











# **Environmental Monitoring Report**

Reporting Period 1/05/2010-30/05/2010 Revision 1

Former Bayer Crop Science Site Hauxton Cambridgeshire

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Author:

M.J. Allsobrook M.Sc. B.Sc. Project Manager

On behalf of:

Harrow Estates Plc

Vertase F.L.I. Limited 3000 Aviator Way Manchester Business Park Manchester M22 5TG

Tel +44 (0) 161 437 2708 Fax +44 (0) 161 437 6300

Email info@vertasefli.co.uk www.vertasefli.co.uk



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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 5<sup>th</sup> February 2010.

The time period that this report represents is from the 1<sup>st</sup> of May 2010, until the 30<sup>th</sup> of May 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 8. Week Commencing 3rd May 2010

Excavation continued in grid square L8 (Drawing D907-07 Appendix A), materials being hauled to treatment area, formed into treatment beds and covered to prevent odour migration. Odorous materials excavated in K9 and L9 were temporarily left within the excavation until emissions generated by this material had significantly reduced. This action reduces odour migration by preventing contact with the predominant wind direction across the site and allowing the odours to release at a slower rate in a sheltered location / bottom of the excavation, away from the adjacent receptors. Further excavation was required within grid square K8 due to validation failure. Trial pits were excavated to the east and south of the main excavations to identify the potential odour releases during the next phase of excavation, samples were taken at specific intervals to assess the types and concentrations of contaminants that would be encountered in the coming month.

## Week 9. Week Commencing 10<sup>th</sup> May 2010

The main excavation progressed to the east in grid squares J7 and J8 (Drawing D907-07 Appendix A), materials were less odorous than those previously encountered in grid squares L8 and J8. All materials having the potential to generate odours that may migrate off site are laid in windrows and covered on the same day, to minimise odour generation. Excavated concrete was stockpiled, waiting to be crushed site. All odorous materials were covered at the end of the working day including both soils and waters to minimise odour migration off site.

# Week 10. Week Commencing 17th May 2010

Favourable weather conditions allowed excavation to recommence in L8 and L9, this material had the potential to release VOC's and odours at the excavation point. Soils from L8 and L9 were formed into windrows and covered immediately. The main excavations progressed southwards into grid square J9, the VOC and odour generated by the excavations had significantly reduced, also changing in character becoming slightly sour and more sulphurous in parts.



## Week 11. Week Commencing 24th May 2010

Concrete slab and foundations were broken out in grid squares I7, I8 and I9. The main excavation followed this course removing contaminated marl, sands and gravels. Specific treatment beds were selected on a daily basis and processed to increase the rate of bioremediation within the soils, the beds were selected inline with the predominant wind direction. A concrete crusher, along with its associated dust suppression equipment was deployed to site to create are usable product from the fragmented concrete on site. The site was inspection by D Griffiths of the Environment Agency (24/05/2010).



## 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 form 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 22<sup>nd</sup> 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. The odour controlling solutions used in the misting and telescopic fan systems vary in fragrance from lemon, to pine, to bubblegum.

Site generated odours were observed during the monitoring rounds beyond the site boundary on:

- 04/05/10 (12:05): Very faint to faint odour control fragrance noted to the northeast and south of the site. An intermittent faint odour from the treatment beds was detected at the south western monitoring location (12:30) along with a very faint odour coming from the lagoons detected at the west monitoring location.
- 04/05/10 (17:00) Barely traceable to faint odour of suspected chlorinated phenols detected from the west through to the southwest, odour control fragrance detected to the south of the site (17:10).
- 05/05/10 (11:05): Faint odour control fragrance noted to the northeast and south of the site. At 16:55 a very faint odour from the treatment beds was detected to the south of the site.



- 06/05/10 (10:05): A faint odour from the lagoons noted to the west of the site.
- 07/05/10 (12:45): Very faint odour control fragrance noted to the southwest. Faint chlorinated phenol odours were detected to the north of the site (12:55). At 16:20 faint odour control fragrance was detected to the southeast and southwest of the site.
- 10/05/10 (10:20): Very faint to faint 50/50 (approximately) mix of odour control fragrance and solvent odours detected at the southwest monitoring location through to the northwest location. At 14:40 a barely traceable to very faint hydrocarbon odour was detected to the east and southwest of the site.
- 11/05/10 (17:25): Faint odour control fragrance detected to the south through to the northwest of the site.
- 12/05/10 (08:55): Faint odour control fragrance noted to the south of the site, very faint to faint odours from the excavations noted to the west and northwest of the site. In the afternoon (17:40) a very faint chlorinated phenol odour were detected to the south, southwest and northwest of the site.
- 13/05/10 (10:10): Faint odour control fragrance noted to the west of the site. AT 17:20 a moderate odour control fragrance mixed with the odours from the excavations was detected to the northeast of the site, to the southeast very faint odour control fragrance was detected (17:35).
- 14/05/10 (15:20): Very faint solvent odour noted beyond north western boundary...
- 18/05/10 (11:045): very faint to weak odour control fragrance noted to the southeast, west and northwest. In the afternoon (17:10) faint odour control fragrance was noted to the west.
- 20/05/10 (10:40): Very faint pesticide odour noted to the west of the site, at 16:55 unbearable odours were detected emanating from a decaying animal (badger) suspected to have been involved in a collision with a vehicle adjacent to the monitoring southwest monitoring location, SCDC notified during site visit.
- 21/05/10 (08:50) Unbearable odour caused by the above animal adjacent to the southwest monitoring location.
- 24/05/10 (16:05) Very faint to faint chlorinated phenol odour detected at the southwest and west monitoring locations, odour mitigation measures were amended to reduce the impact off site.
- 25/05/10 (11:45) Faint mixture of odour control fragrance and odour from the excavation was detected at the west and northwest monitoring locations. At 15:10 a very faint to faint



chlorinated phenol odour from the excavation was detected at the west and northwest monitoring locations.

- 26/05/10 (09:25) Very faint general site odour detected at the southwest monitoring location.
- 27/05/10 (10:55) Very faint odour control detected at the west monitoring location. At 18:08 a moderated phenol odour mixed with odour control fragrance was detected at the northeast monitoring location, a weak odour control fragrance was noted at 17:40 at the south monitoring location.
- 28/05/10 (09:10) Faint odour control fragrance mixed with traffic fumes detected at the west monitoring location, at 09:25 a faint mixture of hawthorn, odour control fragrance and phenols was detected at the northeast monitoring location, a weak mixture of odour control fragrance and odours from the treatment beds was detected at the southeast monitoring location (09:40). In the afternoon (15:40) a quite strong odour of phenols, odour control fragrance and hawthorn was detected at the northeast monitoring location.

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 no VOC's, were detected by the PID (Limit of detection of 0.1ppm).

Long term passive VOC monitoring is carried out at eight compass point locations around the site boundary, in the public accessible areas. A further monitoring location is located within the centre of the waste water treatment works.



The results for the long term passive VOC monitoring carried out between 15/04/2010 and 13/05/2010 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. Both of these VOC's have increased above the baseline values. The levels are considered to be within acceptable limits for published criteria. D-Limonene is also particularly elevated at the east and south east monitoring locations, this compound is a key ingredient in the odour controlling neutraliser/suppressant.

The 28 day passive VOC monitoring results have been forwarded to the HPA for review.

#### 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).

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 dust reading around the site is 103.45 ug/m3, 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. Total Suspended Particulates and PM10 dust values are being recorded as of the 26/05/2010 at the boundary monitoring locations as requested by the Environment Agency and Health Protection Agency.

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 15/04/2010 to 29/04/2010 (5 locations monitored) recorded a maximum dust deposition rate was 1.36 %EAC at the Northeast 1 monitoring location. All other locations had a maximum dust deposition rate of 1.14%EAC or less.

Dust monitoring undertaken from the 29/04/2010 to 13/05/2010 recorded a maximum dust deposition rate of 0.79% EAC at the northeast 1 monitoring location. All other locations had a maximum dust deposition rate of 0.71%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 22<sup>nd</sup> 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 noise levels are consistently at an acceptable low background level. There have been no exceedance's of the 80dB threshold as stipulated in



the Environmental Permit deployment document during the monitoring period. 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 have not been any significant rises or falls in Riddy Brook water levels and there has been a constant flow throughout its length.

### 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 4th May 2010 are presented in Appendix F.

The surface water analysis (4<sup>th</sup> May 2010) shows traces of the contaminants of concern (Ethofumesate, Cis-1,2-Dichloroethylene, Tetrachloroehtylene and Trichloroethylene) in the downstream sample taken from the Riddy Brook. The traces of the COC's present in the downstream sample taken from the Riddy Brook are consistent with baseline water quality data monitored in August 2008.



Tetrachloroethylene is present at trace levels (<3 μg/l) in both upstream and downstream Riddy Brook and River Cam samples. These trace levels of Tetrachloroethylene were present in the March 2010 samples and in the baseline data collected during the summer of 2008.

#### 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 western 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 thin sand and gravel bands have also produced some limited quantities of water, which have tended to dry up within 24hrs.

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\_73, D907\_76, D907\_77 and D907\_78 (Appendix G) illustrate the weekly groundwater levels for the reported period.

The four contour plots constructed (Appendix G) illustrate that there has been very little change in groundwater levels during the initial phase of works, the contour plots are very similar in pattern and actual measured values to the baseline data established throughout 2008 and 2009. The remediation works are not having a significant impact on the groundwater levels across the site, and therefore the groundwater has remained in a relatively static condition during the initial phase of excavations on site.



### 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 29<sup>th</sup> of April and the 4th May 2010 are presented in Appendix F.

Site groundwater is actively pumped from around the bentonite wall and the High bay warehouse, to prevent groundwater migration towards the Riddy Brook. The concentrations of the contaminants of concern within each of the monitored boreholes have been static on site during the initial works on site.

The contaminant concentrations present in the samples taken on the 29<sup>th</sup> of April and 4<sup>th</sup> of May 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, specifically designed to treat and discharge liquid waste products derived from the production of agrichemicals (both herbicides and pesticides) and sewage from the facility.

The WWTP has been previously operated (until the 15<sup>th</sup> 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 WWTP has been treating and discharging generally low volumes of influent with generally low contaminants levels as the influent has been solely from the groundwater control systems along the bentonite wall and high bay warehouse.

To ensure the WWTP can operate at higher volumes of influent with greater concentrations of contaminants, the initial loads of contaminated influent pumped from the remediation activities would be treated through the WWTP, re-circulated and stored on site in tanks while the treated effluent was analytically tested prior to being discharged to the River Cam (Granta).



The recirculation of treated effluent commenced on 08/04/2010, the WWTP ceased discharging to the River Cam (Granta). Initial samples were taken from the raw influent and the treated effluent from the first load of contaminated water from the remediation activities.

The second load of contaminated influent was treated and sampled on the 10/04/2010, and the third load of contaminated influent from the remediation site was sampled, treated and stored on the 12/04/2010.

The first set of laboratory results for the primary influent taken on the 08/004/2010 (report 196139, Appendix H) were received on the 13/04/2010, the analysis for the primary treated influent concluded that the stored effluent was suitable for discharge to the River Cam (Granta) under the current discharge consent conditions (consent PR1NF/1744D01). This treated effluent commenced discharged to the River Cam (Granta) on the 15/04/2010, due to the configuration of the WWTP the stored treated effluent had to pass through the entire treatment process for a second time, then on to discharge to the River Cam.

The second and third sets of laboratory results (report 196379 and 196517 respectively Appendix H) for the re-circulated and stored effluent also revealed that the WWTP had treated the loads of contaminated influent form the remediation activities sufficiently to allow it to be discharged to the River Cam (Granta) inline with the discharge consent. The second body of treated effluent commenced discharge on the 19/04/2010, the third body of stored, treated effluent was discharged on the 23/04/2010.

The treated, re-circulated, stored and finally discharged effluent analyses are denoted as T99Circ or T100Circ depending on which tank the influent had originated from, the influent samples are denoted as T99OUT and T100OUT. The laboratory analysis is presented in appendix H.

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 30/05/2010, thirteen 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. Eight characterisation samples analysed contained 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. Where unidentified contaminants are recorded in soils, this material is quarantined on site until an appropriate risk assessment has been carried out and approved by the regulators.

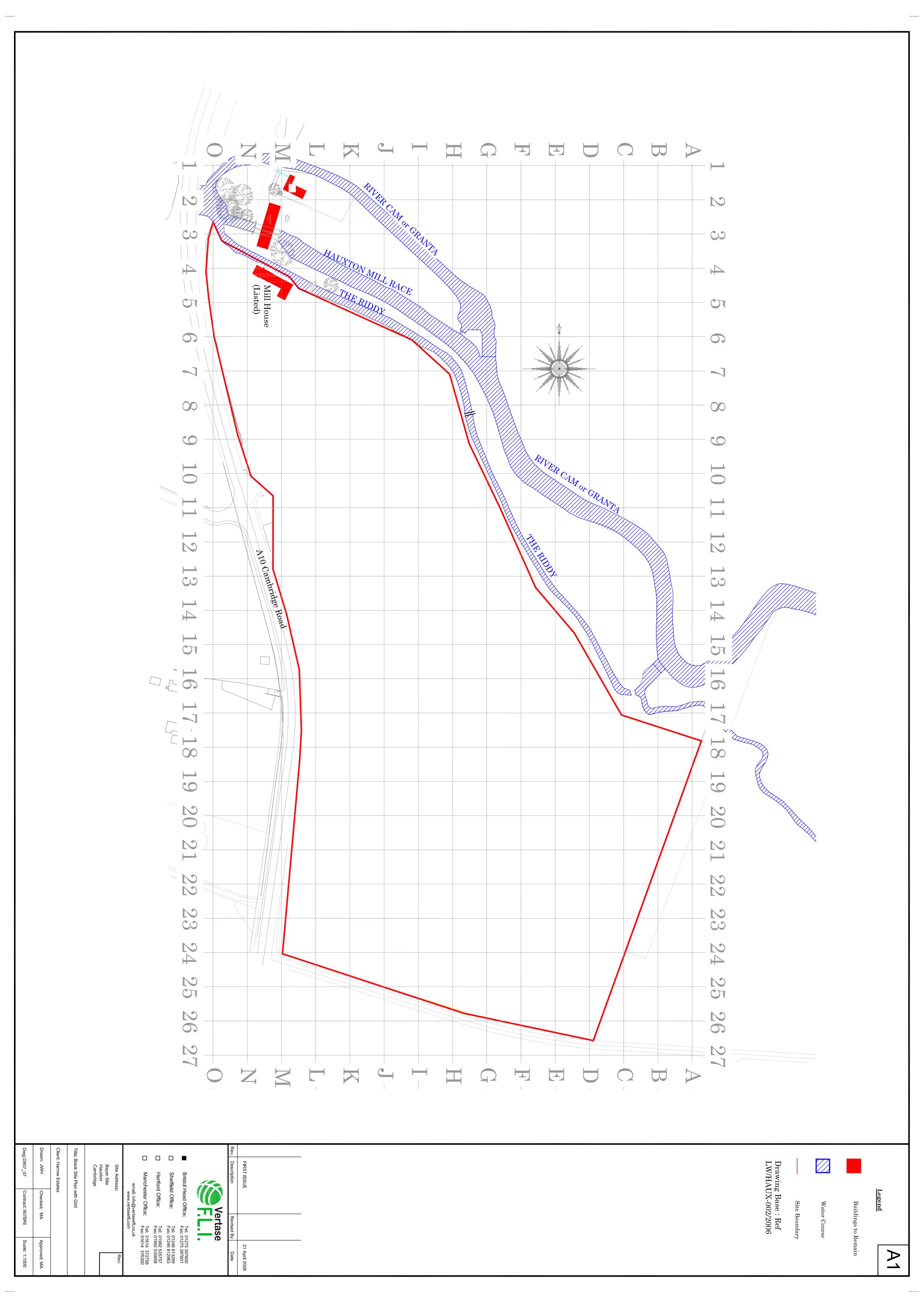
17

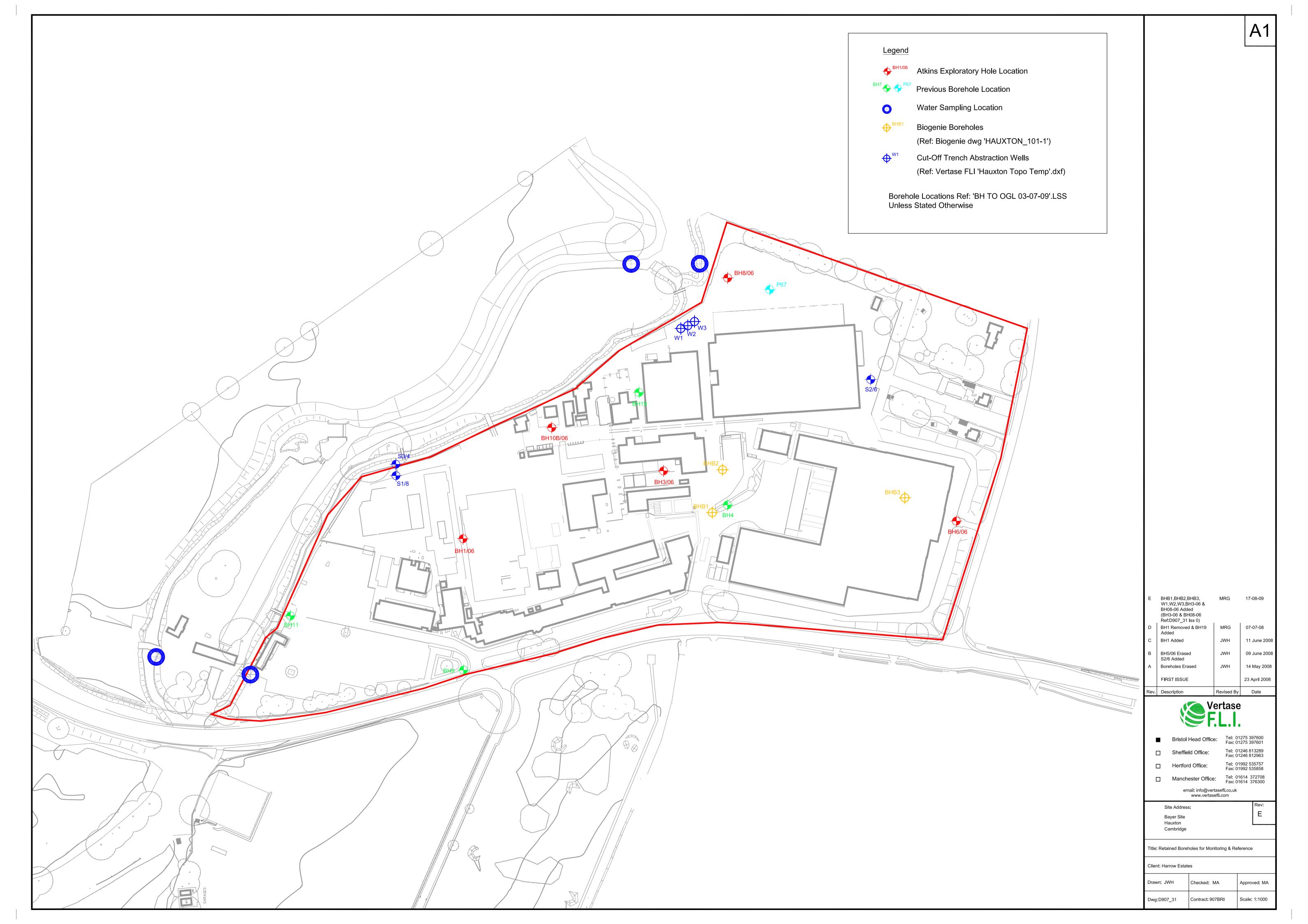
Covering Period: 1st May 2010 to 30th May 2010

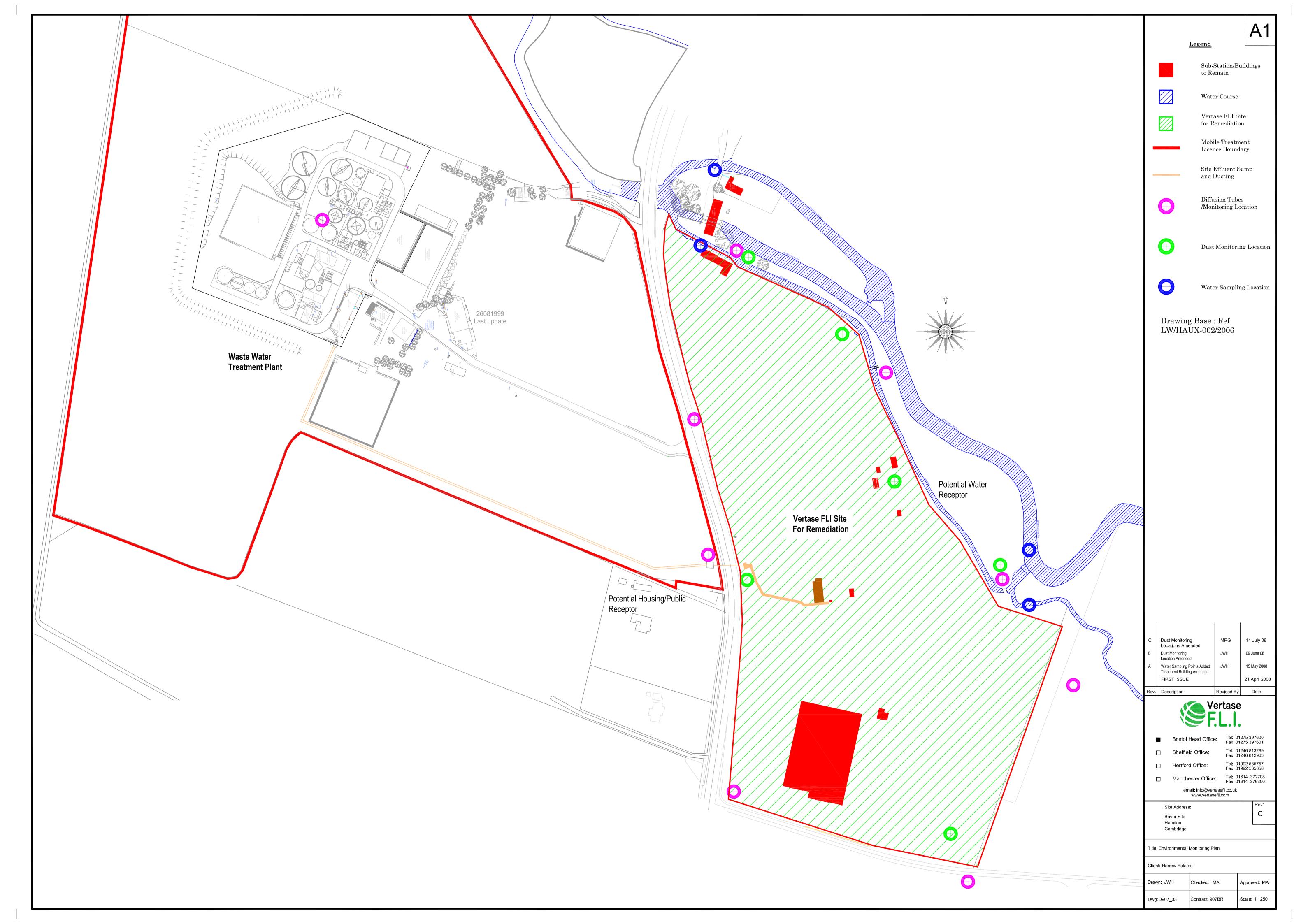


Appendix A

**Drawings** 









**Appendix B** 

**Environmental Monitoring Data** 

							ODOUR					DUST		NOISE	LITT	ER	R	IDDY BROOK		ME	TEOROLO	SICAL AND	DENVIRONMENTAL	CONDITION	
Assessor	Date	Daily Activity	Boundary	Start F	Finish Detectability Time (Yes or No)	Intensity (1 to 9)	Quality (Description)	Hedonic Tone	Location Odou Sensitivity Source	PID (nom)	Max Readin (µg/m3)	g TSP	PM10	Average (dBa)	Present (Description)	Materials attracting	Inspection	Water Level( Refer to Groundwater level data Comp	aints Action Req	ired Sp	ind Wir	d Air Temp	Description (Rain, Sun) (0 to 8	Ground Conditions (Wet, dry)	
I Stephenson	04/05/2010	K9 excavation	N	12.00	12.05 n	(1000)	No odour	(-3 to+3) 0	(1 to 5) (1 to 5	0	76.1	-		66.6	No	scavengers No	Clear	sheet) 9.131m AOD None	No		nph NNW	(C) 13.9		(Wet, dry) dry	General Notes no odour at church or organic food store
1 Stephenson	04/05/2010	K9 excavation K9 excavation		12.05	12.10 y 2	2 0	odour control	0	1 5	0	84.2			60.7	No	No	Clear	None None	No No						
I Stephenson I Stephenson	04/05/2010	K9 excavation K9 excavation	ш	12.15	12.20 n	1 2	No odour No odour	0	1 1	0	15.8			62.6 59.8	No No	No No	Clear	9.637m AOD None							
I Stephenson I Stephenson	04/05/2010	K9 excavation	S	12.25	12.30 y		nippleanum.	0	2 5	0	86.6			65.8	No.	No		None	No.						
Stephenson Stephenson	04/05/2010 04/05/2010	K9 excavation K9 excavation	SW W	12.35	12.35 v 12.40 v	3 i	ntermittent bed odour slight odour from lagoon	0	3 5	0	102.4			74.3	No No	No No		None None	increase odour contri lagoon no longer agit	ted					
l Stephenson	04/05/2010	K9 excavation	NW	12.40	12.45 n	1 r	no odour	0	2 1	0				70.4	No	No		None	No		+	+			Complaints record from New Lane (Vertase monitored location, no orders detected). Odour detected on church
																									Complaints record from New Lane (Vertase monitored location, no orders detected). Odour detected on church road, informed Sits Manager and repositioned odour fogger to gate area. Complaint record at 17.45 of furnes on The Lane. Vertase monitored location and victify, only door was detected at the junction between Church
T Walker	04/05/2010	K9 dig/ forming treatment beds	N	17.25	17.30 n	1 1	no odour no odour	0	3 1	0	78.4			38.4	No	No	Clear	None	No	3	NNW	14	Dry 3	dry	lane and the A10.
T Walker	04/05/2010	K9 dig/forming treatment beds	NE1	17.30	17.35			0		0	121 104 6			39.4	90	140	Clear Clear Clear	None	No.			$\pm$			
T Walker T Walker	04/05/2010 04/05/2010	V50 dy luminy trastrant hefe  V50 dy luminy trastrant hefe  V50 dy luminy trastrant beds	SE SE	17.35	17.40 n 17.45 n	1 1	no odour No odour subblegum	0	3 1	0	104.6			39.4 41.5	No No	No No	Clear	None None	No No		-	+			
T Walker T Walker	04/05/2010 04/05/2010	K9 dig/ forming treatment beds K9 dig/ forming treatment beds	S	17.10	17.15 y 2	2 t	cubblegum	+1	2 1	0	115.9			45.1 68.1	No No	No No		None None	No No			+			
T Walker	04/05/2010	K9 dig/ forming treatment beds	W	17.15	17.20 y 17.25 n	1 1	op No odour	-1	1 1	0	111.1			71.4	No Mo	No No		yes None	moved odour suppre	sion	_				
i vvalke:	04/05/2010	KS dig-forming seament beds	New .	17.20	17.2501		NO OGDGI		3 1					41.7	40	NO		Note							Slight odour control fragrances along Church Rd in places. Very faint odour noted by Atkins between Parish
l Stephenson	05/05/2010	Excavation of K7 and K8	N	11.00	11.05 n	1 1	No odour	0	1 1	0	21.7			52.9	No	No	Clear	9.132m AOD None	No	1	WWW	14.6	Dry 8	dry	Church and South of site. No odour at all between S and SW points of the site. No odour detected along south western boundary. Slight odour of excavation between NW and N locations.
I Stephenson I Stephenson	05/05/2010	Excavation of K7 and K8 Excavation of K7 and K8		11.05	11.10 y	3 1	emon zest	0	1 1	0	147.9 48.2			63.9	No	No	Clear	None None	No No		-				
l Stephenson l Stephenson l Stephenson	05/05/2010	Excavation of K7 and K8 Excavation of K7 and K8	E	11.15	11.20 n	1 1	No odour No odour	0	1 1	0	147.9 48.2 114.9			50.1	No No	No No	Clear	9.637m AOD None None	No No		_	$\blacksquare$			
I Stephenson	05/05/2010	Excavation of K7 and K8	S	11.25	11.30 y	3 1	emon zest	0	2 5	ō	88.8			53.3	No	No		None	No						
Stephenson Stephenson Stephenson	05/05/2010 05/05/2010	Excavation of K7 and K8 Excavation of K7 and K8	w	11.30	11.35 n 11.40 n	1 1	No odour No odour	0	3 1	0	70.8			71.2	No No	No No		None None	No No						
I Stephenson I Stephenson		Excavation of K7 and K8 K8 and K7 excavation	NW N	11.40	11.45 n	1 1	No odour No odour	0	2 1	0	41.1			60.9 59.2	No No	No No	Clear	None None	No No	0	NW	16.5	Dry 7	dry	Possible very faint intermittent odour between Parish Church and SW monitoring location
I Stephenson	05/05/2010	K8 and K7 excavation	NE NE1	16.35	16.40 n 16.45		No odour	0	1 1	0	49.8 65.7	$\vdash$	ı	70.3	No	No	Clear	None None	No No		Ŧ	H			
l Stephenson	05/05/2010	KS and KY A vacuasion KS and KY A vacuasion KS and KY avacuasion	E SF	16.45	16.50 n		No odour No odour	0	1 1	0	23.8			56.7	No No	No No	Clear	None	No No		1	+			
l Stephenson	05/05/2010	KB and K7 excavation	S	16.55	17.00 y	2 6	No odour odour from beds No odour	0	2 3	0	57.7			66.3	No	No		None	No			$\pm$			
l Stephenson	05/05/2010 05/05/2010	K8 and K7 excavation	W	17.10	17.05 n			0	3 1	0	48.7			68.7 68.4	No.	No.		None None	No No		ᆂ				
I Stephenson I Stephenson	05/05/2010 06/05/2010	KB and K7 excavation trial pitting	NW N	17.15 9.30	17.20 n 9.35 n	1 1	No odour No odour No odour	0	2 1	0	54	_		73.2 55.5	No No	No No	Clear	9.133m AOD None	No No	<del>- </del> -	ENE	11.2	Dry 8	d	Faint odour control fragrance down Church Rd
I Stephenson I Stephenson I Stephenson I Stephenson I Stephenson I Stephenson	06/05/2010	KS and KY accusation KS and KY accusation Riad printing Read Printing Re	NE NF1	9.30 9.35 9.40	9.40 n		No odour	0	1 1	0	37.8 16.6	-	-	78.7	No	No	Clear	None	No No		-	Ħ			
1 Stephenson	06/05/2010	trial pitting	E	9.45	9.50 n	1 1	No odour	0	1 1		50.6			58.2	No	No	Clear	9.648m AOD None	No						
l Stephenson	06/05/2010	trial pitting	S	9.50 9.55	9.00 h 10.00 h	1 1	No odour No odour	0	2 1	0	39.5			64.2	No.	No		None None	No			$\pm 1$			
l Stephenson I Stephenson	06/05/2010 06/05/2010	trial pitting trial pitting	SW	10.00	10.05 n	1 P	No odour agoon odour?	1	3 1	0	133.6			69.8 59.4	No No	No No		None None	No No		_	土		<u> </u>	
Stephenson Stephenson	06/05/2010	trial pitting Trial pitting & K8 Excavation	NW N	10.10	10.15 n		No odour No odour	0	2 1	0	46.9	+	H	67.8 57.5	No No	No No	Clear	None None	No No	3.5	mph WSW	25.9	sun 1	dry	Slight site odour & lemon zest odour on Church Road. Lemon zest odour control fragrance on A10
Stephenson	06/05/2010	Trial pitting & K8 Excavation	NE NE	16.50	16.55 n	1 1	No odour	0	1 1	0	140.6 139.4			59.4	No	No	Clear	None	No No						
1 Stephenson	06/05/2010	Trial pitting & K8 Excavation Trial pitting & K8 Excavation	E	16.55	17.05 n	1 1	No odour	0	1 1	0				58.7	No	No	Clear	None None	No						
I Stephenson I Stephenson	06/05/2010 06/05/2010	Trial pitting & K8 Excavation Trial pitting & K8 Excavation	S	17.05	17.10 n 17.15 n	1 1	No odour No odour	0	1 1	0	134			54.1 58.4	No No	No No		None None	No No		-	+			
I Stephenson I Stephenson I Stephenson I Stephenson	06/05/2010 06/05/2010	Trial pitting & KS Excavation		17.15 17.20	17.20 n	1 1	No odour No odour	0	3 1	0	9.8			72	No No	No No		None None	No No		+				
l Stephenson	06/05/2010	Trial pitting & K8 Excavation		17.25	17.30 n	1 1	No odour	0	2 1	0				60.2	No	No		None	No						
																		9.133m AOD None							Faint treatment bed odour along church road. Intermittent and strong odour control lemon zest - very obvious. Strong odour next to excavation, stopped excavating that particular material to mitigate odour migration.
l Stephenson l Stephenson	07/05/2010 07/05/2010	Bed turning and excavation Bed turning and excavation	N NE	12.15	12.20 n 12.25 n	1 P	No odour no odour	0	1 1	0	98.4 15.3			56.9 50.1	No No	No No	Clear	9.133m AOD None None	No No	5.3	NNE	18.4	Dry 7	dry	Strong odour next to excavation, stopped excavating that particular material to mitigate odour migration.
1 Stephenson 1 Stephenson	07/05/2010 07/05/2010	Bed turning and excavation Bed turning and excavation	NE1 E	12.25	12.30 12.35 n	1 1	no odour	0	1 1	0	13.4			58.2	No	No	Clear	9.648m AOD None	No No		+				
1 Stephenson	07/05/2010	Bed turning and excession feet turning and excession	SE S	12.35	12.40 n 12.45 n	1 r	no odour no odour no odour	0	1 1	0	100.4			57.8 64.3	No No	No No		None None	No No		_	$\blacksquare$			
1 Stephenson	07/05/2010	Bed turning and excavation	SW	12.45	12.50 y	2 1	emon zest	0	3 3	0	70.4			70	No	No		yes	None required - odou	control					
I Stephenson	07/05/2010	Bed turning and excavation	NW	12.55	13.00 y	3	no odour chlorinated phenol	1	2 5	0	76.1			68.9	No.	No		None	No.			15.5			
Stephenson Stephenson	07/05/2010 07/05/2010	bed turning & J8 bed turning & J8		16.00		1 1	No odour No odour	0	1 1	0	73.9 93.7			59.8 58.7	No No	No No	Clear	None None		6.9	N	- 1 - 1		dry	Prominent odour control smell on Church Road between S and SW
I Stephenson I Stephenson I Stephenson I Stephenson	07/05/2010 07/05/2010	bed turning & JB bed turning & JB bed turning & JB bed turning & JB	NE1 E	16.10	16.15 16.20 n	1 1	No odour	0	1 1	0	8.9 34.8			54.2	No	No	Clear	None None	No No		+	+			
Stephenson	07/05/2010	bed turning & J8		16.20		3 \$	summer fruit	1	1 4	0	7.0			51.6	No No	No No		None	No No		_				
Stephenson	07/05/2010	bed turning & J8 bed turning & J8 bed turning & J8	SW	16.25 16.30 16.35	16.35 y	3 5	No odour summer fruit	1	3 4	0				69.9	No	No		None	No						
Stephenson	07/05/2010	bed turning & J8 bed turning & J8	NW	16.40	16.45 n	1 1	No odour No odour	0	3 1 2 1	0	285.8			63.7	No No	No No		None None	No No						
l Stephenson		bed turning	N	9.50	9.55m	1 1	No odour	0	1 1	0	20			53.4	No	No	Clear	9.133m AOD None	no	2.6	NNE	15.3	Dry 7	dry	Outside parish Church - no odour, faint treatment bed odour on Church Road with odour control suppressant more being more obvious
I Stephenson I Stephenson	10/05/2010	bed turning bed turning	NE NF1	9.55	10.00 n	1	No odour	0	1 1	0	43.8 90.2			55.9	No	No	Clear Clear	None None	00						
Stephenson	10/05/2010	bed turning	E	10.05	10.10 n	1 1	No odour No odour	0	1 1	0	130.3			56.9	No Mo	No No	Clear	9.648m AOD None	00		_				
1 Stephenson	10/05/2010	bed turning	S	10.15	10.20 y	3 1	emon zest	1	2 5	0	110.8			56.8	No	No		None	no						
1 Stephenson	10/05/2010	look furning sed f	W	10.25	10.30 y	2 1	slight bed odour & odour control slight bed odour & odour control slight bed odour & odour control	0	3 3	ő	92.2			70.2	No	No		None None	no		_				
T Walker	10/05/2010	bed turning bed turning out of J7		10.30		1 C	No odour	0	4 3 3 1	0	21.4			/3.6 48.7	No.	No.	Clear	None None	no no	3	NNW	1.4	Dry 6	dry	Slight odour on Church Road and footpath near to Riddy brook, phoned the EA to tell them
T Walker T Walker	10/05/2010 10/05/2010	bed turning/digging out of J7 bed turning/digging out of J7	NE NE1	14.58 15.05	15.00 n 0	0	No odour	0	3 1	0	45.6 37.6	+ -	$\vdash$	47.6	No	No	Clear Clear	None None	no no	$-\mp$		$+ \exists$		$\vdash$	
T Walker T Walker	10/05/2010	bed turning/digging out of J7 bed turning/digging out of J7	E SE	15.10	15.15 y 14.35 n	1	Hydrocarbon No odour	1 0	3 1	0	52.1			47.7 56.6	No No	No No	Clear	None	no no			$\blacksquare$			
T Walker	10/05/2010	bed turning/digging out of J7	S	14.35	14.38 n	5	No odour	0	2 1	0	41.1			58.1	No.	No No		None None				$\mp$			
T Walker	10/05/2010	hed turning/digging out of J7	W	14.40	14.50 n	1	Hydrocarbon No odour	0	1 1	0	110.6			71.4	No.	No		None None	no			$\pm 1$			
T Walker I Stephenson	1u/05/2010 11/05/2010	bed turning/disgring out of J7 J8 excit/validin J8 excit/validin J8 excit/validin J8 excit/validin	NW N	14.50	14.55 n (	1 1	No odour No odour	0	2 1 1 1	0	52.8			70.8 56	No.	No No	Clear	9.132m AOD None	no no	2m	ph ENE	14.9	Dry 6	dry	No odour at church or organic food store. No obvious odour along church road
Stephenson Stephenson	11/05/2010	J8 excavation J8 excavation	NE NE1	10.25	10.30 n	1	No odour	0	1 1	0	42.6 123.4	+	+	52.8	No	No	Clear	9.132m AOD None None None	no no			$+ \exists$		-	
		Use excavation Use excavation	E SF	10.35	10.40n 10.45n	1	No adour No adour	0	1 1	0	248.1			48.9 47.3	No No	No No	Clear	9.646m AOD None None	00						
I Stephenson	11/05/2010	J8 excavation	S	10.45		1 1	No odour	0	2 1	0	86.6			58.3	No	No		None	no		=	1 1			
Stephenson Stephenson	11/05/2010 11/05/2010	J8 excavation J8 excavation J8 excavation J8 excavation J8 excavation	w W	10.50	10.55 n 11.00 n	1 1	No odour No odour	0	3 1	0	124.5			63.3 58.9	No No	No No		None None	no no						
			NW	11.00	11.05 n		No odour	0	2 1	0				71.2	No	No		None	no		┿			<u> </u>	Very slight odour on church road, intermittent with odour control fragrance and natural odour, on A10 consistent
1 Stephenson 1 Stephenson	11/05/2010	JB excavation JB excavation	N NE	17.00	17.05 n	1 1	No odour No odour	0	1 1	0	5.1 3.7	1	1	68.3 58.4	No No	No No	Clear	None	no no	1.3	mph NE	20	sun/dry 6	dry	Very slight odour on church road, intermittent with odour control fragrance and natural odour, on A10 consistent with W wind
1 Stephenson	11/05/2010	J8 excavation J8 excavation	NE1	17.10	17.15		No odour	0			11.9			50.5	Mo	Mo	Clear	None	no		=	$\pm 1$			
1 Stephenson	11/05/2010	J8 excavation J8 excavation	SE	17.20	17.25 n	1	No odour	0	1	0	94.9			47.8	No	No	undall	None None	100			$\pm 1$			
l Stephenson l Stephenson	11/05/2010 11/05/2010	J8 excavation J8 excavation	SW	17.25 17.30	17.30 y 17.35 y	3 5	summer fruit summer fruit	1	2 5 3 5	0	5.3			54.2 71.2	No No	No No		None None	no no		┿	+7		<u> </u>	
Stephenson I Stephenson I Stephenson I Stephenson I Stephenson I Stephenson I Stephenson I Stephenson I Stephenson	11/05/2010	J8 excevation J8 excevation J8 excevation	W	17.35	17.40 y 17.45 y		summer fruit	1	3 5	0	44.5			63.8	No No	No No		None	no no			$\blacksquare$			
l Stephenson	12/05/2010	J8 excavation	N	9.20	8.35n		No odour	0		Ĺ	20.7			55.0	Mo	No	Clear	9.132m AOD None			ph N	9.5	Dou 6	des	No odour at church or organic health store, slight odour - odour control and occasional bed smell along church
1 Stephenson	12/05/2010	JB excavation	NE	8.35	8.40 n		No odour	0	i	0	9.2			53.9	No.	No	Clear	None	no	1m	ped IN			ату	ruinu
l Stephenson l Stephenson	12/05/2010 12/05/2010	J8 excavation	NE1 E	8.40 8.45	8.45 8.50 n	1	No odour	0	1 1	0	2.3	_		57.1	No	No	Clear	9.640m AOD None			_			<u> </u>	
I Stephenson I Stephenson I Stephenson I Stephenson	12/05/2010	IR executation	S	8.45 8.50 8.55	9.00 v	1 1	No odour odour control	0	1 1 2	0	36.3			48 53.3	No No	No No		None None	no none - inoffensive						
Stephenson	12/05/2010	38 excevation  18 excevation		9.00	9.05 n	1	No odour	0	3 1	0	24.4			68.6	No Mo	No No		None	no						
			NW	9.05	9.10y 9.13y	3 6	excavation odour excavation odour	1	2 5	0	-2.7			71.4	No.	No		None None	Place fogger when b	ck on ??		$\pm$			
T Walker T Walker	12/05/2010 12/05/2010	J8 excevation J7/J8 dig at turning beds J7/J8 dig at turning beds	N NE	17.25	17.30 n	1 1	No odour No odour	0	3 1	0	68.4 137.4	_		27.2 37.1	No No	No No	Clear	None None	no		_	土		<u> </u>	Very faint to faint odour on church road near the church, strong odour near NW monitoring section
T Walker	12/05/2010	J7/J8 dig at turning beds	NE1 E	17.20	17.25 17.40 n	,	No odpur	0	3 1	0	97 A	+	+	54.4	No	No	Clear	None None	no no			H			
T Walker	12/05/2010	277-06 dig at turning beds 171.88 dig at turning beds	SE	17.40	17.45 n	1 1	No odour	0	3 1	0	74.0			47.1	No Mo	No No		None None	no stopping digging in 1	lour.		$\blacksquare$			
T Walker	12/05/2010	J7/J8 dig at turning bods	SW	17.10	17.15 y	2	rCP.	-1	1	0	. 7.0			57.4	No	No		None	no no	- ward		$\pm$			
I waker	12/05/2010	AVVe and we minimal perce	rr .	17.15	17.200		NO OGOUF	U	, p	U	07.4		1	08.1	NU	NU		None	pi0			-1		1	1

Second   S	T Walker 12/05/2010 U7/J8 dig at turning beds	NW 17.20 17.25 v 2	TCP		31.1 No N		None no		
		N 40.20 40.25 0	No odour 0 1 1 0	27.2	67.0 No. N	Clear 9 132m AOD	None ee	2 2meh W 17 1 mm 4	no odour at church or organic food store. Possible odour control between church and S. Faint odour control
Column	Stephenson 13/05/2010 Excavation K9	NE 10.25 10.30 n 1	No odour 0 1 1 0	106.8	56.5 No N	Clear STISSHI ACCU	None no	2.2mpm W 17.1 sun 4	ory Deween declared and S. Fam odders along eastern oddroary - memmors
Column	Stephenson 13/05/2010 Excavation K9 I Stephenson 13/05/2010 Excavation K9	NE1 10.30 10.35 E 10.35 10.40 n 1	No odour 0 1 1 0	34.5	61.5 No N	Clear 9.649m AOD	None no None no		
Column	Stephenson   13/05/2010 Excavation K9	SE 10.40 10.45 n 1	No odour 0 1 1 0	71.2	61.9 No N		None no		
Column	Stephenson 13/05/2010 Excavation K9	SW 10.05 10.10 n 1	No odour 0 3 1 0	712	60.6 No N				
Column	Stephenson 13/05/2010 Excavation K9 Stephenson 13/05/2010 Excavation K9	W 10.10 10.15 v 3 NW 10.15 10.20 n 1	No odour 0 2 4 0	142	63.5 No N 64.2 No N		None no None no		
Column	Stephenson   13/05/2010 Excavation K9	N 17.15 17.20 n 1	No odour 0 1 1 0	2.5	61.3 No N	Clear	None no	5.1mph SW 18.8 sun 2	dry strong odours between N and NE, consistent with wind direction
	i Suprierisori i 13/05/20 to excavation K9	NE1 17.25 17.30		42.1	W. 1	Clear	None no		
	Stephenson 13/05/2010 Excavation K9  Stephenson 13/05/2010 Excavation K9	SE 17.30 17.35 1 SE 17.35 17.40 2	odour control 0 1 5 0	25	45 No N	o Clear			
	Stephenson 13/05/2010 Excavation K9	S 17.40 17.45 n 1	No odour 0 2 1 0	11.5	56.3 No N				
	Stephenson 13/05/2010 Excavation K9	W 17.50 17.55 n 1	No odour 0 3 1 0	64.2	68 No N				
Column		NW 17.55 18.00n 1			bb No N	· -	None no		
Column	Stephenson 14/05/2010 K9 excavation	N 10.20 10.25 n 1 NE 10.25 10.30 n 1	No odour 0 1 1 0 No odour 0 1 1 0	5.3 86.4	59 No N 71.4 No N	Clear 9.132m AOD	None no None no	12 SSW 13.8 sun 2	dry No odour at church or organic food store. Silver mondeo pulled up at exactly 10.00 on church road. Y603 GEX
Column	Stephenson 14/05/2010 K9 excavation	NE1 10.30 10.35		7.1	70 No. 10	Clear	None no		
Column	Stephenson 14/05/2010 K9 excavation	SE 10.40 10.45 n 1	No odour 0 1 1 0	39.7	52.4 No N	S Clear Steam ACC	None no		
Column	Stephenson 14/05/2010 K9 excavation Stephenson 14/05/2010 K9 excavation	S 10.00 10.05 n 1 SW 10.05 10.10 n 1	No odour 0 2 1 0 No odour 0 3 1 0	57.7	59.1 No N 67.7 No N		None no None no		
1	Stephenson 14/05/2010 K9 excavation	W 10.10 10.15 n 1	No odour 0 3 1 0	47.6	71.3 No N		None no		
1	T Walker 14/05/2010 Digging out K9 forming treatment beds	N 15.28 15.30 n 1	No odour 0 3 1 0	67.4	58.1 No N	Clear	None no		
1	T Walker 14/05/2010 Digging out K9 forming treatment beds T Walker 14/05/2010 Digging out K9 forming treatment beds	NE 15.30 15.30 n 1 NE1 15.35 15.35	No odour 0 3 1 0	58.7 88.7	37.4 No N	Clear Clear	None no None no		
1	T Walker 14/05/2010 Digging out K9 forming treatment beds	E 15.40 15.45 n 1	No odour 0 3 1 0	94.4	45.1 No N	Clear	None no		
	T Walker 14/05/2010 Digging out K9 forming treatment beds	S 15.05 15.10 n 1	No odour 0 2 1 0	112.7	37.7 No N		None no		
	T Walker 14/05/2010 Digging out K9 forming treatment beds T Walker 14/05/2010 Digging out K9 forming treatment beds	SW 15.10 15.15 n 1	No odour 0 1 1 0 No odour 0 1 1 0	105.1	39.4 No N 41.1 No N		None no None no		
	T Walker 14/05/2010 Digging out K9 forming treatment beds	NW 15.20 15.25n 2	solvent odour 0 2 1 0	12.5	43.3 No N	Clear 9 121m AOC	None no	1 Emph WMW 12 8 Day	des on odeur at obserb or consels food stops slight intermittent odeur along austern house
Column   C		NE 9.40 9.450 1	No odour 0 1 1 0	117.6	53 No N	Clear		1.30 Dty /	wy no occur ac charen or organic rood state signs interminant cools along easiers boundary
Column	Stephenson 17/05/2010 K8 excavation Stephenson 17/05/2010 K8 excavation	E 9.50 9.55 n 1	No odour 0 1 1 n	115.4	50.5 No N		None no	+ + + + + +	+ +
Column	Stephenson 17/05/2010 K8 excavation	SE 9.55 10.00 n 1	No odour 0 1 1 0	10.5	52.3 No N				
Column	Stephenson 17/05/2010 K8 excavation	SW 9.20 9.25 n 1	No odour 0 3 1 0	10.5	68 No N		None no		
Column   C	Stephenson 17/05/2010 K8 excavation Stephenson 17/05/2010 K8 excavation	W 9.25 9.30n 1 NW 9.30 9.35n 1	No odour 0 3 1 0 No odour 0 2 1 0	73.9	71.6 No N 58.5 No N		None no None no	+	
The state of the	Steehanne   17/05/2010/09 averaging a cruphica	N 15 20 15 25 0	No odour	24.2	57.1 No 1.	Clear	None ee	1 2mph WMW 10 2 mm	No odour at church or organic food store. Very slight odour control along church road, slight odour along easter
Column	Stephenson 17/05/2010 K8 excavation - crushing		No odour 0 1 1 0	39.8	59.7 No N	Clear	None no	cmpm www. 19.3 Isun 3	wy odmany - mannounc
Column	Stephenson   17/05/2010 K8 excavation - crushing   Stephenson   17/05/2010 K8 excavation - crushing	NE1 15.30 15.35	No odour 0 1 1 0	121 3.6	48.2 No N	Clear	None no		
Column	Stephenson   17/05/2010 KB excavation - crushing	SE 15.40 15.45 n 1	No odour 0 1 1 0	11.7	51.2 No N		None no		
Column	Stephenson   17/05/2010 K8 excavation - crushing     Stephenson   17/05/2010 K8 excavation - crushing	SW 15.05 15.10 1	No odour 0 2 1 0 No odour 0 3 1 0	11.7	71.9 No N		None no		
Column	Stephenson   17/05/2010 K8 excavation - crushing   Stephenson   17/05/2010 K8 excavation - crushing	W 15.10 15.15 n 1	No odour 0 3 1 0 No odour 0 2 1 0	243.1	69.9 No N 72.6 No N		None no		
Company   Comp		N 11.25 11.30 n	0	64.2			None no		
Company   Comp	M Longman 18/05/2010 K8/9 excavation  M Longman 18/05/2010 K8/9 excavation	NE 11.30 11.35V 4 NE1 11.35 11.40	nawthorn 2 1 1 0	75.7 41.4	54.4 NO N	Clear	None no		
Company   Comp	M Longman 18/05/2010 K8/9 excavation	E 11.40 11.45 n	odour supposessed 4 4 4 0	191.6	53.7 No N	Clear 9.649m AOD	None no		
Column   C	M Longman 18/05/2010 K8/9 excavation		hawthorn 2 3 1 0	164.2	58.4 No N		None no		
Company   Comp									No odour at church or organic farm. Slight breeze towards. Call received from MA about complaint from Mr Elliot's site, no odour detected. Dog walker on south east (wood) said odour suppressant was not nice and did
Company   Comp	M Longman 18/05/2010 K8/9 excavation	SW 11.10 11.15 n	0	165 1	53.4 No N			1 5 23.3 sunny 2	dry not smell like bubblegum
Company   Comp	M Longman 18/05/2010 K8/9 excavation		intermittent odour suppressant a -1 2 3 0	102.1	77.1 No N				
Company   Comp	Stephenson 18/05/2010 K8/K9 excavation	N 17.20 17.256 NE 17.25 17.30 y 5	hawthorn 2 1 1 0	94.6	57.7 No N	Clear	none no	1 SSE 19.9 dry /	dry odour control between SW and W faint (Faint). TCP odour (Weak) between W and n
March   1975   Propriet and p	Stephenson 18/05/2010 KB/K9 excavation Stephenson 18/05/2010 KB/K9 excavation	NE1 17.30 17.35 E 17.35 17.40 n	1 0	28.7	51.6 No N	Clear Clear	none no		
March   1975   Propriet and p	Stephenson 18/05/2010 K8/K9 excavation	SE 17.40 17.45 n	1 0		55.7 No N		none no		
March   1975   Propriet and p	Stephenson 18/05/2010 KB/K9 excavation	SW 17.00 17.05 n	4 0	134.3	71.4 No N		none no		
March   1975   Propriet and p	Stephenson 18/05/2010 K8/K9 excavation	W 17.10 17.15 y 3	odour control 0 4 2 0 polleophiossom 1 2 1 0	162.2	62.5 No N 69.8 No N		none no		
Company   Comp									no odour at church or organic food shop. No odour along church lane - consistent with wind direction. Passes
Part	Stephenson 19/05/2010 K9 excavation and concrete crushing	N 9.50 9.55 n	0	166.5	64.2 No N	Clear 9.130m AOD	None no	2.9 mphSSE 16.3 sunny 0	dry Possible bed placement - consistent with wind direction.
Part	Stephenson 19/05/2010 K9 excavation and concrete crushing	NE 9.55 10.00 y 3	hawthom 1 1 1 0	78.3 80.9	57.6 No N	Clear Clear	None no		
Second Second Accordance (1985)   1985   1	Stephenson   19/05/2010 K9 excavation and concrete crushing	E 10.05 10.10 n	1 0	151.6	55.5 No N	Clear 9.650m AOD			
Part	Stephenson 19/05/2010 K9 excavation and concrete crushing  Stephenson 19/05/2010 K9 excavation and concrete crushing	S 9.30 9.35 n	2 0	109.3	52.8 No N 60.6 No N		None no None no		
Part	Stephenson 19/05/2010 K9 excavation and concrete crushing	SW 9.35 9.40 n	4 0	254	58.8 No N				
Page	Stephenson 19/05/2010 K9 excavation and concrete crushing	NW 9.45 9.50 v 4	fir tree 1 2 1 0	134	64.4 No N		None no		
Part	T Walker 19/05/2010 Digging out 39 and forming 18's also turning T Walker 19/05/2010 Digging out 39 and forming TB's also turning		No odour 0 1 1 0	34.2 332.3	57.3 No N		None no	1 SSW 20 sun 8	dry 2 complaints today from the lane and church road. No odours anywhere off site
Table   1	T Walker 19/05/2010 Digging out J9 and forming TB's also turning T Walker 19/05/2010 Digging out J9 and forming TB's also turnion	NE1 16.25 16.30 n 1	No odour 0 1 1 0	746.1 106	37.1 No N 43.1 No N		None no	++	
Table   1	T Walker 19/05/2010 Digging out J9 and forming TB's also turning	SE 16.45 16.50n 1	No odour 0 1 1 0		69.7 No N		None no		
Table   1	Walker 19/05/2010 Digging out J9 and forming TB's also turning T Walker 19/05/2010 Digging out J9 and forming TB's also turning	CW 16 10 16 10 1	No odour	114	72.1 No N		None no		
Table   1	T Walker 19/05/2010 Digging out J9 and forming TB's also turning T Walker 19/05/2010 Digging out J9 and forming TB's also turning	W 16.15 16.15n 1	No odour 0 1 1 0 No odour 0 1 1 0	144	73 No N 64.2 No N		None no	+	
Column   C									member of the public complained on church road and A10 of smell of MCPA /MCPp, what was going to be done
Column   C	T Walker 20/05/2010 Digging from J9/concrete crushing/forming TB's/Turning TB's	N 10.30 10.35 n 1	No odour 0	72.4	67.4 No N		None no	2.1 NNW 20 dry 6	dry they were only POW's and his dog turned yellow
Supplement   Displement   Dis	T Walker 20/05/2010 Digging from J9/concrete crushing/forming TB's/Turning TB's T Walker 20/05/2010 Digging from J9/concrete crushing/forming TB's/Turning TB's	NE 10.35 10.40 n 1 NE1 10.35 10.40 n 1	No odour 0 0 0	114.8	57.8 No N 57.8 No N	Clear Clear	None no	+	
Supplement   Displement   Dis	T Walker 20/05/2010 Digging from Jilliconcrete crushing/forming TB's/Turning TB's	E 10.40 10.45 n 1	No odour 0 0	127.4	27.4 No N	Clear 9.649m AOD	None no		
Supplement   Displement   Dis	T Walker 20/05/2010 Digging from J9/concrete crushing/forming TB's/Turning TB's		100 OJUUI U	97.4	37.4 No N		None no		
Supplement   Displement   Dis		SE 10.45 10.500 1 S 10.30 10.350 1	No odour 0 0						
Supplement   Displement   Dis	T Walker 20105/2010 Digging from J9/concrete crushing/forming TB's/Turning TB's T Walker 20105/2010 Digging from J9/concrete crushing/forming TB's/Turning TB's		pesticide -1   1   1   0	156.1	37.1 No N		None no None no		
September   1997   September	T Walker 2005/2016 Digging from Jäconcrete crushingforming TB's/Turning TB's T Walker 2005/2016 Digging from Jäconcrete crushingforming TB's/Turning TB's T Walker 2005/2016 Digging from Jäconcrete crushingforming TB's/Turning TB's T walker 2005/2016 Digging from Jäconcrete crushingforming TB's/Turning TB's		pesticide -1   1   1   0	156.1	37.1 No N 68.4 No N		None no None no None no		
September   1997   September	T Walker 2005/2016 Digging from Jisconcrete crushing/forming TB's Turning TB's T Walker 2005/2016 Digging from Jisconcrete crushing-forming TB's Turning TB's T Walker 2005/2016 Digging from Jisconcrete crushing-forming TB's Turning TB's S Turning	NW 10.45 10.50h 1 N 17.05 17.10h	pessicide -1 1 1 0 No odour 0	156.1	37.1 No N 68.4 No N 58.7 No N	Clear		4.2mph NNW 29.9 sun 6	slight Intermittent odour at church, consistent with wind direction. Treatment Bed odour (slight) and intermittent dry south of processing area
September   1997   September	T Waker 20050210 Dagger from 3/Economic curringforming TB9/Turring TB's TWaker 200502010 Sagger from 1/Economic curringforming TB9/Turring TB's TWaker 200502010 Sagger from 3/Economic curringforming TB9/Turring TB's 200502010 Sagger from 3/Economic Curringforming TB9/Turring TB's Saght-mass 200502010 Secusion of 3/E Saght-mass 200502010 Secusion of 3/E Saght-mass 200502010 Secusion of 3/E	NW 10.40 10.50 n 1  NW 10.45 10.50 n 1  N 17.05 17.10 n  NE 17.10 17.15 v 5	pesticide -1 1 1 0 No odour 0 hawthorn -1 1 1 0	156.1 171 296.9 60.9	37.1 No N 58.4 No N 58.7 No N 62.8 No N	Clear Clear		4.2mph NNW 29.9 sun 6	slight intermittent odour at church, consistent with wind direction. Treatment Bed odour (sligh) and intermittent dry south of processing area
September   1997   September	T Wake . 20052319 Obgrag for J. Riccords coulong/bring TB C Turning TB T.  Wake . 20052719 Obgrag for J. Riccords coulong/bring TB C Turning TB T.  Tillake . 20052719 Obgrag for J. Riccords coulong-bring the Turning TB T.  Tillake . 20052719 Obgrag for J. Riccords coulong-bring TB C Turning TB T.  Tillake . 20052719 Obgrag for J. Riccords of J. B.  Stagfarenoon . 20052719 Obgrag for J. Riccords of J. B.  Stagfarenoon . 20052719 Obgrag for J. Riccords of J. B.  Stagfarenoon . 20052719 Obgrag for J. Riccords of J. B.	NW 10.40 10.40 1 NW 10.45 10.50 n 1 N 17.05 17.10 n NE 17.10 17.15 y 5 NE1 17.15 17.20 E 17.20 17.25 n	pessicide	156.1 171 296.9 90.9 115.3	21.1 No N 68.4 No N 58.7 No N 62.8 No N 57.2 No N		None no None no None no None no	4.2mph NNW 29.9 sun 6	sigh Intermitent odour at church, consistent with wind direction. Treatment Bed odour (slight) and intermittent obor of proceeding area.
September   1997   September	T Waker . 2005/2018 Opgrage how / Reconstruct counterplanning 'TB' F F many 'TB' S.  "Waker . 2005/2018 Opgrage how / Reconstruct counterplanning 'TB' F many 'TB' S.  "Waker . 2005/2018 Opgrage how / Reconstruct counterplanning 'TB' F many 'TB' S.  Sentenco . 2005/2018 Opgrage how / Reconstruct on the Sentence TB' S. Villanning 'TB' S.  Sentenco . 2005/2018 Counterfor of JB .	NV 10.60 10.65 0.50h 1  N 17.05 17.10h  NE 17.10 17.15	pesticide	156.1 171 179.9 90.9 115.3 117.1	21.1 No No No No 88.4 No No No 58.7 No No No 52.8 No No No 57.2 No No No 56.3 No No No S6.3 No No No S6.1 No No No No No No S6.1 No		None no	4 2mph NNW 29.9 sun 6	sign resembles odor at church, consistent with wind director. Treatment Bed odor (sign) and marritism day to the forcessing area.
Supplement   1/5/5/2015 Exception of 3P   N   9.05   5.10   1   0   195.8   MS   2   No   No   Data   1.51   A   No   Data   A   No   Data   1.51	Stephenson   20050010 Securation of JB	WY 10-60 (10-65) (1-55) 1  NY 17-05 (17-10-)  NE 17-10 (17-15) 5  NE1 17-15 (7-20) 6  E 17-20 (17-25) 5  E 17-20 (17-25) 5  S 16-65 (16-50) 5  SW 16-60 (16-55) 9	pesticide	156.1 171 206.9 90.9 115.3 117.1	21.1 NO N 58.4 NO N 58.7 NO N 62.8 NO N 57.2 NO N 54.3 NO N 64.1 NO N		None no	4.2mph NNW 29.9 sun 6	sign resonance and church, consistent with wind direction. Treatment Bed obtain (slight) and intermittent day and information area.
September   1/05/07/05   September   1/05/07	Statemen   2007/2016   Exception of JP	77 10-05 10-29 10-29 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	pesticide	156.1 171 256.9 116.3 117.1 6.6	21.1 NO. N N. N B8.4 No. N S8.7 No. N S2.8 No. N S7.2 No. N S7.2 No. N S7.2 No. N S8.1 No. N		None no	4.2mph NRW 29.9 sun 6	dry south of proceeding para
Supplement   1950000   Supplement   1950000   Supplement   195000   Supplement   1950000   Supplement   1950000   Supplement   195	Statemen   2007/2016   Exception of JP	10.55 10.59 6 5 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	peptide	1561 1 171 296.9 60.0 115.3 117.1 11	2.1.1 No. N. N. N. S.	Clear	None no	4.2mph New 29.9 sun 6	dry south of processing area  or other processing area
Control   Cont	Statemen   2007/2016   Exception of JP	10.55 10.59 6 5 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	peptide	156 1  171 286 9 60 9 115.3  117.1  15.6  15.6  15.8  15.8  15.8	2.1.1 NO. N. N. SE. T. N. SE. T. N. N. N. SE. T. N. SE.	Dear Dear Dear Dear Dear Dear Dear Dear	None 00	4.2mph NNV 29.9 sun 6	dry south of processing area  or other processing area
Supplement   1/500/2006 Recentation of all   Supplement   1/500/	Statemen   2007/2016   Exception of JP	NW   10.45   10.56   1   1   1   1   1   1   1   1   1	peptide	156 1 171 206 9 105 3 115 3 117 1 1.50 8 1.50 8	2.1.1 No.0 N. N. N. S. S. A. N. N. S. S. A. N. N. N. S. S. A. N. N. S. S. S. T. N. N. N. S. S. S. S. N. N. N. S. S. S. S. N. N. N. S. S. S. S. S. N. N. N. S. S. S. S. S. S. S. S. N. N. N. S. S. S. S. N. N. N. N. N. S. S. S. N.	Dear Dear Dear Dear Dear Dear Dear Dear	None 00	4.2mph NNW 29.9 sun 8	dry south of processing area  or other processing area
	Statemen   2007/2016   Exception of JP	NW 10-46 19-56 4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Description   1	106.1 171 171 172 182 183 183 183 184 185 185 185 185 185 185 185 185	27.1 No.	Dear Dear Dear Dear Dear Dear Dear Dear	None 00	A 3mph N00V 29.5 sun 6	dry south of processing area  or other processing area
U reases   P. 14-65   Marg.   P. 14-65   Marg.   P. 14-65   P. 14-	Statemen	NW 10-46 19-56 4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	pecicle	156.1 171 206.9 106.2 117.1 116.2 117.1 1.6.6 6.6 1.7.1 1.7.1 2.7.1	1,1   1,0	Dear Dear Dear Dear Dear Dear Dear Dear	None 00	4 Joseph 9800 29.9 sun 6	dry south of processing area  or other processing area
Tribat   1500000 Suggregal all month bods   NET   14,10   15   15   15   15   15   15   15	Statemen	100.41   100.51   1	pecicle	155.1 11.1 12.1 12.1 12.5 12.5 12.5 12.5	1.1.1 No.	Dear Dear Dear Dear Dear Dear Dear Dear	None 00	1 NNE 25.1 sun 0	dry south of processing area  and processing area  by a colour at church or at organic bood shop, slight odours behind bed area, slight odour control between 5 and dry St monitoring booking.
Table   155,000   Segretar   Records   Recor	Statemen	100.41   100.51   1	pecicle	116.1 117. 128. 129.	1.5   1.5	Dear Dear Dear Dear Dear Dear Dear Dear	None 00	1 NNE 25.1 sun 0	dry south of processing area  and processing area  by a colour at church or at organic bood shop, slight odours behind bed area, slight odour control between 5 and dry sit of the colour at church or at organic bood shop, slight odours behind bed area, slight odour control between 5 and dry sit of the colours behind bed area, slight odour control between 5 and dry sit of the colours behind bed area, slight odour control between 5 and dry sit of the colours behind bed area, slight odour control between 5 and dry sit of the colours behind bed area, slight odour control between 5 and dry sit of the colours behind bed area, slight odour control between 5 and dry sit of the colours behind bed area, slight odour control between 5 and dry sit of the colours behind bed area, slight odour control between 5 and dry sit of the colours behind bed area, slight odour control between 5 and dry sit of the colours behind bed area, slight odour control between 5 and dry sit of the colours behind bed area, slight odour control between 5 and dry sit of the colours behind bed area, slight odour control between 5 and dry sit of the colours behind bed area, slight odour control between 5 and dry sit of the colours behind bed area, slight odour control between 5 and dry sit of the colours behind bed area, slight odour control between 5 and dry sit of the colours behind bed area, slight odour control between 5 and dry sit of the colours behind bed area, slight odour control behind bed area, slight odour control behind bed area.
1   1   1   1   1   1   1   1   1   1	Statemen	100.41   100.51   1	pecicle	156.5  111  121  128  128  129  139  149  149  149  149  149  149  14	1.5   1.5	Dear Dear Dear Dear Dear Dear Dear Dear	None 00	1 NNE 25.1 sun 0	dry south of processing area  and processing area  by a colour at church or at organic bood shop, slight odours behind bed area, slight odour control between 5 and dry sit of the colour at church or at organic bood shop, slight odours behind bed area, slight odour control between 5 and dry sit of the colours behind bed area, slight odour control between 5 and dry sit of the colours behind bed area, slight odour control between 5 and dry sit of the colours behind bed area, slight odour control between 5 and dry sit of the colours behind bed area, slight odour control between 5 and dry sit of the colours behind bed area, slight odour control between 5 and dry sit of the colours behind bed area, slight odour control between 5 and dry sit of the colours behind bed area, slight odour control between 5 and dry sit of the colours behind bed area, slight odour control between 5 and dry sit of the colours behind bed area, slight odour control between 5 and dry sit of the colours behind bed area, slight odour control between 5 and dry sit of the colours behind bed area, slight odour control between 5 and dry sit of the colours behind bed area, slight odour control between 5 and dry sit of the colours behind bed area, slight odour control between 5 and dry sit of the colours behind bed area, slight odour control between 5 and dry sit of the colours behind bed area, slight odour control between 5 and dry sit of the colours behind bed area, slight odour control behind bed area, slight odour control behind bed area.
If Values         2 1/05/2019         Supplement         1/4 <td>  Statemen</td> <td>  10.04   10.05   1</td> <td>  pecicle</td> <td>116.1 1.1 1.1 1.1 1.1 1.1 1.1 1.1 1.1 1.</td> <td>47.1 No N 58.8 No N 63.4 No N 66.7 No N</td> <td>Dear Dear Dear Dear Dear Dear Dear Dear</td> <td>  Dec</td> <td>1 NNE 25.1 sun 0</td> <td>dry south of processing area  and processing area  by a colour at church or at organic bood shop, slight odours behind bed area, slight odour control between 5 and dry sit of the colour at church or at organic bood shop, slight odours behind bed area, slight odour control between 5 and dry sit of the colours behind bed area, slight odour control between 5 and dry sit of the colours behind bed area, slight odour control between 5 and dry sit of the colours behind bed area, slight odour control between 5 and dry sit of the colours behind bed area, slight odour control between 5 and dry sit of the colours behind bed area, slight odour control between 5 and dry sit of the colours behind bed area, slight odour control between 5 and dry sit of the colours behind bed area, slight odour control between 5 and dry sit of the colours behind bed area, slight odour control between 5 and dry sit of the colours behind bed area, slight odour control between 5 and dry sit of the colours behind bed area, slight odour control between 5 and dry sit of the colours behind bed area, slight odour control between 5 and dry sit of the colours behind bed area, slight odour control between 5 and dry sit of the colours behind bed area, slight odour control between 5 and dry sit of the colours behind bed area, slight odour control between 5 and dry sit of the colours behind bed area, slight odour control between 5 and dry sit of the colours behind bed area, slight odour control behind bed area, slight odour control behind bed area.</td>	Statemen	10.04   10.05   1	pecicle	116.1 1.1 1.1 1.1 1.1 1.1 1.1 1.1 1.1 1.	47.1 No N 58.8 No N 63.4 No N 66.7 No N	Dear Dear Dear Dear Dear Dear Dear Dear	Dec	1 NNE 25.1 sun 0	dry south of processing area  and processing area  by a colour at church or at organic bood shop, slight odours behind bed area, slight odour control between 5 and dry sit of the colour at church or at organic bood shop, slight odours behind bed area, slight odour control between 5 and dry sit of the colours behind bed area, slight odour control between 5 and dry sit of the colours behind bed area, slight odour control between 5 and dry sit of the colours behind bed area, slight odour control between 5 and dry sit of the colours behind bed area, slight odour control between 5 and dry sit of the colours behind bed area, slight odour control between 5 and dry sit of the colours behind bed area, slight odour control between 5 and dry sit of the colours behind bed area, slight odour control between 5 and dry sit of the colours behind bed area, slight odour control between 5 and dry sit of the colours behind bed area, slight odour control between 5 and dry sit of the colours behind bed area, slight odour control between 5 and dry sit of the colours behind bed area, slight odour control between 5 and dry sit of the colours behind bed area, slight odour control between 5 and dry sit of the colours behind bed area, slight odour control between 5 and dry sit of the colours behind bed area, slight odour control between 5 and dry sit of the colours behind bed area, slight odour control between 5 and dry sit of the colours behind bed area, slight odour control behind bed area, slight odour control behind bed area.
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Statemen	NW 10-44: 03-50   1	pecicle	105.1 111. 112. 113. 113. 114. 115. 117. 117. 118. 118. 119. 119. 119. 119. 119. 119	47.1 No N 58.8 No N 63.4 No N 66.7 No N 68.9 No N 27.1 No N	Dear Dear Dear Dear Dear Dear Dear Dear	Dec	1 NNE 25.1 sun 0	dry south of processing area  and processing area  by a colour at church or at organic bood shop, slight odours behind bed area, slight odour control between 5 and dry sit of the colour at church or at organic bood shop, slight odours behind bed area, slight odour control between 5 and dry sit of the colours behind bed area, slight odour control between 5 and dry sit of the colours behind bed area, slight odour control between 5 and dry sit of the colours behind bed area, slight odour control between 5 and dry sit of the colours behind bed area, slight odour control between 5 and dry sit of the colours behind bed area, slight odour control between 5 and dry sit of the colours behind bed area, slight odour control between 5 and dry sit of the colours behind bed area, slight odour control between 5 and dry sit of the colours behind bed area, slight odour control between 5 and dry sit of the colours behind bed area, slight odour control between 5 and dry sit of the colours behind bed area, slight odour control between 5 and dry sit of the colours behind bed area, slight odour control between 5 and dry sit of the colours behind bed area, slight odour control between 5 and dry sit of the colours behind bed area, slight odour control between 5 and dry sit of the colours behind bed area, slight odour control between 5 and dry sit of the colours behind bed area, slight odour control between 5 and dry sit of the colours behind bed area, slight odour control behind bed area, slight odour control behind bed area.
	Statemen	NW   10.44   10.50   1	pecicle	114.1 1.1 1.1 1.1 1.1 1.1 1.1 1.1 1.1 1.	47.1 No N 58.8 No N 63.4 No N 66.7 No N 68.9 No N 27.1 No N	Dear Dear Dear Dear Dear Dear Dear Dear	Dec	1 NNE 25.1 sun 0	dry both of encounting area  To observe the service of the service

	Evolution of 19	No.	Landol and	ert. In	hth	- I	- 10	4574.5	20.0	No.	Mr. Plans		Breez.	t-					•
	Excavation of J9	NE 1	10.45 10.5	40 y 3	nawmom o		0	33.9	03.9	NO.	Clear		None	mo mo	-	_	_		
Stephenson 24/05/2010	Excavation of J9	E.	10.50 10.5	550			-	176.4	63.8	Mo	No Clear	9.639m AOD	None	80	_	_	_		
Stephenson 24/05/2010	Excavation of J9	er.					0	176.4	67.4		NO Creat	9.633III AUU	None	110	_		_		
I Stephenson 24/05/2010	Excavation of 10	OE.	10.55 11.0	2004		2	0	0.0	67.8		No No		None	10	_		_		
Stephenson 24/05/2010	Excavation of J9	0	10.15 10.2	2011	Deadhadan 3		0	8.0	76.6		No		None	10	_		_		
I Stephenson 24/05/2010	Excavation of 10	344	10.25 10.3	201/	Dead badger -3		0	70.4	72.3		No.		None	110	_		_		
Stephenson 24/05/2010	Exclavation of 39	**	10.30 10.3	3011		-		79.1			No.			110		_	_		
Stephenson 24/05/2010	Excavation of J9	NW	16.30 10.3			2	0	37.4	67.3		No Clear	9 190m AOD	None None	no		NNE 2			
1 Waker 24/05/2010	Digging out 19/turning beds/forming beds	N	16.25 16.3		No odour No odour			37.4 98.1	38.4		No Clear	9.190m AOD	None	no	2	NNE 2	ь агу	2 dry	moved fogger round to treatment bed area, now 2 foggers round the beds also covering exposed bed
1 Waker 24/05/2010	Digging out 19/turning beds/forming beds	NE			No odbur		_	98.1	39.7	NO				no	_		_		
1 Waker 24/05/2010	Digging out 19/turning beds/forming beds	NE1	16.35 16.4	40				57.4	50 1		Clear	9.639m AOD	None	no	_		_		
T Walker 24/05/2010	Digging out I9/turning beds/forming beds	Ε	16.40 16.4	45n 1	No odour			67.4			No Clear	9.639m AOD	None	no			_		
T Walker 24/05/2010	Digging out 19/turning beds/forming beds	SE	16.45 16.5	50n 1	No odour				61.1	No	No		None	no			_		
T Walker 24/05/2010	Digging out 19/turning beds/forming beds	S	16.00 16.0	05n 1	No odour			111.5	72.7	No	No		yes	no			_		
T Walker 24/05/2010	Digging out I9/turning beds/forming beds	SW	16.05 16.1	10y 2	TCP odour -1	2 5	0		55.1		No		None	see general notes			_		
T Walker 24/05/2010	Digging out 19/turning beds/forming beds	W	16.10 16.1	15 y 3	TCP odour -2	1 5	0	48.4	76		No		None	see general notes					
T Walker 24/05/2010	Digging out 19/turning beds/forming beds	NW	16.15 16.2	20n 1	No odour				70.1	No	No		None	no					
																			Very slight odour to the south of treatment bed area (very faint) odour (faint) on A10 next to treatment bed area.
Stephenson 25/05/2010	17-9 excavation	N	11.50 11.5	55n		1	0	105.5	63.4	No	No Clear	9.193m AOD	none	no	2.4	ENE 2	3.9 dry	5 dry	reposition odour control fogger. Very unpleasant vegetation odour along northern section of the River Cam
I Stephenson 25/05/2010	17-9 excavation	NE	11.55 12.0		hawthorn 0	1	0	91.4	62.7	No	No Clear		none	no					
I Stephenson 25/05/2010	(7-9 excavation	NE1	12.00 12.0	05				52.4			Clear		none	no					
1 Stephenson 25/05/2010	(7-9 excavation	E	12.05 12.1	10n		1		68.7	58.3	No	No Clear	9.639m AOD	none	no					
Stephenson 25/05/2010	7-9 excavation	SE	12.10 12.1	15 n		1			67.2	No	No		none	no					
	7-9 excavation	S	11.30 11.3			2	0	218.4	68.3		No		none	no					
Stephenson 25/05/2010	7-9 excavation	SW	11.35 11.4	40 v 7	dead badger -3	4 1	0		65.8	No	No		none	no					
Stephenson 25/05/2010	(7-9 excavation	W	11.40 11.4	45 y 3	odour control 1	4 3	0	23.4	73.4		No		none	no					
Stephenson 25/05/2010	17-9 excavation	NW	11.45 11.5	50 y 3	excavation odour 1	2 3	0		78.2	No	No		none	no sensitive receptors					1
																			1
		1	1 1	1 1	1		- 1	1 1		1			1	1	1	1		1 1	Excavation halted by site manager due to constant faint to weak odours on the A10 to the southwest of the site.
T Walker 25/05/2010	17/18 forming treatment beds	N	15.20 15.2	25n 1	No odour 0	h h	0	656.8	85.6	No	No Clear	9.193m AOD	none	ne	2	NNE 2	2 sun	5 drv	The PID was detecting voc's inside the boundary fence, it did not detect voc's beyond the site boundary.
T Walker 25/05/2010	17/18 forming treatment beds	NE	15.25 15.3		No odour 0	3 1	ō	243.9	75.5	No	No Clear		none	no	r			T - F'	, and the second of the second
T Walker 25/05/2010	17/18 forming treatment beds	NF1	15.25 15.3						. 5.5		Clear		none	00	_	-		-	<u> </u>
T Walker 25/05/2010	17/18 forming treatment beds	F	15.30 15.3	350 1	No odour 0	3 4	0	170.5	10 7	No	No Clear	9.639m AOD	none	00	_	+			1
T Walker 25/05/2010	17/18 forming treatment beds	SF	15.35 15.4		No odour 0	3 4	ŏ		37.4	No	No.	- Juliani Musu	none	00	1	-			1
T Walker 25/05/2010	17/19 forming treatment hade	e e	15.00 15.0	050	No odour		- Io	26.2	57.4	No	No		none	000	_	-		-	<u> </u>
T Walker 25/05/2010	I7/18 forming treatment beds I7/18 forming treatment beds	cw/	15.05 15.1	100	No odour		0	10.1	56.9		No.		none	000	_	+			1
T Walker 25/05/2010	17/18 forming treatment beds	OVV	15.10 15.1	45.	top -1			702.2	75.4	No.	No		none	110	_	_	_		
T Walker 25/05/2010	17/18 forming treatment beds		15.15 15.2				- 0	703.2	47.8		No No	_	none	10	-		_		
		NW	9.40 9.4	20 V 3	top -2	3 1	- 0			No.				no					
	turning beds, breaking concrete	N			No odour 0	3 1	0	55.1	44.1	No	No Clear	9.194m AOD	None	no	2	NW 1	4 dry	5 ary	
	turning beds, breaking concrete	NE	9.45 9.5	50n 1	No odour 0	3 1	0	118.9	78.9	No	No Clear		None	no			_		
T Walker 26/05/2010	turning beds, breaking concrete	NE1	9.45 9.5					98.1			Clear		None	no					
T Walker 26/05/2010	turning beds, breaking concrete	E	9.50 9.5		No odour 0	3 1	0	111.9	67	No	No Clear	9.644m AOD	None	no					
T Walker 26/05/2010	turning beds, breaking concrete	SE	9.55 10.0		No odour 0	3 1	0		71.4		No		None	no					
T Walker 26/05/2010	turning beds, breaking concrete	S	9.20 9.2	25 n 1	No odour 0	2 1	0	54.3	37.9		No		None	no					
T Walker 26/05/2010	turning beds, breaking concrete	SW	9.25 9.3	30n 2	site odour -1	1 1	0		44.4	No	No		None	no					
T Walker 26/05/2010	turning beds, breaking concrete	w	9.30 9.3	35 n 1	No odour 0	1 1	0	67.9	37.9	No	No		None	no					
T Walker 26/05/2010	turning beds, breaking concrete	NW	9.35 9.4	40n 1	No odour 0	2 1	0		68.4	No	No		None	no					
Stephenson 26/05/2010	breaking out/excavating I7-19	N	17.50 17.5	55n		1	0	31 1:	13 59.7	No	No Clear	9.194m AOD	None	no	2	NW 1	4 dry	7 dry	slight odour on church road south of treatment beds - unpleasant natural veg, is v.pungent. Some odour contro
I Stephenson 26/05/2010	breaking out/excavating 17-19 breaking out/excavating 17-19	NE	17.55 18.0 18.00 18.0	00 n		1		95.2	11.3 54.9	No	No Clear		None	no					
Stephenson 26/05/2010			18.00 18.0	05				51 4	10.2		Clear		None	ne					1
1 Stephenson 26/05/2010	breaking out/excavating I7-19 breaking out/excavating I7-19	NE1	18.05 18.1	10 v 5	natural yen 0	1 1	0	83.8 3	33.5 50.1	No		9 644m AOD	None	00					
1 Stephenson 26/05/2010 1 Stephenson 26/05/2010	breaking out/excavating 17-19	NE1 E	18.05 18.1	15 n	natural veg 0	1 1	0	83.8 3		No No	No Clear No	9.644m AOD		no no	-	_	_		
1 Stephenson 26/05/2010	breaking out/excavating 17-19 breaking out/excavating 17-19	SE c	18 10 18 1	15 n	natural veg 0	1 1	0 0		53.1		No Clear No	9.644m AOD	None	00 00					
Stephenson 26/05/2010 Stephenson 26/05/2010	breaking out/excavating 17-19 breaking out/excavating 17-19 breaking out/excavating 17-19 breaking out/excavating 17-19	SE SE	18 10 18 1	15 n	natural veg 0	1 1 2	0		53.1 15.6 54.2	No		9.644m AOD	None None	00 00 00					
Stephenson 26/05/2010 Stephenson 26/05/2010	breaking out/excavating 17-19 breaking out/excavating 17-19 breaking out/excavating 17-19 breaking out/excavating 17-19	SE SW	18 10 18 1	15 n	natural veg 0	1 1 2 4	0	117.8	53.1 15.6 54.2 68.5	No No	No Clear No	9.644m AOD	None None None	00 00 00					
Stephenson   26/05/2010   Stephenson   26/05/2010   Stephenson   26/05/2010   Stephenson   26/05/2010	breaking out/excavating 17-19	SE SW W	18.10 18.1 17.30 17.3 17.35 17.4 17.40 17.4	15 n 35 n 40 n 45 n	natural veg 0	1 1 1 2 4	0 0 0		53.1 15.6 54.2 68.5 50.1 71.8	No No No	No Clear No	9.644m AOD	None None	no no no no no					
Stephenson   26/05/2010   Stephenson   26/05/2010   Stephenson   26/05/2010   Stephenson   26/05/2010	breaking out/excavating 17-19 breaking out/excavating 17-19 breaking out/excavating 17-19 breaking out/excavating 17-19	SE SW W NW	18 10 18 1	15 n 35 n 40 n 45 n	natural veg D	1 1 2 4 4 4 2 2	0 0 0 0	117.8	53.1 15.6 54.2 68.5	No No No	No Clear No	9.644m AOD	None None None	no no no no no					a date of electric control for electric control for electric control and electric. Other control and end of but two
Stephenson   26/05/2010   Stephenson   26/05/2010   Stephenson   26/05/2010   Stephenson   26/05/2010   Stephenson   26/05/2010	Porobking colfescavating (T-19)  Rossking colfescavating (T-19)	SE SW W NW	18.10 18.1 17.30 17.3 17.35 17.4 17.40 17.4 17.45 17.5	15 n 35 n 40 n 45 n	natural veg 0	1 1 2 2 4 4 2 2 4 4 2 2 4 4 4 2 4 4 4 4	0 0 0 0 0	117.8 1: 52.6 5	53.1 15.6 54.2 68.5 50.1 71.8	No No No	No Clear No		None None None	100 100 100 100 100 100			5.5 Dame	7 4	to odour all church or organic food shop, consistent with wind direction. Odour control small south of bed area.
Stephenson   26/05/2010   Stephenson   26/05/2010   Stephenson   26/05/2010   Stephenson   26/05/2010   Stephenson   26/05/2010   Stephenson   26/05/2010   Stephenson   27/05/2010   Stephenson   27/05/2010	Monalating conferencements (FT-9)	E SE S SW W NW	18.10 18.1 17.30 17.3 17.35 17.4 17.40 17.4 17.45 17.5	15 h 35 h 40 h 45 h 50 h		1 1 2 2 4 4 2 2 1 1 1 1 1	0 0 0 0 0	117.8 11 52.6 5	53.1 15.6 54.2 68.5 50.1 71.8 73.4 40.1 55.9	No No No No	No Clear No N	9.196m AOD	None None None None None	50 50 50 50 50 50 50 50	1	ESE 1	5.5 Damp	7 damp	no adear all church or organic food shop, consistent with wind direction. Oldour control amelt south of food area, advisors for directions.
Stephenson   26/05/2010     Stephenson   26/05/2010     Stephenson   26/05/2010     Stephenson   26/05/2010     Stephenson   26/05/2010     Stephenson   27/05/2010     Stephenson   27/05/2010     Stephenson   27/05/2010	Prosiking outerwarding (F-19) monking outerwarding (F-19)  Z according outerwarding (F-19) Z according	E SE S SW W NW	18.10 18.1 17.30 17.3 17.35 17.4 17.40 17.4 17.45 17.5 11.06 11.1	15 n 35 h 40 n 45 h 50 n	natural veg 0	1 1 2 4 4 4 4 4 4 4 1 1 1 1 1	0 0 0 0 0 0	117.8 11 52.6 5 11.97 4 123.9 9	53.1 15.6 54.2 68.5 50.1 71.8 73.4 40.1 55.9 69.9 64.5	No No No No	No Clear No No No No No No Clear No Clear	9.196m AOD	None None None None None None	00 00 00 00 00 00 00 00	1	ESE 1	5.5 Damp	7 damp	
Stephenson   26/05/2010     Stephenson   26/05/2010     Stephenson   26/05/2010     Stephenson   26/05/2010     Stephenson   26/05/2010     Stephenson   27/05/2010	monking outcomessing 1°19  discussing	E SE S SW W NW	18.10 18.1 17.30 17.3 17.35 17.4 17.40 17.4 17.45 17.5 11.06 11.1 11.10 11.1	15 h 38 n 40 n 45 h 50 n 10 n 15 y 20		1 1 1 1 1 1 2 2 4 4 4 2 2 1 1 1 1 1 1	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	117.8 1 52.6 5 11.97 4 123.9 9 39.8 4	53.1 54.2 68.5 50.1 73.4 73.4 60.1 55.9 64.5	No No No No	No Clear No No No No No Clear No Clear No Clear	9.196m AOD	None None None None None None None None	00 00 00 00 00 00 00 00	1	ESE 1	5.5 Damp	7 damp	
Stophenson 26/05/2010     Stophenson 26/05/2010     Stophenson 26/05/2010     Stophenson 26/05/2010     Stophenson 26/05/2010     Stophenson 26/05/2010     Stophenson 27/05/2010	Province on Conference on Conf	E SE S SW W NW	18.10 18.1 17.30 17.3 17.35 17.4 17.40 17.4 17.45 17.5 11.06 11.1 11.10 11.1	15 h 38 n 40 n 45 h 50 n 10 n 15 y 20		1 1 1 1 1 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	117.8 1 52.6 5 11.97 4 123.9 9 39.8 4	53.1 15.6 54.2 68.5 50.1 71.8 73.4 40.1 55.9 69.9 64.5	No No No No	No Clear No No No No No No Clear No Clear	9.196m AOD	None None None None None None None None	50 50 50 50 50 50 50 50 50 50 50 50 50 5	1	ESE 1	5.5 Damp	7 damp	
Stephenson	Sealing audinousling 179 Sealing 179 Sealin	E SE S SW W NW	18.10 18.1 17.30 17.3 17.35 17.4 17.40 17.4 17.45 17.5 11.06 11.1 11.10 11.1 11.15 11.2 11.25 11.3	15 h 35 h 40 n 45 h 50 h 10 n 115 y 2 20 25 n		1 1 1 1 1 1 2 2 4 4 4 4 2 2 1 1 1 1 1 1	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	117.8 1 52.6 5 11.97 4 123.9 9 39.8 4 87.3 5	53.1 54.2 58.5 50.1 71.8 73.4 10.1 55.9 86.9 54.5 44.6 56.9 50.7	No No No No No No No	No Clear No No No No No Clear No Clear No Clear	9.196m AOD	None None None None None None None None	00 00 00 00 00 00 00 00 00 00	1	ESE 1	5.5 Damp	7 damp	
Stephenson	Provide policiposarios (** 15 )  Social Constructivo (** 15 )  Soc	E SE S SW W NW	18.10 18.1 17.30 17.3 17.35 17.4 17.40 17.4 17.40 17.4 11.06 11.1 11.10 11.1 11.15 11.2 11.20 11.3 11.25 11.3	15 h 35 h 40 n 45 n 50 n 10 n 15 y 2 20 20 50 n		1 1 1 1 1 1 1 2 2 1 1 1 1 1 1 1 1 1 1 1	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	117.8 1 52.6 5 11.97 4 123.9 9 39.8 4	53.1 54.2 68.5 50.1 73.4 73.4 60.1 55.9 64.5	No No No No No No No No	No Clear No No No No No Clear No No Clear No Clear No Clear No Clear No Clear	9.196m AOD	None None None None None None None None	00 00 00 00 00 00 00 00 00 00 00 00 00	1	ESE 1	5.5 Damp	7 damp	
Stephenson	Province of the Control of the Contr	E SE S SW W NW	18.10 18.1 17.30 17.3 17.35 17.4 17.40 17.4 17.45 17.5 11.06 11.1 11.10 11.1 11.20 11.2 11.25 11.3 10.45 10.5 10.50 10.5	15 h 35 h 440 h 45 h 55 h 10 h 110 h 22 h 30 h 55 h	hawthorn 0	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	117.8 1 52.6 9 11.97 4 123.9 9 39.8 4 87.3 5	53.1 15.6 54.2 68.5 50.1 71.8 73.4 40.1 55.9 69.9 64.5 44.6 56.9 60.7 55.5 30.9 61.3	No No No No No No No No No No No	No Clear  No No No No No Clear  No Clear  No Clear  No Clear  No Clear  No Clear  No N	9.196m AOD	None None None None None None None None	00 00 00 00 00 00 00 00 00 00 00 00 00	1	ESE 1	5.5 Damp	7 damp	
Stophenson	Seasing authorization (F. 19) Seasin	E SE S SW W NW	18.10 18.1 17.30 17.3 17.35 17.4 17.45 17.4 17.45 17.5 11.10 11.1 11.10 11.1 11.15 11.2 11.25 11.3 10.45 10.9 10.50 10.5	15 h 35 h 40 h 45 h 45 h 55 h 10 h 20 h 20 h 25 h 20 h 25 h 20 h 20 h 25 h 20		1 1 1 1 1 2 2 4 4 4 4 2 2	0 0 0 0 0 0 0 0	117.8 1 52.6 5 11.97 4 123.9 9 39.8 4 87.3 5	53.1 15.6 54.2 68.5 50.1 71.8 73.4 40.1 55.9 86.9 64.5 54.6 9 60.7 55.5 80.9 61.3 82 89 87.5	No No No No No No No No No No No No	No Clear No No No No No Clear No Clear No Clear No Clear No Clear No Clear No N	9.196m AOD	None None None None None None None None	00 00 00 00 00 00 00 00 00 00 00 00 00	1	ESE 1	5.5 Damp	7 damp	
Stephenson	Promising outcoming 17-9  Section of the Control of	E SE S SW W NW	18.10 18.1 17.30 17.3 17.35 17.4 17.45 17.5 17.45 17.5 11.06 11.1 11.10 11.1 11.20 11.2 11.20 11.2 10.55 11.0 10.55 11.0 11.05 11.0	15 h	Nauthorn 0	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	0 0 0 0 0 0 0 0 0	117.8 1 52.6 9 11.97 4 123.9 9 39.8 4 87.3 5 87.6 3 27.5 5	53.1 15.6 54.2 68.5 50.1 71.8 73.4 40.1 55.9 69.9 64.5 44.6 56.9 60.7 55.5 30.9 61.3	No No No No No No No No No No No No	No Clear  No No No No No No Clear  No Clear  No Clear  No Clear  No Clear  No N	9.196m AOD 9.649m AOD	None None None None None None None None	00 10 10 10 10 10 10 10 10 10 10 10 10 1	1	ESE 1	5.5 Damp	7 damp	
Sephenson   2015/2010	Province on Control of the Control o	E SE SW W NW NE NE1 E SE SS SW W NW NW NW	18.10 18.1 17.30 17.2 17.35 17.4 17.45 17.4 17.45 17.5 11.06 11.1 11.10 11.1 11.25 11.2 11.25 11.3 10.45 10.5 10.55 11.0 11.00 11.0	15 h	Nauthorn 0	1 1 1 1 1 1 2 4 4 4 4 2 2 1 1 1 1 1 1 1	0 0 0 0 0 0 0 0 0 0 0 0	117.8 1 12.8 5 11.97 6 123.9 9 39.8 4 87.3 9 87.5 3 27.5 9	53.1 15.6 34.2 88.5 50.1 71.8 10.1	No N	No Clear  No No No No No No Clear  No Clear  No Clear  No Clear  No Clear  No Clear  No N	9.196m AOD	None None None None None None None None	00 00 00 00 00 00 00 00 00 00 00 00 00	1	ESE 1	5.5 Damp	7 damp	
Sephenson   2005/2015	Seasing authorization (19 ) Se	E SE SW W NW NW NE SE SS SW W NN NE NE SE SW W NW NW NE	18.10 18.1 17.30 17.3 17.35 17.4 17.40 17.4 17.45 17.5 11.06 11.1 11.10 11.1 11.10 11.1 11.20 11.2 11.25 11.3 10.45 10.5 10.50 10.5 10.50 10.5 11.00 11.0 18.00 18.0	15 h 35 h 40 h 40 h 45 h 50 h 10 h 10 h 22 h 26 h 26 h 27 h 27 h 27 h 27 h 28 h 28 h 29 h 20 h 20 h 20 h 21 h 22 h 25 h 26 h 27 h 27 h 28	hawthorn 0	1 1 1 1 1 1 2 2 4 4 2 2 4 4 2 2 2 1 1 1 1	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	117.8 1 52.6 5 11.97 4 1123.9 9 39.8 4 87.3 5 27.5 5 10.8 9 437 1	53.1 15.6 54.2 50.1 71.8 40.1 55.9 36.9 54.5 54.6 90.7 55.5 50.9 51.2 52.2 53.3 53.2 54.5 55.5 55.5 55.5 56.9 57.5 57.5 58.5 59.5	No N	No	9.196m AOD 9.649m AOD	None None None None None None None None	00 00 00 00 00 00 00 00 00 00 00 00 00	1	ESE 1	5.5 Damp	7 damp	
Sephenson   2005/2010	Provincy outcoming 17-9  Section of Control	E SE SW W NW NW NE SE SS SW W NN NE NE SE SW W NW NW NE	18.10 18.1 17.30 17.2 17.35 17.4 17.45 17.5 17.45 17.5 11.06 11.1 11.10 11.1 11.15 11.2 11.20 11.2 11.25 11.3 10.45 10.5 10.55 11.0 18.02 18.0 18.08 18.1 18.14 18.1	15 h	hawthom 0  odour control 0  yes of 2  pand and sweet OCS 1	1 1 1 1 1 1 1 2 2 4 4 2 2 1 1 1 1 5	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	117.8 1 117.8 1 11.07 6 123.9 1 123.9 1 123.9 6 17.3 6 17.3 6 17.5 3 17.5 9 10.8 9	53.1 54.2 56.1 73.4 60.1 55.9 66.9 67.5	No N	No	9.196m AOD 9.649m AOD	None None None None None None None None	00 00 00 00 00 00 00 00 00 00 00 00 00	1	ESE 1	5.5 Damp	7 damp	
Saphanson 2005/2016	Province of Control of	E SE SW W NW NW NE SE SS SW W NN NE NE SE SW W NW NW NE	18.10 18.1 17.30 17.3 17.35 17.4 17.45 17.5 17.45 17.5 11.06 11.1 11.15 11.2 11.20 11.2 11.25 11.3 10.45 10.9 10.55 10.9 10.55 11.0 11.00 11.1 11.00 11.1 11.25 11.3 10.45 10.9 10.55 11.0 11.00 11.0 11.00 11.1 18.02 18.2	15 h 35 h 35 h 40 h 4		1 1 1 1 1 1 2 2 4 4 2 2 2 1 1 1 5 1 1 1 1 1 1 1 1 1 1 1 1 1	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	117.8 1 117.8 1 11.07 6 123.9 1 123.9 1 123.9 6 17.3 6 17.3 6 17.5 3 17.5 9 10.8 9 10.8 9 10.8 9 10.8 9	53.1 15.6 54.2 50.1 71.8 40.1 55.9 36.9 54.5 54.6 90.7 55.5 50.9 51.2 52.2 53.3 53.2 54.5 55.5 55.5 55.5 56.9 57.5 57.5 58.5 59.5	No N	No	9.196m AOD 9.649m AOD	None None None None None None None None	00 00 00 00 00 00 00 00 00 00 00 00 00	1	ESE 1	5.5 Damp	7 damp	
Saphanson 2005/2016	Seasing authorized (19 ) Seasing authorized (1	E SE SW W NW NW NE SE SS SW W NN NE NE SE SW W NW NW NE	18.10 18.1 17.30 17.3 17.35 17.4 17.40 17.4 17.40 17.4 17.40 17.4 11.06 11.1 11.15 11.2 11.25 11.3 10.45 10.5 10.55 11.0 18.02 18.0 18.04 18.1 18.20 18.2 18.20 18.2	15 h 35 h 35 h 40 h 4		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	117.8 1 117.8 1 11.07 6 123.9 1 123.9 1 123.9 6 17.3 6 17.3 6 17.5 3 17.5 9 10.8 9 10.8 9 10.8 9 10.8 9	53.1 54.2 56.1 73.4 60.1 55.9 60.9 60.1 55.9 60.7 60.7 60.9 60.7 60.9	No N	No	9.196m AOD 9.649m AOD	None None None None None None None None	00 00 00 00 00 00 00 00 00 00 00 00 00	1	ESE 1	5.5 Damp	7 damp	driscos bul erapine.
Sephenson 2005/2016	Seasing, authorization (19 S)	E SE SW W NW NW NE SE SS SW W NN NE NE SE SW W NW NW NE	18.10 18.1 17.30 17.35 17.35 17.4 17.40 17.4 17.45 17.5 11.06 11.1 11.15 11.2 11.25 11.3 10.45 10.5 10.50 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5	15 a	hawthom 0  odour control 0  yes of 2  pand and sweet OCS 1	1 1 1 1 1 1 2 2 4 4 2 2 2 1 1 1 1 1 1 1	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	117.8 1 117.8 1 11.07 6 123.9 1 123.9 1 123.9 6 17.3 6 17.3 6 17.5 3 17.5 9 10.8 9 10.8 9 10.8 9 10.8 9	53.1 15.6 14.2 15.6 14.5 15.6	No N	No	9.196m AOD 9.649m AOD	None None None None None None None None	00 00 00 00 00 00 00 00 00 00 00 00 00	1	ESE 1	5.5 Damp	7 damp	
Saphenson 2005/2016	Province of Control of	E SE SW W NW NW NE SE SS SW W NN NE NE SE SW W NW NW NE	18:10 18:1 17:30 17:3 17:30 17:3 17:30 17:3 17:40 17:7 17:40 17:7 11:40 17:7 11:40 11:1 11:5 11:2 11:20 11:3 1	15 is a   35 is is a   46 is a   46 is a   46 is a   46 is a   56	Dearfrom   0	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	117.8 1 117.8 1 11.97 6 11.97 6 123.9 9 87.5 9 87.6 3 27.5 9 10.8 9 497 1 499 9 5 2 5 2 6 2 7 3 10.8 9 10.8 9	15.6 42.7 15.6 15.7 15.6 15.7 15.6 15.7 15.6 15.7 15.6 15.7 15.6 15.7 15.6 15.7 15.6 15.7 15.6 15.7 15.6 15.7 15.6 15.7 15.6 15.7 15.6 15.7 15.6 15.7 15.8 1	No N	No	9.196m AOD 9.649m AOD	None None None None None None None None	00 00 00 00 00 00 00 00 00 00 00 00 00	1	ESE 1	5.5 Damp	7 damp	driscos bul erapine.
	Seasing authorized (19 ) Seasing authorized (1	E SE SW W NW NW NE SE SS SW W NN NE NE SE SW W NW NW NE	18.10 18.1 17.30 17.2 17.30 17.3 17.40 17.7 17.40 17.7 17.40 17.7 11.06 11.1 11.10 11.1 11.10 11.1 11.10 11.1 11.20 11.2 11.20 11.3 11.3 11.3 11.3 11.3 11.3 11.3 11.3	15   15   15   15   15   15   15   15	Description	1 1 1 1 1 2 2 2 2 4 4 2 2 2 1 1 1 1 1 1	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	117.8 1 117.8 1 11.97 4 11.97 4 123.9 8 87.3 6 87.6 3 87.6 3 87.6 5 10.9 9 437 9 4	53.1 15.6	No N	No	9.196m AOD 9.649m AOD	None None None None None None None None	00 00 00 00 00 00 00 00 00 00 00 00 00	1	ESE 1	5.5 Damp	7 damp	driscos bul erapine.
September 2005/2016	Seasing, authorized (19 )  Seasing, authorized (	E SE SW W NW NW NE SE SS SW W NN NE NE SE SW W NW NW NE	18.10 18.1 17.30 17.2 17.30 17.7 17.35 17.7 17.35 17.7 17.36 17.7 17.45 17.7 17.45 17.7 11.06 11.1 11.10 11.1 11.10 11.1 11.10 11.1 11.20 11.2	15 is a   35 is a   40 is	Dearfrom   0	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	117.8 1 117.8 1 119.7 5 119.7 5 119.7 5 119.8 6 107.6 9 107.6 9 108.8 6 109.8 6 109	53.1	No	No	2 196m AOD 9 649m AOD 9 196m AOD 9 196m AOD	None None None None None None None None	00 00 00 00 00 00 00 00 00 00 00 00 00	1	ESE 1	5.5 Damp	7 damp	distosa bul a respire.
Stephenson   1905/2010   Sephenson   1905/2010   Sep	Foreign Continues on the Continues on th	E SE SW W NW NW NE SE SS SW W NN NE NE SE SW W NW NW NE	18.10 18.1 17.30 17.2 17.30 17.2 17.30 17.7 17.30 17.7 17.30 17.7 17.45 17.6 11.06 11.1 11.10 11.1	18 in		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	117.8 1 11.27 4 11.27 4 12.3 5 12.3 5 12.3 5 12.3 7	53.1 56.6 54.2 50.1	Mo  No  No  No  No  No  No  No  No  No	No	2 196m AOD 2 549m AOD 3 549m AOD 3 196m AOD 3 649m AOD	None None None None None None None None	00 00 00 00 00 00 00 00 00 00 00 00 00	1 9.8mph	ESE 1	5.5 Damp	7 damp	driscos bul erapine.
Stephenson   1905/2010   Sephenson   1905/2010   Sep	Sensing and Americans (19 )  Sensing addressing (19 )  Sensing address	E SE SW W NW NW NE SE SS SW W NN NE NE SE SW W NW NW NE	18.10 18.1 17.30 17.2 17.30 17.2 17.35 17.7 17.35 17.7 17.35 17.7 17.45 17.7 17.45 17.7 11.06 11.1 11.10 11.1 11.10 11.1 11.10 11.1 11.20 11.2	150 s	Description	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	117.8 1 117.8 1 119.7 5 119.7 5 119.7 5 119.8 6 107.6 9 107.6 9 108.8 6 109.8 6 109	53.1	Mo  No  No  No  No  No  No  No  No  No	No	2 196m AOD 9 649m AOD 9 196m AOD 9 196m AOD	None None None None None None None None	00 00 00 00 00 00 00 00 00 00 00 00 00	1 9.8mph	ESE 1	5.5 Damp	7 damp	distosa bul a respire.
Supplement   1605/2016	Seasing, authorized (19) Seasing, authorized (	E SE SW W NW NW NE SE SS SW W NN NE NE SE SW W NW NW NE	18.10 18.1 17.30 17.2 17.30 17.2 17.30 17.7 17.30 17.7 17.45 17.5 17.6 17.1 17.6 17.1 17.6 17.1 17.6 17.1 17.6 17.1 17.6 17.1 17.6 17.1 17.6 17.1 17.6 17.1 17.6 17.1 17.6 17.1 17.6 17.1 17.6 17.1 17.6 17.1 17.6 17.7 17.6 18.1 17.5 17.7 17.5 18.1 17.5 18.1 17.5 18.1 17.5 18.1 17.5 18.1 17.5 17.5 18.1 17.5 17.5 18.1 17.5 17.5 18.1 17.5 17.5 18.1 17.5 17.5 18.1 17.5 17.5 18.1 17.5 17.5 18.1 17.5 17.5 18.1 17.5 17.5 18.1 17.5 17.5 18.1 17.5 17.5 18.1 17.5 17.5 18.1 17.5 17.5 18.1	15 h s		1 1 1 1 1 1 2 2 1 1 1 1 1 1 1 1 1 1 1 1	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	117.8 1 11.67	53.1 56.6 54.7 50.1	No N	No	9.196m AOD 9.649m AOD 9.196m AOD 9.649m AOD 9.196m AOD 9.196m AOD	None None None None None None None None	00 00 00 00 00 00 00 00 00 00 00 00 00	1 9.8mph	ESE 1	2.3 sun	7 damp	distosa bul a respire.
Supplement   1965-2716	Province of the Common of the	E SE SW W NW NW NE SE SS SW W NN NE NE SE SW W NW NW NE	18.10 18.1 17.30 17.3 17.31 17.4 17.32 17.7 17.32 17.7 17.45 17.5 11.06 11.1 11.15 11.2 11.20 11.2	159 s	Seathern 0	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	0	117.8 1 12.6 0 12.6 0 12.2 0 12.2 0 12.2 0 12.2 0 12.3 0 12.3 0 12.3 0 12.3 0 12.3 0 12.3 0 12.3 0 13.3 0 13.3 0 13.3 0 13.3 0 13.3 0 13.3 0 13.3 0 13.3 0 13.3 0 13.3 0 13.3 0 13.3 0 13.3 0 14.4 0 1	SAL   SAL	No N	NO Clear NO NO Clear NO CLEAR NO CLEAR NO CLEAR NO NO CLEAR NO NO CLEAR NO	2 196m AOD 9 649m AOD 9 196m AOD 9 196m AOD	None None None None None None None None	00 00 00 00 00 00 00 00 00 00 00 00 00	1 1 9.8mph	ESE 1	5.5 Damp	7 damp	distosa bul a respire.
Supplement   1965-0716	Seasing advisorating 179 Seasing and Seasing advisorating 179 Seasing 17	E SE SW W NW NW NE SE SS SW W NN NE NE SE SW W NW NW NE	1810 18:1 17:30 17:7 17:35 17:7 17:35 17:7 17:35 17:7 17:35 17:7 17:45 17:7 17:45 17:7 11:40 11:1 11:5 11:2 11:5 11:3 11:5 11:	159 s		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	177.6 1 10.5 0 1	SAL   SAL	No N	No	9.196m AOD 9.649m AOD 9.196m AOD 9.649m AOD 9.196m AOD 9.196m AOD	None None None None None None None None	00 00 00 00 00 00 00 00 00 00 00 00 00	1 1 9.8mph	ESE 1	2.3 sun	7 damp	distosa bul a respire.
Supplement   1965-0716	Seasing advisorating 179 Seasing and Seasing advisorating 179 Seasing 17	E SS SSW W NW NE NE1 SSSW W W NW NE1 SSSW W W N N N N N N N N N N N N N N N	18.10 18.1 17.30 17.3 17.31 17.4 17.32 17.4 17.40 17.4 17.40 17.4 17.40 17.4 17.40 17.4 17.40 17.4 17.40 17.4 17.40 17.4 17.40 17.4 17.40 17.4 17.40 17.4 17.40 17.4 17.40 17.4 17.4 17.4 17.4 17.4 17.4 17.4 17.4	15 h s	Jamehom 0 John corend 0 John C		0	117.8 1 11.67	SAL   SAL	No N	NO Clear NO NO Clear NO CLEAR NO CLEAR NO CLEAR NO NO CLEAR NO	9.196m AOD 9.649m AOD 9.196m AOD 9.649m AOD 9.196m AOD 9.196m AOD	None None None None None None None None	00 00 00 00 00 00 00 00 00 00 00 00 00	1 9.8mph	ESE 1	5.5 Damp	7 damp	distosa bul a respire.
Supplement   1965/2016	Seasing, authorized (19 )  Seasing, authorized (	E SS SSW W NW NE NE1 SSSW W W NW NE1 SSSW W W N N N N N N N N N N N N N N N	18.10 18.1 17.30 17.3 17.31 17.4 17.32 17.4 17.40 17.4 17.40 17.4 17.40 17.4 17.40 17.4 17.40 17.4 17.40 17.4 17.40 17.4 17.40 17.4 17.40 17.4 17.40 17.4 17.40 17.4 17.40 17.4 17.4 17.4 17.4 17.4 17.4 17.4 17.4	15 h s	Jamehom 0 John corend 0 John C	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	0	177.6 1 10.5 0 1	SAL   SAL	No N	NO Clear NO NO Clear NO CLEAR NO CLEAR NO CLEAR NO NO CLEAR NO	9.196m AOD 9.649m AOD 9.196m AOD 9.649m AOD 9.196m AOD 9.196m AOD	None None None None None None None None	00 00 00 00 00 00 00 00 00 00 00 00 00	1 1 9.8mph	ESE 1	5.5 Damp	7 damp	distosa bul a respire.
Supplement   1965-2016	Foreign Continues of the Continues of th	E SS SSW W NW NE NE1 SSSW W W NW NE1 SSSW W W N N N N N N N N N N N N N N N	1810 18:1 17:30 17:2 17:35 17:4 17:35 17:4 17:45 17:5 11:06 11:1 1	159 s	Seathern 0	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	0	177.6 1 10.5 0 1	SA1   SA1   SA1   SA3	No N	No Clear No	9.196m AOD 9.649m AOD 9.196m AOD 9.649m AOD 9.196m AOD 9.196m AOD	None None None None None None None None	00 00 00 00 00 00 00 00 00 00 00 00 00	1 9.8mph	ESE 1	5.5 Damp	7 damp	distosa bul a respire.
Supplement   1965-07101	Seasing authorized to 10 miles of the control of th	E S S S S S S S S S S S S S S S S S S S	1810 18: 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	150 s	Jamehom 0 John corend 0 John C	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	0	117.4 1 11.97 1 11.97 1 12.9 1 12.9 1 12.9 1 12.1 1	SA1	No N	NO Clear NO	9.196m AOD 9.649m AOD 9.196m AOD 9.649m AOD 9.196m AOD 9.196m AOD	None None None None None None None None	00 00 00 00 00 00 00 00 00 00 00 00 00	1 9.8mph	ESE 1	5.5 Damp	7 damp	distosa bul a reagine.
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Supplement   Sup	Provide Continue of the Contin	E S S S S S S S S S S S S S S S S S S S	1810 18: 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	150 m	Sewfrom 0  Solver correct  Sol	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	0	177.6 1 1	SAL   SAL	No N	NO Clear NO	9.196m AOD 9.649m AOD 9.196m AOD 9.649m AOD 9.196m AOD 9.196m AOD	None None None None None None None None	00 00 00 00 00 00 00 00 00 00 00 00 00			5.5 Damp	7 damp	distosa bul a reagine.
Supplement   1965-0710	Seasing authorized to 10 miles of the control of th	E SE SE SW W W N N N N N N N N N N N N N N N N	1810 18: 17: 17: 17: 18: 18: 18: 18: 18: 18: 18: 18: 18: 18	15   15   15   15   15   15   15   15	Seathern 0	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	0	177.6 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	SAL   SAL   SAL	No N	NO Clear No	2 196m AGD 2 649m AGD 3 649m AGD 3 196m AGD 3 196m AGD 3 186m AGD 3 186m AGD	None None None None None None None None	00 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0				7 damp	distocation for evapore.  Carebridge form machinery.  Carebridge form machinery.  Carebridge form organic health shop. Sight adoler control before bed area.
Supplement   Sup	Season, and control of 19 (19 (19 (19 (19 (19 (19 (19 (19 (19	E SE SE SW W W N N N N N N N N N N N N N N N N	1810 18: 17: 17: 17: 18: 18: 18: 18: 18: 18: 18: 18: 18: 18	130	Sewfrom 0  Solver correct  Sol	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	0	177.6 1 127.6	SAL   SAL	No N	NO Clear No	8 196m ACO  8 649m ACO  9 196m ACO	None None None None None None None None	00 00 00 00 00 00 00 00 00 00 00 00 00				7 damp	distocation for evapore.  Carebridge form machinery.  Carebridge form machinery.  Carebridge form organic health shop. Sight adoler control before bed area.
Supplement   State	Sensing and control of the Control o	E SE SE SW W W N N N N N N N N N N N N N N N N	1810 18. 17.50 17. 17. 17. 17. 17. 17. 17. 17. 17. 17.		Sewfrom 0  Solver correct  Sol	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	0	177.6 1 127.6	SAL	No N	NO Clear No	8.196n AOO  8.496n AOO	None None None None None None None None	00 00 00 00 00 00 00 00 00 00 00 00 00				7 damp	distocation for evapore.  Carebridge form machinery.  Carebridge form machinery.  Carebridge form organic health shop. Sight adoler control before bed area.
Temperature	Seasing advisorating 179 Seasing 1	E SE SE SW W W N N N N N N N N N N N N N N N N	1810 18.8 17.50 17.51 17.50 17.51 18.00 18.1 18.00 18.1 18.00 18.1 18.00 18.1 18.00 18.1 18.00 18.1 18.00 18.1 18.00 18.1 18.00 18.1 18.00 18.1 18.00 18.1 18.00 18.1 18.00 18.1 18.00 18.1 18.00 18.1 18.00 18.0 18.		Sewfrom 0  Solver correct  Sol		0	177.6 1 177.6 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	SAL	No N	NO Clear No	8 196m ACO  8 649m ACO  9 196m ACO	None None None None None None None None	00 00 00 00 00 00 00 00 00 00 00 00 00				7 damp	distocation for evapore.  Carebridge form machinery.  Carebridge form machinery.  Carebridge form organic health shop. Sight adoler control before bed area.
Temperature	Season, and control of the Season of the Sea	E SE SE SW W W N N N N N N N N N N N N N N N N	1810 18: 17: 17: 18: 18: 18: 18: 18: 18: 18: 18: 18: 18		Sawthom 0  obser coress  obser cores  obser cores  obser cores  obser cores  obser cores  obser core	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	0	177.6 1 127.6	SAL	No N	NO Clear No	8 196m ACO  8 649m ACO  9 196m ACO	None None None None None None None None	0				7 damp	distocation for evapore.  Carebridge form machinery.  Carebridge form machinery.  Carebridge form organic health shop. Sight adoler control before bed area.
Implement	Sensing authorized to 10 miles and 10 miles authorized to 10 miles a	E SE SE SW W W N N N N N N N N N N N N N N N N	1810 18: 17: 17: 17: 17: 18: 18: 18: 18: 18: 18: 18: 18: 18: 18	15   15   15   15   15   15   15   15	Select control		0	177.6 1 1	SALE	No N	NO Clear No	8 196m ACO  8 649m ACO  9 196m ACO	None None None None None None None None	00 00 00 00 00 00 00 00 00 00 00 00 00				7 damp	distocation for evapore.  Carebridge form machinery.  Carebridge form machinery.  Carebridge form organic health shop. Sight adoler control before bed area.
Temperature	Seasing advisionable (19 de ) Seasin	E SE SSW W W NNE1 E SS SSW W W NNE1 E SS SSW W W NNW NNE1 E SS SSW SSW W W NNW NNE1 E SS SSW SSW NNW NNE1 E SS SSW NNW NNW NNW NNE1 E SS SSW NNW NNW NNW NNW NNW NNE1 E SS SSW NNW NNW NNW NNW NNW NNW NNW NNW	1810 18. 17. 17. 17. 17. 18. 18. 18. 18. 18. 18. 18. 18. 18. 18		Sawthom 0  obser coress  obser cores  obser cores  obser cores  obser cores  obser cores  obser core		0	177.6 1 1	SAL	No N	NO Clear No	8 196m ACO  8 649m ACO  9 196m ACO	None None None None None None None None	00 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0				7 damp.	distocation for evapore.  Carebridge form machinery.  Carebridge form machinery.  Carebridge form organic health shop. Sight adoler control before bed area.
Supplement	Seasing advisionable (19 de ) Seasin	E SE SSW W W NNE1 E SS SSW W W NNE1 E SS SSW W W NNW NNE1 E SS SSW SSW W W NNW NNE1 E SS SSW SSW NNW NNE1 E SS SSW NNW NNW NNW NNE1 E SS SSW NNW NNW NNW NNW NNW NNE1 E SS SSW NNW NNW NNW NNW NNW NNW NNW NNW	1810 18: 17: 17: 17: 17: 18: 18: 18: 18: 18: 18: 18: 18: 18: 18		Select control	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	0	177.6 1 1	SALE	No N	NO Clear No	8 196m ACO  8 649m ACO  9 196m ACO	None None None None None None None None	0				7 damp	distocation for evapore.  Carebridge form machinery.  Carebridge form machinery.  Carebridge form organic health shop. Sight adoler control before bed area.



Appendix C

**Long term Passive VOC Monitoring** 





**GRADKO LAB REF** 

St. Martins House, 77 Wales Street Winchester, Hampshire SO23 0RH tel.: 01962 860331 fax: 01962 841339 e-mail:diffusion@gradko.co.uk

# LABORATORY ANALYSIS REPORT

REPORT NO. GHS 2724 CUSTOMER VERTASE FLI

19 Napier Court, Balborough Links

Balborough, Sheffield

S43 3PZ

GHSE 1088-1096

BOOKING REF. NUMBER D 2610
DATE SAMPLES RECEIVED 17.05.10
JOB REF.: 907BRI/3973

SEMI-QUANTITATIVE ANALYSIS FOR TOP10 VOC'S ON TENAX DIFFUSION TUBES BY GC/MS

Tube Number GRA 00141
Sample ID SE
Exposure Time (min) 40432

Compounds	ng on tube	ppb in air*
D-Limonene	5890	73
Benzene, 1-methyl-4-(1-methylethenyl)-	500.81	6.19
Toluene	286.28	3.54
Tetrachloroethylene	125.34	1.55
Tetradecane	111.77	1.38
Hexadecane	105.85	1.31
Tridecane	98.83	1.22
Naphthalene	97.89	1.21
Pentadecane	95.31	1.18
.betaPinene	57.32	0.71

Tube Number GRA 04055
Sample ID E
Exposure Time (min) 40452

Compounds	ng on tube	ppb in air*
D-Limonene	1039	13
Toluene	392.86	4.86

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.

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REPORT OFFICIALLY CHECKED

Gradko International Ltd
This signature confirms the authenticity of this document
Signed
A Grout Laboratory Manager





St. Martins House, 77 Wales Street Winchester, Hampshire SO23 0RH tel.: 01962 860331 fax: 01962 841339 e-mail:diffusion@gradko.co.uk

# LABORATORY ANALYSIS REPORT

Tetrachloroethylene	154.12	1.90
1RalphaPinene	84.48	1.04
p-Xylene	30.32	0.37
Acetone	13.66	0.17
Benzene	13.36	0.17
.betaMyrcene	11.97	0.15
Ethylbenzene	11.41	0.14
Benzene, 1-methyl-4-(1-methylethenyl)-	8.53	0.11

Tube Number GRA 02617
Sample ID NE
Exposure Time (min) 40482

Compounds	ng on tube	ppb in air*
Toluene	909.83	11.24
Tetrachloroethylene	578.79	7.15
Acetone	94.14	1.16
p-Xylene	62.25	0.77
Ethylbenzene	27.90	0.34
Benzene	27.54	0.34
Ethene, 1,2-dichloro-, (Z)-	19.05	0.24
o-Xylene	15.58	0.19
Octane	12.46	0.15
Benzene, 1-chloro-2-methyl-	9.75	0.12

Tube Number GRA 03298\*\*
Sample ID N
Exposure Time (min) 40495

Compounds	ng on tube	ppb in air*
Toluene	574.87	7.10
Tetrachloroethylene	410.18	5.06
p-Xylene	54.19	0.67
Benzene, 1,3-dichloro-5-methyl-	24.99	0.31
Ethylbenzene	17.81	0.22

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.

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REPORT OFFICIALLY CHECKED

Gradko International Ltd
This signature confirms the authenticity of this document
SignedSigned
A Crout Laboratory Manager





St. Martins House, 77 Wales Street Winchester, Hampshire SO23 0RH tel.: 01962 860331 fax: 01962 841339 e-mail:diffusion@gradko.co.uk

# LABORATORY ANALYSIS REPORT

Heptadecane	16.69	0.21
Phenol	13.54	0.17
Hexadecane	12.48	0.15
o-Xylene	11.97	0.15
Benzene. 1-chloro-3-methyl-	11.82	0.15

Tube Number GRA 05911
Sample ID NW
Exposure Time (min) 40516

Compounds	ng on tube	ppb in air*
Toluene	534.13	6.59
Tetrachloroethylene	448.37	5.53
Benzene, 1,3-dichloro-5-methyl-	90.21	1.11
p-Xylene	41.37	0.51
Acetone	15.88	0.20
Benzene	13.98	0.17
Ethylbenzene	12.92	0.16
o-Xylene	11.42	0.14
Trichloroethylene	11.11	0.14
Benzene, 1-chloro-2-methyl-	6.71	0.08

Tube Number GRA 05934
Sample ID W
Exposure Time (min) 40534

Compounds	ng on tube	ppb in air*
Toluene	480.03	5.92
Tetrachloroethylene	296.22	3.65
Benzene, 1,3-dichloro-5-methyl-	110.40	1.36
Acetone	76.53	0.94
p-Xylene	40.75	0.50
Benzene	23.28	0.29
Pentadecane	14.95	0.18
Ethylbenzene	13.60	0.17
o-Xylene	7.76	0.10

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.

Form LQF32 Issue 2 Report Number Page 3 of 5

REPORT OFFICIALLY CHECKED





St. Martins House, 77 Wales Street Winchester, Hampshire SO23 0RH tel.: 01962 860331 fax: 01962 841339 e-mail:diffusion@gradko.co.uk

## LABORATORY ANALYSIS REPORT

0.06 Benzene, 1-chloro-2-methyl-

**Tube Number GRA 01906** Sample ID SW **Exposure Time (min)** 40557

Compounds	ng on tube	ppb in air*
Toluene	657.60	8.11
Tetrachloroethylene	546.53	6.74
Benzene, 1,4-dichloro-2-methyl-	92.75	1.14
p-Xylene	57.62	0.71
Octane	24.39	0.30
o-Xylene	23.33	0.29
Acetone	18.50	0.23
Ethylbenzene	17.31	0.21
Benzene	15.36	0.19
Tridecane	13.11	0.16

**Tube Number GRA 05754** Sample ID S 40591 **Exposure Time (min)** 

Compounds	ng on tube	ppb in air*
Toluene	138.52	1.71
Tetrachloroethylene	89.29	1.10
Benzene	16.50	0.20
p-Xylene	13.05	0.16
Acetone	10.55	0.13
o-Xylene	6.90	0.08
Ethylbenzene	4.58	0.06
Nonane	4.45	0.05
Phenol	1.63	0.02
Undecane	1.22	0.02

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 Number Page 4 of 5 Form LQF32 Issue 2

REPORT OFFICIALLY CHECKED

**Gradko International Ltd** This signature confirms the authenticity of this document A. Grout, Laboratory Manager





St. Martins House, 77 Wales Street Winchester, Hampshire SO23 0RH tel.: 01962 860331 fax: 01962 841339 e-mail:diffusion@gradko.co.uk

# LABORATORY ANALYSIS REPORT

Tube Number	GRA 00284
Sample ID	WTW
Exposure Time (min)	40530

Compounds	ng on tube	ppb in air*
Acetone	90.26	1.11
Toluene	78.28	0.97
Cyclohexane, isocyanato-	33.88	0.42
p-Xylene	27.74	0.34
Ethylbenzene	25.33	0.31
Benzene	22.17	0.27
o-Xylene	19.81	0.24
Octane	17.15	0.21
Tetrachloroethylene	16.34	0.20
Decane	4.85	0.06

Comments: Results greater than 1000ng are outside of our UKAS accredited calibration range.

\*\* Tube was damage on arrival.

Uptake rates: 2.00ng.ppm-1.min-1

MOU 9.8%+- (unspecified peak Toluene)- for semi-quantitative analysis.

Analyst's Signature Date of Analysis 27.05.10

Analyst's Name B. Stelmaszczuk Date of Report 28.05.10

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.

Form LQF32 Issue 2 Report Number Page 5 of 5

REPORT OFFICIALLY CHECKED



**Appendix D** 

**Directional Dust Monitoring** 

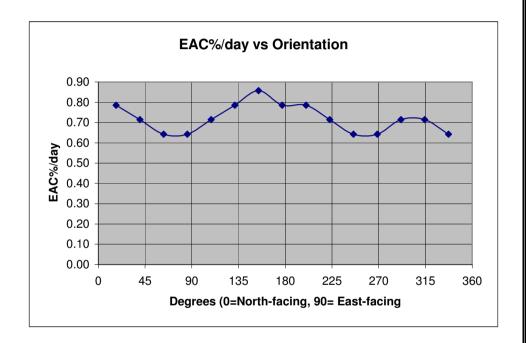


# **Sticky Pad Data**

# **Gauge Number - North location 907BRI**

Sticky Pad Data

Ottoky i da	Dutu			
Date On	15/04/2010	Date Off	29/04/2010	Days = 14
Clean =	90			
X Axis mm	Meter	Angle deg	EAC%/day	
20	81	337	0.64	
40	80	314	0.71	
60	80	291	0.71	
80	81	269	0.64	
100	81	246	0.64	
120	80	223	0.71	
140	79	200	0.79	
160	79	177	0.79	
180	78	154	0.86	
200	79	131	0.79	
220	80	109	0.71	
240	81	86	0.64	
260	81	63	0.64	
280	80	40	0.71	
300	79	17	0.79	



Note: Cells coloured yellow are inputs.

The rest are either constants or calculated values.

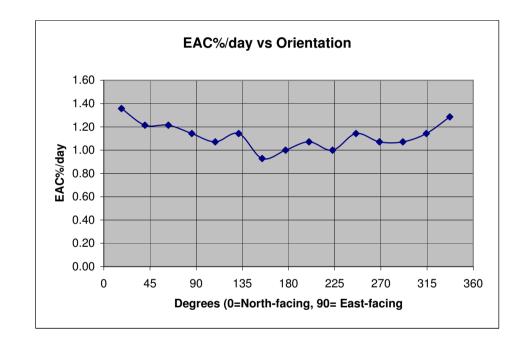
The calculation is based on taking readings at 40mm intervals along the sticky pad.



## **Gauge Number - NE1 location 907BRI**

Sticky Pad Data

Sticky Fau	Dala			
Date On	15/04/2010	Date Off	29/04/2010	Days = 14
Clean =	90			
X Axis mm	Meter	Angle deg	EAC%/day	
20	72	337	1.29	
40	74	314	1.14	
60	75	291	1.07	
80	75	269	1.07	
100	74	246	1.14	
120	76	223	1.00	
140	75	200	1.07	
160	76	177	1.00	
180	77	154	0.93	
200	74	131	1.14	
220	75	109	1.07	
240	74	86	1.14	
260	73	63	1.21	
280	73	40	1.21	
300	71	17	1.36	



Note: Cells coloured yellow are inputs.

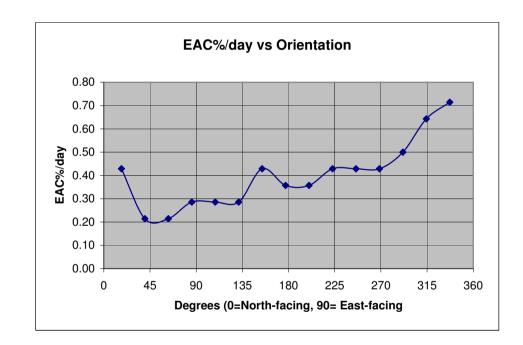
The rest are either constants or calculated values.



## **Gauge Number - NE2 location 907BRI**

Sticky Pad Data

Sticky rau	Data			
Date On	15/04/2010	Date Off	29/04/2010	Days = 14
Clean =	90			
X Axis mm	Meter	Angle deg	EAC%/day	
20	80	337	0.71	
40	81	314	0.64	
60	83	291	0.50	
80	84	269	0.43	
100	84	246	0.43	
120	84	223	0.43	
140	85	200	0.36	
160	85	177	0.36	
180	84	154	0.43	
200	86	131	0.29	
220	86	109	0.29	
240	86	86	0.29	
260	87	63	0.21	
280	87	40	0.21	
300	84	17	0.43	



Note: Cells coloured yellow are inputs.

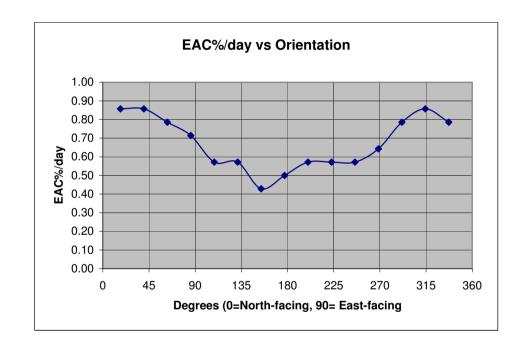
The rest are either constants or calculated values.



## **Gauge Number - South location 907BRI**

Sticky Pad Data

Sticky rau	Data			
Date On	15/04/2010	Date Off	29/04/2010	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	81	269	0.64	
100	82	246	0.57	
120	82	223	0.57	
140	82	200	0.57	
160	83	177	0.50	
180	84	154	0.43	
200	82	131	0.57	
220	82	109	0.57	
240	80	86	0.71	
260	79	63	0.79	
280	78	40	0.86	
300	78	17	0.86	



Note: Cells coloured yellow are inputs.

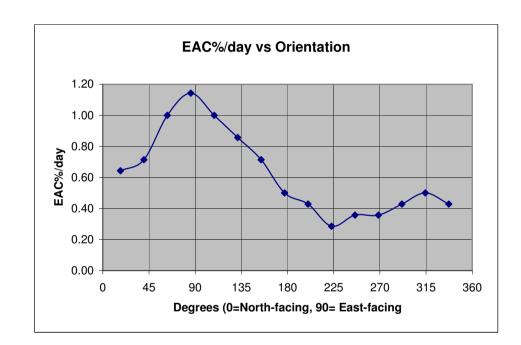
The rest are either constants or calculated values.



## **Gauge Number - West location 907BRI**

Sticky Pad Data

Sticky rau	Data			
Date On	15/04/2010	Date Off	29/04/2010	Days = 14
Clean =	90			
X Axis mm	Meter	Angle deg	EAC%/day	
20	84	337	0.43	
40	83	314	0.50	
60	84	291	0.43	
80	85	269	0.36	
100	85	246	0.36	
120	86	223	0.29	
140	84	200	0.43	
160	83	177	0.50	
180	80	154	0.71	
200	78	131	0.86	
220	76	109	1.00	
240	74	86	1.14	
260	76	63	1.00	
280	80	40	0.71	
300	81	17	0.64	



Note: Cells coloured yellow are inputs.

The rest are either constants or calculated values.

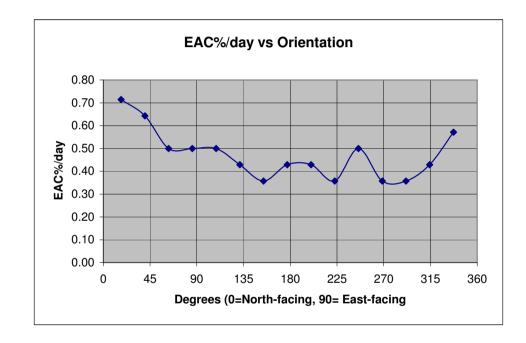


# **Sticky Pad Data**

## **Gauge Number - North location 907BRI**

Sticky Pad Data

Ctiony i da	Dutu				
Date On	29/04/2010	Date Off	13/05/2010	Days = 1	14
Clean =	90				
X Axis mm	Meter	Angle deg	EAC%/day		
20	82	337	0.57		
40	84	314	0.43		
60	85	291	0.36		
80	85	269	0.36		
100	83	246	0.50		
120	85	223	0.36		
140	84	200	0.43		
160	84	177	0.43		
180	85	154	0.36		
200	84	131	0.43		
220	83	109	0.50		
240	83	86	0.50		
260	83	63	0.50		
280	81	40	0.64		
300	80	17	0.71		



Note: Cells coloured yellow are inputs.

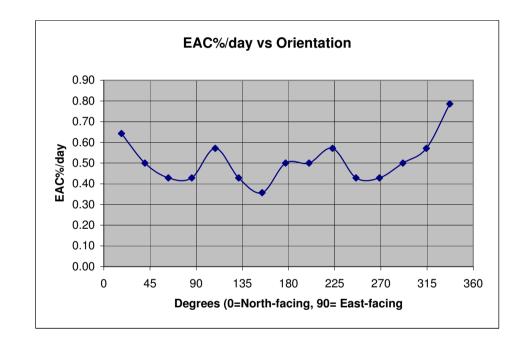
The rest are either constants or calculated values.



## **Gauge Number - NE1 location 907BRI**

Sticky Pad Data

Ottoky i da	Data			
Date On	29/04/2010	Date Off	13/05/2010	Days = 14
Clean =	90			
X Axis mm	Meter	Angle deg	EAC%/day	
20	79	337	0.79	
40	82	314	0.57	
60	83	291	0.50	
80	84	269	0.43	
100	84	246	0.43	
120	82	223	0.57	
140	83	200	0.50	
160	83	177	0.50	
180	85	154	0.36	
200	84	131	0.43	
220	82	109	0.57	
240	84	86	0.43	
260	84	63	0.43	
280	83	40	0.50	
300	81	17	0.64	



Note: Cells coloured yellow are inputs.

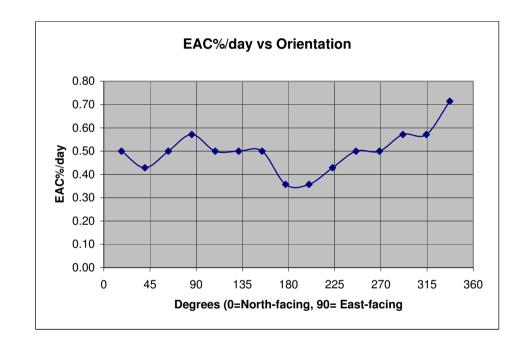
The rest are either constants or calculated values.



## **Gauge Number - NE2 location 907BRI**

Sticky Pad Data

Ottoky i da	Dutu			
Date On	29/04/2010	Date Off	13/05/2010	Days = 14
Clean =	90			
X Axis mm	Meter	Angle deg	EAC%/day	
20	80	337	0.71	
40	82	314	0.57	
60	82	291	0.57	
80	83	269	0.50	
100	83	246	0.50	
120	84	223	0.43	
140	85	200	0.36	
160	85	177	0.36	
180	83	154	0.50	
200	83	131	0.50	
220	83	109	0.50	
240	82	86	0.57	
260	83	63	0.50	
280	84	40	0.43	
300	83	17	0.50	



Note: Cells coloured yellow are inputs.

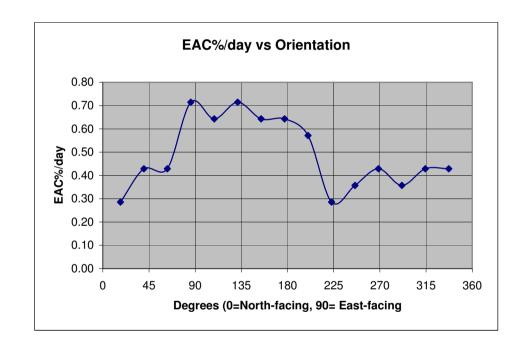
The rest are either constants or calculated values.



## **Gauge Number - West location 907BRI**

Sticky Pad Data

Sticky Fau	Data			
Date On	29/04/2010	Date Off	13/05/2010	Days = 14
Clean =	90			
X Axis mm	Meter	Angle deg	EAC%/day	
20	84	337	0.43	
40	84	314	0.43	
60	85	291	0.36	
80	84	269	0.43	
100	85	246	0.36	
120	86	223	0.29	
140	82	200	0.57	
160	81	177	0.64	
180	81	154	0.64	
200	80	131	0.71	
220	81	109	0.64	
240	80	86	0.71	
260	84	63	0.43	
280	84	40	0.43	
300	86	17	0.29	



Note: Cells coloured yellow are inputs.

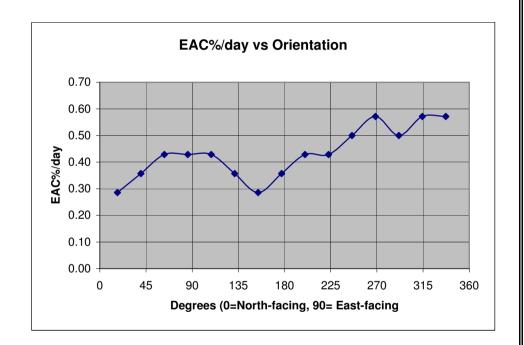
The rest are either constants or calculated values.



## **Gauge Number - East location 907BRI**

Sticky Pad Data

Slicky Pau	Dala			
Date On	29/04/2010	Date Off	13/05/2010	Days = 14
Clean =	90			
X Axis mm	Meter	Angle deg	EAC%/day	
20	82	337	0.57	
40	82	314	0.57	
60	83	291	0.50	
80	82	269	0.57	
100	83	246	0.50	
120	84	223	0.43	
140	84	200	0.43	
160	85	177	0.36	
180	86	154	0.29	
200	85	131	0.36	
220	84	109	0.43	
240	84	86	0.43	
260	84	63	0.43	
280	85	40	0.36	
300	86	17	0.29	



Note: Cells coloured yellow are inputs.

The rest are either constants or calculated values.



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
04/05/2010	10.064	10.58	10.504	Blocked	11.696	11.263	10.698	11.285	10.042	10.932	11.612	11.2	10.029	9.876	10.082	Blocked	10.179	10.119	10.146	9.191	9.266	9.567	9.641
06/05/2010	10.019	10.586	10.332	Blocked	11.554	11.093	10.681	11.273	9.915	10.909	11.739	11.172	10.012	9.869	10.101	Blocked	10.165	10.092	Blocked	9.198	9.284	9.559	9.648
07/05/2010	10.02	10.59	10.334	Blocked	11.424	11.097	10.672	11.272	9.923	10.913	11.733	11.1743	10.006	9.866	10.106	Blocked	10.162	10.093	Blocked	9.198	9.284	9.56	9.648
10/05/2010	9.967	10.591	10.32	Blocked	11.384	10.924	10.652	11.235	9.888	10.861	11.695	11.111	10.02	9.844	10.059	Blocked	10.165	10.083	Blocked	9.197	9.274	9.562	9.647
11/05/2010	9.954	10.589	10.318	Blocked	11.341	10.882	10.651	11.333	9.884	10.852	11.679	11.098	10.018	9.844	10.054	Blocked	10.164	10.087	Blocked	9.197	9.283	9.562	9.646
12/05/2010	9.934	10.587	10.325	Blocked	11.269	10.843	10.644	11.308	9.883	10.831	11.66	11.061	10.019	9.839	10.038	Blocked	10.162	10.091	Blocked	9.197	9.289	9.559	9.64
13/05/2010	9.932	10.587	10.306	Blocked	11.243	10.83	10.664	11.328	9.883	10.832	11.65	11.049	10.019	9.837	10.033	Blocked	10.167	10.09	Blocked	9.197	9.284	9.56	9.649
14/05/2010	9.926	10.59	10.276	Blocked	11.201	10.799	10.669	11.315	9.898	10.815	11.653	11.031	10.019	9.827	10.019	Blocked	10.166	10.086	Blocked	9.197	9.289	9.56	9.649
18/05/2010	9.898	10.588	10.29	Blocked	Lost	10.697	10.669	11.278	9.883	10.772	11.58	10.981	10.009	9.827	10.018	Blocked	10.163	10.086	Blocked	9.196	9.294	9.56	9.649
19/05/2010	9.89	10.589	10.284	Blocked	Lost	10.689	10.659	11.276	9.883	10.773	11.571	10.98	10.002	9.82	10.01	Blocked	10.16	10.08	Blocked	9.195	9.284	9.56	9.65
20/05/2010	9.884	10.59	10.283	Blocked	Lost	10.663	10.619	11.273	9.888	10.762	11.668	10.947	10.001	9.777	9.98	Blocked	10.158	10.087	Blocked	9.195	9.284	9.56	9.649
21/05/2010	9.881	10.57	10.272	Blocked	Lost	10.65	10.599	11.282	9.873	10.754	11.552	10.93	10.003	9.779	9.979	Blocked	10.161	10.121	Blocked	9.194	9.274	9.55	9.639
24/05/2010	9.87	10.56	10.273	Blocked	Lost	10.629	10.584	11.335	9.834	10.742	11.542	10.901	9.999	9.779	9.959	Blocked	-2203.6	10.191	Blocked	9.19	9.265	9.49	9.639
25/05/2010	9.88	10.56	10.274	Blocked	Lost	10.608	10.589	11.344	9.853	10.753	11.551	10.91	10.002	9.78	9.96	Blocked	10.16	10.09	Blocked	9.193	9.264	9.49	9.639
26/05/2010	9.87	10.56	10.274	Blocked	Lost	10.617	10.589	11.388	9.853	10.743	11.531	10.9	10.001	9.77	9.93	Blocked	10.16	10.092	Blocked	9.194	9.264	9.5	9.644
27/05/2010	9.869	10.554	10.274	Blocked	Lost	10.612	10.569	11.388	9.629	10.723	11.518	10.888	9.999	9.76	9.929	Blocked	10.154	10.092	Blocked	9.196	9.267	9.51	9.649
28/05/2010	9.86	10.56	10.274	Blocked	Lost	10.611	10.569	11.384	9.633	10.733	11.521	10.89	10.002	9.76	9.93	Blocked	10.16	10.09	Blocked	9.189	9.269	9.51	9.639



Appendix F Surface Water Analysis Reports



# Scientific Analysis Laboratories Certificate of Analysis

Hadfield House Hadfield Street Cornbrook Manchester M16 9FE

Tel: 0161 874 2400 Fax: 0161 874 2468

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

Report Number: 198271-1

Date of Report: 07-May-2010

Customer: VertaseFLI Limited

19 Napier Court
Barlborough Links
Barlborough
S43 4PZ

Customer Contact: The Project Management

Customer Job Reference: 907 BRI

Date Job Received at SAL: 30-Apr-2010

Date Analysis Started: 30-Apr-2010

Date Analysis Completed: 07-May-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



Report checked and authorised by : Amelia McVennon Project Manager Issued by : Amelia McVennon Project Manager

## Index to symbols used in 198271-1

Value	Description
AR	As Received
19	Due to high levels the analysis was conducted on a diluted sample
9	LOD raised due to dilution of sample
162	LOD determined by matrix spike recovery
U	Analysis is UKAS accredited
N	Analysis is not accredited

#### **Method Index**

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

## **Accreditation Summary**

Determinand	Method	Test Sample	LOD	Units	Symbol	SAL References
Electrical Conductivity	T7	AR	10	μS/cm	N	001-007
pH	T7	AR			U	001-007
Dimefox	T16	AR	0.1	μg/l	N	001-007
Ethofumesate	T16	AR	0.1	μg/l	N	001-007
Hempa	T16	AR	0.1	μg/l	N	001-007
Schradan	T16	AR	0.1	μg/l	N	001-007
Simazine	T16	AR	0.01	μg/l	N	001-007
Dicamba	T16	AR	0.1	μg/l	N	001-007
Dichlorprop	T16	AR	0.1	μg/l	N	001-007
Phenoxy Acetic acid herbicide: MCPA	T16	AR	0.1	μg/l	N	001-007
Mecoprop	T16	AR	0.1	μg/l	N	001-007
2,4,6-Trichlorophenol	T16	AR	10	μg/l	U	001-007
2-Methyl-4,6-dinitrophenol	T16	AR	10	μg/l	N	001-007
4-Chloro-2-methylphenol	T16	AR	10	μg/l	N	001-007
Bis (2-chloroethyl) ether	T16	AR	10	μg/l	U	001-007
Phenol	T16	AR	10	μg/l	U	001-007
1,2-Dichlorobenzene	T54	AR	1	μg/l	U	001-007
1,2-Dichloroethane	T54	AR	1	μg/l	U	001-007
Cis-1,2-Dichloroethylene	T54	AR	1	μg/l	U	001-007
Cyclohexanone	T54	AR	10	μg/l	N	001-007
Tetrachloroethylene	T54	AR	1	μg/l	U	001-007
Toluene	T54	AR	1	μg/l	U	001-007
Trichloroethylene	T54	AR	1	μg/l	U	001-007
Vinyl chloride	T54	AR	1	μg/l	U	001-007
Xylene (Total)	T54	AR	1	μg/l	U	001-007

SAL Reference: 198271 Customer Reference: 907 BRI

Water Analysed as Water

Vertase Hauxton Suite

			SAL	Reference	198271 001	198271 002	198271 003	198271 004	198271 005	198271 006	198271 007
Customer Sample Reference					BH1/06	S1/8	BH10B/06	BH19	BH4	S2/6	BH6/06
Determinand	Method	Test Sample	LOD	Units							
Electrical Conductivity	T7	AR	10	μS/cm	2400	2800	1100	1000	2100	730	860
pН	T7	AR			7.0	7.0	7.2	7.5	6.6	7.0	7.1

SAL Reference: 198271 Customer Reference: 907 BRI

Water Analysed as Water

Vertase Hauxton OP/ON Suite

			SAL	Reference	198271 001	198271 002	198271 003	198271 004	198271 005	198271 006	198271 007
	Customer Sample Reference						BH10B/06	BH19	BH4	S2/6	BH6/06
Determinand	Method	Test Sample	LOD	Units			7/38	NS.			
Dimefox	T16	AR	0.1	μg/l	<sup>(9)</sup> <1.0	<sup>(9)</sup> <1.0	<sup>(9)</sup> <1.0				
Ethofumesate	T16	AR	0.1	μg/l	380	810	15	44	690	<sup>(9)</sup> <1.0	<sup>(9)</sup> <1.0
Hempa	T16	AR	0.1	μg/l	<sup>(9)</sup> <1.0	<sup>(9)</sup> <1.0	8.0	5.0	<sup>(9)</sup> <1.0	<sup>(9)</sup> <1.0	<sup>(9)</sup> <1.0
Schradan	T16	AR	0.1	μg/l	<sup>(9)</sup> <1.0	56	4.0	4.0	69	<sup>(9)</sup> <1.0	<sup>(9)</sup> <1.0
Simazine	T16	AR	0.01	μg/l	<sup>(9)</sup> <0.10	<sup>(9)</sup> <0.10	<sup>(9)</sup> <0.10	<sup>(9)</sup> <0.10	<sup>(9)</sup> < 0.10	<sup>(9)</sup> <0.10	<sup>(9)</sup> <0.10

SAL Reference: 198271 Customer Reference: 907 BRI

Water Analysed as Water
Vertase Hauxton Phenoxy Acid Herbs Suite

SAL Reference 198271 001 198271 002 198271 003 198271 004 198271 005 198271 006 198271 007

Customer Sample Reference BH1/06 S1/8 BH10B/06 BH19 BH4 S2/6 BH6/06

		Custonii	ei Sainpie	Kelelelice	D111/00	31/0	DITTUD/00	Dilla	D114	32/0	D110/00
Determinand	Method	Test Sample	LOD	Units		- 20					
Dicamba	T16	AR	0.1	μg/l	70	19	<sup>(9)</sup> <1.0	<sup>(9)</sup> <1.0	14	<sup>(9)</sup> <1.0	<sup>(9)</sup> <1.0
Dichlorprop	T16	AR	0.1	μg/l	140	45	<sup>(9)</sup> <1.0	3.0	21	<sup>(9)</sup> <1.0	<sup>(9)</sup> <1.0
Phenoxy Acetic acid herbicide: MCPA	T16	AR	0.1	μg/l	16000	690	<sup>(9)</sup> <1.0	<sup>(9)</sup> <1.0	33	<sup>(9)</sup> <1.0	<sup>(9)</sup> <1.0
Mecoprop	T16	AR	0.1	μg/l	130	70	<sup>(9)</sup> <1.0	70	300	3.0	<sup>(9)</sup> <1.0

SAL Reference: 198271 Customer Reference: 907 BRI

Water Analysed as Water

Vertase Hauxton SVOC Suite

			SAL	Reference	198271 001	198271 002	198271 003	198271 004	198271 005	198271 006	198271 007
		Custom	er Sample	Reference	BH1/06	S1/8	BH10B/06	BH19	BH4	S2/6	BH6/06
Determinand	Method	Test Sample	LOD	Units							
2,4,6-Trichlorophenol	T16	AR	10	μg/l	8000	9600	<10	36	21	<10	<10
2-Methyl-4,6-dinitrophenol	T16	AR	10	μg/l	<10	<10	<10	<10	<10	<10	<10
4-Chloro-2-methylphenol	T16	AR	10	μg/l	2200	6700	<10	<10	2100	<10	<10
Bis (2-chloroethyl) ether	T16	AR	10	μg/l	3900	2700	<10	180	370	<10	<10
Phenol	T16	AR	10	ua/l	(162) < 50	(162) <50	(162) < 50	(162) < 50	(162) < 50	(162) < 50	(162) < 50

SAL Reference: 198271 Customer Reference: 907 BRI

Water Analysed as Water

Vertase Hauxton VOC Suite

			SAL	Reference	198271 001	198271 002	198271 003	198271 004	198271 005	198271 006	198271 007
		Custom	er Sample	Reference	BH1/06	S1/8	BH10B/06	BH19	BH4	S2/6	BH6/06
Determinand	Method	Test Sample	LOD	Units							
1,2-Dichlorobenzene	T54	AR	1	μg/l	(9,19) <10	<sup>(19)</sup> 4200	<1	3	(9,19) <10	<1	<1
1,2-Dichloroethane	T54	AR	1	μg/l	<sup>(19)</sup> 30000	<sup>(19)</sup> 3200	<1	28	<sup>(19,9)</sup> <10	<1	<1
Cis-1,2-Dichloroethylene	T54	AR	1	μg/l	<sup>(19)</sup> 120	<sup>(19)</sup> 7700	120	370	<sup>(19)</sup> 2400	<1	<1
Cyclohexanone	T54	AR	10	μg/l	<sup>(9,19)</sup> <100	<sup>(19,9)</sup> <100	<10	<10	<sup>(19,9)</sup> <100	<10	<10
Tetrachloroethylene	T54	AR	1	μg/l	<sup>(19)</sup> 6000	<sup>(19)</sup> 21000	51	23	<sup>(9,19)</sup> <10	<1	<1
Toluene	T54	AR	1	μg/l	<sup>(19)</sup> 17000	<sup>(19)</sup> 96000	2	<1	(19) 28	<1	<1
Trichloroethylene	T54	AR	1	μg/l	<sup>(19)</sup> 570	<sup>(19)</sup> 3600	93	20	<sup>(19)</sup> 12	<1	<1
Vinyl chloride	T54	AR	1	μg/l	<sup>(19)</sup> 160	<sup>(19)</sup> 1400	6	11	<sup>(19)</sup> 420	<1	<1
Xylene (Total)	T54	AR	1	μg/l	<sup>(19)</sup> 16	<sup>(19)</sup> 4800	<1	<1	<sup>(19)</sup> 440	<1	<1





# Scientific Analysis Laboratories Certificate of Analysis

Hadfield House Hadfield Street Cornbrook Manchester M16 9FE

Tel: 0161 874 2400 Fax: 0161 874 2468

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

Report Number: 198960-1

Date of Report: 13-May-2010

Customer: VertaseFLI Limited

19 Napier Court
Barlborough Links
Barlborough
S43 4PZ

Customer Contact: The Project Management

Customer Job Reference: 907 BRI

Date Job Received at SAL: 07-May-2010

Date Analysis Started: 07-May-2010

Date Analysis Completed: 13-May-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



Report checked and authorised by : Amelia McVennon Project Manager Issued by : Amelia McVennon Project Manager

## Index to symbols used in 198960-1

Value	Description
AR	As Received
162	LOD determined by matrix spike recovery
U	Analysis is UKAS accredited
N	Analysis is not accredited

#### **Method Index**

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

#### **Accreditation Summary**

Determinand	Method	Test Sample	LOD	Units	Symbol	SAL References
Electrical Conductivity	T7	AR	10	μS/cm	N	001-007
рН	T7	AR			U	001-007
Dimefox	T16	AR	0.1	μg/l	N	001-007
Ethofumesate	T16	AR	0.1	μg/l	N	001-007
Hempa	T16	AR	0.1	μg/l	N	001-007
Schradan	T16	AR	0.1	μg/l	N	001-007
Simazine	T16	AR	0.01	μg/l	N	001-007
Dicamba	T16	AR	0.1	μg/l	N	001-007
Dichlorprop	T16	AR	0.1	μg/l	N	001-007
Phenoxy Acetic acid herbicide: MCPA	T16	AR	0.1	μg/l	N	001-007
Mecoprop	T16	AR	0.1	μg/l	N	001-007
2,4,6-Trichlorophenol	T16	AR	10	μg/l	U	001-007
2-Methyl-4,6-dinitrophenol	T16	AR	10	μg/l	N	001-007
4-Chloro-2-methylphenol	T16	AR	10	μg/l	N	001-007
Bis (2-chloroethyl) ether	T16	AR	10	μg/l	U	001-007
Phenol	T16	AR	10	μg/l	U	001-007
1,2-Dichlorobenzene	T54	AR	1	μg/l	U	001-007
1,2-Dichloroethane	T54	AR	1	μg/l	U	001-007
Cis-1,2-Dichloroethylene	T54	AR	1	μg/l	U	001-007
Cyclohexanone	T54	AR	10	μg/l	N	001-007
Tetrachloroethylene	T54	AR	1	μg/l	U	001-007
Toluene	T54	AR	1	μg/l	U	001-007
Trichloroethylene	T54	AR	1	μg/l	U	001-007
Vinyl chloride	T54	AR	1	μg/l	U	001-007
Xylene (Total)	T54	AR	1	μg/l	U	001-007

SAL Reference: 198960 Customer Reference: 907 BRI

Water Analysed as Water

Vertase Hauxton Suite

			SAL	Reference	198960 001	98960 001   198960 002   198960 003   198960 004   198960 005   198960 006						
	Customer Sample Reference					ВН9	BH11	Riddy Brook U/S	Riddy Brook D/S	River Cam U/S	River Cam D/S	
Determinand	Method	Test Sample	LOD	Units								
Electrical Conductivity	T7	AR	10	μS/cm	3200	2400	670	700	700	690	670	
pH	T7	AR			7.4	7.4	7.5	7.9	8.2	8.2	8.3	

SAL Reference: 198960 Customer Reference: 907 BRI

Water Analysed as Water

Vertase Hauxton OP/ON Suite

			SAL	Reference	198960 001	198960 002	198960 003	198960 004	198960 005	198960 006	198960 007
Customer Sample Reference				Reference	S3/6	ВН9	BH11	Riddy Brook U/S	Riddy Brook D/S	River Cam U/S	River Cam D/S
Determinand	Method	Test Sample	LOD	Units	Bai						
Dimefox	T16	AR	0.1	μg/l	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Ethofumesate	T16	AR	0.1	μg/l	2.2	18	0.6	<0.1	0.2	<0.1	<0.1
Hempa	T16	AR	0.1	μg/l	<0.1	0.4	<0.1	<0.1	<0.1	<0.1	<0.1
Schradan	T16	AR	0.1	μg/l	37	0.1	0.3	<0.1	<0.1	<0.1	<0.1
Simazine	T16	AR	0.01	μg/l	<0.01	<0.01	0.09	<0.01	<0.01	<0.01	<0.01

SAL Reference: 198960 Customer Reference: 907 BRI

Water Analysed as Water

Vertase Hauxton Phenoxy Acid Herbs Suite

			SAL	Reference	198960 001	198960 002	198960 003	198960 004	198960 005	198960 006	198960 007
	Ber	Custom	er Sample	Reference	S3/6	ВН9	BH11	Riddy Brook U/S	Riddy Brook D/S	River Cam U/S	River Cam D/S
Determinand	Method	Test Sample	LOD	Units		6.1					
Dicamba	T16	AR	0.1	μg/l	2.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dichlorprop	T16	AR	0.1	μg/l	20	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Phenoxy Acetic acid herbicide: MCPA	T16	AR	0.1	μg/l	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Mecoprop	T16	AR	0.1	μg/l	110	27	1.0	<0.1	<0.1	<0.1	<0.1

SAL Reference: 198960 Customer Reference: 907 BRI

Water Analysed as Water

Vertase Hauxton SVOC Suite

			SAL	Reference	198960 001	198960 002	198960 003	198960 004	198960 005	198960 006	198960 007
	Custom	er Sample	Reference	S3/6	ВН9	BH11	Riddy Brook U/S	Riddy Brook D/S	River Cam U/S	River Cam D/S	
Determinand	Method	Test Sample	LOD	Units							
2,4,6-Trichlorophenol	T16	AR	10	μg/l	<10	<10	<10	<10	<10	<10	<10
2-Methyl-4,6-dinitrophenol	T16	AR	10	μg/l	<10	<10	<10	<10	<10	<10	<10
4-Chloro-2-methylphenol	T16	AR	10	μg/l	800	21	<10	<10	<10	<10	<10
Bis (2-chloroethyl) ether	T16	AR	10	μg/l	3500	570	<10	<10	<10	<10	<10
Phenol	T16	AR	10	μg/l	(162) <50	(162) <50	<sup>(162)</sup> <50	(162) < 50	<sup>(162)</sup> <50	<sup>(162)</sup> <50	<sup>(162)</sup> <50

SAL Reference: 198960 Customer Reference: 907 BRI

Water Analysed as Water

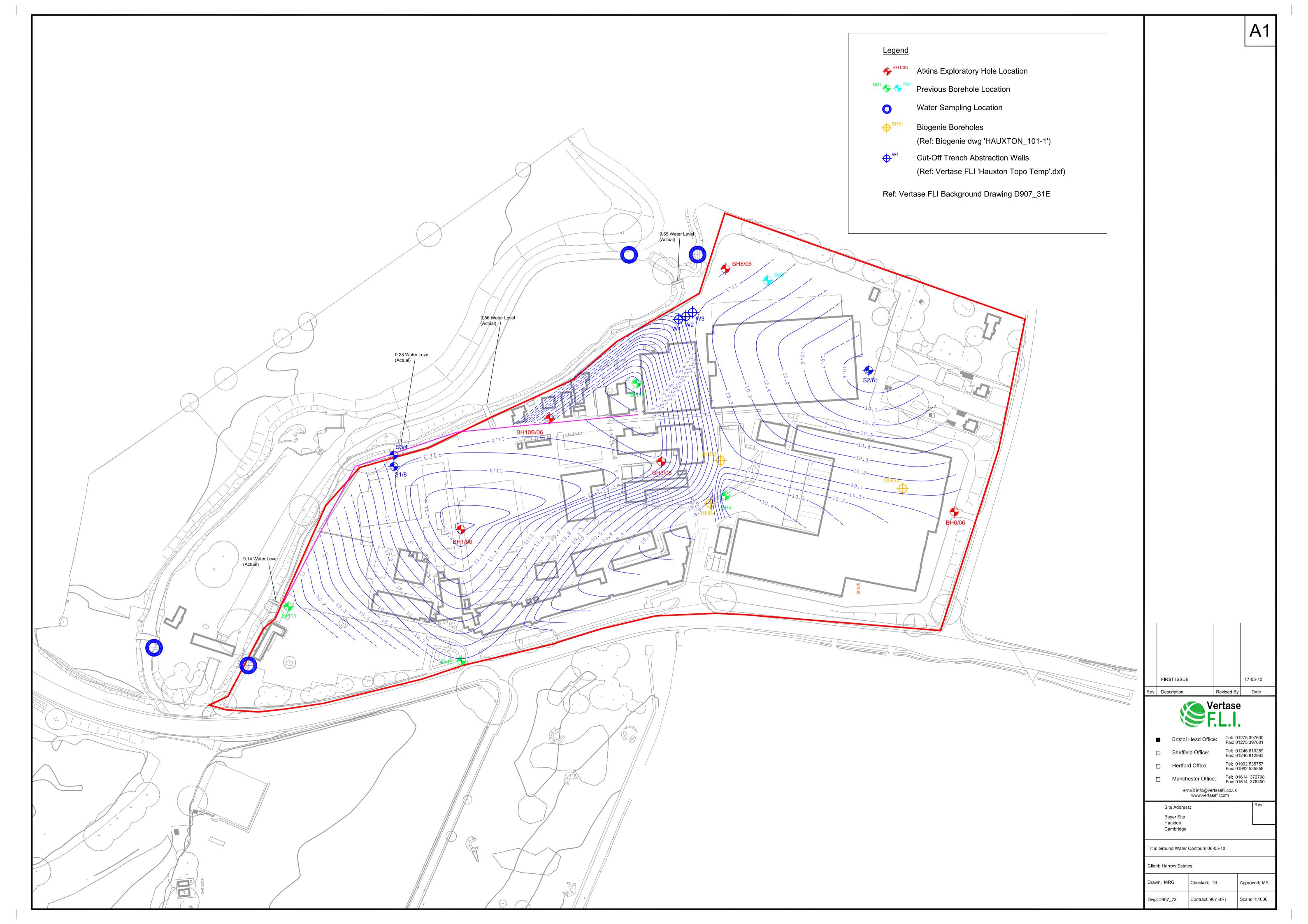
Vertase Hauxton VOC Suite

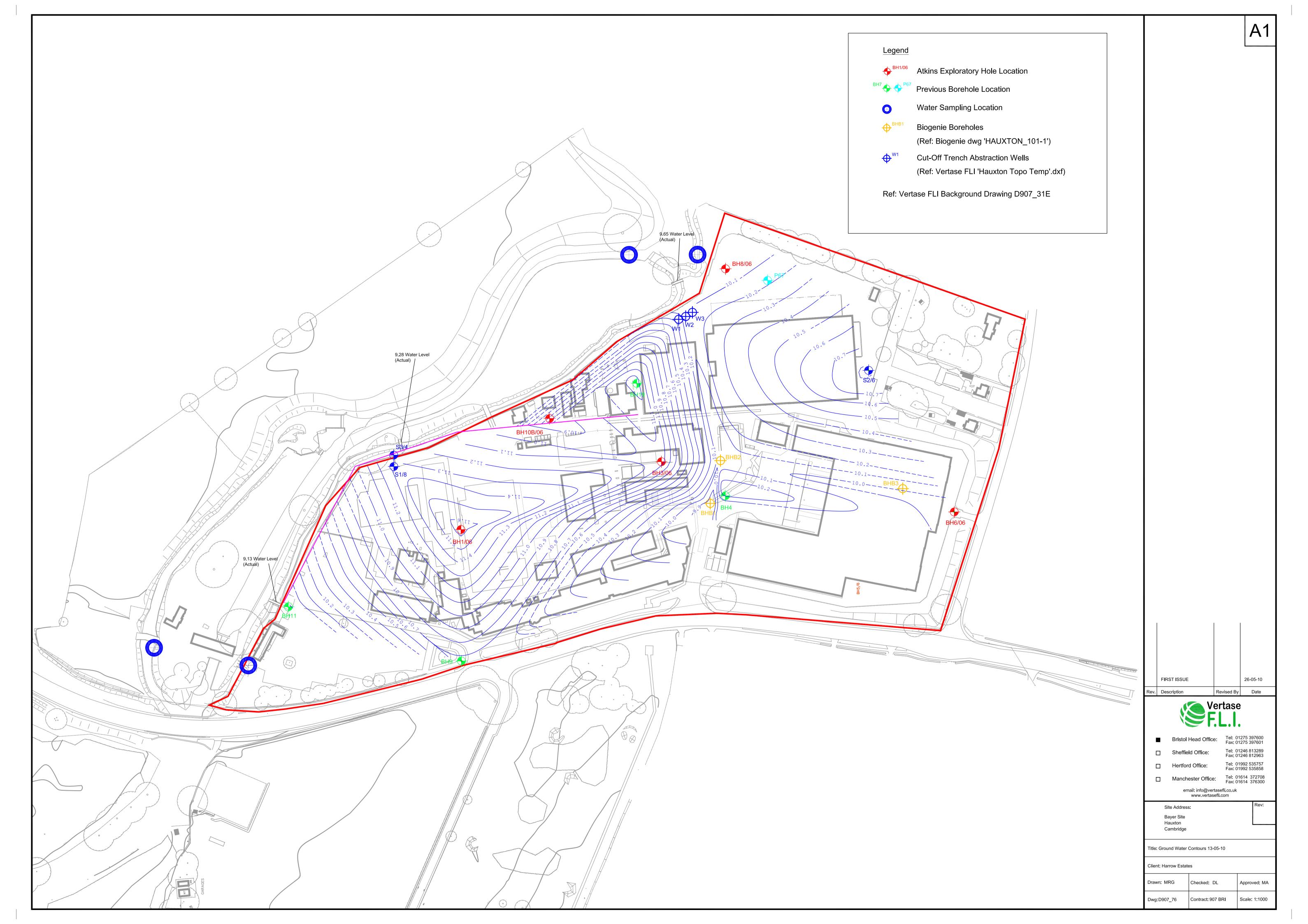
			SAL	Reference	198960 001	198960 002	198960 003	198960 004	198960 005	198960 006	198960 007
	Custom	er Sample	Reference	S3/6	ВН9	BH11	Riddy Brook U/S	Riddy Brook D/S	River Cam U/S	River Cam D/S	
Determinand	Method	Test Sample	LOD	Units							
1,2-Dichlorobenzene	T54	AR	1	μg/l	<1	<1	<1	<1	<1	<1	<1
1,2-Dichloroethane	T54	AR	1	μg/l	<1	<1	<1	<1	<1	<1	<1
Cis-1,2-Dichloroethylene	T54	AR	1	μg/l	2	2	<1	<1	4	<1	<1
Cyclohexanone	T54	AR	10	μg/l	<10	<10	<10	<10	<10	<10	<10
Tetrachloroethylene	T54	AR	1	μg/l	<1	<1	<1	2	3	3	2
Toluene	T54	AR	1	μg/l	220	<1	<1	<1	<1	<1	<1
Trichloroethylene	T54	AR	1	μg/l	<1	<1	<1	<1	7	<1	<1
Vinyl chloride	T54	AR	1	μg/l	3	<1	<1	<1	<1	<1	<1
Xylene (Total)	T54	AR	1	μg/l	84	<1	<1	<1	<1	<1	<1

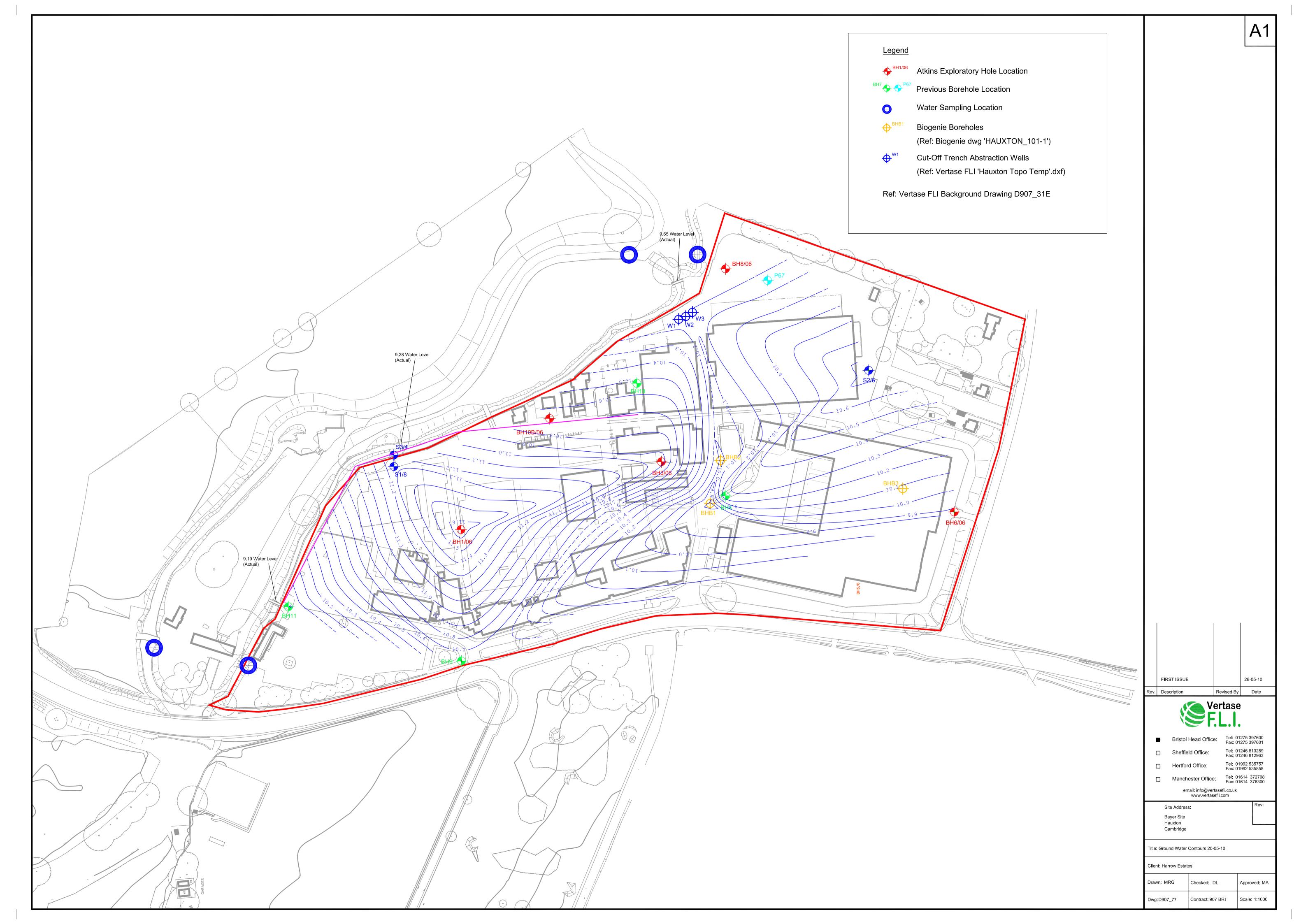


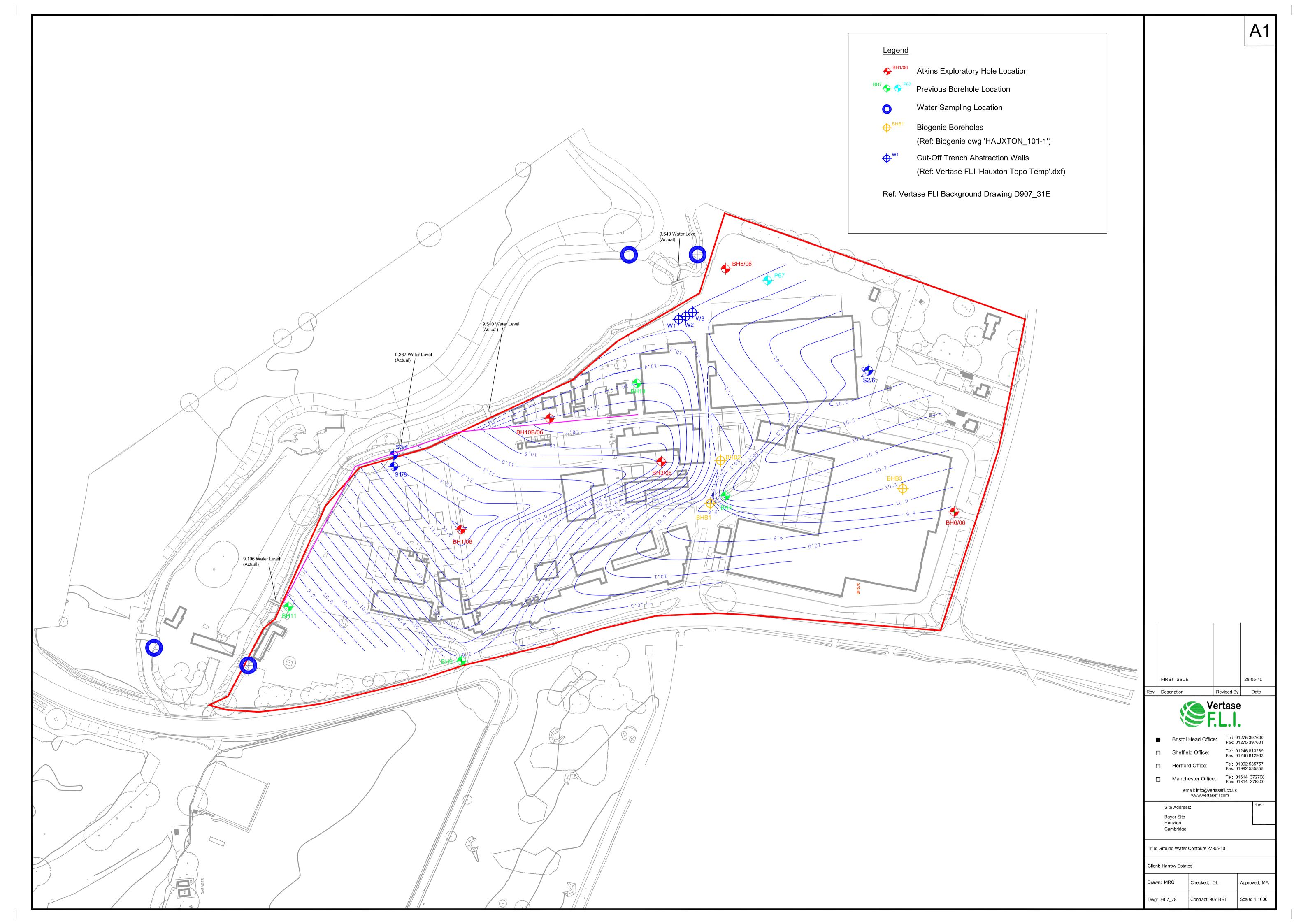


Appendix G
Groundwater Contour Plots











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		Atrazine	Trietazine		Total Atrazine, Trietazine and Simazine		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
	Cons	sented Levels		50	3000	5000	45	15	30	na	To	otal of all th	ree	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	Discharge Point	<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		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



# Scientific Analysis Laboratories Certificate of Analysis

Hadfield House Hadfield Street Cornbrook Manchester M16 9FE

Tel: 0161 874 2400 Fax: 0161 874 2468

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

Report Number: 193447-1

Date of Report: 17-Mar-2010

Customer: VertaseFLI Limited

Number One

Middle Bridge Business Park

Bristol Road Portishead BS20 6PN

Customer Contact: Mr Jonathan Lewis

Customer Job Reference: 907BRI WWTW

Date Job Received at SAL: 02-Mar-2010

Date Analysis Started: 15-Mar-2010

Date Analysis Completed: 17-Mar-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



Report checked and authorised by : Amelia McVennon Project Manager Issued by : Amelia McVennon Project Manager

## Index to symbols used in 193447-1

Value	Description
AR	As Received
100	LOD determined by sample aliquot used for analysis
U	Analysis is UKAS accredited
N	Analysis is not accredited

#### **Method Index**

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

## **Accreditation Summary**

Determinand	Method	Test Sample	LOD	Units	Symbol	SAL References
Ammoniacal nitrogen	T4	AR	0.05	mg/l	U	001-003
Biochemical Oxygen Demand	T7	AR	3	mg/l	N	001-003
рH	T7	AR			U	001-003
Suspended Solids (Total)	T2	AR	10	mg/l	N	001
Atrazine	T16	AR	0.01	μg/l	N	001-003
Trietazine	T16	AR	0.01	μg/l	N	001-003
Benazolin	T16	AR	0.1	μg/l	N	001-003
2,3,6-TCB	T16	AR	0.1	μg/l	N	001-003
Bromide	T253	AR	0.1	mg/l	U	001-003
Chloride	T253	AR	0.2	mg/l	U	001-003
Sulphate ion	T253	AR	0.1	mg/l	U	001-003
Dicamba	T16	AR	0.1	μg/l	N	001-003
Hempa	T16	AR	0.1	μg/l	N	001-003
Schradan	T16	AR	0.1	μg/l	N	001-003
Simazine	T16	AR	0.01	μg/l	N	001-003

SAL Reference: 193447
Customer Reference: 907BRI WWTW

Water Analysed as Water

Miscellaneous

			SAL	Reference	193447 001	193447 002	193447 003
		Custom	er Sample	Reference	T99 OUT 192393-001	C5102 OUT 192393- 002	T99 RIVER DISCHARGE OUT 192393-003
Determinand	Method	Test Sample	LOD	Units			
Ammoniacal nitrogen	T4	AR	0.05	mg/l	0.47	<0.05	<0.05
Biochemical Oxygen Demand	T7	AR	3	mg/l	<3	<3	<3
рН	T7	AR			8.3	8.4	8.4
Suspended Solids (Total)	T2	AR	10	mg/l	<10	<10	<10

SAL Reference: 193447
Customer Reference: 907BRI WWTW

Water Analysed as Water

Suite A

			SAL	Reference	193447 001	193447 002	193447 003	
		Custom	er Sample	Reference	T99 OUT 192393-001	C5102 OUT 192393-002	T99 RIVER DISCHARGE OUT 192393-003	
Determinand	Method	Test Sample	LOD	Units				
Atrazine	T16	AR	0.01	μg/l	4.3	0.69	(100) < 0.02	
Trietazine	T16	AR	0.01	μg/l	79	12	0.07	

SAL Reference: 193447
Customer Reference: 907BRI WWTW

Water Analysed as Water

Suite B

		- 10	SAL	Reference	193447 001	193447 002	193447 003	
		Custom	er Sample	Reference	T99 OUT 192393-001	C5102 OUT 192393-002	T99 RIVER DISCHARGE OUT 192393-003	
Determinand	Method	Test Sample	LOD	Units				
Benazolin	T16	AR	0.1	μg/l	14	3.1	<0.1	

SAL Reference: 193447
Customer Reference: 907BRI WWTW

Water Analysed as Water

Suite C

			SAL	. Reference	193447 001	193447 002	193447 003
		Custom	er Sample	Reference	T99 OUT 192393-001	C5102 OUT 192393-002	T99 RIVER DISCHARGE OUT 192393-003
Determinand	Method	Test Sample	LOD	Units			
Bromide	T253	AR	0.1	mg/l	0.4	0.3	0.3
Chloride	T253	AR	0.2	mg/l	99	76	84
Sulphate ion	T253	AR	0.1	mg/l	170	140	150
Suspended Solids (Total)	T2	AR	10	ma/l	<10	<10	<10

SAL Reference: 193447 Customer Reference: 907BRI WWTW

Water Suite D Analysed as Water

			SAL	Reference	193447 001	193447 002	193447 003	
		Custom	er Sample	Reference	T99 OUT 192393-001	C5102 OUT 192393-002	T99 RIVER DISCHARGE OUT 192393-003	
Determinand	Method	Test Sample	LOD	Units				
Dicamba	T16	AR	0.1	μg/l	3.7	1.0	<0.1	
Hempa	T16	AR	0.1	μg/l	3.2	6.0	<0.1	
Schradan	T16	AR	0.1	μg/l	3.6	3.9	<0.1	
Simazine	T16	AR	0.01	μg/l	1.4	<0.01	<0.01	





# Scientific Analysis Laboratories Certificate of Analysis

Hadfield House Hadfield Street Cornbrook Manchester M16 9FE

Tel: 0161 874 2400 Fax: 0161 874 2468

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

Report Number: 195429-1

Date of Report: 09-Apr-2010

Customer: VertaseFLI Limited

19 Napier Court
Barlborough Links
Barlborough
S43 4PZ

Customer Contact: The Project Management

Customer Job Reference: 907BRI WWTW
Date Job Received at SAL: 31-Mar-2010
Date Analysis Started: 31-Mar-2010
Date Analysis Completed: 09-Apr-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



Report checked and authorised by : Amelia McVennon Project Manager Issued by : Amelia McVennon Project Manager

## Index to symbols used in 195429-1

Value	Description
AR	As Received
W	Analysis was performed at another SAL laboratory
U	Analysis is UKAS accredited
N	Analysis is not accredited

#### **Method Index**

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

## **Accreditation Summary**

Determinand	Method	Test Sample	LOD	Units	Symbol	SAL References
Ammoniacal nitrogen	T4	AR	0.05	mg/l	U	001-003
Biochemical Oxygen Demand	T7	AR	3	mg/l	N	001-003
pH	T7	AR			U	001-003
Suspended Solids (Total)	T2	AR	10	mg/l	N	001
Bromide	T253	AR	0.1	mg/l	WU	001-003
Chloride	T253	AR	0.2	mg/l	WU	001-003
Sulphate ion	T253	AR	0.1	mg/l	WU	001-003
Suspended Solids (Total)	T2	AR	10	mg/l	WN	001
Atrazine	T16	AR	0.01	μg/l	N	001-003
Trietazine	T16	AR	0.01	μg/l	N	001-003
Benazolin	T16	AR	0.1	μg/l	N	001-003
2,3,6-TCB	T16	AR	0.1	μg/l	N	001-003
Dicamba	T16	AR	0.1	μg/l	N	001-003
Hempa	T16	AR	0.1	μg/l	N	001-003
Schradan	T16	AR	0.1	μg/l	N	001-003
Simazine	T16	AR	0.01	μg/l	N	001-003

SAL Reference: 195429
Customer Reference: 907BRI WWTW

Water Analysed as Water

Miscellaneous

			195429 001	195429 002	195429 003		
		Custom	T99 OUT	C5102 OUT	DISCHARGE OUT		
Determinand	Determinand Method Test Sample LOD Units						
Ammoniacal nitrogen	T4	AR	0.05	mg/l	0.41	<0.05	<0.05
Biochemical Oxygen Demand	T7	AR	3	mg/l	5	<3	<3
pН	T7	AR			7.6	8.1	8.7
Suspended Solids (Total)	T2	AR	10	mg/l	<10	<10	<10

SAL Reference: 195429 Customer Reference: 907BRI WWTW

Water Analysed as Water

Suite C

			195429 001	195429 002	195429 003		
		Custom	T99 OUT	C5102 OUT	DISCHARGE OUT		
Determinand	Method	Test Sample	LOD	Units			
Bromide	T253	AR	0.1	mg/l	<1.0	<1.0	0.4
Chloride	T253	AR	0.2	mg/l	110	110	110
Sulphate ion	T253	AR	0.1	mg/l	190	180	180
Suspended Solids (Total)	T2	AR	10	mg/l	<10	<10	<10

SAL Reference: 195429
Customer Reference: 907BRI WWTW

Water Analysed as Water

Suite A

			SAL	195429 001	195429 002	195429 003	
		Custom	er Sample	T99 OUT	C5102 OUT	DISCHARGE OUT	
Determinand	Method	Test Sample	LOD	Units			
Atrazine	T16	AR	0.01	μg/l	0.68	0.08	<0.01
Trietazine	T16	AR	0.01	μg/l	7.8	1.6	<0.01

SAL Reference: 195429
Customer Reference: 907BRI WWTW

Water Analysed as Water

Suite B

			SAL	195429 001	195429 002	195429 003	
		Custom	er Sample	T99 OUT	C5102 OUT	DISCHARGE OUT	
Determinand	Method Test LOD Units						
Benazolin	T16	AR	0.1	μg/l	94	22	<0.1
2,3,6-TCB	T16	AR	0.1	μg/l	83	41	0.3

SAL Reference: 195429
Customer Reference: 907BRI WWTW

Water Analysed as Water

Suite D

			SAL	Reference	195429 001	195429 002	195429 003
		Custom	er Sample	T99 OUT	C5102 OUT	DISCHARGE OUT	
Determinand	Method	Test Sample	LOD	Units			
Dicamba	T16	AR	0.1	μg/l	1.6	0.4	<0.1
Hempa	T16	AR	0.1	μg/l	8.2	4.9	0.4
Schradan	T16	AR	0.1	μg/l	9.0	6.6	<0.1
Simazine	T16	AR	0.01	μg/l	1.0	<0.01	<0.01



# Scientific Analysis Laboratories Certificate of Analysis

Hadfield House Hadfield Street Cornbrook Manchester M16 9FE

Tel: 0161 874 2400 Fax: 0161 874 2468

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

Report Number: 196139-1

Date of Report: 13-Apr-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: 09-Apr-2010

Date Analysis Started: 09-Apr-2010

Date Analysis Completed: 13-Apr-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



Report checked and authorised by : Amelia McVennon Project Manager Issued by : Amelia McVennon Project Manager

## Index to symbols used in 196139-1

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

#### **Method Index**

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

## **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
Suspended Solids (Total)	T2	AR	10	mg/l	N	001
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
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
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

SAL Reference: 196139 Customer Reference: 907 BRI WWTW

Water Analysed as Water

Miscellaneous

SAL Reference 196139 001 196139 00											
Customer Sample Reference T99 OUT T99 Circ											
Determinand Method Test Sample LOD Units											
Ammoniacal nitrogen	T4	AR	0.05	mg/l	0.82	<0.05					
Biochemical Oxygen Demand	T7	AR	3	mg/l	<3	<3					
pH	T7	AR			7.7	8.0					
Suspended Solids (Total)	T2	AR	10	mg/l	54	<10					

SAL Reference: 196139 Customer Reference: 907 BRI WWTW

Analysed as Water Water

Suite C

			SAL	Reference	196139 001	196139 002			
Customer Sample Reference T99 OUT T99 Cir									
Determinand	Method	Test Sample	LOD	Units					
Bromide	T253	AR	0.1	mg/l	<sup>(9)</sup> <1.0	<sup>(9)</sup> <1.0			
Chloride	T253	AR	0.2	mg/l	120	110			
Sulphate ion	T253	AR	0.1	mg/l	180	190			
Suspended Solids (Total)	T2	AR	10	mg/l	54	<10			

SAL Reference: 196139 Customer Reference: 907 BRI WWTW

Water Analysed as Water

Suite A						
			SAL	Reference	196139 001	196139 002
		Custom	er Sample	Reference	T99 OUT	T99 Circ
Determinand	Method	Test Sample	LOD	Units		
Atrazine	T16	AR	0.01	μg/l	0.97	<0.01
Trietazine	T16	AR	0.01	μg/l	37	<0.01

SAL Reference: 196139 Customer Reference: 907 BRI WWTW

Water Analysed as Water

Suite B

SAL Reference 196139 001 196139 002											
Customer Sample Reference T99 OUT T99 Circ											
Determinand	Method	Test Sample	LOD	Units							
Benazolin	T16	AR	0.1	μg/l	85	<0.1					
2,3,6-TCB	T16	AR	0.1	μg/l	53	<0.1					

SAL Reference: 196139 Customer Reference: 907 BRI WWTW

Water Analysed as Water

SAL Reference 196139 001 196139 002										
Customer Sample Reference T99 OUT T99 Circ										
Determinand	Method	Method Test Sample LOD Units								
Dicamba	T16	AR	0.1	μg/l	1.6	<0.1				
Hempa	T16	AR	0.1	μg/l	8.9	2.9				
Schradan	T16	AR	0.1	μg/l	9.4	0.4				
Simazine	T16	ΔR	0.01	ug/l	17	<0.01				



Hadfield House Hadfield Street Cornbrook Manchester M16 9FE

Tel: 0161 874 2400 Fax: 0161 874 2468

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

Report Number: 196379-1

Date of Report: 19-Apr-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: 13-Apr-2010

Date Analysis Started: 13-Apr-2010

Date Analysis Completed: 19-Apr-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



Report checked and authorised by : Amelia McVennon Project Manager Issued by : Amelia McVennon Project Manager

## Index to symbols used in 196379-1

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

### **Method Index**

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

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		6.70	U	001-002
Suspended Solids (Total)	T2	AR	10000	μg/l	N	001
Bromide	T253	AR	100	μg/l	WU	001-002
Chloride	T253	AR	200	μg/l	WU	001-002
Sulphate ion	T253	AR	100	μg/l	WU	001-002
Suspended Solids (Total)	T2	AR	10000	μg/l	WN	001
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
Dicamba	T16	AR	0.1	μg/l	N	001-002
Нетра	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

SAL Reference: 196379

Customer Reference: 907 BRI WWTW

Water Analysed as Water

Miscellaneous

SAL Reference 196379 001 196379 00											
Customer Sample Reference T100 OUT T100 Cir											
Determinand Method Test Sample LOD Units											
Ammoniacal nitrogen	T4	AR	50	μg/l	730	<50					
Biochemical Oxygen Demand	T7	AR	3000	μg/l	<3000	<3000					
pН	T7	AR			7.8	7.9					
Suspended Solids (Total)	T2	AR	10000	μg/l	59000	<10000					

SAL Reference: 196379
Customer Reference: 907 BRI WWTW

Water Analysed as Water

Suite C

ouite o						
			SAL	. Reference	196379 001	196379 002
		Custom	er Sample	Reference	T100 OUT	T100 Circ
Determinand	Method	Test Sample	LOD	Units		
Bromide	T253	AR	100	μg/l	<sup>(9)</sup> <1000	<sup>(9)</sup> <1000
Chloride	T253	AR	200	μg/l	120000	110000
Sulphate ion	T253	AR	100	μg/l	220000	190000
Suspended Solids (Total)	T2	AR	10000	μg/l	59000	<10000

SAL Reference: 196379
Customer Reference: 907 BRI WWTW

Water Analysed as Water

Suite A										
			SAL	Reference	196379 001	196379 002				
	Customer Sample Reference T100 OUT T100 Circ									
	I			14000		7.1535.1				
Determinand	Method	Test Sample	LOD	Units	5.700L30					
Atrazine	T16	AR	0.01	μg/l	0.74	<0.01				
Trietazine	T16	AR	0.01	μg/l	15	0.01				

SAL Reference: 196379

Customer Reference: 907 BRI WWTW

Water Analysed as Water

Suite B

SAL Reference 196379 001 196379 0										
Customer Sample Reference T100 OUT T100 C										
Determinand	Method	Test Sample	LOD	Units						
Benazolin	T16	AR	0.1	μg/l	140	<0.1				
2,3,6-TCB	T16	AR	0.1	μg/l	78	<0.1				

SAL Reference: 196379
Customer Reference: 907 BRI WWTW

Water Analysed as Water

	SAL Reference 196379 001 196379 0							
Customer Sample Reference T100 OUT T100 Cir								
Determinand	Method	Test Sample						
Dicamba	T16	AR	0.1	μg/l	8.4	<0.1		
Hempa	T16	AR	0.1	μg/l	10	0.9		
Schradan	T16	AR	0.1	μg/l	9.3	0.3		
Simazine	T16	AR	0.01	μg/l	0.86	<0.01		



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Tel: 0161 874 2400 Fax: 0161 874 2468

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

Report Number: 196517-1

Date of Report: 21-Apr-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: 14-Apr-2010

Date Analysis Started: 14-Apr-2010

Date Analysis Completed: 20-Apr-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



Report checked and authorised by : Amelia McVennon Project Manager Issued by : Amelia McVennon Project Manager

## Index to symbols used in 196517-1

Value	Description
AR	As Received
9	LOD raised due to dilution of sample
162	LOD determined by matrix spike recovery
W	Analysis was performed at another SAL laboratory
U	Analysis is UKAS accredited
N	Analysis is not accredited

#### **Method Index**

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

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
Suspended Solids (Total)	T2	AR	10000	μg/l	N	001
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	WU	001-002
Chloride	T253	AR	200	μg/l	WU	001-002
Sulphate ion	T253	AR	100	μg/l	WU	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

SAL Reference: 196517 Customer Reference: 907 BRI WWTW Water Analysed as Water

Suite C

SAL Reference 196517 001 196517 00:								
Customer Sample Reference T100 OUT T100 Circ								
Determinand	d Method Test Sample LOD Units							
Bromide	T253	AR	100	μg/l	<sup>(9)</sup> <1000	<sup>(9)</sup> <1000		
Chloride	T253	AR	200	μg/l	100000	110000		
Sulphate ion	T253	AR	100	μg/l	200000	200000		
Suspended Solids (Total)	T2	AR	10000	μg/l	26000	<10000		

SAL Reference: 196517 Customer Reference: 907 BRI WWTW

Water Analysed as Water

Miscellaneous

	SAL Reference									
	T100 OUT	T100 Circ								
Determinand	Method	Test Sample	LOD	Units						
Ammoniacal nitrogen	T4	AR	50	μg/l	730	<50				
Biochemical Oxygen Demand	T7	AR	3000	μg/l	<3000	<3000				
pН	T7	AR			7.6	8.2				
Suspended Solids (Total)	T2	AR	10000	ug/l	26000	<10000				

SAL Reference: 196517 Customer Reference: 907 BRI WWTW

Water Analysed as Water

Suite A							
			SAL	Reference	196517 001	196517 002	
Customer Sample Reference T100 OUT T100 Circ							
Determinand	Method	Test Sample	LOD	Units			
Atrazine	T16	AR	0.01	μg/l	0.74	<0.01	
Trietazine	T16	AR	0.01	μg/l	18	<0.01	

SAL Reference: 196517 Customer Reference: 907 BRI WWTW

Water Analysed as Water

Suite B

	196517 001	196517 002					
Customer Sample Reference T100 OUT T100 Circ							
Determinand	Method	Test Sample	LOD	Units			
Benazolin	T16	AR	0.1	μg/l	130	<0.1	
2,3,6-TCB	T16	AR	0.1	μg/l	77	<0.1	

SAL Reference: 196517 Customer Reference: 907 BRI WWTW

Water Analysed as Water

	SAL Reference   196517 001   196517 002								
Customer Sample Reference T100 OUT T100 Circ									
Determinand	Method	Method Test LOD Units							
Dicamba	T16	AR	0.1	μg/l	7.8	<0.1			
Hempa	T16	AR	0.1	μg/l	11	1.5			
Schradan	T16	AR	0.1	μg/l	14	<sup>(162)</sup> <1.0			
Simazine	T16	AR	0.01	μg/l	1.7	<0.01			



Hadfield House Hadfield Street Cornbrook Manchester M16 9FE

Tel: 0161 874 2400 Fax: 0161 874 2468

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

Report Number: 199291-1

Date of Report: 19-May-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: 11-May-2010

Date Analysis Started: 11-May-2010

Date Analysis Completed: 19-May-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



Report checked and authorised by : Amelia McVennon Project Manager Issued by : Amelia McVennon Project Manager

## Index to symbols used in 199291-1

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

### **Method Index**

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

Determinand	Method	Test Sample	LOD	Units	Symbol	SAL References
Ammoniacal nitrogen	T4	AR	0.05	mg/l	U	001
Biochemical Oxygen Demand	T7	AR	3	mg/l	N	001
рН	T7	AR			U	001
Suspended Solids (Total)	T2	AR	10	mg/l	N	001
Bromide	T253	AR	0.1	mg/l	WU	001
Chloride	T253	AR	0.2	mg/l	WU	001
Sulphate ion	T253	AR	0.1	mg/l	WU	001
Atrazine	T16	AR	0.01	μg/l	N	001
Trietazine	T16	AR	0.01	μg/l	N	001
Benazolin	T16	AR	0.1	μg/l	N	001
2,3,6-TCB	T16	AR	0.1	μg/l	N	001
Dicamba	T16	AR	0.1	μg/l	N	001
Hempa	T16	AR	0.1	μg/l	N	001
Schradan	T16	AR	0.1	μg/l	N	001
Simazine	T16	AR	0.01	μg/l	N	001

SAL Reference: 199291 Customer Reference: 907 BRI WWTW

Water Analysed as Water

Miscellaneous

	199291 001								
	WWTW Discharge								
Determinand Method Test Sample LOD Units									
Ammoniacal nitrogen	T4	AR	0.05	mg/l	<0.05				
Biochemical Oxygen Demand	T7	AR	3	mg/l	<3				
pH	T7	AR			8.1				
Suspended Solids (Total)	T2	AR	10	mg/l	<10				

SAL Reference: 199291 Customer Reference: 907 BRI WWTW

Water Analysed as Water

Suite C

	199291 001							
	Customer Sample Reference							
Determinand	Determinand Method Sample LOD Units							
Bromide	T253	AR	0.1	mg/l	<sup>(9)</sup> <1.0			
Chloride	T253	AR	0.2	mg/l	130			
Sulphate ion	T253	AR	0.1	mg/l	200			

SAL Reference: 199291 Customer Reference: 907 BRI WWTW

Water Analysed as Water

Suite A

		- 232	4537						
			Reference	199291 001					
	Customer Sample Reference								
Determinand	Method	Test Sample	LOD	Units					
Atrazine	T16	AR	0.01	μg/l	<0.01				
Trietazine	T16	AR	0.01	μg/l	<0.01				

SAL Reference: 199291
Customer Reference: 907 BRI WWTW

Water Analysed as Water

Suite B

	199291 001							
	WWTW Discharge							
Determinand	Determinand Method Test Sample LOD Units							
Benazolin	T16	AR	0.1	μg/l	<0.1			
2,3,6-TCB	T16	AR	0.1	μg/l	<0.1			

SAL Reference: 199291
Customer Reference: 907 BRI WWTW

Water Analysed as Water

	199291 001				
	WWTW Discharge				
Determinand					
Dicamba	T16	AR	0.1	μg/l	<0.1
Hempa	T16	AR	0.1	μg/l	5.1
Schradan	T16	AR	0.1	μg/l	1.5
Simazine	T16	AR	0.01	μg/l	<0.01



Hadfield House Hadfield Street Cornbrook Manchester M16 9FE

Tel: 0161 874 2400 Fax: 0161 874 2468

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Report Number: Interim to 199176-1

Date of Report: 17-May-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: 10-May-2010

Date Analysis Started: 10-May-2010

**Date Analysis Completed:** 

The results reported relate to samples received in the laboratory

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



Report checked and authorised by :

Issued by : Amelia McVennon Project Manager

A.A.

## Index to symbols used in Interim to 199176-1

Value	Description
AR	As Received
100	LOD determined by sample aliquot used for analysis
9	LOD raised due to dilution of sample
W	Analysis was performed at another SAL laboratory
U	Analysis is UKAS accredited
N	Analysis is not accredited

#### **Notes**

Interim report: BOD to follow

#### **Method Index**

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

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
рН	T7	AR			U	001-002
Suspended Solids (Total)	T2	AR	10	mg/l	N	001
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
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
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

SAL Reference: 199176 Customer Reference: 907 BRI WWTW

Water Analysed as Water

Miscellaneous

		199176 001	199176 002			
		T99 OUT (196931/001)	T99 Discharge			
Determinand	Method	Test Sample	LOD	Units		
Ammoniacal nitrogen	T4	AR	0.05	mg/l	0.40	<0.05
Biochemical Oxygen Demand	T7	AR	3	mg/l	-	•
pH	T7	AR			7.9	8.2
Suspended Solids (Total)	T2	AR	10	mg/l	34	<10
					34	<10

SAL Reference: 199176 Customer Reference: 907 BRI WWTW

Water Analysed as Water

Suite C

			SAL	Reference	199176 001	199176 002
		T99 OUT (196931/001)	T99 Discharge			
Determinand	Method	Test Sample	LOD	Units		
Bromide	T253	AR	0.1	mg/l	<sup>(9)</sup> <1.0	<sup>(9)</sup> <1.0
Chloride	T253	AR	0.2	mg/l	110	110
Sulphate ion	T253	AR	0.1	mg/l	210	200

SAL Reference: 199176 Customer Reference: 907 BRI WWTW

Water Analysed as Water

Suite A						
			SAL	. Reference	199176 001	199176 002
		Custom	er Sample	Reference	T99 OUT (196931/001)	T99 Discharge
Determinand	Method	Test Sample	LOD	Units	+ 1	
Atrazine	T16	AR	0.01	μg/l	0.53	<0.01
Trietazine	T16	AR	0.01	μg/l	4.2	<0.01

SAL Reference: 199176 Customer Reference: 907 BRI WWTW

Water Analysed as Water

Suite B

			SAL	Reference	199176 001	199176 002
	T99 Discharge					
Determinand	Method	Test Sample	LOD	Units		
Benazolin	T16	AR	0.1	μg/l	62	(100) < 0.2
2,3,6-TCB	T16	AR	0.1	µq/l	71	3.0

SAL Reference: 199176 Customer Reference: 907 BRI WWTW

Water Analysed as Water

			199176 001	199176 002		
		T99 OUT (196931/001)	T99 Discharge			
Determinand	Method	Test Sample	LOD	Units		
Dicamba	T16	AR	0.1	μg/l	6.5	(100) < 0.2
Hempa	T16	AR	0.1	μg/l	8.1	3.3
Schradan	T16	AR	0.1	μg/l	6.1	0.6
Simazine	T16	AR	0.01	µq/l	0.67	<0.01



Hadfield House Hadfield Street Cornbrook Manchester M16 9FE

Tel: 0161 874 2400 Fax: 0161 874 2468

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

Report Number: 200382-1

Date of Report: 01-Jun-2010

Customer: VertaseFLI Limited

19 Napier Court
Barlborough Links
Barlborough
S43 4PZ

Customer Contact: The Project Management

Customer Job Reference: 907BRI WWTW
Customer Purchase Order: 907BRI WWTW
Date Job Received at SAL: 20-May-2010
Date Analysis Started: 20-May-2010
Date Analysis Completed: 01-Jun-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



Report checked and authorised by : Amelia McVennon Project Manager Issued by : Amelia McVennon Project Manager

AA

## Index to symbols used in 200382-1

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

### **Method Index**

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

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
рН	T7	AR		0.1200	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	WU	001-002
Chloride	T253	AR	200	μg/l	WU	001-002
Sulphate ion	T253	AR	100	μg/l	WU	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

SAL Reference: 200382
Customer Reference: 907BRI WWTW

Water Analysed as Water

Suite C

	200382 001	200382 002				
	<b>Primary Carbon</b>	Discharge				
Determinand						
Bromide	T253	AR	100	μg/l	<sup>(9)</sup> <1000	<sup>(9)</sup> <1000
Chloride	T253	AR	200	μg/l	170000	180000
Sulphate ion	T253	AR	100	μg/l	270000	280000
Suspended Solids (Total)	T2	AR	10000	μg/l	<10000	<10000



SAL Reference: 200382
Customer Reference: 907BRI WWTW

Water Analysed as Water

Miscellaneous

			SA	L Reference	200382 001	200382 002			
Customer Sample Reference Primary Carbon Discharge									
Determinand	Method	Test Sample	LOD	Units					
Ammoniacal nitrogen	T4	AR	50	μg/l	50	90			
Biochemical Oxygen Demand	T7	AR	3000	μg/l	<3000	<3000			
pH	T7	AR			7.9	8.0			



 SAL Reference: 200382

 Customer Reference: 907BRI WWTW

 Water
 Analysed as Water

 SAL Reference 200382 001 200382 002

 Customer Sample Reference Primary Carbon Discharge

 Determinand
 Method
 Test Sample
 LOD
 Units

0.01

0.01

μg/l

μg/l

0.08

<0.01

0.01

AR

AR

T16

T16

Atrazine

Trietazine



SAL Reference: 200382
Customer Reference: 907BRI WWTW

Water Analysed as Water

Suite B

	200382 001	200382 002						
	Primary Carbon	Discharge						
Determinand	Method	Test Sample	LOD	Units				
Benazolin	T16	AR	0.1	μg/l	33	0.6		
2,3,6-TCB	T16	AR	0.1	μg/l	64	5.2		



SAL Reference: 200382
Customer Reference: 907BRI WWTW

Water Analysed as Water

	200382 001	200382 002				
	Primary Carbon	Discharge				
Determinand	Method	Test Sample	LOD	Units		
Dicamba	T16	AR	0.1	μg/l	1.2	0.2
Hempa	T16	AR	0.1	μg/l	13	6.3
Schradan	T16	AR	0.1	μg/l	4.4	3.8
Simazine	T16	AR	0.01	μg/l	0.07	<0.01





Hadfield House Hadfield Street Cornbrook Manchester M16 9FE

Tel: 0161 874 2400 Fax: 0161 874 2468

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

Report Number: Supplement to 201487-1

Date of Report: 16-Jun-2010

Customer: VertaseFLI Limited

19 Napier Court
Barlborough Links
Barlborough
S43 4PZ

Customer Contact: The Project Management

Customer Job Reference: 907 BRI

Date Job Received at SAL: 01-Jun-2010

Date Analysis Started: 01-Jun-2010

Date Analysis Completed: 14-Jun-2010

The results reported relate to samples received in the laboratory

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

Report checked and authorised by : Mr Ross Walker Customer Services Manager Issued by :
Mr Ross Walker
Customer Services Manager

## Index to symbols used in Supplement to 201487-1

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

#### **Notes**

Supplemental report issued to amend the sample references, at the customer's request

#### **Method Index**

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

Determinand	Method	Test Sample	LOD	Units	Symbol	SAL References
Bromide	T253	AR	100	μg/l	WU	001-002
Chloride	T253	AR	200	μg/l	WU	001-002
Sulphate ion	T253	AR	100	μg/l	WU	001-002
Suspended Solids (Total)	T2	AR	10000	μg/l	N	001-002
Ammoniacal nitrogen	T4	AR	50	μg/l	U	001-002
Biochemical Oxygen Demand	T7	AR	3000	μg/l	N	001-002
pH	T7	AR	W. 19	The Sylphia	U	001
Total Viable Coliforms	T34	AR			SN	001
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
Dicamba	T16	AR	0.1	μg/l	N	001
Нетра	T16	AR	0.1	μg/l	N	001
Schradan	T16	AR	0.1	μg/l	N	001
Simazine	T16	AR	0.01	μg/l	N	001

SAL Reference: 201487 Customer Reference: 907 BRI

Water Analysed as Water

Suite C

	201487 001	201487 002				
	Discharge	Primary Carbon				
Determinand						
Bromide	T253	AR	100	μg/l	<sup>(9)</sup> <1000	<sup>(9)</sup> <1000
Chloride	T253	AR	200	μg/l	130000	130000
Sulphate ion	T253	AR	100	μg/l	210000	210000
Suspended Solids (Total)	T2	AR	10000	μg/l	<10000	<10000

SAL Reference: 201487 Customer Reference: 907 BRI

Water Analysed as Water

Miscellaneous

			SA	L Reference	201487 001	201487 002
		Customer Sample Reference			Discharge	Primary Carbon
Determinand	Method	Test Sample	LOD	Units		
Ammoniacal nitrogen	T4	AR	50	μg/l	<50	<50
Biochemical Oxygen Demand	T7	AR	3000	μg/l	<3000	<3000
рН	T7	AR			8.1	8.2
Total Viable Coliforms	T34	AR			Total Viable Count at 37°C after 2 days 3000	Total Viable Count at 37°C after 2 days 8400
					Total Viable Count at 22°C after 3 days	Total Viable Count at 22°C after 3 days
					> 10000	> 10000

SAL Reference: 201487 Customer Reference: 907 BRI Water Analysed as Water Suite A 201487 001 201487 002 SAL Reference **Customer Sample Reference** Discharge Primary Carbon Test Sample Method LOD Determinand Units Atrazine T16 0.01 <0.01 0.09 AR μg/l Trietazine T16 0.01 0.93

SAL Reference: 201487 Customer Reference: 907 BRI

Water Analysed as Water

Suite B

			SA	L Reference	201487 001	201487 002
	Discharge	Primary Carbon				
Determinand	Method	Test Sample	LOD	Units		
Benazolin	T16	AR	0.1	μg/l	<0.1	15
2.3.6-TCB	T16	AR	0.1	ua/l	13	43

SAL Reference: 201487 Customer Reference: 907 BRI

Water Analysed as Water

	201487 001	201487 002				
	Discharge	Primary Carbon				
Determinand	Method	Test Sample	LOD	Units		
Dicamba	T16	AR	0.1	μg/l	<0.1	0.5
Hempa	T16	AR	0.1	μg/l	4.3	8.8
Schradan	T16	AR	0.1	μg/l	1.1	5.2
Simazine	T16	AR	0.01	μg/l	<0.01	<0.01





Appendix I Soil Characterisation Results Summary

Results received	Reported to SCDC	Grid square	Contaminant	Concentration	Likely use/origin
		_		la \/OC/2\/OC ==	Solve detected
	06.05.2010	K15		lo VOC/SVOC pe	
	06.05.2010	K16	Series of Aromatic Hydrocarbons circa C <sub>13</sub> -C <sub>16</sub>		possible herbicide degradation products
15.04.2010	06.05.2010	J16	2(1-methylpropyl)-phenol	10.0 mg/kg	may have been used in surfactant production or may be degradation product of the 2,6-bis(1-methylpropyl)-phenol) listed below
			2,6-bis(1-methylpropyl)-phenol	100 mg/kg	used in the manufacture of specialty surfactants used as wetting agents for agrochemicals
			2,6-bis(1,1-dimethylethyl)-4-(1-methylpropyl)-phenol	6 mg/kg	used as an antioxidant and stabiliser in plastics such as polyvinyl chloride (PVC) and polyurethane. It is also used in liquids such as brake fluid and ink resins, as well as in oils used in industrial applications
			Unidentified branched aromatic alcohol, C <sub>14</sub>	240 mg/kg	possible herbicide degradation product
			Unidentified branched aromatic alcohol, C <sub>18</sub>	290 mg/kg	possible herbicide degradation product
15.04.2010	06.05.2010	K14	Phenanthrene	4.1 mg/kg	Previously Identified
			Fluoranthene	4.8 mg/kg	Previously Identified
			Pyrene	3.9 mg/kg	Previously Identified
			Benzo(b/k)Fluoranthene	2.2 mg/kg	Previously Identified
07.05.2010		K9	Dodecanoic acid (Lauric acid), isooctyl ester	2.4 mg/kg	As for L8
			Unidentified Aliphatic Hydrocarbon circa C <sub>30</sub>	2.3 mg/kg	As for L9
07.05.2010		L8	2,4-Dichloro-o-cresol	9.0 mg/kg	potential herbicide degradation product
		Cyclo octaatomic sulphur	2.8 mg/kg	S <sub>8</sub> is the most common form of sulphur in the solid state, widely used in insecticide and fungicide manufacture	
		Dodecanoic acid (Lauric acid), isooctyl ester	7.4 mg/kg	Lauric acid is the main acid in coconut oil and in palm kernel oil, is believed to have antimicrobial properties, is non-toxic and safe to handle	
		Bis(2-ethylhexyl) maleate	3.8 mg/kg	used as an intermediate in hydrogenation or acetylation reactions, possibly used in agrochemicals manufacture	
			Unidentified aromatic hydrocarbon containing O and Cl circa C <sub>7</sub>	8.4 mg/kg	likely herbicide degradation product
07.05.2010		L9	Unidentified Aliphatic Hydrocarbon circa C <sub>30</sub>	2.3 mg/kg	Not known. Due to straight line structure, degradation will be readily promoted by remediation technology.
13.05.2010		H8	N	lo VOC/SVOC pe	eaks detected
13.05.2010		H9	1,2-bis(2,4,6- trichlorophenoxy)ethane	6.9 mg/kg	Possible herbicide?
			Prochloraz	9.1 mg/kg	Fungicide
			Unidentified aromatic hydrocarbon containing CI circa C <sub>8</sub>	9.4 mg/kg	likely herbicide degradation product
			Unidentified aromatic amine containing CI circa C11	2.1 mg/kg	Possible herbicide?
13.05.2010			lo VOC/SVOC pe		
13.05.2010	1	19	2,4-Dichloro-o-cresol	29.0 mg/kg	As for L8
			2,3,6-Trichlorotoluene 1-(2-Chloroethoxy)-2-(o-	47.0 mg/kg 20.0 mg/kg	potential herbicide degradation product potential herbicide degradation product
			Tolyloxy)-ethane Unidentified aromatic alcohol	25.0 mg/kg	likely herbicide degradation product
			containing Cligiros C		
			containing CI circa C <sub>7</sub> Unidentified aromatic hydrocarbon containing O circa C <sub>16-18</sub>	12.0 mg/kg	likely herbicide degradation product
13.05.2010		J7	Unidentified aromatic hydrocarbon containing O circa C <sub>16-18</sub>	12.0 mg/kg lo VOC/SVOC pe	, ,