenzene	T54 / AR / 5 / µg/kg	<5	<5	<5	<5	<5	(2) <25	<5
1,2-Dichloroethane	T54 / AR / 5 / µg/kg	<5	<5	<5	<5	<5	(2) <25	<5
Cis-1,2-Dichloroethylene	T54 / AR / 5 / µg/kg	<5	<5	<5	<5	**40**	(2) <25	<5
Cyclohexanone	T54 / AR / 10 / µg/kg	<10	<10	<10	<10	<10	(2) <50	<10
Tetrachloroethene	T54 / AR / 5 / µg/kg	**24**	<5	**8**	**33**	**120**	**50**	<5
Toluene	T54 / AR / 1 / µg/kg	<1	<1	<1	**2**	<1	**11**	<1
Trichloroethene	T54 / AR / 5 / µg/kg	<5	<5	<5	<5	**22**	(2) <25	<5
Vinyl chloride	T54 / AR / 5 / µg/kg	<5	<5	<5	<5	<5	(2) <25	<5
Xylene (Total)	T54 / AR / 1 / µg/kg	<1	<1	<1	**2**	<1	**11**	<1

SAL Reference: 289635
Customer Reference: 907 BRI

Soil Analysed as Soil
Hauxton Extra Determinands Screen

	SAL Reference	289635 001	289635 002	289635 003	289635 004	289635 005	289635 006	289635 007
	Customer Sample Reference	L8	K8	J8	L9	K9	J9	L10
	Date Sampled	31-JUL-2012	31-JUL-2012	31-JUL-2012	31-JUL-2012	31-JUL-2012	31-JUL-2012	31-JUL-2012
Determinand	Method / Test Sample / LOD / Units							
Bis(2-ethylhexyl) maleate	T16 / AR / 100 / µg/kg	<100	<100	<100	<100	<100	<100	<100
Dichloromethyl phenol	T16 / AR / 100 / µg/kg	<100	<100	<100	**230**	<100	<100	<100
Dichlorotoluene	T16 / AR / 100 / µg/kg	<100	<100	<100	<100	<100	<100	<100
Trichloro methyl benzene	T16 / AR / 100 / µg/kg	<100	<100	<100	<100	<100	<100	<100

Index to symbols used in 289635-1

Value	Description
AR	As Received
2	LOD Raised Due to Matrix Interference
U	Analysis is UKAS accredited
N	Analysis is not UKAS accredited

Method Index

Value	Description
T54	GC/MS (Headspace)
T277	Grav (1 Dec) (40 C)
T16	GC/MS
T7	Probe

Accreditation Summary

Determinand	Method	Test Sample	LOD	Units	Symbol	SAL References
Electrical Conductivity	T7	AR	10	µS/cm	N	001-007
pH	T7	AR			U	001-007
Moisture	T277	AR	0.1	%	N	001-007
Dimefox	T16	AR	10	µg/kg	N	001-007
Ethofumesate	T16	AR	10	µg/kg	N	001-007
Hempa	T16	AR	10	µg/kg	N	001-007
Schradan	T16	AR	10	µg/kg	N	001-007
Simazine	T16	AR	10	µg/kg	N	001-007
Dicamba	T16	AR	10	µg/kg	N	001-007
Dichlorprop	T16	AR	10	µg/kg	N	001-007
Phenoxy Acetic acid herbicide: MCPA	T16	AR	10	µg/kg	N	001-007
Mecoprop	T16	AR	10	µg/kg	N	001-007

Determinand	Method	Test Sample	LOD	Units	Symbol	SAL References
2,4,6-Trichlorophenol	T16	AR	100	µg/kg	U	001-007
2-Methyl-4,6-dinitrophenol	T16	AR	100	µg/kg	N	001-007
4-Chloro-2-methylphenol	T16	AR	100	µg/kg	N	001-007
Bis (2-chloroethyl) ether	T16	AR	100	µg/kg	U	001-007
Phenol	T16	AR	100	µg/kg	U	001-007
1,2-Dichlorobenzene	T54	AR	5	µg/kg	U	001-007
1,2-Dichloroethane	T54	AR	5	µg/kg	U	001-007
Cis-1,2-Dichloroethylene	T54	AR	5	µg/kg	U	001-007
Cyclohexanone	T54	AR	10	µg/kg	N	001-007
Tetrachloroethene	T54	AR	5	µg/kg	U	001-007
Toluene	T54	AR	1	µg/kg	U	001-007
Trichloroethene	T54	AR	5	µg/kg	U	001-007
Vinyl chloride	T54	AR	5	µg/kg	U	001-007
Xylene (Total)	T54	AR	1	µg/kg	U	001-007
Bis(2-ethylhexyl) maleate	T16	AR	100	µg/kg	N	001-007
Dichloromethyl phenol	T16	AR	100	µg/kg	N	001-007
Dichlorotoluene	T16	AR	100	µg/kg	N	001-007
Trichloro methyl benzene	T16	AR	100	µg/kg	N	001-007

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