Environmental Monitoring Report

Reporting Period
02/08/2010-29/08/2010
Revision1.

Former Bayer Crop Science Site
Hauxton
Cambridgeshire

15th September 2010

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1.0 Introduction

1.1. General

This report has been prepared and submitted in accordance Environmental Permitting Regulations 2007 with reference to the approved Deployment of Vertase FLI's Environmental Permit Ref: ERP/QP3293FY for the remediation works at the former Bayer CropScience site Hauxton, and in accordance with Condition 4 of the planning permission dated 5th February 2010.

The time period that this report represents is from the 2nd of August 2010, until the 29th of August 2010.

1.2. The site

The site is the former Bayer Crop Science site, Cambridge Road, Hauxton, Cambridge. The site was used for the storage and production of agrichemicals from the 1940's through to ceasing production in 2004. The site was used primarily for the synthesis, formulation, packaging and storage of agrichemicals (both herbicides and pesticides). It is this former historical use that has led to the contamination legacy of soil and groundwater at the site.

There is also a Waste Water Treatment Plant (WWTP) and other agricultural land which is part of the former land holding of Bayer Crop Science and is part of that controlled by Harrow Estates. The WWTP will be utilised to assist in the treatment of recovered groundwater and will be improved to undertake this task and then maintained for the duration of the remediation. This area of the site will not be subject to remediation as part of this phase of works but will be remediated as a separate phase of work under a separate contract and separate Remediation Method Statement in the future.

1.3. Remediation Brief and Philosophy

The philosophy for this remediation project is set out in detail in the agreed Remediation Method Statement. The remediation of the site has been developed from knowledge of the site gained from historical site investigations, Atkins Preliminary Conceptual Model Report August 2006 (interpretative report defining the current and correct understanding of the geological and

environmental conditions) and subsequent sampling and analysis defining the extent of contamination following further investigation. This information has allowed the conceptual site model and pollutant linkages to be developed to form the remediation methodology. Whilst the remediation work itself is complex and varied, the philosophy is simple and defines the proposed remedial action required. This philosophy has been designed with the brief in mind. This brief can be defined as "a remediation to address all pollutant linkages and ensure that following remediation and re-development no unacceptable risks will remain associated with the treated area of the site by applying the best available techniques not entailing excessive costs (BATNEEC)".

The philosophy behind the remediation is to remove all uncertainty relating to soils and groundwater within the site area by the excavation, characterisation and treatment. All pathways between the identified sources and receptors will be removed and the contaminant mass within soils reduced as far as the practical limits of cost effective technology permit. The Remediation Method Statement sets out how this philosophy or strategy will be achieved practically on site and validated with confirmative post remediation risk assessment.

These remediation works are also required to satisfy the regulators that adequate remediation works have been completed to satisfy their requirements under Part IIa of the Environmental Protection Act 1990.

2.0 Monthly Progress

Week 21. Week Commencing 2nd August 2010

Concrete slab and foundations were removed from grid squares J11 to J13 (Drawing D907-07 Appendix A), this material was stockpiled on site and is to be crushed at a later date. Excavation of contaminated soils continued in grid squares K12, K13 and J11 through to and including J13, contaminated materials hauled to treatment area, formed into treatment beds and covered to prevent odour migration. The main excavation through grid squares K12 and K13 comprised of sands and gravels, and Gault Clay, moving the row J saw the re-emergence of the West Melbury Marl Formation and a reduction in sands and gravel deposits. Eight partially treated non-odorous treatment beds were relocated towards the boundary of the site to free up space within the central parts of the site adjacent to the excavation, to place more recently excavated and heavily impacted soils, which assisted greatly in reducing the odour impact beyond the site boundary. Spent mushroom compost has been added to a number of heavily contaminated treatment beds to aid the biological treatment processes. The force ventilation and vapour extraction treatment was trialled and commissioned during the first week of August 2010.

Week 22. Week Commencing 9th August 2010

The main excavation continued through grid square J12, J13 and into J14, contaminated materials hauled to treatment area, formed into treatment beds and covered to prevent odour migration. Four of the partially treated non-odorous treatment beds were relocated towards the boundary of the site to free up space within the central parts of the site adjacent to the excavation, to place more recently excavated and heavily impacted soils, which assisted greatly in reducing the odour impact beyond the site boundary.

Week 23. Week Commencing 16th August 2010

The excavation activity focussed on completing grid square J14 only, due to the predominant wind direction being towards the residential areas to the south east and south of the site, works mainly consisted of breaking out concrete slab, a relatively odourless site activity. This was undertaken in grid squares I14, I15, H14 and H15, this material was stockpiled on site and is to be crushed at a later date.

Week 24. Week Commencing 23rd August 2010

The broken concrete stockpile was moved slightly and an area prepared adjacent to the stockpile for the crushing plant. Trial pits were excavated in grid squares I14, I15, H14 and H15 and characterisation samples were taken. During the trial pitting exercise there were no readings recorded by the PID and odours generated during the exercise were very low. The decision was made to progress the excavation through these grid squares as there was very little risk that significant odours and VOCs would be generated by the excavation of these grid squares. This excavation had to be halted on the 26th of August due to a heavy rain event, excavation of this area recommenced following the August bank holiday.

3.0 Environmental Monitoring Summary

The environmental monitoring locations detailed in the Environmental Permit deployment form for the site are highlighted in drawing D907_33C in Appendix A.

The detailed environmental monitoring data can be found in Appendix B, the following chapters summarise the finding from the monitoring undertaken by Vertase FLI Site Engineers.

3.1. Odour and VOC Emissions

Odour and VOC monitoring around the site boundary commenced on the 22nd March 2010 and has been undertaken twice daily at eight compass points around the site boundary, in the public access areas. Odour and VOC related observations in between the eight compass points around the site are also noted by the Vertase FLI representative undertaking the monitoring.

In addition to physical control via covers and management of activities odour controlling suppressants and masking agent are being used around the site boundary to mitigate the impact of odour migration off site. Initially two mobile telescopic misting fans were used on site and a full boundary misting system was also erected to supplement the mobile units, along with the addition of two further mobile units to focus specifically on the excavation. The odour controlling solutions used in the misting and telescopic fan systems vary in fragrance from lemon, to melon, to pine, to bubblegum.

Site generated odours including those from the remediation processes and the odour suppression systems observed during the monitoring rounds beyond the site boundary are listed in the environmental monitoring data spreadsheet in Appendix B.

The Vertase FLI Environmental Engineers and Site Management team have been working closely to prevent odours and VOC's generated by the remediation processes migrating off site, along with trying to achieve a fine balance of using a variety of odour control fragrance's at a variety of dilutions to reduce the impact of any odours detected off site.

The Environmental Engineers have logged the actions undertaken on site to reduce the impact of VOC/odours off site, these are noted in the environmental monitoring data in Appendix B. All

mitigation measures have been in accordance with the actions stipulated in the deployment form, including some additional actions to reduce the potential of odour nuisance e.g. repositioning of mobile odour control systems.

During the twice daily environmental monitoring a Photoionisation Detector (PID) has been used to record VOC's present beyond the site boundary. During the reported period VOC's, were detected by the PID (Limit of detection of 0.1ppm) on the following occasions:

- 06/08/2010 (16:00) At the northwest monitoring location a maximum intermittent PID reading of 3.5ppm was recorded, the odour was described as a faint to weak paint and TCE odour. The excavation in grid square J13 was ceased and materials covered.

- 09/08/2010 (12:05) At the west monitoring location a maximum intermittent value of 0.3ppm was recorded using a PID. The odour at these locations was described as a weak to moderate TCE odour, the excavation continued with the boundary condition being closely monitored for an increase in VOC concentration.

- 13/08/2010 (09:56) Between the northeast and northeast1 monitoring locations a maximum PID value of 0.0ppm was recorded the odour was described as a faint Phenol /general site odour. The processing of that particular treatment bed was halted as to not cause odours and VOC's to migrate beyond the site boundary.

All PID reading above 1ppm recorded beyond the site boundary are reported to the Environment Agency immediately, along with details of the additional mitigation methods being implemented to reduce the migration of VOC's from the site.

Long term passive VOC monitoring is carried out at eight compass point locations around the site boundary, in the public accessible areas, further monitoring locations are located within the centre of the waste water treatment works, on Church Road, Hauxton and Queens Close, Harston.

The results for the long term passive VOC monitoring carried out between 08/07/2010 and 06/08/2010, and to the 03/09/2010 are presented in appendix C. The analysis indicates that the majority of the VOC's detected are around the baseline, except for Toluene and Tetrachlroethylene which continue to be slightly raised above the baseline values but are well below the levels considered to be within acceptable limits for published criteria. During the month of August (06/08/2010-03/09/2010) there has been a significant reduction in the total voc emission from the site, when comparing against the results from the July period (08/07/2010-06/08/2010).

The analysis for Church Road, Hauxton and Queens Close, Harston indicates there are some site related VOC's detected at these locations, but at levels that are considered to be within acceptable limits for published criteria.

The 28 day passive VOC monitoring results have been forwarded to the Health Protection Agency for review. The HPA have under taken independent risk assessment upon the data provided and have provided a positive non technical summary which is available on South Cambridgeshire District Councils website.

3.2. Dust Fibre and Particulate Emission

Both real time dust measurement and long term dust deposition monitoring has been undertaken around the site boundary at six compass point locations, north, east, south, west with two monitoring positions in the northeast (drawing D907_30C, Appendix A).

Real time airborne dust monitoring is undertaken as a minimum twice daily by an Environmental Engineer using a 'Dustmate' dust particle monitor around the site boundary as part of the environmental monitoring schedule, results are recorded in the environmental monitoring spreadsheet (Appendix B). The 'Dustmate' dust particle monitor will not function correctly in wet weather conditions, therefore on occasion data may be missing from the environmental monitoring spreadsheet for this reason. Dust migration is however less likely in wet weather conditions. The 'Dustmate' dust particle monitor did not function correctly on afternoon of the 20th of August 2010.

Dust particle measurements at each monitoring location have varied, with the higher dust readings being generally at the locations adjacent to the heavily trafficked Cambridge Road (A10). The average Total Suspended Particulates (TSP) reading around the site is 114.13 µg/m^3, the average PM10 dust reading around the site is 52.25 µg/m^3. Where a potential for dust has been observed, on site dust suppression methods have been deployed immediately to reduce the generation of site dust and all haul routes are continually wetted to prevent dust release.

Directional dust deposition gauges at the six monitoring locations are analysed every fortnight for Effective Area Coverage (EAC) (percentage of dust deposition relating to the potential to cause nuisance), results generated by an external laboratory are presented in Appendix D.

Baseline dust monitoring undertaken between 19/02/2010 to 19/03/2010 (4 locations monitored) recorded a maximum dust deposition rate of 0.54 %EAC at the western monitoring location.

Dust monitoring undertaken from the 22/07/2010 to 06/08/2010 (6 locations monitored) recorded a maximum dust deposition rate was 1.40 %EAC at the west monitoring location. All other locations had a maximum dust deposition rate of 1.33 %EAC, or less.

Dust monitoring undertaken from the 06/08/2010 to 20/08/2010 (6 locations monitored) recorded a maximum dust deposition rate of 1.14% EAC at the northeast 1 monitoring location. All other locations had a maximum dust deposition rate of 1.07%EAC, or less.

Dust deposition values of less than 2.5% are regarded as having a very low nuisance potential. Only when percentages rise from 2.5% – 5% EAC is dust considered to have a low nuisance causing potential.

During the reported period dust, fibre and particle emissions have been low, and have not caused visual dusting off site.

3.3. Control of Mud and Debris

A pressure washer has been on site constantly to allow any maintenance or plant delivery vehicles leaving contaminated parts of the site to be washed down thoroughly first, as not to

take potentially contaminated mud and debris through the clean zone and off site. The movement of vehicles between the contaminated and clean parts of the site is strictly controlled by the site management team.

3.4. Noise

Noise monitoring around the site boundary commenced on the 22nd March 2010 and has been undertaken twice daily as a minimum, recording findings at eight compass points around the site boundary in the public access areas (drawing D907_30C, Appendix A).

Site operations are restricted to 8am to 6pm and site noise levels are consistently at an average acceptable low background level of 65.58dB. Exceedance's of the 80dB threshold (stipulated in the Environmental Permit deployment document) have been recorded during the monitoring period, however traffic along the A10 has been identified as the source of the slightly elevated noise levels. Data is recorded in the environmental monitoring data spreadsheet, Appendix B.

3.5. Litter

All litter occurrences are removed from within the site, and off site around the boundary fence, and disposed of appropriately. Litter is generally low off site, and is well managed on site, by all site personnel. All recordings of the presence of litter are noted in the Environmental Monitoring Data spreadsheet in Appendix B.

4.0 Surface and Ground Water Condition

4.1. Surface Water Monitoring

As part of the environmental monitoring programme, the Riddy Brook located to the east of the site (Drawing D907_33C, Appendix A) is inspected daily as a minimum at two locations up and down stream for general observations, on any discolouration, sedimentation etc. The observations are recorded on the Environmental Monitoring Data (Appendix B). Throughout the monitoring period there have been no visual signs that the remediation works on site are having any impact on the Riddy Brook.

The water level within the Riddy Brook is monitored and recorded on a daily basis at a minimum of two locations, footbridge adjacent to Mill House (Riddy 1) and the most southerly footbridge over the Riddy Brook, adjacent to the eastern corner of the site (Riddy 4). Two further locations are also monitored, Riddy 2 at the footbridge over the Riddy Brook approximately 150m southeast of Mill House and the former fire exit bridge (Riddy 3), 210m southeast of Mill House. All the water level data is recorded in the main groundwater level data sheet in Appendix E. During the monitoring period there has been very little change in level and flow along the Riddy Brook.

4.2. Surface Water Sampling and Analysis

Upstream and downstream water samples from both the River Cam (Granta) and the Riddy Brook are taken on a monthly basis. The results for samples taken on 26th August 2010 are presented in Appendix F.

The surface water analysis (26th July 2010) shows traces of Tetrachloroethylene (<3 µg/l) in both upstream and downstream Riddy Brook and River Cam samples. Traces of Toluene (<2 µg/l), Mecoprop (<1.6 µg/l), Ethofumesate (<0.8 µg/l) and Simazine (0.14 µg/l) were detected in the downstream samples of both the River Cam and Riddy Brook. These trace levels of have been recorded in the baseline data collected prior to the commencement of the remediation project and are not related .to a specific incident.

4.3. Groundwater Level Monitoring

Groundwater levels are recorded within at least 11 borehole locations onsite on a daily basis, to ensure the groundwater beneath the site remains in a static condition during the remediation works and does not pose a risk to surface and groundwater bodies beyond the site boundary.

During the initial excavation works on site very little groundwater has been encountered, the majority of excavations located in the northern parts of the site have exceeded a depth of 4m below current ground level and have penetrated the Gault Clay in parts.

The main source of water encountered during excavations has been discontinuous contaminated perched water present in the Made Ground. This water has been captured and treated in the Waste Water Treatment Works associated with the site.

From approximately 2-3m below ground level discontinuous thin sand and gravel bands have also produced some limited quantities of water, which have tended to dry up within 24 hours.

The groundwater levels measured at locations around the site are shown in drawing D907_31E, in appendix A. The groundwater levels are presented in Appendix E.

Groundwater contour plots are drawn up on a weekly basis to interpret the potential movement of the water beneath the site. Contour plots D907_99, D907_100, D907_101 and D907_102 (Appendix G) illustrate the weekly groundwater levels for the reported period.

The four contour plots constructed (Appendix G) illustrate that there have been very few subtle changes in groundwater levels during the monitoring period.

There has been no recharge of groundwater in the central and northern part of the site where the main excavations have taken place, the base of excavations on site are approximately at 10.00mAOD and remain free of groundwater. There has not been any change to the pumping regime in this part of the site during the monitoring period.

4.4. Groundwater Sampling and Analysis

Groundwater samples from 11 monitoring locations on site are taken on a monthly basis. The results for samples taken on 26th of August 2010 are pending and will be presented in Appendix F.

The contaminant concentrations present in the samples taken on the 26th of August are very similar to the baseline data collected during the summer of 2008, illustrating that there has been very little change to the groundwater's condition since 2008.

5.0 Waste Water Treatment Plant

The Waste Water Treatment Plant (WWTP) is part of the former land holding of Bayer Cropscience and is part of that controlled by Harrow Estates. The WWTP was an integral part of the former Bayer Crop Science site, located to the west of the A10, specifically designed to treat and discharge liquid waste products derived from the production of agrochemicals (both herbicides and pesticides) and sewage from the facility.

The WWTP has been previously operated (until the 15th of March 2010) by Alpheus Environmental Ltd. to maintain the required discharge volume generated by the groundwater pumping systems on the main Bayer Cropscience site along the bentonite cut off wall and the high bay warehouse.

Vertase FLI have established a maintenance programme and control procedures to ensure the WWTP is operated within the constraints of the discharge consent. Essential system checks and improvements have been made to the plant to ensure it can treat the volume and concentrations of influent generated by the continued groundwater control and the contaminated water recovered during the remediation activities on the main site.

The composition of the water discharged to the River Cam (Granta) must not exceed the permitted levels in paragraphs 1.7.1, 1.8.1 and 1.8.2 of the discharge consent PR1NF/1744D01 Issued and regulated by the Environment Agency.

The treated effluent is sampled at the specified location as stipulated in the discharge consent. Vertase FLI also sample the influent to the WWTP, along with a sample taken after the primary carbon treatment, this is to assess the performance of main treatment process of the WWTP and highlight potential expiry of the primary carbon vessels.

The fortnightly samples are analytically tested for the water quality parameters and the chemical compounds specified in paragraph 1.7.1 of the discharge consent PR1NF/1744 D 01. The data is tabulated and presented in Appendix H along with the raw data from the laboratory reports.

Throughout the reporting period the WWTP has been successful in treating the compounds listed within paragraph 1.7.1 (consent PR1NF/1744D01) to acceptable levels for discharge to the River Cam (Granta) under the regulated discharge consent.

The Environment Agency carry out independent discharge monitoring at the WWTP on a monthly basis, during the reportable period Vertase FLI and Harrow Estates Plc have not been notified of any unacceptable effluent discharging to the River Cam (Granta) from the operating plant.

6.0 Contaminants Not Previously Identified

To fulfil the requirements of condition 4 and condition 9, Planning Condition Document ref:S/2307/06/f Issued 10/02/2010, Vertase FLI are continually undertaking soil characterisation sampling prior to remediation processes to identify the types and concentrations of contaminants present in the specific grid squares across the entire site.

The soil characterisation samples undergo a series of laboratory analyses consisting of targeted analysis, screening against known contaminants and a full GCMS scan to identify any contaminants not previously identified.

All characterisation samples analysed and found to contain previously unidentified contaminants are reported in accordance with condition 9 of the Planning Condition Document ref:S/2307/06/f Issued 10/02/2010.

From the commencement of site works (15/03/2010) to 30/08/2010, thirty eight characterisation samples have been taken by Vertase FLI in partnership with Atkins to assess the contamination type and concentrations prior to remediation of the materials. Twenty two characterisation samples analysed contained a total of seventeen compounds / potential contaminants that had not been previously identified.

A summary table of the soil characterisation testing is presented in Appendix I, the previously unidentified compounds are listed here, with comments regarding the origin and likely usage on site.

The remediation project consultants Atkins continuously review the soil characterisation analysis and report previously unidentified contaminates in accordance with condition 9, Planning Condition Document ref:S/2307/06/f Issued 10/02/2010.

Appendix A

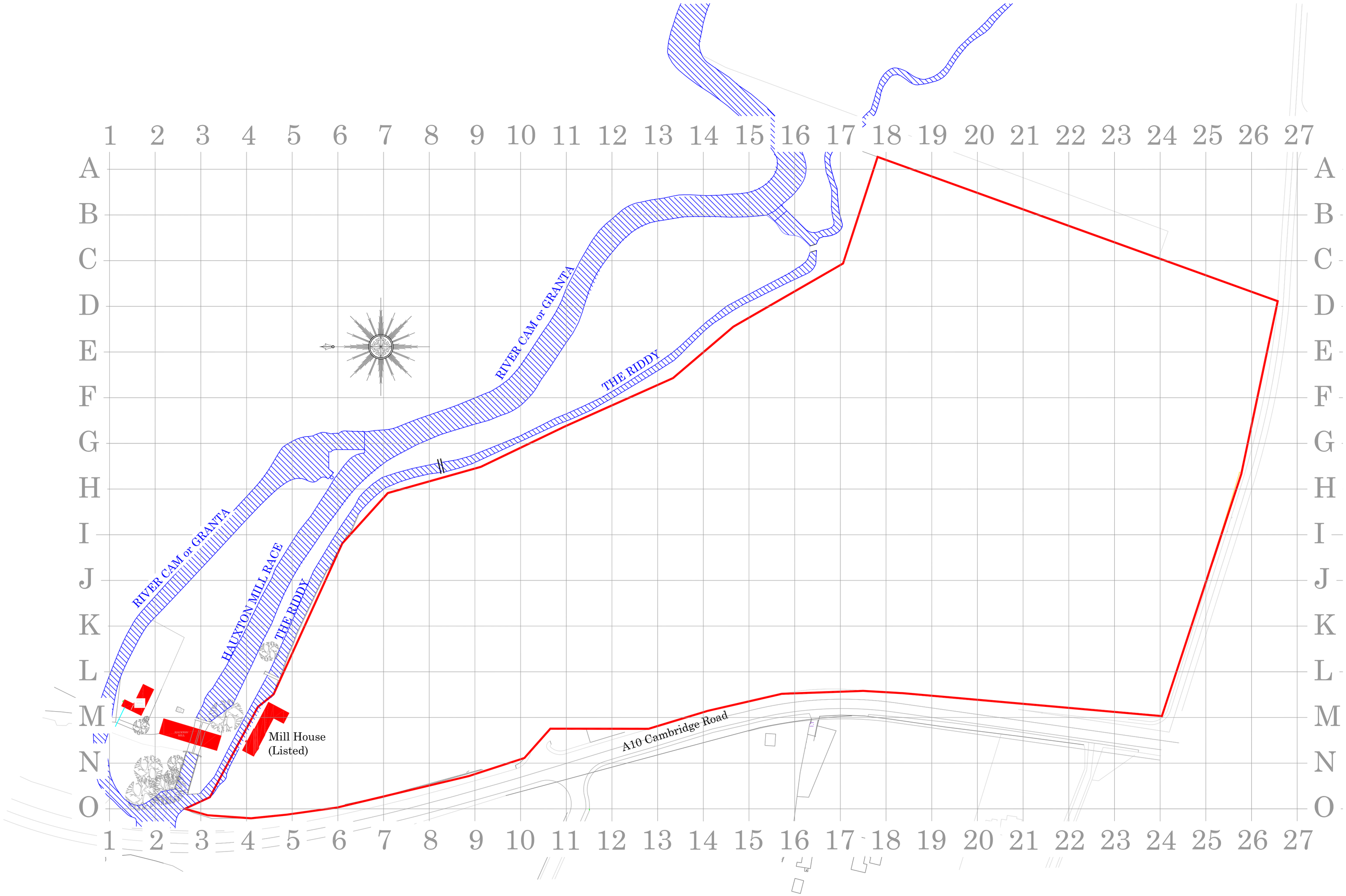
Drawings

A1

Legend

- Buildings to Remain
- Water Course
- Site Boundary

Drawing Base : Ref
LW/HAUX-002/2006



Rev.	Description	Revised By	Date
	FIRST ISSUE		21 April 2008

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Site Address:

Bayer Site
Hauxton
Cambridge

Rev:

Title: Blank Site Plan with Grid

Client: Harrow Estates

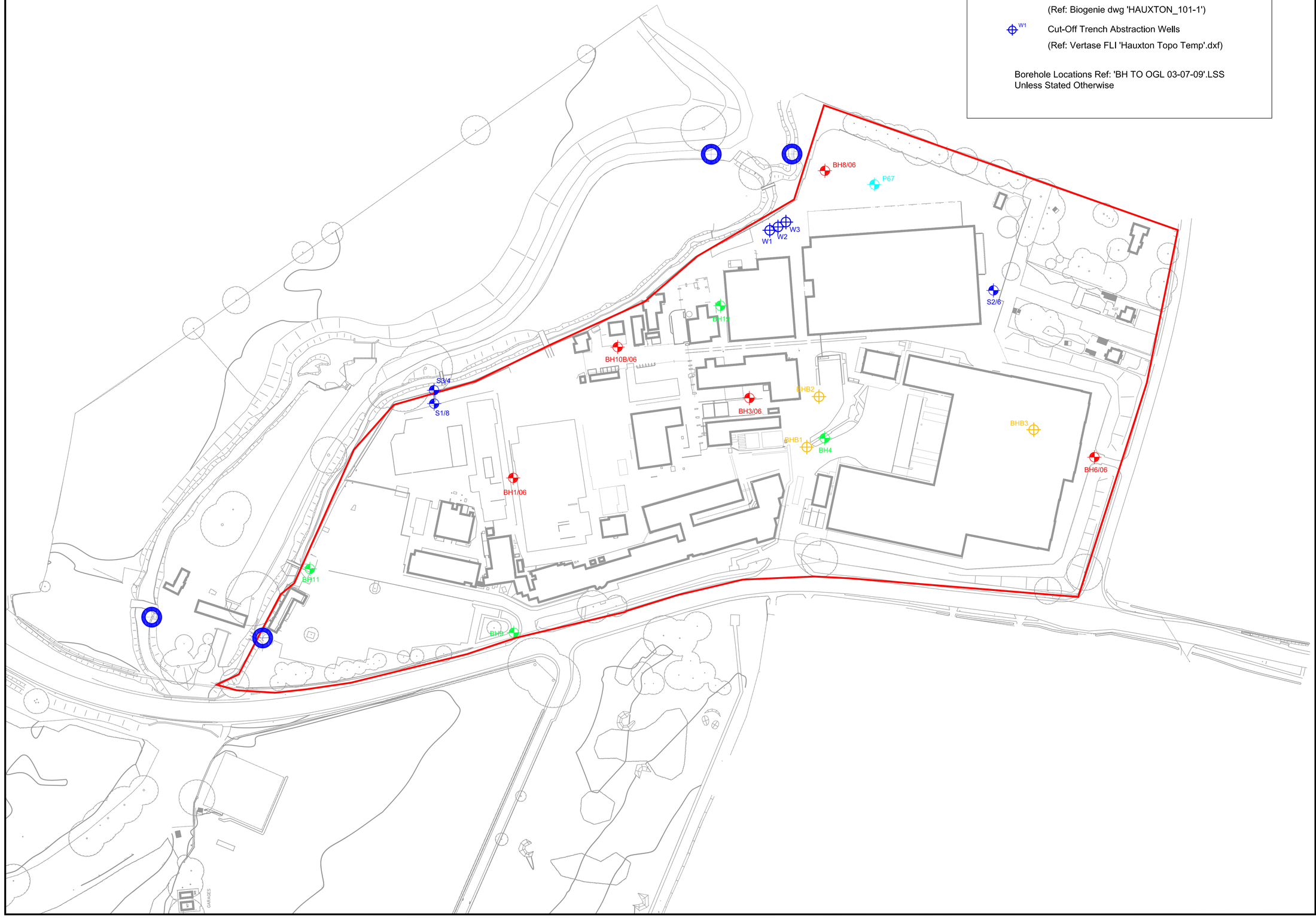
Drawn: JWH	Checked: MA	Approved: MA
Dwg: D907_07	Contract: 907BRI	Scale: 1:1000

A1

Legend

- BH1/06 — Atkins Exploratory Hole Location
- BH7 / P67 — Previous Borehole Location
- Water Sampling Location
- BHB1 — Biogenie Boreholes (Ref: Biogenie dwg 'HAUXTON_101-1')
- W1 — Cut-Off Trench Abstraction Wells (Ref: Vertase FLI 'Hauxton Topo Temp'.dxf)

Borehole Locations Ref: 'BH TO OGL 03-07-09'.LSS
Unless Stated Otherwise



Rev.	Description	Revised By	Date
E	BHB1,BHB2,BHB3, W1,W2,W3,BH3-06 & BH08-06 Added (BH3-06 & BH08-06 Ref:D907_31 Iss 0)	MRG	17-08-09
D	BH1 Removed & BH19 Added	MRG	07-07-08
C	BH1 Added	JWH	11 June 2008
B	BH5/06 Erased S2/6 Added	JWH	09 June 2008
A	Boreholes Erased	JWH	14 May 2008
	FIRST ISSUE		23 April 2008

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Site Address:
Bayer Site
Hauxton
Cambridge

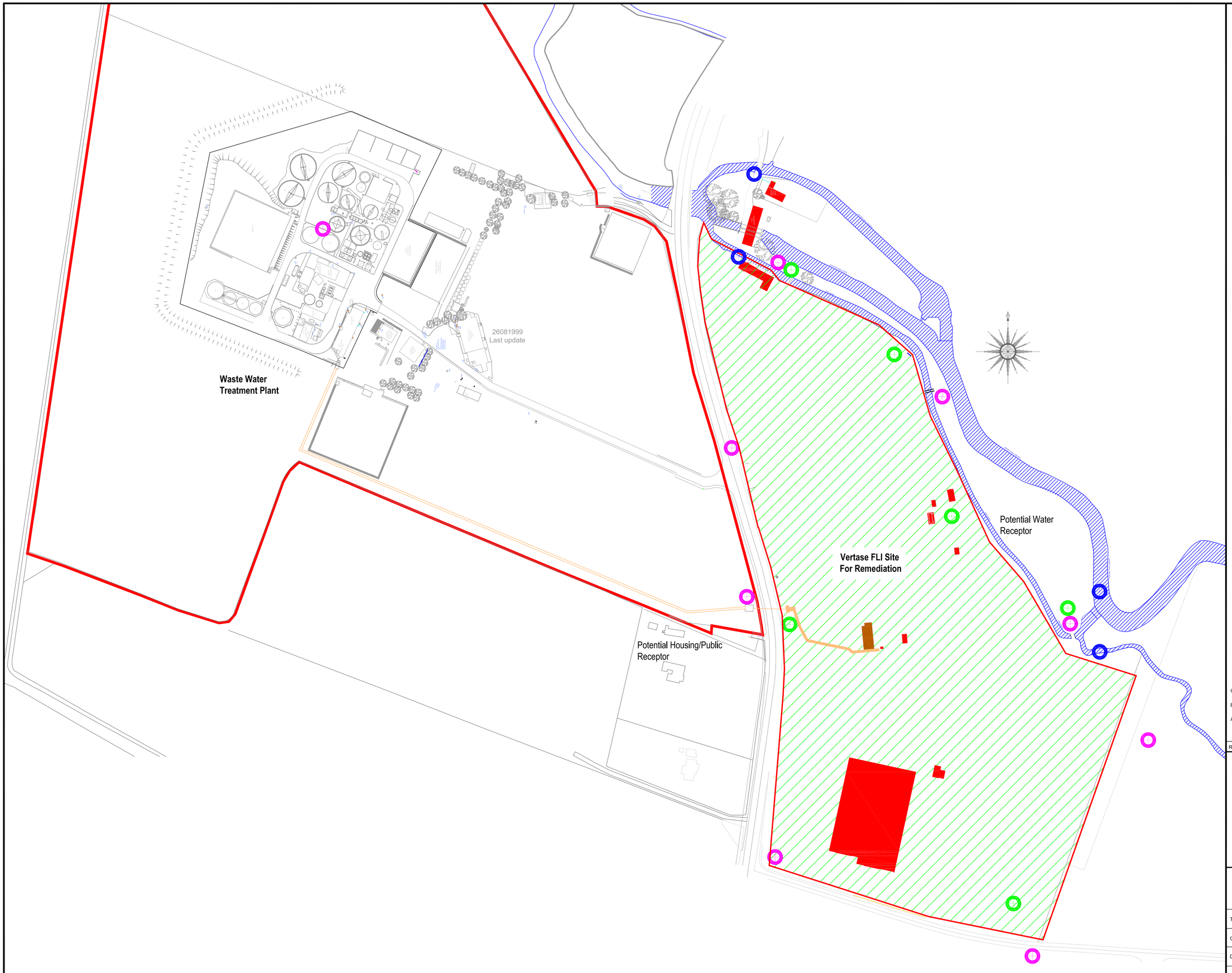
Rev: E

Title: Retained Boreholes for Monitoring & Reference

Client: Harrow Estates

Drawn: JWH	Checked: MA	Approved: MA
Dwg: D907_31	Contract: 907BRI	Scale: 1:1000

A1



Legend

- Sub-Station/Buildings to Remain
- Water Course
- Vertase FLI Site for Remediation
- Mobile Treatment Licence Boundary
- Site Effluent Sump and Ducting
- Diffusion Tubes /Monitoring Location
- Dust Monitoring Location
- Water Sampling Location

Drawing Base : Ref
LW/HAUX-002/2006

Rev.	Description	Revised By	Date
C	Dust Monitoring Locations Amended	MRG	14 July 08
B	Dust Monitoring Location Amended	JWH	09 June 08
A	Water Sampling Points Added Treatment Building Amended	JWH	15 May 2008
	FIRST ISSUE		21 April 2008

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Site Address:
Bayer Site
Hauxton
Cambridge

Rev: C

Title: Environmental Monitoring Plan

Client: Harrow Estates

Drawn: JWH	Checked: MA	Approved: MA
Dwg: D907_33	Contract: 907BRI	Scale: 1:1250

Appendix B

Environmental Monitoring Data

						ODOUR						DUST		NOISE	LITTER		RIDDY BROOK				METEOROLOGICAL AND ENVIRONMENTAL CONDITIONS						
Assessor	Date	Daily Activity	Boundary	Start Time	Finish Time	Detectability (Yes or No)	Intensity (1 to 9)	Quality (Description)	Hedonic Tone (-3 to+3)	Location Sensitivity (1 to 5)	Odour Source (1 to 5)	PID (ppm)	TSP	PM10	Average (dBa)	Present (Description)	Materials attracting Scavengers	Inspection	Water Level (mAOD)	Complaints	Action Required	Wind Speed (1 to 6)	Wind Direction	Air Temp (C)	Description (Rain, Sun)	Cloud Cover (0 to 8)	Ground Conditions (Wet, dry)	General Notes
T Walker	02/08/2010	breaking concrete/turning beds	N	10.30	10.35	n	1	no odour	0				222.4	9.5	57.1	no	no	clear	9.219	no	no	6.5	NW	17	dry/cloud	7	dry	Very slight site odour at west monitoring location.
T Walker	02/08/2010	breaking concrete/turning beds	NE	10.25	10.30	n	1	no odour	0				212	54	47.9	no	no	clear		no	no							
T Walker	02/08/2010	breaking concrete/turning beds	NE1	10.21	10.30								212	54		no	no	clear		no	no							
T Walker	02/08/2010	breaking concrete/turning beds	E	10.20	10.25	n	1	no odour	0				86.1	47.2	50.1	no	no	clear	9.659	no	no							
T Walker	02/08/2010	breaking concrete/turning beds	SE	10.15	10.20	n	1	no odour	0						63.5	no	no			no	no							
T Walker	02/08/2010	breaking concrete/turning beds	S	10.10	10.15	n	1	no odour	0				230	38	57.6	no	no			no	no							
T Walker	02/08/2010	breaking concrete/turning beds	SW	10.10	10.15	n	1	no odour	0						54.2	no	no			no	no							
T Walker	02/08/2010	breaking concrete/turning beds	W	10.00	10.05	n	1	no odour	0				161	38	70	no	no			no	no							
T Walker	02/08/2010	breaking concrete/turning beds	NW	10.05	10.10	n	1	no odour	0						72.8	no	no			no	no							
O Holman	02/08/2010	turning beds/forming beds/breaking concrete	N	17.22	17.27	y	4	vegetation	0	2	1	0	34.9	27.6	61	no	no	clear	9.219			2	ESE	17	rain	8	wet	
O Holman	02/08/2010	turning beds/forming beds/breaking concrete	NE	17.16	17.21	y	4	vegetation	0	2	1	0	21.6	14.1	62	no	no	clear										
O Holman	02/08/2010	turning beds/forming beds/breaking concrete	NE1	17.10	17.15								55.9	16.4				clear										
O Holman	02/08/2010	turning beds/forming beds/breaking concrete	E	17.04	17.09	y	2	vegetation	1	2	1	0	35.3	17.8	61	no	no	clear	9.659									
O Holman	02/08/2010	turning beds/forming beds/breaking concrete	SE	16.58	17.03	y	3	vegetation	0	2	1	0			63	no	no											
O Holman	02/08/2010	turning beds/forming beds/breaking concrete	S	16.52	16.57	y	4	vegetation	0	2	1	0	43.6	22.7	66	no	no											
O Holman	02/08/2010	turning beds/forming beds/breaking concrete	SW	16.46	16.51	y	2	vegetation and general site odour	0	4	2	0			73	no	no											
O Holman	02/08/2010	turning beds/forming beds/breaking concrete	W	16.40	16.45	y	2	vegetation	1	4	1	0	345.5	107.5	63	no	no											
O Holman	02/08/2010	turning beds/forming beds/breaking concrete	NW	17.28	17.33	y	2	general site odour and exhaust fumes	0	2	3	0			80	no	no											
O Holman	03/08/2010	breaking concrete, turning beds, forming beds, moving beds	N	10.42	10.47	y	3	vegetation	1	2	1	0	36.1	27.8	67	no	no	clear	9.209			1.7	NW	23	dry	5	damp	
O Holman	03/08/2010	breaking concrete, turning beds, forming beds, moving beds	NE	10.36	10.41	y	3	vegetation and general site odour	0	2	3	0	168.2	138.8	58	no	no	clear										
O Holman	03/08/2010	breaking concrete, turning beds, forming beds, moving beds	NE1	10.30	10.35								102.3	69.8				clear										
O Holman	03/08/2010	breaking concrete, turning beds, forming beds, moving beds	E	10.24	10.29	y	2	general site odour	0	2	5	0	95.5	41.7	61	no	no	clear	9.659									
O Holman	03/08/2010	breaking concrete, turning beds, forming beds, moving beds	SE	10.18	10.23	y	4	general site odour	-1	2	5	0			59	no	no											
O Holman	03/08/2010	breaking concrete, turning beds, forming beds, moving beds	S	10.12	10.17	y	2	vegetation	1	2	1	0	36.9	14.1	63	no	no											
O Holman	03/08/2010	breaking concrete, turning beds, forming beds, moving beds	SW	10.06	10.11	y	3	vegetation	0	4	1	0			75	no	no											
O Holman	03/08/2010	breaking concrete, turning beds, forming beds, moving beds	W	10.00	10.05	y	1	vegetation	0	4	1	0	93.6	52.9	78	no	no											
O Holman	03/08/2010	breaking concrete, turning beds, forming beds, moving beds	NW	10.48	10.53	y	2	vegetation	0	2	1	0			78	no	no											
																												odour present at kissing gate at church meadow near SE monitoring location 2/9 0.0ppm. TCE/PCE odour
O Holman	03/08/2010	breaking concrete, turning beds, forming beds, moving beds	N	17.37	17.42	y	2	vegetation	1	2	1	0	41.3	25.9	63	no	no	clear	9.209									present around NE1 2/9 0.0ppm
O Holman	03/08/2010	breaking concrete, turning beds, forming beds, moving beds	NE	17.31	17.36	y	2	vegetation	1	2	1	0	161.4	138.2	64	no	no	clear										
O Holman	03/08/2010	breaking concrete, turning beds, forming beds, moving beds	NE1	17.25	17.30								88.3	87.6				clear										
O Holman	03/08/2010	breaking concrete, turning beds, forming beds, moving beds	E	17.19	17.24	y	2	general site odour	-1	2	5	0	111.6	89.3	59	no	no	clear	9.659									
O Holman	03/08/2010	breaking concrete, turning beds, forming beds, moving beds	SE	17.13	17.18	y	3	general site odour	-1	2	5	0			54	no	no											
O Holman	03/08/2010	breaking concrete, turning beds, forming beds, moving beds	S	17.07	17.12	y	1	vegetation	0	2	1	0	67.3	21.4	65	no	no											
O Holman	03/08/2010	breaking concrete, turning beds, forming beds, moving beds	SW	17.01	17.06	y	2	vegetation	1	4	1	0			74	no	no											
O Holman	03/08/2010	breaking concrete, turning beds, forming beds, moving beds	W	16.55	17.00	y	2	vegetation	0	4	1	0	36.1	14.2	78	no	no											
O Holman	03/08/2010	breaking concrete, turning beds, forming beds, moving beds	NW	17.43	17.48	y	2	vegetation	0	2	1	0			79	no	no											
O Holman	04/08/2010	breaking concrete, turning beds, forming beds, excavation	N	10.37	10.42	y	3	vegetation	1	2	1	0	27.8	13.3	58	no	no	clear	9.209			2	WNW	15	drizzle	8	damp	slight TCE odour present around NE1 2/9 0.0ppm
O Holman	04/08/2010	breaking concrete, turning beds, forming beds, excavation	NE	10.31	10.36	y	2	vegetation	1	2	1	0	112.3	108.9	69	no	no	clear										
O Holman	04/08/2010	breaking concrete, turning beds, forming beds, excavation	NE1	10.25	10.30								103.4	98.5				clear										
O Holman	04/08/2010	breaking concrete, turning beds, forming beds, excavation	E	10.19	10.24	y	3	general site odour	0	2	5	0	47.1	39.3	62	no	no	clear	9.659									
O Holman	04/08/2010	breaking concrete, turning beds, forming beds, excavation	SE	10.13	10.18	y	4	general site odour	-1	2	5	0			63	no	no											
O Holman	04/08/2010	breaking concrete, turning beds, forming beds, excavation	S	10.07	10.12	y	2	vegetation	1	2	1	0	31.6	19.3	64	no	no											
O Holman	04/08/2010	breaking concrete, turning beds, forming beds, excavation	SW	10.01	10.06	y	1	vegetation	1	4	1	0			76	no	no											
O Holman	04/08/2010	breaking concrete, turning beds, forming beds, excavation	W	9.55	10.00	y	2	vegetation	0	4	1	0	41.1	36.2	79	no	no											
O Holman	04/08/2010	breaking concrete, turning beds, forming beds, excavation	NW	10.43	10.48	y	2	vegetation	0	2	1	0			79	no	no											
																												slight odour present at NE1 3/9 0.0ppm. Slight odour present from Cambridge farm machinery to site boundary
O Holman	04/08/2010	breaking concrete, turning beds, forming beds	N	17.07	17.07	y	4	vegetation	0	2	1	0	206.2	37.9	58	no	no	clear	9.209			0.5	W	17	cloudy	8	wet	along church road 2/9 0.0
O Holman	04/08/2010	breaking concrete, turning beds, forming beds	NE	16.56	17.01	y	3	vegetation	0	2	1	0	221.3	126.4	68	no	no	clear										
O Holman	04/08/2010	breaking concrete, turning beds, forming beds	NE1	16.50	16.55								275.2	180.5				clear										
O Holman	04/08/2010	breaking concrete, turning beds, forming beds	E	16.44	16.49	y	3	vegetation	0	2	1	0	237.1	220.5	66	no	no	clear	9.659									
O Holman	04/08/2010	breaking concrete, turning beds, forming beds	SE	16.38	16.43	y	3	general site odour	0	2	5	0			59	no	no											
O Holman	04/08/2010	breaking concrete, turning beds, forming beds	S	16.32	16.37	y	1	general site odour	0	2	5	0	69.1	10.1	65	no	no											
O Holman	04/08/2010	breaking concrete, turning beds, forming beds	SW	16.26	16.31	y	3	vegetation	1	4	1	0			77	no	no											
O Holman	04/08/2010	breaking concrete, turning beds, forming beds	W	16.20	16.25	y	2	vegetation	0	4	1	0	65.2	29.5	79	no	no											
O Holman	04/08/2010	breaking concrete, turning beds, forming beds	NW	17.08	17.13	y	4	vegetation	0	2	1	0			78	no	no											
																												Ice odour present around south gate 3/9 0.0ppm. General site and exhaust odour present around NE1 2/9
O Holman	05/08/2010	Excavating J12 and J13, turning treatment beds	N	10.46	10.51	y	2	vegetation	0	2	1	0	39.6	18.1	63	no	no	clear	9.209									0.0ppm
O Holman	05/08/2010	Excavating J12 and J13, turning treatment beds	NE	10.40	10.45	y	2	vegetation	1	2	1	0	61.6	38.6	66	no	no	clear										
O Holman	05/08/2010	Excavating J12 and J13, turning treatment beds	NE1	10.33	10.38								268.9	107.9				clear										
O Holman	05/08/2010	Excavating J12 and J13, turning treatment beds	E	10.27	10.32	y	3	tce/pce and general site odour	-1	2	5	0	186	157.6	63	no	no	clear	9.649									
O Holman	05/08/2010	Excavating J12 and J13, turning treatment beds	SE	10.21	10.26	y	3	general site odour	0	2	5	0			59	no	no											
O Holman	05/08/2010	Excavating J12 and J13, turning treatment beds	S	10.13	10.18	y	1	general site odour	0	2	5	0	40.3	22.3	63	no	no											
O Holman	05/08/2010	Excavating J12 and J13, turning treatment beds	SW	10.06	10.11	y	2	vegetation	0	4	1	0			73	no	no											
O Holman	05/08/2010	Excavating J12 and J13, turning treatment beds	W	10.00	10.05	y	2	vegetation and exhaust fumes	0	4	1	0	49.1	31.2	75	no	no											
O Holman	05/08/2010	Excavating J12 and J13, turning treatment beds	NW	10.53	10.58	y	2	vegetation	1	2	1	0			79	no	no											
O Holman	05/08/2010	Excavating J12 and J13, turning treatment beds	N	17.42	17.47	y	2	vegetation	0	2	1	0	23.6	15	49	no	no	clear	9.209			5	WNW	24	sun	3	damp	slight odour present at Hauxton church 3/9 0.0ppm
O Holman	05/08/2010	Excavating J12 and J13, turning treatment beds	NE	17.36	17.41	y	1	vegetation	0	2	1	0	205.6	73.4	56	no	no	clear										
O Holman	05/08/2010	Excavating J12 and J13, turning treatment beds	NE1	17.30	17.35								67.7	20.5				clear										
O Holman	05/08/2010	Excavating J12 and J13, turning treatment beds	E	17.24	17.29	y	3	general site odour	-1	2	5	0	49.5	18.9	60	no	no	clear	9.649									
O Holman	05/08/2010	Excavating J12 and J13, turning treatment beds	SE	17.18	17.23	y	4	tce/pce	-1	2	5	0			68	no	no											
O Holman	05/08/2010	Excavating J12 and J13, turning treatment beds	S	17.12	17.17	y	2	tce/pce	0	2	5	0	18.3	13.9	63	no	no											
O Holman	05/08/2010	Excavating J12 and J13, turning treatment beds	SW	17.06	17.11	y	1	vegetation	0	4	1	0			73	no	no											
O Holman	05/08/2010	Excavating J12 and J13, turning treatment beds	W	17.00	17.05	y	2	vegetation	0	4	1	0	95.1	19.6	76	no	no											
O Holman	05/08/2010	Excavating J12 and J13, turning treatment beds	NW	17.48	17.53	y	2	vegetation	0	2	1	0			78	no	no											
T Walker	06/08/2010	excavating J11/forming beds	N	11.05	11.10	n	1	no odour	0	3	5	0	214	36	65	no	no	clear	9.219	no	no	11.4	SE	22.4	sun	6	dry	
T Walker	06/08/2010	excavating J11/forming beds	NE	11.10	11.15	n	1	no odour	0	3	5	0	137	28	48	no	no	clear		no	no							
T Walker	06/08/2010	excavating J11/forming beds	NE1	11.10	11.15								146	19				clear		no	no							
T Walker	06/08/2010	excavating J11/forming beds	E	11.15	11.20	n	1	no odour	0	3	5	0	118	42	57	no	no	clear	9.659	no	no							
T Walker	06/08/2010	excavating J11/forming beds	SE	10.40	10.45	n	1	no odour	0	5	5	0			56	no	no			no	no							
T Walker	06/08/2010	excavating J11/forming beds	S	10.45	10.50	n	1	no odour	0	5	5	0	127	31	56	no	no			no	no							
T Walker	06/08/2010	excavating J11/forming beds	SW	10.50	10.55	n	1	no odour	0	5	5	0			67	no	no			no	no							
T Walker	06/08/2010	excavating J11/forming beds	W	10.55	11.00	y	2	compost/tce	-2	5	5	0	131	47	78	no	no			no	no							
T Walker	06/08/2010	excavating J11/forming beds	NW	11.06	11.01	y	2	compost	-1	3	5	0			71	no	no			no	no							
																												Odour in mill house car park of aerosol paint rated 2/3 pid readings only in gusts of 3.5 on A10, excavation
T Walker	06/08/2010	excavating J11/turning beds	N	15.56	16.00	n	1	no odour	0			0	196	58	26	no	no	clear	9.219	no	no	9.4	SE	19	showers	8	damp	ceased immediately.
T Walker	06/08/2010	excavating J11/turning beds	NE	15.50	15.55	y	2	odour control	-1	3	5	0	224	38	57	no	no	clear		no	no							
T Walker	06/08/2010	excavating J11/turning beds	NE1	15.50	15.55								201	49				clear		no	no							
T Walker	06/08/2010	excavating J11/turning beds	E	15.45	15.50	n	1	no odour	0			0	198	44	27	no	no	clear	9.659	no	no							
T Walker	06/08/2010	excavating J11/turning beds	SE	15.40	15.45	y	2	diesel fumes from farm machinery place	-1	5	1	0			52	no	no			no	no							
T Walker	06/08/2010	excavating J11/turning beds	S	15.35	15.40	n	1	no odour	0			0	179	28	64	no	no			no	no							
T Walker	06/08/2010	excavating J11/turning beds	SW	15.35	15.40	n	1	no odour	0			0			68	no	no			no	no							
T Walker	06/08/2010	excavating J11/turning beds	W	15.30	15.35	n	1	no odour	0			0	137	38	48	no	no			no	no							
T Walker	06/08/2010	excavating J11/turning beds	NW	16.00	16.05	y	2/3	paint/tce	-2	5	5	3.5			26	no	no			no	no							
T Walker	09/08/2010	Excavating I11/moving bed 68	N	12.40	12.45	n	1	no odour				0	154	17	72.4	no	no	clear	9.219	no	no	1	SW	22	dry/sun	1	dry	PID readings on the access road to the site reading at 4 ppm all points monitoring 0.0ppm
T Walker	09/08/2010	Excavating I11/moving bed 68	NE	12.30	12.35	n	1	no odour				0	246	37	91.1	no	no	clear		no	no							
T Walker	09/08/2010	Excavating I11/moving bed 68	NE1	12.30	12.35								157	64				clear		no	no							
T Walker	09/08/2010	Excavating I11/moving bed 68	E	12.25	12.30	n	1	no odour				0	85	9	76.4	no	no	clear	9.659	no	no							
T Walker	09/08/2010	Excavating I11/moving bed 68	SE	12.20	12.25	n	1	no odour				0			68.1	no	no			no	no							
T Walker	09/08/2010	Excavating I11/moving bed 68	S	12.15	12.20	n	1	no odour				0	89	17	67.4	no	no			no	no							
T Walker	09/08/2010	Excavating I11/moving bed 68	SW	12.10	12.15	n	1	no odour				0			67.1	no	no			no	no							
T Walker	09/08/2010	Excavating I11/moving bed 68	W	12.05	12.10	y	3/4	tce/pce	-2	2	5	0.3	157	19	44.8	no	no			no	no							
T Walker	09/08/2010	Excavating I11/moving bed 68	NW	12.00	12.05	n	1	no odour				0			67.6	no	no			no	no							
O Holman	09/08/2010	breaking concrete, turning beds, screening concrete	N	17.02	17.07	y	4	burning/smoke	-1	2	1	0	109.8	22.1	64	no	no	clear	9.219			7	SSW	28	sun	0	dry	no odour at Hauxton church
O Holman	09/08/2010	breaking concrete, turning beds, forming beds, screening concrete	NE	16.56	17.01	y	3	tce/pce and general site odour	-1	2	5	0	67.2	51.6	65	no	no	clear										
O Holman	09/08/2010	breaking concrete, turning beds, forming beds, screening concrete	NE1	16.50	16.55								267.3	190.8				clear										
O Holman	09/08/2010	breaking concrete, turning beds, forming beds, screening concrete	E	16.44	16.49	y	3	general site odour	-1	2	5	0	293.4	110.5	63	no	no	clear	9.659									
O Holman	09/08/2010	breaking concrete, turning beds, forming beds, screening concrete	SE	16.38	16.43	y	2	vegetation	0	2	1	0			58	no	no											
O Holman	09/08/2010	breaking concrete, turning beds, forming beds, screening concrete	S	16.32	16.37	y	3	vegetation	0	2	1	0	241.7	22.4	63	no	no											
O Holman	09/08/2010	breaking concrete, turning beds, forming beds, screening concrete	SW	16.26	16.31	y	2	vegetation	0	4	1	0			75	no	no											
O Holman	09/08/2010	breaking concrete, turning beds, forming beds, screening concrete	W	16.20	16.25	y	3	vegetation	0	4	1	0	53.5	45.2	79	no	no											
O Holman	09/08/2010	breaking concrete, turning beds, forming beds, screening concrete	NW	17.08	17.13	y	2	general site odour	0	2	5	0			75	no	no											
O Holman	10/08/2010	breaking concrete, turning beds, forming beds, screening concrete	N	10.32	10.37	y	2	vegetation	0	2	1	0	57.8	10.4	56	no	no	clear	9.209			2	SSW	15	rainy spells	8	wet	
O Holman	10/08/2010	breaking concrete, turning beds, forming beds, screening concrete	NE	10.26	10.31	y	3	general site odour	-1	2	5	0	36.6	31.7	62	no	no	clear										
O Holman	10/08/2010	breaking concrete, turning beds, forming beds, screening concrete	NE1	10.20	10.25								114	54.5				clear										
O Holman	10/08/2010	breaking concrete, turning beds, forming beds, screening concrete	E	10.14	10.19	y	3	PCE/TCE	-1	2	5	0	29.5	11.8	61	no	no	clear	9.649									
O Holman	10/08/2010	breaking concrete, turning beds, forming beds, screening concrete	SE	10.08	10.13	y	2	general site odour	0	2	5	0			64	no	no											
O Holman	10/08/2010	breaking concrete, turning beds, forming beds, screening concrete	S	10.02	10.07	y	1	vegetation	0	2	1	0	62.9	7.7	66	no	no											
O Holman	10/08/2010	breaking concrete, turning beds, forming beds, screening concrete	SW	9.56	10.01	n				4		0			77	no	no											
O Holman	10/08/2010	breaking concrete, turning beds, forming beds, screening concrete	W	9.50	9.55	y	1	vegetation	0	4	1	0	75.3	63.7	78	no	no											
O Holman	10/08/2010	breaking concrete, turning beds, forming beds, screening concrete	NW	10.38	10.43	y	3	vegetation and exhaust fumes	-1	2	1	0			79	no	no											
O Holman	10/08/2010	breaking concrete, turning beds, forming beds, screening concrete	N	17.02	17.07	y	1	vegetation	0	2	1	0	41.3	38.9	57	no	no	clear	9.209			2	SW	16	rain	8	wet	
O Holman	10/08/2010	breaking concrete, turning beds, forming beds, screening concrete	NE	16.56	17.01	y	4	general site odour	-1	2	5	0	122.3	56.3	58	no	no	clear										
O Holman	10/08/2010	breaking concrete, turning beds, forming beds, screening concrete	NE1	16.50	16.55								67.8	31.9				clear										
O Holman	10/08/2010	breaking concrete, turning beds, forming beds, screening concrete	E	16.44	16.49	y	3	general site odour	-1	2	5	0	83.2	57.9	59	no	no	clear	9.649									
O Holman	10/08/2010	breaking concrete, turning beds, forming beds, screening concrete	SE	16.38	16.43	y	3	general site odour	0	2	5	0			64	no	no											
O Holman	10/08/2010	breaking concrete, turning beds, forming beds, screening concrete	S	16.32	16.37	y	2	vegetation	0	2	1	0	58.4	1.7	65	no	no											
O Holman	10/08/2010	breaking concrete, turning beds, forming beds, screening concrete	SW	16.26	16.31	y	1	vegetation	0	2	1	0			75	no	no											
O Holman	10/08/2010	breaking concrete, turning beds, forming beds, screening concrete	W	16.20	16.25	y	1	vegetation	0	2	1	0	157.3	141.2	78	no	no											
O Holman	10/08/2010	breaking concrete, turning beds, forming beds, screening concrete	NW	17.08	17.13	y	3	vegetation	0	2	1	0			79	no	no											
T Walker	11/08/2010	breaking concrete, forming beds, turning beds, screening concrete	N	10.12	10.17	y	2	vegetation	0	2	1	0	125.2	92	62	no	no	clear	9.209			1.5	WSW	19	sun	4	damp	slight odour present at NE1 2/9 0.0ppm general site odour
O Holman	11/08/2010	breaking concrete, forming beds, turning beds, screening concrete	NE	10.06	10.11	y	2	general site odour	0	2	5	0	19.8	15.3	63	no	no	clear										
O Holman	11/08/2010	breaking concrete, forming beds, turning beds, screening concrete	NE1	10.00	10.05								215.3	93.4				clear										
O Holman	11/08/2010	breaking concrete, forming beds, turning beds, screening concrete	E	9.54	9.59	y	3	general site odour	-1	2	5	0	246.7	137.2	59	no	no	clear	9.639									
O Holman	11/08/2010	breaking concrete, forming beds, turning beds, screening concrete	SE	9.48	9.53	y	3	general site odour and concrete dust	0	2	5	0			61	no	no											

D Holman	11/08/2010	breaking concrete, forming beds, turning beds, screening concrete	S	9.42	9.47	y	2	vegetation	0	2	1	0	245.5	35.9	64	no	no												
D Holman	11/08/2010	breaking concrete, forming beds, turning beds, screening concrete	SW	9.36	9.41	y	2	vegetation	0	4	1	0			74	no	no												
D Holman	11/08/2010	breaking concrete, forming beds, turning beds, screening concrete	W	9.30	9.35	y	3	vegetation	0	4	1	0	112.3	42.4	79	no	no												
D Holman	11/08/2010	breaking concrete, forming beds, turning beds, screening concrete	NW	10.18	10.23	y	2	exhaust fumes and vegetation	0	2	1	0			79	no	no												
D Holman	11/08/2010	breaking concrete, screening concrete, turning beds, forming beds	N	16.02	16.07	y	1	vegetation	0	2	1	0	14.1	5.9	55	no	no	clear	9.209		2	WSW	22	dry	6	dry	No odour at Hauxton parish church, odour control and mushroom compost odour present between NE1 and E monitoring locations.
D Holman	11/08/2010	breaking concrete, screening concrete, turning beds, forming beds	NE	15.56	16.01	y	3	odour control	1	2	5	0	215.5	33.2	64	no	no	clear											
D Holman	11/08/2010	breaking concrete, screening concrete, turning beds, forming beds	NE1	15.50	15.55								213.4	187.9				clear											
D Holman	11/08/2010	breaking concrete, screening concrete, turning beds, forming beds	E	15.44	15.49	y	4	mushroom compost & odour control	-1	2	5	0	225.7	24.3	61	no	no	clear	9.639										
D Holman	11/08/2010	breaking concrete, screening concrete, turning beds, forming beds	SE	15.38	15.43	y	3	concrete dust	-1	2	5	0			62	no	no												
D Holman	11/08/2010	breaking concrete, screening concrete, turning beds, forming beds	S	15.32	15.37	y	2	vegetation	0	2	1	0	16.1	9.8	65	no	no												
D Holman	11/08/2010	breaking concrete, screening concrete, turning beds, forming beds	SW	15.26	15.31	y	3	vegetation	0	4	1	0			75	no	no												
D Holman	11/08/2010	breaking concrete, screening concrete, turning beds, forming beds	W	15.20	15.25	y	2	vegetation	0	4	1	0	255.3	39.1	79	no	no												
D Holman	11/08/2010	breaking concrete, screening concrete, turning beds, forming beds	NW	16.08	16.13	y	3	vegetation	0	2	1	0			79	no	no												
D Holman	12/08/2010	breaking concrete, turning beds, forming beds	N	9.42	9.47	y	1	vegetation	0	2	1	0	111.6	24.9	64	no	no	clear	9.219		1.6	WSW	15	cloudy	8	damp	
D Holman	12/08/2010	breaking concrete, turning beds, forming beds	NE	9.36	9.41	y	4	odour control	1	2	5	0	166	96	68	no	no	clear											
D Holman	12/08/2010	breaking concrete, turning beds, forming beds	NE1	9.30	9.35								142.4	126.4				clear											
D Holman	12/08/2010	breaking concrete, turning beds, forming beds	E	9.24	9.29	y	3	general site odour	0	2	5	0	88.4	24	61	no	no	clear	9.639										
D Holman	12/08/2010	breaking concrete, turning beds, forming beds	SE	9.18	9.23	y	2	concrete and vegetation	0	2	3	0			65	no	no												
D Holman	12/08/2010	breaking concrete, turning beds, forming beds	S	9.12	9.17	y	3	vegetation	0	2	1	0	22.3	17.2	64	no	no												
D Holman	12/08/2010	breaking concrete, turning beds, forming beds	SW	9.06	9.11	y	2	vegetation	0	4	1	0			75	no	no												
D Holman	12/08/2010	breaking concrete, turning beds, forming beds	W	9.00	9.05	y	2	vegetation	0	4	1	0	65.8	40.7	76	no	no												
D Holman	12/08/2010	breaking concrete, turning beds, forming beds	NW	9.48	9.53	y	4	vegetation	0	2	1	0			79	no	no												
D Holman	12/08/2010	breaking concrete, turning beds, forming beds	N	17.22	17.27	y	1	tcp type	0	2	5	0	28.4	21.7	55	no	no	clear	9.219		3	W	18	cloudy	8	damp	
D Holman	12/08/2010	breaking concrete, turning beds, forming beds	NE	17.16	17.21	y	3	odour control and vegetation	1	2	3	0	74.2	67.3	55	no	no	clear											
D Holman	12/08/2010	breaking concrete, turning beds, forming beds	NE1	17.10	17.15								20.8	20.2				clear											
D Holman	12/08/2010	breaking concrete, turning beds, forming beds	E	17.04	17.09	y	4	odour control	1	2	5	0	24	19.3	59	no	no	clear	9.639										
D Holman	12/08/2010	breaking concrete, turning beds, forming beds	SE	16.58	17.03	y	3	concrete dust, odour control and vegetation	0	2	4	0			58	no	no												
D Holman	12/08/2010	breaking concrete, turning beds, forming beds	S	16.52	16.57	y	2	vegetation	0	2	1	0	47.9	26.2	65	no	no												
D Holman	12/08/2010	breaking concrete, turning beds, forming beds	SW	16.46	16.51	y	1	vegetation	0	4	1	0			74	no	no												
D Holman	12/08/2010	breaking concrete, turning beds, forming beds	W	16.40	16.45	y	1	vegetation	0	4	1	0	97.7	4	78	no	no												
D Holman	12/08/2010	breaking concrete, turning beds, forming beds	NW	17.28	17.33	y	2	odour control	1	2	5	0			79	no	no												
D Holman	13/08/2010	breaking concrete, turning beds, forming beds	N	10.02	10.07	y	2	vegetation	0	2	1	0	30.2	22	63	no	no	clear	9.219		3	W	16	cloudy	8	dry	slight odour at Hauxton parish church 1/9 0.0ppm odour present along east boundary s of NE1 0.0ppm 5/9 bed turning halted
D Holman	13/08/2010	breaking concrete, turning beds, forming beds	NE	9.56	10.01	y	2	DNOC and general site odour	-1	2	5	0	45.6	38.9	64	no	no	clear											
D Holman	13/08/2010	breaking concrete, turning beds, forming beds	NE1	9.50	9.55								251.1	60				clear											
D Holman	13/08/2010	breaking concrete, turning beds, forming beds	E	9.44	9.49	y	5	odour control	1	2	5	0	179.4	37.6	61	no	no	clear	9.639										
D Holman	13/08/2010	breaking concrete, turning beds, forming beds	SE	9.38	9.43	y	3	general site odour	0	2	5	0			60	no	no												
D Holman	13/08/2010	breaking concrete, turning beds, forming beds	S	9.32	9.37	y	2	vegetation and general site odour	0	2	3	0	90.6	28.3	65	no	no												
D Holman	13/08/2010	breaking concrete, turning beds, forming beds	SW	9.26	9.31	y	3	vegetation	0	4	1	0			73	no	no												
D Holman	13/08/2010	breaking concrete, turning beds, forming beds	W	9.20	9.25	y	1	vegetation and odour control	0	4	3	0	15.9	14.6	79	no	no												
D Holman	13/08/2010	breaking concrete, turning beds, forming beds	NW	10.08	10.13	y	3	exhaust fumes and vegetation	0	2	1	0			78	no	no												
D Holman	13/08/2010	breaking concrete, turning beds, forming beds	N	17.12	17.17	y	1	vegetation	0	2	1	0	36.1	22.8	59	no	no	clear	9.219		1	NW	16	cloudy	8	damp	
D Holman	13/08/2010	breaking concrete, turning beds, forming beds	NE	17.06	17.11	y	3	general site odour	-1	2	5	0	119.3	68.7	63	no	no	clear											
D Holman	13/08/2010	breaking concrete, turning beds, forming beds	NE1	17.00	17.05								199.1	85.3				clear											
D Holman	13/08/2010	breaking concrete, turning beds, forming beds	E	16.54	16.59	y	4	odour control	1	2	5	0	63.1	37.9	60	no	no	clear	9.639										
D Holman	13/08/2010	breaking concrete, turning beds, forming beds	SE	16.48	16.53	y	2	general site odour	0	2	5	0			61	no	no												
D Holman	13/08/2010	breaking concrete, turning beds, forming beds	S	16.42	16.47	y	2	general site odour	0	2	5	0	10.1	6.3	65	no	no												
D Holman	13/08/2010	breaking concrete, turning beds, forming beds	SW	16.36	16.41	y	2	vegetation	0	4	1	0			74	no	no												
D Holman	13/08/2010	breaking concrete, turning beds, forming beds	W	16.30	16.35	y	2	vegetation	0	4	1	0	9.7	8.1	79	no	no												
D Holman	13/08/2010	breaking concrete, turning beds, forming beds	NW	17.18	17.23	y	2	vegetation	0	2	1	0			79	no	no												
I Stephenson	16/08/2010	Breaking out concrete, turning treatment beds	N	10.04	10.09	n							113.4	54.6	60.8	no	no	clear	9.209	no	no	10	NNW	16	cloudy	8	damp	slight odour behind fire exit, slight odour at church (1/9)
I Stephenson	16/08/2010	Breaking out concrete, turning treatment beds	NE	9.58	10.03	n				2			108	111	68.3	no	no	clear		no	no							
I Stephenson	16/08/2010	Breaking out concrete, turning treatment beds	NE1	9.51	9.56								49.9	36.8				clear		no	no							
I Stephenson	16/08/2010	Breaking out concrete, turning treatment beds	E	9.45	9.50	y	3	natural vegetation	0	2	1	0	25.1	26.6	58.2	no	no	clear	9.639	no	no							
I Stephenson	16/08/2010	Breaking out concrete, turning treatment beds	SE	9.38	9.43	y	3	site odour	0	2	4	0			69.4	no	no			no	no							
I Stephenson	16/08/2010	Breaking out concrete, turning treatment beds	S	9.30	9.35	y	1	site odour, vegetation	0	4	3	0	41.6	16.8	65.3	no	no			no	no							
I Stephenson	16/08/2010	Breaking out concrete, turning treatment beds	SW	9.24	9.29	n				4					64.6	no	no			no	no							
I Stephenson	16/08/2010	Breaking out concrete, turning treatment beds	W	9.17	9.22	y	2	farmers field, odour control	0	4	2	0	393	74.4	71.4	no	no			no	no							
I Stephenson	16/08/2010	Breaking out concrete, turning treatment beds	NW	10.12	10.17	N				4																		
D Holman	16/08/2010	Breaking out concrete, turning treatment beds	N	17.12	17.17	y	1	vegetation	0	2	1	0	25.6	17.9	55	no	no	clear	9.209		1	NW	28	sun	3	dry	
D Holman	16/08/2010	Breaking out concrete, turning treatment beds	NE	17.06	17.11	y	2	vegetation	0	2	1	0	221.5	53	61	no	no	clear											
D Holman	16/08/2010	Breaking out concrete, turning treatment beds	NE1	17.00	17.05								276.1	160.6				clear											
D Holman	16/08/2010	Breaking out concrete, turning treatment beds	E	16.54	16.59	y	2	odour control and vegetation	0	2	3	0	8.3	2.9	58	no	no	clear	9.639										
D Holman	16/08/2010	Breaking out concrete, turning treatment beds	SE	16.48	16.53	y	3	mushroom compost & odour control	0	2	5	0			64	no	no												
D Holman	16/08/2010	Breaking out concrete, turning treatment beds	S	16.42	16.47	y	3	vegetation	0	2	1	0	13.6	5.1	63	no	no												
D Holman	16/08/2010	Breaking out concrete, turning treatment beds	SW	16.36	16.41	y	2	vegetation	0	4	1	0			74	no	no												
D Holman	16/08/2010	Breaking out concrete, turning treatment beds	W	16.30	16.35	y	2	vegetation	0	4	1	0	39.9	10.3	78	no	no												
D Holman	16/08/2010	Breaking out concrete, turning treatment beds	NW	17.18	17.23	y	1	exhaust fumes	-1	2	1	0			79	no	no												
T Walker	17/08/2010	excavating, breaking concrete, turning beds	N	9.00	9.05	n	1	no odour	0			0	191	44	37.1	no	no	clear	9.209	no	no	4.1	SW	16	dry	8	dry	slight smell at entrance gate
T Walker	17/08/2010	excavating, breaking concrete, turning beds	NE	8.55	9.00	n	1	no odour	0			0	237	67	71.4	no	no	clear		no	no							
T Walker	17/08/2010	excavating, breaking concrete, turning beds	NE1	8.55	9.00								161	48				clear		no	no							
T Walker	17/08/2010	excavating, breaking concrete, turning beds	E	8.50	8.55	n	1	no odour	0			0	158	19	81.1	no	no	clear	9.649	no	no							
T Walker	17/08/2010	excavating, breaking concrete, turning beds	SE	8.45	8.50	n	1	no odour	0			0			75.4	no	no			no	no							
T Walker	17/08/2010	excavating, breaking concrete, turning beds	S	8.40	8.45	n	1	no odour	0			0	201	27	81.1	no	no			no	no							
T Walker	17/08/2010	excavating, breaking concrete, turning beds	SW	8.35	8.40	n	1	no odour	0			0			76.9	no	no			no	no							
T Walker	17/08/2010	excavating, breaking concrete, turning beds	W	8.30	8.35	y	3	tcp/odour control	-1	5	1	0	176	34	87.4	no	no			no	no							
T Walker	17/08/2010	excavating, breaking concrete, turning beds	NW	9.05	9.10	y	2	TCE/hydrocarbons	-1	4	1	0			48.9	no	no			no	no							
I Stephenson	17/08/2010	moving treatment beds	N	11.45	11.50	y	4	blocked drains	2	2	2	0	171	57.1	63.1	no	no	clear	9.209	no	no	3.8	SW	16.9	cloudy/rain	8	damp	no odour at church or organic machinery shop. Odour along eastern boundary, mild contamination and odour control
I Stephenson	17/08/2010	moving treatment beds	NE	11.50	11.55	y	4	slight solvents, vegetation	1	2	3	0	242	52.8	60.4	no	no	clear		no	no							
I Stephenson	17/08/2010	moving treatment beds	NE1	11.55	12.00								130	59				clear		no	no							
I Stephenson	17/08/2010	moving treatment beds	E	12.00	12.05	n				2			25.6	28.9	66.3	no	no	clear	9.649	no	no							
I Stephenson	17/08/2010	moving treatment beds	SE	12.05	12.10	y	3	vehicle fumes, slight contam	0	2	3	0			76.4	no	no			no	no							
I Stephenson	17/08/2010	moving treatment beds	S	12.10	12.15	n				2			140	15.1	84.5	no	no			no	no							
I Stephenson	17/08/2010	moving treatment beds	SW	11.30	11.35	n				4					71.2	no	no			no	no							
I Stephenson	17/08/2010	moving treatment beds	W	11.35	11.40	n				4			219	52	85.4	no	no			no	no							
I Stephenson	17/08/2010	moving treatment beds	NW	11.40	11.45	n				2					73.7	no	no			no	no							
D Holman	17/08/2010	moving treatment beds	N	17.32	17.37	y	2	vegetation	0	2	1	0	19.5	11.7	55	no	no	clear	9.209		3	WSW	26	sun	3	dry	
D Holman	17/08/2010	moving treatment beds	NE	17.26	17.31	y	4	odour control	1	2	5	0	111.4	28.3	57	no	no	clear											
D Holman	17/08/2010	moving treatment beds	NE1	17.20	17.25								286.3	30				clear											
D Holman	17/08/2010	moving treatment beds	E	17.14	17.19	y	3	exhaust fumes, organic compost, odour control	-1	2	5	0	14.1	8.2	68	no	no	clear	9.649										
D Holman	17/08/2010	moving treatment beds	SE	17.08	17.13	y	3	organic compost, odour control	0	2	5	0			65	no	no												
D Holman	17/08/2010	moving treatment beds	S	17.02	17.07	y	2	vegetation	0	2	1	0	65.8	1.4	64	no	no												
D Holman	17/08/2010	moving treatment beds	SW	16.56	17.01	y	1	vegetation	0	4	1	0			72	no	no												
D Holman	17/08/2010	moving treatment beds	W	16.50	16.55	y	2	vegetation	0	4	1	0	109.5	68.3	79	no	no												
D Holman	17/08/2010	moving treatment beds	NW	17.38	17.43	y	1	vegetation	1	2	1	0			79	no	no												
D Holman	18/08/2010	Turning beds, moving material	N	10.16	10.21	y	1	vegetation	0	2	1	0	178.5	30.7	58	no	no	clear	9.199		2	W	19	cloudy	7	dry	
D Holman	18/08/2010	Turning beds, moving material	NE	10.15	10.19	y	1	odour control	0	2	5	0	234.4	89.6	63	no	no	clear											
D Holman	18/08/2010	Turning beds, moving material	NE1	10.04	10.09								121.3	106.5				clear											
D Holman	18/08/2010	Turning beds, moving material	E	9.58	10.03	y	2	odour control, PCE/TCE	0	2	5	0	94.1	48.8	65	no	no	clear	9.639										
D Holman	18/08/2010	Turning beds, moving material	SE	9.52	9.57	y	3	organic compost	-1	2	5	0			67	no	no												
D Holman	18/08/2010	Turning beds, moving material	S	9.46	9.51	y	2	vegetation	0	2	1	0	60.6	16.4	63	no	no												
D Holman	18/08/2010	Turning beds, moving material	SW	9.38	9.43	y	2	vegetation	0	4	1	0			74	no	no												
D Holman	18/08/2010	Turning beds, moving material	W	9.30	9.35	y	3	vegetation	0	4	1	0	68.6	30.3	78	no	no												
D Holman	18/08/2010	Turning beds, moving material	NW	10.22	10.27	y	1	vegetation	0	2	1	0			79	no	no												
I Stephenson	18/08/2010	Turning beds, moving material	N	17.12	17.17	y	2	vegetation	0	2	1	0	61.4	10.8	55	no	no	clear	9.199		3	WSW	21	cloudy	6	dry	
I Stephenson	18/08/2010	Turning beds, moving material	NE	17.06	17.11	y	3	odour control	1	2	5	0	210.5	94.2	55	no	no	clear											
I Stephenson	18/08/2010	Turning beds, moving material	NE1	17.00	17.05								153.4	87.3				clear											
I Stephenson	18/08/2010	Turning beds, moving material	E	16.54	16.59	y	3	organic compost and odour control	0	2	5	0	40.2	14.4	64	no	no	clear	9.639										
I Stephenson	18/08/2010	Turning beds, moving material	SE	16.48	16.53	y	4	organic compost and odour control	-1	2	5	0			65	no	no												
I Stephenson	18/08/2010	Turning beds, moving material	S	16.42	16.47	y	3	vegetation	0	2	1	0	34.2	26.4	64	no	no												
I Stephenson	18/08/2010	Turning beds, moving material	SW	16.36	16.41	y	2	vegetation	0	4	1	0			75	no	no												
I Stephenson	18/08/2010	Turning beds, moving material	W	16.30	16.35	y	3	vegetation and exhaust fumes	0	4	1	0	26.9	12.9	80	no	no												
I Stephenson	18/08/2010	Turning beds, moving material	NW	17.18	17.23	y	1	vegetation	0	2	1	0			79	no	no												
B Ashley	19/08/2010	Turning beds, moving material	N	10.40	10.45	n				2			31.1	151.3	63	no	no		9.199		0.7	SW	21.8	sun	3	dry	no odour at parish church on church road, Hauxton
B Ashley	19/08/2010	Turning beds, moving material	NE	10.30	10.35	n				2			82.7	39	54	no	no	clear											
B Ashley	19/08/2010	Turning beds, moving material	NE1	10.25	10.30								17.8	68.1				clear											
B Ashley	19/08/2010	Turning beds, moving material	E	10.20	10.25	y	2	chemical	-2	2	5	0	103	113.3	66	no	no		9.649										
B Ashley	19/08/2010	Turning beds, moving material	SE	10.15	10.20	y	3	odour suppressant	2	2	5	0			71	no	no												
B Ashley	19/08/2010	Turning beds, moving material	S	10.10	10.15	y	2	grass	0	2	1	0	79.3	46.9	66	no	no												
B Ashley	19/08/2010	Turning beds, moving material	SW	10.00	10.05	n				4					74	no	no												
B Ashley	19/08/2010	Turning beds, moving material	W	9.50	9.55	y	2	odour suppressant	2	4	5	0	0.56	66.5	75	yes	no												Litter along the western boundary was collected and disposed of on site.
B Ashley	19/08/2010	Turning beds, moving material	NW	10.50	10.55	y	1	traffic fumes	0	2	1	0			79	no	no												
D Holman	19/08/2010	Turning treatment beds	N	17.22	17.27	y	1	odour control	1	2	5	0	17.6	5.8	58	no	no	clear	9.199		3	SSE	24	sunny	2	dry	
D Holman	19/08/2010	Turning treatment beds	NE	17.16	17.21	y	3	odour control	1	2	5	0	224.1	121.5	62	no	no	clear											
D Holman	19/08/2010	Turning treatment beds	NE1	17.10	17.15								87.6	73.5				clear											
D Holman	19/08/2010	Turning treatment beds	E	17.04	17.09	y	4	ice/pce, exhaust fumes, odour control	-1	2	5	0	97.4	44.9	58	no	no	clear	9.649										
D Holman	19/08/2010	Turning treatment beds	SE	16.58	17.03	y	3	organic compost	0	2	5	0			64	no	no												
D Holman	19/08/2010	Turning treatment beds	S	16.52	16.57	y	4	smoke vegetation	0	2	1	0	29.1	13.2	65	no	no												
D Holman	19/08/2010	Turning treatment beds	SW	16.46	16.51	y	3	smoke	-1	4	1	0			74	no	no												
D Holman	19/08/2010	Turning treatment beds	W	16.40	16.45	y	2	vegetation	0	4	1	0	31.9	5.1	79	no	no												
D Holman	19/08/2010	Turning treatment beds	NW	17.28	17.33	y	2	vegetation	0	2	1	0			78	no	no												
D Holman	20/08/2010	Breaking out concrete, turning treatment beds	N	10.12	10.17	y	1	vegetation	0	2	1	0	124	72.3	62	no	no	clear	9.189		4.5	SSE	21.5	cloudy	8	dry	
D Holman	20/08/2010	Breaking out concrete, turning treatment beds	NE	10.06	10.11	y	3	odour control	-1	2	5	0	42.4	33.8	65	no	no	clear											
D Holman	20/08/2010	Breaking out concrete, turning treatment beds	NE1	10.00	10.05								82.4	46.5				clear											
D Holman	20/08/2010	Breaking out concrete, turning treatment beds	E	9.54	9.59	y	2	compost organic and odour control	0	2	5	0	72.9	66.8	64	no	no	clear	9.649										
D Holman	20/08/2010	Breaking out concrete, turning treatment beds	SE	9.48	9.53	y	2	compost and organic	-1	2	5	0			61	no	no												
D Holman	20/08/2010	Breaking out concrete, turning treatment beds	S	9.42	9.47	y	3	vegetation	0	2	1	0	58	45.1	63	no	no												

D Holman	20/08/2018	Breaking out concrete, turning treatment beds	SW	9.36	9.41	y	2	vegetation	0	4	1	0			72	no	no													
D Holman	20/08/2018	Breaking out concrete, turning treatment beds	W	9.30	9.35	y	3	vegetation	0	4	1	0	25	19.2	78	no	no														
D Holman	20/08/2018	Breaking out concrete, turning treatment beds	NW	10.18	10.23	y	2	vegetation	0	2	1	0			79	no	no														
D Holman	20/08/2018	Breaking out concrete, turning treatment beds	N	16.42	16.47	y	2	odour control	1	2	5	0			62	no	no	clear	9.189												
D Holman	20/08/2018	Breaking out concrete, turning treatment beds	NE	16.36	16.41	y	2	odour control	1	2	5	0			66	no	no	clear													
D Holman	20/08/2018	Breaking out concrete, turning treatment beds	NE1	16.30	16.35													clear													
D Holman	20/08/2018	Breaking out concrete, turning treatment beds	E	16.24	16.29	y	3	compost organic	0	2	5	0			63	no	no	clear	9.649												
D Holman	20/08/2018	Breaking out concrete, turning treatment beds	SE	16.18	16.23	y	1	compost organic	-1	2	5	0			59	no	no														
D Holman	20/08/2018	Breaking out concrete, turning treatment beds	S	16.12	16.17	y	2	vegetation	0	2	1	0			65	no	no														
D Holman	20/08/2018	Breaking out concrete, turning treatment beds	SW	16.06	16.11	y	3	vegetation	-1	4	1	0			74	no	no														
D Holman	20/08/2018	Breaking out concrete, turning treatment beds	W	16.00	16.05	y	3	vegetation	0	4	1	0			81	no	no														
D Holman	20/08/2018	Breaking out concrete, turning treatment beds	NW	16.48	16.53	y	2	vegetation	0	2	1	0			80	no	no														
D Holman	23/08/2018	Breaking out concrete, turning treatment beds	N	10.12	10.17	n	1	vegetation	0	2	1	0	7.1	5.6	54	no	no	clear	9.209					5	WNW	17	cloudy	8	wet		
D Holman	23/08/2018	Breaking out concrete, turning treatment beds	NE	10.06	10.11	y	4	vegetation and exhaust fumes	0	2	3	0	153.7	50.6	55	no	no	clear													
D Holman	23/08/2018	Breaking out concrete, turning treatment beds	NE1	10.00	10.05								166.6	99.8				clear													
D Holman	23/08/2018	Breaking out concrete, turning treatment beds	E	9.54	9.59	y	2	compost organic and odour control	0	2	5	0	77.1	69.2	58	no	no	clear	9.649												
D Holman	23/08/2018	Breaking out concrete, turning treatment beds	SE	9.48	9.53	y	3	compost organic	0	2	5	0			61	no	no														
D Holman	23/08/2018	Breaking out concrete, turning treatment beds	S	9.42	9.47	n				2		0	11.7	5.4	64	no	no														
D Holman	23/08/2018	Breaking out concrete, turning treatment beds	SW	9.36	9.41	n				4		0			72	no	no														
D Holman	23/08/2018	Breaking out concrete, turning treatment beds	W	9.30	9.35	y	2	vegetation	0	4	1	0	13.4	8.7	79	no	no														
D Holman	23/08/2018	Breaking out concrete, turning treatment beds	NW	10.18	10.23	y	2	vegetation	0	2	1	0			81	no	no														
D Holman	23/08/2018	Breaking out concrete, turning treatment beds	N	17.12	17.17	y	2	vegetation	0	2	1	0	15.2	5.3	57	no	no	clear	9.209					6	w	21	rain	4	wet		
D Holman	23/08/2018	Breaking out concrete, turning treatment beds	NE	17.06	17.11	y	1	vegetation	0	2	1	0	262.8	218.5	59	no	no	clear													
D Holman	23/08/2018	Breaking out concrete, turning treatment beds	NE1	17.00	17.05								13.9	10.1				clear													
D Holman	23/08/2018	Breaking out concrete, turning treatment beds	E	16.54	16.59	y	3	odour control	1	2	5	0	192.1	103.2	67	no	no	clear	9.649												
D Holman	23/08/2018	Breaking out concrete, turning treatment beds	SE	16.48	16.53	y	2	compost organic	0	2	5	0			64	no	no														
D Holman	23/08/2018	Breaking out concrete, turning treatment beds	S	16.42	16.47	y	1	vegetation	0	2	1	0	12.1	3.1	63	no	no														
D Holman	23/08/2018	Breaking out concrete, turning treatment beds	SW	16.36	16.41	y	2	vegetation	0	4	1	0			76	no	no														
D Holman	23/08/2018	Breaking out concrete, turning treatment beds	W	16.30	16.35	y	2	vegetation	0	4	1	0	265.8	32.1	80	no	no														
D Holman	23/08/2018	Breaking out concrete, turning treatment beds	NW	17.18	17.23	y	3	vegetation	0	2	1	0			81	no	no														
D Holman	24/08/2018	Turning Treatment beds and Trial pitting	N	10.42	10.47	y	1	vegetation	0	2	1	0	62.4	43.2	57	no	no	clear	9.199					8	WSW	19	sunny/cloudy spells	4	wet		
D Holman	24/08/2018	Turning Treatment beds and Trial pitting	NE	10.36	10.41	y	3	odour control	1	2	5	0	144	67.2	57	no	no	clear													
D Holman	24/08/2018	Turning Treatment beds and Trial pitting	NE1	10.30	10.35								38.4	14.1				clear													
D Holman	24/08/2018	Turning Treatment beds and Trial pitting	E	10.24	10.29	y	2	compost organic and exhaust fumes	-1	2	5	0	51.7	32.9	70	no	no	clear	9.649												
D Holman	24/08/2018	Turning Treatment beds and Trial pitting	SE	10.18	10.23	y	2	compost organic	0	2	5	0			67	no	no														
D Holman	24/08/2018	Turning Treatment beds and Trial pitting	S	10.12	10.17	y	2	vegetation	0	2	1	0	8.1	1.4	62	no	no														
D Holman	24/08/2018	Turning Treatment beds and Trial pitting	SW	10.06	10.11	y	1	vegetation	0	4	1	0			72	no	no														
D Holman	24/08/2018	Turning Treatment beds and Trial pitting	W	10.00	10.05	y	3	vegetation	0	4	1	0	111.9	51.5	79	no	no														
D Holman	24/08/2018	Turning Treatment beds and Trial pitting	NW	10.48	10.53	y	2	vegetation and exhaust fumes	0	2	1	0			79	no	no														
D Holman	24/08/2018	Turning Treatment beds and Trial pitting	N	17.42	17.47	y	2	vegetation	0	2	1	0	53	44.8	66	no	no	clear	9.199					3	WNW	19.6	cloudy	8	damp		
D Holman	24/08/2018	Turning Treatment beds and Trial pitting	NE	17.36	17.41	y	4	odour control	0	2	5	0	213.3	89.4	61	no	no	clear													
D Holman	24/08/2018	Turning Treatment beds and Trial pitting	NE1	17.30	17.35								90.9	80.8				clear													
D Holman	24/08/2018	Turning Treatment beds and Trial pitting	E	17.24	17.29	y	3	odour control	0	2	5	0	242.1	159.7	69	no	no	clear	9.649												
D Holman	24/08/2018	Turning Treatment beds and Trial pitting	SE	17.18	17.23	y	4	compost organic and odour control	-1	2	5	0			65	no	no														
D Holman	24/08/2018	Turning Treatment beds and Trial pitting	S	17.12	17.17	y	1	vegetation	0	2	1	0	37	24.8	64	no	no														
D Holman	24/08/2018	Turning Treatment beds and Trial pitting	SW	17.06	17.11	y	2	vegetation	0	4	1	0			72	no	no														
D Holman	24/08/2018	Turning Treatment beds and Trial pitting	W	17.00	17.05	y	3	vegetation	0	4	1	0	101.6	50.4	79	no	no														
D Holman	24/08/2018	Turning Treatment beds and Trial pitting	NW	17.48	17.53	y	2	vegetation	0	2	1	0			81	no	no														
D Holman	25/08/2018	Excavating and turning treatment beds	N	10.12	10.17	y	2	vegetation	0	2	1	0	175.3	117.3	57	no	no	clear	9.209					3	WSW	21	Sun	4	dry		
D Holman	25/08/2018	Excavating and turning treatment beds	NE	10.06	10.11	y	2	vegetation	0	2	1	0	158.3	85.9	59	no	no	clear													
D Holman	25/08/2018	Excavating and turning treatment beds	NE1	10.00	10.05								174.6	60.2				clear													
D Holman	25/08/2018	Excavating and turning treatment beds	E	9.54	9.59	y	3	odour control	0	2	5	0	115.1	98	58	no	no	clear	9.649												
D Holman	25/08/2018	Excavating and turning treatment beds	SE	9.46	9.53	y	3	compost, organic, earthy and odour control	0	2	5	0			56	no	no														
D Holman	25/08/2018	Excavating and turning treatment beds	S	9.47	9.47	y	2	vegetation	0	2	1	0	238.6	63.6	63	no	no														
D Holman	25/08/2018	Excavating and turning treatment beds	SW	9.36	9.41	y	1	vegetation	0	4	1	0			71	no	no														
D Holman	25/08/2018	Excavating and turning treatment beds	W	9.30	9.35	y	1	vegetation	0	4	1	0	167.5	103.5	78	no	no														
D Holman	25/08/2018	Excavating and turning treatment beds	NW	10.18	10.23	y	1	vegetation	0	2	1	0			81	no	no														
D Holman	25/08/2018	Excavating and turning treatment beds	N	17.12	17.17	n				2		0	152	66.4	61	no	no	clear	9.209					0.5	S	14	Rain	8	wet		
D Holman	25/08/2018	Excavating and turning treatment beds	NE	17.06	17.11	y	1	vegetation	0	2	1	0	201.3	34.8	59	no	no	clear													
D Holman	25/08/2018	Excavating and turning treatment beds	NE1	17.00	17.05								256.6	218.6				clear													
D Holman	25/08/2018	Excavating and turning treatment beds	E	16.54	16.59	y	2	compost and odour control	0	2	5	0	286.4	236.8	64	no	no	clear	9.649												
D Holman	25/08/2018	Excavating and turning treatment beds	SE	16.48	16.53	y	1	compost organic	0	2	5	0			59	no	no														
D Holman	25/08/2018	Excavating and turning treatment beds	S	16.47	16.47	y	1	vegetation	0	2	1	0	224.7	204.2	67	no	no														
D Holman	25/08/2018	Excavating and turning treatment beds	SW	16.36	16.41	y	2	vegetation	1	4	1	0			76	no	no														
D Holman	25/08/2018	Excavating and turning treatment beds	W	16.30	16.35	y	2	vegetation	-1	4	1	0	232.6	141.7	81	no	no														
D Holman	25/08/2018	Excavating and turning treatment beds	NW	17.18	17.23	n	1	vegetation	0	2	1	0			80	no	no														
D Holman	26/08/2018	Breaking concrete only, No turning or excavation due to heavy rain	N	10.12	10.17	y	1	vegetation	0	2	1	0	15.4	13.6	61	no	no	clear	9.199					0.5	N	16	rain	8	wet	smell of burning present along S boundary 4 out of 9. 0.0ppm	
D Holman	26/08/2018	Breaking concrete only, No turning or excavation due to heavy rain	NE	10.06	10.11	n	3	smoke/organic vegetation	0	2	1	0	191.2	126.1	58	no	no	clear													
D Holman	26/08/2018	Breaking concrete only, No turning or excavation due to heavy rain	NE1	10.00	10.05								15	5.1				clear													
D Holman	26/08/2018	Breaking concrete only, No turning or excavation due to heavy rain	E	9.54	9.59	y	4	burning/smoke	-1	2	1	0	16.1	7.1	59	no	no	clear	9.649												
D Holman	26/08/2018	Breaking concrete only, No turning or excavation due to heavy rain	SE	9.48	9.53	y	3	vegetation	0	2	1	0			64	no	no														
D Holman	26/08/2018	Breaking concrete only, No turning or excavation due to heavy rain	S	9.42	9.47	y	2	burning/smoke	0	2	1	0	95.9	6.1	64	no	no														
D Holman	26/08/2018	Breaking concrete only, No turning or excavation due to heavy rain	SW	9.36	9.41	y	3	vegetation	-1	4	1	0			75	no	no														
D Holman	26/08/2018	Breaking concrete only, No turning or excavation due to heavy rain	W	9.30	9.35	y	2	vegetation	0	4	1	0	224.2	166.4	78	no	no														
D Holman	26/08/2018	Breaking concrete only, No turning or excavation due to heavy rain	NW	10.18	10.23	y	2	vegetation	0	2	1	0			79	no	no														
D Holman	26/08/2018	Breaking concrete only, No turning or excavation due to heavy rain	N	17.42	17.47	y	1	vegetation	0	2	1	0	61.7	22.8	59	no	no	clear	9.199					2	N	15	cloudy	8	wet		
D Holman	26/08/2018	Breaking concrete only, No turning or excavation due to heavy rain	NE	17.36	17.41	y	3	vegetation	0	2	1	0	53.1	25	61	no	no	clear													
D Holman	26/08/2018	Breaking concrete only, No turning or excavation due to heavy rain	NE1	17.30	17.35								42.5	39.1				clear													
D Holman	26/08/2018	Breaking concrete only, No turning or excavation due to heavy rain	E	17.24	17.29	y	1	smoke	-1	2	1	0	225.1	13.4	61	no	no	clear	9.649												
D Holman	26/08/2018	Breaking concrete only, No turning or excavation due to heavy rain	SE	17.18	17.23	y	2	vegetation	0	2	1	0			63	no	no														
D Holman	26/08/2018	Breaking concrete only, No turning or excavation due to heavy rain	S	17.12	17.17	y	1	vegetation	0	2	1	0	33.6	311	65	no	no														
D Holman	26/08/2018	Breaking concrete only, No turning or excavation due to heavy rain	SW	17.06	17.11	y	3	vegetation	0	4	1	0			76	no	no														
D Holman	26/08/2018	Breaking concrete only, No turning or excavation due to heavy rain	W	17.00	17.05	y	3	vegetation	0	4	1	0	56.2	7.6	79	no	no														
D Holman	26/08/2018	Breaking concrete only, No turning or excavation due to heavy rain	NW	17.48	17.53	y	3	vegetation and exhaust fumes	0	2	1	0			81	no	no														
T Walker	27/08/2018	Turning beds, breaking concrete	N	10.05	10.10	n	1	no odour				0	164	37	52.1	no	no	clear	9.199	no	no			0.5	n	15	cloudy	8	wet	slight odour between fire escape on church road and the south monitoring station.	
T Walker	27/08/2018	Turning beds, breaking concrete	NE	10.00	10.05	n	1	no odour				0	147	23	56.1	no	no	clear		no	no										
T Walker	27/08/2018	Turning beds, breaking concrete	NE1	10.00	10.05								281	57				clear		no	no										
T Walker	27/08/2018	Turning beds, breaking concrete	E	9.50	10.00	y	2	TCE/TCP	-1	3	5	0	143	48	52.5	no	no	clear	9.649	no	no										
T Walker	27/08/2018	Turning beds, breaking concrete	SE	9.45	9.50	n	1	no odour				0			49.6	no	no			no	no										
T Walker	27/08/2018	Turning beds, breaking concrete	S	9.40	9.45	y	2	pesticides	-1	4	5	0	189	33	47.4	no	no			no	no										
T Walker	27/08/2018	Turning beds, breaking concrete	SW	9.35	9.40	n	1	no odour				0			73.8	no	no			no	no										
T Walker	27/08/2018	Turning beds, breaking concrete	W	9.30	9.35	n	1	no odour				0	111	17	75.9	no	no			no	no										
T Walker	27/08/2018	Turning beds, breaking concrete	NW	10.10	10.15	n	1	no odour				0			63.2	no	no			no	no										
D Holman	27/08/2018	Turning beds, breaking concrete	N	17.12	17.17	y	2	vegetation	0	2	1	0	43.8	18.1	52	no	no	clear	9.199					2	NNE	17	cloudy	8	wet		
D Holman	27/08/2018	Turning beds, breaking concrete	NE	17.06	17.11	n				2		0	116.2	68.3	54	no	no	clear													
D Holman	27/08/2018	Turning beds, breaking concrete	NE1	17.00	17.05								98.9	75.8				clear													
D Holman	27/08/2018	Turning beds, breaking concrete	E	16.54	16.59	y	1	vegetation	0	2	1	0	35.2	27.1	55	no	no	clear	9.649												
D Holman	27/08/2018	Turning beds, breaking concrete	SE	16.48	16.53	y	2	compost organic	-1	2	5	0			53	no	no														
D Holman	27/08/2018	Turning beds, breaking concrete	S	16.42	16.47	y	2	vegetation	0	2	1	0	47.6	31.3	65	no	no														
D Holman	27/08/2018	Turning beds, breaking concrete	SW	16.36	16.41	y	3	odour control	1	4	5	0			74	no	no														
D Holman	27/08/2018	Turning beds, breaking concrete	W	16.30	16.35	y	1	vegetation	0	4	1	0	28.3	16.8	80	no	no														
D Holman	27/08/2018	Turning beds, breaking concrete	NW	17.18	17.23	y	2	vegetation and exhaust fumes	-1	2	1	0			81	no	no														

Appendix C

Long term Passive VOC Monitoring

gradko environmental
(A division of Gradko International Ltd.)
St. Martins House, 77 Wales Street Winchester, Hampshire SO23 0RH
tel.: 01962 860331 fax: 01962 841339 e-mail:diffusion@gradko.co.uk

UKAS TESTING 2187

LABORATORY ANALYSIS REPORT

REPORT NUMBER	**GCMS4409**
CUSTOMER	**Vertase FLI Ltd**
GRADKO LAB REFERENCE	**GMSE 1539-1548**
DATE SAMPLES RECEIVED	**10.08.10**
DESPATCH REF.NUMBER	**SOR004443**
BOOKING IN REF.	**D 4181**
JOB NUMBER	**907BRI/4041**

SEMI-QUANTITATIVE ANALYSIS FOR TOP 10 VOC'S ON TENAX DIFFUSION TUBES BY GC/MS

Analysis has been carried out in accordance with in-house method GLM 13

Tube Number	**GRA 05100**
Exposure Time(mins)	**41460**
Sample ID	**North East**

Top 10 VOC'S Compounds	**ng on tube**	**ppb in air***
Tetrachloroethylene	1751.62	21.72
Toluene	1322.90	16.41
p-Xylene	160.75	1.99
Benzene, 1,2-dichloro-3-methyl-	108.31	1.34
Benzene, 1,2,4-trichloro-3-methyl-	97.77	1.21
Bis(2-chloroethyl) ether	82.94	1.03
Benzene, 1,4-dichloro-	51.83	0.64
Benzene, 1-chloro-2-methyl-	49.21	0.61
Benzene, 1,2,4-trichloro-3-methyl-	43.69	0.54
o-Xylene	42.05	0.52

Tube Number	**GRA 06009**
Exposure Time(mins)	**41419.2**
Sample ID	**East**

Top 10 VOC'S Compounds	**ng on tube**	**ppb in air***
Tetrachloroethylene	2927.76	36.31
Toluene	2074.72	25.73

The Diffusion Tubes have been tested within the scope of Gradko International Ltd. Laboratory Quality Procedures calculations and assessments involving the exposure procedures and periods provided by the client are not within the scope of our UKAS accreditation. Those results obtained using exposure data shall be indicated by an asterisk. Any queries concerning the data in this report should be directed to the Laboratory Manager Gradko International Ltd.

REPORT OFFICIALLY CHECKED

Gradko International Ltd
This signature confirms the authenticity of these results
Signed.....
L. Gates, Laboratory Supervisor

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UKAS TESTING 2187

LABORATORY ANALYSIS REPORT

p-Xylene	164.89	2.04
Benzene, 1,2-dichloro-3-methyl-	119.95	1.49
Benzene, 1,2,4-trichloro-3-methyl-	114.01	1.41
Benzene, 1-chloro-2-methyl-	71.23	0.88
Benzene, 1,4-dichloro-	68.84	0.85
Benzene, 1,2,4-trimethyl-	58.24	0.72
o-Xylene	53.79	0.67
Benzene, 1,2,3-trichloro-	51.70	0.64

Tube Number **GRA 05909**
Exposure Time(mins) **41410.8**
Sample ID **South East**

Top 10 VOC'S

Compounds	**ng on tube**	**ppb in air***
Tetrachloroethylene	793.30	9.84
Toluene	563.25	6.98
Benzene, 1,4-dichloro-	70.92	0.88
p-Xylene	56.05	0.70
Benzene, 1,4-dichloro-2-methyl-	48.04	0.60
Benzene, 1,2,4-trichloro-3-methyl-	38.91	0.48
o-Xylene	24.44	0.30
Benzene	20.65	0.26
Benzene, 1,2,3-trichloro-4-methyl-	17.31	0.21
Benzene, 1-chloro-2-methyl-	15.64	0.19

Tube Number **GRA 04219**
Exposure Time(mins) **41482.8**
Sample ID **South**

Top 10 VOC'S

Compounds	**ng on tube**	**ppb in air***
Tetrachloroethylene	148.57	1.84
Toluene	143.03	1.77
Benzene	24.82	0.31
p-Xylene	14.91	0.18

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REPORT OFFICIALLY CHECKED

Gradko International Ltd
This signature confirms the authenticity of these results
Signed.....
L. Gates, Laboratory Supervisor

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LABORATORY ANALYSIS REPORT

Benzene, 1,2-dichloro-	14.43	0.18
Phenol	12.71	0.16
Benzene, 1,4-dichloro-2-methyl-	9.45	0.12
o-Xylene	8.87	0.11
Benzene, 1,2,4-trimethyl-	8.66	0.11
Butylated Hydroxytoluene	6.97	0.09

Tube Number **GRA 03629**
Exposure Time(mins) **41482.8**
Sample ID **South West**

Top 10 VOC'S

Compounds	**ng on tube**	**ppb in air***
Tetrachloroethylene	266.75	3.31
Toluene	223.57	2.77
Benzene, 1,3-dichloro-5-methyl-	55.80	0.69
p-Xylene	28.88	0.36
Benzene	25.17	0.31
Benzene, 1,2,4-trichloro-3-methyl-	18.31	0.23
Benzene, 1,2-dichloro-3-methyl-	16.69	0.21
o-Xylene	15.03	0.19
Benzene, 1,4-dichloro-	13.95	0.17
Benzene, 1,2-dichloro-3-methyl-	11.95	0.15

Tube Number **GRA 02673**
Exposure Time(mins) **401434.8**
Sample ID **West**

Top 10 VOC'S

Compounds	**ng on tube**	**ppb in air***
Toluene	292.11	3.62
Tetrachloroethylene	265.56	3.29
p-Xylene	34.76	0.43
Benzene, 1,3-dichloro-5-methyl-	23.65	0.29
Benzene	22.79	0.28
Phenol	16.75	0.21

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L. Gates, Laboratory Supervisor

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(A division of Gradko International Ltd.)
St. Martins House, 77 Wales Street Winchester, Hampshire SO23 0RH
tel.: 01962 860331 fax: 01962 841339 e-mail:diffusion@gradko.co.uk

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LABORATORY ANALYSIS REPORT

Benzene, 1,2,4-trichloro-3-methyl-	14.22	0.18
o-Xylene	13.31	0.17
Benzene, 1,4-dichloro-	11.23	0.14
Benzene, 1,3,5-trimethyl-	8.58	0.11

Tube Number **GRA 05705**
Exposure Time(mins) **41416.2**
Sample ID **North West**

Top 10 VOC'S

Compounds	**ng on tube**	**ppb in air***
Tetrachloroethylene	427.66	5.30
Toluene	355.03	4.40
p-Xylene	40.72	0.50
Benzene	29.77	0.37
Benzene, 1,3-dichloro-5-methyl-	21.67	0.27
Benzene, 1,2,4-trichloro-3-methyl-	19.18	0.24
Benzene, 1,4-dichloro-	16.40	0.20
Phenol	14.90	0.18
o-Xylene	12.40	0.15
Benzene, 1,2,4-trimethyl-	10.00	0.12

Tube Number **GRA 02308**
Exposure Time(mins) **41434.2**
Sample ID **WWTW**

Top 10 VOC'S

Compounds	**ng on tube**	**ppb in air***
Eicosane	47.58	0.59
Tetrachloroethylene	47.40	0.59
Toluene	46.55	0.58
Benzene	21.73	0.27
Phenol	10.83	0.13
p-Xylene	10.54	0.13
o-Xylene	10.16	0.13
Trichloroethylene	9.52	0.12

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LABORATORY ANALYSIS REPORT

Octadecane	14.85	0.18
Benzene, 1,2,4-trimethyl-	4.60	0.06

Tube Number	**GRA 06041**
Exposure Time(mins)	**41432.4**
Sample ID	**Church Road**

Top 10 VOC'S

Compounds	**ng on tube**	**ppb in air***
Naphthalene	290.61	3.60
Toluene	100.10	1.24
Tetrachloroethylene	80.23	0.99
Naphthalene, 1-methyl-	41.58	0.52
Benzene	25.03	0.31
Naphthalene, 2-methyl-	24.42	0.30
p-Xylene	17.41	0.22
Phenol	13.70	0.17
Naphthalene, 2,6-dimethyl-	13.07	0.16
Naphthalene, 1,6-dimethyl-	11.51	0.14

Tube Number	**GRA 02226**
Exposure Time(mins)	**41429.4**
Sample ID	**Queen's Close**

Top 10 VOC'S

Compounds	**ng on tube**	**ppb in air***
Toluene	63.76	0.79
Tetrachloroethylene	27.55	0.34
Benzene	21.09	0.26
p-Xylene	18.17	0.23
Phenol	14.33	0.18
Benzene, 1,2,4-trimethyl-	11.95	0.15
o-Xylene	11.71	0.15
Benzoyl bromide	11.08	0.14
Ethylbenzene	7.15	0.09
Undecane	5.38	0.07

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UKAS TESTING 2187

LABORATORY ANALYSIS REPORT

Comments: Results greater than 1000ng are outside our UKAS accredited calibration range. Semi-quantitative results are calculated using toluene standards.

Analysts Signature		**Date of Analysis**	**17.07.10**
Analysts Name	**Sandra Wilkin**	**Date of Report**	**19.07.10**

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2187

LABORATORY ANALYSIS REPORT

REPORT NO.	PE6MS0771
CUSTOMER	VERTASE FLI 19 Napier Court, Barlborough Sheffield S43 4PZ
GRADKO LAB REF	PE6E2168-2178
BOOKING REF. NUMBER	D 4694
DATE SAMPLES RECEIVED	08.09.10

SEMI- QUANTITATIVE ANALYSIS FOR TOP 10 COMPOUNDS ON TENAX DIFFUSION TUBES BY GCMS
Analysis has been carried out in accordance with in-house method GLM 13

Tube Number	GRA 02841
Sample Location	North East
Exposure Time (mins)	40588

Top10 Compounds	ng on tube	ppb in air*	µgm-3*
Tetrachloroethylene	555.36	6.84	44.88
Toluene	292.70	3.61	13.27
mp-Xylene	84.84	1.05	4.43
Benzene, 1,2,4-trichloro-3-methyl-	51.81	0.64	4.95
Trichloroethylene	34.80	0.43	2.23
Benzene, 1,2-dichloro-3-methyl-	24.20	0.30	1.91
Ethylbenzene	22.13	0.27	1.16
Benzene, 1,2,3-trichloro-4-methyl-	20.49	0.25	1.96
Benzene, 1,4-dichloro-	20.06	0.25	1.44
Benzene, 1-chloro-2-methyl-	17.62	0.22	1.09

Tube Number	GRA 05330
Sample Location	East
Exposure Time (mins)	40593

Top10 Compounds	ng on tube	ppb in air*	µgm-3*
Tetrachloroethylene	963.29	11.87	77.84
Toluene	270.15	3.33	12.25
Benzene, 1,2-dichloro-3-methyl-	66.89	0.82	5.27
Benzene, 1,2,4-trichloro-3-methyl-	65.66	0.81	6.28
Benzene, 1,4-dichloro-	61.03	0.75	4.39
mp-Xylene	35.21	0.43	1.84
Benzene, 1,2,3-trichloro-4-methyl-	25.19	0.31	2.41
Benzene, 1,3-dichloro-2-methyl-	19.20	0.24	1.51

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LABORATORY ANALYSIS REPORT

Benzene, 1-chloro-2-methyl-	18.91	0.23	1.17
Benzene, 1,3,5-trichloro-	17.57	0.22	1.56

Tube Number	**GRA 02818**
Sample Location	**South East**
Exposure Time (mins)	**40591**

Top10 Compounds	ng on tube	ppb in air*	µgm-3*
Tetrachloroethylene	346.78	4.27	28.02
Toluene	173.54	2.14	7.87
mp-Xylene	69.05	0.85	3.61
Ethylbenzene	54.48	0.67	2.85
Benzene, 1,4-dichloro-	53.85	0.66	3.87
Benzene, 1,4-dichloro-3-methyl-	47.17	0.58	3.72
o-Xylene	40.95	0.50	2.14
Benzene, 1,2,4-trichloro-3-methyl-	30.90	0.38	2.95
Hexane	21.19	0.26	0.90
Benzene, 1,3-dichloro-2-methyl-	14.10	0.17	1.11

Tube Number	**GRA 02692**
Sample Location	**South**
Exposure Time (mins)	**40589**

Top10 Compounds	ng on tube	ppb in air*	µgm-3*
Tetrachloroethylene	76.23	0.94	6.16
Toluene	34.33	0.42	1.56
mp-Xylene	13.46	0.17	0.70
o-Xylene	10.01	0.12	0.52
Benzene	7.33	0.09	0.28
Benzene, 1,2,4-trichloro-3-methyl-	6.19	0.08	0.59
Benzene, 1,2-dichloro-3-methyl-	5.37	0.07	0.42
Benzene, 1,4-dichloro-	4.83	0.06	0.35
Benzene, 1,2,3-trichloro-4-methyl-	4.55	0.06	0.44

9 Compounds Detected

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LABORATORY ANALYSIS REPORT

Tube Number	**GRA 03371**
Sample Location	**South West**
Exposure Time (mins)	**40585**

Top10 Compounds	ng on tube	ppb in air*	µgm-3*
Tetrachloroethylene	161.07	1.98	13.02
Toluene	112.56	1.39	5.10
mp-Xylene	15.30	0.19	0.80
Benzene, 1,2-dichloro-3-methyl-	10.90	0.13	0.86
Benzene, 1,2,4-trichloro-3-methyl-	10.78	0.13	1.03
o-Xylene	9.77	0.12	0.51
Benzene	8.00	0.10	0.31
Phenol	6.46	0.08	0.30
Octane	5.26	0.06	0.30
Trichloroethylene	5.21	0.06	0.33

Tube Number	**GRA 05194**
Sample Location	**West**
Exposure Time (mins)	**40585**

Top10 Compounds	ng on tube	ppb in air*	µgm-3*
Tetrachloroethylene	88.92	1.10	7.19
Toluene	53.32	0.66	2.42
mp-Xylene	12.84	0.16	0.67
o-Xylene	9.09	0.11	0.47
Benzene	6.15	0.08	0.24
Trichloroethylene	4.82	0.06	0.31
Benzene, 1,2,4-trichloro-3-methyl-	3.65	0.04	0.35
Benzene, 1,4-dichloro-	3.44	0.04	0.25

8 Compounds Detected

Tube Number	**GRA 04630**
Sample Location	**North West**
Exposure Time (mins)	**40600**

Top10 Compounds	ng on tube	ppb in air*	µgm-3*
Tetrachloroethylene	77.01	0.95	6.22
Toluene	48.99	0.60	2.22
mp-Xylene	15.01	0.18	0.78
o-Xylene	10.11	0.12	0.53
Benzene	8.36	0.10	0.32

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Phenol	5.46	0.07	0.25
Ethylbenzene	5.07	0.06	0.26
Octane	4.89	0.06	0.27
Trichloroethylene	4.53	0.06	0.29
Benzene, 1,2,4-trichloro-3-methyl-	3.87	0.05	0.37

Tube Number GRA 02329
Sample Location North
Exposure Time (mins) 40560

Top10 Compounds	ng on tube	ppb in air*	µgm-3*
Hexane	117.73	1.45	4.99
Toluene	113.75	1.40	5.16
Cyclopentane, methyl-	86.28	1.06	3.57
Tetrachloroethylene	85.99	1.06	6.95
Pentane, 3-methyl-	81.56	1.01	3.46
Naphthalene	50.73	0.63	3.20
Pentane, 2-methyl-	55.90	0.69	2.37
mp-Xylene	16.53	0.20	0.86
Heptane	18.41	0.23	0.91
Naphthalene, 1-methyl-	7.08	0.09	0.50

Tube Number GRA 06461
Sample Location WWTW
Exposure Time (mins) 40600

Top10 Compounds	ng on tube	ppb in air*	µgm-3*
Tetrachloroethylene	22.41	0.28	1.81
Ethylbenzene	17.49	0.22	0.91
Trichloroethylene	14.73	0.18	0.94
Toluene	14.15	0.17	0.64
Hexane	10.97	0.14	0.46
Cyclopentane, methyl-	6.53	0.08	0.27
mp-Xylene	4.87	0.06	0.25

7 Compounds Detected

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LABORATORY ANALYSIS REPORT

Tube Number	**GRA 04229**
Sample Location	**Church Rd**
Exposure Time (mins)	**40665**

Top10 Compounds	ng on tube	ppb in air*	µgm-3*
Naphthalene	516.92	6.36	32.54
Naphthalene, 1-methyl-	71.90	0.88	5.02
Tetrachloroethylene	37.79	0.46	3.05
Naphthalene, 2-methyl-	37.00	0.45	2.58
Toluene	23.68	0.29	1.07
mp-Xylene	8.73	0.11	0.45
Benzene	6.81	0.08	0.26
Trichloroethylene	2.59	0.03	0.17
Octane	5.54	0.07	0.31
Tetradecane	5.00	0.06	0.49

Tube Number	**GRA 06438**
Sample Location	**Queens Close**
Exposure Time (mins)	**40665**

Top10 Compounds	ng on tube	ppb in air*	µgm-3*
Toluene	21.32	0.26	0.96
mp-Xylene	14.41	0.18	0.75
Benzene	11.29	0.14	0.43
o-Xylene	8.52	0.10	0.44
Tetrachloroethylene	7.98	0.10	0.64
Ethylbenzene	5.33	0.07	0.28
Dodecane	4.10	0.05	0.34
Heptadecane	2.95	0.04	0.35

8 Compounds Detected

Semi-quantitative results for ng on tube are calculated using toluene standards.

Analyst's Name	**G. Aikman**	**Date of Analysis**	**14.09.10**
		Date of Report	**15.09.10**

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Appendix D

Directional Dust Monitoring

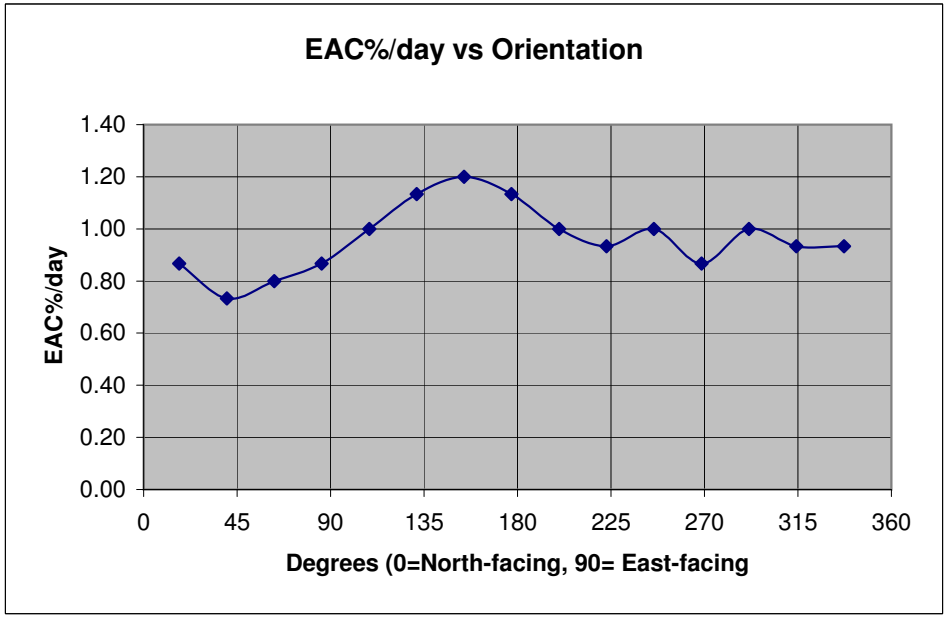
Chemtest

Sticky Pad Data

Gauge Number - North location 907BRI

Sticky Pad Data

Date On	22/07/2010	Date Off	06/08/2010	Days = 15
Clean =	90			
X Axis mm	Meter	Angle deg	EAC%/day	
20	76	337	0.93	
40	76	314	0.93	
60	75	291	1.00	
80	77	269	0.87	
100	75	246	1.00	
120	76	223	0.93	
140	75	200	1.00	
160	73	177	1.13	
180	72	154	1.20	
200	73	131	1.13	
220	75	109	1.00	
240	77	86	0.87	
260	78	63	0.80	
280	79	40	0.73	
300	77	17	0.87	



Note: Cells coloured yellow are inputs.
The rest are either constants or calculated values.
The calculation is based on taking readings at 40mm intervals along the sticky pad.

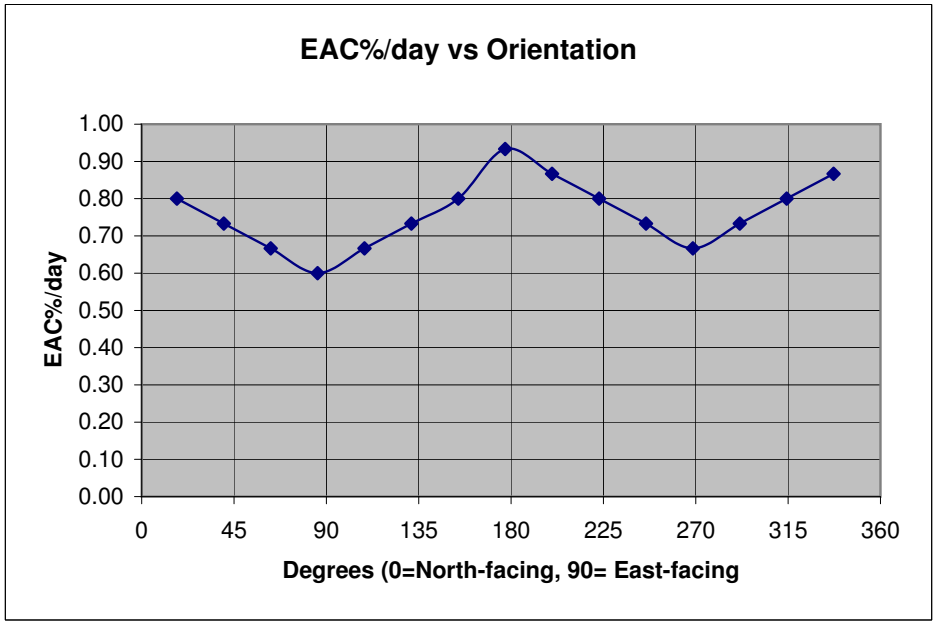
Chemtest **Sticky Pad Data**

Gauge Number - NE1 location 907BRI

Sticky Pad Data

Date On	22/07/2010	Date Off	06/08/2010	Days = 15
Clean =	90			

X Axis mm	Meter	Angle deg	EAC%/day
20	77	337	0.87
40	78	314	0.80
60	79	291	0.73
80	80	269	0.67
100	79	246	0.73
120	78	223	0.80
140	77	200	0.87
160	76	177	0.93
180	78	154	0.80
200	79	131	0.73
220	80	109	0.67
240	81	86	0.60
260	80	63	0.67
280	79	40	0.73
300	78	17	0.80



Note: Cells coloured yellow are inputs.
The rest are either constants or calculated values.
The calculation is based on taking readings at 40mm intervals along the sticky pad.

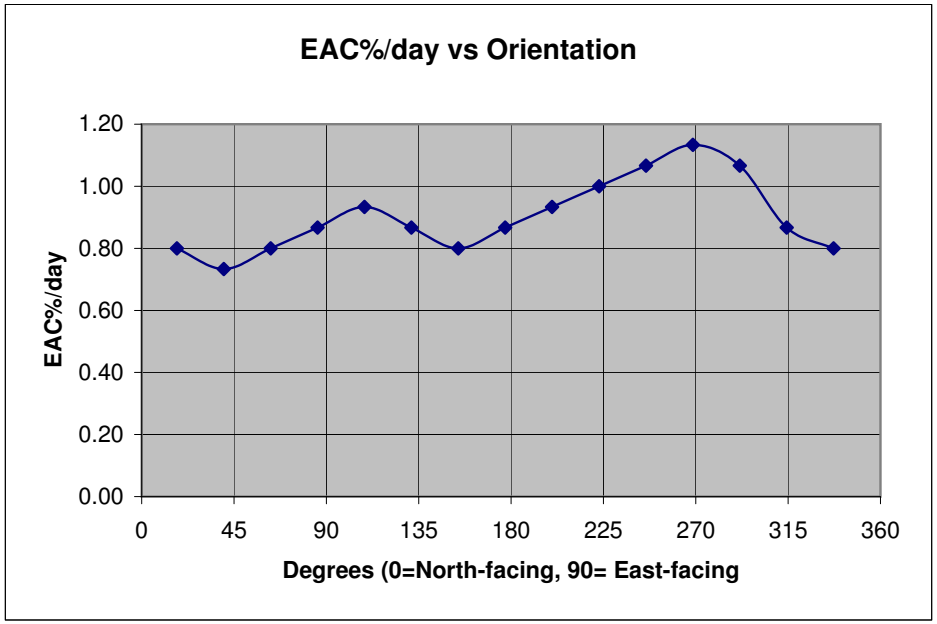
Chemtest

Sticky Pad Data

Gauge Number - NE2 location 907BRI

Sticky Pad Data

Date On	22/07/2010	Date Off	06/08/2010	Days = 15
Clean =	90			
X Axis mm	Meter	Angle deg	EAC%/day	
20	78	337	0.80	
40	77	314	0.87	
60	74	291	1.07	
80	73	269	1.13	
100	74	246	1.07	
120	75	223	1.00	
140	76	200	0.93	
160	77	177	0.87	
180	78	154	0.80	
200	77	131	0.87	
220	76	109	0.93	
240	77	86	0.87	
260	78	63	0.80	
280	79	40	0.73	
300	78	17	0.80	



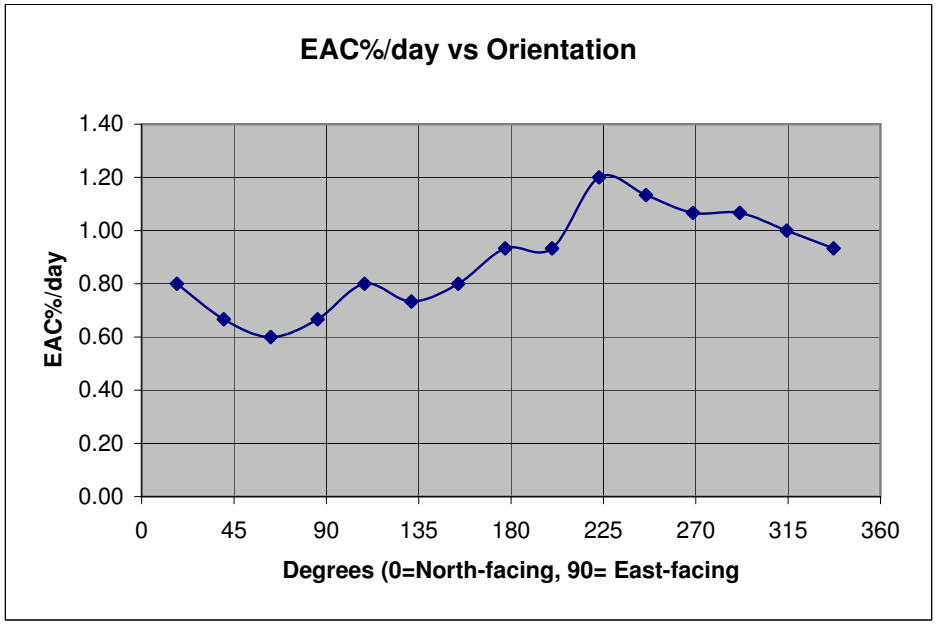
Note: Cells coloured yellow are inputs.
The rest are either constants or calculated values.
The calculation is based on taking readings at 40mm intervals along the sticky pad.

Chemtest **Sticky Pad Data**

Gauge Number - South location 907BRI

Sticky Pad Data

Date On	22/07/2010	Date Off	06/08/2010	Days = 15
Clean =	90			
X Axis mm	Meter	Angle deg	EAC%/day	
20	76	337	0.93	
40	75	314	1.00	
60	74	291	1.07	
80	74	269	1.07	
100	73	246	1.13	
120	72	223	1.20	
140	76	200	0.93	
160	76	177	0.93	
180	78	154	0.80	
200	79	131	0.73	
220	78	109	0.80	
240	80	86	0.67	
260	81	63	0.60	
280	80	40	0.67	
300	78	17	0.80	



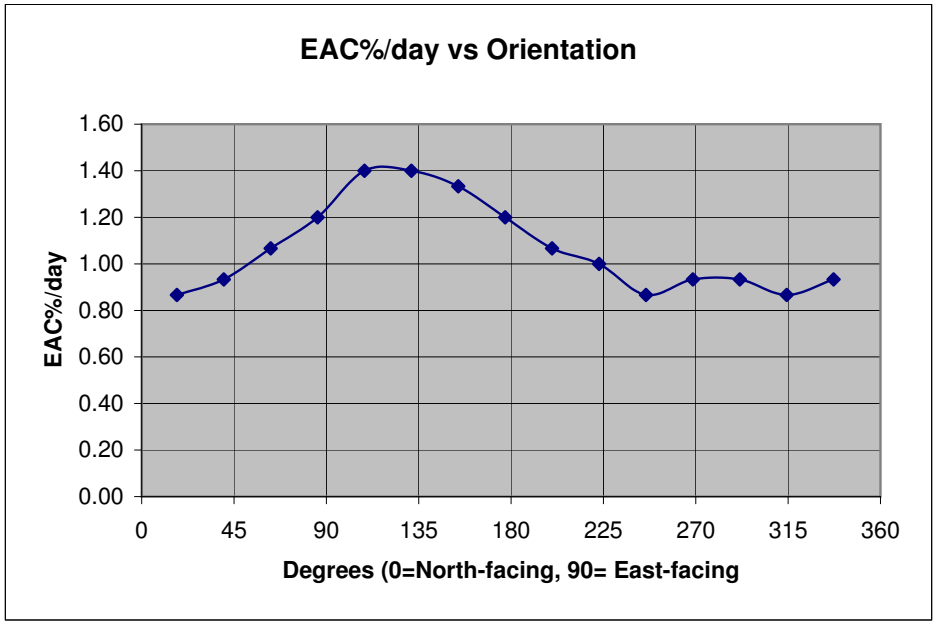
Note: Cells coloured yellow are inputs.
The rest are either constants or calculated values.
The calculation is based on taking readings at 40mm intervals along the sticky pad.

Chemtest **Sticky Pad Data**

Gauge Number - West location 907BRI

Sticky Pad Data

Date On	22/07/2010	Date Off	06/08/2010	Days = 15
Clean =	90			
X Axis mm	Meter	Angle deg	EAC%/day	
20	76	337	0.93	
40	77	314	0.87	
60	76	291	0.93	
80	76	269	0.93	
100	77	246	0.87	
120	75	223	1.00	
140	74	200	1.07	
160	72	177	1.20	
180	70	154	1.33	
200	69	131	1.40	
220	69	109	1.40	
240	72	86	1.20	
260	74	63	1.07	
280	76	40	0.93	
300	77	17	0.87	



Note: Cells coloured yellow are inputs.
The rest are either constants or calculated values.
The calculation is based on taking readings at 40mm intervals along the sticky pad.

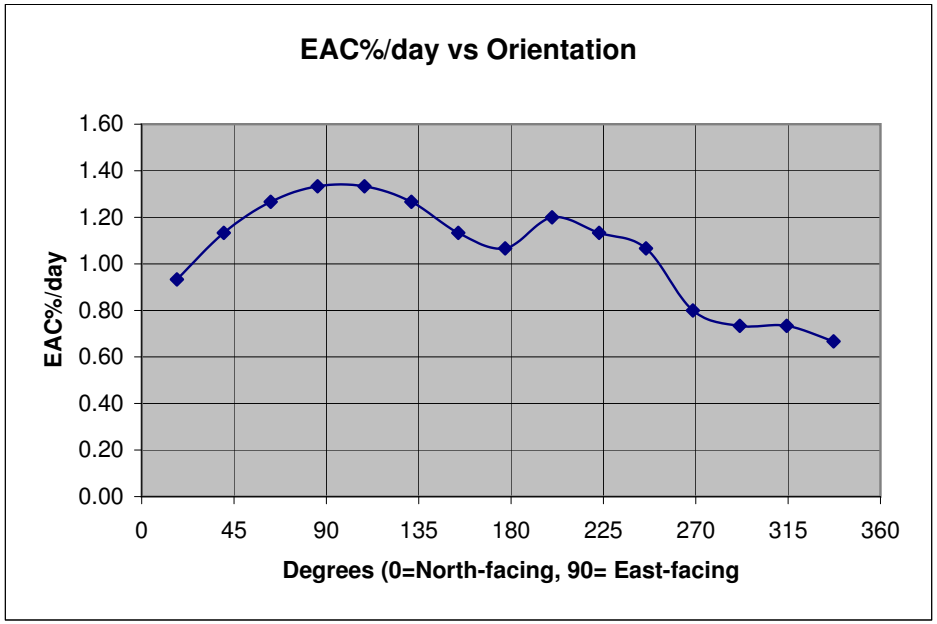
Chemtest **Sticky Pad Data**

Gauge Number - East location 907BRI

Sticky Pad Data

Date On	22/07/2010	Date Off	06/08/2010	Days = 15
Clean =	90			

X Axis mm	Meter	Angle deg	EAC%/day
20	80	337	0.67
40	79	314	0.73
60	79	291	0.73
80	78	269	0.80
100	74	246	1.07
120	73	223	1.13
140	72	200	1.20
160	74	177	1.07
180	73	154	1.13
200	71	131	1.27
220	70	109	1.33
240	70	86	1.33
260	71	63	1.27
280	73	40	1.13
300	76	17	0.93



Note: Cells coloured yellow are inputs.
The rest are either constants or calculated values.
The calculation is based on taking readings at 40mm intervals along the sticky pad.

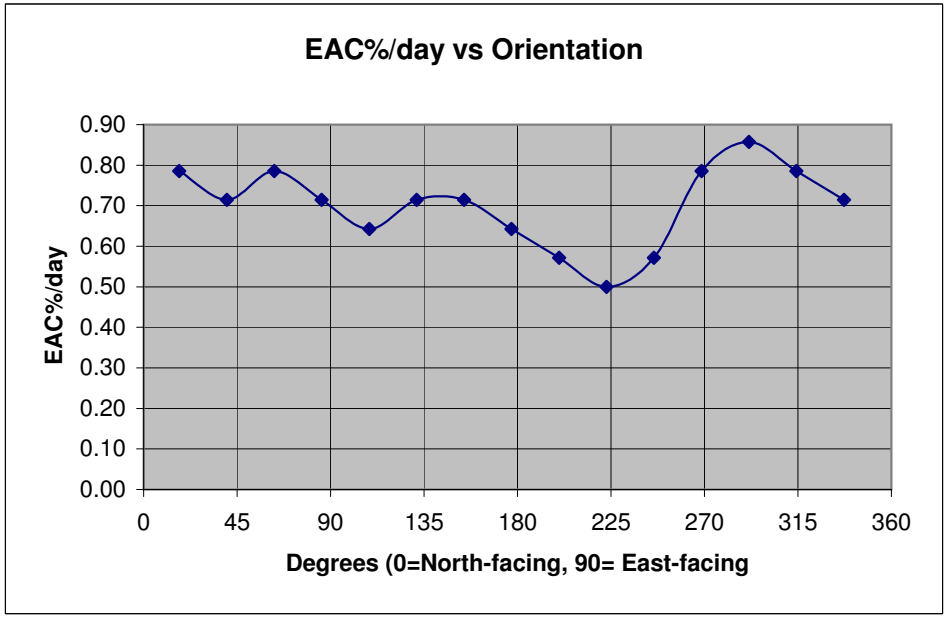
Chemtest

Sticky Pad Data

Gauge Number - North location 907BRI

Sticky Pad Data

Date On	06/08/2010	Date Off	20/08/2010	Days = 14
Clean =	90			
X Axis mm	Meter	Angle deg	EAC%/day	
20	80	337	0.71	
40	79	314	0.79	
60	78	291	0.86	
80	79	269	0.79	
100	82	246	0.57	
120	83	223	0.50	
140	82	200	0.57	
160	81	177	0.64	
180	80	154	0.71	
200	80	131	0.71	
220	81	109	0.64	
240	80	86	0.71	
260	79	63	0.79	
280	80	40	0.71	
300	79	17	0.79	



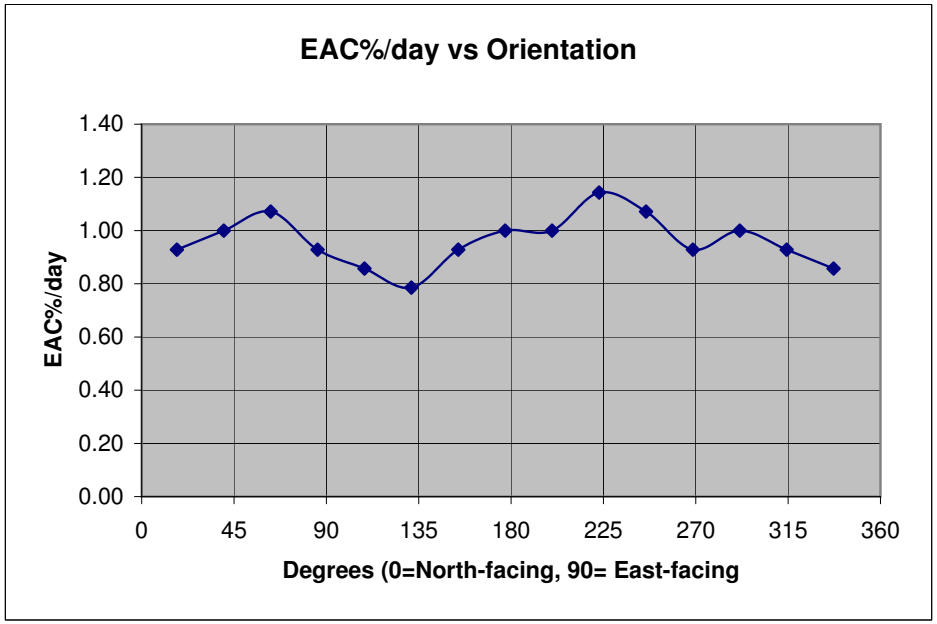
Note: Cells coloured yellow are inputs.
The rest are either constants or calculated values.
The calculation is based on taking readings at 40mm intervals along the sticky pad.

Chemtest **Sticky Pad Data**

Gauge Number - NE1 location 907BRI

Sticky Pad Data

Date On	06/08/2010	Date Off	20/08/2010	Days = 14
Clean =	90			
X Axis mm	Meter	Angle deg	EAC%/day	
20	78	337	0.86	
40	77	314	0.93	
60	76	291	1.00	
80	77	269	0.93	
100	75	246	1.07	
120	74	223	1.14	
140	76	200	1.00	
160	76	177	1.00	
180	77	154	0.93	
200	79	131	0.79	
220	78	109	0.86	
240	77	86	0.93	
260	75	63	1.07	
280	76	40	1.00	
300	77	17	0.93	



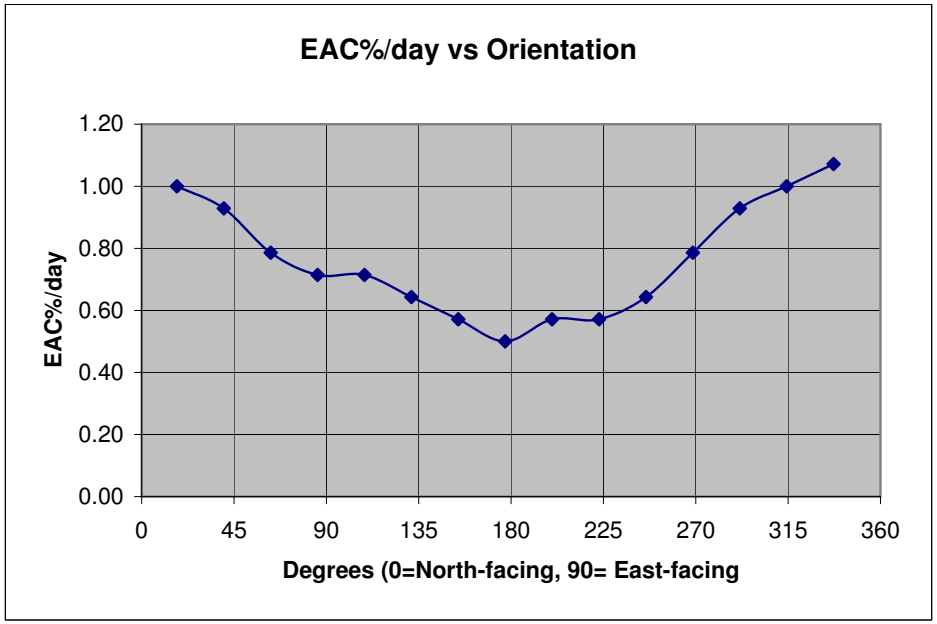
Note: Cells coloured yellow are inputs.
The rest are either constants or calculated values.
The calculation is based on taking readings at 40mm intervals along the sticky pad.

Chemtest **Sticky Pad Data**

Gauge Number - NE2 location 907BRI

Sticky Pad Data

Date On	06/08/2010	Date Off	20/08/2010	Days = 14
Clean =	90			
X Axis mm	Meter	Angle deg	EAC%/day	
20	75	337	1.07	
40	76	314	1.00	
60	77	291	0.93	
80	79	269	0.79	
100	81	246	0.64	
120	82	223	0.57	
140	82	200	0.57	
160	83	177	0.50	
180	82	154	0.57	
200	81	131	0.64	
220	80	109	0.71	
240	80	86	0.71	
260	79	63	0.79	
280	77	40	0.93	
300	76	17	1.00	



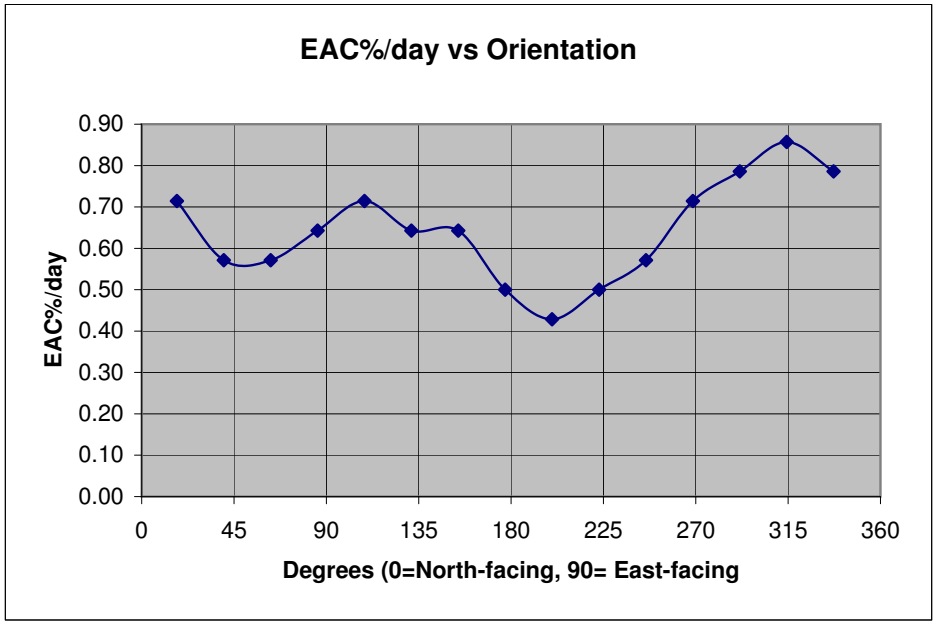
Note: Cells coloured yellow are inputs.
The rest are either constants or calculated values.
The calculation is based on taking readings at 40mm intervals along the sticky pad.

Chemtest **Sticky Pad Data**

Gauge Number - South location 907BRI

Sticky Pad Data

Date On	06/08/2010	Date Off	20/08/2010	Days = 14
Clean =	90			
X Axis mm	Meter	Angle deg	EAC%/day	
20	79	337	0.79	
40	78	314	0.86	
60	79	291	0.79	
80	80	269	0.71	
100	82	246	0.57	
120	83	223	0.50	
140	84	200	0.43	
160	83	177	0.50	
180	81	154	0.64	
200	81	131	0.64	
220	80	109	0.71	
240	81	86	0.64	
260	82	63	0.57	
280	82	40	0.57	
300	80	17	0.71	



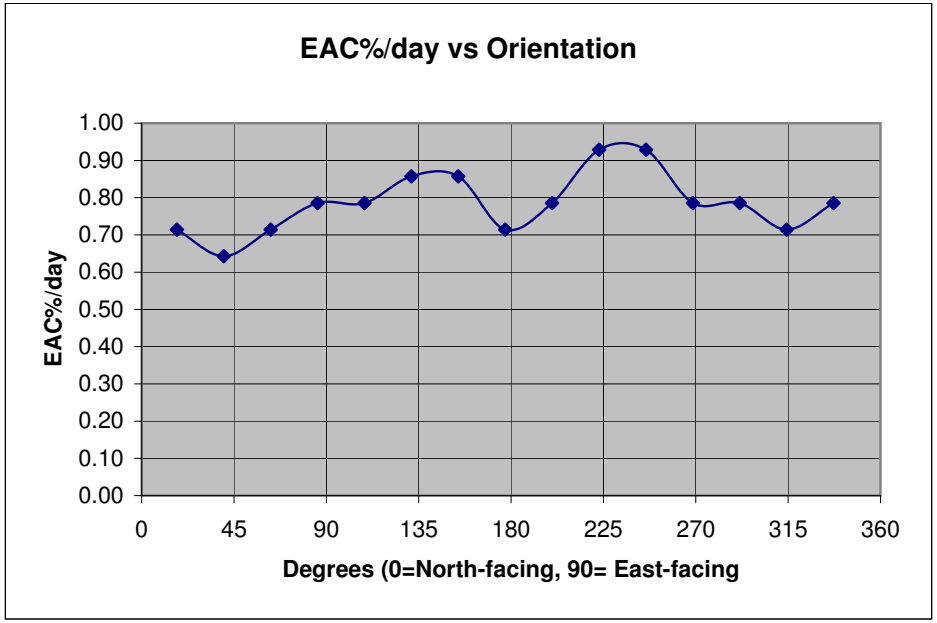
Note: Cells coloured yellow are inputs.
The rest are either constants or calculated values.
The calculation is based on taking readings at 40mm intervals along the sticky pad.

Chemtest **Sticky Pad Data**

Gauge Number - West location 907BRI

Sticky Pad Data

Date On	06/08/2010	Date Off	20/08/2010	Days = 14
Clean =	90			
X Axis mm	Meter	Angle deg	EAC%/day	
20	79	337	0.79	
40	80	314	0.71	
60	79	291	0.79	
80	79	269	0.79	
100	77	246	0.93	
120	77	223	0.93	
140	79	200	0.79	
160	80	177	0.71	
180	78	154	0.86	
200	78	131	0.86	
220	79	109	0.79	
240	79	86	0.79	
260	80	63	0.71	
280	81	40	0.64	
300	80	17	0.71	



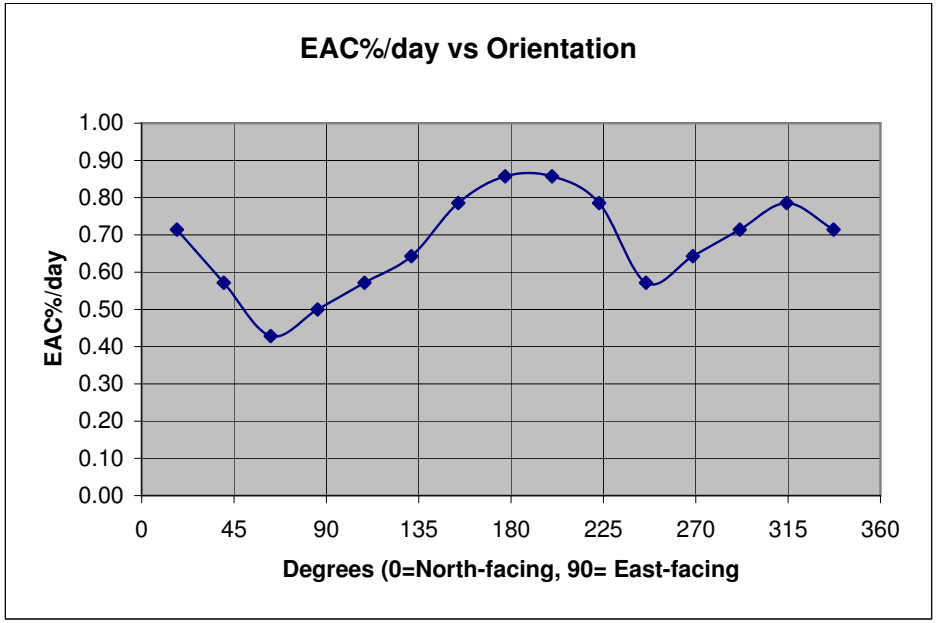
Note: Cells coloured yellow are inputs.
The rest are either constants or calculated values.
The calculation is based on taking readings at 40mm intervals along the sticky pad.

Chemtest **Sticky Pad Data**

Gauge Number - East location 907BRI

Sticky Pad Data

Date On	06/08/2010	Date Off	20/08/2010	Days = 14
Clean =	90			
X Axis mm	Meter	Angle deg	EAC%/day	
20	80	337	0.71	
40	79	314	0.79	
60	80	291	0.71	
80	81	269	0.64	
100	82	246	0.57	
120	79	223	0.79	
140	78	200	0.86	
160	78	177	0.86	
180	79	154	0.79	
200	81	131	0.64	
220	82	109	0.57	
240	83	86	0.50	
260	84	63	0.43	
280	82	40	0.57	
300	80	17	0.71	



Note: Cells coloured yellow are inputs.
The rest are either constants or calculated values.
The calculation is based on taking readings at 40mm intervals along the sticky pad.

Appendix E
Groundwater Level Data

Date	BH6/06	S3/4	BH4	P67**	BH19	BH10B/06	BH9	S1/8	BH11*	S2/6	BH1/06	BH3/06	BH8/06	BHB1	BHB2	BHB3	W1 (n)	W2	W3 (s)	Riddy 1	Riddy 2	Riddy 3	Riddy 4
02/08/2010	9.82	10.57	10.284	Blocked	Lost	10.351	10.419	9.824	9.653	10.883	Lost	covered	9.162	9.85	Lost	Lost	10.22	10.23	10.27	9.219	9.284	9.540	9.659
03/08/2010	9.82	10.58	10.314	Blocked	Lost	10.351	10.439	9.804	9.693	10.883	Lost	covered	9.172	9.81	Lost	Lost	10.19	10.2	10.23	9.209	9.304	9.540	9.659
04/08/2010	9.86	10.57	10.314	Blocked	Lost	10.371	10.449	9.784	9.713	10.863	Lost	covered	9.182	9.77	Lost	Lost	10.16	10.16	10.21	9.209	9.294	9.550	9.659
05/08/2010	9.85	10.57	10.324	Blocked	Lost	10.381	10.449	9.764	9.733	10.853	Lost	covered	9.182	9.75	Lost	Lost	10.17	10.13	10.18	9.209	9.304	9.550	9.649
06/08/2010	9.85	10.58	10.324	Blocked	Lost	10.391	10.469	9.774	9.743	10.853	Lost	covered	9.182	9.76	Lost	Lost	10.17	10.11	10.17	9.219	9.294	9.550	9.659
09/08/2010	9.88	10.58	10.354	Blocked	Lost	10.401	10.479	9.774	9.783	10.833	Lost	covered	9.232	9.74	Lost	Lost	10.16	10.11	10.12	9.219	9.304	9.540	9.659
10/08/2010	9.89	10.58	10.364	Blocked	Lost	10.401	10.479	9.784	9.773	10.833	Lost	covered	9.272	9.7	Lost	Lost	10.14	10.1	DRY	9.209	9.304	9.540	9.649
11/08/2010	9.83	10.58	10.254	Blocked	Lost	10.421	10.489	9.764	9.793	10.813	Lost	covered	9.292	9.69	Lost	Lost	10.15	10.09	DRY	9.209	9.304	9.540	9.639
12/08/2010	9.79	10.58	10.244	Blocked	Lost	10.431	10.459	9.754	9.803	10.803	Lost	covered	9.312	9.68	Lost	Lost	10.15	10.09	DRY	9.219	9.314	9.550	9.639
13/08/2010	9.78	10.58	10.244	Blocked	Lost	10.431	10.479	9.754	9.793	10.803	Lost	covered	9.332	9.68	Lost	Lost	10.15	10.09	DRY	9.219	9.314	9.550	9.639
16/08/2010	9.76	10.59	10.254	Blocked	Lost	10.431	10.459	9.764	9.763	10.793	Lost	covered	9.382	9.66	Lost	Lost	10.14	10.1	DRY	9.209	9.294	9.550	9.639
17/08/2010	9.78	10.6	10.264	Blocked	Lost	10.441	10.449	9.764	9.723	10.783	Lost	covered	9.402	9.67	Lost	Lost	10.15	10.1	DRY	9.209	9.294	9.540	9.649
18/08/2010	9.83	10.58	10.274	Blocked	Lost	10.431	10.449	9.764	9.723	10.803	Lost	covered	9.422	9.67	Lost	Lost	10.14	10.11	DRY	9.199	9.294	9.540	9.639
19/08/2010	9.84	10.58	10.264	Blocked	Lost	10.431	10.449	9.764	9.733	10.793	Lost	covered	9.432	9.68	Lost	Lost	10.15	10.11	DRY	9.199	9.294	9.550	9.649
20/08/2010	9.85	10.58	10.304	Blocked	Lost	10.451	10.449	9.784	9.793	10.813	Lost	covered	covered	9.72	Lost	Lost	10.16	10.11	10.12	9.189	9.294	9.550	9.649
23/08/2010	9.92	10.63	10.534	Blocked	Lost	10.461	10.569	9.814	9.933	10.853	Lost	covered	covered	9.81	Lost	Lost	10.18	10.13	10.16	9.209	9.304	9.550	9.649
24/08/2010	10.09	10.61	10.514	Blocked	Lost	10.481	10.529	9.764	9.913	10.783	Lost	covered	covered	9.81	Lost	Lost	10.18	10.14	10.17	9.199	9.294	9.550	9.649
25/08/2010	10.12	10.59	10.524	Blocked	Lost	10.471	10.499	9.754	9.903	10.773	Lost	covered	covered	9.82	Lost	Lost	10.18	10.13	10.16	9.209	9.304	9.550	9.649
26/08/2010	10.1	10.58	10.784	Blocked	Lost	10.471	10.489	9.824	9.863	10.783	Lost	covered	covered	10.09	Lost	Lost	10.47	10.36	10.41	9.199	9.294	9.550	9.649
27/08/2010	10.09	10.58	10.794	Blocked	Lost	10.461	10.489	9.824	9.853	10.643	Lost	covered	covered	10.08	Lost	Lost	10.43	10.35	10.41	9.199	9.304	9.550	9.649

Appendix F
Surface Water Analysis Reports

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

Certificate of Analysis

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

Report Number: 211291-2

Date of Report: 10-Sep-2010

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: 02-Sep-2010
Date Analysis Started: 03-Sep-2010
Date Analysis Completed: 10-Sep-2010

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 :
Amelia McVennon
Project Manager

Issued by :
Amelia McVennon
Project Manager

SAL Reference: 211291
Customer Reference: 907BRI

Water Analysed as Water
Vertase Hauxton Suite

				SAL Reference	**211291 001**	**211291 002**	**211291 003**	**211291 004**	**211291 005**
				Customer Sample Reference	**S2/6**	**BH10B/06**	**BH4**	**BH9**	**S3/4**
				Date Sampled	**27-AUG-2010**	**27-AUG-2010**	**27-AUG-2010**	**27-AUG-2010**	**27-AUG-2010**
Determinand	**Method**	**Test Sample**	**LOD**	**Units**					
Electrical Conductivity	T7	AR	10	µS/cm	**2000**	**2000**	**1400**	**2300**	**4500**
pH	T7	AR			**11.6**	**9.1**	**7.6**	**7.3**	**6.9**

SAL Reference: 211291
Customer Reference: 907BRI

Water Analysed as Water
Vertase Hauxton Suite

				SAL Reference	**211291 006**	**211291 007**	**211291 008**	**211291 009**	**211291 010**
				Customer Sample Reference	**BH11**	**BH6/06**	**S1/8**	**4/06**	**S3/6**
				Date Sampled	**27-AUG-2010**	**27-AUG-2010**	**26-AUG-2010**	**26-AUG-2010**	**26-AUG-2010**
Determinand	**Method**	**Test Sample**	**LOD**	**Units**					
Electrical Conductivity	T7	AR	10	µS/cm	**480**	**920**	**2200**	**1300**	**2700**
pH	T7	AR			**7.6**	**7.2**	**7.2**	**7.3**	**7.0**

SAL Reference: 211291
Customer Reference: 907BRI

Water Analysed as Water
Vertase Hauxton Suite

				SAL Reference	**211291 011**	**211291 012**	**211291 013**	**211291 014**	**211291 015**
				Customer Sample Reference	**CAM UPSTREAM**	**CAM DOWNSTREAM**	**RIDDY UPSTREAM**	**RIDDY DOWNSTREAM**	**BH8/06**
				Date Sampled	**26-AUG-2010**	**26-AUG-2010**	**26-AUG-2010**	**26-AUG-2010**	**31-AUG-2010**
Determinand	**Method**	**Test Sample**	**LOD**	**Units**					
Electrical Conductivity	T7	AR	10	µS/cm	**820**	**780**	**750**	**750**	**830**
pH	T7	AR			**7.7**	**7.9**	**7.7**	**7.8**	**7.7**

SAL Reference: 211291
Customer Reference: 907BRI

Water Analysed as Water
Vertase Hauxton OP/ON Suite

				SAL Reference	**211291 001**	**211291 002**	**211291 003**	**211291 004**	**211291 005**
				Customer Sample Reference	**S2/6**	**BH10B/06**	**BH4**	**BH9**	**S3/4**
				Date Sampled	**27-AUG-2010**	**27-AUG-2010**	**27-AUG-2010**	**27-AUG-2010**	**27-AUG-2010**
Determinand	**Method**	**Test Sample**	**LOD**	**Units**					
Dimefox	T16	AR	0.1	µg/l	<0.1	<0.1	<0.1	<0.1	(9) <1.0
Ethofumesate	T16	AR	0.1	µg/l	(27) **180**	**210**	**140**	**6.0**	**3.0**
Hempa	T16	AR	0.1	µg/l	<0.1	<0.1	<0.1	**0.6**	**460**
Schradan	T16	AR	0.1	µg/l	<0.1	<0.1	<0.1	<0.1	**150**
Simazine	T16	AR	0.01	µg/l	<0.01	**37**	**2.0**	<0.01	(9) <0.10

SAL Reference: 211291
Customer Reference: 907BRI

Water Analysed as Water
Vertase Hauxton OP/ON Suite

					SAL Reference	**211291 006**	**211291 007**	**211291 008**	**211291 009**	**211291 010**
					Customer Sample Reference	**BH11**	**BH6/06**	**S1/8**	**4/06**	**S3/6**
					Date Sampled	**27-AUG-2010**	**27-AUG-2010**	**26-AUG-2010**	**26-AUG-2010**	**26-AUG-2010**
Determinand	**Method**	**Test Sample**	**LOD**	**Units**						
Dimefox	T16	AR	0.1	µg/l		<0.1	<0.1	<0.1	(9) <1.0	<0.1
Ethofumesate	T16	AR	0.1	µg/l		**4.8**	**1.0**	**370**	**610**	**270**
Hempa	T16	AR	0.1	µg/l		**0.2**	<0.1	<0.1	(9) <1.0	<0.1
Schradan	T16	AR	0.1	µg/l		**0.2**	<0.1	**44**	**8.0**	**380**
Simazine	T16	AR	0.01	µg/l		**0.14**	<0.01	**3.7**	(9) <0.10	**17**

SAL Reference: 211291
Customer Reference: 907BRI

Water Analysed as Water
Vertase Hauxton OP/ON Suite

					SAL Reference	**211291 011**	**211291 012**	**211291 013**	**211291 014**	**211291 015**
					Customer Sample Reference	**CAM UPSTREAM**	**CAM DOWNSTREAM**	**RIDDY UPSTREAM**	**RIDDY DOWNSTREAM**	**BH8/06**
					Date Sampled	**26-AUG-2010**	**26-AUG-2010**	**26-AUG-2010**	**26-AUG-2010**	**31-AUG-2010**
Determinand	**Method**	**Test Sample**	**LOD**	**Units**						
Dimefox	T16	AR	0.1	µg/l		<0.1	<0.1	<0.1	<0.1	<0.1
Ethofumesate	T16	AR	0.1	µg/l		<0.1	**0.2**	<0.1	**0.8**	**48**
Hempa	T16	AR	0.1	µg/l		<0.1	<0.1	<0.1	<0.1	**4.1**
Schradan	T16	AR	0.1	µg/l		<0.1	<0.1	<0.1	<0.1	**4.3**
Simazine	T16	AR	0.01	µg/l		<0.01	<0.01	<0.01	**0.14**	**1.6**

SAL Reference: 211291
Customer Reference: 907BRI

Water Analysed as Water
Vertase Hauxton Phenoxy Acid Herbs Suite

					SAL Reference	**211291 001**	**211291 002**	**211291 003**	**211291 004**	**211291 005**
					Customer Sample Reference	**S2/6**	**BH10B/06**	**BH4**	**BH9**	**S3/4**
					Date Sampled	**27-AUG-2010**	**27-AUG-2010**	**27-AUG-2010**	**27-AUG-2010**	**27-AUG-2010**
Determinand	**Method**	**Test Sample**	**LOD**	**Units**						
Dicamba	T16	AR	0.1	µg/l		**160**	**18**	**4.8**	**0.1**	**0.4**
Dichlorprop	T16	AR	0.1	µg/l		**250**	**27**	**5.7**	<0.1	**3.8**
Phenoxy Acetic acid herbicide: MCPA	T16	AR	0.1	µg/l		**3500**	**2200**	**72**	**2.3**	**4.7**
Mecoprop	T16	AR	0.1	µg/l		**1300**	**1000**	**93**	**0.5**	**46**

SAL Reference: 211291
Customer Reference: 907BRI

Water Analysed as Water
Vertase Hauxton Phenoxy Acid Herbs Suite

					SAL Reference	**211291 006**	**211291 007**	**211291 008**	**211291 009**	**211291 010**
					Customer Sample Reference	**BH11**	**BH6/06**	**S1/8**	**4/06**	**S3/6**
					Date Sampled	**27-AUG-2010**	**27-AUG-2010**	**26-AUG-2010**	**26-AUG-2010**	**26-AUG-2010**
Determinand	**Method**	**Test Sample**	**LOD**	**Units**						
Dicamba	T16	AR	0.1	µg/l		<0.1	<0.1	**11**	**0.2**	**27**
Dichlorprop	T16	AR	0.1	µg/l		<0.1	<0.1	**31**	**11**	**510**
Phenoxy Acetic acid herbicide: MCPA	T16	AR	0.1	µg/l		<0.1	<0.1	**200**	**5.3**	**1600**
Mecoprop	T16	AR	0.1	µg/l		**0.8**	<0.1	**110**	**30**	**980**

SAL Reference: 211291
Customer Reference: 907BRI

Water Analysed as Water
Vertase Hauxton Phenoxy Acid Herbs Suite

	SAL Reference	211291 011	211291 012	211291 013	211291 014	211291 015
	Customer Sample Reference	CAM UPSTREAM	CAM DOWNSTREAM	RIDDY UPSTREAM	RIDDY DOWNSTREAM	BH8/06
	Date Sampled	26-AUG-2010	26-AUG-2010	26-AUG-2010	26-AUG-2010	31-AUG-2010

Determinand	Method	Test Sample	LOD	Units					
Dicamba	T16	AR	0.1	µg/l	<0.1	<0.1	<0.1	<0.1	**0.9**
Dichlorprop	T16	AR	0.1	µg/l	<0.1	<0.1	<0.1	<0.1	**0.6**
Phenoxy Acetic acid herbicide: MCPA	T16	AR	0.1	µg/l	<0.1	<0.1	<0.1	<0.1	**43**
Mecoprop	T16	AR	0.1	µg/l	<0.1	**0.7**	<0.1	**1.6**	**6.3**

SAL Reference: 211291
Customer Reference: 907BRI

Water Analysed as Water
Vertase Hauxton SVOC Suite

	SAL Reference	211291 001	211291 002	211291 003	211291 004	211291 005
	Customer Sample Reference	S2/6	BH10B/06	BH4	BH9	S3/4
	Date Sampled	27-AUG-2010	27-AUG-2010	27-AUG-2010	27-AUG-2010	27-AUG-2010

Determinand	Method	Test Sample	LOD	Units					
2,4,6-Trichlorophenol	T16	AR	10	µg/l	**280**	**190**	<10	<10	<10
2-Methyl-4,6-dinitrophenol	T16	AR	10	µg/l	**3200**	**5500**	**690**	<10	<10
4-Chloro-2-methylphenol	T16	AR	10	µg/l	**1500**	**150**	**450**	<10	<10
Bis (2-chloroethyl) ether	T16	AR	10	µg/l	<10	**120**	**82**	**62**	**1300**
Phenol	T16	AR	10	µg/l	(147) **2900**	(162) <50	(162) <50	(162) <50	(162) <50

SAL Reference: 211291
Customer Reference: 907BRI

Water Analysed as Water
Vertase Hauxton SVOC Suite

	SAL Reference	211291 006	211291 007	211291 008	211291 009	211291 010
	Customer Sample Reference	BH11	BH6/06	S1/8	4/06	S3/6
	Date Sampled	27-AUG-2010	27-AUG-2010	26-AUG-2010	26-AUG-2010	26-AUG-2010

Determinand	Method	Test Sample	LOD	Units					
2,4,6-Trichlorophenol	T16	AR	10	µg/l	<10	<10	**2900**	**11**	**2100**
2-Methyl-4,6-dinitrophenol	T16	AR	10	µg/l	<10	<10	<10	<10	<10
4-Chloro-2-methylphenol	T16	AR	10	µg/l	<10	<10	**3000**	**33**	**1900**
Bis (2-chloroethyl) ether	T16	AR	10	µg/l	<10	<10	**2300**	**1400**	**10000**
Phenol	T16	AR	10	µg/l	(162) <50	(162) <50	(162) <50	(162) <50	(162) <50

SAL Reference: 211291
Customer Reference: 907BRI

Water Analysed as Water
Vertase Hauxton SVOC Suite

	SAL Reference	211291 011	211291 012	211291 013	211291 014	211291 015
	Customer Sample Reference	CAM UPSTREAM	CAM DOWNSTREAM	RIDDY UPSTREAM	RIDDY DOWNSTREAM	BH8/06
	Date Sampled	26-AUG-2010	26-AUG-2010	26-AUG-2010	26-AUG-2010	31-AUG-2010

Determinand	Method	Test Sample	LOD	Units					
2,4,6-Trichlorophenol	T16	AR	10	µg/l	<10	<10	<10	<10	<10
2-Methyl-4,6-dinitrophenol	T16	AR	10	µg/l	<10	<10	<10	<10	<10
4-Chloro-2-methylphenol	T16	AR	10	µg/l	<10	<10	<10	<10	<10
Bis (2-chloroethyl) ether	T16	AR	10	µg/l	<10	<10	<10	<10	<10
Phenol	T16	AR	10	µg/l	(162) <50	(162) <50	(162) <50	(162) <50	(162) <50

SAL Reference: 211291
Customer Reference: 907BRI

Water Analysed as Water
Vertase Hauxton VOC Suite

					SAL Reference	**211291 001**	**211291 002**	**211291 003**	**211291 004**	**211291 005**
					Customer Sample Reference	**S2/6**	**BH10B/06**	**BH4**	**BH9**	**S3/4**
					Date Sampled	**27-AUG-2010**	**27-AUG-2010**	**27-AUG-2010**	**27-AUG-2010**	**27-AUG-2010**
Determinand	**Method**	**Test Sample**	**LOD**	**Units**						
1,2-Dichlorobenzene	T54	AR	1	µg/l		**12**	**8**	**1**	**4**	**4**
1,2-Dichloroethane	T54	AR	1	µg/l		(13) <1	(13) <1	(13) <1	(13) <1	(13) <1
Cis-1,2-Dichloroethylene	T54	AR	1	µg/l		**2**	**73**	**620**	**3**	**2**
Cyclohexanone	T54	AR	10	µg/l		<10	<10	<10	<10	<10
Tetrachloroethylene	T54	AR	1	µg/l		**290**	**400**	**3**	**170**	**170**
Toluene	T54	AR	1	µg/l		**90**	**10**	**2**	<1	**3**
Trichloroethylene	T54	AR	1	µg/l		**110**	**54**	**13**	**25**	**36**
Vinyl chloride	T54	AR	1	µg/l		<1	**12**	**110**	<1	<1
Xylene (Total)	T54	AR	1	µg/l		**41**	**6**	**57**	**6**	**60**

SAL Reference: 211291
Customer Reference: 907BRI

Water Analysed as Water
Vertase Hauxton VOC Suite

					SAL Reference	**211291 006**	**211291 007**	**211291 008**	**211291 009**	**211291 010**
					Customer Sample Reference	**BH11**	**BH6/06**	**S1/8**	**4/06**	**S3/6**
					Date Sampled	**27-AUG-2010**	**27-AUG-2010**	**26-AUG-2010**	**26-AUG-2010**	**26-AUG-2010**
Determinand	**Method**	**Test Sample**	**LOD**	**Units**						
1,2-Dichlorobenzene	T54	AR	1	µg/l		**4**	**1**	**(19) 1400**	**5**	**(19) 760**
1,2-Dichloroethane	T54	AR	1	µg/l		(13) <1	(13) <1	**(13,19) 1700**	(13) <1	**(19,13) 710**
Cis-1,2-Dichloroethylene	T54	AR	1	µg/l		<1	<1	**(19) 3200**	<1	**(19) 4000**
Cyclohexanone	T54	AR	10	µg/l		<10	<10	(19,9) <200	<10	**(19) 640**
Tetrachloroethylene	T54	AR	1	µg/l		**160**	**53**	**(19) 9200**	<1	**(19) 34000**
Toluene	T54	AR	1	µg/l		**1**	**5**	**(19) 22000**	<1	**(19) 12000**
Trichloroethylene	T54	AR	1	µg/l		**20**	**4**	**(19) 1800**	<1	**(19) 25000**
Vinyl chloride	T54	AR	1	µg/l		<1	<1	**(19) 370**	<1	**(19) 410**
Xylene (Total)	T54	AR	1	µg/l		**2**	**3**	**(19) 1900**	**290**	**(19) 2800**

SAL Reference: 211291
Customer Reference: 907BRI

Water Analysed as Water
Vertase Hauxton VOC Suite

					SAL Reference	**211291 011**	**211291 012**	**211291 013**	**211291 014**	**211291 015**
					Customer Sample Reference	**CAM UPSTREAM**	**CAM DOWNSTREAM**	**RIDDY UPSTREAM**	**RIDDY DOWNSTREAM**	**BH8/06**
					Date Sampled	**26-AUG-2010**	**26-AUG-2010**	**26-AUG-2010**	**26-AUG-2010**	**31-AUG-2010**
Determinand	**Method**	**Test Sample**	**LOD**	**Units**						
1,2-Dichlorobenzene	T54	AR	1	µg/l		<1	<1	<1	<1	**3**
1,2-Dichloroethane	T54	AR	1	µg/l		(13) <1	(13) <1	(13) <1	(13) <1	(13) <1
Cis-1,2-Dichloroethylene	T54	AR	1	µg/l		<1	<1	<1	<1	<1
Cyclohexanone	T54	AR	10	µg/l		<10	<10	<10	<10	<10
Tetrachloroethylene	T54	AR	1	µg/l		**2**	**1**	**3**	**2**	**140**
Toluene	T54	AR	1	µg/l		<1	<1	**2**	**2**	**12**
Trichloroethylene	T54	AR	1	µg/l		<1	<1	<1	<1	**16**
Vinyl chloride	T54	AR	1	µg/l		<1	<1	<1	<1	<1
Xylene (Total)	T54	AR	1	µg/l		<1	<1	<1	<1	**7**

Index to symbols used in 211291-2

Value	Description
AR	As Received
162	LOD determined by matrix spike recovery
147	Result has been Recovery corrected.
9	LOD raised due to dilution of sample

13	Results have been blank corrected.
19	Due to high levels the analysis was conducted on a diluted sample
27	Result should be considered as a minimum due to detector saturation.
U	Analysis is UKAS accredited
N	Analysis is not UKAS accredited

Method Index

Value	Description
T16	GC/MS
T7	Probe
T54	GC/MS (Headspace)

Accreditation Summary

Determinand	Method	Test Sample	LOD	Units	Symbol	SAL References
Electrical Conductivity	T7	AR	10	µS/cm	N	001-015
pH	T7	AR			U	001-015
Dimefox	T16	AR	0.1	µg/l	N	001-015
Ethofumesate	T16	AR	0.1	µg/l	N	001-015
Hempa	T16	AR	0.1	µg/l	N	001-015
Schradan	T16	AR	0.1	µg/l	N	001-015
Simazine	T16	AR	0.01	µg/l	N	001-015
Dicamba	T16	AR	0.1	µg/l	N	001-015
Dichlorprop	T16	AR	0.1	µg/l	N	001-015
Phenoxy Acetic acid herbicide: MCPA	T16	AR	0.1	µg/l	N	001-015
Mecoprop	T16	AR	0.1	µg/l	N	001-015
2,4,6-Trichlorophenol	T16	AR	10	µg/l	U	001-015
2-Methyl-4,6-dinitrophenol	T16	AR	10	µg/l	N	001-015
4-Chloro-2-methylphenol	T16	AR	10	µg/l	N	001-015
Bis (2-chloroethyl) ether	T16	AR	10	µg/l	U	001-015
Phenol	T16	AR	10	µg/l	U	001-015
1,2-Dichlorobenzene	T54	AR	1	µg/l	U	001-015
1,2-Dichloroethane	T54	AR	1	µg/l	U	001-015
Cis-1,2-Dichloroethylene	T54	AR	1	µg/l	U	001-015
Cyclohexanone	T54	AR	10	µg/l	N	001-015
Tetrachloroethylene	T54	AR	1	µg/l	U	001-015
Toluene	T54	AR	1	µg/l	U	001-015
Trichloroethylene	T54	AR	1	µg/l	U	001-015
Vinyl chloride	T54	AR	1	µg/l	U	001-015
Xylene (Total)	T54	AR	1	µg/l	U	001-015

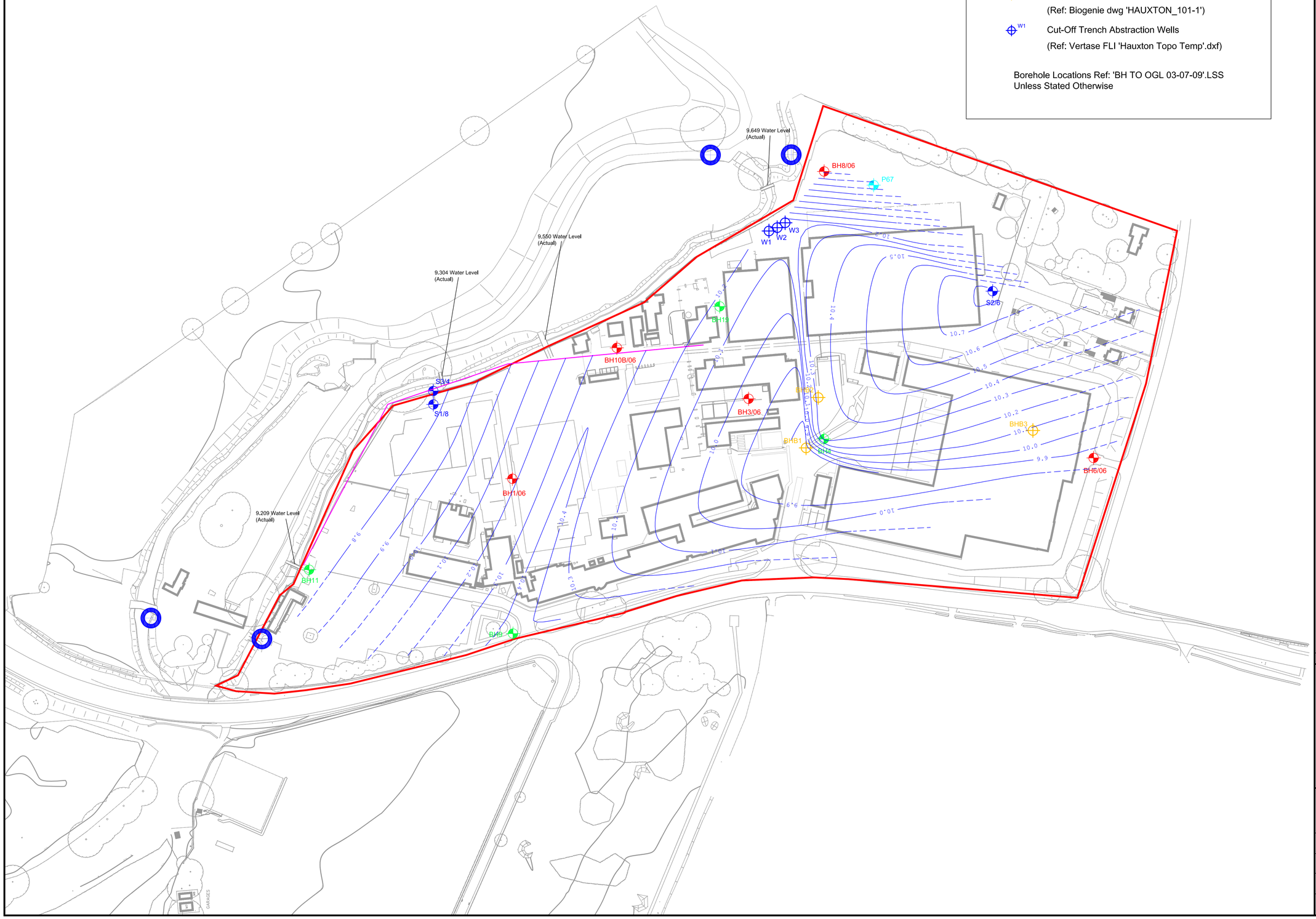
Appendix G
Groundwater Contour Plots

A1

Legend

- BH1/06 — Atkins Exploratory Hole Location
- BH7 P67 — Previous Borehole Location
- Water Sampling Location
- BHB1 — Biogenie Boreholes (Ref: Biogenie dwg 'HAUXTON_101-1')
- W1 — Cut-Off Trench Abstraction Wells (Ref: Vertase FLI 'Hauxton Topo Temp'.dxf)

Borehole Locations Ref: 'BH TO OGL 03-07-09'.LSS
Unless Stated Otherwise



Rev.	Description	Revised By	Date
	FIRST ISSUE		27-08-10

Vertase F.L.I.

- Bristol Head Office: Tel: 01275 397600 Fax: 01275 397601
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Site Address:
Bayer Site
Hauxton
Cambridge

Rev:

Title: Ground Water Contours 05-08-10

Client: Harrow Estates

Drawn: MRG	Checked: MA	Approved: MA
Dwg: D907_99	Contract: 907 BRI	Scale: 1:1000

A1

Legend

- BH1/06 — Atkins Exploratory Hole Location
- BH7 / P67 — Previous Borehole Location
- Water Sampling Location
- BHB1 — Biogenie Boreholes (Ref: Biogenie dwg 'HAUXTON_101-1')
- W1 — Cut-Off Trench Abstraction Wells (Ref: Vertase FLI 'Hauxton Topo Temp'.dxf)

Borehole Locations Ref: 'BH TO OGL 03-07-09'.LSS
Unless Stated Otherwise

9.639 Water Level (Actual)
9.550 Water Level (Actual)
9.314 Water Level (Actual)
9.219 Water Level (Actual)

BH8/06, P67, W1, W2, W3, S2/6, BH10B/06, BH12, S3/4, S1/8, BH3/06, BH2, BHB1, BH4, BHB3, BH6/06, BH1/06, BH11, BH9, GARAGES

Rev.	Description	Revised By	Date
	FIRST ISSUE		31-08-10

Vertase F.L.I.

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Site Address:
Bayer Site
Hauxton
Cambridge

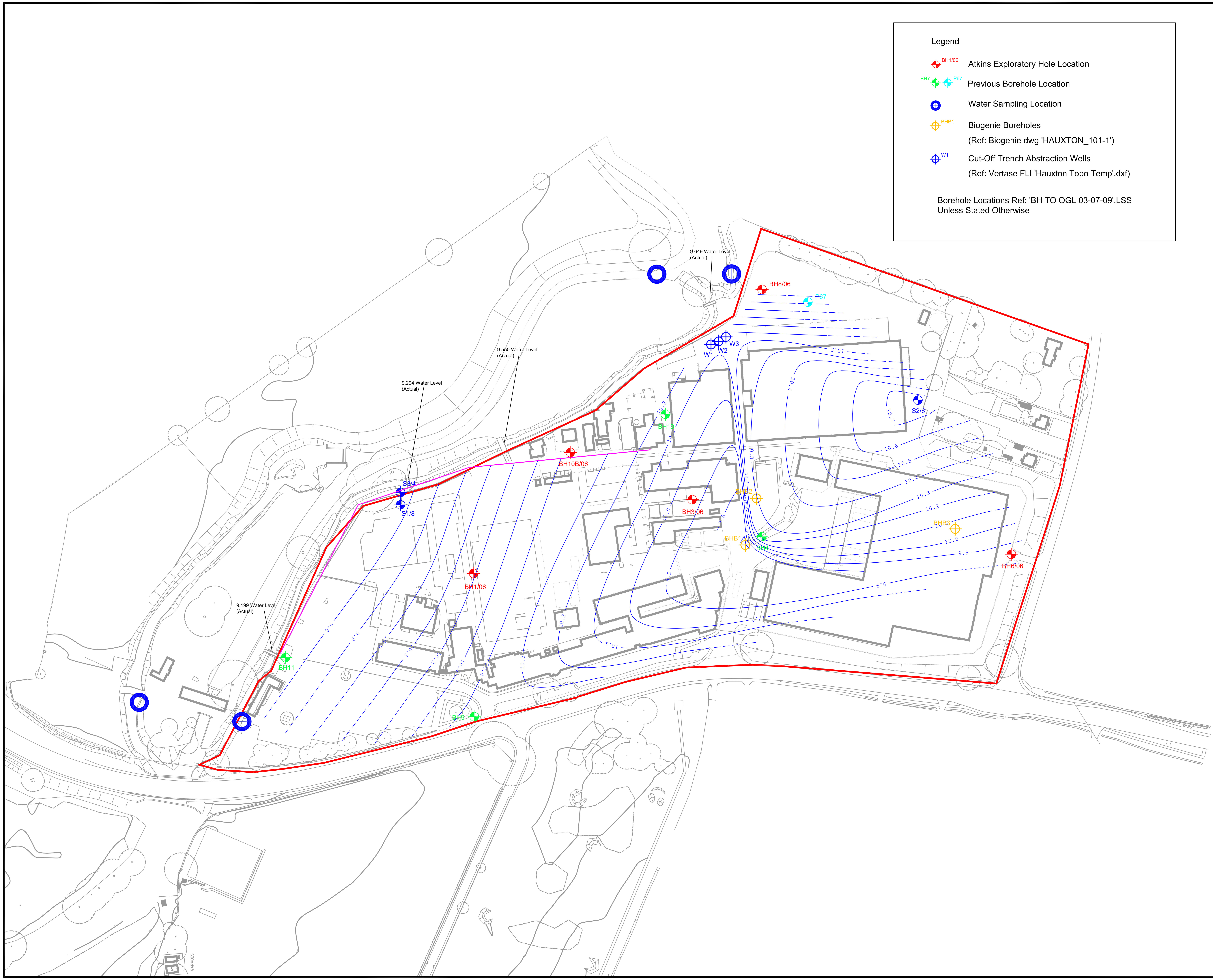
Rev:

Title: Ground Water Contours 12-08-10

Client: Harrow Estates

Drawn: MRG	Checked: MA	Approved: MA
Dwg: D907_100	Contract: 907 BRI	Scale: 1:1000

A1



Rev.	Description	Revised By	Date
	FIRST ISSUE		31-08-10

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Site Address:
Bayer Site
Hauxton
Cambridge

Rev:

Title: Ground Water Contours 19-08-10

Client: Harrow Estates

Drawn: MRG	Checked: MA	Approved: MA
Dwg: D907_101	Contract: 907 BRI	Scale: 1:1000

A1

Legend

- BH1/06 — Atkins Exploratory Hole Location
- BH7 P67 — Previous Borehole Location
- Water Sampling Location
- BHB1 — Biogenie Boreholes (Ref: Biogenie dwg 'HAUXTON_101-1')
- W1 — Cut-Off Trench Abstraction Wells (Ref: Vertase FLI 'Hauxton Topo Temp'.dxf)

Borehole Locations Ref: 'BH TO OGL 03-07-09'.LSS
Unless Stated Otherwise

9.649 Water Level (Actual)
9.550 Water Level (Actual)
9.294 Water Level (Actual)
9.199 Water Level (Actual)

BH8/06 P67 W1 W2 W3 S2/6 BH10B/06 BH10 S3/4 S1/8 BH3/06 BHB2 BHB3 BHB1 BH4 BH6/06 BH1/06 BH11 BH9 GARAGES

Rev.	Description	Revised By	Date
	FIRST ISSUE		01-09-10

Vertase F.L.I.

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Site Address:
Bayer Site
Hauxton
Cambridge

Rev:

Title: Ground Water Contours 26-08-10

Client: Harrow Estates

Drawn: MRG	Checked: MA	Approved: MA
Dwg: D907_102	Contract: 907 BRI	Scale: 1:1000

Appendix H

Waste Water Treatment Plant Discharge Analysis

Water Quality Analysis of Effluent Discharge Sample

				Bromide	Chloride	Sulphate Ion	Suspended Solids (Total)	Ammoniacal Nitrogen	Biochemical Oxygen Demand	pH	Atrazine	Trietazine	Simazine	Total Atrazine, Trietazine and Simazine	Benazolin	2,3,6-TBA	Dicamba	Hempa	Schradan
Sample Taken	Report Date	Report Number	Sample Location	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l		µg/l	µg/l	µg/l	ug/l	µg/l	µg/l	µg/l	µg/l	µg/l
Consented Levels				*50*	*3000*	*5000*	*45*	*15*	*30*	*na*	*Total of all three*			*250*	*50*	*20*	*50*	*274*	*135*
01/03/2010	17/03/2010	193447	Discharge Point	0.30	84.00	150.00	<10	<0.05	<3	8.4	<0.02	0.07	<0.01	0.07	<0.1	0.40	<0.1	<0.1	<0.1
30/03/2010	09/04/2010	195429	Discharge Point	0.40	110.00	180.00	<10	<0.05	<3	8.7	<0.01	<0.01	<0.01	0.00	<0.1	0.30	<0.1	0.40	<0.1
08/04/2010	13/04/2010	196139	T99 Circ	<1.0	110.00	190.00	<10	<0.05	<3	8.0	<0.01	<0.01	<0.01	0.00	<0.1	<0.1	<0.1	2.90	0.40
10/04/2010	19/04/2010	196379	T100 Circ	<1.0	110.00	190.00	<10	0.05	<3	7.9	<0.01	0.01	<0.01	0.01	<0.1	<0.1	<0.1	0.90	0.30
12/04/2010	21/04/2010	196517	T100 Circ	<1.0	1100.00	200.00	<10	<0.05	<3	8.2	<0.01	<0.01	<0.01	0.00	<0.1	<0.1	<0.1	1.50	<0.1
28/04/2010	19/05/2010	199291	Discharge Point	<1.0	130.00	200.00	<10	<0.05	<3	8.1	<0.01	<0.01	<0.01	0.00	<0.1	<0.1	<0.1	5.10	1.50
07/05/2010	17/05/2010	199176	T99 Discharge	<1.0	110.00	200.00	<10	<0.05	6.60	8.2	<0.01	<0.01	<0.01	0.00	<0.2	3.00	<0.2	3.30	0.60
18/05/2010	01/06/2010	200382	Discharge Point	<1.0	180.00	280.00	<10	0.09	<3	8.0	<0.01	0.01	<0.01	0.01	0.60	5.20	0.20	6.30	3.80
28/05/2010	17/06/2010	201487	Discharge Point	<1.0	130.00	210.00	<10	<0.05	<3	8.1	<0.01	<0.01	<0.01	0.00	<0.1	1.30	<0.1	4.30	1.10
15/06/2010	28/06/2010	203351	WTW Discharge	2.7	240.00	320.00	<10	0.05	<3	8.1	<0.01	0.02	<0.01	0.02	<0.1	2.40	0.2	4.10	1.00
01/07/2010	19/07/2010	205613	WWTW Discharge	3.3	290.00	370.00	13	0.07	<3	8.1	<0.01	<0.01	<0.01	0.00	<0.1	0.40	<0.1	<0.1	<0.1
05/08/2010	16/08/2010	208693	WWTW Discharge	<1.0	160.00	300.00	<10	<0.05	<3	8.0	0.02	0.09	0.02	0.13	<0.5	0.40	<0.1	<0.1	<0.1
19/08/2010	26/08/2010	209961	WWTW Discharge	<1.0	160.00	260.00	<10	<0.05	<3	7.7	<0.01	<0.01	<0.01	0.00	<0.1	<0.1	<0.1	<0.1	<0.1

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Scientific Analysis Laboratories

Certificate of Analysis

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Hadfield Street
Cornbrook
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M16 9FE
Tel : 0161 874 2400
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Report Number: 208693-2

Date of Report: 16-Aug-2010

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

Customer Contact: The Project Management

Customer Job Reference: 907 BRI WWTW
Date Job Received at SAL: 06-Aug-2010
Date Analysis Started: 06-Aug-2010
Date Analysis Completed: 16-Aug-2010

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 :
Amelia McVennon
Project Manager

Issued by :
Amelia McVennon
Project Manager

SAL Reference: 208693
Customer Reference: 907 BRI WWTW

Water Analysed as Water
Miscellaneous

					SAL Reference	208693 001	208693 002
					Customer Sample Reference	WWTW INPUT	WWTW Discharge
Determinand	**Method**	**Test Sample**	**LOD**	**Units**			
Ammoniacal nitrogen	T4	AR	50	µg/l		**1300**	<50
Biochemical Oxygen Demand	T7	AR	3000	µg/l		<3000	<3000
pH	T7	AR				**7.4**	**8.0**

SAL Reference: 208693
Customer Reference: 907 BRI WWTW

Water Analysed as Water
Suite A

					SAL Reference	208693 001	208693 002
					Customer Sample Reference	WWTW INPUT	WWTW Discharge
Determinand	**Method**	**Test Sample**	**LOD**	**Units**			
Atrazine	T16	AR	0.01	µg/l		**6.0**	**0.02**
Trietazine	T16	AR	0.01	µg/l		**23**	**0.09**

SAL Reference: 208693
Customer Reference: 907 BRI WWTW

Water Analysed as Water
Suite B

					SAL Reference	208693 001	208693 002
					Customer Sample Reference	WWTW INPUT	WWTW Discharge
Determinand	**Method**	**Test Sample**	**LOD**	**Units**			
Benazolin	T16	AR	0.1	µg/l		**160**	(2) <0.5
2,3,6-TCB	T16	AR	0.1	µg/l		**160**	**0.4**

SAL Reference: 208693
Customer Reference: 907 BRI WWTW

Water Analysed as Water
Suite C

					SAL Reference	208693 001	208693 002
					Customer Sample Reference	WWTW INPUT	WWTW Discharge
Determinand	**Method**	**Test Sample**	**LOD**	**Units**			
Bromide	T253	AR	100	µg/l		(9) <1000	(9) <1000
Chloride	T253	AR	200	µg/l		**150000**	**160000**
Sulphate ion	T253	AR	100	µg/l		**330000**	**300000**
Suspended Solids (Total)	T2	AR	10000	µg/l		**260000**	<10000

SAL Reference: 208693
Customer Reference: 907 BRI WWTW

Water Analysed as Water
Suite D

					SAL Reference	208693 001	208693 002
					Customer Sample Reference	WWTW INPUT	WWTW Discharge
Determinand	**Method**	**Test Sample**	**LOD**	**Units**			
Dicamba	T16	AR	0.1	µg/l		**4.4**	<0.1
Hempa	T16	AR	0.1	µg/l		**3.0**	<0.1
Schradan	T16	AR	0.1	µg/l		**1.2**	<0.1
Simazine	T16	AR	0.01	µg/l		**6.8**	**0.02**

Index to symbols used in 208693-2

Value	Description
AR	As Received
2	LOD Raised Due to Matrix Interference
9	LOD raised due to dilution of sample
U	Analysis is UKAS accredited
N	Analysis is not UKAS accredited

Method Index

Value	Description
T16	GC/MS
T7	Probe
T253	IC(EID299)
T4	Colorimetry
T2	Grav

Accreditation Summary

Determinand	Method	Test Sample	LOD	Units	Symbol	SAL References
Ammoniacal nitrogen	T4	AR	50	µg/l	U	001-002
Biochemical Oxygen Demand	T7	AR	3000	µg/l	N	001-002
pH	T7	AR			U	001-002
Atrazine	T16	AR	0.01	µg/l	N	001-002
Trietazine	T16	AR	0.01	µg/l	N	001-002
Benazolin	T16	AR	0.1	µg/l	N	001-002
2,3,6-TCB	T16	AR	0.1	µg/l	N	001-002
Bromide	T253	AR	100	µg/l	U	001-002
Chloride	T253	AR	200	µg/l	U	001-002
Sulphate ion	T253	AR	100	µg/l	U	001-002
Suspended Solids (Total)	T2	AR	10000	µg/l	N	001-002
Dicamba	T16	AR	0.1	µg/l	N	001-002
Hempa	T16	AR	0.1	µg/l	N	001-002
Schradan	T16	AR	0.1	µg/l	N	001-002
Simazine	T16	AR	0.01	µg/l	N	001-002

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Scientific Analysis Laboratories

Certificate of Analysis

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Tel : 0161 874 2400
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Report Number: 209961-1

Date of Report: 26-Aug-2010

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

Customer Contact: The Project Management

Customer Job Reference: 907 BRI WWTW
Date Job Received at SAL: 19-Aug-2010
Date Analysis Started: 20-Aug-2010
Date Analysis Completed: 26-Aug-2010

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 :
Mr Ross Walker
Customer Services Manager

Issued by :
Mr Ross Walker
Customer Services Manager

SAL Reference: 209961
Customer Reference: 907 BRI WWTW

Water Analysed as Water
Miscellaneous

SAL Reference	**209961 001**	**209961 002**
Customer Sample Reference	**WWTW DISCHARGE**	**WWTW PRIMARY B**
Date Sampled	**13-AUG-2010**	**13-AUG-2010**

Determinand	Method	Test Sample	LOD	Units		
Ammoniacal nitrogen	T4	AR	0.05	mg/l	<0.05	<0.05
Biochemical Oxygen Demand	T7	AR	3	mg/l	<3	<3
pH	T7	AR			**7.7**	**7.9**

SAL Reference: 209961
Customer Reference: 907 BRI WWTW

Water Analysed as Water
Suite A

SAL Reference	**209961 001**	**209961 002**
Customer Sample Reference	**WWTW DISCHARGE**	**WWTW PRIMARY B**
Date Sampled	**13-AUG-2010**	**13-AUG-2010**

Determinand	Method	Test Sample	LOD	Units		
Atrazine	T16	AR	0.00001	mg/l	<0.00001	<0.00001
Trietazine	T16	AR	0.00001	mg/l	<0.00001	**0.00003**

SAL Reference: 209961
Customer Reference: 907 BRI WWTW

Water Analysed as Water
Suite B

SAL Reference	**209961 001**	**209961 002**
Customer Sample Reference	**WWTW DISCHARGE**	**WWTW PRIMARY B**
Date Sampled	**13-AUG-2010**	**13-AUG-2010**

Determinand	Method	Test Sample	LOD	Units		
Benazolin	T16	AR	0.0001	mg/l	<0.0001	<0.0001
2,3,6-TCB	T16	AR	0.0001	mg/l	<0.0001	**0.018**

SAL Reference: 209961
Customer Reference: 907 BRI WWTW

Water Analysed as Water
Suite C

SAL Reference	**209961 001**	**209961 002**
Customer Sample Reference	**WWTW DISCHARGE**	**WWTW PRIMARY B**
Date Sampled	**13-AUG-2010**	**13-AUG-2010**

Determinand	Method	Test Sample	LOD	Units		
Bromide	T253	AR	0.1	mg/l	(9) <1.0	(9) <1.0
Chloride	T253	AR	0.2	mg/l	**160**	**160**
Sulphate ion	T253	AR	0.1	mg/l	**260**	**260**
Suspended Solids (Total)	T2	AR	10	mg/l	<10	<10

SAL Reference: 209961
Customer Reference: 907 BRI WWTW

Water Analysed as Water
Suite D

				SAL Reference	**209961 001**	**209961 002**
				Customer Sample Reference	**WWTW DISCHARGE**	**WWTW PRIMARY B**
				Date Sampled	**13-AUG-2010**	**13-AUG-2010**
Determinand	**Method**	**Test Sample**	**LOD**	**Units**		
Dicamba	T16	AR	0.1	µg/l	<0.1	**0.3**
Hempa	T16	AR	0.1	µg/l	<0.1	**2.1**
Schradan	T16	AR	0.1	µg/l	<0.1	**0.6**
Simazine	T16	AR	0.01	µg/l	<0.01	<0.01

SAL Reference: 209961
Customer Reference: 907 BRI WWTW

Water Analysed as Water
Suite E

				SAL Reference	**209961 001**	**209961 002**
				Customer Sample Reference	**WWTW DISCHARGE**	**WWTW PRIMARY B**
				Date Sampled	**13-AUG-2010**	**13-AUG-2010**
Determinand	**Method**	**Test Sample**	**LOD**	**Units**		
TVC at 22°C after 3 days	T34	AR	10	cfu/ml	> **10000**	> **10000**
TVC at 37°C after 2 days	T34	AR	10	cfu/ml	> **10000**	> **10000**

Index to symbols used in 209961-1

Value	Description
AR	As Received
9	LOD raised due to dilution of sample
W	Analysis was performed at another SAL laboratory
S	Analysis was subcontracted
U	Analysis is UKAS accredited
N	Analysis is not UKAS accredited

Method Index

Value	Description
T253	IC(EID299)
T2	Grav
T16	GC/MS
T34	Micro
T4	Colorimetry
T7	Probe

Accreditation Summary

Determinand	Method	Test Sample	LOD	Units	Symbol	SAL References
Ammoniacal nitrogen	T4	AR	0.05	mg/l	U	001-002
Biochemical Oxygen Demand	T7	AR	3	mg/l	N	001-002
pH	T7	AR			U	001-002
Atrazine	T16	AR	0.00001	mg/l	N	001-002
Trietazine	T16	AR	0.00001	mg/l	N	001-002
Benazolin	T16	AR	0.0001	mg/l	N	001-002
2,3,6-TCB	T16	AR	0.0001	mg/l	N	001-002
Bromide	T253	AR	0.1	mg/l	WU	001-002
Chloride	T253	AR	0.2	mg/l	WU	001-002
Sulphate ion	T253	AR	0.1	mg/l	WU	001-002
Suspended Solids (Total)	T2	AR	10	mg/l	N	001-002
Dicamba	T16	AR	0.1	µg/l	N	001-002
Hempa	T16	AR	0.1	µg/l	N	001-002

Determinand	Method	Test Sample	LOD	Units	Symbol	SAL References
Schradan	T16	AR	0.1	µg/l	N	001-002
Simazine	T16	AR	0.01	µg/l	N	001-002
TVC at 22°C after 3 days	T34	AR	10	cfu/ml	SN	001-002
TVC at 37°C after 2 days	T34	AR	10	cfu/ml	SN	001-002

Appendix I
Soil Characterisation Results Summary

Results Received	Reported to SCDC	Grid square	Contaminant	Concentration (µg/kg)	Likely use/origin
12.04.2010	06.05.2010	K15	VOC/SVOC peaks detected		
12.04.2010	06.05.2010	K16	Series of Aromatic Hydrocarbons circa C_{13}-C_{16}	17,000	Potential herbicide degradation products. The structrues are smaller and less complex than contaminants of concern and will therefore degrade more readily than the target contaminants and will be captured by the remediation process.
15.04.2010	06.05.2010 (09.06.2010)	J16	2(1-methylpropyl)-phenol	10,000	Encountered and assessed during site investigation, not a priority contaminant
			2,6-bis(1-methylpropyl)-phenol	100,000	Commonly used in the manufacture of specialty surfactants used as wetting agents for agrochemicals.
			2,6-bis(1,1-dimethylethyl)-4-(1-methylpropyl)-phenol	6,000	Commonly used as an antioxidant and stabiliser, also used in oils used in industrial applications.
			Unidentified branched aromatic alcohol, C_{14}	240,000	Potential herbicide degradation products. The structrues are smaller and less complex than contaminants of concern and will therefore degrade more readily than the target contaminants and will be captured by
			Unidentified branched aromatic alcohol, C_{18}	290,000	
15.04.2010	06.05.2010	K14	Phenanthrene	4,100	Encountered and assessed during site investigation, concentration below target value
			Fluoranthene	4,800	
			Pyrene	3,900	
			Benzo(b/k)Fluoranthene	2,200	
07.05.2010	24.05.2010	K9	Dodecanoic acid (Lauric acid), isooctyl ester	2,400	Lauric acid - main acid in coconut oil and palm kernel oil, is non-toxic and safe to handle, is used in many soaps, shampoos and body butters.
			Unidentified Aliphatic Hydrocarbon circa C_{30}	2,300	Potential herbicide degradation products. The structrues are smaller and less complex than contaminants of concern and will therefore degrade more readily than the target contaminants and will be captured by the remediation process.

07.05.2010	24.05.2010 (09.06.2010)	L8	2,4-Dichloro-o-cresol	9,000	Potential herbicide degradation product
			Bis(2-ethylhexyl) maleate	3,800	Commonly used as an intermediate in hydrogenation or acetylation reactions, possibly used in agrochemicals manufacture
			Cyclo octaatomic sulphur	2,800	S_8 is the most common form of sulphur in the solid state, widely used in insecticide and fungicide manufacture
			Dodecanoic acid (Lauric acid), isooctyl ester	7,400	Lauric acid - main acid in coconut oil and palm kernel oil, is non-toxic and safe to handle, is used in many soaps, shampoos and body butters.
			Unidentified aromatic hydrocarbon containing O and Cl circa C_7	8,400	Potential herbicide degradation products. The structrues are smaller and less complex than contaminants of concern and will therefore degrade more readily than the target contaminants and will be captured by the remediation process.
07.05.2010	24.05.2010	L9	Unidentified Aliphatic Hydrocarbon circa C_{30}	2,300	Potential herbicide degradation products. The structures are smaller and less complex than contaminants of concern and will therefore degrade more readily than the target contaminants and will be captured by the remediation process.
13.05.2010	24.05.2010	H8	No VOC/SVOC peaks detected		
13.05.2010	24.05.2010 (09.06.2010)	H9	1,2-bis(2,4,6-trichlorophenoxy)ethane	6,900	Potential Prochloraz degradation product
			Prochloraz	9,100	Fungicide
			Unidentified aromatic hydrocarbon containing Cl circa C_8	9,400	Potential herbicide degradation products. The structures are smaller and less complex than contaminants of concern and will therefore degrade more readily than the target contaminants and will be captured by the remediation process.
			Unidentified aromatic amine containing Cl circa C_{11}	2,100	
13.05.2010	24.05.2010	I7	No SVOC peaks detected		
			2,4-Dichloro-o-cresol	29,000	

13.05.2010	24.05.2010 (09.06.2010)	I9	2,3,6-Trichlorotoluene	47,000	Potential herbicide degradation product
			1-(2-Chloroethoxy)-2-(o-Tolyloxy) ethane	20,000	
			Unidentified aromatic alcohol containing Cl circa C_7	25,000	Potential herbicide degradation products. The structures are smaller and less complex than contaminants of concern and will therefore degrade more readily than the target contaminants and will be captured by the remediation process.
			Unidentified aromatic hydrocarbon containing O circa C_{16-18}	12,000	
13.05.2010	24.05.2010	J7	No VOC/SVOC peaks detected		
20.05.2010	24.05.2010	J8	No VOC/SVOC peaks detected		
26.05.2010		J9	No VOC/SVOC peaks detected		
04.06.2010	16.06.2010 (09.06.2010)	H7	Dichloromethyl phenol	2,100	Same as 2,4-Dichloro-o-cresol (I9)
05.05.2010	16.06.2010 (09.06.2010)	K7	1,2-bis(2,4,6-trichlorophenoxy)ethane	2400.0	As for H9
05.05.2010	16.06.2010	K8	No VOC/SVOC peaks detected		
18.06.2010	29.06.2010	I8	2-methyl phenol	5,500	Encountered and assessed during site investigation, not a priority contaminant
			1,2-dichlorobenzene	3,600	Contaminant of concern, already included in the standard validation suite
17.06.2010	29.06.2010 (09.06.2010)	K10	2,4-Dichloro-o-cresol	550,000	As for I9 and H7
22.06.2010		L10	Cyclo octaatomic sulphur	16,000	As for L8 - Sulphur
20.07.2010	21.07.2010	K10 NAPL	Dichloromethyl phenol	1,800,000	As for 2,4-Dichloro-o-cresol (I9, H7, K10)
			Naphthalene	4,600,000	Encountered and assessed during site investigation, not a priority contaminant
			2-methylnaphthalene	3,900,000	
			1-methylnaphthalene *CAS 90-12-0*	2,400,000	More toxic than 2-methylnaphthalene, must be assessed separately
			Dinoseb *CAS 88-85-7*	68,000,000	2-(1-methylpropyl)-4,6-dinitro- phenol - herbicide and insecticide. Yellow crystalline solid.
			Dichloromethyl phenol	24,000	As for 2,4-Dichloro-o-cresol (I9, H7, K10)
			1-(2-Chloroethoxy)-2-(o-Tolyloxy) ethane *CAS 21120-80-9*	13,000	Same as I9

21.07.2010	22.07.2010	J10	1,2,4-Trichlorobenzene	28,000	Encountered and assessed during site investigation, not a priority contaminant
			Trichlorobenzene	32,000	
			2-Chlorotoluene	60,000	
			Trichloro toluene isomer	48,000	Same as I9
			Trichloro benzenamine isomer	11,000	Potential herbicide degradation product
			2,3-Dichlorotoluene *CAS 32768-54-0*	290,000	
21.07.2010	22.07.2010	L11	Dichloromethyl phenol	5,000	As for 2,4-Dichloro-o-cresol (I9, H7, K10, J10)
28.07.2010	02.08.2010	H10	2,4-Dichloro-o-cresol *CAS 1570-65-6*	10,000	As for I9, H7, K10, J10, L11
			Trichloro toluene isomers	58,000	Same as I9, J10
			Dichlorotoluene isomer	52,000	6 possible isomers, but very little data, using surrogate.
			2-Chlorotoluene	39,000	Encountered and assessed during site investigation, not a priority contaminant
			Trichlorobenzene	350,000	
28.07.2010	02.08.2010	I10	2,4-Dichloro-o-cresol *CAS 1570-65-6*	5,000	As for I9, H7, K10, J10, L11, H10
			Trichloro toluene isomers	24,000	Same as I9, J10, H10
03.08.2010	04.08.2010	L12	2,4-Dichloro-o-cresol *CAS 1570-65-6*	7,000	As for I9, H7, K10, J10, L11, H10, I10
03.08.2010	04.08.2010	L13	No VOC/SVOC peaks detected		
03.08.2010	04.08.2010	K12	2,4-Dichloro-o-cresol *CAS 1570-65-6*	7,000	As for I9, H7, K10, J10, L11, H10, I10, L12
03.08.2010	04.08.2010	K13 sand & gravel	Cyclo octaatomic sulphur	68,000	As for L8, L10 - Sulphur
05.08.2010	N/A	K13 chalk	2,4-Dichloro-o-cresol CAS 1570-65-6	650,000	As for I9, H7, K10, J10, L11, H10, I10, L12, K12
			Trichloro toluene isomers	1,140,000	Same as I9, J10, H10, I10
			1-(2-Chloroethoxy)-2-(o-Tolyloxy) ethane CAS 21120-80-9	140,000	Same as I9 and J10
			Dichlorotoluene isomer	99,000	Same as J10, H10

			2-Chlorotoluene	12,000	Encountered and assessed during site investigation, not a priority contaminant
05.08.2010	N/A	K11	2,4-Dichloro-o-cresol CAS 1570-65-6	22,000	As for I9, H7, K10, J10, L11, H10, I10, L12, K12, K13
05.08.2010	N/A	J11	2,4-Dichloro-o-cresol CAS 1570-65-6	220,000	As for I9, H7, K10, J10, L11, H10, I10, L12, K12, K13
			Trichloro toluene isomers	376,000	Same as I9, J10, H10, I10, K13
			Dinoseb CAS 88-85-7	90,000	Same as K10
			Dichlorotoluene isomer	18,000	Same as H10, K13
			2-Chlorotoluene	13,000	Encountered and assessed during site investigation, not a priority contaminant
12.08.2010	17.08.2010	J12	2-chloro Benzenemethanol CAS 17849-38-6	620	Potential agrochemical synthesis ingredient - further investigation is required
			2-Chlorobenzalazine CAS 5328-80-3	5,900	
			2,4-Dichloro-o-cresol CAS 1570-65-6	2,000	As for I9, H7, K10, J10, L11, H10, I10, L12, K12, K13, J11
			2(1-methylpropyl)-phenol	610	Encountered and assessed during site investigation, not a priority contaminant
12.08.2010	N/A	J13	2,4-Dichloro-o-cresol CAS 1570-65-6	3,400	As for I9, H7, K10, J10, L11, H10, I10, L12, K12, K13, J11, J12
24.08.2010	25.08.2010	J14	Total Petroleum Hydrocarbons (C5-C12)	43,000	Encountered and assessed during site investigation, not a priority contaminant
			1,3,5-Trimethylbenzene CAS 108-67-8	1,600	Encountered and assessed during site investigation, not a priority contaminant
			1,2,4-Trimethylbenzene CAS 95-63-6	600	
			1,2,3-Trimethylbenzene CAS 526-73-8	700	Isomers encountered and assessed during site investigation, quantitative risk assessment not required
			1-Ethyl-2-Methylbenzene CAS 611-14-3	500	Potential agrochemical synthesis ingredient - further investigation is required
25.08.2010	N/A	I13	1-methylnaphthalene CAS 90-12-0	100	Same as K10NAPL

			Phenanthrene	200	Encountered and assessed during site investigation, not a priority contaminant
			Fluoranthene	300	
			Pyrene	300	
			Benzo(b/k)Fluoranthene	200	