ANALYTICAL CONSTRUCTION SERVICES

A PHENNA GROUP COMPANY

VECTOR AEROSPACE INTERNATIONAL LIMITED

SITE CONDITION REPORT - FLEETLANDS

In support of Environmental Permit application

JANUARY 2025

Vector Aerospace Ltd

Site Condition Report – Fleetlands

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Site Address:

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1 INTRODUCTION

This Site Condition Report (SCR) has been prepared on behalf of Vector Aerospace Ltd in support of an Environmental Permit application for part of their Fleetlands site on Fareham Rd, Gosport.

The boundary of the application site is shown outlined in red on the accompanying Site Location Plan and the centre of the application site is located at National Grid Reference SU 59102 04224.

1.1 Report Format

A first draft of this SCR was prepared in accordance with the content requirements of the Environment Agency's Site Condition Report Template (last updated 2013). However, during the preliminary review of the draft Application submissions, the EA notified the Applicant that new guidance had been issued in Nov 2024 relating to the content of SCR's at Installations where it is proposed to "*use, produce or release hazardous substances during the life of the permit to identify if there is a risk of pollution risk to soil or groundwater*". This new guidance was necessary in order to address the requirement of Schedule 7 of the EPR (derived from the IED), that part A1 installations must complete a "baseline report".

In order to recognise the specific circumstances relating to this site, its history and the proposed Environmental Permit application, together with the new EA Installations pre-application advice, the following report structure has been adopted:

Sections 2 to 6:

- Environmental Setting;
- Previous Site Investigation;
- Recent Site Investigation;
- Environmental Monitoring;
- Site Condition Summary.

Sections 7 to 8;

- Supplementary Stages 1 & 2 – Assessment of Relevant Hazardous Substances;
- Supplementary Stage 3 – Containment Arrangements.

It is understood that existing H5 SCR guidance is currently being updated by the EA. However in the absence of such guidance, the additional elements of this SCR are derived from the advice set out in the "Installations basic general pre-application advice" note, issued by the EA under reference InstBasicPreAppAdvice – Version 3.0 – 05/11/2024. This Note is also included within Appendix A

1.2 Limitations

ACS carried out the site investigation, collection of samples, laboratory analysis and environmental monitoring described in this report in accordance with instructions provided by the Client. It should be appreciated that there will be areas of the Site that have not been investigated where ground conditions may vary from those encountered. The contaminant concentrations or sub-surface features revealed may be more widespread than identified by the investigation.

The information contained in this report is intended for the use of the Client pursuant to the development described above. The information contained herein may not be appropriate to other development proposals.

We confirm that in preparing this report we have exercised reasonable skill and care as would be expected of a suitably qualified and experienced Geoscience consultant working within the limits of the Client's instructions.

No liability can be accepted for information in other data sources or conditions not revealed by our sampling or testing. Any comments made on the basis of information obtained from the Client are given in good faith on the assumption that the information is accurate. Third party reports have been reviewed as part of this assignment and the veracity of factual data regarding the environmental setting of the site has been checked. Information reported in respect of previous site investigations is given in good faith on the assumption that the information is accurate.

2 ENVIRONMENTAL SETTING

The information set out in this section of the report derives partly from a review of previous reporting, combined with independent corroborative review of public records and a GroundSure report commissioned specifically in support of this SCR.

2.1 Previous Reporting

Two previous reports containing information on the site's history, land quality, geological, hydrogeological and hydrological features, written by Enviros in 2008 and 2012, were reviewed for this report. The information below is derived from the GroundSure Report and accompanying historical maps, supported by a review of relevant available current public records, comprising:

- British Geological Survey (BGS) map records (Online Viewer and Sheet 316 (Fareham));
- Environment Agency Hydrogeology and Hydrology Maps;
- MAGIC government website; and
- Zetica UXO risk maps.

While the preceding reports should not be solely depended upon, their review for use in this report shows good consistency with current public records and serves as a marker to their reliability.

2.2 Site Location

The site 'Vector Aerospace Fleetlands', formally DARA Fleetlands, lies approximately 3km northwest of Gosport town Centre. The site is accessed via Fareham Road to the southwest. The north-eastern boundary of the Fleetlands site forms part of the coastline of Portsmouth Harbour and there are residential and commercial land-uses to the east and south.

2.3 Site History

Based on previous reports and the historic maps in the GroundSure report, the site was agricultural land occupied by Bedenham Farm until 1939, where it was developed into MOD Fleetlands buildings. Since this time the site boundaries have not changed significantly, although the surrounding land has been developed further and an increase in residential and commercial buildings is observed.

The site was also occupied by Gosport Water Works Co, visible on the historic maps until circa 1951. Site usage has not changed significantly since its initial development, however various building configurations and development have been noted throughout its history. The site now works predominantly with the refurbishment of rotary wing aircraft and the maintenance and overhaul of fixed wing aircraft engines.

2.4 Geology

The GroundSure, BGS maps, historic boreholes and existing reports all indicate there are no superficial deposits on the site which is directly underlain by the London Clay Formation, described by the BGS as comprising ***'bioturbated or poorly laminated, blue-grey or grey-brown, slightly calcareous, silty to very silty clay, clayey silt and sometimes silt, with some layers of sandy clay'.*** The London Clay unit appears to thin towards the north of the site, where it may become non-existent.

The BGS maps and the 2008 Enviros Report indicate that there is a thin outcrop of the Bognor Sand Member running roughly east to west approximately central to the site, described as ***'Glauconitic bioturbated or cross-bedded fine and medium-grained sands, partially cemented'***.

The Groundsure report indicates that no Made Ground underlies the Site or is present within 500m. However, Made Ground is likely to be encountered at shallow levels as a result of the original development of the Site and subsequent modifications. Made Ground is referenced in both previous Enviros reports and recent site investigation and is described as mainly brown gravelly clays. The gravels are mainly comprised of brick, clinker, concrete and flint, with rare metal fragments across the site.

2.5 Hydrogeology

The London Clay formation underlying the majority of the site is classified by the Environment Agency as an unproductive aquifer. The Bognor Sand member is described by the Environment Agency as a secondary A Aquifer, which is considered a minor aquifer and due to its proximity to the sea would likely be brackish water and not usable as a strategic resource.

The site does not lie within a Groundwater Protection Zone. The nearest groundwater abstraction is approximately 1km north of the site and is used for spray irrigation on a golf course. Historic water abstraction on site is noted in public records, however this stopped due to the water becoming brackish.

2.6 Hydrology

The site is located adjacent to Fareham Lake which is a tidal watercourse formed where Wallington River discharges into Portsmouth Harbour. Surface water drainage flows towards Portsmouth Harbour with several outlets visibly discharging into Fareham Lake and its surroundings.

There are several surface water features surrounding the site which due to the topography of the site and proximity to Portsmouth harbour are likely to flow towards the north-east.

The highest risk from surface water flooding is a 1 in 1,000 year event of 0.10 - 0.30m depth and a 1 in 100 year event of 0.10 - 0.30m depth, within 50m of the site. The risk from groundwater flooding on site and within 50m is moderate to high, based on a 1 in 100 year event.

2.7 Ecology

The site is highly sensitive in terms of ecological receptors as it is adjacent to Portsmouth Harbour, which is classified as a Ramsar Site, a Special Protection Area (SPA) and also a Site of Special Scientific Interest (SSSI). There are also main habitat Deciduous Woodlands and primary habitat saltmarshes and other unspecified habitat networks within 250m of the site.

2.8 Acoustic Environment

In order to profile the local acoustic environment, a separate report has been carried out by 24 Acoustics and this forms part of the Permit application pack.

3 PREVIOUS SITE INVESTIGATION

Two previous reports cover site investigation at the site. The Enviros report dated 2008 details previous site investigations carried out in 2006, reviews the historic data and adds further additional site investigation data obtained from its own work in the western area of the site.

The 2012 Enviros report details a comprehensive site investigation undertaken in 2008. The intrusive investigation included 9 No. Window sampler boreholes (WS9-17), 4 No. Cable percussion Boreholes (BH9-13), 10 No. hand dug trial pits and 5 No. machine dug trial pits.

Specific focus is given in this Site Condition Report to the window sampler locations WS12, WS13, WS15, and WS16, as they are the closest to the Environmental Permit application area. Gas monitoring standpipes were installed at these window sampler locations, targeting the various strata encountered on the site. Monitoring at these locations took place in late 2008 to early 2009.

3.1 Window Sampling 2008

Boreholes WS12, 13, 15 and 16 were located in the vicinity building 99 and were drilled to a maximum depth of 3.00mbgl. Three of the four locations were installed with gas monitoring standpipes The well comprised 35mm diameter HDPE slotted pipe surrounded by a gravel filter pack, with the top section consisting of plain pipe with a bentonite seal. WS15 was unable to be installed due to collapse of the borehole. The locations of WS12 and 13 targeted noted diesel odours identified in previous investigations.

Made Ground was encountered to a maximum depth of 1.10mbgl and comprised brown sandy clays with gravels of brick, concrete, tiles, blacky ashy material, glass and clinker. Made Ground between 0.85-1.00mbgl in WS12 was noted to be stained black clay with a diesel odour. A sample at 0.85mbgl was tested using a flame ionisation detector (FID) and found that the VOC concentration was 300ppm.

The Made Ground was underlain in all locations by orange to grey clay of the London Clay Formation, but the base of this unit was not reached in any of the window sampler locations.

No groundwater was encountered in any of the four window sampler locations. It was noted that previous groundwater monitoring indicated that groundwater beneath the site is tidally influenced.

Table 1 below sets out the range of results of monitoring of soil gas within the installed boreholes. WS16 displayed elevated methane levels on some occasions, above the Environment Agency's guideline generic threshold of 0.5% CH_4 v/v.

Table 1: Summary of gas monitoring data gathered from November 2008 to January 2009.

Exploratory Location	Strata targeted	Methane %	Carbon Dioxide %	Oxygen %	Flow (l/hr)
WS12	Made Ground and Natural Clay	0.1 - 0.1	0.1 - 3.4	20.4 - 20.9	-6.0 - 0.1
WS13	Natural Clay	0.1 - 0.1	0.1 - 1.4	19.5 - 21.1	-1.1 - 0.3
WS16	Made Ground and Natural Clay	0.1 - 2.9	0.5 - 3.5	17.8 - 20.4	-6.0 - 0.5

3.2 Soils Testing 2008

Nine samples were tested from the four locations (four in Made Ground units and five in underlying natural strata).

The testing results for arsenic, cadmium, chromium, copper, lead, mercury, nickel, selenium, vanadium and zinc for all samples were found not to exceed any of the defined limits when compared to the generic assessment criteria (GAC) for a commercial/industrial end use.

Seven samples were also analysed for speciated Poly Aromatic Hydrocarbons (PAH) and were found not to exceed any of the defined limits when compared to the GAC for a commercial/industrial end use.

Six samples were also tested for the presence of asbestos but no potential asbestos fibres were identified.

Five samples were also analysed for benzene, toluene, ethylbenzene and xylene (BTEX) and phenols and similarly were found not to exceed any of the defined limits when compared to the GAC for a commercial/industrial end use.

WS12 was found to have a positive result for PCB, however, was found not to pose a risk to human health when assessed using the Environment Agency worksheet for dioxin-like compounds.

3.2.1 Radiological Testing

An external radiation survey was carried out in 2006 as part of the fieldwork reported in the Enviros report of 2008. This identified five areas of slightly elevated radioactivity, believed to derive from the presence of industrial radium from luminised aircraft instruments. One of these areas comprised two spot locations immediately south of Building 110, the northern part of which lies within the existing and the proposed Environmental Permit application boundary.

The spot locations of elevated radioactivity were remediated by Aurora Health Physics Services Ltd in 2008. No further assessment of the radiological status of on-site soils has taken place as part of this Site Condition Report.

3.3 Summary of Findings

Made Ground was encountered in all four wells. WS12 specifically, exhibited a diesel odour, the sole olfactory confirmed contamination among the four locations. Although PCB concentrations were noted in WS12, they were determined not to pose a risk to human health, based on the assessment using the Environment Agency worksheet for dioxin-like compounds. No sample exceeded the GAC for a commercial/industrial land use. There were no positive results for asbestos fibres in any of the window sampler locations.

The gas monitoring data for WS16 exhibited elevated methane values on some occasions.

4 RECENT SITE INVESTIGATION

4.1 Borehole Locations

In order to provide current data on soil condition in the vicinity of the Environmental Permit application area, ACS drilled 4 cable-percussion boreholes on 18th to 19th December 2023 and a further 3 cable-percussion boreholes were drilled on the 2nd of January 2025. The borehole locations are shown in the accompanying Figure 2 and the rationale for their positions was as follows:

- BH CP01: Adjacent to the proposed new air emission control equipment which will serve new activities in Building 118. No previous sub-surface investigation in this area.
- BH CP02: Down hydrogeological gradient from the Tank Farm and the Effluent Treatment Plant.
- BH CP03: Down hydrogeological gradient from the Effluent Treatment Plant.
- BH CP04: Adjacent to the existing air emission control equipment which serves current activities in Building 110.
- BH CP05: North of Chemical Storage Building 99. There are two monitoring points south of the Chemical Storage area, BH05 located to address lack of monitoring north of Building 99.
- BH CP06: Down hydrogeological gradient from the MRF, which was identified as a potential risk to groundwater from spillage and leaks. BH06 is located on the southern end of the external boundary of the MRF, adjacent to the sealed channel drain in the MRF floor
- BH CP07: Down hydrogeological gradient from the MRF, which was identified as a potential risk to groundwater from spillage and leaks. BH07 located on the northern end of the external boundary of the MRF, adjacent to the sealed channel drain.

All four boreholes drilled in 2023 were drilled to a depth of 6.0m below ground level (mbgl) on the basis that empirical evidence and previous reporting suggested existing Made Ground at the site did not extend any deeper than around 4.00mbgl and groundwater was expected to be encountered at similar depths.

The three boreholes drilled in 2025 were drilled to a depth of 5.0m below ground level (mbgl) on the basis that Made Ground did not extend below this in previous reporting and was not encountered past 0.95mbgl in the ACS investigation undertaken in 2023. Groundwater was expected at similar depths to the 2023 ACS borehole locations.

Logs of the boreholes are set out in Appendix B.

4.2 Geology Encountered

4.2.1 Concrete

Three of the four wells drilled in 2023 encountered dense concrete hardstanding at surface, to depths of between 0.20 and 0.35mbgl.

4.2.2 Made Ground

All seven wells encountered Made Ground at thicknesses of between 0.30 and 0.95mbgl. Made Ground beneath the concrete hardstanding (in BH's CP02, 03 & 04) typically comprised a subgrade layer of light greyish-brown sandy silty fine to coarse angular to sub-angular gravel of limestone, underlain by a

darker sandy gravelly clay or clayey gravel made up of angular to sub-angular flint, chalk and brick fragments.

Made Ground in BH CP01 comprised dark brown silty fine to coarse sand becoming gravelly and containing occasional metal fragments. This was underlain by a firm light brown sandy slightly gravelly clay.

Made Ground in BH CP05 comprised of reddish brown silty very sandy fine to coarse sub-angular to angular gravel of limestone and flint and black mottled brown clayey sandy fine to coarse angular to sub-angular gravel of limestone flint, lignite and brick. This was underlaid by a dark brown slightly gravelly slightly sandy clay. The gravel was fine to coarse angular to sub-angular of brick, flint, limestone chalk and ceramic fragments

Made Ground in BH CP06 was a light brown mottled black slightly gravelly slightly sandy clay. The gravel is fine to coarse sub-angular to sub-rounded of flint.

Made Ground in BH CP07 was a brown slightly gravelly slightly sandy clay. The gravel is fine to coarse sub-angular to sub-rounded of flint. Plastic, bituminous material and concrete. this was underlaid by a light brown mottled dark brown slightly gravelly sandy clay. Gravel was fine to coarse angular to sub-rounded of flint and concrete.

4.2.3 London Clay Formation

All four 2023 wells were underlain by firm light greyish brown mottled clay, becoming stiff thinly laminated dark brownish grey with depth. This clay is assessed to be from the London Clay Formation and was present to the base of all boreholes at 6.00mbgl.

The three 2025 wells were underlain by soft to firm light brown mottled sandy clays, becoming stiff grey sandy clay and very stiff grey clay with depth. This clay is also assessed to be from the London Clay Formation and was present to the base of all boreholes at 5.00mbgl.

4.3 Soils Testing

Samples of Made Ground and London Clay were selected for soils testing on the basis of visual and olfactory assessment of the materials encountered, together with the need to obtain a good spread of sampling across the drilling depth. A minimum of one sample each from the strata identified were sent for testing, supplemented by samples from any horizon which indicated potential contamination or other interest.

Samples were sent to the UKAS accredited laboratory of ACS Environmental in Poole for analysis for a standard suite of potential contaminants, including metals, speciated hydrocarbons, speciated PAH's. speciated BTEX, cyanide and presence of asbestos.

The laboratory Certificates for the soils testing are set out in Appendix C.

4.4 Analysis of Soil Testing Results

Basis of Assessment

The following provides a review of the soil chemical analysis results and an assessment of their significance with respect to the potential harm to people through exposure to the soils from ingestion, dermal contact or inhalation, or to vapour deriving from hydrocarbon contamination in the placed soil, underlying the Site. In order to assist in the risk assessment, the results of chemical analysis have been compared to published Generic Assessment Criteria (GAC) as described below.

"Suitable for Use Levels" (S4ULs) were published (S4UL3023) by Land Quality Management Ltd (LQM) and the Chartered Institute of Environmental Health (CIEH) in 2015. The S4ULs have been derived in accordance with UK Legislation, Environment Agency (EA) Policy and a modified version of the EA's CLEA Model (v1.06). The S4ULs have been designed to replace the 2009 LQM/CIEH Generic Assessment Criteria (GACs). The approach to collection and use of toxicology data used to produce the S4ULs is in accordance with current EA guidance (SR2 – Human Health Toxicology Assessment of Contaminants in Soil) which are based on the principles of 'minimal' or 'tolerable' risk.

Assessment of Lead in Soil

There is no S4UL for Lead, therefore we have used Category 4 Screening Levels (C4SLs), published by Defra in 2013. The purpose of the C4SLs is to provide a "relevant technical tool" as outlined in paragraph 4.21(c) below, at which if soils show concentrations below, the land is within Category 4 as defined by the 2012 revised Statutory Guidance for Part 2A of the Environmental Protection Act (1990). Category 4 is defined as:

"4.21 The local authority should consider that the following types of land should be placed into Category 4: Human Health:

(a) Land where no relevant contaminant linkage has been established.

(b) Land where there are only normal levels of contaminants in soil, as explained in Section 3 of this Guidance.

(c) Land that has been excluded from the need for further inspection and assessment because contaminant levels do not exceed relevant generic assessment criteria in accordance with Section 3 of this Guidance, or relevant technical tools or advice that may be developed in accordance with paragraph 3.30 of this Guidance.

(d) Land where estimated levels of exposure to contaminants in soil are likely to form only a small proportion of what a receptor might be exposed to anyway through other sources of environmental exposure (e.g. in relation to average estimated national levels of exposure to substances commonly found in the environment, to which receptors are likely to be exposed in the normal course of their lives).

The local authority may consider that land other than the types described in paragraph 4.21 should be placed into Category 4: Human Health if following a detailed quantitative risk assessment, it is satisfied that the level of risk posed is sufficiently low." (Defra, 2012).

C4SLs model a 'low' level of risk; a higher level than the 'minimal' risk approach adopted when deriving the S4ULs. In the absence of an alternative criteria for Lead, the use of low risk screening criteria within the planning regime are considered acceptable in this instance.

The assessment criteria for inorganic mercury is used for total mercury results as the equilibrium concentrations of elemental and methyl mercury compounds are likely to be very low.

Assumptions

The Site will continue to be used for a Commercial land-use, so we have compared the testing results with GAC thresholds for "Commercial" land-uses, however, to provide some additional context we have also compared the results against the most stringent GAC's relating to soils for residential dwellings with private gardens used for home-grown produce.

Where contaminants are sensitive to soil organic matter (SOM), LQM / CIEH S4UL provide three GAC values for 6%, 2.5% and 1% SOM. SOM content measured in the 2023 samples ranged from <0.87%

to 9.48%, SOM content measured in the 2025 samples ranged from <0.50% to 17.4%, however, as a conservative approach a SOM of 1% has been adopted for the GAC assessments.

The testing results are compared against the GAC for both the “Commercial” and “Residential with plant uptake” scenarios and these tables are set out in Appendix D.

Results

Review of the summarised data in Appendix D identifies that results from all seven locations are below the GAC thresholds for “Commercial” land-uses and only the result for Lead in the sample from 0.20 – 0.40mbgl in BH CP01 (518mg/kg) exceeded the GAC threshold for a “Residential with plant uptake” scenario. No asbestos fibres were identified in any of the soil samples.

The soils beneath the area investigated at this site can therefore be considered very clean for an area which has been in continuous military and industrial use for many decades.

4.5 Installations

The seven boreholes were installed with appropriate infrastructure to enable their ongoing use as monitoring wells. The installations comprised slotted pipework from 1.5mbgl to 6.0m within BH CP01-04 and slotted pipework from 1.0mbgl to 5.0m within BH CP05-07, with plain pipework to surface, with slotted section surrounded by pea shingle and plain sections sealed with bentonite pellets. A rubber bung and gas tap were fitted to the top of each plain section of pipework and these headworks were enclosed within lockable steel security covers.

The wells are now able to be used in a future environmental monitoring programme to record;

- Groundwater depth;
- Groundwater quality; and
- Soil gas characteristics.

5 ENVIRONMENTAL MONITORING

In support of this SCR, ACS carried out a short environmental monitoring programme, following borehole installation, comprising the following elements:

- Collection & testing of groundwater samples from the monitoring wells;
- Measurement of groundwater elevation;
- Monitoring of soil gases in the new monitoring wells; and
- Collection & testing of samples of surface water discharging into Crabtree Lake.

Monitoring visits were conducted on the following dates regarding testing of CP01-04:

- 9th January 2024
- 18th January 2024
- 25th January 2024

A subsequent monitoring visit was conducted on the following date to monitor the additional 2025 installations CP05-07 and further surface water testing:

- 10th January 2025

5.1 Groundwater Monitoring

Groundwater samples were collected from each of the 4 monitoring wells using conventional disposable bailers during the first monitoring visit 9th January 2024. A further three samples were collected from each of the new 2025 borehole locations on the 10th January 2025. Samples were tested for a standard suite of potential contaminants including metals,

The groundwater testing Certificates are set out in Appendix E and compared against a set of Environmental Quality Standards (EQS) drawn from various UK standards & guidelines, where available. Note that there is no definitive standard for water quality in this situation – it is for the Permit applicant to set out selected standards and to justify them in the context of the site's characteristics and its environmental setting. The results can be summarised as follows:

- Sulphate levels of between 36.4 and 836mg/l were recorded across the 7 wells. This compares with an EQS of 250mg/l as defined in the UK Water Supply (Water Quality) Regs 2000; There were no sulphate levels above EQS limits within the 2025 boreholes.
- Phenol levels of between < 2µg/l and 57.4µg/l were recorded across the 7 wells. This compares with an EQS of 7.7µg/l as defined in the Water Framework Directive (England & Wales) 2015, Annual Average; There were no phenol levels above EQS limits within the 2025 boreholes.
- Total speciated petroleum hydrocarbons (TPH) were identified across all 4 wells drilled in 2023 at levels of between 18 and 2,410µg/l. There were no levels of TPH higher than the 1ug/l LOD found in boreholes drilled in 2025. There is no defined EQS for TPH, but among the individual speciated hydrocarbon ranges, only C10-C12 Aliphatic showed an EQS exceedance in comparison with the WHO Petroleum Products in Drinking Water Guidelines of 2008. The guideline figure is 300µg/l and the results for Boreholes CP01 and 02 were 384 and 402µg/l, respectively.
- Notably all heavy metal results were very low and well below their respective EQS values as derived from the Priority Substances Directive 2013, UK Water Supply (Water Quality) Regs 2000 and the Water Framework Directive (England & Wales) 2015; BH CP07 showed the only exceedance, for chromium of 0.02444 mg/l compared to the EQS Priority Substances Directive (2013) (EQS) MAC of 0.0047 mg/l.

- All results for BTEX, PAHs and PCBs were at or below the detection limits of the laboratory analytical methods employed for all seven boreholes.

5.2 Groundwater Levels

Groundwater levels were recorded using a dipmeter during each of monitoring visits and Table 2 below sets out the data obtained from this monitoring:

Table 2 – Groundwater elevation monitoring data

Borehole No.	09/01/2024	18/01/2024	25/01/2024	10/01/2025
CP01	1.20	1.17	1.29	-
CP02	3.92	4.40	4.05	-
CP03	4.63	4.80	4.27	-
CP04	3.27	3.72	3.49	-
CP05	-	-	-	0.51
CP06	-	-	-	0.32
CP07	-	-	-	0.46

The results confirm the expectation that groundwater levels are deeper towards the coastal boundary of the site, indicating a hydrogeological gradient towards the waters of the Harbour.

5.3 Soil Gas Monitoring

Levels of selected soil gases were recorded using a GA5000 portable gas monitoring device during each of the monitoring visits. These visits were carried out during a range of rising, steady and falling atmospheric pressure. The results of the gas monitoring are set out in Appendix F.

In summary, the monitoring indicated that trace methane was only recorded on one occasion in BH CP01 at a value of 0.1% v/v, while carbon dioxide was recorded at levels of between 0.1 and 5.1% v/v, across the seven wells. VOC's were recorded between 0.05 and 0.64 ppm in CP05-07.

Environment Agency guidance advises that under normal circumstances, methane values in excess of 1.0% v/v would require further investigation to determine potential sources and evaluate risk and mitigation, therefore methane is not considered to be an issue in these soils.

The carbon dioxide values established from the monitoring are slightly elevated above typical background levels for soils, but are within the range of naturally occurring values. The presence of Made Ground beneath a thick capping layer of concrete is likely to be the source of these slightly elevated values.

The absence of high levels of VOC's indicates that there is no significant hydrocarbon contamination in the ground local to any of the seven wells, which correlates well with the soil testing results.

It was noted that the two wells closest to the Effluent Treatment Plant (BH CP02 & 03) displayed a significant positive pressure at the time of the first monitoring visit, although this reduced significantly on subsequent visits. Although this gas pressure is not associated with any recorded methane values and does not suggest any associated risks, it is recommended that the new monitoring infrastructure forms the basis of a monitoring programme in order to assess any changes in soil gas behaviour. This

programme could also include routine testing of groundwater at an appropriate frequency, to confirm the integrity of nearby liquid waste storage in the Effluent Treatment Plant and the Off-haul Tank Farm.

5.4 Surface Water Monitoring

There are no natural watercourses flowing through or adjacent to the proposed Environmental Permit application area. The Fleetlands site does however have an extensive network of surface water drainage which flows to a number of high and low level discharge points along the edge of Crabtree Lake.

In order to assess the quality of the surface water discharges to Crabtree Lake, three representative discharge points were selected for sample collection. Locations were determined on the basis of safe access and visible flow, at a suitable spread of points along the section of coastline adjoining the Fleetlands site. Sampling locations are shown in the accompanying Figure 3 and samples were tested for a similar standard range of potential contaminants as for groundwater.

The three locations were sampled on 9th January 2024 however, during the 10th January 2025 visit, only two locations (SW2 and SW3) had sufficient flow to sample sufficient volume for testing.

The surface water testing Certificates are provided in Appendix E and the results have been compared against the same EQS as used to assess the groundwater samples. The results can be summarised as follows:

- Outflow SW1 showed a Phenol level of 18.4 µg/l in 2024 which is above the EQS of 7.7 µg/l, there was insufficient flow to sample in 2025;
- All 3 outflows showed minor petroleum hydrocarbon presence when sampled in 2024, with TPH in the range of 1,220 to 2,890 µg/l, slightly higher than noted in the groundwater sampling. All speciated hydrocarbon ranges were below their respective EQS; both outflows sampled in 2025 (SW2 and SW3) had TPH concentrations below the Limit of detection of 10 µg/l;
- All heavy metal results were very low and well below their respective EQS values for all three outflows testing in 2024. There was an exceedance for cadmium at the SW3 location in 2025, the Priority Substances Directive (2013) EQS is 0.45µg/l, the cadmium concentration was 0.53 µg/l.
- All results for BTEX, PAH's and PCB's were at or below the detection limits of the laboratory analytical methods employed.

6 SITE CONDITION SUMMARY

6.1 Soils

Only one sample showed a single exceedance (for Lead) when compared with the GAC for a “Residential with Plant uptake” land-use scenario. All sample results were below the thresholds for the GAC for “Commercial” land-uses. The soils beneath the area investigated at this site can therefore be considered very clean for an area which has been in continuous military and industrial use for many decades.

6.2 Groundwater

The results of the groundwater testing indicated that there was elevated sulphate and phenol in comparison with EQS guidelines and very minor hydrocarbon presence. It is likely that sulphate derives from the Made Ground on which the concrete hardstandings have been founded. All heavy metal results were very low and well below their respective EQS values in 2024 only one exceedance of chromium was recorded in CP07 in the 2025 boreholes.

6.3 Soil Gas

Soil gases were tested for the presence of methane, carbon dioxide and VOC’s on four occasions. No significant methane of VOC values were recorded and carbon dioxide values, although slightly elevated above typical background levels for soils, are within the range of naturally occurring values.

6.4 Surface Water

The results of the groundwater testing indicated that one of the outflows had Phenol levels around 2.5 times above the EQS guideline and all three outflows had very minor hydrocarbon presence in 2024. These had all fallen below limits of detection for the two outflows sampled in 2025. All heavy metal results were very low and well below their respective EQS values in 2024 with one exceedance of cadmium in SW3 noted during 2025.

7 SUPPLEMENTARY STAGES 1 & 2

In accordance with the guidance set out in the EA's "Installations basic general pre-application advice" note, the Applicant has collated a schedule of all of the chemicals which are utilised in the operations at the installation.

7.1 Stage 1

The attached table in Appendix G represents Stage 1 of the supplementary process and lists all of these chemicals and reviews the available information on their following characteristics:

- Composition;
- CLP Classification;
- Physical state & Solubility;
- Toxicity, Mobility & Persistence; and
- Potential to Pollute Soil & Groundwater.

7.2 Stage 2

On the basis of the assessed potential for each chemical to pollute soil and/or groundwater beneath the Site, combined with its hazardous characteristics, Stage 2 of the supplementary process involves the determination of whether each chemical is a Relevant Hazardous Substance (RHS) for the purposes of the assessment.

The final column in the table in Appendix G sets out this determination in respect of each of the listed chemicals. For the purpose of this assessment, the approach has been adopted that where chemicals display any identifiable toxicity to humans, fauna or flora, and are mobile, they will normally be considered as RHS. Chemicals which have very narrowly defined toxicity and have limited mobility and persistence may not be RHS.

In practice, for the chemical inventory employed at this installation, the majority are considered to be RHS.

8 SUPPLEMENTARY STAGE 3

Following the determination of which chemicals are identified as RHS, the final Stage 3 of the assessment process considers the manner in which each is contained at the installation. The basic details of all primary containment facilities at the Site are set out in the accompanying table in Appendix H. This information has been derived from the Master Infrastructure Inventory (Ref: VAIL Inventory & Containment Rev 1.1)

Within Appendix H, each tank at the installation has been listed, together with the following key information;

- Reference No;
- Chemical contained;
- Maximum tank capacity;
- Maximum amount stored;
- Maximum annual usage;

There are many aspects of the primary and secondary containment systems which are common across the infrastructure at the installation. A description of the containment systems has therefore only been provided against the first entry in each grouping of similar containments, within the table in Appendix H.

8.1 Preliminary Infrastructure Inspection

Details of the management, inspection, maintenance and refurbishment of containment infrastructure at the Site are set out in the VAIL document EHS-048. As part of the preparation of this SCR, a high level preliminary inspection of the containment systems employed at the Site was carried out by ACS accompanied by the VAIL EHS Manager, in January 2025.

Photographs showing the general characteristics of the containment facilities, together with selected observations in respect of identified issues or areas for improvement are set out in the accompanying Appendix I. Where relevant these are also referenced in Appendix H.

In summary, whilst the majority of the infrastructure has now been in service for a considerable operational period, it remains fit for purpose. There are however a number of specific areas where more detailed examination and repair/refurbishment may be required. Specific examples of this are as follows:

- Cleaning Bay – Several of the tanks showed evidence of corrosion damage near their exit manifolds to the sump network (see Fig 5 in Appendix I). Some of the shallow concrete bund walls in the spray booths area were cracked, compromising containment (see Fig 6 in Appendix I). Sump access arrangements need to be improved to ensure more robust structures allowing entry for sampling, inspection and maintenance (see Fig 8 in Appendix I).
- Effluent Treatment Plant – Concrete bund wall at front of chemical loading area showed several cracks (see Fis 9 & 10 in Appendix I).
- Off-haul Tank Farm – Connection manifold area for visiting tankers had very limited drip and spill containment capacity (see Fig 13 in Appendix I).
- MRF – Existing channel drain at rear of building is sealed but has very limited capacity to hold any significant liquid storage following IBC damage (see Fig 16 in Appendix I).

A detailed inspection of all tanks, sumps and interconnecting pipework is scheduled to be commissioned by VAIL, as set out in the document EHS-048.

8.2 Source – Pathway – Receptor Assessment

In accordance with accepted risk assessment methodology, the following section considers the key attributes of the installation and the Site on which it is located.

8.2.1 Sources:

The sources of potential contaminants can be defined as the RHS chemicals within the primary and secondary containment systems which are currently in place across the installation, as set out in Appendix H.

8.2.2 Pathways:

Potential pathways form sources to receptors at the site could include fugitive emissions of chemicals via any of the following routes:

- Leaks from tanks or sumps into underlying ground or waters;
- Leaks from interconnecting pipework into underlying ground or waters;
- Spills and leaks from above ground transfer of chemicals onto hardstandings and then into surface water drainage;
- Localised flooding or inundation affecting dry chemical storage areas.

Section 2.0 of this SCR has already identified that beneath a shallow cover of Made Ground, associated with the initial development of the Site, it is entirely underlain by clays and silts of the London Clay Formation. With the exception of occasional discontinuous sand lenses, the London Clay is highly impermeable and provides a significant natural containment to the site in respect of potential vertical migration of contaminants.

The presence of a shallow Made Ground horizon above the London Clay does however present a local pathway for the lateral migration of contaminants. The monitoring network set out in Section 8.3 below, has been designed to ensure visibility of any such contamination in close proximity to its source(s).

8.2.3 Receptors:

For the purposes of this assessment, the primary receptors of contaminants at this site are the soils immediately underlying the containment structures and the protective hardstandings as well as the controlled waters lying within those soils, in the form of groundwater or as adjacent hydrologically-connected surface water features.

As identified above, the underlying London Clay Formation is highly impermeable and provides important natural containment to the Site.

8.3 Monitoring Programme

The development of this SCR has involved the installation of seven new monitoring wells in Dec 2023 and Jan 2025. These are capable of allowing routine monitoring of groundwater levels and groundwater quality in the shallow Made Ground above the London Clay, as well as ground gases.

As discussed in Section 4.0 above, these wells have been located in positions which will allow ongoing surveillance of groundwater quality in the vicinity of the permitted activities which present the greatest potential risk. The monitoring network can be summarised as follows:

- BH01 – Adjacent to new APC equipment serving Building
- BH02 – Down hydrogeological gradient from Effluent Treatment Plant;
- BH03 – Adjacent to Off-haul Tank Farm;
- BH04 – Down hydrogeological gradient from the Cleaning Bay & related APC equipment;
- BH05 – Down hydrogeological gradient of the Chemicals Store (Building 99)
- BH06 – Adjacent to the MRF enclosed channel drain South;
- BH07 - Adjacent to the MRF enclosed channel drain North;

VAIL document EHS-048 sets out the basis upon which emissions monitoring will be carried out at the installation during future operations. Subject to further professional guidance and EA liaison, it is proposed that monitoring will comprise the following elements:

- Quarterly monitoring of groundwater depth and quality, as well as ground gases, for the first 2 years following Permit application submission;
- Quarterly monitoring of surface water at specified points where the site drainage system serving the permitted areas reaches an accessible discharge location into the neighbouring Creek;
- Groundwater and surface water quality to be tested at a UKAS accredited laboratory for the following range of parameters:
    - Heavy metals;
    - Anions;
    - Total Petroleum Hydrocarbons;
    - BTEX;
- Subject to no identification of any significant contaminants, after the first 2 years, ongoing monitoring to be carried out annually, unless any pollution incidents are recorded which have the potential to impact any part of the monitoring network.

Testing parameters will be a function of the chemicals that are required to be used at the installation which may change over time or due to the introduction of new processes. The monitoring programme will be reviewed from time to time in the context of ongoing sampling and testing of effluents which are held in sumps and tanks, to ensure that samples from monitoring wells continue to be tested for relevant parameters.

FIGURES

Fig 1 - Site Location Plan

Fig 2 - Borehole Location Plan

Fig 3 - Surface Water Sample Location Plan

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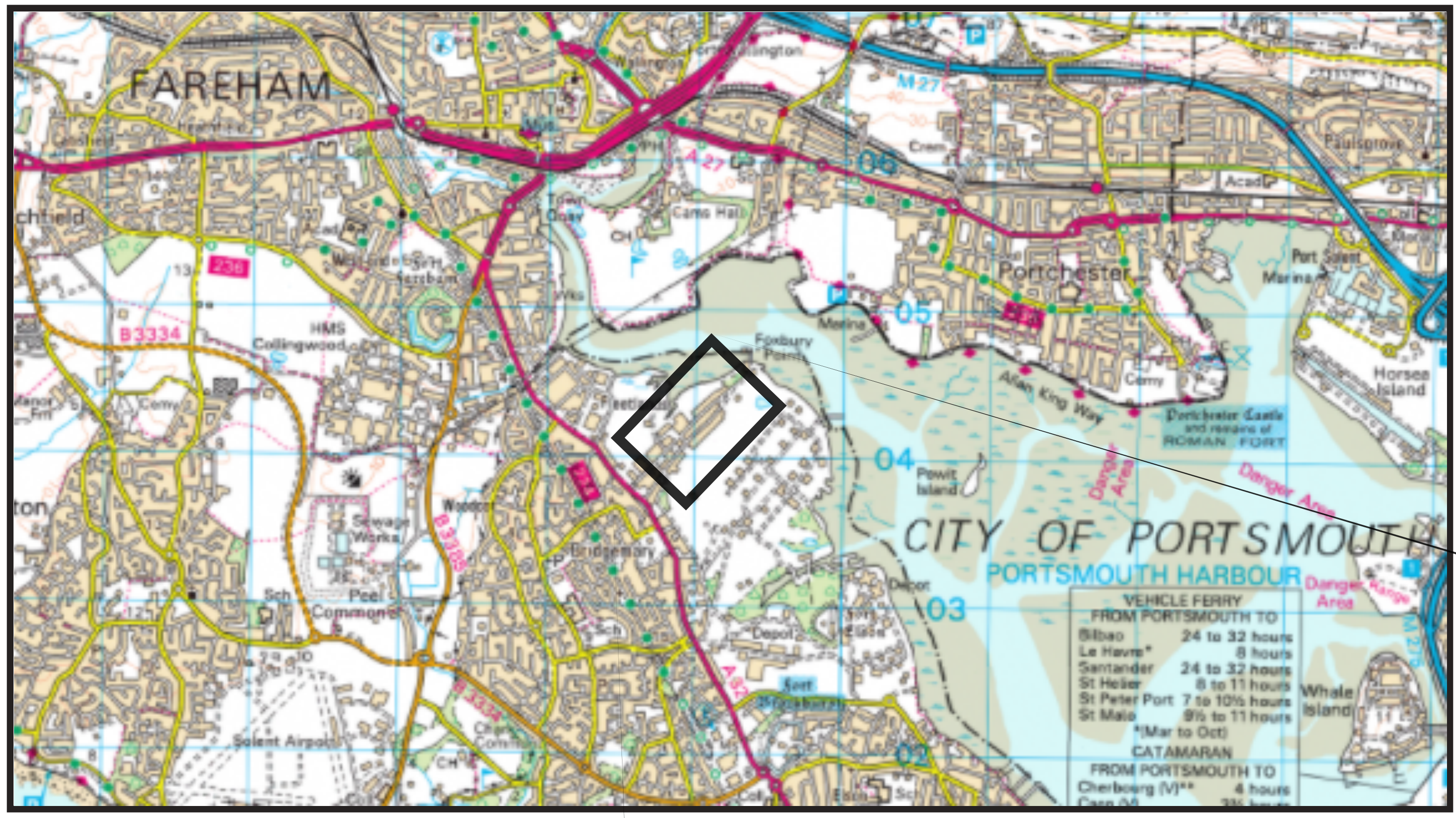

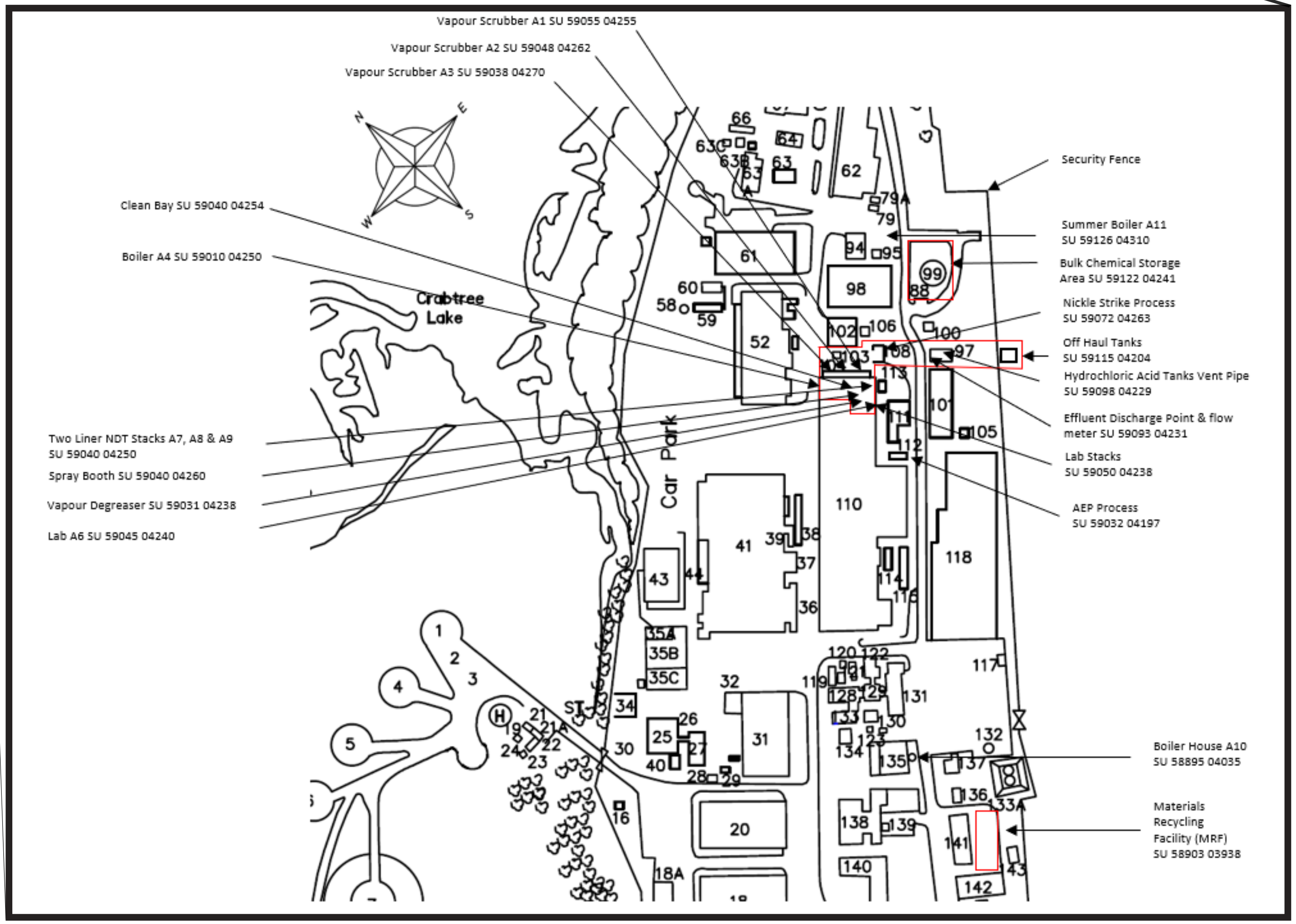

Notes:
Baseplan provided by Bing Maps and OS Data.

Key:

Environmental Permit Application Area

N

DO NOT SCALE

Drawing:
Site Location & Permit Application Boundary

Client:
Vector Aerospace Ltd

Project: Fleetlands Permit SCR	Project No: 24-50040
	Drawing No: Figure 1
	Revision:
Drawn By: JS	Date: 31/01/2025
Checked By: BA	Date: 31/01/2025

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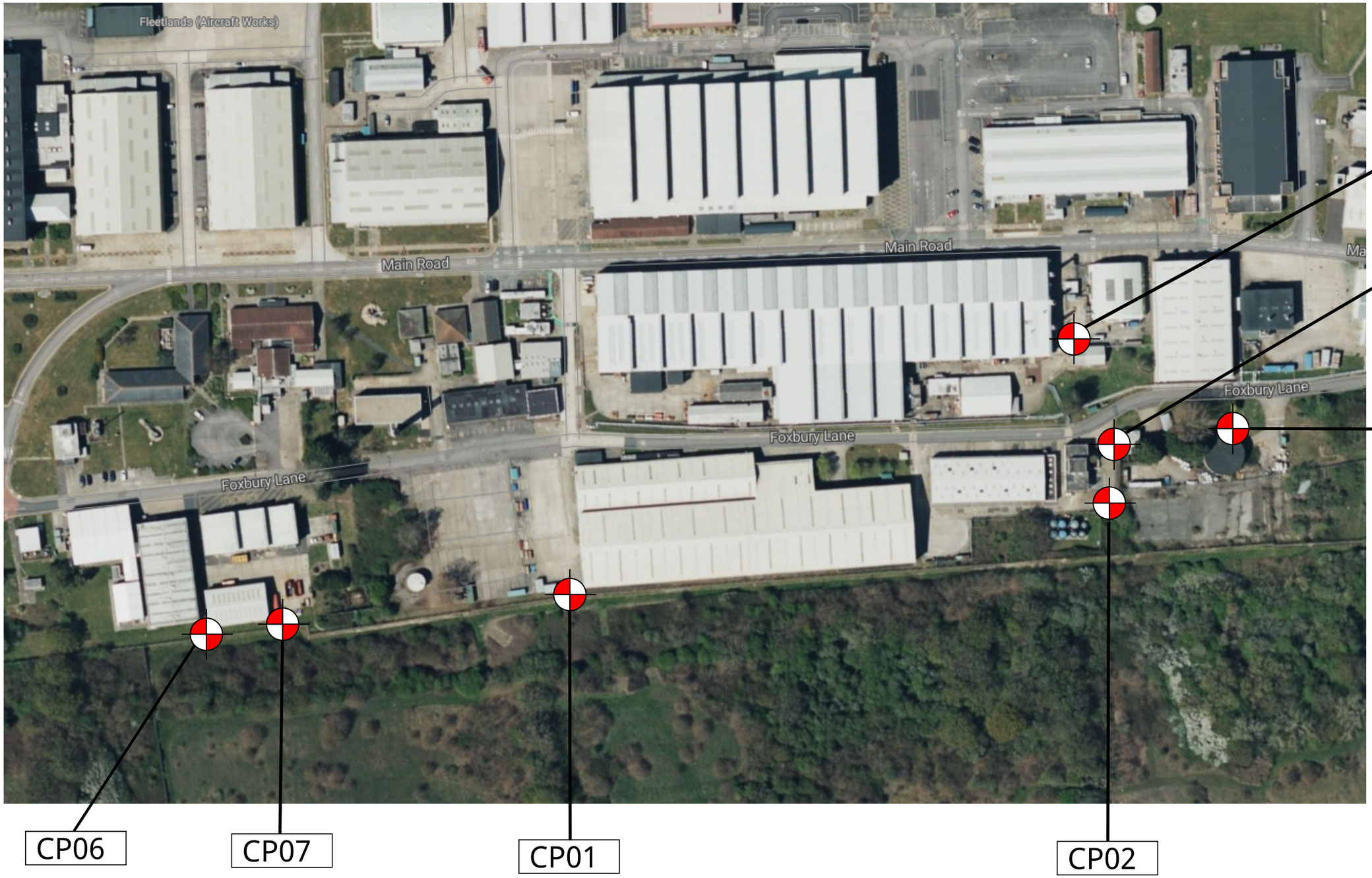

Notes:
Baseplan provided by Bing Maps.
Exploratory hole locations are approximate.

Key:

Cable Percussive Borehole

DO NOT SCALE

Drawing:
Exploratory Hole Location Plan

Client:
Vector Aerospace International Ltd

Project:
Fareham Rd
Gosport
Hampshire
PO13 0AA

Project No:
25-50248

Drawing No:
25-50248/01

Revision:

Drawn By:
TB

Date:
21/01/2025

Checked By:
BA

Date:
21/01/2025

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Notes:
Baseplan provided by Bing Maps.
Exploratory hole locations are approximate.

Key:

Surface Water monitoring Location

DO NOT SCALE

Drawing:
Surface Water Location Plan

Client:
Vector Aerospce Ltd

Project:
Fareham Rd
Gosport
Hampshire
PO13 0AA

Project No:
23-51237

Drawing No:
23-51237/02

Revision:

Drawn By:
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Date:
26/01/2024

Checked By:
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26/01/2024

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APPENDIX A

EA Installations basic general pre-application advice

ANALYTICAL CONSTRUCTION SERVICES
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Installations basic general pre-application advice

Site condition report (SCR)

For guidance on site condition reports and establishing baseline reference data see H5 Site Condition Report guidance.

If you are proposing to use, produce or release hazardous substances you may need to complete or update a stage 1 to 3 assessment in accordance with EC Commission Guidance on baseline reporting (2014/C 136/03) dated 6 May 2014.

To identify hazardous substances use the criteria given in article 3 in the Classification, labelling and packaging of substances and mixtures regulations.

See sections below for further advice on SCR and stage 1 to 3 assessments for new bespoke and permit variation applications.

A supplementary stage 1 to 3 assessment advice note is included at the end of this basic pre-app advice.

New bespoke permit - SCR

You must submit a SCR with sections 1 to 3 of the SCR template completed with your permit application. You should use the H5 Site Condition Report word template to prepare your SCR.

You must complete a stage 1 to 3 assessment and include this in your SCR if you are proposing to use, produce or release hazardous substances.

Permit variations - SCR

You must update your existing site condition report if you are proposing to:

- extend your site boundary
- use, produce or release any new hazardous substances

You must submit your updated site condition report with your permit variation application. If you have not previously produced a site condition report you should use the H5 Site Condition Report word template to prepare your SCR.

If you have an existing Application site report (ASR) and Site Protection and Monitoring Programme (SPMP) you should either update or replace these with a site condition report.

If you are applying for a variation and you propose to use, produce or release new hazardous substances, you must:

- update your existing stage 1 to 3 assessment
- produce a new stage 1 to 3 assessment if you do not already have one

- update or collect new baseline reference data, if applicable

This also applies if you are proposing to relocate any hazardous substances you currently use, produce or release to a new area within your site boundary.

You must submit this to us as part of your updated site condition report.

Guidance for new bespoke permits and variations - SCR

A stage 1 to 3 assessment is required to comply with the requirement for a baseline report in Schedule 7 (paragraph 5 [m]) in the Environmental Permitting Regulations.

If your stage 1 to 3 assessment identifies a risk to soil and groundwater we recommend baseline reference data is established for these substances and you do soil and groundwater monitoring during the life of your permit.

It is recommended that A1 installations who do not have hazardous substances complete the stage 1 to 3 assessment for any other potentially polluting substances.

This will help you demonstrate your site is in a satisfactory state when you apply to surrender all or part of your permit.

Supplementary stage 1 - 3 assessment advice (Part A installations)

Background

Schedule 7 to the EPR transposes the requirements of the Industrial Emissions Directive into domestic law. This requires Part A1 installations to complete a 'baseline report.'

To satisfy the requirement for a 'baseline report' Part A1 installations are required to produce a stage 1 - 3 assessment if they propose to use, produce or release any hazardous substances during the life of the permit to identify if there is a risk of pollution risk to soil and groundwater.

Where a risk to soil and groundwater is identified baseline reference data **must** be established and periodic soil and groundwater monitoring carried out – at a frequency to be agreed but every 10 and 5 years respectively as a minimum.

Whilst a periodic monitoring condition is included in all Part A1 installation permits this condition only becomes active when a risk from relevant hazardous substances is identified.

Further information on the Stage 1 - 3 assessment is detailed in the EC guidance concerning baseline reports (2014/C 136).

We are currently updating our existing H5 SCR guidance on GOV.UK to provide further information on complying with baseline reporting and periodic monitoring requirements.

Stage 1 – Identify hazardous substances used on site

You should produce a list of all hazardous substances you propose to use, produce or release within your site boundary.

Include raw materials, effluent discharges, products, intermediaries, by-products, emissions or wastes.

You should then determine which of the substances are classified as hazardous substances.

Hazardous substances are defined in article 3 of the Classification, labelling and packaging of substances and mixtures regulations (CLPR).

They are defined as a substance or a mixture of substances that meet the criteria given in Parts 2 to 5 of Annex I of the CLPR. They are:

- Part 2 – physical hazards.

- Part 3 – health hazards.
- Part 4 – environmental hazards.
- Part 5 – additional hazard to the ozone layer

Your material safety data sheets will state if any substances you are proposing to use, produce or release are hazardous substances.

You can also use the:

- C&L Inventory on the European Chemicals Agency (ECHA) website
- Registered substances on the ECHA website
- eChemPortal on the Organisation for Economic Co-operation and Development website

Include the chemical constituents if substances are listed as trade names. Give details of the proportion of the largest constituent chemicals if there are mixtures or compounds.

Stage 2 – Identify relevant hazardous substances

You must work out the potential pollution risk of each hazardous substance you have identified in Stage 1. If they could cause soil and groundwater pollution, they are called 'relevant hazardous substances'.

To identify relevant hazardous substances, you must do this by reviewing the chemical and physical properties of each hazardous substance by assessing the:

- solubility
- toxicity
- mobility
- persistence – consider for example degradation rates, breakdown products and the potential for bio-accumulation
- biodegradability
- physical state - solid, liquid or gas

To get information on physical and chemical properties you can use your material safety data sheets.

You can also use the:

- eChemPortal on the Organisation for Economic Co-operation and Development website

Where a group of substances display similar characteristics, you can assess them together. Your assessment must include:

- your data and how you interpreted it
- a justification if any hazardous substances have been excluded, included or grouped together

- substances you have identified as relevant hazardous substances

The information for this stage is generally summarised in a table with the final column identifying whether a substance has the potential to cause pollution and is therefore a Relevant Hazardous Substance (RHS) or a substance with a pollution potential.

You can use Example 1 as a checklist for the type of information you will need to provide for your Stage 1 and 2 assessment. We recommend the final column identifies whether a substance has been identified as relevant hazardous substance.

Stage 3 – Assessment of site specific pollution possibility

You must assess the potential pollution risk to soil and groundwater for each RHS for all activities that will take place on your site. For example, production areas, tank farms, fuel storage and warehousing.

The assessment of the potential pollution risk from each RHS needs to include:

- a detailed physical inspection
- their location
- quantity of each one used, produced or released
- location of delivery
- existing pollution prevention measures and whether they are fit for purpose
- the circumstances under which emissions may occur

The EC guidance contains useful detail on this stage.

Use the information you have collected to assess if there is a risk to soil and groundwater from the relevant hazardous substances you have identified. Use a source-pathway-receptor approach.

If a risk is identified, you **must** establish baseline reference data for soil and groundwater for those relevant hazardous substances and you will be required to do periodic soil and groundwater monitoring.

You should provide the information in a table or series of tables for each type of activity on-site for example, production areas, tank farms, warehousing with additional supporting details in the body of the report – i.e. the zone assigned in the site plan.

The supporting information in the report should include a ‘detailed’ summary of the procedures (including document references) and the systems in place within your company environmental management system (EMS) for the inspection and maintenance of all pollution prevention measures.

It is recommended the assessment of existing pollution prevention measures is undertaken using a ‘lines of evidence’ type approach to set out the primary,

secondary and tertiary containment measures and process control measures for example, alarms, manned loading / off loading facilities that are in place to prevent the pollution of soil and groundwater.

Where possible it is useful to refer to asset numbers of tanks and bunds so the assessment can be crossed referenced with the inspection and maintenance programme within your EMS – and the reporting elements of your operational SCR. This should be carried out in the text and table format with reference to the detailed zoned site plan.

Drainage systems, collection pits/sumps, interceptors should also be included in the assessment.

Examples 2 and 3 provide worked examples of the types of information you will need to include.

Example 1: Stage 1 – 2 assessment

Trade name	Hazardous Substance	Composition	Classification Labelling Packaging (CLP) Classification (EC No 1272/2008)	Physical State	Solubility	Toxicity	Mobility	Persistence	Potential to pollute soil and groundwater	Relevant Hazardous Substance
Not applicable	Xylene	Xylene 100%	<u>Physical Hazards</u> Flammable liquids Category 3 (H226) <u>Health Hazards</u> Aspiration Toxicity Category 1 (H304) Acute dermal toxicity	Liquid	Low	High	Med	Yes	Yes. Moderately mobile in soil and may leach into groundwater and be persistent for many years.	Yes

Trade name	Hazardous Substance	Composition	Classification Labelling Packaging (CLP) Classification (EC No 1272/2008)	Physical State	Solubility	Toxicity	Mobility	Persistence	Potential to pollute soil and groundwater	Relevant Hazardous Substance
			Category 4 (H312) Acute Inhalation Toxicity - Vapours Category 4 (H332) Causes skin irritation Category 2 (H315) Causes serious eye irritation Category 2 (H319)							

Trade name	Hazardous Substance	Composition	Classification Labelling Packaging (CLP) Classification (EC No 1272/2008)	Physical State	Solubility	Toxicity	Mobility	Persistence	Potential to pollute soil and groundwater	Relevant Hazardous Substance
			Specific target organ toxicity - (single exposure) Category 3 (H335) Specific target organ toxicity - (repeated exposure) Category 2 (H373) <u>Environmental Hazards</u> Toxic to aquatic life with long lasting effects							

Trade name	Hazardous Substance	Composition	Classification Labelling Packaging (CLP) Classification (EC No 1272/2008)	Physical State	Solubility	Toxicity	Mobility	Persistence	Potential to pollute soil and groundwater	Relevant Hazardous Substance
			Category 4 (H411)							
Not applicable	Sulphuric acid	Sulphuric acid 72% weight solution	Health Hazards Causes severe skin burns and eye damage Category 1A (H314) Causes serious eye damage Category 1 (H318)	Liquid	High	Low	High	Low	Yes. May affect pH in groundwater.	Yes

Example 2: Stage 3 assessment

This example of a tank farm shows the relevant hazardous substance is not a pollution risk to soil and groundwater.

Relevant Hazardous Substance (RHS)	Tank Number	Maximum capacity of tank (tonnes)	Maximum amount stored at site (tonnes)	Maximum amount used annually (tonnes)	Details of existing pollution prevention measures	Is the RHS a pollution risk?
Xylene	T001	25	15	100	<u>Primary containment measures</u> Stainless steel tank seated on concrete plinth. Tank fitted with level indication and alarm system with independent high-level alarm. Tank is inspected and maintained in line with manufacturers guidelines in accordance with Standard Operating Procedure (SOP) 01 Inspection and testing of primary tanks. Tanker off-loading activities are supervised and completed in accordance with SOP 02 Off-loading of bulk chemical road tankers. Instructions identifying destination tank are issued in writing and tank contents are checked before tanker offloaded to confirm sufficient capacity available. <u>Secondary containment measures</u> Tank located in secondary containment bund constructed of reinforced concrete tied into underlying reinforced concrete slab	No

Relevant Hazardous Substance (RHS)	Tank Number	Maximum capacity of tank (tonnes)	Maximum amount stored at site (tonnes)	Maximum amount used annually (tonnes)	Details of existing pollution prevention measures	Is the RHS a pollution risk?
					with a bund liquid alarm detection switch. Bund volume meets CIRIA C736 requirements of a 110% capacity. Sump observed in the bund. This was observed to be in good condition. Bund integrity is tested annually by a certified contractor in accordance with procedure SOP 03 Site Bund Inspections. The removal and disposal of surface water from the bund is completed in accordance with SOP 04 Removal and disposal of surface water from bunds. <u>Tertiary containment measures</u> Offloading area is served by an impermeable concrete surface with containment provision for the entirety of the largest tanker delivery. The surfacing is in good condition. There are no evidence of cracks or damage. Site surfacing is inspected in accordance with procedure SOP 05 Inspection of site surfacing. The tanker unloading area and external hard standing are inspected on a monthly basis. <u>Environmental Management System: Inspections and Procedures</u>	

Relevant Hazardous Substance (RHS)	Tank Number	Maximum capacity of tank (tonnes)	Maximum amount stored at site (tonnes)	Maximum amount used annually (tonnes)	Details of existing pollution prevention measures	Is the RHS a pollution risk?
					Daily checks of all primary, secondary and tertiary containment are completed in accordance with procedure SOP 06 Daily checks for primary, secondary and tertiary containment. Defects logged on the maintenance system and assigned a timescale for repair on a risk basis. A register is maintained via the Environmental Management System to record all inspection, maintenance repair and replacement work for all primary, secondary and tertiary containment including drainage systems to ensure these remain fit for purpose. <u>Emergency response procedure</u> Spill kits observed to be available and training on use provided. Procedures governing the inspection, use and training of spill kits and emergency equipment is documented within procedure SOP 07 Site Spillage Control Equipment and SOP 08 Emergency response equipment. Emergency incidents and spillages are dealt with in accordance with procedure SOP 09 Procedure for dealing with environmental incidents and emergencies.	

Example 3: Stage 3 assessment

This example of a tank farm shows the relevant hazardous substance is a pollution risk to soil and groundwater.

Relevant Hazardous Substance (RHS)	Tank Number	Maximum capacity of tank (tonnes)	Maximum amount stored at site (tonnes)	Maximum amount used annually (tonnes)	Details of existing pollution prevention measures	Is the RHS a pollution risk?
Sulphuric Acid (72% weight solution)	T002	8	5	20	<u>Primary containment measures</u> High density polyethylene tank (HDPE) seated on concrete plinth Tank fitted with level indication and alarm system with independent high-level alarm. Tank is inspected and maintained in line with manufacturers guidelines in accordance with procedure SOP 01 Inspection and testing of primary tanks. Tanker off-loading is supervised but no formal procedure is in place detailing instructions to be followed. <u>Secondary containment measures</u> Tank located in secondary containment. Bund constructed of reinforced concrete tied into underlying reinforced concrete slab. Extensive loss of surface observed on bund wall and base slab revealing exposed aggregate. Hairline cracks observed in bund wall. Rainwater in bund observed to be permeating into bund wall	Yes

Relevant Hazardous Substance (RHS)	Tank Number	Maximum capacity of tank (tonnes)	Maximum amount stored at site (tonnes)	Maximum amount used annually (tonnes)	Details of existing pollution prevention measures	Is the RHS a pollution risk?
					at base. No corrosive protective coating observed on bund walls or base slab. Bund volume does not meet CIRIA C736 requirements of a 110%. Given these observations there is a medium – high potential that soil and groundwater may be potentially impacted. Bund integrity testing is not completed by a certified contactor. Integrity assessed via daily checks only. No formal procedure in place for bund integrity assessment checks or for the removal and disposal of rainwater in the bund. <u>Tertiary containment measures</u> Offloading area is served by a concrete and tarmac surface. Any spills are likely to seep through the permeable tarmac surface and corrode the tarmac due to the corrosive nature of the substance and migrate into soil and groundwater. Joints within the concrete observed to be unsealed and cracks observed potentially creating a pathway for any spills to migrate into the soil and groundwater. No containment provisions are in place for spillages or loss of entire tank load. Any spills are likely to enter nearby surface water drains and potentially impact any receiving water bodies. There is	

Relevant Hazardous Substance (RHS)	Tank Number	Maximum capacity of tank (tonnes)	Maximum amount stored at site (tonnes)	Maximum amount used annually (tonnes)	Details of existing pollution prevention measures	Is the RHS a pollution risk?
					no information on the integrity of the surface water drains. Due to the corrosive nature of the substances this may corrode the drains and potentially impact soil and groundwater. <u>Environmental Management System: Inspections and Procedures</u> Daily checks of all primary, secondary and tertiary containment are completed, and defects logged on the maintenance system and assigned a timescale for repair on a risk basis. No formal procedure in place documenting daily checks for primary, secondary and tertiary containment. A register is maintained via the Environmental Management System to record all inspection, maintenance repair and replacement work for all primary, secondary and tertiary containment including drainage systems. <u>Emergency response procedure</u> Spill kits observed to be available and training on use provided. Procedures governing the inspection, use and training of spill kits and emergency equipment is documented within	

Relevant Hazardous Substance (RHS)	Tank Number	Maximum capacity of tank (tonnes)	Maximum amount stored at site (tonnes)	Maximum amount used annually (tonnes)	Details of existing pollution prevention measures	Is the RHS a pollution risk?
					procedure SOP 02 Site Spillage Control Equipment and SOP 03 Emergency response equipment. Emergency incidents and spillages are dealt with in accordance with procedure SOP 04 Procedure for dealing with environmental incidents and emergencies.	

APPENDIX B

Borehole Logs

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BOREHOLE LOG

CABLE PERCUSSION

Borehole No.
CP01
Sheet 1 of 1

Client:	Vector Aerospace International	**Lab. Ref:**	**23-51237**
Contract:	Fleetlands	**Drilling Equipment:**	Dando 2000 Cable Percussion Rig
Location:	Fareham Road, Gosport, PO13 0AA		
Ground Level (mAOD):	Not Surveyed	**Co-ords:**	Not Surveyed
Date(s):	18/12/2023		

Hole Type CP
Scale 1:50
Logged By DW

All units = (m)	Stratum Description	Depth (Level)	Thickness	Legend	Backfill	Water Strike Depth	Casing Depth at Strike	Sample (Type) Depth	In Situ Testing: Depth	Type	Results
0	MADE GROUND. Dark brown silty fine to coarse SAND.	0.19	(0.41)					0.20 (B) 0.40			
	MADE GROUND. Dark brownish grey gravelly fine to coarse SAND. Gravel is fine to coarse angular to sub-rounded of flint, chalk and brick. Rare metal fragments throughout.	0.60						0.60 (B) 0.80			
	MADE GROUND. Firm light brown slightly sandy slightly gravelly CLAY. Gravel is fine to coarse sub-angular to sub-rounded of flint and brick.	0.80	(0.90)					1.00 (B) 1.20			
1	Firm light brown slightly sandy slightly gravelly CLAY. Gravel is fine to coarse sub-angular to sub-rounded of flint. [LONDON CLAY FORMATION]	1.70	(2.30)					1.70 (B) 2.20			
2	Firm to stiff light brownish grey slightly sandy CLAY. Weak hydrocarbon odour between 1.70-2.20mbgl. [LONDON CLAY FORMATION]										
3								3.50 (B) 4.00			
4	Firm to stiff thinly laminated dark brownish grey CLAY. [LONDON CLAY FORMATION]	4.00	(2.00)								
5								5.50 (B) 6.00			
6	End of Borehole at 6.000m	6.00									
7											
8											
9											

Remarks

Water added to assist drilling.

Chiselling

Depth	Time

Groundwater Observations

Date	Strike	Casing	Wait	Standing	Remarks

Technical Notes (where applicable):
Fine grained soil consistencies and rock strengths have been determined by hand worked field tests as described in BS5930:2015. Coarse grained soil densities are described based on SPT[N] values where available. Chalk is described in accordance with CIRIA C574.

Sample Codes: (D) - Small Disturbed / (B) - Bulk / (U) Undisturbed

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BOREHOLE LOG

CABLE PERCUSSION

Borehole No.
CP02
Sheet 1 of 1

Client:	Vector Aerospace International	**Lab. Ref:**	**23-51237**
Contract:	Fleetlands	**Drilling Equipment:**	Dando 2000 Cable Percussion Rig
Location:	Fareham Road, Gosport, PO13 0AA		
Ground Level (mAOD):	Not Surveyed	**Co-ords:**	Not Surveyed
Date(s):	18/12/2023		

Hole Type CP
Scale 1:50
Logged By DW

All units = (m)	Stratum Description	Depth (Level)	Thickness	Legend	Backfill	Water Strike Depth	Casing Depth at Strike	Sample (Type) Depth	In Situ Testing: Depth	Type	Results
	CONCRETE.										
	MADE GROUND, Light greyish brown sandy silty fine to coarse angular to sub-angular GRAVEL of limestone.	0.30						0.35 (B) 0.50			
	MADE GROUND. Dark greyish brown gravelly fine to coarse SAND. Gravel is fine to coarse angular to sub-rounded of flint, chalk and brick.	0.50						0.60 (B) 0.80			
	Firm to stiff light brown mottled light grey CLAY. [LONDON CLAY FORMATION]	0.80	(2.60)					1.00 (B) 1.20			
								2.50 (B) 3.00			
	Stiff thinly laminated dark brownish grey CLAY. [LONDON CLAY FORMATION]	3.40	(2.60)					3.50 (B) 4.00			
								5.50 (B) 6.00			
	End of Borehole at 6.000m	6.00									

Remarks

Water added to assist drilling.

Chiselling

Depth	Time

Groundwater Observations

Date	Strike	Casing	Wait	Standing	Remarks

Technical Notes (where applicable):
Fine grained soil consistencies and rock strengths have been determined by hand worked field tests as described in BS5930:2015. Coarse grained soil densities are described based on SPT[N] values where available. Chalk is described in accordance with CIRIA C574.

Sample Codes: (D) - Small Disturbed / (B) - Bulk / (U) Undisturbed

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BOREHOLE LOG

CABLE PERCUSSION

Borehole No.
CP03
Sheet 1 of 1

Client:	Vector Aerospace International	**Lab. Ref:**	**23-51237**
Contract:	Fleetlands	**Drilling Equipment:**	Dando 2000 Cable Percussion Rig
Location:	Fareham Road, Gosport, PO13 0AA		
Ground Level (mAOD):	Not Surveyed	**Co-ords:**	Not Surveyed
Date(s):	18/12/2023 - 19/12/2023		

Hole Type CP
Scale 1:50
Logged By DW

All units = (m)	Stratum Description	Depth (Level)	Thickness	Legend	Backfill	Water Strike Depth	Casing Depth at Strike	Sample (Type) Depth	In Situ Testing: Depth	Type	Results
0	CONCRETE.	0.35									
	MADE GROUND. Light greyish brown sandy silty fine to coarse angular to sub-angular GRAVEL of limestone.	0.50						0.35 (B) 0.50			
	MADE GROUND. Dark grey sandy gravelly CLAY. Gravel is fine to coarse sub-angular to sub-rounded of chalk and brick.		(0.80)					0.60 (B) 0.80			
1								1.00 (B) 1.20			
	Firm light greyish brown mottled light grey CLAY. [LONDON CLAY FORMATION]	1.30									
2			(1.90)					1.50 (B) 2.00			
								2.50 (B) 3.00			
3	Stiff thinly laminated dark brownish grey CLAY. [LONDON CLAY FORMATION]	3.20									
4								4.00 (B) 4.50			
5			(2.80)								
								5.50 (B) 6.00			
6	End of Borehole at 6.000m	6.00									
7											
8											
9											

Remarks

Water added to assist drilling.

Chiselling

Depth	Time

Groundwater Observations

Date	Strike	Casing	Wait	Standing	Remarks

Technical Notes (where applicable):
Fine grained soil consistencies and rock strengths have been determined by hand worked field tests as described in BS5930:2015. Coarse grained soil densities are described based on SPT[N] values where available. Chalk is described in accordance with CIRIA C574.

Sample Codes: (D) - Small Disturbed / (B) - Bulk / (U) Undisturbed

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BOREHOLE LOG

CABLE PERCUSSION

Borehole No.
CP04
Sheet 1 of 1

Client:	Vector Aerospace International	**Lab. Ref:**	**23-51237**
Contract:	Fleetlands	**Drilling Equipment:**	Dando 2000 Cable Percussion Rig
Location:	Fareham Road, Gosport, PO13 0AA		
Ground Level (mAOD):	Not Surveyed	**Co-ords:**	Not Surveyed
Date(s):	18/12/2023		

Hole Type CP
Scale 1:50
Logged By DW

All units = (m)	Stratum Description	Depth (Level)	Thickness	Legend	Backfill	Water Strike Depth	Casing Depth at Strike	Sample (Type) Depth	In Situ Testing: Depth	Type	Results
	CONCRETE.	0.20						0.20 (B) 0.40			
	MADE GROUND. White mottled dark grey slightly gravelly SILT. Gravel is fine to coarse sub-angular to sub-rounded of flint and chalk.	0.40						0.40 (B) 0.60			
	MADE GROUND. Dark brownish grey gravelly fine to coarse SAND. Gravel is fine to coarse angular to sub-rounded of flint, chalk and brick.	0.60						0.60 (B) 0.80			
1	Firm light brown mottled orange slightly sandy CLAY. [LONDON CLAY FORMATION]		(2.55)					1.00 (B) 1.30			
2											
3								2.50 (B) 3.00			
	Firm to stiff thinly laminated dark brownish grey CLAY. [LONDON CLAY FORMATION]	3.20									
4								3.50 (B) 4.00			
5			(2.80)								
								5.50 (B) 6.00			
6	End of Borehole at 6.000m	6.00									
7											
8											
9											

Remarks

Water added to assist drilling.

Chiselling

Depth	Time

Groundwater Observations

Date	Strike	Casing	Wait	Standing	Remarks

Technical Notes (where applicable):
Fine grained soil consistencies and rock strengths have been determined by hand worked field tests as described in BS5930:2015. Coarse grained soil densities are described based on SPT[N] values where available. Chalk is described in accordance with CIRIA C574.

Sample Codes: (D) - Small Disturbed / (B) - Bulk / (U) Undisturbed

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BOREHOLE LOG

CABLE PERCUSSION

Borehole No.
CP05
Sheet 1 of 1

Client:	Vector Aerospace International	**Lab. Ref:**	**25-50040**
Contract:	Fleetlands - Standard Aero	**Drilling Equipment:**	Cable Percussion Drilling Rig
Location:	Foxbury Lane, Gosport, Fareham, PO16 9DR		
Ground Level (mAOD):	Not Surveyed	**Co-ords:** Not Surveyed	**Date(s):** 02/01/2025

Hole Type CP
Scale 1:55
Logged By SM

All units = (m)	Stratum Description	Depth (Level)	Thickness	Legend	Backfill	Water Strike Depth	Casing Depth at Strike	Sample (Type) Depth	In Situ Testing: Depth	Type	Results
0	MADE GROUND. Reddish brown silty very sandy fine to coarse sub-angular to angular GRAVEL of limestone and flint.	0.30						0.00 (B) 0.30			
	MADE GROUND. Black mottled brown clayey sandy fine to coarse angular to sub-angular GRAVEL of limestone, flint, lignite and brick.	0.60						0.30 (B) 0.40 0.40 (B) 0.60			
		0.80						0.60 (B) 0.80 0.80 (B) 1.00			
1	MADE GROUND. Dark brown slightly gravelly slightly sandy CLAY. Gravel is fine to coarse angular to sub-rounded of brick, flint, limestone, chalk and rare ceramic fragments.		(0.70)								
	Soft to firm light brown slightly sandy CLAY. [LONDON CLAY FORMATION].	1.50									
2	Firm to stiff light brown slightly sandy CLAY. [LONDON CLAY FORMATION].							2.00 (B) 2.50			
	Becoming orange mottled grey.										
3	*Becoming slightly gravelly.*		(3.00)					3.00 (B) 3.50			
4											
	Stiff grey slightly sandy CLAY. Rare shell fragments throughout. [LONDON CLAY FORMATION].	4.50	(0.50)					4.50 (B) 5.00			
5	End of Borehole at 5.000m	5.00									
6											
7											
8											
9											
10											

Remarks

Groundwater not encountered

Chiselling

Depth	Time

Groundwater Observations

Date	Strike	Casing	Wait	Standing	Remarks

Technical Notes (where applicable):
Fine grained soil consistencies and rock strengths have been determined by hand worked field tests as described in BS5930:2015. Coarse grained soil densities are described based on SPT[N] values where available. Chalk is described in accordance with CIRIA C574.

Sample Codes: (D) - Small Disturbed / (B) - Bulk / (U) Undisturbed

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BOREHOLE LOG

CABLE PERCUSSION

Borehole No.
CP06
Sheet 1 of 1

Client:	Vector Aerospace International	**Lab. Ref:**	**25-50040**
Contract:	Fleetlands - Standard Aero	**Drilling Equipment:**	Cable Percussion Drilling Rig
Location:	Foxbury Lane, Gosport, Fareham, PO16 9DR		
Ground Level (mAOD):	Not Surveyed	**Co-ords:** Not Surveyed	**Date(s):** 02/01/2025

Hole Type CP
Scale 1:55
Logged By SM

All units = (m)	Stratum Description	Depth (Level)	Thickness	Legend	Backfill	Water Strike Depth	Casing Depth at Strike	Sample (Type) Depth	In Situ Testing: Depth	Type	Results
0	MADE GROUND. Grass over light brown mottled black slightly gravelly slightly sandy CLAY. Gravel is fine to coarse sub-angular to sub-rounded of flint.	0.30						0.10 (B) 0.30			
	Orangish brown mottled black slightly gravelly slightly sandy CLAY. Gravel is fine to coarse angular to sub-angular of flint. [LONDON CLAY FORMATION].	0.50	(0.50)					0.30 (B) 0.50			
1	Orangish brown mottled grey slightly gravelly slightly sandy CLAY. Gravel is fine to coarse angular to sub-angular of flint. [LONDON CLAY FORMATION].	1.00	(1.00)					0.60 (B) 0.70 0.90 (B) 1.00 1.00 (B) 1.20			
	Light brown mottled orangish brown and greyish blue slightly gravelly slightly sandy CLAY. Gravel is fine to coarse angular to sub-angular flint. [LONDON CLAY FORMATION].										
2	Stiff light brown mottled grey slightly sandy CLAY. [LONDON CLAY FORMATION].	2.00	(2.00)					2.00 (B) 2.50			
3	*Becoming grey mottled orange.*							3.00 (B) 3.50			
4	Stiff grey slightly sandy CLAY. [LONDON CLAY FORMATION].	4.00	(1.00)					4.00 (B) 4.50 4.50 (B) 5.00			
5	End of Borehole at 5.000m	5.00									
6											
7											
8											
9											
10											

Remarks

Groundwater not encountered

Chiselling

Depth	Time

Groundwater Observations

Date	Strike	Casing	Wait	Standing	Remarks

Technical Notes (where applicable):
Fine grained soil consistencies and rock strengths have been determined by hand worked field tests as described in BS5930:2015. Coarse grained soil densities are described based on SPT[N] values where available. Chalk is described in accordance with CIRIA C574.

Sample Codes: (D) - Small Disturbed / (B) - Bulk / (U) Undisturbed

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BOREHOLE LOG

CABLE PERCUSSION

Borehole No.
CP07
Sheet 1 of 1

Client:	Vector Aerospace International	**Lab. Ref:**	**25-50040**
Contract:	Fleetlands - Standard Aero	**Drilling Equipment:**	Cable Percussion Drilling Rig
Location:	Foxbury Lane, Gosport, Fareham, PO16 9DR		
Ground Level (mAOD):	Not Surveyed	**Co-ords:** Not Surveyed	**Date(s):** 02/01/2025

Hole Type CP
Scale 1:55
Logged By SM

All units = (m)	Stratum Description	Depth (Level)	Thickness	Legend	Backfill	Water Strike Depth	Casing Depth at Strike	Sample (Type) Depth	In Situ Testing: Depth	Type	Results
0	MADE GROUND. Grass over brown slightly sandy slightly gravelly CLAY. Gravel is fine to coarse sub-angular to sub-rounded of flint, plastic, bituminous material and concrete.	0.40						0.00 (B) 0.30; 0.30 (B) 0.40			
	Concrete cobble	0.60						0.40 (B) 0.60			
1	MADE GROUND. Light brown mottled dark brown slightly gravelly sandy CLAY. Gravel is fine to coarse angular to sub-rounded of flint and concrete.							0.70 (B) 0.90			
	Soft orangish brown mottled grey slightly gravelly slightly sandy CLAY. [LONDON CLAY FORMATION].		(1.40)			1.20 1.20		1.00 (B) 1.20			
2	Stiff multicoloured slightly gravelly slightly sandy CLAY. Gravel is fine to coarse sub-angular to sub-rounded of mudstone. [LONDON CLAY FORMATION].	2.00						2.00 (B) 2.50			
3			(1.50)					3.00 (B) 3.50			
	Stiff to very stiff dark grey CLAY. [LONDON CLAY FORMATION].	3.50						3.50 (B) 4.00			
4			(1.50)								
5	End of Borehole at 5.000m	5.00						4.50 (B) 5.00			
6											
7											
8											
9											
10											

Remarks

Water strike likely to be perched and ingress into hand dug pit as borehole dipped on completion at 1.52mbgl.

Chiselling

Depth	Time

Groundwater Observations

Date	Strike	Casing	Wait	Standing	Remarks
	1.20m		15mins	1.20m	

Technical Notes (where applicable):
Fine grained soil consistencies and rock strengths have been determined by hand worked field tests as described in BS5930:2015. Coarse grained soil densities are described based on SPT[N] values where available. Chalk is described in accordance with CIRIA C574.

Sample Codes: (D) - Small Disturbed / (B) - Bulk / (U) Undisturbed

APPENDIX C

Laboratory Test Results – Soils

ACS
ANALYTICAL CONSTRUCTION SERVICES
A PHENNA GROUP COMPANY

ACS Testing Ltd
Unit 14
Blackhill Road West
Holton Heath Trading Park
Poole
Dorset
BH16 6LE

Certificate of Analysis

Certificate Number : 25-00021-Issue 1-Page: 1

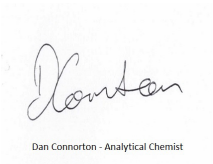
Report Fao:	
Site Address^:	Gosport - Fareham Rd
Client Order No:	25-50040
Date of Sampling^:	03/01/2024
Date Received:	07/01/2025
Date of Analysis:	08/01/2025 - 27/01/2025
Report Date:	27/01/2025

Please find your certificates of test attached for your samples received in the laboratory on 07/01/2025 under our laboratory reference 25-00021.

Remarks:

None

Results reviewed by:



Test Certificates approved by:

Any opinions or interpretations indicated are outside the scope of our UKAS accreditation.
This certificate should not be reproduced, except in full, without the express permission of the laboratory.
The results included within the report are representative of the samples submitted for analysis.
Excel copies of reports are valid only when accompanied by this PDF certificate.
Client's Sample Description / ACS Material Description are noted for reference only.

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UKAS TESTING
4150

ACSE Sample Number	91394	91395	91396
Sample ID	830425 - 25-50040	830426 - 25-50040	830427 - 25-50040
Clients Sample Ref.^	BH05	BH05	BH05
Location / Sample Depth (m)^	0.3-0.6	2.0-2.5	4.5-5.0
Date Sampled^	03/01/2024	03/01/2024	03/01/2024
Time Sampled^	0	0	0
Sample deviating codes			
Client's Sample Description^			
ACS Testing Material Description^	Made Ground	Brown sandy CLAY	Grey sandy CLAY
ACSE Material Description (Principal Matrix - As Received)	GRAVEL	CLAY	CLAY

Determination	HWOL Acroynm	Units	Method	Prepared As	Result	AS	Result	AS	Result	AS
Carbon										
Soil Organic Matter		%	S/C	S/C	**17.4**		< 0.50		< 0.50	
FOC		%	S/C	SC	< 0.500		< 0.500		< 0.500	
Cyanide										
Total Cyanide_S		mg/kg	IHP	AR	< 0.050	*	< 0.050	*	< 0.050	*
Metals (Soil)										
Chromium III		mg/kg	NAM/ACSE/X11	AD	**41.7**		**34.7**		**35.6**	
Chromium Hexavalent		mg/kg	NAM/ACSE/X11	AD	< 0.20		< 0.20		< 0.20	
Metals and Metalloids (Solids)										
Arsenic		mg/kg	MT_ACSE_210	AD	**15.974**	*	**13.647**	*	**16.641**	*
Cadmium		mg/kg	MT_ACSE_210	AD	**5.7401**	*	**0.0642**	*	**0.1519**	*
Chromium (Total)		mg/kg	MT_ACSE_210	AD	**41.73**	*	**34.74**	*	**35.57**	*
Copper		mg/kg	MT_ACSE_210	AD	**60.900**	*	**24.836**	*	**23.899**	*
Selenium		mg/kg	MT_ACSE_210	AD	**0.36801**	*	**0.52946**	*	**0.77357**	*
Mercury		mg/kg	MT_ACSE_210	AD	**0.21193**	*	**0.04215**	*	**0.03694**	*
Nickel		mg/kg	MT_ACSE_210	AD	**31.462**	*	**38.509**	*	**48.152**	*
Lead		mg/kg	MT_ACSE_210	AD	**163.6**	*	**18.73**	*	**19.02**	*
Zinc		mg/kg	MT_ACSE_210	AD	**336.3**	*	**77.86**	*	**79.51**	*
pH and Conductivity										
pH (@ 20℃)		units	MT/ACSE/308	AD	**8.7**	*	**8.8**	*	**8.6**	*
Poly Aromatic Hydrocarbons										
Naphthalene		mg/kg	MT/ACSE/108	AR	**0.11**		< 0.10		< 0.10	
Acenaphthylene		mg/kg	MT/ACSE/108	AR	< 0.10		< 0.10		< 0.10	
Acenaphthene		mg/kg	MT/ACSE/108	AR	< 0.10		< 0.10		< 0.10	
Fluorene		mg/kg	MT/ACSE/108	AR	< 0.10		< 0.10		< 0.10	
Phenanthrene		mg/kg	MT/ACSE/108	AR	< 0.10		< 0.10		< 0.10	
Anthracene		mg/kg	MT/ACSE/108	AR	**0.21**		< 0.10		< 0.10	
Fluoranthene		mg/kg	MT/ACSE/108	AR	**0.24**		< 0.10		< 0.10	
Pyrene		mg/kg	MT/ACSE/108	AR	**0.19**		< 0.10		< 0.10	
Benzo (a) anthracene		mg/kg	MT/ACSE/108	AR	< 0.10		< 0.10		< 0.10	
Chrysene		mg/kg	MT/ACSE/108	AR	< 0.10		< 0.10		< 0.10	
Benzo (b) fluoranthene		mg/kg	MT/ACSE/108	AR	< 0.10		< 0.10		< 0.10	
Benzo (k) fluoranthene		mg/kg	MT/ACSE/108	AR	< 0.10		< 0.10		< 0.10	
Benzo (a) pyrene		mg/kg	MT/ACSE/108	AR	< 0.10		< 0.10		< 0.10	
Indeno (1 2 3-CD) pyrene		mg/kg	MT/ACSE/108	AR	< 0.10		< 0.10		< 0.10	
Dibenzo(a h)anthracene		mg/kg	MT/ACSE/108	AR	< 0.10		< 0.10		< 0.10	
Benzo(g h i)perylene		mg/kg	MT/ACSE/108	AR	< 0.10		< 0.10		< 0.10	
Total PAH		mg/kg	MT/ACSE/108	AR	< 2.00		< 2.00		< 2.00	
Speciated BTEX										
MTBE	HS_1D_TOTAL	mg/kg	NAM/ACSE/X12	AR	< 0.0100		< 0.0100		< 0.0100	
Hexane	HS_1D_TOTAL	mg/kg	NAM/ACSE/X06	AR	< 0.0100		< 0.0100		< 0.0100	
Heptane	HS_1D_TOTAL	mg/kg	NAM/ACSE/X06	AR	< 0.0100		< 0.0100		< 0.0100	
Octane	HS_1D_TOTAL	mg/kg	NAM/ACSE/X06	AR	< 0.0100		< 0.0100		< 0.0100	
Benzene	HS_1D_TOTAL	mg/kg	NAM/ACSE/X06	AR	< 0.0100		< 0.0100		< 0.0100	
Toluene	HS_1D_TOTAL	mg/kg	NAM/ACSE/X06	AR	< 0.0100		< 0.0100		< 0.0100	

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ANALYTICAL CONSTRUCTION SERVICES
A PHENNA GROUP COMPANY

ACSE Sample Number	**91394**	**91395**	**91396**
Sample ID	**830425 - 25-50040**	**830426 - 25-50040**	**830427 - 25-50040**
Clients Sample Ref.^	**BH05**	**BH05**	**BH05**
Location / Sample Depth (m)^	**0.3-0.6**	**2.0-2.5**	**4.5-5.0**
Date Sampled^	**03/01/2024**	**03/01/2024**	**03/01/2024**
Time Sampled^	**0**	**0**	**0**
Sample deviating codes			
Client's Sample Description^			
ACS Testing Material Description^	**Made Ground**	**Brown sandy CLAY**	**Grey sandy CLAY**
ACSE Material Description (Principal Matrix - As Received)	**GRAVEL**	**CLAY**	**CLAY**

Determination	HWOL Acroynm	Units	Method	Prepared As	Result	AS	Result	AS	Result	AS
Ethylbenzene	HS_1D_TOTAL	mg/kg	NAM/ACSE/X06	AR	< 0.0100		< 0.0100		< 0.0100	
m+p-xylene	HS_1D_TOTAL	mg/kg	NAM/ACSE/X06	AR	< 0.0100		< 0.0100		< 0.0100	
o-xylene	HS_1D_TOTAL	mg/kg	NAM/ACSE/X06	AR	< 0.0100		< 0.0100		< 0.0100	
Total BTEX	HS_1D_TOTAL	mg/kg	NAM/ACSE/X06	AR	< 0.05		< 0.05		< 0.05	
Speciated Petroleum Hydrocarbons										
C5-C6 Aliphatic	HS_1D_AL	mg/kg	NAM/ACSE/X07	AR	< 0.10		< 0.10		< 0.10	
>C6-C8 Aliphatic	HS_1D_AL	mg/kg	NAM/ACSE/X07	AR	< 0.10		< 0.10		< 0.10	
>C8-C10 Aliphatic	EH_2D_AL	mg/kg	NAM/ACSE/X07	AR	< 10.0		< 10.0		< 10.0	
>C10-C12 Aliphatic	EH_2D_AL	mg/kg	NAM/ACSE/X07	AR	< 10.0		< 10.0		< 10.0	
>C12-C16 Aliphatic	EH_2D_AL	mg/kg	NAM/ACSE/X07	AR	< 10.0		< 10.0		< 10.0	
>C16-C21 Aliphatic	EH_2D_AL	mg/kg	NAM/ACSE/X07	AR	< 10.0		< 10.0		< 10.0	
>C21-C35 Aliphatic	EH_2D_AL	mg/kg	NAM/ACSE/X07	AR	< 10.0		< 10.0		< 10.0	
C6-C7 Aromatic	HS_1D_AR	mg/kg	NAM/ACSE/X07	AR	< 0.10		< 0.10		< 0.10	
C7-C8 Aromatic	HS_1D_AR	mg/kg	NAM/ACSE/X07	AR	< 0.10		< 0.10		< 0.10	
>C8-C10 Aromatic	EH_2D_AR	mg/kg	NAM/ACSE/X07	AR	< 10.0		< 10.0		< 10.0	
>C10-C12 Aromatic	EH_2D_AR	mg/kg	NAM/ACSE/X07	AR	< 10.0		< 10.0		< 10.0	
>C12-C16 Aromatic	EH_2D_AR	mg/kg	NAM/ACSE/X07	AR	< 10.0		< 10.0		< 10.0	
>C16-C21 Aromatic	EH_2D_AR	mg/kg	NAM/ACSE/X07	AR	< 10.0		< 10.0		< 10.0	
>C21-C35 Aromatic	EH_2D_AR	mg/kg	NAM/ACSE/X07	AR	< 10.0		< 10.0		< 10.0	
Total Speciated TPH	EH+HS_2D_TOTAL	mg/kg	NAM/ACSE/X07	AR	< 10.0		< 10.0		< 10.0	
Subcontracted Analysis										
Asbestos Fibre ID		SC	SC	SC	**Attached**		**Attached**		**Attached**	
TOC (Total Organic Carbon)		SC	SC	SC	**S/C**		**S/C**		**S/C**	

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ACS ANALYTICAL CONSTRUCTION SERVICES
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ACSE Sample Number	**91397**	**91398**	**91399**
Sample ID	**830428 - 25-50040**	**830429 - 25-50040**	**830430 - 25-50040**
Clients Sample Ref.^	**BH06**	**BH06**	**BH06**
Location / Sample Depth (m)^	**0.3-0.7**	**2.0-2.5**	**4.5-5.0**
Date Sampled^	**03/01/2024**	**03/01/2024**	**03/01/2024**
Time Sampled^	**0**	**0**	**0**
Sample deviating codes			
Client's Sample Description^			
ACS Testing Material Description^	**Made Ground**	**Brown sandy CLAY**	**Grey sandy CLAY**
ACSE Material Description (Principal Matrix - As Received)	**CLAY**	**CLAY**	**CLAY**

Determination	HWOL Acroynm	Units	Method	Prepared As	Result	AS	Result	AS	Result	AS
Carbon										
Soil Organic Matter		%	S/C	S/C	**0.87**		< 0.50		**0.87**	
FOC		%	S/C	SC	< 0.500		< 0.500		< 0.500	
Cyanide										
Total Cyanide_S		mg/kg	IHP	AR	< 0.050	*	< 0.050	*	< 0.050	*
Metals (Soil)										
Chromium III		mg/kg	NAM/ACSE/X11	AD	**17.8**		**34.9**		**25.9**	
Chromium Hexavalent		mg/kg	NAM/ACSE/X11	AD	< 0.20		< 0.20		< 0.20	
Metals and Metalloids (Solids)										
Arsenic		mg/kg	MT_ACSE_210	AD	**5.6816**	*	**11.883**	*	**9.1417**	*
Cadmium		mg/kg	MT_ACSE_210	AD	**0.1442**	*	**0.0794**	*	**0.1004**	*
Chromium (Total)		mg/kg	MT_ACSE_210	AD	**17.80**	*	**34.93**	*	**25.93**	*
Copper		mg/kg	MT_ACSE_210	AD	**9.5685**	*	**20.685**	*	**18.640**	*
Selenium		mg/kg	MT_ACSE_210	AD	**0.02357**	*	**0.11297**	*	**0.50075**	*
Mercury		mg/kg	MT_ACSE_210	AD	**0.03304**	*	**0.03600**	*	**0.02785**	*
Nickel		mg/kg	MT_ACSE_210	AD	**25.968**	*	**44.419**	*	**30.002**	*
Lead		mg/kg	MT_ACSE_210	AD	**17.93**	*	**19.06**	*	**15.11**	*
Zinc		mg/kg	MT_ACSE_210	AD	**35.19**	*	**68.78**	*	**63.69**	*
pH and Conductivity										
pH (@ 20℃)		units	MT/ACSE/308	AD	**8.5**	*	**8.9**	*	**8.9**	*
Poly Aromatic Hydrocarbons										
Naphthalene		mg/kg	MT/ACSE/108	AR	< 0.10		< 0.10		< 0.10	
Acenaphthylene		mg/kg	MT/ACSE/108	AR	< 0.10		< 0.10		< 0.10	
Acenaphthene		mg/kg	MT/ACSE/108	AR	< 0.10		< 0.10		< 0.10	
Fluorene		mg/kg	MT/ACSE/108	AR	< 0.10		< 0.10		< 0.10	
Phenanthrene		mg/kg	MT/ACSE/108	AR	< 0.10		< 0.10		< 0.10	
Anthracene		mg/kg	MT/ACSE/108	AR	< 0.10		< 0.10		< 0.10	
Fluoranthene		mg/kg	MT/ACSE/108	AR	< 0.10		< 0.10		< 0.10	
Pyrene		mg/kg	MT/ACSE/108	AR	< 0.10		< 0.10		< 0.10	
Benzo (a) anthracene		mg/kg	MT/ACSE/108	AR	< 0.10		< 0.10		< 0.10	
Chrysene		mg/kg	MT/ACSE/108	AR	< 0.10		< 0.10		< 0.10	
Benzo (b) fluoranthene		mg/kg	MT/ACSE/108	AR	< 0.10		< 0.10		< 0.10	
Benzo (k) fluoranthene		mg/kg	MT/ACSE/108	AR	< 0.10		< 0.10		< 0.10	
Benzo (a) pyrene		mg/kg	MT/ACSE/108	AR	< 0.10		< 0.10		< 0.10	
Indeno (1 2 3-CD) pyrene		mg/kg	MT/ACSE/108	AR	< 0.10		< 0.10		< 0.10	
Dibenzo(a h)anthracene		mg/kg	MT/ACSE/108	AR	< 0.10		< 0.10		< 0.10	
Benzo(g h i)perylene		mg/kg	MT/ACSE/108	AR	< 0.10		< 0.10		< 0.10	
Total PAH		mg/kg	MT/ACSE/108	AR	< 2.00		< 2.00		< 2.00	
Speciated BTEX										
MTBE	HS_1D_TOTAL	mg/kg	NAM/ACSE/X12	AR	< 0.0100		< 0.0100		< 0.0100	
Hexane	HS_1D_TOTAL	mg/kg	NAM/ACSE/X06	AR	< 0.0100		< 0.0100		< 0.0100	
Heptane	HS_1D_TOTAL	mg/kg	NAM/ACSE/X06	AR	< 0.0100		< 0.0100		< 0.0100	
Octane	HS_1D_TOTAL	mg/kg	NAM/ACSE/X06	AR	< 0.0100		< 0.0100		< 0.0100	

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ACSE Sample Number	**91397**	**91398**	**91399**
Sample ID	**830428 - 25-50040**	**830429 - 25-50040**	**830430 - 25-50040**
Clients Sample Ref.^	**BH06**	**BH06**	**BH06**
Location / Sample Depth (m)^	**0.3-0.7**	**2.0-2.5**	**4.5-5.0**
Date Sampled^	**03/01/2024**	**03/01/2024**	**03/01/2024**
Time Sampled^	**0**	**0**	**0**
Sample deviating codes			
Client's Sample Description^			
ACS Testing Material Description^	**Made Ground**	**Brown sandy CLAY**	**Grey sandy CLAY**
ACSE Material Description (Principal Matrix - As Received)	**CLAY**	**CLAY**	**CLAY**

Determination	HWOL Acroynm	Units	Method	Prepared As	Result	AS	Result	AS	Result	AS
Benzene	HS_1D_TOTAL	mg/kg	NAM/ACSE/X06	AR	< 0.0100		< 0.0100		< 0.0100	
Toluene	HS_1D_TOTAL	mg/kg	NAM/ACSE/X06	AR	< 0.0100		< 0.0100		< 0.0100	
Ethylbenzene	HS_1D_TOTAL	mg/kg	NAM/ACSE/X06	AR	< 0.0100		< 0.0100		< 0.0100	
m+p-xylene	HS_1D_TOTAL	mg/kg	NAM/ACSE/X06	AR	< 0.0100		< 0.0100		< 0.0100	
o-xylene	HS_1D_TOTAL	mg/kg	NAM/ACSE/X06	AR	< 0.0100		< 0.0100		< 0.0100	
Total BTEX	HS_1D_TOTAL	mg/kg	NAM/ACSE/X06	AR	< 0.05		< 0.05		< 0.05	
Speciated Petroleum Hydrocarbons										
C5-C6 Aliphatic	HS_1D_AL	mg/kg	NAM/ACSE/X07	AR	< 0.10		< 0.10		< 0.10	
>C6-C8 Aliphatic	HS_1D_AL	mg/kg	NAM/ACSE/X07	AR	< 0.10		< 0.10		< 0.10	
>C8-C10 Aliphatic	EH_2D_AL	mg/kg	NAM/ACSE/X07	AR	< 10.0		< 10.0		< 10.0	
>C10-C12 Aliphatic	EH_2D_AL	mg/kg	NAM/ACSE/X07	AR	< 10.0		< 10.0		< 10.0	
>C12-C16 Aliphatic	EH_2D_AL	mg/kg	NAM/ACSE/X07	AR	< 10.0		< 10.0		< 10.0	
>C16-C21 Aliphatic	EH_2D_AL	mg/kg	NAM/ACSE/X07	AR	< 10.0		< 10.0		< 10.0	
>C21-C35 Aliphatic	EH_2D_AL	mg/kg	NAM/ACSE/X07	AR	< 10.0		< 10.0		< 10.0	
C6-C7 Aromatic	HS_1D_AR	mg/kg	NAM/ACSE/X07	AR	< 0.10		< 0.10		< 0.10	
C7-C8 Aromatic	HS_1D_AR	mg/kg	NAM/ACSE/X07	AR	< 0.10		< 0.10		< 0.10	
>C8-C10 Aromatic	EH_2D_AR	mg/kg	NAM/ACSE/X07	AR	< 10.0		< 10.0		< 10.0	
>C10-C12 Aromatic	EH_2D_AR	mg/kg	NAM/ACSE/X07	AR	< 10.0		< 10.0		< 10.0	
>C12-C16 Aromatic	EH_2D_AR	mg/kg	NAM/ACSE/X07	AR	< 10.0		< 10.0		< 10.0	
>C16-C21 Aromatic	EH_2D_AR	mg/kg	NAM/ACSE/X07	AR	< 10.0		< 10.0		< 10.0	
>C21-C35 Aromatic	EH_2D_AR	mg/kg	NAM/ACSE/X07	AR	< 10.0		< 10.0		< 10.0	
Total Speciated TPH	EH+HS_2D_TOTAL	mg/kg	NAM/ACSE/X07	AR	< 10.0		< 10.0		< 10.0	
Subcontracted Analysis										
Asbestos Fibre ID		SC	SC	SC	**Attached**		**Attached**		**Attached**	
TOC (Total Organic Carbon)		SC	SC	SC	**S/C**		**S/C**		**S/C**	

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ACSE Sample Number	**91400**	**91401**	**91402**
Sample ID	**830431 - 25-50040**	**830432 - 25-50040**	**830433 - 25-50040**
Clients Sample Ref.^	**BH07**	**BH07**	**BH07**
Location / Sample Depth (m)^	**0.3-0.6**	**2.0-2.5**	**4.5-5.0**
Date Sampled^	**03/01/2024**	**03/01/2024**	**03/01/2024**
Time Sampled^	**0**	**0**	**0**
Sample deviating codes			
Client's Sample Description^			
ACS Testing Material Description^	**Made Ground**	**Brown sandy CLAY**	**Grey sandy CLAY**
ACSE Material Description (Principal Matrix - As Received)	**CLAY**	**CLAY**	**CLAY**

Determination	HWOL Acroynm	Units	Method	Prepared As	Result	AS	Result	AS	Result	AS
Carbon										
Soil Organic Matter		%	S/C	S/C	**1.22**		< 0.50		**1.04**	
FOC		%	S/C	SC	< 0.500		< 0.500		< 0.500	
Cyanide										
Total Cyanide_S		mg/kg	IHP	AR	< 0.050	*	< 0.050	*	< 0.050	*
Metals (Soil)										
Chromium III		mg/kg	NAM/ACSE/X11	AD	**19.6**		**33.5**		**33.6**	
Chromium Hexavalent		mg/kg	NAM/ACSE/X11	AD	< 0.20		< 0.20		< 0.20	
Metals and Metalloids (Solids)										
Arsenic		mg/kg	MT_ACSE_210	AD	**5.5968**	*	**8.6654**	*	**8.9732**	*
Cadmium		mg/kg	MT_ACSE_210	AD	**0.1787**	*	**0.1352**	*	**0.1178**	*
Chromium (Total)		mg/kg	MT_ACSE_210	AD	**19.58**	*	**33.45**	*	**33.55**	*
Copper		mg/kg	MT_ACSE_210	AD	**12.894**	*	**20.944**	*	**19.790**	*
Selenium		mg/kg	MT_ACSE_210	AD	**0.15564**	*	**0.20559**	*	**0.27643**	*
Mercury		mg/kg	MT_ACSE_210	AD	**0.05321**	*	**0.03618**	*	**0.03124**	*
Nickel		mg/kg	MT_ACSE_210	AD	**10.698**	*	**34.267**	*	**39.305**	*
Lead		mg/kg	MT_ACSE_210	AD	**33.15**	*	**16.19**	*	**15.72**	*
Zinc		mg/kg	MT_ACSE_210	AD	**36.85**	*	**67.29**	*	**68.13**	*
pH and Conductivity										
pH (@ 20°C)		units	MT/ACSE/308	AD	**8.4**	*	**8.7**	*	**8.8**	*
Poly Aromatic Hydrocarbons										
Naphthalene		mg/kg	MT/ACSE/108	AR	< 0.10		< 0.10		< 0.10	
Acenaphthylene		mg/kg	MT/ACSE/108	AR	< 0.10		< 0.10		< 0.10	
Acenaphthene		mg/kg	MT/ACSE/108	AR	< 0.10		< 0.10		< 0.10	
Fluorene		mg/kg	MT/ACSE/108	AR	< 0.10		< 0.10		< 0.10	
Phenanthrene		mg/kg	MT/ACSE/108	AR	< 0.10		< 0.10		< 0.10	
Anthracene		mg/kg	MT/ACSE/108	AR	< 0.10		< 0.10		< 0.10	
Fluoranthene		mg/kg	MT/ACSE/108	AR	< 0.10		< 0.10		< 0.10	
Pyrene		mg/kg	MT/ACSE/108	AR	< 0.10		< 0.10		< 0.10	
Benzo (a) anthracene		mg/kg	MT/ACSE/108	AR	< 0.10		< 0.10		< 0.10	
Chrysene		mg/kg	MT/ACSE/108	AR	< 0.10		< 0.10		< 0.10	
Benzo (b) fluoranthene		mg/kg	MT/ACSE/108	AR	< 0.10		< 0.10		< 0.10	
Benzo (k) fluoranthene		mg/kg	MT/ACSE/108	AR	< 0.10		< 0.10		< 0.10	
Benzo (a) pyrene		mg/kg	MT/ACSE/108	AR	< 0.10		< 0.10		< 0.10	
Indeno (1 2 3-CD) pyrene		mg/kg	MT/ACSE/108	AR	< 0.10		< 0.10		< 0.10	
Dibenzo(a h)anthracene		mg/kg	MT/ACSE/108	AR	< 0.10		< 0.10		< 0.10	
Benzo(g h i)perylene		mg/kg	MT/ACSE/108	AR	< 0.10		< 0.10		< 0.10	
Total PAH		mg/kg	MT/ACSE/108	AR	< 2.00		< 2.00		< 2.00	
Speciated BTEX										
MTBE	HS_1D_TOTAL	mg/kg	NAM/ACSE/X12	AR	< 0.0100		< 0.0100		< 0.0100	
Hexane	HS_1D_TOTAL	mg/kg	NAM/ACSE/X06	AR	< 0.0100		< 0.0100		< 0.0100	
Heptane	HS_1D_TOTAL	mg/kg	NAM/ACSE/X06	AR	< 0.0100		< 0.0100		< 0.0100	
Octane	HS_1D_TOTAL	mg/kg	NAM/ACSE/X06	AR	< 0.0100		< 0.0100		< 0.0100	

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ANALYTICAL CONSTRUCTION SERVICES
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ACSE Sample Number	**91400**	**91401**	**91402**
Sample ID	**830431 - 25-50040**	**830432 - 25-50040**	**830433 - 25-50040**
Clients Sample Ref.^	**BH07**	**BH07**	**BH07**
Location / Sample Depth (m)^	**0.3-0.6**	**2.0-2.5**	**4.5-5.0**
Date Sampled^	**03/01/2024**	**03/01/2024**	**03/01/2024**
Time Sampled^	**0**	**0**	**0**
Sample deviating codes			
Client's Sample Description^			
ACS Testing Material Description^	**Made Ground**	**Brown sandy CLAY**	**Grey sandy CLAY**
ACSE Material Description (Principal Matrix - As Received)	**CLAY**	**CLAY**	**CLAY**

Determination	HWOL Acroynm	Units	Method	Prepared As	Result	AS	Result	AS	Result	AS
Benzene	HS_1D_TOTAL	mg/kg	NAM/ACSE/X06	AR	< 0.0100		< 0.0100		< 0.0100	
Toluene	HS_1D_TOTAL	mg/kg	NAM/ACSE/X06	AR	< 0.0100		< 0.0100		< 0.0100	
Ethylbenzene	HS_1D_TOTAL	mg/kg	NAM/ACSE/X06	AR	< 0.0100		< 0.0100		< 0.0100	
m+p-xylene	HS_1D_TOTAL	mg/kg	NAM/ACSE/X06	AR	< 0.0100		< 0.0100		< 0.0100	
o-xylene	HS_1D_TOTAL	mg/kg	NAM/ACSE/X06	AR	< 0.0100		< 0.0100		< 0.0100	
Total BTEX	HS_1D_TOTAL	mg/kg	NAM/ACSE/X06	AR	< 0.05		< 0.05		< 0.05	
Speciated Petroleum Hydrocarbons										
C5-C6 Aliphatic	HS_1D_AL	mg/kg	NAM/ACSE/X07	AR	< 0.10		< 0.10		< 0.10	
>C6-C8 Aliphatic	HS_1D_AL	mg/kg	NAM/ACSE/X07	AR	< 0.10		< 0.10		< 0.10	
>C8-C10 Aliphatic	EH_2D_AL	mg/kg	NAM/ACSE/X07	AR	< 10.0		< 10.0		< 10.0	
>C10-C12 Aliphatic	EH_2D_AL	mg/kg	NAM/ACSE/X07	AR	< 10.0		< 10.0		< 10.0	
>C12-C16 Aliphatic	EH_2D_AL	mg/kg	NAM/ACSE/X07	AR	< 10.0		< 10.0		< 10.0	
>C16-C21 Aliphatic	EH_2D_AL	mg/kg	NAM/ACSE/X07	AR	< 10.0		< 10.0		< 10.0	
>C21-C35 Aliphatic	EH_2D_AL	mg/kg	NAM/ACSE/X07	AR	< 10.0		< 10.0		< 10.0	
C6-C7 Aromatic	HS_1D_AR	mg/kg	NAM/ACSE/X07	AR	< 0.10		< 0.10		< 0.10	
C7-C8 Aromatic	HS_1D_AR	mg/kg	NAM/ACSE/X07	AR	< 0.10		< 0.10		< 0.10	
>C8-C10 Aromatic	EH_2D_AR	mg/kg	NAM/ACSE/X07	AR	< 10.0		< 10.0		< 10.0	
>C10-C12 Aromatic	EH_2D_AR	mg/kg	NAM/ACSE/X07	AR	< 10.0		< 10.0		< 10.0	
>C12-C16 Aromatic	EH_2D_AR	mg/kg	NAM/ACSE/X07	AR	< 10.0		< 10.0		< 10.0	
>C16-C21 Aromatic	EH_2D_AR	mg/kg	NAM/ACSE/X07	AR	< 10.0		< 10.0		< 10.0	
>C21-C35 Aromatic	EH_2D_AR	mg/kg	NAM/ACSE/X07	AR	< 10.0		< 10.0		< 10.0	
Total Speciated TPH	EH+HS_2D_TOTAL	mg/kg	NAM/ACSE/X07	AR	< 10.0		< 10.0		< 10.0	
Subcontracted Analysis										
Asbestos Fibre ID		SC	SC	SC	**Attached**		**Attached**		**Attached**	
TOC (Total Organic Carbon)		SC	SC	SC	**S/C**		**S/C**		**S/C**	

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Technical Information for Analytical Results

Analysis

* - denotes analysis covered by our UKAS accreditation.
# - denoted analysis covered by our MCERTS certification & UKAS accreditation.
Loss on Ignition (MT/ACSE/302) is carried out at our laboratory at Unit D11 Admiralty Park, Station Road, Holton Heath, Poole, Dorset BH16 6HX.
AD = Sample tested in air dried condition.
AR = Sample tested in as-received condition.
AS = Accreditation status.
D = Sample tested in dry condition.
L = Laboratory prepared leachate.
SC = Sub contracted.
^ = Clients supplied information. This may affect the validity of test results.
All MCERTS certified test values reported on a dry weight basis.
The preparation of 10:1 Leachates (to BS EN 12457-2:2002) and 2:1 leachates (to BS EN 12457-1:2002) fall outside the scope of our UKAS accreditation.
Soils and leachates are prepared at our laboratory at Unit D11 Admiralty Park, Station Road, Holton Heath, Poole, Dorset BH16 6HX.
Method uncertainty available on request.
Where results are less than the limit of detection, the value of 0 is used in calculations.

Key to HWOL Acronyms

Acronym		Description
HS	-	Headspace analysis
EH	-	Extractable Hydrocarbons - i.e. everything extracted by the solvent
CU	-	Clean-up - e.g. by florisil, silica gel
1D	-	GC - Single coil gas chromatography
Total	-	Aliphatics & Aromatics
AL	-	Aliphatics only
AR	-	Aromatics only
2D	-	GC-GC - Double coil gas chromatography
#1	-	e.g. EH_2D_Total_#1 means humics mathematically subtracted
#2	-	e.g. EH_2D_Total_#2 means fatty acids mathematically subtracted
_	-	Operator - underscore to separate acronyms (exception for +)
+	-	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total

Deviating Codes

Deviating Samples

The use of any of the following symbols indicates that the sample was deviating and it is possible therefore that the results provided may not be representative of the sample taken.

a – The date and /or time of sampling has not been provided, therefore it is not known if the time lapse between sampling and analysis has exceeded the acceptable holding time(s)*.
b – The test item was received in a container which has not been recommended*.
c – On receipt, the temperature of the sample received was found to fall outside the recommendations of BS ISO 18512:2007, Soil Quality. Guidance on long and short term storage of soil samples*.
d – The sample was received in a container that had not been filled as recommended*.
e – The delay between sampling and sample receipt is greater than the recommended holding time for the analyte of interest in this matrix*.
f – The delay between sampling and analysis is greater than the recommended holding time for the analyte of interest in this matrix*.

In accordance with the requirements of Technical Policy Statement TPS 63; UKAS Policy on Deviating Samples, all UKAS accredited testing laboratories are required to notify their clients that calibration or test results may be invalid where samples are found to be deviating. It is the opinion of ACSE that the term invalid should be interpreted as 'not fully representative of the sample taken at source'.

The following Additional Deviating Sample Codes may also be used.

I/S – Insufficient sample mass/volume received for accurate quantification of this analyte.
U/S – The sample received was deemed unsuitable for accurate determination of this analyte using the Test Methods available.
S/C - The sample received was subcontracted for analysis.

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Analytical Test Report: L25/00170/ACS - 25-54941 - Amendment A

Your Project Reference:	**E/25-00021/10956**		
Your Order Number:	E/25-00021/10956	Samples Received / Instructed:	09/01/2025 / 09/01/2025
Report Issue Number:	2	Sample Tested:	09/01 to 17/01/2025
Samples Analysed:	9 sample(s)	Report issued:	20/01/2025

Signed

James Gane
Analytical Services Manager
CTS

Notes:

Amendment A 20/01/2025. Report updated to amend sample references as requested.

General

Please refer to Methodologies page for details pertaining to the analytical methods undertaken.

Samples will be retained for 14 days after issue of this report with the exception of the asbestos test portion which is held for 6 months unless otherwise requested.

Moisture Content was determined in accordance with CTS method statement MS - CL - Sample Prep, oven dried at <30˚C.

Moisture Content is reported as a percentage of the dry mass of soil, this calculation is in accordance with BS1377, Part 2, 1990, Clause 3.2

Stone Content was determined in accordance with CTS method statement MS - CL - Sample Prep and refers to the percentage of stones retained on a 10mm BS test sieve.

Where specification limits are included these are for guidance only. Where a measured value has been highlighted this is not implying acceptance or failure and certainty of measurement values have not been taken into account.

Uncertainty of measurement values are available on request.

Samples were supplied by customer, results apply to the samples as received.

Asbestos

Please note: Where futher analaysis is required samples identified as containing asbestos are screened and tested on an as recevied basis. No correction is made for moisture content and other than the asbestos test(s) these results are not covered by our accrediation

Opinions and interpretations expressed herein are outside the scope of UKAS accreditation

Deviating Samples

On receipt samples are compared against our sample holding and handling protocols, where any deviations have been noted these are reported on our deviating sample page (if present)

Accreditation Key

This report shall not be reproduce except in full

UKAS = UKAS Accreditation, MCERTS = MCERTS Accreditation, u = Unaccredited, subUKAS - Subcontracted to a laboratory UKAS accredited for this test, subMCERTS - Subcontracted to a laboratory MCERTS accredited for this test

MCERTS Accreditation only covers the SAND, CLAY and LOAM matrices

UKAS accreditation on waters only covers the Ground water and Surface water matrices

Date of Issue: 08.01.2025

Issued by: J. Gane

Issue No: 4

Rev No: 22

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Project Reference - E/25-00021/10956

Analytical Test Results - Solid

Lab Reference			434498	434499	434500	434501	434502	434503
Client Sample ID			830425-25-50040	830426-25-50040	830427-25-50040	830428-25-50040	830429-25-50040	830430-25-50040
Client Sample Location			BH05	BH05	BH05	BH06	BH06	BH06
Client Sample Type			-	-	-	-	-	-
Client Sample Number			91394	91395	91396	91397	91398	91399
Depth - Top (m)			-	-	-	-	-	-
Depth - Bottom (m)			-	-	-	-	-	-
Date of Sampling			03/01/2025	03/01/2025	03/01/2025	03/01/2025	03/01/2025	03/01/2025
Time of Sampling			0000	0000	0000	0000	0000	0000
Sample Matrix			Clay	Clay	Clay	Clay	Clay	Clay
Determinant	**Units**	**Accreditation**						
TOC	(%)	MCERTS	10	< 0.5	< 0.5	0.5	< 0.5	0.5
Asbestos	-	UKAS	No asbestos detected	No asbestos detected	No asbestos detected	No asbestos detected	No asbestos detected	No asbestos detected

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L25/00170/ACS - 25-54941 - Amendment A

Project Reference - E/25-00021/10956

Analytical Test Results - Solid

Lab Reference			434504	434505	434506
Client Sample ID			830431-25-50040	830432-25-50040	830433-25-50040
Client Sample Location			BH07	BH07	BH07
Client Sample Type			-	-	-
Client Sample Number			91400	91401	91402
Depth - Top (m)			-	-	-
Depth - Bottom (m)			-	-	-
Date of Sampling			03/01/2025	03/01/2025	03/01/2025
Time of Sampling			0000	0000	0000
Sample Matrix			Clay	Clay	Clay
Determinant	**Units**	**Accreditation**			
TOC	(%)	MCERTS	0.7	< 0.5	0.6
Asbestos	-	UKAS	No asbestos detected	No asbestos detected	No asbestos detected

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L25/00170/ACS - 25-54941 - Amendment A

Project Reference - E/25-00021/10956

Sample Descriptions

Lab Reference	Client Sample ID	Client Sample Location	Client Sample Type	Client Sample Number	Description	Moisture Content (%)	Stone Content (%)
434498	830425-25-50040	BH05	-	91394	Brown slightly gravelly silty clay	22	2.0
434499	830426-25-50040	BH05	-	91395	Brown silty clay	23	< 0.1
434500	830427-25-50040	BH05	-	91396	Brown silty clay	25	< 0.1
434501	830428-25-50040	BH06	-	91397	Brown slightly gravelly silty clay	20	8.1
434502	830429-25-50040	BH06	-	91398	Brown silty clay	26	< 0.1
434503	830430-25-50040	BH06	-	91399	Grey silty clay	30	12
434504	830431-25-50040	BH07	-	91400	Brown silty clay	21	2.5
434505	830432-25-50040	BH07	-	91401	Brown silty clay	24	9.2
434506	830433-25-50040	BH07	-	91402	Grey silty clay	27	7.1

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Project Reference - E/25-00021/10956

Sample Comments

Lab Reference	Client Sample ID	Client Sample Location	Client Sample Type	Client Sample Number	Comments
434498	830425-25-50040	BH05	-	91394	
434499	830426-25-50040	BH05	-	91395	
434500	830427-25-50040	BH05	-	91396	
434501	830428-25-50040	BH06	-	91397	
434502	830429-25-50040	BH06	-	91398	
434503	830430-25-50040	BH06	-	91399	
434504	830431-25-50040	BH07	-	91400	
434505	830432-25-50040	BH07	-	91401	
434506	830433-25-50040	BH07	-	91402	

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Project Reference - E/25-00021/10956

Analysis Methodologies

Test Code	Test Name / Reference	Sample condition for analysis	Sample Preperation	Test Details
TOCS	MS - CL - TOC Eltra	Air Dried	Passing 10mm test sieve	Determination of Total Organic Carbon in soils
ASB	MS - AS - Asbestos	-	-	Fibre identification is in accordance with in house documented methods which are based on the procedure documented in the HSE Document HSG 248 "Asbestos: The analysts guide for sampling, analysis and clearance procedures"
SAMPLEPREP	MS - CL - Sample Preparation	-	-	Preparation of samples (including determination of moisture content) to allow for subsequent analysis

APPENDIX D

GAC Comparisons

ACS
ANALYTICAL CONSTRUCTION SERVICES
A PHENNA GROUP COMPANY

Generic Assessment Criteria (GAC) Comparison - Residential with Homegrown Produce (1% SOM)			Site:	Fareham Rd - Gosport	GAC Source:	Published Suitable for Use Levels (S4UL) and Category 4 Screening Levels (C4SL) - see report for references		Key:	Below GAC	ACS ANALYTICAL CONSULTATION SERVICES
			Project No:	23-51237					Exceeds GAC	
Exploratory Hole Location			CP01	CP01	CP01	CP02	CP02	CP02	CP03	CP03
Sample Depth			0.20-0.40mbgl	1.70-2.20mbgl	3.50-4.00mbgl	0.60-0.80mbgl	1.00-1.20mbgl	3.50-4.00mbgl	0.60-0.80mbgl	1.50-2.00mbgl
Soil/Rock Unit			Dark brownish grey gravell	Light brownish grey sandy g	Light brownish grey sandy g	Dark greyish brown gravell	Light brown CLAY	Dark brownish grey CLAY	Dark grey sandy gravelly Cl	Light greyish brown CLAY
REPNAME	Units	GAC								
Arsenic	mg/kg	37	9.74	10.1	14	13.6	16	11.5	3.3	6.7
Cadmium	mg/kg	11	7.2	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
Chromium Hexavalent	mg/kg	6	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20
Chromium	mg/kg	910	44	51.8	52.7	55.1	56.4	51.8	18.6	54.6
Copper	mg/kg	2400	225	11	13.9	16.5	18.2	18.3	10.4	14
Lead	mg/kg	200	518	12.6	14.3	31.6	20.4	19	29.2	15.9
Mercury	mg/kg	40	0.101	0.029	0.036	0.06	0.045	0.037	0.052	0.029
Nickel	mg/kg	130	129	29.7	30.9	14.5	57.3	34.7	6.66	30.3
Selenium	mg/kg	250	< 6.00	< 6.00	< 6.00	< 6.00	< 6.00	< 6.00	< 6.00	< 6.00
Zinc	mg/kg	3700	476	43.8	54.3	101	73.3	72.2	49.7	51.5
Naphthalene	mg/kg	2.3	0.11	0.43	< 0.10	< 0.10	< 0.10	< 0.10	0.11	< 0.10
Acenaphthylene	mg/kg	170	< 0.10	0.12	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Acenaphthene	mg/kg	210	< 0.10	0.3	< 0.10	< 0.10	< 0.10	< 0.10	0.19	< 0.10
Fluorene	mg/kg	170	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	0.14	< 0.10
Phenanthrene	mg/kg	95	0.48	1.48	< 0.10	< 0.10	< 0.10	< 0.10	1.44	< 0.10
Anthracene	mg/kg	2400	0.12	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	0.47	< 0.10
Fluoranthene	mg/kg	280	0.79	< 0.10	< 0.10	0.11	< 0.10	< 0.10	2.63	< 0.10
Pyrene	mg/kg	620	0.71	0.19	< 0.10	< 0.10	< 0.10	< 0.10	2.42	< 0.10
Benzo (a) anthracene	mg/kg	7.2	0.49	0.15	0.14	0.15	0.15	< 0.10	1.3	< 0.10
Chrysene	mg/kg	15	0.42	< 0.10	0.12	< 0.10	< 0.10	0.11	1.19	0.13
Benzo (b) fluoranthene	mg/kg	2.6	0.46	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	1.26	< 0.10
Benzo (k) fluoranthene	mg/kg	77	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo (a) pyrene	mg/kg	2.2	0.36	< 0.10	0.18	< 0.10	< 0.10	< 0.10	1.13	< 0.10
Indeno (1 2 3-CD) pyrene	mg/kg	27	0.13	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Dibenzo(a h)anthracene	mg/kg	0.24	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	0.14	< 0.10
Benzo(g h i)perylene	mg/kg	320	0.16	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	0.55	< 0.10
Benzene	mg/kg	0.087	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100
Toluene	mg/kg	130	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100
Ethylbenzene	mg/kg	47	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100
m+p-xylene	mg/kg	56	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100
o-xylene	mg/kg	60	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100
C5-C6 Aliphatic	mg/kg	42	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
>C6-C8 Aliphatic	mg/kg	100	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
>C8-C10 Aliphatic	mg/kg	27	12.7	22.7	< 10.0	< 10.0	< 10.0	< 10.0	20.7	< 10.0
>C10-C12 Aliphatic	mg/kg	130	< 10.0	11.5	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
>C12-C16 Aliphatic	mg/kg	1100	< 10.0	63	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
>C16-C21 Aliphatic	mg/kg	65000	< 10.0	105	< 10.0	< 10.0	< 10.0	< 10.0	172	< 10.0
>C21-C35 Aliphatic	mg/kg	6500	15.1	40.3	< 10.0	< 10.0	< 10.0	< 10.0	502	< 10.0
C6-C7 Aromatic	mg/kg	70	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
C7-C8 Aromatic	mg/kg	130	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
>C8-C10 Aromatic	mg/kg	34	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
>C10-C12 Aromatic	mg/kg	74	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
>C12-C16 Aromatic	mg/kg	140	< 10.0	51.5	< 10.0	< 10.0	< 10.0	< 10.0	14.4	< 10.0
>C16-C21 Aromatic	mg/kg	260	< 10.0	29	< 10.0	< 10.0	< 10.0	< 10.0	35.8	< 10.0
>C21-C35 Aromatic	mg/kg	1100	< 10.0	14	< 10.0	< 10.0	< 10.0	< 10.0	144	< 10.0

Generic Assessment Criteria (GAC) Comparison - Residential with Homegrown Produce (1% SOM)			Site:	Fareham Rd - Gosport	GAC Source:	Published Suitable for Use Levels (S4UL) and Category 4 Screening Levels (C4SL) - see report for references		Key:		
			Project No:	23-51237				Below GAC	Exceeds GAC	
Exploratory Hole Location			CP03	CP04	CP04	CP04				
Sample Depth			5.50-6.00mbgl	0.40-0.60mbgl	1.00-1.30mbgl	3.50-4.00mbgl				
Soil/Rock Unit			Dark brownish grey CLAY	Dark brownish grey gravell	Light brown slightly sandy (	Dark brownish grey CLAY				
REPNAME	Units	GAC								
Arsenic	mg/kg	37	12.6	17.8	9.43	11.5				
Cadmium	mg/kg	11	< 1.00	< 1.00	< 1.00	< 1.00				
Chromium Hexavalent	mg/kg	6	< 0.20	< 0.20	< 0.20	< 0.20				
Chromium	mg/kg	910	59	40.9	52.7	58.4				
Copper	mg/kg	2400	18.8	80.8	18.6	21.9				
Lead	mg/kg	200	21	98.6	15.9	19				
Mercury	mg/kg	40	0.053	1.05	0.038	0.04				
Nickel	mg/kg	130	39.9	61.2	32	39.3				
Selenium	mg/kg	250	< 6.00	< 6.00	< 6.00	< 6.00				
Zinc	mg/kg	3700	76.5	374	66.2	72.3				
Naphthalene	mg/kg	2.3	< 0.10	0.1	< 0.10	< 0.10				
Acenaphthylene	mg/kg	170	< 0.10	< 0.10	< 0.10	< 0.10				
Acenaphthene	mg/kg	210	< 0.10	< 0.10	< 0.10	< 0.10				
Fluorene	mg/kg	170	< 0.10	< 0.10	< 0.10	< 0.10				
Phenanthrene	mg/kg	95	< 0.10	0.13	< 0.10	< 0.10				
Anthracene	mg/kg	2400	< 0.10	< 0.10	< 0.10	< 0.10				
Fluoranthene	mg/kg	280	< 0.10	0.1	< 0.10	< 0.10				
Pyrene	mg/kg	620	< 0.10	< 0.10	< 0.10	< 0.10				
Benzo (a) anthracene	mg/kg	7.2	< 0.10	0.16	< 0.10	< 0.10				
Chrysene	mg/kg	15	0.13	< 0.10	0.13	0.12				
Benzo (b) fluoranthene	mg/kg	2.6	< 0.10	< 0.10	< 0.10	< 0.10				
Benzo (k) fluoranthene	mg/kg	77	< 0.10	< 0.10	< 0.10	< 0.10				
Benzo (a) pyrene	mg/kg	2.2	< 0.10	< 0.10	< 0.10	< 0.10				
Indeno (1 2 3-CD) pyrene	mg/kg	27	< 0.10	< 0.10	< 0.10	< 0.10				
Dibenzo(a h)anthracene	mg/kg	0.24	< 0.10	< 0.10	< 0.10	< 0.10				
Benzo(g h i)perylene	mg/kg	320	< 0.10	< 0.10	< 0.10	< 0.10				
Benzene	mg/kg	0.087	< 0.0100	< 0.0100	< 0.0100	< 0.0100				
Toluene	mg/kg	130	< 0.0100	< 0.0100	< 0.0100	< 0.0100				
Ethylbenzene	mg/kg	47	< 0.0100	< 0.0100	< 0.0100	< 0.0100				
m+p-xylene	mg/kg	56	< 0.0100	< 0.0100	< 0.0100	< 0.0100				
o-xylene	mg/kg	60	< 0.0100	< 0.0100	< 0.0100	< 0.0100				
C5-C6 Aliphatic	mg/kg	42	< 0.10	< 0.10	< 0.10	< 0.10				
>C6-C8 Aliphatic	mg/kg	100	< 0.10	< 0.10	< 0.10	< 0.10				
>C8-C10 Aliphatic	mg/kg	27	< 10.0	< 10.0	< 10.0	< 10.0				
>C10-C12 Aliphatic	mg/kg	130	< 10.0	< 10.0	< 10.0	< 10.0				
>C12-C16 Aliphatic	mg/kg	1100	< 10.0	< 10.0	< 10.0	< 10.0				
>C16-C21 Aliphatic	mg/kg	65000	< 10.0	< 10.0	< 10.0	< 10.0				
>C21-C35 Aliphatic	mg/kg	6500	< 10.0	< 10.0	< 10.0	< 10.0				
C6-C7 Aromatic	mg/kg	70	< 0.10	< 0.10	< 0.10	< 0.10				
C7-C8 Aromatic	mg/kg	130	< 0.10	< 0.10	< 0.10	< 0.10				
>C8-C10 Aromatic	mg/kg	34	< 10.0	< 10.0	< 10.0	< 10.0				
>C10-C12 Aromatic	mg/kg	74	< 10.0	< 10.0	< 10.0	< 10.0				
>C12-C16 Aromatic	mg/kg	140	< 10.0	< 10.0	< 10.0	< 10.0				
>C16-C21 Aromatic	mg/kg	260	< 10.0	< 10.0	< 10.0	< 10.0				
>C21-C35 Aromatic	mg/kg	1100	< 10.0	< 10.0	< 10.0	< 10.0				

Generic Assessment Criteria (GAC) Comparison - Residential with Homegrown Produce (1% SOM)			Site:	Fareham Rd - Gosport	GAC Source:	Published Suitable for Use Levels (S4UL) and Category 4 Screening Levels (C4SL) - see report for references		Key: Below GAC / Exceeds GAC		ACS ANALYTICAL CONSULTING SERVICES
			Project No:	25-50040						
Exploratory Hole Location			BH05	BH05	BH05	BH06	BH06	BH06	BH07	BH07
Sample Depth			0.3-0.6mbgl	2.0-2.5mbgl	4.5-5.0mbgl	0.3-0.7mbgl	2.0-2.5mbgl	4.5-5.0mbgl	0.3-0.6mbgl	2.0-2.5mbgl
Soil/Rock Unit			Made Ground	Brown sandy CLAY	Grey sandy CLAY	Made Ground	Brown sandy CLAY	Grey sandy CLAY	Made Ground	Brown sandy CLAY
REPNAME	Units	GAC								
Arsenic	mg/kg	37	15.974	13.647	16.641	5.6816	11.883	9.1417	5.5968	8.6654
Cadmium	mg/kg	11	5.7401	0.0642	0.1519	0.1442	0.0794	0.1004	0.1787	0.1352
Chromium Hexavalent	mg/kg	6	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20
Chromium	mg/kg	910	41.73	34.74	35.57	17.8	34.93	25.93	19.58	33.45
Copper	mg/kg	2400	60.9	24.836	23.899	9.5685	20.685	18.64	12.894	20.944
Lead	mg/kg	200	31.462	38.509	48.152	25.968	44.419	30.002	10.698	34.267
Mercury	mg/kg	40	0.21193	0.04215	0.03694	0.03304	0.036	0.02785	0.05321	0.03618
Nickel	mg/kg	130	31.462	38.509	48.152	25.968	44.419	30.002	10.698	34.267
Selenium	mg/kg	250	0.36801	0.52946	0.77357	0.02357	0.11297	0.50075	0.15564	0.20559
Zinc	mg/kg	3700	336.3	77.86	79.51	35.19	68.78	63.69	36.85	67.29
Naphthalene	mg/kg	2.3	0.11	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Acenaphthylene	mg/kg	170	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Acenaphthene	mg/kg	210	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Fluorene	mg/kg	170	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Phenanthrene	mg/kg	95	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Anthracene	mg/kg	2400	0.21	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Fluoranthene	mg/kg	280	0.24	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Pyrene	mg/kg	620	0.19	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo (a) anthracene	mg/kg	7.2	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Chrysene	mg/kg	15	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo (b) fluoranthene	mg/kg	2.6	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo (k) fluoranthene	mg/kg	77	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo (a) pyrene	mg/kg	2.2	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Indeno (1 2 3-CD) pyrene	mg/kg	27	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Dibenzo(a h)anthracene	mg/kg	0.24	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo(g h i)perylene	mg/kg	320	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzene	mg/kg	0.087	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100
Toluene	mg/kg	130	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100
Ethylbenzene	mg/kg	47	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100
m+p-xylene	mg/kg	56	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100
o-xylene	mg/kg	60	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100
C5-C6 Aliphatic	mg/kg	42	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
>C6-C8 Aliphatic	mg/kg	100	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
>C8-C10 Aliphatic	mg/kg	27	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
>C10-C12 Aliphatic	mg/kg	130	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
>C12-C16 Aliphatic	mg/kg	1100	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
>C16-C21 Aliphatic	mg/kg	65000	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
>C21-C35 Aliphatic	mg/kg	6500	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
C6-C7 Aromatic	mg/kg	70	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
C7-C8 Aromatic	mg/kg	130	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
>C8-C10 Aromatic	mg/kg	34	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
>C10-C12 Aromatic	mg/kg	74	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
>C12-C16 Aromatic	mg/kg	140	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
>C16-C21 Aromatic	mg/kg	260	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
>C21-C35 Aromatic	mg/kg	1100	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0

Generic Assessment Criteria (GAC) Comparison - Residential with Homegrown Produce (1% SOM)			Site:	Fareham Rd - Gosport	GAC Source:	Published Suitable for Use Levels (S4UL) and Category 4 Screening Levels (C4SL) - see report for references		Key: Below GAC / Exceeds GAC		ACS ANALYTICAL CONSTRUCTION SERVICES
			Project No:	25-50040						
Exploratory Hole Location			BH07							
Sample Depth			4.5-5.0mbgl							
Soil/Rock Unit			Grey sandy CLAY							
REPNAME	Units	GAC								
Arsenic	mg/kg	37	8.9732							
Cadmium	mg/kg	11	0.1178							
Chromium Hexavalent	mg/kg	6	< 0.20							
Chromium	mg/kg	910	33.55							
Copper	mg/kg	2400	19.79							
Lead	mg/kg	200	15.72							
Mercury	mg/kg	40	0.03124							
Nickel	mg/kg	130	39.305							
Selenium	mg/kg	250	0.27643							
Zinc	mg/kg	3700	68.13							
Naphthalene	mg/kg	2.3	< 0.10							
Acenaphthylene	mg/kg	170	< 0.10							
Acenaphthene	mg/kg	210	< 0.10							
Fluorene	mg/kg	170	< 0.10							
Phenanthrene	mg/kg	95	< 0.10							
Anthracene	mg/kg	2400	< 0.10							
Fluoranthene	mg/kg	280	< 0.10							
Pyrene	mg/kg	620	< 0.10							
Benzo (a) anthracene	mg/kg	7.2	< 0.10							
Chrysene	mg/kg	15	< 0.10							
Benzo (b) fluoranthene	mg/kg	2.6	< 0.10							
Benzo (k) fluoranthene	mg/kg	77	< 0.10							
Benzo (a) pyrene	mg/kg	2.2	< 0.10							
Indeno (1 2 3-CD) pyrene	mg/kg	27	< 0.10							
Dibenzo(a h)anthracene	mg/kg	0.24	< 0.10							
Benzo(g h i)perylene	mg/kg	320	< 0.10							
Benzene	mg/kg	0.087	< 0.0100							
Toluene	mg/kg	130	< 0.0100							
Ethylbenzene	mg/kg	47	< 0.0100							
m+p-xylene	mg/kg	56	< 0.0100							
o-xylene	mg/kg	60	< 0.0100							
C5-C6 Aliphatic	mg/kg	42	< 0.10							
>C6-C8 Aliphatic	mg/kg	100	< 0.10							
>C8-C10 Aliphatic	mg/kg	27	< 10.0							
>C10-C12 Aliphatic	mg/kg	130	< 10.0							
>C12-C16 Aliphatic	mg/kg	1100	< 10.0							
>C16-C21 Aliphatic	mg/kg	65000	< 10.0							
>C21-C35 Aliphatic	mg/kg	6500	< 10.0							
C6-C7 Aromatic	mg/kg	70	< 0.10							
C7-C8 Aromatic	mg/kg	130	< 0.10							
>C8-C10 Aromatic	mg/kg	34	< 10.0							
>C10-C12 Aromatic	mg/kg	74	< 10.0							
>C12-C16 Aromatic	mg/kg	140	< 10.0							
>C16-C21 Aromatic	mg/kg	260	< 10.0							
>C21-C35 Aromatic	mg/kg	1100	< 10.0							

Generic Assessment Criteria (GAC) Comparison - Commercial (1% SOM)			Site:	Fareham Rd - Gosport	GAC Source:	Published Suitable for Use Levels (S4UL) and Category 4 Screening Levels (C4SL) - see report for references		Key: Below GAC / Exceeds GAC		ACS ANALYTICAL CONSTRUCTION SERVICES
			Project No:	23-51237						
Exploratory Hole Location			CP01	CP01	CP01	CP02	CP02	CP02	CP03	CP03
Sample Depth			0.20-0.40mbgl	1.70-2.20mbgl	3.50-4.00mbgl	0.60-0.80mbgl	1.00-1.20mbgl	3.50-4.00mbgl	0.60-0.80mbgl	1.50-2.00mbgl
Soil/Rock Unit			Dark brownish grey gravell	Light brownish grey sandy g	Light brownish grey sandy g	Dark greyish brown gravell	Light brown CLAY	Dark brownish grey CLAY	Dark grey sandy gravelly Cl	Light greyish brown CLAY
REPNAME	Units	GAC								
Arsenic	mg/kg	640	9.74	10.1	14	13.6	16	11.5	3.3	6.7
Beryllium	mg/kg	12								
Boron	mg/kg	240000								
Cadmium	mg/kg	190	7.2	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
Chromium Hexavalent	mg/kg	33	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20
Chromium	mg/kg	8600	44	51.8	52.7	55.1	56.4	51.8	18.6	54.6
Copper	mg/kg	68000	225	11	13.9	16.5	18.2	18.3	10.4	14
Lead	mg/kg	2300	518	12.6	14.3	31.6	20.4	19	29.2	15.9
Mercury	mg/kg	1100	0.101	0.029	0.036	0.06	0.045	0.037	0.052	0.029
Nickel	mg/kg	980	129	29.7	30.9	14.5	57.3	34.7	6.66	30.3
Selenium	mg/kg	12000	< 6.00	< 6.00	< 6.00	< 6.00	< 6.00	< 6.00	< 6.00	< 6.00
Vanadium	mg/kg	9000								
Zinc	mg/kg	730000	476	43.8	54.3	101	73.3	72.2	49.7	51.5
Naphthalene	mg/kg	190	0.11	0.43	< 0.10	< 0.10	< 0.10	< 0.10	0.11	< 0.10
Acenaphthylene	mg/kg	83000	< 0.10	0.12	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Acenaphthene	mg/kg	84000	< 0.10	0.3	< 0.10	< 0.10	< 0.10	< 0.10	0.19	< 0.10
Fluorene	mg/kg	63000	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	0.14	< 0.10
Phenanthrene	mg/kg	22000	0.48	1.48	< 0.10	< 0.10	< 0.10	< 0.10	1.44	< 0.10
Anthracene	mg/kg	520000	0.12	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	0.47	< 0.10
Fluoranthene	mg/kg	23000	0.79	< 0.10	< 0.10	0.11	< 0.10	< 0.10	2.63	< 0.10
Pyrene	mg/kg	54000	0.71	0.19	< 0.10	< 0.10	< 0.10	< 0.10	2.42	< 0.10
Benzo (a) anthracene	mg/kg	170	0.49	0.15	0.14	0.15	0.15	< 0.10	1.3	< 0.10
Chrysene	mg/kg	350	0.42	< 0.10	0.12	< 0.10	< 0.10	0.11	1.19	0.13
Benzo (b) fluoranthene	mg/kg	44	0.46	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	1.26	< 0.10
Benzo (k) fluoranthene	mg/kg	1200	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo (a) pyrene	mg/kg	35	0.36	< 0.10	0.18	< 0.10	< 0.10	< 0.10	1.13	< 0.10
Indeno (1 2 3-CD) pyrene	mg/kg	500	0.13	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Dibenzo(a h)anthracene	mg/kg	3.5	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	0.14	< 0.10
Benzo(g h i)perylene	mg/kg	3900	0.16	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	0.55	< 0.10
Benzene	mg/kg	27	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100
Toluene	mg/kg	56000	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100
Ethylbenzene	mg/kg	5700	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100
m+p-xylene	mg/kg	6200	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100
o-xylene	mg/kg	6600	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100
C5-C6 Aliphatic	mg/kg	32000	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
>C6-C8 Aliphatic	mg/kg	7800	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
>C8-C10 Aliphatic	mg/kg	2000	12.7	22.7	< 10.0	< 10.0	< 10.0	< 10.0	20.7	< 10.0
>C10-C12 Aliphatic	mg/kg	9700	< 10.0	11.5	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
>C12-C16 Aliphatic	mg/kg	59000	< 10.0	63	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
>C16-C21 Aliphatic	mg/kg	1.6E+06	< 10.0	105	< 10.0	< 10.0	< 10.0	< 10.0	172	< 10.0
>C21-C35 Aliphatic	mg/kg	1.6E+06	15.1	40.3	< 10.0	< 10.0	< 10.0	< 10.0	502	< 10.0
C6-C7 Aromatic	mg/kg	26000	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
C7-C8 Aromatic	mg/kg	56000	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
>C8-C10 Aromatic	mg/kg	3500	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
>C10-C12 Aromatic	mg/kg	16000	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
>C12-C16 Aromatic	mg/kg	36000	< 10.0	51.5	< 10.0	< 10.0	< 10.0	< 10.0	14.4	< 10.0
>C16-C21 Aromatic	mg/kg	28000	< 10.0	29	< 10.0	< 10.0	< 10.0	< 10.0	35.8	< 10.0
>C21-C35 Aromatic	mg/kg	28000	< 10.0	14	< 10.0	< 10.0	< 10.0	< 10.0	144	< 10.0

Generic Assessment Criteria (GAC) Comparison - Residential with Homegrown Produce (1% SOM)			Site:	Fareham Rd - Gosport	GAC Source:	Published Suitable for Use Levels (S4UL) and Category 4 Screening Levels (C4SL) - see report for references		Key:		
			Project No:	23-51237				Below GAC		
								Exceeds GAC		
Exploratory Hole Location			CP03	CP04	CP04	CP04				
Sample Depth			5.50-6.00mbgl	0.40-0.60mbgl	1.00-1.30mbgl	3.50-4.00mbgl				
Soil/Rock Unit			Dark brownish grey CLAY	Dark brownish grey gravell	Light brown slightly sandy (	Dark brownish grey CLAY				
REPNAME	Units	GAC								
Arsenic	mg/kg	640	12.6	17.8	9.43	11.5				
Beryllium	mg/kg	12								
Boron	mg/kg	240000								
Cadmium	mg/kg	190	< 1.00	< 1.00	< 1.00	< 1.00				
Chromium Hexavalent	mg/kg	33	< 0.20	< 0.20	< 0.20	< 0.20				
Chromium	mg/kg	8600	59	40.9	52.7	58.4				
Copper	mg/kg	68000	18.8	80.8	18.6	21.9				
Lead	mg/kg	2300	21	98.6	15.9	19				
Mercury	mg/kg	1100	0.053	1.05	0.038	0.04				
Nickel	mg/kg	980	39.9	61.2	32	39.3				
Selenium	mg/kg	12000	< 6.00	< 6.00	< 6.00	< 6.00				
Vanadium	mg/kg	9000								
Zinc	mg/kg	730000	76.5	374	66.2	72.3				
Naphthalene	mg/kg	190	< 0.10	0.1	< 0.10	< 0.10				
Acenaphthylene	mg/kg	83000	< 0.10	< 0.10	< 0.10	< 0.10				
Acenaphthene	mg/kg	84000	< 0.10	< 0.10	< 0.10	< 0.10				
Fluorene	mg/kg	63000	< 0.10	< 0.10	< 0.10	< 0.10				
Phenanthrene	mg/kg	22000	< 0.10	0.13	< 0.10	< 0.10				
Anthracene	mg/kg	520000	< 0.10	< 0.10	< 0.10	< 0.10				
Fluoranthene	mg/kg	23000	< 0.10	0.1	< 0.10	< 0.10				
Pyrene	mg/kg	54000	< 0.10	< 0.10	< 0.10	< 0.10				
Benzo (a) anthracene	mg/kg	170	< 0.10	0.16	< 0.10	< 0.10				
Chrysene	mg/kg	350	0.13	< 0.10	0.13	0.12				
Benzo (b) fluoranthene	mg/kg	44	< 0.10	< 0.10	< 0.10	< 0.10				
Benzo (k) fluoranthene	mg/kg	1200	< 0.10	< 0.10	< 0.10	< 0.10				
Benzo (a) pyrene	mg/kg	35	< 0.10	< 0.10	< 0.10	< 0.10				
Indeno (1 2 3-CD) pyrene	mg/kg	500	< 0.10	< 0.10	< 0.10	< 0.10				
Dibenzo(a h)anthracene	mg/kg	3.5	< 0.10	< 0.10	< 0.10	< 0.10				
Benzo(g h i)perylene	mg/kg	3900	< 0.10	< 0.10	< 0.10	< 0.10				
Benzene	mg/kg	27	< 0.0100	< 0.0100	< 0.0100	< 0.0100				
Toluene	mg/kg	56000	< 0.0100	< 0.0100	< 0.0100	< 0.0100				
Ethylbenzene	mg/kg	5700	< 0.0100	< 0.0100	< 0.0100	< 0.0100				
m+p-xylene	mg/kg	6200	< 0.0100	< 0.0100	< 0.0100	< 0.0100				
o-xylene	mg/kg	6600	< 0.0100	< 0.0100	< 0.0100	< 0.0100				
C5-C6 Aliphatic	mg/kg	32000	< 0.10	< 0.10	< 0.10	< 0.10				
>C6-C8 Aliphatic	mg/kg	7800	< 0.10	< 0.10	< 0.10	< 0.10				
>C8-C10 Aliphatic	mg/kg	2000	< 10.0	< 10.0	< 10.0	< 10.0				
>C10-C12 Aliphatic	mg/kg	9700	< 10.0	< 10.0	< 10.0	< 10.0				
>C12-C16 Aliphatic	mg/kg	59000	< 10.0	< 10.0	< 10.0	< 10.0				
>C16-C21 Aliphatic	mg/kg	1.6E+06	< 10.0	< 10.0	< 10.0	< 10.0				
>C21-C35 Aliphatic	mg/kg	1.6E+06	< 10.0	< 10.0	< 10.0	< 10.0				
C6-C7 Aromatic	mg/kg	26000	< 0.10	< 0.10	< 0.10	< 0.10				
C7-C8 Aromatic	mg/kg	56000	< 0.10	< 0.10	< 0.10	< 0.10				
>C8-C10 Aromatic	mg/kg	3500	< 10.0	< 10.0	< 10.0	< 10.0				
>C10-C12 Aromatic	mg/kg	16000	< 10.0	< 10.0	< 10.0	< 10.0				
>C12-C16 Aromatic	mg/kg	36000	< 10.0	< 10.0	< 10.0	< 10.0				
>C16-C21 Aromatic	mg/kg	28000	< 10.0	< 10.0	< 10.0	< 10.0				
>C21-C35 Aromatic	mg/kg	28000	< 10.0	< 10.0	< 10.0	< 10.0				

Generic Assessment Criteria (GAC) Comparison - Commercial (1% SOM)			Site:	Fareham Rd - Gosport	GAC Source:	Published Suitable for Use Levels (S4UL) and Category 4 Screening Levels (C4SL) - see report for references		Key: Below GAC / Exceeds GAC		ACS ANALYTICAL CHEMISTRY SERVICES
			Project No:	25-50040						
Exploratory Hole Location			BH05	BH05	BH05	BH06	BH06	BH06	BH07	BH07
Sample Depth			0.3-0.6mbgl	2.0-2.5mbgl	4.5-5.0mbgl	0.3-0.7mbgl	2.0-2.5mbgl	4.5-5.0mbgl	0.3-0.6mbgl	2.0-2.5mbgl
Soil/Rock Unit			Made Ground	Brown sandy CLAY	Grey sandy CLAY	Made Ground	Brown sandy CLAY	Grey sandy CLAY	Made Ground	Brown sandy CLAY
REPNAME	Units	GAC								
Arsenic	mg/kg	640	15.974	13.647	16.641	5.6816	11.883	9.1417	5.5968	8.6654
Beryllium	mg/kg	12								
Boron	mg/kg	240000								
Cadmium	mg/kg	190	5.7401	0.0642	0.1519	0.1442	0.0794	0.1004	0.1787	0.1352
Chromium Hexavalent	mg/kg	33	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20
Chromium	mg/kg	8600	41.73	34.74	35.57	17.8	34.93	25.93	19.58	33.45
Copper	mg/kg	68000	60.9	24.836	23.899	9.5685	20.685	18.64	12.894	20.944
Lead	mg/kg	2300	31.462	38.509	48.152	25.968	44.419	30.002	10.698	34.267
Mercury	mg/kg	1100	0.21193	0.04215	0.03694	0.03304	0.036	0.02785	0.05321	0.03618
Nickel	mg/kg	980	31.462	38.509	48.152	25.968	44.419	30.002	10.698	34.267
Selenium	mg/kg	12000	0.36801	0.52946	0.77357	0.02357	0.11297	0.50075	0.15564	0.20559
Vanadium	mg/kg	9000								
Zinc	mg/kg	730000	336.3	77.86	79.51	35.19	68.78	63.69	36.85	67.29
Naphthalene	mg/kg	190	0.11	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Acenaphthylene	mg/kg	83000	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Acenaphthene	mg/kg	84000	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Fluorene	mg/kg	63000	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Phenanthrene	mg/kg	22000	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Anthracene	mg/kg	520000	0.21	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Fluoranthene	mg/kg	23000	0.24	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Pyrene	mg/kg	54000	0.19	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo (a) anthracene	mg/kg	170	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Chrysene	mg/kg	350	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo (b) fluoranthene	mg/kg	44	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo (k) fluoranthene	mg/kg	1200	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo (a) pyrene	mg/kg	35	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Indeno (1 2 3-CD) pyrene	mg/kg	500	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Dibenzo(a h)anthracene	mg/kg	3.5	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo(g h i)perylene	mg/kg	3900	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzene	mg/kg	27	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100
Toluene	mg/kg	56000	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100
Ethylbenzene	mg/kg	5700	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100
m+p-xylene	mg/kg	6200	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100
o-xylene	mg/kg	6600	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100
C5-C6 Aliphatic	mg/kg	32000	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
>C6-C8 Aliphatic	mg/kg	7800	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
>C8-C10 Aliphatic	mg/kg	2000	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
>C10-C12 Aliphatic	mg/kg	9700	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
>C12-C16 Aliphatic	mg/kg	59000	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
>C16-C21 Aliphatic	mg/kg	1.6E+06	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
>C21-C35 Aliphatic	mg/kg	1.6E+06	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
C6-C7 Aromatic	mg/kg	26000	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
C7-C8 Aromatic	mg/kg	56000	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
>C8-C10 Aromatic	mg/kg	3500	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
>C10-C12 Aromatic	mg/kg	16000	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
>C12-C16 Aromatic	mg/kg	36000	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
>C16-C21 Aromatic	mg/kg	28000	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
>C21-C35 Aromatic	mg/kg	28000	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0

Generic Assessment Criteria (GAC) Comparison - Residential with Homegrown Produce (1% SOM)			Site:	Fareham Rd - Gosport	GAC Source:	Published Suitable for Use Levels (S4UL) and Category 4 Screening Levels (C4SL) - see report for references		Key:		ACS ANALYTICAL CONSTRUCTION SERVICES
			Project No:	25-50040				Below GAC		
								Exceeds GAC		
Exploratory Hole Location			BH07							
Sample Depth			4.5-5.0mbgl							
Soil/Rock Unit			Grey sandy CLAY							
REPNAME	Units	GAC								
Arsenic	mg/kg	640	8.9732							
Beryllium	mg/kg	12								
Boron	mg/kg	240000								
Cadmium	mg/kg	190	0.1178							
Chromium Hexavalent	mg/kg	33	< 0.20							
Chromium	mg/kg	8600	33.55							
Copper	mg/kg	68000	19.79							
Lead	mg/kg	2300	15.72							
Mercury	mg/kg	1100	0.03124							
Nickel	mg/kg	980	39.305							
Selenium	mg/kg	12000	0.27643							
Vanadium	mg/kg	9000								
Zinc	mg/kg	730000	68.13							
Naphthalene	mg/kg	190	< 0.10							
Acenaphthylene	mg/kg	83000	< 0.10							
Acenaphthene	mg/kg	84000	< 0.10							
Fluorene	mg/kg	63000	< 0.10							
Phenanthrene	mg/kg	22000	< 0.10							
Anthracene	mg/kg	520000	< 0.10							
Fluoranthene	mg/kg	23000	< 0.10							
Pyrene	mg/kg	54000	< 0.10							
Benzo (a) anthracene	mg/kg	170	< 0.10							
Chrysene	mg/kg	350	< 0.10							
Benzo (b) fluoranthene	mg/kg	44	< 0.10							
Benzo (k) fluoranthene	mg/kg	1200	< 0.10							
Benzo (a) pyrene	mg/kg	35	< 0.10							
Indeno (1 2 3-CD) pyrene	mg/kg	500	< 0.10							
Dibenzo(a h)anthracene	mg/kg	3.5	< 0.10							
Benzo(g h i)perylene	mg/kg	3900	< 0.10							
Benzene	mg/kg	27	< 0.0100							
Toluene	mg/kg	56000	< 0.0100							
Ethylbenzene	mg/kg	5700	< 0.0100							
m+p-xylene	mg/kg	6200	< 0.0100							
o-xylene	mg/kg	6600	< 0.0100							
C5-C6 Aliphatic	mg/kg	32000	< 0.10							
>C6-C8 Aliphatic	mg/kg	7800	< 0.10							
>C8-C10 Aliphatic	mg/kg	2000	< 10.0							
>C10-C12 Aliphatic	mg/kg	9700	< 10.0							
>C12-C16 Aliphatic	mg/kg	59000	< 10.0							
>C16-C21 Aliphatic	mg/kg	1.6E+06	< 10.0							
>C21-C35 Aliphatic	mg/kg	1.6E+06	< 10.0							
C6-C7 Aromatic	mg/kg	26000	< 0.10							
C7-C8 Aromatic	mg/kg	56000	< 0.10							
>C8-C10 Aromatic	mg/kg	3500	< 10.0							
>C10-C12 Aromatic	mg/kg	16000	< 10.0							
>C12-C16 Aromatic	mg/kg	36000	< 10.0							
>C16-C21 Aromatic	mg/kg	28000	< 10.0							
>C21-C35 Aromatic	mg/kg	28000	< 10.0							

APPENDIX E

Laboratory Test Results – Waters

ACS
ANALYTICAL CONSTRUCTION SERVICES
A PHENNA GROUP COMPANY

ACS Testing Ltd
Unit 14
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Poole
Dorset
BH16 6LE

Interim Report of Analysis

Certificate Number : 24-00064-Issue 0-Page: 1

Report Fao:	
Site Address^:	Gosport - Fareham Rd
Client Order No:	24-51551
Date of Sampling^:	09/01/2024
Date Received:	10/01/2024
Date of Analysis:	11/01/2024 - 25/01/2024
Report Date:	31/01/2024

Please find your certificates of test attached for your samples received in the laboratory on 10/01/2024 under our laboratory reference 24-00064.

Test Results included in this interim report have not been Validated or Approved and thus may be subject to change, or a repeat analysis may be required which may subsequently necessitate the inclusion of a Deviating Code or change in Accreditation status.

Remarks:

None

Results reviewed by:

Test Certificates approved by:

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Registered in England and
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4150

ACSE Sample Number	81229	81230	81231
Sample ID	762526 - 24-51551	762527 - 24-51551	762528 - 24-51551
Clients Sample Ref.^	CP01	CP02	CP03
Location / Sample Depth (m)^	CP01	CP02	CP03
Date Sampled^	09/01/2024	09/01/2024	09/01/2024
Time Sampled^	1045	1100	1115
Sample deviating codes	ef	ef	ef
Client's Sample Description^			
ACS Testing Material Description^	Groundwater	Groundwater	Groundwater
ACSE Material Description (Principal Matrix - As Received)	WATER	WATER	WATER

Determination	HWOL Acroynm	Units	Method	Prepared As	Result	AS	Result	AS	Result	AS
Anions										
Sulphate		mg/l	MT/ACSE/204	AR	**836**	*	**708**	*	**686**	*
Cyanide										
Total Cyanide		ug/l	IHP	AR	< 1.00		< 1.00		< 1.00	
LL Speciated Petroleum Hydrocarbons										
C5-C6 Aliphatic		ug/l	IHP	AR	< 1.00		< 1.00		< 1.00	
>C6-C8 Aliphatic		ug/l	IHP	AR	< 1.00		< 1.00		< 1.00	
>C8-C10 Aliphatic		ug/l	NAM/ACSE/X07	AR	**384**		**402**		**2.98**	
>C10-C12 Aliphatic		ug/l	NAM/ACSE/X07	AR	**141**		**145**		**1.10**	
>C12-C16 Aliphatic		ug/l	NAM/ACSE/X07	AR	**184**		**183**		**1.47**	
>C16-C21 Aliphatic		ug/l	NAM/ACSE/X07	AR	**239**		**227**		**1.98**	
>C21-C35 Aliphatic		ug/l	NAM/ACSE/X07	AR	**1360**		**1210**		**10.2**	
C6-C7 Aromatic		ug/l	IHP	AR	< 1.00		< 1.00		< 1.00	
C7-C8 Aromatic		ug/l	IHP	AR	< 1.00		< 1.00		< 1.00	
>C8-C10 Aromatic		ug/l	NAM/ACSE/X07	AR	**6.06**		**5.32**		< 1.00	
>C10-C12 Aromatic		ug/l	NAM/ACSE/X07	AR	**4.83**		**4.26**		< 1.00	
>C12-C16 Aromatic		ug/l	NAM/ACSE/X07	AR	**9.79**		**8.62**		< 1.00	
>C16-C21 Aromatic		ug/l	NAM/ACSE/X07	AR	**24.1**		**19.9**		< 1.00	
>C21-C35 Aromatic		ug/l	NAM/ACSE/X07	AR	**62.8**		**53.2**		< 1.00	
Total Speciated TPH LL		ug/l	IHP	AR	**2410**		**2250**		**17.8**	
Metals (Water)										
Arsenic		mg/l	MT/ACSE/205	AR	< 0.007		< 0.007		< 0.007	
Boron		mg/l	MT/ACSE/205	AR	**0.17**		**0.35**		**0.33**	
Cadmium		mg/l	MT/ACSE/205	AR	< 0.0008		< 0.0008		< 0.0008	
Chromium		mg/l	MT/ACSE/205	AR	< 0.001		< 0.001		< 0.001	
Copper		mg/l	MT/ACSE/205	AR	< 0.008		< 0.008		< 0.008	
Mercury		mg/l	MT/ACSE/202	AR	< 0.0001	*	< 0.0001	*	< 0.0001	*
Nickel		mg/l	MT/ACSE/205	AR	**0.0062**		**0.0172**		**0.0074**	
Lead		mg/l	MT/ACSE/205	AR	< 0.004		< 0.004		< 0.004	
Selenium		mg/l	MT/ACSE/205	AR	**0.032**		**0.014**		< 0.006	
Zinc		mg/l	MT/ACSE/205	AR	**0.006**		**0.008**		**0.009**	
Chromium Hexavalent		mg/l	NAM/ACSE/X11	AR	< 0.05		< 0.05		< 0.05	
pH and Conductivity										
pH (@ 20℃)		units	MT/ACSE/301	AR	**6.9**	*ef	**6.8**	*	**7.0**	*ef
Phenols										
Phenol Index		ug/L	IHP	AR	**45.0**		**57.4**		**49.2**	

m- and p- cresol are reported as mixed isomers, calibrated with reference to a p-cresol reference solution. The individual concentrations of m- and p- cresol cannot be quantified using this method, however, the result reported for the mixed isomers will be an over estimation of the true result in samples where m-cresol is present.

Polychlorinated Biphenyls (PCBs)										
PCB (7 Congeners)		mg/l	MT/ACSE/110	AR	< 1.00		< 1.00		< 1.00	
Speciated BTEX										
MTBE		mg/l	IHP	AR	< 0.0020		< 0.0020		< 0.0020	
Hexane		mg/l	IHP	AR	< 0.0020		< 0.0020		< 0.0020	
Heptane		mg/l	IHP	AR	< 0.0020		< 0.0020		< 0.0020	

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Registered in England and
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ACSE Sample Number	**81229**	**81230**	**81231**
Sample ID	**762526 - 24-51551**	**762527 - 24-51551**	**762528 - 24-51551**
Clients Sample Ref.^	**CP01**	**CP02**	**CP03**
Location / Sample Depth (m)^	**CP01**	**CP02**	**CP03**
Date Sampled^	**09/01/2024**	**09/01/2024**	**09/01/2024**
Time Sampled^	**1045**	**1100**	**1115**
Sample deviating codes	**ef**	**ef**	**ef**
Client's Sample Description^			
ACS Testing Material Description^	**Groundwater**	**Groundwater**	**Groundwater**
ACSE Material Description (Principal Matrix - As Received)	**WATER**	**WATER**	**WATER**

Determination	HWOL Acroynm	Units	Method	Prepared As	Result	AS	Result	AS	Result	AS
Octane		mg/l	IHP	AR	< 0.0020		< 0.0020		< 0.0020	
Benzene		mg/l	IHP	AR	< 0.0020		< 0.0020		< 0.0020	
Toluene		mg/l	IHP	AR	< 0.0020		< 0.0020		< 0.0020	
Ethylbenzene		mg/l	IHP	AR	< 0.0020		< 0.0020		< 0.0020	
m+p-xylene		mg/l	IHP	AR	< 0.0020		< 0.0020		< 0.0020	
o-xylene		mg/l	IHP	AR	< 0.0020		< 0.0020		< 0.0020	
Subcontracted Analysis										
Speciated PAH (Low Level)		SC	SC	SC	**Attached**		**Attached**		**Attached**	

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ANALYTICAL CONSTRUCTION SERVICES
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ACSE Sample Number	**81232**	**81233**	**81234**
Sample ID	**762529 - 24-51551**	**762530 - 24-51551**	**762531 - 24-51551**
Clients Sample Ref.^	**CP04**	**Outflow 1**	**Outflow 2**
Location / Sample Depth (m)^	**CP04**	**Outflow 1**	**Outflow 2**
Date Sampled^	**09/01/2024**	**09/01/2024**	**09/01/2024**
Time Sampled^	**1130**	**1300**	**1230**
Sample deviating codes	**ef**	**ef**	**ef**
Client's Sample Description^			
ACS Testing Material Description^	**Groundwater**	**Surface water**	**Surface water**
ACSE Material Description (Principal Matrix - As Received)	**WATER**	**WATER**	**WATER**

Determination	HWOL Acroynm	Units	Method	Prepared As	Result	AS	Result	AS	Result	AS
Anions										
Sulphate		mg/l	MT/ACSE/204	AR	**392**	*	**43.8**	*	**43.7**	*
Cyanide										
Total Cyanide		ug/l	IHP	AR	< 1.00		< 1.00		< 1.00	
LL Speciated Petroleum Hydrocarbons										
C5-C6 Aliphatic		ug/l	IHP	AR	< 1.00		< 1.00		< 1.00	
>C6-C8 Aliphatic		ug/l	IHP	AR	< 1.00		< 1.00		< 1.00	
>C8-C10 Aliphatic		ug/l	NAM/ACSE/X07	AR	**2.53**		**257**		**203**	
>C10-C12 Aliphatic		ug/l	NAM/ACSE/X07	AR	< 1.00		**99.6**		**76.3**	
>C12-C16 Aliphatic		ug/l	NAM/ACSE/X07	AR	**1.24**		**125**		**96.9**	
>C16-C21 Aliphatic		ug/l	NAM/ACSE/X07	AR	**1.53**		**153**		**119**	
>C21-C35 Aliphatic		ug/l	NAM/ACSE/X07	AR	**8.64**		**839**		**668**	
C6-C7 Aromatic		ug/l	IHP	AR	< 1.00		< 1.00		< 1.00	
C7-C8 Aromatic		ug/l	IHP	AR	< 1.00		< 1.00		< 1.00	
>C8-C10 Aromatic		ug/l	NAM/ACSE/X07	AR	< 1.00		**3.84**		**3.81**	
>C10-C12 Aromatic		ug/l	NAM/ACSE/X07	AR	< 1.00		**2.80**		**2.45**	
>C12-C16 Aromatic		ug/l	NAM/ACSE/X07	AR	< 1.00		**5.33**		**4.63**	
>C16-C21 Aromatic		ug/l	NAM/ACSE/X07	AR	< 1.00		**13.4**		**11.6**	
>C21-C35 Aromatic		ug/l	NAM/ACSE/X07	AR	< 1.00		**39.2**		**35.3**	
Total Speciated TPH LL		ug/l	IHP	AR	**14.0**		**1540**		**1220**	
Metals (Water)										
Arsenic		mg/l	MT/ACSE/205	AR	< 0.007		< 0.007		< 0.007	
Boron		mg/l	MT/ACSE/205	AR	**0.36**		**0.05**		**0.07**	
Cadmium		mg/l	MT/ACSE/205	AR	< 0.0008		< 0.0008		< 0.0008	
Chromium		mg/l	MT/ACSE/205	AR	**0.001**		**0.002**		**0.004**	
Copper		mg/l	MT/ACSE/205	AR	< 0.008		< 0.008		< 0.008	
Mercury		mg/l	MT/ACSE/202	AR	< 0.0001	*	< 0.0001	*	< 0.0001	*
Nickel		mg/l	MT/ACSE/205	AR	**0.0088**		**0.0009**		< 0.0008	
Lead		mg/l	MT/ACSE/205	AR	< 0.004		< 0.004		< 0.004	
Selenium		mg/l	MT/ACSE/205	AR	**0.011**		< 0.006		< 0.006	
Zinc		mg/l	MT/ACSE/205	AR	**0.004**		< 0.002		**0.005**	
Chromium Hexavalent		mg/l	NAM/ACSE/X11	AR	< 0.05		< 0.05		< 0.05	
pH and Conductivity										
pH (@ 20°C)		units	MT/ACSE/301	AR	**7.1**	*	**8.2**	*ef	**8.0**	*ef
Phenols										
Phenol Index		ug/L	IHP	AR	**26.8**		**18.4**		< 2.00	

m- and p- cresol are reported as mixed isomers, calibrated with reference to a p-cresol reference solution. The individual concentrations of m- and p- cresol cannot be quantified using this method, however, the result reported for the mixed isomers will be an over estimation of the true result in samples where m-cresol is present.

Polychlorinated Biphenyls (PCBs)										
PCB (7 Congeners)		mg/l	MT/ACSE/110	AR	**To Follow**		< 1.00		< 1.00	
Speciated BTEX										
MTBE		mg/l	IHP	AR	< 0.0020		< 0.0020		< 0.0020	

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ACSE Sample Number	**81232**	**81233**	**81234**
Sample ID	**762529 - 24-51551**	**762530 - 24-51551**	**762531 - 24-51551**
Clients Sample Ref.^	**CP04**	**Outflow 1**	**Outflow 2**
Location / Sample Depth (m)^	**CP04**	**Outflow 1**	**Outflow 2**
Date Sampled^	**09/01/2024**	**09/01/2024**	**09/01/2024**
Time Sampled^	**1130**	**1300**	**1230**
Sample deviating codes	**ef**	**ef**	**ef**
Client's Sample Description^			
ACS Testing Material Description^	**Groundwater**	**Surface water**	**Surface water**
ACSE Material Description (Principal Matrix - As Received)	**WATER**	**WATER**	**WATER**

Determination	HWOL Acroynm	Units	Method	Prepared As	Result	AS	Result	AS	Result	AS
Hexane		mg/l	IHP	AR	< 0.0020		< 0.0020		< 0.0020	
Heptane		mg/l	IHP	AR	< 0.0020		< 0.0020		< 0.0020	
Octane		mg/l	IHP	AR	< 0.0020		< 0.0020		< 0.0020	
Benzene		mg/l	IHP	AR	< 0.0020		< 0.0020		< 0.0020	
Toluene		mg/l	IHP	AR	< 0.0020		< 0.0020		< 0.0020	
Ethylbenzene		mg/l	IHP	AR	< 0.0020		< 0.0020		< 0.0020	
m+p-xylene		mg/l	IHP	AR	< 0.0020		< 0.0020		< 0.0020	
o-xylene		mg/l	IHP	AR	< 0.0020		< 0.0020		< 0.0020	
Subcontracted Analysis										
Speciated PAH (Low Level)		SC	SC	SC	**Attached**		**Attached**		**Attached**	

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ACSE Sample Number	**81235**
Sample ID	**762532 - 24-51551**
Clients Sample Ref.^	**Outfow 3**
Location / Sample Depth (m)^	**Outfow 3**
Date Sampled^	**09/01/2024**
Time Sampled^	**1200**
Sample deviating codes	**ef**
Client's Sample Description^	
ACS Testing Material Description^	**Surface water**
ACSE Material Description (Principal Matrix - As Received)	**WATER**

Determination	HWOL Acroynm	Units	Method	Prepared As	Result	AS
Anions						
Sulphate		mg/l	MT/ACSE/204	AR	**14.7**	*
Cyanide						
Total Cyanide		ug/l	IHP	AR	< 1.00	
LL Speciated Petroleum Hydrocarbons						
C5-C6 Aliphatic		ug/l	IHP	AR	< 1.00	
>C6-C8 Aliphatic		ug/l	IHP	AR	< 1.00	
>C8-C10 Aliphatic		ug/l	NAM/ACSE/X07	AR	**617**	
>C10-C12 Aliphatic		ug/l	NAM/ACSE/X07	AR	**232**	
>C12-C16 Aliphatic		ug/l	NAM/ACSE/X07	AR	**279**	
>C16-C21 Aliphatic		ug/l	NAM/ACSE/X07	AR	**325**	
>C21-C35 Aliphatic		ug/l	NAM/ACSE/X07	AR	**1310**	
C6-C7 Aromatic		ug/l	IHP	AR	< 1.00	
C7-C8 Aromatic		ug/l	IHP	AR	< 1.00	
>C8-C10 Aromatic		ug/l	NAM/ACSE/X07	AR	**8.53**	
>C10-C12 Aromatic		ug/l	NAM/ACSE/X07	AR	**6.08**	
>C12-C16 Aromatic		ug/l	NAM/ACSE/X07	AR	**10.5**	
>C16-C21 Aromatic		ug/l	NAM/ACSE/X07	AR	**23.4**	
>C21-C35 Aromatic		ug/l	NAM/ACSE/X07	AR	**71.9**	
Total Speciated TPH LL		ug/l	IHP	AR	**2890**	
Metals (Water)						
Arsenic		mg/l	MT/ACSE/205	AR	< 0.007	
Boron		mg/l	MT/ACSE/205	AR	**0.11**	
Cadmium		mg/l	MT/ACSE/205	AR	< 0.0008	
Chromium		mg/l	MT/ACSE/205	AR	< 0.001	
Copper		mg/l	MT/ACSE/205	AR	< 0.008	
Mercury		mg/l	MT/ACSE/202	AR	< 0.0001	*
Nickel		mg/l	MT/ACSE/205	AR	< 0.0008	
Lead		mg/l	MT/ACSE/205	AR	< 0.004	
Selenium		mg/l	MT/ACSE/205	AR	< 0.006	
Zinc		mg/l	MT/ACSE/205	AR	< 0.002	
Chromium Hexavalent		mg/l	NAM/ACSE/X11	AR	< 0.05	
pH and Conductivity						
pH (@ 20°C)		units	MT/ACSE/301	AR	**7.6**	*ef
Phenols						
Phenol Index		ug/L	IHP	AR	< 2.00	

m- and p- cresol are reported as mixed isomers, calibrated with reference to a p-cresol reference solution. The individual concentrations of m- and p- cresol cannot be quantified using this method, however, the result reported for the mixed isomers will be an over estimation of the true result in samples where m-cresol is present.

Polychlorinated Biphenyls (PCBs)						
PCB (7 Congeners)		mg/l	MT/ACSE/110	AR	< 1.00	
Speciated BTEX						
MTBE		mg/l	IHP	AR	< 0.0020	

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ACSE Sample Number	**81235**
Sample ID	**762532 - 24-51551**
Clients Sample Ref.^	**Outfow 3**
Location / Sample Depth (m)^	**Outfow 3**
Date Sampled^	**09/01/2024**
Time Sampled^	**1200**
Sample deviating codes	**ef**
Client's Sample Description^	
ACS Testing Material Description^	**Surface water**
ACSE Material Description (Principal Matrix - As Received)	**WATER**

Determination	HWOL Acroynm	Units	Method	Prepared As	Result AS
Hexane		mg/l	IHP	AR	< 0.0020
Heptane		mg/l	IHP	AR	< 0.0020
Octane		mg/l	IHP	AR	< 0.0020
Benzene		mg/l	IHP	AR	< 0.0020
Toluene		mg/l	IHP	AR	< 0.0020
Ethylbenzene		mg/l	IHP	AR	< 0.0020
m+p-xylene		mg/l	IHP	AR	< 0.0020
o-xylene		mg/l	IHP	AR	< 0.0020
Subcontracted Analysis					
Speciated PAH (Low Level)		SC	SC	SC	**Attached**

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Technical Information for Analytical Results

Analysis

* - denotes analysis covered by our UKAS accreditation.
# - denoted analysis covered by our MCERTS certification & UKAS accreditation.
Loss on Ignition (MT/ACSE/302) is carried out at our laboratory at Unit D11 Admiralty Park, Station Road, Holton Heath, Poole, Dorset BH16 6HX.
AD = Sample tested in air dried condition.
AR = Sample tested in as-received condition.
AS = Accreditation status.
D = Sample tested in dry condition.
L = Laboratory prepared leachate.
SC = Sub contracted.
^ = Clients supplied information.
All MCERTS certified test values reported on a dry weight basis.
The preparation of 10:1 Leachates (to BS EN 12457-2:2002) and 2:1 leachates (to BS EN 12457-1:2002) fall outside the scope of our UKAS accreditation.
Soils and leachates are prepared at our laboratory at Unit D11 Admiralty Park, Station Road, Holton Heath, Poole, Dorset BH16 6HX.
Method uncertainty available on request.
Where results are less than the limit of detection, the value of 0 is used in calculations.

Key to HWOL Acronyms

Acronym		Description
HS	-	Headspace analysis
EH	-	Extractable Hydrocarbons - i.e. everything extracted by the solvent
CU	-	Clean-up - e.g. by florisil, silica gel
1D	-	GC - Single coil gas chromatography
Total	-	Aliphatics & Aromatics
AL	-	Aliphatics only
AR	-	Aromatics only
2D	-	GC-GC - Double coil gas chromatography
#1	-	e.g. EH_2D_Total_#1 means humics mathematically subtracted
#2	-	e.g. EH_2D_Total_#2 means fatty acids mathematically subtracted
_	-	Operator - underscore to separate acronyms (exception for +)
+	-	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total

Deviating Codes

Deviating Samples

The use of any of the following symbols indicates that the sample was deviating and it is possible therefore that the results provided may not be representative of the sample taken.

a – The date and /or time of sampling has not been provided, therefore it is not known if the time lapse between sampling and analysis has exceeded the acceptable holding time(s)*.
b – The test item was received in a container which has not been recommended*.
c – On receipt, the temperature of the sample received was found to fall outside the recommendations of BS ISO 18512:2007, Soil Quality. Guidance on long and short term storage of soil samples*.
d – The sample was received in a container that had not been filled as recommended*.
e – The delay between sampling and sample receipt is greater than the recommended holding time for the analyte of interest in this matrix*.
f – The delay between sampling and analysis is greater than the recommended holding time for the analyte of interest in this matrix*.

In accordance with the requirements of Technical Policy Statement TPS 63; UKAS Policy on Deviating Samples, all UKAS accredited testing laboratories are required to notify their clients that calibration or test results may be invalid where samples are found to be deviating. It is the opinion of ACSE that the term invalid should be interpreted as 'not fully representative of the sample taken at source'.

The following Additional Deviating Sample Codes may also be used.

I/S – Insufficient sample mass/volume received for accurate quantification of this analyte.
U/S – The sample received was deemed unsuitable for accurate determination of this analyte using the Test Methods available.
S/C - The sample received was subcontracted for analysis.

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LE1 4DH

ACS
Unit 14b Blackhill Road West
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Analytical Test Report: L24/00271/ACS - 24-40676

Your Project Reference:	**E/24-00064/2036**		
Your Order Number:	E/24-00064/2036	Samples Received / Instructed:	12/01/2024 / 12/01/2024
Report Issue Number:	1	Sample Tested:	12/01 to 17/01/2024
Samples Analysed:	7 water samples	Report issued:	17/01/2024

Signed

Peter Swanston
Technical Manager
CTS Group

Notes:

General

Please refer to Methodologies page for details pertaining to the analytical methods undertaken.

Samples will be retained for 14 days after issue of this report unless otherwise requested.

Where specification limits are included these are for guidance only. Where a measured value has been highlighted this is not implying acceptance or failure and certainty of measurement values have not been taken into account.

Uncertainty of measurement values are available on request.

Samples were supplied by customer, results apply to the samples as received.

Deviating Samples

On receipt samples are compared against our sample holding and handling protocols, where any deviations have been noted these are reported on our deviating sample page (if present)

Accreditation Key

UKAS = UKAS Accreditation, MCERTS = MCERTS Accreditation, u = Unaccredited

MCERTS Accreditation only covers the SAND, CLAY and LOAM matrices

Date of Issue: 30.10.2023

Issued by: J. Gane

Issue No: 4

Rev No: 5

CTS Group
7 - 11 Harding Street
Leicester
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L24/00271/ACS - 24-40676

Project Reference - E/24-00064/2036

Analytical Test Results - Water

Lab Reference			335447	335448	335449	335450	335451	335452	335453
Client Sample ID			762526-24-51551	762527-24-51551	762528-24-51551	762529-24-51551	762530-24-51551	762531-24-51551	762532-24-51551
Client Sample Location			CP01	CP02	CP03	CP04	Outflow 1	Outflow 2	Outflow 3
Client Sample Type			-	-	-	-	-	-	-
Client Sample Number			81229	81230	81231	81232	81233	81234	81235
Depth (m)			-	-	-	-	-	-	-
Date of Sampling			09/01/2024	09/01/2024	09/01/2024	09/01/2024	09/01/2024	09/01/2024	09/01/2024
Time of Sampling			1045	1100	1115	1130	1300	1230	1200
Sample Matrix			Water	Water	Water	Water	Water	Water	Water
Determinant	**Units**	**Accreditation**							
Acenaphthene	(µg/l)	u	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	0.01
Acenaphthylene	(µg/l)	u	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Anthracene	(µg/l)	u	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo (a) anthracene	(µg/l)	u	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo (a) pyrene	(µg/l)	u	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo (b) fluoranthene	(µg/l)	u	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo (g, h, i) perylene	(µg/l)	u	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo (k) fluoranthene	(µg/l)	u	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Chrysene	(µg/l)	u	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Dibenzo (a,h) anthracene	(µg/l)	u	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Fluoranthene	(µg/l)	u	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	0.01
Fluorene	(µg/l)	u	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Indeno (1, 2, 3,-cd) pyrene	(µg/l)	u	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Naphthalene	(µg/l)	u	0.01	< 0.01	< 0.01	0.01	< 0.01	0.02	0.01
Phenanthrene	(µg/l)	u	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	0.03
Pyrene	(µg/l)	u	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Total PAH (Sum of USEPA 16)	(µg/l)	u	0.16	< 0.16	< 0.16	0.16	< 0.16	0.17	0.18

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LE1 4DH

L24/00271/ACS - 24-40676

Project Reference - E/24-00064/2036

Analysis Methodologies

Test Code	Test Name / Reference	Sample condition for analysis	Sample Preperation	Test Details
PAHSPMEW	MS - CL - PAH SPME	As received	-	Determination of Polyaromatic hydrocarbons in water via GC-MS

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Holton Heath Trading Park
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Dorset
BH16 6LE

Certificate of Analysis

Certificate Number : 25-00063-Issue 1-Page: 1

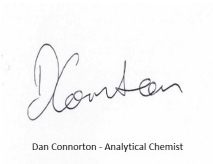
Report Fao:	
Site Address^:	Gosport - Fareham Rd
Client Order No:	25-50248
Date of Sampling^:	10/01/2025
Date Received:	13/01/2025
Date of Analysis:	13/01/2025 - 30/01/2025
Report Date:	30/01/2025

Please find your certificates of test attached for your samples received in the laboratory on 13/01/2025 under our laboratory reference 25-00063.

Remarks:

None

Results reviewed by:



Test Certificates approved by:

Any opinions or interpretations indicated are outside the scope of our UKAS accreditation.
This certificate should not be reproduced, except in full, without the express permission of the laboratory.
The results included within the report are representative of the samples submitted for analysis.
Excel copies of reports are valid only when accompanied by this PDF certificate.
Client's Sample Description / ACS Material Description are noted for reference only.

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UKAS TESTING
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ACS ANALYTICAL CONSTRUCTION SERVICES
A PHENNA GROUP COMPANY

ACSE Sample Number	**91539**	**91540**	**91541**
Sample ID	**831800 - 25-50248**	**831801 - 25-50248**	**831802 - 25-50248**
Clients Sample Ref.^	**BH05**	**BH06**	**BH07**
Location / Sample Depth (m)^	**Ref Plan**	**Ref Plan**	**Ref Plan**
Date Sampled^	**10/01/2025**	**10/01/2025**	**10/01/2025**
Time Sampled^	**0**	**0**	**0**
Sample deviating codes			
Client's Sample Description^			
ACS Testing Material Description^	**BH05 Groundwater**	**BH06 Groundwater**	**BH07 Groundwater**
ACSE Material Description (Principal Matrix - As Received)	**WATER**	**WATER**	**WATER**

Determination	HWOL Acroynm	Units	Method	Prepared As	Result	AS	Result	AS	Result	AS
Anions										
Chloride		mg/l	MT/ACSE/204	AR	-----		-----		-----	
Fluoride		mg/l	MT/ACSE/204	AR	-----		-----		-----	
Sulphate		mg/l	MT/ACSE/204	AR	**286**	*	**147**	*	**36.4**	*
Cyanide										
Total Cyanide		ug/l	IHP	AR	< 1.00	*	**3.81**	*	< 1.00	*
LL Speciated Petroleum Hydrocarbons										
C5-C6 Aliphatic		ug/l	NAM/ACSE/X07	AR	< 1.00		< 1.00		< 1.00	
>C6-C8 Aliphatic		ug/l	NAM/ACSE/X07	AR	< 1.00		< 1.00		< 1.00	
>C8-C10 Aliphatic		ug/l	NAM/ACSE/X07	AR	< 1.00		< 1.00		< 1.00	
>C10-C12 Aliphatic		ug/l	NAM/ACSE/X07	AR	< 1.00		< 1.00		< 1.00	
>C12-C16 Aliphatic		ug/l	NAM/ACSE/X07	AR	< 1.00		< 1.00		< 1.00	
>C16-C21 Aliphatic		ug/l	NAM/ACSE/X07	AR	< 1.00		< 1.00		< 1.00	
>C21-C35 Aliphatic		ug/l	NAM/ACSE/X07	AR	< 1.00		< 1.00		< 1.00	
C6-C7 Aromatic		ug/l	NAM/ACSE/X07	AR	< 1.00		< 1.00		< 1.00	
C7-C8 Aromatic		ug/l	NAM/ACSE/X07	AR	< 1.00		< 1.00		< 1.00	
>C8-C10 Aromatic		ug/l	NAM/ACSE/X07	AR	< 1.00		**7.68**		< 1.00	
>C10-C12 Aromatic		ug/l	NAM/ACSE/X07	AR	< 1.00		**2.35**		< 1.00	
>C12-C16 Aromatic		ug/l	NAM/ACSE/X07	AR	< 1.00		**2.13**		< 1.00	
>C16-C21 Aromatic		ug/l	NAM/ACSE/X07	AR	< 1.00		**3.84**		< 1.00	
>C21-C35 Aromatic		ug/l	NAM/ACSE/X07	AR	< 1.00		**9.00**		< 1.00	
Total Speciated TPH LL		ug/l	NAM/ACSE/X07	L	< 10.0		< 10.0		< 10.0	
Metals and Metalloids (Water)										
Boron		mg/l	MT/ACSE/205	AR	**0.12**		**0.15**		**0.07**	
Arsenic		mg/l	MT_ACSE_208	AR	**0.00088**	*	**0.00069**	*	**0.00498**	*
Cadmium		mg/l	MT_ACSE_208	AR	< 0.00025	*	< 0.00025	*	< 0.00025	*
Chromium (Total) Dissolved		mg/l	MT_ACSE_208	AR	**0.00091**	*	**0.00131**	*	**0.02444**	*
Cobalt		mg/l	MT_ACSE_208	AR	-----		-----		-----	
Selenium		mg/l	MT_ACSE_208	AR	**0.00843**	*	**0.00827**	*	**0.00430**	*
Copper		mg/l	MT_ACSE_208	AR	**0.00320**	*	**0.00242**	*	**0.00136**	*
Iron		mg/l	MT_ACSE_208	AR	-----		-----		-----	
Mercury		mg/l	MT_ACSE_208	AR	< 0.00020	*	< 0.00020	*	< 0.00020	*
Manganese		mg/l	MT_ACSE_208	AR	-----		-----		-----	
Nickel		mg/l	MT_ACSE_208	AR	**0.01603**	*	**0.00360**	*	< 0.00025	*
Lead		mg/l	MT_ACSE_208	AR	< 0.00025	*	< 0.00025	*	< 0.00025	*
Zinc		mg/l	MT_ACSE_208	AR	**0.00714**	*	**0.00667**	*	< 0.00025	*
pH and Conductivity										
pH (@ 20°C)		units	MT/ACSE/301	AR	**7.1**	*	**7.2**	*	**9.0**	*
Phenols										
Phenol Index		ug/l	IHP	AR	< 2.00	*	< 2.00	*	< 2.00	*
Phenol Index		ug/l	IHP	AR	-----		-----		-----	
Polychlorinated Biphenyls (PCBs)										
PCB (7 Congeners)		mg/l	MT/ACSE/110	AR	< 1.00		< 1.00		< 1.00	
Speciated BTEX										
MTBE		mg/l	IHP	AR	< 0.0020		< 0.0020		< 0.0020	

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ACSE Sample Number	**91539**	**91540**	**91541**
Sample ID	**831800 - 25-50248**	**831801 - 25-50248**	**831802 - 25-50248**
Clients Sample Ref.^	**BH05**	**BH06**	**BH07**
Location / Sample Depth (m)^	**Ref Plan**	**Ref Plan**	**Ref Plan**
Date Sampled^	**10/01/2025**	**10/01/2025**	**10/01/2025**
Time Sampled^	**0**	**0**	**0**
Sample deviating codes			
Client's Sample Description^			
ACS Testing Material Description^	**BH05 Groundwater**	**BH06 Groundwater**	**BH07 Groundwater**
ACSE Material Description (Principal Matrix - As Received)	**WATER**	**WATER**	**WATER**

Determination	HWOL Acroynm	Units	Method	Prepared As	Result	AS	Result	AS	Result	AS
Hexane		mg/l	IHP	AR	< 0.0020		< 0.0020		< 0.0020	
Heptane		mg/l	IHP	AR	< 0.0020		< 0.0020		< 0.0020	
Octane		mg/l	IHP	AR	< 0.0020		< 0.0020		< 0.0020	
Benzene		mg/l	IHP	AR	< 0.0020		< 0.0020		< 0.0020	
Toluene		mg/l	IHP	AR	< 0.0020		< 0.0020		< 0.0020	
Ethylbenzene		mg/l	IHP	AR	< 0.0020		< 0.0020		< 0.0020	
m+p-xylene		mg/l	IHP	AR	< 0.0020		< 0.0020		< 0.0020	
o-xylene		mg/l	IHP	AR	< 0.0020		< 0.0020		< 0.0020	
Subcontracted Analysis										
Speciated PAH (Low Level)		SC	SC	SC	**Attached**		**Attached**		**Attached**	
Speciated PAH (Low Level)		SC	SC	SC	**-----**		**Attached**		**-----**	
Waters and Leachates										
BOD (Biochemical Oxygen Demand)		mg/l	MT/ACSE/306	AR	**-----**		**-----**		**-----**	
COD (Chemical Oxygen Demand)		mg/l	MT/ACSE/307	AR	**-----**		**-----**		**-----**	
Suspended Solids		mg/l	MT/ACSE/305	AR	**-----**		**-----**		**-----**	
Wet Chemistry (Water)										
Chromium Hexavalent		mg/l	NAM/ACSE/X11	AR	< 0.05		< 0.05		< 0.05	

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ACS Environmental Testing Limited
Registered in England and
Wales No. 6000065

ACSE Sample Number	**91542**	**91543**
Sample ID	**831803 - 25-50248**	**831804 - 25-50248**
Clients Sample Ref.^	**SW02**	**SW03**
Location / Sample Depth (m)^	**Ref Plan**	**Ref Plan**
Date Sampled^	**10/01/2025**	**10/01/2025**
Time Sampled^	**0**	**0**
Sample deviating codes		
Client's Sample Description^		
ACS Testing Material Description^	**SW02**	**SW03**
ACSE Material Description (Principal Matrix - As Received)	**WATER**	**WATER**

Determination	HWOL Acroynm	Units	Method	Prepared As	Result	AS	Result	AS
Anions								
Chloride		mg/l	MT/ACSE/204	AR	**20.5**	*	**14.2**	*
Fluoride		mg/l	MT/ACSE/204	AR	**39.0**	*	**99.8**	*
Sulphate		mg/l	MT/ACSE/204	AR	**40.1**	*	**106**	*
Cyanide								
Total Cyanide		ug/l	IHP	AR	< 1.00	*	< 1.00	*
LL Speciated Petroleum Hydrocarbons								
C5-C6 Aliphatic		ug/l	NAM/ACSE/X07	AR	< 1.00		< 1.00	
>C6-C8 Aliphatic		ug/l	NAM/ACSE/X07	AR	< 1.00		< 1.00	
>C8-C10 Aliphatic		ug/l	NAM/ACSE/X07	AR	< 1.00		< 1.00	
>C10-C12 Aliphatic		ug/l	NAM/ACSE/X07	AR	< 1.00		< 1.00	
>C12-C16 Aliphatic		ug/l	NAM/ACSE/X07	AR	< 1.00		< 1.00	
>C16-C21 Aliphatic		ug/l	NAM/ACSE/X07	AR	< 1.00		< 1.00	
>C21-C35 Aliphatic		ug/l	NAM/ACSE/X07	AR	< 1.00		< 1.00	
C6-C7 Aromatic		ug/l	NAM/ACSE/X07	AR	< 1.00		< 1.00	
C7-C8 Aromatic		ug/l	NAM/ACSE/X07	AR	< 1.00		< 1.00	
>C8-C10 Aromatic		ug/l	NAM/ACSE/X07	AR	< 1.00		< 1.00	
>C10-C12 Aromatic		ug/l	NAM/ACSE/X07	AR	< 1.00		< 1.00	
>C12-C16 Aromatic		ug/l	NAM/ACSE/X07	AR	< 1.00		< 1.00	
>C16-C21 Aromatic		ug/l	NAM/ACSE/X07	AR	< 1.00		< 1.00	
>C21-C35 Aromatic		ug/l	NAM/ACSE/X07	AR	< 1.00		< 1.00	
Total Speciated TPH LL		ug/l	NAM/ACSE/X07	L	< 10.0		< 10.0	
Metals and Metalloids (Water)								
Boron		mg/l	MT/ACSE/205	AR	**0.05**		**0.16**	
Arsenic		mg/l	MT_ACSE_208	AR	**0.00089**	*	**0.00036**	*
Cadmium		mg/l	MT_ACSE_208	AR	< 0.00025	*	**0.00053**	*
Chromium (Total) Dissolved		mg/l	MT_ACSE_208	AR	**0.00112**	*	< 0.00025	*
Cobalt		mg/l	MT_ACSE_208	AR	< 0.00025	*	< 0.00025	*
Selenium		mg/l	MT_ACSE_208	AR	**0.00089**	*	**0.00054**	*
Copper		mg/l	MT_ACSE_208	AR	**0.00252**	*	**0.00638**	*
Iron		mg/l	MT_ACSE_208	AR	< 0.010	*	< 0.010	*
Mercury		mg/l	MT_ACSE_208	AR	< 0.00020	*	< 0.00020	*
Manganese		mg/l	MT_ACSE_208	AR	**0.00158**		< 0.00025	
Nickel		mg/l	MT_ACSE_208	AR	**0.00083**	*	**0.00264**	*
Lead		mg/l	MT_ACSE_208	AR	< 0.00025	*	< 0.00025	*
Zinc		mg/l	MT_ACSE_208	AR	**0.00199**	*	**0.09161**	*
pH and Conductivity								
pH (@ 20°C)		units	MT/ACSE/301	AR	**8.3**	*	**7.7**	*
Phenols								
Phenol Index		ug/l	IHP	AR	< 2.00	*	< 2.00	*
Phenol Index		ug/l	IHP	AR	< 0.05		< 0.05	
Polychlorinated Biphenyls (PCBs)								
PCB (7 Congeners)		mg/l	MT/ACSE/110	AR	< 1.00		< 1.00	

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ACSE Sample Number	**91542**	**91543**
Sample ID	**831803 - 25-50248**	**831804 - 25-50248**
Clients Sample Ref.^	**SW02**	**SW03**
Location / Sample Depth (m)^	**Ref Plan**	**Ref Plan**
Date Sampled^	**10/01/2025**	**10/01/2025**
Time Sampled^	**0**	**0**
Sample deviating codes		
Client's Sample Description^		
ACS Testing Material Description^	**SW02**	**SW03**
ACSE Material Description (Principal Matrix - As Received)	**WATER**	**WATER**

Determination	HWOL Acroynm	Units	Method	Prepared As	Result	AS	Result	AS
Speciated BTEX								
MTBE		mg/l	IHP	AR	< 0.0020		< 0.0020	
Hexane		mg/l	IHP	AR	< 0.0020		< 0.0020	
Heptane		mg/l	IHP	AR	< 0.0020		< 0.0020	
Octane		mg/l	IHP	AR	< 0.0020		< 0.0020	
Benzene		mg/l	IHP	AR	< 0.0020		< 0.0020	
Toluene		mg/l	IHP	AR	< 0.0020		< 0.0020	
Ethylbenzene		mg/l	IHP	AR	< 0.0020		< 0.0020	
m+p-xylene		mg/l	IHP	AR	< 0.0020		< 0.0020	
o-xylene		mg/l	IHP	AR	< 0.0020		< 0.0020	
Subcontracted Analysis								
Speciated PAH (Low Level)		SC	SC	SC	**Attached**		**Attached**	
Speciated PAH (Low Level)		SC	SC	SC	**-----**		**-----**	
Waters and Leachates								
BOD (Biochemical Oxygen Demand)		mg/l	MT/ACSE/306	AR	**6.33**		< 4.00	
COD (Chemical Oxygen Demand)		mg/l	MT/ACSE/307	AR	**12.1**	*	**26.1**	*
Suspended Solids		mg/l	MT/ACSE/305	AR	< 4.0	*	< 4.0	*
Wet Chemistry (Water)								
Chromium Hexavalent		mg/l	NAM/ACSE/X11	AR	< 0.05		< 0.05	

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Technical Information for Analytical Results

Analysis

* - denotes analysis covered by our UKAS accreditation.
# - denoted analysis covered by our MCERTS certification & UKAS accreditation.
Loss on Ignition (MT/ACSE/302) is carried out at our laboratory at Unit D11 Admiralty Park, Station Road, Holton Heath, Poole, Dorset BH16 6HX.
AD = Sample tested in air dried condition.
AR = Sample tested in as-received condition.
AS = Accreditation status.
D = Sample tested in dry condition.
L = Laboratory prepared leachate.
SC = Sub contracted.
^ = Clients supplied information. This may affect the validity of test results.
All MCERTS certified test values reported on a dry weight basis.
The preparation of 10:1 Leachates (to BS EN 12457-2:2002) and 2:1 leachates (to BS EN 12457-1:2002) fall outside the scope of our UKAS accreditation.
Soils and leachates are prepared at our laboratory at Unit D11 Admiralty Park, Station Road, Holton Heath, Poole, Dorset BH16 6HX.
Method uncertainty available on request.
Where results are less than the limit of detection, the value of 0 is used in calculations.

Key to HWOL Acronyms

Acronym		Description
HS	-	Headspace analysis
EH	-	Extractable Hydrocarbons - i.e. everything extracted by the solvent
CU	-	Clean-up - e.g. by florisil, silica gel
1D	-	GC - Single coil gas chromatography
Total	-	Aliphatics & Aromatics
AL	-	Aliphatics only
AR	-	Aromatics only
2D	-	GC-GC - Double coil gas chromatography
#1	-	e.g. EH_2D_Total_#1 means humics mathematically subtracted
#2	-	e.g. EH_2D_Total_#2 means fatty acids mathematically subtracted
_	-	Operator - underscore to separate acronyms (exception for +)
+	-	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total

Deviating Codes

Deviating Samples

The use of any of the following symbols indicates that the sample was deviating and it is possible therefore that the results provided may not be representative of the sample taken.

a – The date and /or time of sampling has not been provided, therefore it is not known if the time lapse between sampling and analysis has exceeded the acceptable holding time(s)*.
b – The test item was received in a container which has not been recommended*.
c – On receipt, the temperature of the sample received was found to fall outside the recommendations of BS ISO 18512:2007, Soil Quality. Guidance on long and short term storage of soil samples*.
d – The sample was received in a container that had not been filled as recommended*.
e – The delay between sampling and sample receipt is greater than the recommended holding time for the analyte of interest in this matrix*.
f – The delay between sampling and analysis is greater than the recommended holding time for the analyte of interest in this matrix*.

In accordance with the requirements of Technical Policy Statement TPS 63; UKAS Policy on Deviating Samples, all UKAS accredited testing laboratories are required to notify their clients that calibration or test results may be invalid where samples are found to be deviating. It is the opinion of ACSE that the term invalid should be interpreted as 'not fully representative of the sample taken at source'.

The following Additional Deviating Sample Codes may also be used.

I/S – Insufficient sample mass/volume received for accurate quantification of this analyte.
U/S – The sample received was deemed unsuitable for accurate determination of this analyte using the Test Methods available.
S/C - The sample received was subcontracted for analysis.

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Registered in England and
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Chemistry
ACS Environmental Ltd
Unit 14, Blackhill Road West
Holton Heath Trading Park
Poole
BH16 6LE

Normec DETS Limited
Unit 1
Rose Lane Industrial Estate
Rose Lane
Lenham Heath
Kent
ME17 2JN
t: 01622 850410

DETS Report No: 25-00336

Site Reference:	None Supplied
Project / Job Ref:	None Supplied
Order No:	E/25-00063 / 11064
Sample Receipt Date:	17/01/2025
Sample Scheduled Date:	17/01/2025
Report Issue Number:	1
Reporting Date:	23/01/2025

Authorised by:

Dave Ashworth
Technical Manager

Dates of laboratory activities for each tested analyte are available upon request.

Opinions and interpretations are outside the laboratory's scope of ISO 17025 accreditation. This certificate is issued in accordance with the accreditation requirements of the United Kingdom Accreditation Service. The results reported herein relate only to the material supplied to the laboratory. This certificate shall not be reproduced except in full, without the prior written approval of the laboratory.

Normec DETS Limited
Unit 1, Rose Lane Industrial Estate
Rose Lane
Lenham Heath
Maidstone
Kent ME17 2JN
Tel : 01622 850410

Water Analysis Certificate - Speciated PAH						
DETS Report No: 25-00336	**~Date Sampled**	10/01/25	10/01/25	10/01/25	10/01/25	10/01/25
ACS Environmental Ltd	**~Time Sampled**	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
~Site Reference: None Supplied	**~TP / BH No**	91539	91540	91541	91542	91543
~Project / Job Ref: None Supplied	**~Additional Refs**	BH05	BH06	BH07	SW02	SW03
~Order No: E/25-00063 / 11064	**~Depth (m)**	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Reporting Date: 23/01/2025	**DETS Sample No**	759484	759485	759486	759487	759488

Determinand	**Unit**	**RL**	**Accreditation**					
Naphthalene	µg/l	< 0.01	NONE	0.03	< 0.01	< 0.01	0.06	0.01
Acenaphthylene	µg/l	< 0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Acenaphthene	µg/l	< 0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Fluorene	µg/l	< 0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Phenanthrene	µg/l	< 0.01	NONE	< 0.01	< 0.01	< 0.01	0.04	< 0.01
Anthracene	µg/l	< 0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Fluoranthene	µg/l	< 0.01	NONE	< 0.01	< 0.01	0.06	0.01	< 0.01
Pyrene	µg/l	< 0.01	NONE	< 0.01	< 0.01	0.07	< 0.01	< 0.01
Benzo(a)anthracene	µg/l	< 0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Chrysene	µg/l	< 0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(b)fluoranthene	µg/l	< 0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(k)fluoranthene	µg/l	< 0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(a)pyrene	µg/l	< 0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Indeno(1,2,3-cd)pyrene	µg/l	< 0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Dibenz(a,h)anthracene	µg/l	< 0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(ghi)perylene	µg/l	< 0.008	NONE	< 0.008	< 0.008	< 0.008	< 0.008	< 0.008
Total EPA-16 PAHs	µg/l	< 0.16	NONE	< 0.16	< 0.16	< 0.16	< 0.16	< 0.16

~Sample details provided by customer and can affect the validity of results

Normec DETS Limited
Unit 1, Rose Lane Industrial Estate
Rose Lane
Lenham Heath
Maidstone
Kent ME17 2JN
Tel : 01622 850410

Water Analysis Certificate - Methodology & Miscellaneous Information
DETS Report No: 25-00336
ACS Environmental Ltd
~Site Reference: None Supplied
~Project / Job Ref: None Supplied
~Order No: E/25-00063 / 11064
Reporting Date: 23/01/2025

Matrix	Analysed On	Determinand	Brief Method Description	Method No
Water	UF	Alkalinity	Determination of alkalinity by titration against hydrochloric acid using bromocresol green as the end point	E103
Water	F	Ammoniacal Nitrogen	Determination of ammoniacal nitrogen by discrete analyser.	E126
Water	UF	BTEX	Determination of BTEX by headspace GC-MS	E101
Water	F	Cations	Determination of cations by filtration followed by ICP-MS	E102
Water	F	Chemical Oxygen Demand (COD)	Determination using a COD reactor followed by colorimetry	E112
Water	UF	Biological Oxygen Demand (BOD)	Determination using BOD sensors measuring the change of pressure	E133
Water	F	Chloride	Determination of chloride by filtration & analysed by ion chromatography	E109
Water	F	Chromium - Hexavalent	Determination of hexavalent chromium by acidification, addition of 1,5 diphenylcarbazide followed by	E116
Water	UF	Cyanide - Complex	Determination of complex cyanide by distillation followed by colorimetry	E115
Water	UF	Cyanide - Free	Determination of free cyanide by distillation followed by colorimetry	E115
Water	UF	Cyanide - Total	Determination of total cyanide by distillation followed by colorimetry	E115
Water	UF	Cyclohexane Extractable Matter (CEM)	Gravimetrically determined through liquid:liquid extraction with cyclohexane	E111
Water	F	Diesel Range Organics (C10 - C24)	Determination of liquid:liquid extraction with hexane followed by GC-FID	E104
Water	F	Dissolved Organic Content (DOC)	Determination of DOC by filtration followed by low heat with persulphate addition followed by IR dete	E110
Water	UF	Electrical Conductivity	Determination of electrical conductivity by electrometric measurement	E123
Water	F	EPH (C10 – C40)	Determination of liquid:liquid extraction with hexane followed by GC-FID	E104
Water	F	EPH TEXAS (C6-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C40)	Determination of liquid:liquid extraction with hexane followed by GC-FID for C8 to C40. C6 to C8 by headspace GC-MS	E104
Water	F	Fluoride	Determination of Fluoride by filtration & analysed by ion chromatography	E109
Water	F	Hardness	Determination of Ca and Mg by ICP-MS followed by calculation	E102
Leachate	F	Leachate Preparation - NRA	Based on National Rivers Authority leaching test 1994	E301
Leachate	F	Leachate Preparation - WAC	Based on BS EN 12457 Pt1, 2, 3	E302
Water	F	Metals	Determination of metals by filtration followed by ICP-MS	E102
Water	F	Mineral Oil (C10 - C40)	Determination of liquid:liquid extraction with hexane followed by GI-FID	E104
Water	F	Nitrate	Determination of nitrate by filtration & analysed by ion chromatography	E109
Water	UF	Monohydric Phenol	Determination of phenols by distillation followed by colorimetry	E121
Water	F	PAH - Speciated (EPA 16)	Determination of PAH compounds by concentration through SPE cartridge, collection in dichloromethane followed by GC-MS	E105
Water	F	PCB - 7 Congeners	Determination of PCB compounds by concentration through SPE cartridge, collection in dichlorometha	E108
Water	UF	Petroleum Ether Extract (PEE)	Gravimetrically determined through liquid:liquid extraction with petroleum ether	E111
Water	UF	pH	Determination of pH by electrometric measurement	E107
Water	F	Phosphate	Determination of phosphate by filtration & analysed by ion chromatography	E109
Water	UF	Redox Potential	Determination of redox potential by electrometric measurement	E113
Water	F	Sulphate (as SO4)	Determination of sulphate by filtration & analysed by ion chromatography	E109
Water	UF	Sulphide	Determination of sulphide by distillation followed by colorimetry	E118
Water	F	SVOC	Determination of semi-volatile organic compounds by concentration through SPE cartridge, collection in dichloromethane followed by GC-MS	E106
Water	UF	Toluene Extractable Matter (TEM)	Gravimetrically determined through liquid:liquid extraction with toluene	E111
Water	UF	Total Organic Carbon (TOC)	Low heat with persulphate addition followed by IR detection	E110
Water	F	TPH CWG (ali: C5-C6, C6-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C34, aro: C5-C7, C7-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C35)	Determination of liquid:liquid extraction with hexane, fractionating with SPE followed by GC-FID for C8 to C35. C5 to C8 by headspace GC-MS	E104
Water	F	TPH LQM (ali: C5-C6, C6-C8, C8-C10, C10-C12, C12-C16, C16-C35, C35-C44, aro: C5-C7, C7-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C35, C35-C44)	Determination of liquid:liquid extraction with hexane, fractionating with SPE followed by GC-FID for C8 to C44. C5 to C8 by headspace GC-MS	E104
Water	UF	VOCs	Determination of volatile organic compounds by headspace GC-MS	E101
Water	UF	VPH (C6-C8 & C8-C10)	Determination of hydrocarbons C6-C8 by headspace GC-MS & C8-C10 by GC-FID	E101

Key

F Filtered
UF Unfiltered
~Sample details provided by customer and can affect the validity of results

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E-Mail: sales@southeastwater.co.uk
Website: www.sewscientificservices.co.uk

ANALYTICAL REPORT

ACS Environmental Testing Ltd
Unit 14 B
Blackhill Road West, Holton Heath Trading Park
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Dorset
BH16 6LE

Date Received: 14/01/2025

Certificate Number: 1364063-1 Final

Order Number: E/25-00063/11059

Date Reported: 21/01/2025

Lab Ref.	Sample Details	Method	Test	Result	Units	Limit	Flag
4945631	Desc: 91542 Order No: E/25-00063/11059 Received Date: 14/01/2025 Tested Date: 14/01/2025 Sampling Date: 10/01/2025 00:00 Sample Type: NS : Not Specified Product: SS-MICRO0 The matrix type has not been recorded and as a result the test result(s) may be invalid. The time of sampling has not been recorded and as a result the test result(s) may be invalid.	3724	Chromium VI	<2.0	µg / l		*

Richard Brown

Laboratory Manager

Disclaimers:

Unless otherwise stated, all results apply to the sample as received. Information provided by the customer (includes Date, Time, Sample Matrix & Sample Description) can affect the validity of the result.
Opinions and interpretations expressed in this report are outside the scope of UKAS accreditation.
Details of Uncertainty of Measurement and Analytical Quality Control are available on request.
Where a statement of conformity to a Regulatory Standard or customer limit is provided, the uncertainty of measurement is not taken into account unless shown on the certificate.
*** - denotes non UKAS accredited test**

South East Water Scientific Services
3 Columbus Drive, Farnborough
Hampshire, GU14 0NZ
E-Mail: sales@southeastwater.co.uk
Website: www.sewscientificservices.co.uk

ANALYTICAL REPORT

ACS Environmental Testing Ltd
Unit 14 B
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Dorset
BH16 6LE

Date Received: 14/01/2025

Certificate Number: 1364064-1 Final

Order Number: E/25-00063/11059

Date Reported: 21/01/2025

Lab Ref.	Sample Details	Method	Test	Result	Units	Limit	Flag
4945632	Desc: 91543 Order No: E/25-00063/11059 Received Date: 14/01/2025 Tested Date: 14/01/2025 Sampling Date: 10/01/2025 00:00 Sample Type: NS : Not Specified Product: SS-MICRO0 The matrix type has not been recorded and as a result the test result(s) may be invalid. The time of sampling has not been recorded and as a result the test result(s) may be invalid.	3724	Chromium VI	54.3	µg / l		*

Richard Brown

Laboratory Manager

Disclaimers:

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Details of Uncertainty of Measurement and Analytical Quality Control are available on request.
Where a statement of conformity to a Regulatory Standard or customer limit is provided, the uncertainty of measurement is not taken into account unless shown on the certificate.
*** - denotes non UKAS accredited test**

APPENDIX F

Ground Gas Monitoring Results

ACS
ANALYTICAL CONSTRUCTION SERVICES
A PHENNA GROUP COMPANY

Project Name	Vector Aerospace
Project Number	23-51237
Site Address	Fleetlands, Fareham Rd, Gosport
Client	Standard Aero

Ground Gas Monitoring Summary

Borehole: CP01

ACS
ANALYTICAL CONSTRUCTION SERVICES
A PHENNA GROUP COMPANY

Date	Atmoshpheric Pressure on site (mb)	Pressure Trend (Past 3 hours*)	Methane (%)		Carbon Dioxide (%)		Oxygen (%)		Hydrogen Sulphide (ppm)		Carbon Monoxide (ppm)		VOC (ppm)	Flow (l/hr)		Depth to Groundwater (mbgl)	Depth to Base (mbgl)
			Peak	Steady	Peak	Steady	Minimum	Steady	Peak	Steady	Peak	Steady		Peak	Steady		
09/01/24	1028	Steady	0.0	0.0	0.6	0.6	19.4	19.4	0	0	0	0	0.00	0.0	0.0	1.20	6.00
18/01/24	1007	Rising	0.0	0.0	3.7	3.6	17.1	17.5	0	0	0	0	0.00	0.0	0.0	1.17	6.00
27/01/24	1023	Falling	0.1	0.0	3.9	3.9	16.4	16.4	0	0	7	7	0.00	0.0	0.0	1.29	6.00

* - Data obtained from nearest public access weather station

Maximum Steady Parameter Values

Parameter	Value	Date
Methane (%)	0	09/01/24
Carbon Dioxide (%)	3.9	27/01/24
Oxygen (%) (Minimum Value)	16.4	27/01/24
Hydrogen Sulphide (ppm)	0	09/01/24
Carbon Monoxide (ppm)	7	27/01/24
VOC (ppm)	0	09/01/24
Flow (l/hr)	0	09/01/24

Comments

Date	Comment

Project Name	Vector Aerospace
Project Number	23-51237
Site Address	Fleetlands, Fareham Rd, Gosport
Client	Standard Aero

Ground Gas Monitoring Summary

Borehole: CP02

ACS
ANALYTICAL CONSTRUCTION SERVICES
A PHENNA GROUP COMPANY

Date	Atmoshpheric Pressure on site (mb)	Pressure Trend (Past 3 hours*)	Methane (%)		Carbon Dioxide (%)		Oxygen (%)		Hydrogen Sulphide (ppm)		Carbon Monoxide (ppm)		VOC (ppm)	Flow (l/hr)		Depth to Groundwater (mbgl)	Depth to Base (mbgl)
			Peak	Steady	Peak	Steady	Minimum	Steady	Peak	Steady	Peak	Steady		Peak	Steady		
09/01/24	1028	Steady	0.0	0.0	0.5	0.5	19.4	19.4	0	0	0	0	0.0	109.1	0.0	3.92	5.97
18/01/24	1007	Rising	0.0	0.0	4.5	4.5	12.5	12.5	0	0	0	0	0.0	32.9	0.0	4.4	5.95
27/01/24	1023	Falling	0.0	0.0	5.1	5.1	12.4	12.4	0	0	0	0	0.0	3.3	0.0	4.05	5.95

* - Data obtained from nearest public access weather station

Maximum Steady Parameter Values

Parameter	Value	Date
Methane (%)	0	09/01/24
Carbon Dioxide (%)	5.1	27/01/24
Oxygen (%) (Minimum Value)	12.4	27/01/24
Hydrogen Sulphide (ppm)	0	09/01/24
Carbon Monoxide (ppm)	0	09/01/24
VOC (ppm)	0	09/01/24
Flow (l/hr)	0	09/01/24

Comments

Date	Comment

Project Name	Vector Aerospace
Project Number	23-51237
Site Address	Fleetlands, Fareham Rd, Gosport
Client	Standard Aero

Ground Gas Monitoring Summary

Borehole: CP03

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Date	Atmoshpheric Pressure on site (mb)	Pressure Trend (Past 3 hours*)	Methane (%)		Carbon Dioxide (%)		Oxygen (%)		Hydrogen Sulphide (ppm)		Carbon Monoxide (ppm)		VOC (ppm)	Flow (l/hr)		Depth to Groundwater (mbgl)	Depth to Base (mbgl)
			Peak	Steady	Peak	Steady	Minimum	Steady	Peak	Steady	Peak	Steady		Peak	Steady		
09/01/24	1028	Steady	0.0	0.0	0.5	0.5	19.4	19.4	0	0	0	0	0.0	110.4	0.0	4.63	5.97
18/01/24	1007	Rising	0.0	0.0	4.1	4.1	12.2	12.2	0	0	0	0	0.0	90.9	0.0	4.8	5.98
27/01/24	1023	Falling	0.0	0.0	4.7	4.7	12.2	12.2	0	0	0	0	0.0	23.4	0.0	4.27	5.99

* - Data obtained from nearest public access weather station

Maximum Steady Parameter Values

Parameter	Value	Date
Methane (%)	0	09/01/24
Carbon Dioxide (%)	4.7	27/01/24
Oxygen (%) (Minimum Value)	12.2	18/01/24
Hydrogen Sulphide (ppm)	0	09/01/24
Carbon Monoxide (ppm)	0	09/01/24
VOC (ppm)	0	09/01/24
Flow (l/hr)	0	09/01/24

Comments

Date	Comment

Project Name	Vector Aerospace
Project Number	23-51237
Site Address	Fleetlands, Fareham Rd, Gosport
Client	Standard Aero

Ground Gas Monitoring Summary

Borehole: CP04

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Date	Atmoshpheric Pressure on site (mb)	Pressure Trend (Past 3 hours*)	Methane (%)		Carbon Dioxide (%)		Oxygen (%)		Hydrogen Sulphide (ppm)		Carbon Monoxide (ppm)		VOC (ppm)	Flow (l/hr)		Depth to Groundwater (mbgl)	Depth to Base (mbgl)
			Peak	Steady	Peak	Steady	Minimum	Steady	Peak	Steady	Peak	Steady		Peak	Steady		
09/01/24	1028	Steady	0.0	0.0	0.5	0.5	19.4	19.4	0	0	0	0	0.0	0.0	0.0	3.27	6.00
18/01/24	1007	Rising	0.0	0.0	1.8	1.8	15.5	15.5	0	0	0	0	0.0	0.0	0.0	3.72	5.99
27/01/24	1023	Falling	0.0	0.0	2.2	2.2	15.3	15.3	0	0	0	0	0.0	3.3	0.0	3.49	5.99

* - Data obtained from nearest public access weather station

Maximum Steady Parameter Values

Parameter	Value	Date
Methane (%)	0	09/01/24
Carbon Dioxide (%)	2.2	27/01/24
Oxygen (%) (Minimum Value)	15.3	27/01/24
Hydrogen Sulphide (ppm)	0	09/01/24
Carbon Monoxide (ppm)	0	09/01/24
VOC (ppm)	0	09/01/24
Flow (l/hr)	0	09/01/24

Comments

Date	Comment

Project Name	Vector Aerospace
Project Number	25-50248
Site Address	Fleetlands, Fareham Rd, Gosport
Client	Standard Aero

Ground Gas Monitoring Summary

Borehole: CP05

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Date	Atmoshpheric Pressure on site (mb)	Pressure Trend (Past 3 hours*)	Methane (%)		Carbon Dioxide (%)		Oxygen (%)		Hydrogen Sulphide (ppm)		Carbon Monoxide (ppm)		VOC (ppm)	Flow (l/hr)		Depth to Groundwater (mbgl)	Depth to Base (mbgl)
			Peak	Steady	Peak	Steady	Minimum	Steady	Peak	Steady	Peak	Steady		Peak	Steady		
10/01/25	1015	Steady	0.0	0.0	0.8	0.7	20.6	20.8	0	0	0	0	0.05	0.0	0.0	0.51	4.91

* - Data obtained from nearest public access weather station

Maximum Steady Parameter Values

Parameter	Value	Date
Methane (%)	0	10/01/25
Carbon Dioxide (%)	0.7	10/01/25
Oxygen (%) (Minimum Value)	20.8	10/01/25
Hydrogen Sulphide (ppm)	0	10/01/25
Carbon Monoxide (ppm)	0	10/01/25
VOC (ppm)	0.05	10/01/25
Flow (l/hr)	0	10/01/25

Comments

Date	Comment

Project Name	Vector Aerospace
Project Number	25-50248
Site Address	Fleetlands, Fareham Rd, Gosport
Client	Standard Aero

Ground Gas Monitoring Summary

Borehole: CP06

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Date	Atmoshpheric Pressure on site (mb)	Pressure Trend (Past 3 hours*)	Methane (%)		Carbon Dioxide (%)		Oxygen (%)		Hydrogen Sulphide (ppm)		Carbon Monoxide (ppm)		VOC (ppm)	Flow (l/hr)		Depth to Groundwater (mbgl)	Depth to Base (mbgl)
			Peak	Steady	Peak	Steady	Minimum	Steady	Peak	Steady	Peak	Steady		Peak	Steady		
10/01/25	1015	Steady	0.0	0.0	1.4	1.4	20.5	20.6	0	0	0	0	0.05	0.0	0.0	0.32	4.94

* - Data obtained from nearest public access weather station

Maximum Steady Parameter Values

Parameter	Value	Date
Methane (%)	0	10/01/25
Carbon Dioxide (%)	1.4	10/01/25
Oxygen (%) (Minimum Value)	20.6	10/01/25
Hydrogen Sulphide (ppm)	0	10/01/25
Carbon Monoxide (ppm)	0	10/01/25
VOC (ppm)	0.05	10/01/25
Flow (l/hr)	0	10/01/25

Comments

Date	Comment
10/01/2025	Stopped at 100 seconds due to water level

Project Name	Vector Aerospace
Project Number	25-50248
Site Address	Fleetlands, Fareham Rd, Gosport
Client	Standard Aero

Ground Gas Monitoring Summary

Borehole: CP07

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Date	Atmoshpheric Pressure on site (mb)	Pressure Trend (Past 3 hours*)	Methane (%)		Carbon Dioxide (%)		Oxygen (%)		Hydrogen Sulphide (ppm)		Carbon Monoxide (ppm)		VOC (ppm)	Flow (l/hr)		Depth to Groundwater (mbgl)	Depth to Base (mbgl)
			Peak	Steady	Peak	Steady	Minimum	Steady	Peak	Steady	Peak	Steady		Peak	Steady		
10/01/25	1015	Steady	0.0	0.0	0.1	0.1	20.0	20.0	0	0	0	0	0.64	-0.2	-0.1	0.46	4.88

* - Data obtained from nearest public access weather station

Maximum Steady Parameter Values

Parameter	Value	Date
Methane (%)	0	10/01/25
Carbon Dioxide (%)	0.1	10/01/25
Oxygen (%) (Minimum Value)	20	10/01/25
Hydrogen Sulphide (ppm)	0	10/01/25
Carbon Monoxide (ppm)	0	10/01/25
VOC (ppm)	0.64	10/01/25
Flow (l/hr)	-0.1	10/01/25

Comments

Date	Comment

APPENDIX G

Supplementary Stages 1 & 2 – Hazardous Substances Identification

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Trade Name	Hazardous Substance	Composition	CLP Classification	Physical State	Solubility	Toxicity	Mobility	Persistence	Potential to Pollute Soil / Groundwater	Relevant Hazardous Substance
BETZDEARBORN AE1125	Alcohols, C10-16, ethoxylated		Acute Tox. 4;H302, Eye Dam. 1;H318, Aquatic Chronic 3;H412 H302 Harmful if swallowed. H318 Causes serious eye damage. H412 Harmful to aquatic life with long lasting effects.	Liquid		General Information Occupational exposure to the substance or mixture may cause adverse effects. Eye Contact Causes serious eye irritation. Ingestion May cause discomfort if swallowed. However, ingestion is not likely to be a primary route of occupational exposure.		Testing has shown product not to be readily bio-degradable.	Based on available data, the classification criteria are not met for hazardous to the aquatic environment. The aquatic toxicity data were obtained under standard laboratory conditions. Used under normal conditions, the product has been shown to achieve substantial absorption onto suspended solids, resulting in reduced toxicity.	POSSIBLE
Trade Name	**Hazardous Substance**	**Composition**	**CLP Classification**	**Physical State**	**Solubility**	**Toxicity**	**Mobility**	**Persistence**	**Potential to Pollute Soil / Groundwater**	**Relevant Hazardous Substance**
CAUSTIC SODA SOLUTION,	sodium hydroxide solution >5%	sodium hydroxide solution >5%	Acute Toxicity Estimate (oral): LD_{50} > 500 mg/kg, Oral, Rabbit Skin Corr. 1A ≥ 5 % Skin Corr. 1B ≥ 2 - < 5 % Skin Irrit. 2 ≥ 0.5 - < 2 % Eye Irrit. 2 ≥ 0.5 - < 2 % Classification Met. Corr. 1 - H290 Skin Corr. 1A - H314 Eye Dam. 1 - H318	Liquid.	Soluble in water.	Ingestion May cause chemical burns in mouth, oesophagus and stomach. Skin contact Causes severe burns. Eye contact Causes serious eye damage. May cause permanent damage if eye is not immediately irrigated. The product may affect the acidity (pH) of water which may have hazardous effects on aquatic organisms.	The product is soluble in water.	The product contains only inorganic substances which are not bio-degradable.	The product is water-soluble and may spread in water systems.	YES
Trade Name	**Hazardous Substance**	**Composition**	**CLP Classification**	**Physical State**	**Solubility**	**Toxicity**	**Mobility**	**Persistence**	**Potential to Pollute Soil / Groundwater**	**Relevant Hazardous Substance**
HYDROCHLORIC ACID	Hydrochloric Acid >25%	Hydrochloric Acid >25%	Physical hazards Met. Corr. 1 - H290 Health hazards Skin Corr. 1A - H314 Eye Dam. 1 - H318 STOT SE 3 - H335	Fuming liquid. Liquid.	Soluble in water.	Inhalation May cause respiratory system irritation. Ingestion May cause chemical burns in mouth, oesophagus and stomach.	The product is soluble in water.	The product is expected to be bio-degradable	The product components are not classified as environmentally hazardous. However, large or frequent spills may have hazardous effects on the environment.	YES

						Skin contact Causes severe burns. Eye contact Causes serious eye damage. May cause permanent damage if eye is not immediately Irrigated. Not considered toxic to fish.				
Trade Name	**Hazardous Substance**	**Composition**	**CLP Classification**	**Physical State**	**Solubility**	**Toxicity**	**Mobility**	**Persistence**	**Potential to Pollute Soil / Groundwater**	**Relevant Hazardous Substance**
KLARAID PC1194	1,2-Ethanediamine, polymer with (chloromethyl)oxirane and N-methylmethanamine	1,2-Ethanediamine, polymer with (chloromethyl) oxirane and N-methylmethanamine	R 52/53 : Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment. Health/ physical hazard Not considered hazardous to health	Liquid	Soluble in water	Skin contact Prolonged or repeated contact may cause transient irritation. Eye contact Prolonged or repeated contact may cause transient irritation. Ingestion May cause slight gastrointestinal irritation Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.		Testing has shown product not to be readily bio-degradable.	Environmental hazards Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.	YES
Trade Name	**Hazardous Substance**	**Composition**	**CLP Classification**	**Physical State**	**Solubility**	**Toxicity**	**Mobility**	**Persistence**	**Potential to Pollute Soil / Groundwater**	**Relevant Hazardous Substance**
LIQ LIME (KALIC)	Calcium Hydroxide Suspension	Calcium Hydroxide	H315 Causes skin irritation. H318 Causes serious eye damage. H335 May cause respiratory irritation. Skin Irrit. 2 - H315 Eye Dam. 1 - H318 STOT SE 3 - H335	Viscous Liquid	Soluble in water.	Inhalation May cause respiratory irritation. Ingestion Gastrointestinal symptoms, including upset stomach. Skin contact May cause skin irritation. Eye contact Causes serious eye damage. Not considered toxic to fish.	The product is partly miscible with water and may spread in the aquatic environment.	The product contains only inorganic substances which are not bio-degradable.	The product is not expected to be hazardous to the environment. However, large or frequent spills may have hazardous effects on the environment. The product may affect the acidity (pH) of water which may have hazardous effects on aquatic organisms.	YES
Trade Name	**Hazardous Substance**	**Composition**	**CLP Classification**	**Physical State**	**Solubility**	**Toxicity**	**Mobility**	**Persistence**	**Potential to Pollute Soil / Groundwater**	**Relevant Hazardous Substance**
SODIUM BISULPHITE	Sodium Bisulphate	Sodium Bisulphate	Acute Tox. 4 – H302	Liquid.	Soluble in water.	Health hazards Acute Tox. 4 – H302		There are no data on the	The product components are not classified as	YES

SOLUTION 15 - 45 %						H302 Harmful if swallowed Inhalation Gas or vapour in high concentrations may irritate the respiratory system. Symptoms following overexposure may include the following: Coughing. Ingestion Harmful if swallowed Skin contact Skin irritation should not occur when used as recommended. Eye contact May cause temporary eye irritation. Not considered toxic to fish.		degradability of this product.	environmentally hazardous. However, large or frequent spills may have hazardous effects on the environment.	
Trade Name	**Hazardous Substance**	**Composition**	**CLP Classification**	**Physical State**	**Solubility**	**Toxicity**	**Mobility**	**Persistence**	**Potential to Pollute Soil / Groundwater**	**Relevant Hazardous Substance**
FERRIC SULPHATE 40% SOLUTION	iron (iii) sulphate,	iron (iii) sulphate iron (ii) sulphate Sulphuric Acid Manganese Sulphate	Acute Tox. 4 - H302 Skin Corr. 1C - H314 Eye Dam. 1 - H318 H302 Harmful if swallowed. H314 Causes severe skin burns and eye damage.	Liquid.	Completely soluble in water	Inhalation Upper respiratory irritation. May cause damage to mucous membranes in nose, throat, lungs and bronchial system. Ingestion Causes burns. Swallowing concentrated chemical may cause severe internal injury. Skin contact Causes burns. Prolonged and frequent contact may cause redness and irritation. Eye contact Causes burns. May cause chemical eye burns. May cause blurred vision and serious eye damage.	The product is soluble in water.	Contains mainly inorganic substances which are not biodegradable. The other substances in the product are not expected to be readily bio-degradable	The product components are not classified as environmentally hazardous. However, large or frequent spills may have hazardous effects on the environment. The product may affect the acidity (pH) of water which may have hazardous effects on aquatic organisms.	YES
	iron (ii) sulphate		Acute Tox. 4 - H302 Skin Irrit. 2 - H315 Eye Irrit. 2 - H319				The product is soluble in water.	The product is not expected to be bio-degradable.		
	Sulphuric Acid		Skin Corr. 1A - H314 Eye Dam. 1 - H318							

	Manganese Sulphate						Product is soluble in water.		The product contains substances which are toxic to aquatic organisms and which may cause long-term adverse effects in the aquatic environment.	
Trade Name	**Hazardous Substance**	**Composition**	**CLP Classification**	**Physical State**	**Solubility**	**Toxicity**	**Mobility**	**Persistence**	**Potential to Pollute Soil / Groundwater**	**Relevant Hazardous Substance**
ARDROX 185	sodium hydroxide	sodium hydroxide	Skin Corr./Irrit. 1A H314 Causes severe skin burns and eye damage. Eye Dam./Irrit. 1 H318 Causes serious eye damage. Met. Corr. 1 H290 May be corrosive to metals.	powder	fully soluble	Irritation Assessment of irritating effects: Highly corrosive! Damages skin and eyes. May cause severe damage to the eyes. May cause severe burns of the mouth and throat if orally ingested, as well as a danger of perforation of the oesophagus and the stomach			Assessment of aquatic toxicity: There are no test results available for this product. Do not allow to enter drains or waterways. The mixture has been assessed following regulation (EC) No 1272/2008 and is not classified as dangerous for the environment	YES
Trade Name	**Hazardous Substance**	**Composition**	**CLP Classification**	**Physical State**	**Solubility**	**Toxicity**	**Mobility**	**Persistence**	**Potential to Pollute Soil / Groundwater**	**Relevant Hazardous Substance**
ARDROX 1435A	sodium hydroxide	sodium hydroxide	Skin Corr./Irrit. 1A H314 Causes severe skin burns and eye damage. Eye Dam./Irrit. 1 H318 Causes serious eye damage. Met. Corr. 1 H290 May be corrosive to metals.	liquid	miscible	Irritation Assessment of irritating effects: Highly corrosive! Damages skin and eyes. May cause severe damage to the eyes. May cause severe burns of the mouth and throat if orally ingested, as well as a danger of perforation of the oesophagus and the stomach			Assessment of aquatic toxicity: There are no test results available for this product. Do not allow to enter drains or waterways. The mixture has been assessed following regulation (EC) No 1272/2008 and is not classified as dangerous for the environment.	YES
Trade Name	**Hazardous Substance**	**Composition**	**CLP Classification**	**Physical State**	**Solubility**	**Toxicity**	**Mobility**	**Persistence**	**Potential to Pollute Soil / Groundwater**	**Relevant Hazardous Substance**
ARDROX 1435B	Sodium permangana te	Water, inorganic salts	Skin Corr./Irrit. 1A H314 Causes severe skin burns and eye damage. Eye Dam./Irrit. 1 H318 Causes serious eye damage.	liquid	soluble	Assessment of irritating effects: May cause severe burns of the mouth and throat if orally ingested, as well as a danger of perforation of the oesophagus and the stomach. Highly corrosive! Damages skin and eyes. May cause severe damage to the eyes.			Very toxic to aquatic life with long lasting effects.	YES

			Aquatic Chronic 1 H410 Very toxic to aquatic life with long lasting effects. Ox. Liq. 2 H272 May intensify fire; oxidizer. STOT RE 1 H372 Causes damage to organs through prolonged or repeated exposure. Aquatic Acute 1 H400 Very toxic to aquatic life.							
Trade Name	**Hazardous Substance**	**Composition**	**CLP Classification**	**Physical State**	**Solubility**	**Toxicity**	**Mobility**	**Persistence**	**Potential to Pollute Soil / Groundwater**	**Relevant Hazardous Substance**
ARDROX 1873A	Acetic acid, hydroxy-, monoammonium salt	organic compounds, Water, organic acids, amines	Acute Tox. 4 (oral) H302	liquid	soluble	Skin Corr./Irrit. 1B H314 Causes severe skin burns and eye damage. Eye Dam./Irrit. 1 H318 Causes serious eye damage. Aquatic Chronic 3 H412 Harmful to aquatic life with long lasting effects. <u>Irritation</u> Assessment of irritating effects: May cause severe burns of the mouth and throat if orally ingested, as well as a danger of perforation of the oesophagus and the stomach. Corrosive! Damages skin and eyes. May cause severe damage to the eyes.	miscible		Harmful to aquatic life with long lasting effects	YES
	Glycolic acid		Met. Corr. 1 Acute Tox. 4 (Inhalation - vapour) Eye Dam./Irrit. 1 Skin Corr./Irrit. 1B H314, H332, H290 EUH071							
	Triammonium citrate		Eye Dam./Irrit. 2 H319							
	N,N-diethylhydroxylamine		Flam. Liq. 3 Acute Tox. 4 (Inhalation - vapour) Acute Tox. 4 (dermal) STOT SE (Respiratory system) 3 (irr. to respiratory syst.) Aquatic Chronic 2 H312, H332, H411, H226, H335							

Trade Name	Hazardous Substance	Composition	CLP Classification	Physical State	Solubility	Toxicity	Mobility	Persistence	Potential to Pollute Soil / Groundwater	Relevant Hazardous Substance
ARDROX 3705	No dangerous ingredients	Water, inorganic salts	.	Aqueous solution	soluble	Skin irritation : May cause skin irritation in susceptible persons. Eye irritation : May cause eye irritation with susceptible persons			slightly water endangering Do not flush into surface water or sanitary sewer system. Avoid subsoil penetration	YES
Trade Name	**Hazardous Substance**	**Composition**	**CLP Classification**	**Physical State**	**Solubility**	**Toxicity**	**Mobility**	**Persistence**	**Potential to Pollute Soil / Groundwater**	**Relevant Hazardous Substance**
ARDROX 2302	2-(2-butoxyethoxy)ethanol		Eye Dam./Irrit. 2 H319	liquid	soluble	Skin corrosion/ irritation. Eye Dam./Irrit. Serious eye damage/eye irritation. Reproductive toxicity STOT SE Specific target organ toxicity — single exposure Aquatic Chronic Hazardous to the aquatic environment - chronic Acute Tox. Acute toxicity H314 Causes severe skin burns and eye damage. H412 Harmful to aquatic life with long lasting effects. H335 May cause respiratory irritation. H360D May damage the unborn child. H319 Causes serious eye irritation. H302 + H312 + H332 Harmful if swallowed, in contact with skin or if inhaled H315 Causes skin irritation.	miscible		Harmful to aquatic life with long lasting effects.	YES
	2-aminoethanol		Acute Tox. 4 (Inhalation - vapour) Acute Tox. 4 (oral) Acute Tox. 4 (dermal) Skin Corr./Irrit. 1B Eye Dam./Irrit. 1 STOT SE 3 (irr. to respiratory syst.) Aquatic Chronic 3 H335, H314, H302 + H312 + H332, H412							
	N-methyl-2-pyrrolidone		Skin Corr./Irrit. 2 Eye Dam./Irrit. 2 Repr. 1B (unborn child) STOT SE 3 (irr. to respiratory syst.) H319, H315, H335, H360D							
Trade Name	**Hazardous Substance**	**Composition**	**CLP Classification**	**Physical State**	**Solubility**	**Toxicity**	**Mobility**	**Persistence**	**Potential to Pollute Soil / Groundwater**	**Relevant Hazardous Substance**
BONDERITE M-CR	hydrofluoric acid		Acute Tox. 2; Inhalation H330 Acute Tox. 2; Oral H300 Acute Tox. 1; Dermal H310 Skin Corr. 1A H314						Very toxic to aquatic life with long lasting effects.	YES

	Chromium trioxide		Muta. 1B H340 Carc. 1A H350 Repr. 2 H361f Ox. Sol. 1 H271 Acute Tox. 3; Oral H301 Acute Tox. 2; Dermal H310 Acute Tox. 2; Inhalation H330 Skin Corr. 1A H314 Resp. Sens. 1 H334 Skin Sens. 1 H317 STOT RE 1 H372 Aquatic Acute 1 H400 Aquatic Chronic 1 H410							
	fluoroboric acid		Skin Corr. 1B H314 Met. Corr. 1 H290							
	Dihydrogen hexafluorozirconate(2-)		Acute Tox. 3; Oral H301 Acute Tox. 3; Dermal H311 Skin Corr. 1B H314 Acute Tox. 3; Inhalation H331 Met. Corr. 1 H290							
	boric acid		Repr. 1B H360FD							
Trade Name	**Hazardous Substance**	**Composition**	**CLP Classification**	**Physical State**	**Solubility**	**Toxicity**	**Mobility**	**Persistence**	**Potential to Pollute Soil / Groundwater**	**Relevant Hazardous Substance**
CHEMETALL ARDROX 1218	Phosphoric Acid	Phosphoric Acid 30-60%	R34 – Causes Burns	Slightly viscous liquid	Miscible with water	Corrosive to eyes and skin. Causes burns. Inhalation of spray or mist from the working solution may irritate the respiratory system. <u>Inhalation</u> Inhalation of the mist or spray from the working solution may cause irritation to the nasal tract and respiratory system <u>Ingestion</u> Irritation of, or burns to, the mouth, throat and digestive system <u>Skin</u> Burns may occur <u>Eyes</u> May cause chemical eye burns		Generally, the inorganic constituents would not expect to be bio-degradable.	This product contains phosphate. Low concentrations in receiving waters may act as a plant nutrient or precipitate heavy metals. Although the acidity in receiving waters may be reduced by natural water hardness salts, the phosphate may persist indefinitely . High concentrations in receiving waters will injure aquatic life by the effects of pH.	YES

Trade Name	Hazardous Substance	Composition	CLP Classification	Physical State	Solubility	Toxicity	Mobility	Persistence	Potential to Pollute Soil / Groundwater	Relevant Hazardous Substance
CHROMIC ACID SOLUTION	chromic acid solution	Chromium trioxide	Respiratory sensitisation Category 1 --- H334 Skin sensitisation Category 1 --- H317 Germ cell mutagenicity Category 1B --- H340 Carcinogenicity Category 1A --- H350 Reproductive toxicity Category 2 --- H361f Specific target organ toxicity - repeated exposure (Inhalation) Category 1 --- H372 Specific target organ toxicity - single exposure (Inhalation) Category 3 --- H335 Acute aquatic toxicity Category 1 --- H400 Chronic aquatic toxicity Category 1 --- H410	liquid	The product is water soluble.	Skin Liquid product causes severe burns, irritation of the digestive system and badly healing sores. Extremely corrosive and destructive to tissue. Destruction of skin tissue as a result of more than 3 minutes exposure. Eyes Causes severe caustic burns to skin and eyes. Aqueous solution causes burns of eyes, skin and mucous membranes. May cause irreversible eye damage Carcinogenic Category 1 Mutagenic Category 2 Toxic to Reproduction Category 3		Inorganic product which is not removable from water by biological processes.	Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. Do not flush into surface water or sanitary sewer system. Avoid subsoil penetration.	YES

Trade Name	Hazardous Substance	Composition	CLP Classification	Physical State	Solubility	Toxicity	Mobility	Persistence	Potential to Pollute Soil / Groundwater	Relevant Hazardous Substance
IRIDITE 15	chromium trioxide	chromium trioxide 40- <60%	Physical and Chemical Hazards Ox. Sol. 1 - H271 Human health Acute Tox. 3 - H301;Acute Tox. 2 - H310;Acute Tox. 2 - H330;Skin Corr. 1A - H314;Resp. Sens. 1 - H334;Skin Sens. 1 - H317;Muta. 1B - H340;Carc. 1A - H350;Repr. 2 - H361f;STOT SE 3 - H335;STOT RE 1 - H372 Environment Aquatic Acute 1 - H400;Aquatic Chronic 1 - H410	Flakes. or Granular / Crystalline powder.	Soluble in water	Acute toxicity: Toxic if swallowed. Fatal in contact with skin. Fatal if inhaled. Skin Corrosion/Irritation: Causes severe skin burns and eye damage. Serious eye damage/irritation: Skin corrosive; corrosivity to eyes is assumed. No testing is needed. Respiratory or skin sensitisation: Sensitising. May cause allergy or asthma symptoms or breathing difficulties if inhaled. Sensitising. May cause an allergic skin reaction. Germ cell mutagenicity: May induce heritable mutations in the germ cells of humans. May cause genetic defects. Carcinogenicity: Known or suspected carcinogen for humans. May cause cancer. Reproductive Toxicity: Possible reproductive impact. Suspected of damaging fertility.	The product is water soluble and may spread in water systems.	The product is not expected to be bio-degradable	Dangerous for the environment if discharged into watercourses. The product may affect the acidity (pH-factor) in water with risk of harmful effects to aquatic organisms. The product contains a substance which may have adverse effects on waste water treatment processes. The product does not contain organically bound halogen. Very toxic to aquatic life with long lasting effects.	YES
	Sodium nitrate	Sodium nitrate 40- <60%	Physical and Chemical Hazards Ox. Sol. 1 - H271 Eye Irrit. 2 - H319							
Trade Name	**Hazardous Substance**	**Composition**	**CLP Classification**	**Physical State**	**Solubility**	**Toxicity**	**Mobility**	**Persistence**	**Potential to Pollute Soil / Groundwater**	**Relevant Hazardous Substance**
NITRIC ACID 65	Nitric acid	Nitric acid >=65 - <=70%	Oxidizing liquids Category 3 --- H272 NITRIC ACID >=65 - <=70% 800000000080 / Version 7.0 2/30 EN Corrosive to metals Category 1 --- H290 Acute toxicity (Inhalation) Category 3	liquid	completely miscible	H272 May intensify fire; oxidizer.H290 May be corrosive to metals. H314 Causes severe skin burns and eye damage. H318 Causes serious eye damage. H331 Toxic if inhaled.	The product is water soluble.		Harmful effects to aquatic organisms due to pH-shift. Do not flush into surface water or sanitary sewer system. Avoid subsoil penetration.	YES

			--- H331 Skin corrosion Category 1A --- H314 Serious eye damage Category 1 --- H318							
Trade Name	**Hazardous Substance**	**Composition**	**CLP Classification**	**Physical State**	**Solubility**	**Toxicity**	**Mobility**	**Persistence**	**Potential to Pollute Soil / Groundwater**	**Relevant Hazardous Substance**
SODIUM HYDROXIDE 20	sodium hydroxide	sodium hydroxide 20%	H314 - Skin Corrosion/Irritation Category 1A, H318 - Serious Eye Damage/Eye Irritation Category 1 Skin Corr. 1A; H314: C ≥ 5 % | Skin Corr. 1B; H314: 2 % ≤ C < 5 % | Skin Irrit. 2; H315: 0,5 % ≤ C < 2 % | Eye Irrit.2; H319: 0,5 % ≤ C < 2 %	Liquid	Miscible	Skin Irritation/Corrosion Reproductivity Serious Eye Damage/Irritation		Low persistence	Harmful to aquatic organisms. Prevent, by any means available, spillage from entering drains or water courses.	YES
Trade Name	**Hazardous Substance**	**Composition**	**CLP Classification**	**Physical State**	**Solubility**	**Toxicity**	**Mobility**	**Persistence**	**Potential to Pollute Soil / Groundwater**	**Relevant Hazardous Substance**
SUPER BEE 300LFG	ethoxylated propoxylate fatty alcohol (block copolymer	ethoxylated propoxylate fatty alcohol (block copolymer	Eye Dam. 1, H318	Liquid	Water: Highly soluble			Not rapidly degradable	The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment.	POSSIBLE
	sodium xylene sulfonate	sodium xylene sulfonate	Eye Irrit. 2, H319							
	sodium metasilicate	sodium metasilicate	Skin Corr. 1B, H314 STOT SE 3, H335							

	sodium nitrite	sodium nitrite	Ox. Sol. 3, H272 Acute Tox. 3 (Oral), H301 Aquatic Acute 1, H400							
Trade Name	**Hazardous Substance**	**Composition**	**CLP Classification**	**Physical State**	**Solubility**	**Toxicity**	**Mobility**	**Persistence**	**Potential to Pollute Soil / Groundwater**	**Relevant Hazardous Substance**
Magnaflux Zyglo ZL-37	C14-20 aliphatics (<=2% aromatics) <50%		Aspiration Hazard Category 1, Specific Target Organ Toxicity - Single Exposure (Narcotic Effects) Category 3; H304, H336, EUH066 [1]	Liquid	Partly miscible	<u>Inhalation</u> May cause drowsiness and dizziness. May be accompanied by sleepiness, reduced alertness, loss of reflexes, lack of co-ordination, and vertigo. Inhalation of aerosols (mists, fumes), generated during normal handling, may be damaging to health. Can cause respiratory irritation in some persons. Can cause further lung damage. Inhaling high concentrations of mixed hydrocarbons can cause narcosis, with nausea, vomiting and light-headedness. Low molecular weight (C2-C12) hydrocarbons can irritate mucous membranes and cause incoordination, giddiness, nausea, vertigo, confusion, headache, appetite loss, drowsiness, tremors and stupor. Serious poisonings may result in respiratory depression and may be fatal. Organic phosphates are very stable and highly hazardous. <u>Ingestion</u> Swallowing may cause aspiration into lungs with risk of chemical pneumonitis; serious consequences may result. (ICSC13733) Accidental ingestion may be damaging to the health of the individual. Ingestion of petroleum hydrocarbons can irritate the pharynx, oesophagus, stomach and small intestine. Symptoms		High persistence	Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment	YES
	isodecyl diphenyl phosphate <35%		Germ Cell Mutagenicity Category 2, Reproductive Toxicity Category 2, Specific Target Organ Toxicity - Repeated Exposure Category 2, Hazardous to the Aquatic Environment Long-Term Hazard Category 1; H341, H361d, H373, H410 [1]							
	alcohols C12-13		Hazardous to the Aquatic Environment Acute Hazard Category 1; H400 [1]							
	triphenyl phosphate		Acute Toxicity (Inhalation) Category 4, Specific Target Organ Toxicity - Repeated Exposure Category 2, Hazardous to the Aquatic Environment Long-							

			Term Hazard Category 1; H332, H373, H410 [1]			include a burning mouth and throat; larger amounts can cause nausea and vomiting, narcosis, weakness, dizziness, slow and shallow breathing, abdominal swelling, unconsciousness and convulsions. Adverse effects of choline esters include nausea, vomiting, abdominal pain, flushing, sweating, salivation, watery eyes, reduced heart rate, heart block, constriction of airways, low blood pressure and tightening of the chest. <u>Skin Contact</u> May degrease skin, producing a skin reaction described as non-allergic contact dermatitis. Material unlikely to produce an irritant dermatitis as described in EC Directives. Repeated exposure may cause skin cracking, flaking or drying following normal handling and use. Open cuts, abraded or irritated skin should not be exposed to this material <u>Eye Damage</u> Can cause eye irritation and damage in some persons. Direct eye contact with petroleum hydrocarbons can be painful, and the corneal epithelium may be temporarily damaged. Aromatic species can cause irritation and excessive tear secretion. <u>Chronic Effects</u> Repeated or long-term occupational exposure is likely to produce cumulative health effects involving organs or biochemical systems. Strong evidence exists that this substance may cause irreversible mutations (though not lethal) even following a single exposure.				

						Harmful: danger of serious damage to health by prolonged exposure through inhalation, in contact with skin and if swallowed. Based on experience with animal studies, exposure to the material may result in toxic effects to the development of the foetus, at levels which do not cause significant toxic effects to the mother. Repeated or prolonged exposures to cholinesterase inhibitors produce symptoms similar to acute effects. In addition workers exposed repeatedly to these substances may exhibit impaired memory and loss of concentration, severe depression and acute psychosis, irritability, confusion, apathy, emotional liability, speech difficulties, headache, spatial disorientation, delayed reaction times, sleepwalking, drowsiness or insomnia.				
Trade Name	**Hazardous Substance**	**Composition**	**CLP Classification**	**Physical State**	**Solubility**	**Toxicity**	**Mobility**	**Persistence**	**Potential to Pollute Soil / Groundwater**	**Relevant Hazardous Substance**
Zyglo ZL-60D	Hydrocarbons, C12-C15, n-alkanes, isoalkanes, cyclics, < 2% aromatics	25-40%	EUH066 Asp. Tox. 1, H304	Liquid		Acute Tox. 4; H302, Harmful if swallowed. Asp. Tox. 1; H304, May be fatal if swallowed and enters airways. Skin Irrit. 2; H315, Causes skin irritation. Eye Dam. 1; H318, Causes serious eye damage. Aquatic Chronic 3; H412, Harmful to aquatic life with long lasting effects.			This product contains substances that are toxic to the environment. May result in adverse effects to aquatic organisms Harmful to aquatic life with long lasting effects.	YES
	Alcohols, C10-12, ethoxylated propoxylated	15-25%	Acute Tox. 4, H302 Eye Dam. 1, H318							
	Alcohols, C12-15-branched and linear, ethoxylated propoxylated	10-15%	Acute Tox. 4, H302 Eye Dam. 1, H318							

	Alcohols, C11-15-secondary, ethoxylated	5-10%	Skin Irrit. 2, H315 Eye Dam. 1, H318							
	Alcohols, C12-C15, branched and linear, ethoxylated, propoxylated	3-5%	Skin Irrit. 2, H315 Eye Irrit. 2, H319							
	N-(2-hydroxypropyl)oleamide	1-3%	Skin Irrit. 2, H315 Eye Irrit. 2, H319							
	7-(diethylamino)-4-methyl-2-benzopyrone	1-3%	Aquatic Chronic 2, H411							
	2-butoxyethanol	<1%	Acute Tox. 4, H302 Acute Tox. 4, H312 Skin Irrit. 2, H315 Eye Irrit. 2, H319 Acute Tox. 4, H332							
	2-butyl-6-(butylamino)-1H-benz[de]isoquinoline-1,3(2H)-dione	<1%	Aquatic Acute 1, H400 (M=1) Aquatic Chronic 1, H410 (M=1)							
Trade Name	**Hazardous Substance**	**Composition**	**CLP Classification**	**Physical State**	**Solubility**	**Toxicity**	**Mobility**	**Persistence**	**Potential to Pollute Soil / Groundwater**	**Relevant Hazardous Substance**
Zyglo ZL-67B	Oxirane, 2-methyl-, polymer with oxirane, mono(2-propylheptyl) ether	40-60%	Acute Tox. 4, H302 Eye Dam. 1, H318	Liquid		Classification of the substance or mixture Acute Tox. 4; H302, Harmful if swallowed. Skin Irrit. 2; H315, Causes skin irritation. Eye Dam. 1; H318, Causes serious eye damage. Aquatic Chronic 3; H412, Harmful to aquatic life with long lasting effects.			Harmful to aquatic life with long lasting effects.	YES
	Alcohols, C10-12, ethoxylated propoxylated	15-25%	Acute Tox. 4, H302 Eye Dam. 1, H318							

	Alcohols, C12-C15, branched and linear, ethoxylated, propoxylated	15-25%	Skin Irrit. 2, H315 Eye Irrit. 2, H319							
	Hydrocarbons, C12-C15, n-alkanes, isoalkanes, cyclics, < 2% aromatics	5-10%	EUH066 Asp. Tox. 1, H304							
	7-(diethylamino)-4-methyl-2-benzopyrone	1-3%	Aquatic Chronic 2, H411							
	2-butyl-6-(butylamino)-1H-benz[de]isoquinoline-1,3(2H)-dione	<1%	Aquatic Acute 1, H400 (M=1) Aquatic Chronic 1, H410 (M=1)							
Trade Name	**Hazardous Substance**	**Composition**	**CLP Classification**	**Physical State**	**Solubility**	**Toxicity**	**Mobility**	**Persistence**	**Potential to Pollute Soil / Groundwater**	**Relevant Hazardous Substance**
Zyglo ZR-10C	Oxirane, 2-methyl-, polymer with oxirane, mono(2-propylheptyl) ether		Acute Tox. 4, H302 Eye Dam. 1, H318	Liquid	Soluble (100%)	The product contains substances that cause serious eye damage. Contact with these substances can cause irreversible effects on the eye / serious eye damage. Harmful if swallowed. (H302) Causes serious eye damage. (H318)			Based on available data, the classification criteria are not met.	NO

APPENDIX H

Supplementary Stage 3 – Assessment of Pollution Potential

ACS
ANALYTICAL CONSTRUCTION SERVICES
A PHENNA GROUP COMPANY

APPENDIX H: Supplementary Stage 3 - Containment infrastructure

Hazardous Substances Details (= Rinse, =Treatment)									Primary Storage Location Details (From)					Effluent Routing - Secondary Storage Location Details (To)					
Primary Storage Area	Storage ID	Hazardous Chemical Stored	Density Kg.m3	Percentage (Fraction)	Max Qty Stored (Tonnes)	Annual Changes	Annual Throughput (Tonnes)	Reactivity	Primary Containment Volume m^3	Primary Containment Type	Secondary Containment Type	Secondary Containment Volume m^3	Containment Notes	Effluent Routing	Primary Containment Volume m^3	Primary Containment Type	Secondary Containment Type	Secondary Containment volume m^3	Containment Notes
Clean Bay B110	E1	Ardrox 6333A (10%) Water	1140 1000	0.1 0.9	0.08	6	0.49	Avoid strong acids, chlorides, anhydrides and chlorofomates N/A	0.08	Tank - within machine.	Clean Bay Floor Bund Area 1	4.65	(Bund Area 1) Small volume tank on concrete hardstanding within area containing building bund walls.	Floor bund routes to sump 14	3.53	Sump	None	N/A	Concrete hard standing with bund walls. Links to sump 14. Spill kit provided in area.
Clean Bay B110	SW1	SuperBee 300 FLG (20%) Water	1058 1000	0.2 0.8	0.36	6	2.19	Avoid strong oxidizing agents and acids. N/A	0.36	Tank - within machine.	Clean Bay Floor Bund Area 1	4.65	(Bund Area 1) Small volume tank on concrete hardstanding within area containing building bund walls.	Floor bund routes to sump 14	3.53	Sump	None	N/A	Concrete hard standing with bund walls. Links to sump 14. Spill kit provided in area.
Clean Bay B110	D1	Empty	N/A	0	0.00	0	0.00	N/A	0.36	VAT (Stainless Steel)	Clean Bay Floor Bund Area 5	4.02	VAT on concrete hardstanding within Clean Bay area with low level concrete bund walls.	Effluent routed to Tank Farm B97 in single pipe run below ground in concrete lined trench inclined back to sump. Any above ground pipework double skinned with trace heating provided.	25	Off Hall Tanks T34	Tank Bund	27	Tank 34 is a thermoplastic vertical tank supported on an integral plastic bund above a concrete base. Tank 34 stores chemical waste for off haul. The bund is lidded to prevent rain water ingress. Tank 34 is fitted with a non-return valve which limits capacity. Level gauges are linked to the PLC within building 97 which indicates tanks capacity. The tank roof contains a swan neck free vent.
Clean Bay B110	D2	SuperBee 300 FLG (20%) Water	1058 1000	0.2 0.8	0.36	1	0.36	Avoid strong oxidizing agents and acids. N/A	0.36	VAT (Stainless Steel)	Clean Bay Floor Bund Area 5	4.02	VAT on concrete hardstanding within Clean Bay area with low level concrete bund walls. Tank is manually pumped out in area to IBC/Drum	N/A	N/A	N/A	N/A	N/A	N/A
Clean Bay B110	D3	Ardrox 2302 (100%)	1045	1	1.25	1	1.25	Reactivity: None Avoid Strong oxidizing agents & acids. (Vapours may form explosive mixture in air)	1.2	VAT (Stainless Steel)	Clean Bay Floor Bund Area 5	4.02	VAT on concrete hardstanding within Clean Bay area with low level concrete bund walls. Tank is manually pumped out in area to IBC/Drum	N/A	N/A	N/A	N/A	N/A	N/A
Clean Bay B110	D4	Ardrox 2302 (100%)	1045	1	1.25	1	1.25	Reactivity: None Avoid Strong oxidizing agents & acids. (Vapours may form explosive mixture in air)	1.2	VAT (Stainless Steel)	Clean Bay Floor Bund Area 5	4.02	VAT on concrete hardstanding within Clean Bay area with low level concrete bund walls. Tank is manually pumped out in area to IBC/Drum	N/A	N/A	N/A	N/A	N/A	N/A
Clean Bay B110	D5	Ardrox 2302 (100%)	1045	1	1.25	1	1.25	Reactivity: None Avoid Strong oxidizing agents & acids. (Vapours may form explosive mixture in air)	1.2	VAT (Stainless Steel)	Clean Bay Floor Bund Area 5	4.02	VAT on concrete hardstanding within Clean Bay area with low level concrete bund walls. Tank is manually pumped out in area to IBC/Drum	N/A	N/A	N/A	N/A	N/A	N/A
Clean Bay B110	D6	SuperBee 300 FLG (10%) Water	1058 1000	0.2 0.8	1.21	1	1.21	Avoid strong oxidizing agents and acids. N/A	1.2	VAT (Stainless Steel)	Clean Bay Floor Bund Area 4	2.09	VAT on hardstanding within Clean Bay area containing building bund linked to Sump 12.	Effluent routed to Tank Farm B97 in single pipe run below ground in concrete lined trench inclined back to sump. Any above ground pipework double skinned with trace heating provided.	25	Off Hall Tanks T34	Tank Bund	27	Tank 34 is a thermoplastic vertical tank supported on an integral plastic bund above a concrete base. Tank 34 stores chemical waste for off haul. The bund is lidded to prevent rain water ingress. Tank 34 is fitted with a non-return valve which limits capacity. Level gauges are linked to the PLC within building 97 which indicates tanks capacity. The tank roof contains a swan neck free vent.
Clean Bay B110	D7	Cold Rinse Water - Traces of Super Bee 300 FLG, Ardrox 2302, Solids, Metals, Oils.	1000	1	1.20	8	9.60	None identified	1.2	VAT (Stainless Steel)	Clean Bay Floor Bund Area 4	7.29	VAT on hardstanding within Clean Bay area containing building bund linked to Sump 12.	Effluent is routed to Sump 22 in B110 within single pipe work above ground.	3.78	Sump S22	None	0	Building acts a containment for above ground pipe work routed to sump 22 within B110. Spill kit provided in area.
Clean Bay B110	D8	Shower - Water	1000	1	80.40	0	0.00	None identified	80.4	Sump S15	Clean Bay Floor Bund Area 4	7.29	VAT on hardstanding within Clean Bay area containing building bund linked to Sump 12.	Effluent is routed to Sump 15 in B110 within single pipe run contained within bunded area.	80.4	Sump S15	None	0	Building acts a containment for above ground pipe work routed to sump 15 within B110. Spill kit provided in area.
Clean Bay B110	D9	SuperBee 300 FLG (20%) Water	1058 1000	0.2 0.8	0.36	1	0.36	Avoid strong oxidizing agents and acids. N/A	0.36	VAT (Stainless Steel)	Clean Bay Floor Bund Area 4	7.29	VAT on hardstanding within Clean Bay area containing building bund linked to Sump 12.	Effluent routed to Tank Farm B97 in single pipe run below ground in concrete lined trench inclined back to sump. Any above ground pipework double skinned with trace heating provided.	25	Off Hall Tanks T34	Tank Bund	27	Tank 34 is a thermoplastic vertical tank supported on an integral plastic bund above a concrete base. Tank 34 stores chemical waste for off haul. The bund is lidded to prevent rain water ingress. Tank 34 is fitted with a non-return valve which limits capacity. Level gauges are linked to the PLC within building 97 which indicates tanks capacity. The tank roof contains a swan neck free vent.
Clean Bay B110	D10	Cold Rinse. Traces of Super Bee 300 FLG, Iridite 15, Bonderite M-CR 1200, Chromic Acid. Solids, Metals, Oils.	1000	1	2.57	8	20.56	None identified	2.57	VAT (Stainless Steel)	Clean Bay Floor Bund Area 6	2.09	VAT on concrete hardstanding within Clean Bay area with low level concrete bund walls. Spill kit in area will mitigate low capacity.	Effluent is routed to Sump 13 in B110 within single pipe run contained within bunded area.	3.79	Sump S 13	None	0	Building acts a containment for above ground pipe work routed to sump 13 within B110. Spill kit provided in area.
Clean Bay B110	D11	IRIDITE 15 (41g/L) Water	1000 1000	0.01 0.99	0.96	0..3	#VALUE!	Avoid strong oxidizing agents and acids. N/A	0.96	VAT (Stainless Steel)	Clean Bay Floor Bund Area 6	2.09	VAT on concrete hardstanding within Clean Bay area with low level concrete bund walls. 30L Chemical Spill kit in area will mitigate low capacity.	Effluent is routed to Sump 12 in B110 within single pipe run contained within bunded area.	3.78	Sump S12	None	0	Building acts a containment for above ground pipe work routed to sump 12 within B110. Spill kit provided in area.
Clean Bay B110	D12	Empty	N/A	0	0.00	0	0.00	None identified	0	VAT (Stainless Steel)	Clean Bay Floor Bund Area 6	2.09	VAT on concrete hardstanding within Clean Bay area with low level concrete bund walls. 30L Chemical Spill kit in area will mitigate low capacity.	N/A	N/A	N/A	N/A	N/A	N/A
Clean Bay B110	D13	Bonderite M-CR 1200 (15g/L) Water	1000 1000	0.01 0.99	0.96	0.3	0.29	Strong bases N/A	0.96	VAT (Stainless Steel)	Clean Bay Floor Bund Area 6	2.09	VAT on concrete hardstanding within Clean Bay area with low level concrete bund walls. 30L Chemical Spill kit in area will mitigate low capacity. 30L Chemical Spill kit in area will mitigate low capacity.	Effluent routed to Tank Farm B97 in single pipe run below ground in concrete lined trench inclined back to sump. Any above ground pipework double skinned with trace heating provided.	25	Off Hall Tanks T33	Tank Bund	27	Tank 33 is a stainless Steel vertical tank supported on an integral plastic bund above a concrete base. Tank 33 stores a chemical, Acid waste off haul. The bund is lidded to prevent rain water ingress. Tank 34 is fitted with a non-return valve which limits capacity. Level gauges are linked to the PLC within building 97 which indicates tanks capacity. The tank roof contains a swan neck free vent.
Clean Bay B110	D14	Chromic Acid (0.025g/L) Water	1000 1000	0.01 0.99	0.96	0.3	0.29	None information given N/A	0.96	VAT (Stainless Steel)	Clean Bay Floor Bund Area 6	2.09	VAT on concrete hardstanding within Clean Bay area with low level concrete bund walls. 30L Chemical Spill kit in area will mitigate low capacity.	Effluent is routed to Sump 12 in B110 within single pipe run contained within bunded area.	3.78	Sump S12	None	0	Building acts a containment for above ground pipe work routed to sump 12 within B110. Spill kit provided in area.
Clean Bay B110	D15	Cold Rinse. Traces of Super Bee 300 FLG, Iridite 15, Bonderite M-CR 1200, Chromic Acid. Solids, Metals, Oils.	1000	1	1.20	8	9.60	None	1.2	VAT (Stainless Steel)	Clean Bay Floor Bund Area 6	2.09	VAT on concrete hardstanding within Clean Bay area with low level concrete bund walls. 30L Chemical Spill kit in area will mitigate low capacity.	Effluent is routed to Sump 13 in B110 within single pipe run contained within bunded area.	3.79	Sump S 13	None	0	Building acts a containment for above ground pipe work routed to sump 13 within B110. Spill kit provided in area.
Clean Bay B110	C1 - Drying Oven	Oil (Loss of Containment)	881	1	0.09	1	0.09	None identified	0.1	Oven	Clean Bay Floor Bund Area 5	4.02	Oven on hardstanding within Clean Bay area containing building bund linked to closed sump for pumping out manually.	N/A	N/A	N/A	N/A	N/A	N/A
Clean Bay B110	C2 - Drying Oven	Oil (Loss of Containment)	881	1	0.09	0	0.00	None identified	0.1	Oven	Clean Bay Floor Bund Area 5	4.02	Oven on hardstanding within Clean Bay area containing building bund linked to closed sump for pumping out manually.	N/A	N/A	N/A	N/A	N/A	N/A
Clean Bay B110	C3	Hot Rinse - Traces Ardrox 3705, Nitric Acid, Solids, Metals, Oils.	1000	1	2.57	0	0.00	None identified	2.57	VAT (Stainless Steel)	Clean Bay Floor Bund Area 5	4.02	VAT on concrete hardstanding within Clean Bay area with low level concrete bund walls.	Effluent is routed to Sump 13 in B110 within single pipe run contained within bunded area.	3.78	Sump S22	None	0	Building acts a containment for above ground pipe work routed to sump 22 within B110. Spill kit provided in area.

Clean Bay B110	C4	Ardrox 185 (450 ml/L) Water	950 1000	0.45 0.55	2.51	2	5.02	Keep away from highly acidic or alkaline substances & oxidants. N/A	2.57	VAT (Stainless Steel)	Clean Bay Floor Bund Area 5	4.02	VAT on concrete hardstanding within Clean Bay area with low level concrete bund walls.	Effluent routed to Tank Farm B97 in single pipe run below ground in concrete lined trench inclined back to sump. Any above ground pipework double skinned with trace heating provided.	25	Off Hall Tanks T34	Tank Bund	27	Tank 34 is a thermoplastic vertical tank supported on an integral plastic bund above a concrete base. Tank 34 stores chemical waste for off haul. The bund is lidded to prevent rain water ingress. Tank 34 is fitted with a non-return valve which limits capacity. Level gauges are linked to the PLC within building 97 which indicates tanks capacity. The tank roof contains a swan neck free vent.
Clean Bay B110	C5	Ardrox 3705 (2%) Water	1075 1000	0.02 0.98	0.96	0.3	0.29	Exothermic reaction with strong acids N/A	0.96	VAT (Stainless Steel)	Clean Bay Floor Bund Area 4	7.29	VAT on hardstanding within Clean Bay area containing building bund linked to Sump 12. Tank is manually pumped out in area to IBC/Drum	N/A	N/A	N/A	N/A	N/A	N/A
Clean Bay B110	C6	Nitric Acid 65-70 (545 ml/L) Water	1000 1000	0.01 0.99	0.96	0.2	0.19	Reacts exothermically with water. Avoid reducing agents, metals, alcohols, chlorates, steel, chromic acid, copper, alkalis, organic matter, flammable materials, powder metals & chlorides. N/A	0.96	VAT (Stainless Steel)	Clean Bay Floor Bund Area 4	7.29	VAT on hardstanding within Clean Bay area containing building bund linked to Sump 12.	Effluent routed to Tank Farm B97 in single pipe run below ground in concrete lined trench inclined back to sump. Any above ground pipework double skinned with trace heating provided.	25	Off Hall Tanks T33	Tank Bund	27	Tank 33 is a stainless Steel vertical tank supported on an integral plastic bund above a concrete base. Tank 33 stores a chemical, Acid waste off haul. The bund is lidded to prevent rain water ingress. Tank 34 is fitted with a non-return valve which limits capacity. Level gauges are linked to the PLC within building 97 which indicates tanks capacity. The tank roof contains a swan neck free vent.
Clean Bay B110	C7	Empty	N/A	0	0.00	0	0.00	None identified	0	VAT (Stainless Steel)	Clean Bay Floor Bund Area 4	7.29	VAT on hardstanding within Clean Bay area containing building bund linked to Sump 12.	Effluent routed to Tank Farm B97 in single pipe run below ground in concrete lined trench inclined back to sump. Any above ground pipework double skinned with trace heating provided.	25	Off Hall Tanks T33	Tank Bund	27	Tank 33 is a stainless Steel vertical tank supported on an integral plastic bund above a concrete base. Tank 33 stores a chemical, Acid waste off haul. The bund is lidded to prevent rain water ingress. Tank 34 is fitted with a non-return valve which limits capacity. Level gauges are linked to the PLC within building 97 which indicates tanks capacity. The tank roof contains a swan neck free vent.
Clean Bay B110	C8	Ardrox 1218 (490ml/L) Water	1260 1000	0.49 0.51	1.08	0.3	0.32	Avoid alkaline and carbonates. N/A	0.96	VAT (Stainless Steel)	Clean Bay Floor Bund Area 4	7.29	VAT on hardstanding within Clean Bay area containing building bund linked to Sump 12. Tank is manually pumped out in area to IBC/Drum	N/A	N/A	N/A	N/A	N/A	N/A
Clean Bay B110	C9	Cold Rinse - Traces Ardrox 3705, Nitric Acid, Ardrox 1218, Solids, Metals, Oils.	1000	1	2.57	8	20.56	None identified	2.57	VAT (Stainless Steel)	Clean Bay Floor Bund Area 4	7.29	VAT on hardstanding within Clean Bay area containing building bund linked to Sump 12.	Effluent is routed to Sump 13 in B110 within single pipe run contained within bunded area.	3.78	Sump S22	None	0	Building acts a containment for above ground pipe work routed to sump 22 within B110. Spill kit provided in area.
Clean Bay B110	C10	Shower	1000	1	80.40	0	0.00	None identified	80.4	Sump S15	Clean Bay Floor Bund Area 4	7.29	VAT on hardstanding within Clean Bay area containing building bund linked to Sump 12.	Effluent is routed to Sump 15 in B110 within single pipe run contained within bunded area.	80.4	Sump S15	None	0	Building acts a containment for above ground pipe work routed to sump 15 within B110. Spill kit provided in area.
Clean Bay B110	C11	SuperBee 300 FLG (20%) Water	1058 1000	0.2 0.8	1.21	1	1.21	Avoid strong oxidizing agents and acids. N/A	1.2	VAT (Stainless Steel)	Clean Bay Floor Bund Area 4	7.29	VAT on hardstanding within Clean Bay area containing building bund linked to Sump 12.	Effluent routed to Tank Farm B97 in single pipe run below ground in concrete lined trench inclined back to sump. Any above ground pipework double skinned with trace heating provided.	25	Off Hall Tanks T34	Tank Bund	27	Tank 34 is a thermoplastic vertical tank supported on an integral plastic bund above a concrete base. Tank 34 stores chemical waste for off haul. The bund is lidded to prevent rain water ingress. Tank 34 is fitted with a non-return valve which limits capacity. Level gauges are linked to the PLC within building 97 which indicates tanks capacity. The tank roof contains a swan neck free vent.
Clean Bay B110	C12	Cold Rinse - Traces Super Bee 300 FLG, Ardour 2302, Solids, Metals, Oil.	1000	1	2.57	8	20.56	None identified	2.57	VAT (Stainless Steel)	Clean Bay Floor Bund Area 4	7.29	VAT on hardstanding within Clean Bay area containing building bund linked to Sump 12.	Effluent is routed to Sump 13 in B110 within single pipe run contained within bunded area.	3.78	Sump S22	None	0	Building acts a containment for above ground pipe work routed to sump 22 within B110. Spill kit provided in area.
Clean Bay B110	C13	Ardrox 2302 (100%)	1045	1	1.25	1	1.25	Reactivity: None Avoid Strong oxidizing agents & acids. (Vapours may form explosive mixture in air)	1.2	VAT (Stainless Steel)	Clean Bay Floor Bund Area 4	7.29	VAT on hardstanding within Clean Bay area containing building bund linked to Sump 12	Effluent routed to Tank Farm B97 in single pipe run below ground in concrete lined trench inclined back to sump. Any above ground pipework double skinned with trace heating provided.	25	Off Hall Tanks T33	Tank Bund	27	Tank 33 is a stainless Steel vertical tank supported on an integral plastic bund above a concrete base. Tank 33 stores a chemical, Acid waste off haul. The bund is lidded to prevent rain water ingress. Tank 34 is fitted with a non-return valve which limits capacity. Level gauges are linked to the PLC within building 97 which indicates tanks capacity. The tank roof contains a swan neck free vent.
Clean Bay B110	B1	Ardrox 185 (450 ml/L) Water	950 1000	0.45 0.55	2.51	2	5.02	Keep away from highly acidic or alkaline substances & oxidants. N/A	2.57	VAT (Stainless Steel)	Clean Bay Floor Bund Area 2	4.61	VAT on concrete hardstanding within Clean Bay area with low level concrete bund walls.	Effluent routed to Tank Farm B97 in single pipe run below ground in concrete lined trench inclined back to sump. Any above ground pipework double skinned with trace heating provided.	25	Off Hall Tanks T34	Tank Bund	27	Tank 34 is a thermoplastic vertical tank supported on an integral plastic bund above a concrete base. Tank 34 stores chemical waste for off haul. The bund is lidded to prevent rain water ingress. Tank 34 is fitted with a non-return valve which limits capacity. Level gauges are linked to the PLC within building 97 which indicates tanks capacity. The tank roof contains a swan neck free vent.
Clean Bay B110	B2	Hot Rinse - Traces of Ardour 185, Solids, Metals, Oil.	1000	1	2.57	8	20.56	None identified	2.57	VAT (Stainless Steel)	Clean Bay Floor Bund Area 2	4.61	VAT on concrete hardstanding within Clean Bay area with low level concrete bund walls.	Effluent routed to Tank Farm B97 in single pipe run below ground in concrete lined trench inclined back to sump. Any above ground pipework double skinned with trace heating provided.	25	Off Hall Tanks T34	Tank Bund	27	Tank 34 is a thermoplastic vertical tank supported on an integral plastic bund above a concrete base. Tank 34 stores chemical waste for off haul. The bund is lidded to prevent rain water ingress. Tank 34 is fitted with a non-return valve which limits capacity. Level gauges are linked to the PLC within building 97 which indicates tanks capacity. The tank roof contains a swan neck free vent.
Clean Bay B110	B3	Cold Rinse - Traces of Ardour 185, Solids, Metals, Oil.	1000	1	2.57	8	20.56	None identified	2.57	VAT (Stainless Steel)	Clean Bay Floor Bund Area 2	4.61	VAT on concrete hardstanding within Clean Bay area with low level concrete bund walls.	Effluent is routed to Sump 13 in B110 within single pipe run contained within bunded area.	3.78	Sump S22	None	0	Building acts a containment for above ground pipe work routed to sump 22 within B110. Spill kit provided in area.
Clean Bay B110	B4	Ardrox 185 (450 ml/L) Water	950 1000	0.45 0.55	2.51	2	5.02	Keep away from highly acidic or alkaline substances & oxidants. N/A	2.57	VAT (Stainless Steel)	Clean Bay Floor Bund Area 2	4.61	VAT on concrete hardstanding within Clean Bay area with low level concrete bund walls.	Effluent routed to Tank Farm B97 in single pipe run below ground in concrete lined trench inclined back to sump. Any above ground pipework double skinned with trace heating provided.	25	Off Hall Tanks T34	Tank Bund	27	Tank 34 is a thermoplastic vertical tank supported on an integral plastic bund above a concrete base. Tank 34 stores chemical waste for off haul. The bund is lidded to prevent rain water ingress. Tank 34 is fitted with a non-return valve which limits capacity. Level gauges are linked to the PLC within building 97 which indicates tanks capacity. The tank roof contains a swan neck free vent.
Clean Bay B110	B5	Cold Rinse - Traces of Ardour 185, Ardrox 1435, Solids, Metals, Oil.	1000	1	2.57	8	20.56	None identified	2.57	VAT (Stainless Steel)	Clean Bay Floor Bund Area 2	4.61	VAT on concrete hardstanding within Clean Bay area with low level concrete bund walls.	Effluent is routed to Sump 13 in B110 within single pipe run contained within bunded area.	3.78	Sump S22	None	0	Building acts a containment for above ground pipe work routed to sump 22 within B110. Spill kit provided in area.
Clean Bay B110	B6	Shower	1000	1	3.79	0	0.00	None identified	3.79	Sump S13	Clean Bay Floor Bund Area 2	4.61	VAT on concrete hardstanding within Clean Bay area with low level concrete bund walls.	Effluent is routed to Sump 13 in B110 within single pipe run contained within bunded area.	3.79	Sump S 13	None	0	Building acts a containment for above ground pipe work routed to sump 13 within B110. Spill kit provided in area.
Clean Bay B110	B7	Ardrox 1435 (25%) Water	1150 1000	0.25 0.75	2.67	1.5	4.00	Keep away from highly acidic or alkaline substances & oxidants. N/A	2.57	VAT (Stainless Steel)	Clean Bay Floor Bund Area 3	3.46	VAT on concrete hardstanding within Clean Bay area with low level concrete bund walls.	Effluent routed to Tank Farm B97 in single pipe run below ground in concrete lined trench inclined back to sump. Any above ground pipework double skinned with trace heating provided.	25	Off Hall Tanks T34	Tank Bund	27	Tank 34 is a thermoplastic vertical tank supported on an integral plastic bund above a concrete base. Tank 34 stores chemical waste for off haul. The bund is lidded to prevent rain water ingress. Tank 34 is fitted with a non-return valve which limits capacity. Level gauges are linked to the PLC within building 97 which indicates tanks capacity. The tank roof contains a swan neck free vent.

Clean Bay B110	B8	Cold Rinse - Traces of Ardrox 1435, Solids, Metals, Oil.	1000	1	2.57	8	20.56	None identified	2.57	VAT (Stainless Steel)	Clean Bay Floor Bund Area 3	3.46	VAT on concrete hardstanding within Clean Bay area with low level concrete bund walls.	Effluent is routed to Sump 13 in B110 within single pipe run contained within bunded area.	3.79	Sump S 13	None	0	Building acts a containment for above ground pipe work routed to sump 13 within B110. Spill kit provided in area.
Clean Bay B110	B9	Empty	N/A	0	0.00	0	0.00	None identified	0	VAT (Stainless Steel)	Clean Bay Floor Bund Area 4	7.29	VAT on hardstanding within Clean Bay area containing building bund linked to Sump 12.	Effluent routed to Tank Farm B97 in single pipe run below ground in concrete lined trench inclined back to sump. Any above ground pipework double skinned with trace heating provided.	25	Off Hall Tanks T33	Tank Bund	27	Tank 33 is a stainless Steel vertical tank supported on an integral plastic bund above a concrete base. Tank 33 stores a chemical, Acid waste off haul. The bund is lidded to prevent rain water ingress. Tank 34 is fitted with a non-return valve which limits capacity. Level gauges are linked to the PLC within building 97 which indicates tanks capacity. The tank roof contains a swan neck free vent.
Clean Bay B110	B10	Cold Rinse - Traces of Ardrox 1873A, Super Bee 300 FLG, Solids, Metals, Oil.	1000	1	2.57	8	20.56	None identified	2.57	VAT (Stainless Steel)	Clean Bay Floor Bund Area 4	7.29	VAT on hardstanding within Clean Bay area containing building bund linked to Sump 12.	Effluent is routed to Sump 13 in B110 within single pipe run contained within bunded area.	3.78	Sump S22	None	0	Building acts a containment for above ground pipe work routed to sump 22 within B110. Spill kit provided in area.
Clean Bay B110	B11	Ardrox 1873A (450ml/L) Water	1122 1000	0.45 0.55	2.71	0.5	1.36	Keep away from highly acidic or alkaline substances & oxidants. N/A	2.57	VAT (Stainless Steel)	Clean Bay Floor Bund Area 4	7.29	VAT on hardstanding within Clean Bay area containing building bund linked to Sump 12.	Effluent routed to Tank Farm B97 in single pipe run below ground in concrete lined trench inclined back to sump. Any above ground pipework double skinned with trace heating provided.	25	Off Hall Tanks T33	Tank Bund	27	Tank 33 is a stainless Steel vertical tank supported on an integral plastic bund above a concrete base. Tank 33 stores a chemical, Acid waste off haul. The bund is lidded to prevent rain water ingress. Tank 34 is fitted with a non-return valve which limits capacity. Level gauges are linked to the PLC within building 97 which indicates tanks capacity. The tank roof contains a swan neck free vent.
Clean Bay B110	B12	SuperBee 300 FLG (20%) Water	1058 1000	0.2 0.8	2.60	1	2.60	Avoid strong oxidizing agents and acids. N/A	2.57	VAT (Stainless Steel)	Clean Bay Floor Bund Area 4	7.29	VAT on hardstanding within Clean Bay area containing building bund linked to Sump 12.	Effluent routed to Tank Farm B97 in single pipe run below ground in concrete lined trench inclined back to sump. Any above ground pipework double skinned with trace heating provided.	25	Off Hall Tanks T33	Tank Bund	27	Tank 33 is a stainless Steel vertical tank supported on an integral plastic bund above a concrete base. Tank 33 stores a chemical, Acid waste off haul. The bund is lidded to prevent rain water ingress. Tank 34 is fitted with a non-return valve which limits capacity. Level gauges are linked to the PLC within building 97 which indicates tanks capacity. The tank roof contains a swan neck free vent.
Clean Bay B110	A1	SuperBee 300 FLG (20%) Water	1058 1000	0.2 0.8	2.60	1	2.60	Avoid strong oxidizing agents and acids. N/A	2.57	VAT (Stainless Steel)	Clean Bay Floor Bund Area 2	4.61	VAT on concrete hardstanding within Clean Bay area with low level concrete bund walls.	Effluent routed to Tank Farm B97 in single pipe run below ground in concrete lined trench inclined back to sump. Any above ground pipework double skinned with trace heating provided.	25	Off Hall Tanks T34	Tank Bund	27	Tank 34 is a thermoplastic vertical tank supported on an integral plastic bund above a concrete base. Tank 34 stores chemical waste for off haul. The bund is lidded to prevent rain water ingress. Tank 34 is fitted with a non-return valve which limits capacity. Level gauges are linked to the PLC within building 97 which indicates tanks capacity. The tank roof contains a swan neck free vent.
Clean Bay B110	A2	Cold Rinse - Traces of Super Bee 300 FLG, Solids, Metals, Oil.	1000	1	2.57	8	20.56	None identified	2.57	VAT (Stainless Steel)	Clean Bay Floor Bund Area 2	4.61	VAT on concrete hardstanding within Clean Bay area with low level concrete bund walls.	Effluent is routed to Sump 13 in B110 within single pipe run contained within bunded area.	3.78	Sump S22	None	0	Building acts a containment for above ground pipe work routed to sump 22 within B110. Spill kit provided in area.
Clean Bay B110	A3	Shower	1000	1	0.00	0	0.00	None identified	0	Sump S15	Clean Bay Floor Bund Area 2	4.61	VAT on concrete hardstanding within Clean Bay area with low level concrete bund walls.	Effluent is routed to Sump 15 in B110 within single pipe run contained within bunded area.	80.4	Sump S15	None	0	Building acts a containment for above ground pipe work routed to sump 15 within B110. Spill kit provided in area.
Clean Bay B110	A4	SuperBee 300 FLG (20%) Water	1058 1000	0.2 0.8	2.60	1	2.60	Avoid strong oxidizing agents and acids. N/A	2.57	VAT (Stainless Steel)	Clean Bay Floor Bund Area 2	4.61	VAT on concrete hardstanding within Clean Bay area with low level concrete bund walls.	Effluent routed to Tank Farm B97 in single pipe run below ground in concrete lined trench inclined back to sump. Any above ground pipework double skinned with trace heating provided.	25	Off Hall Tanks T34	Tank Bund	27	Tank 34 is a thermoplastic vertical tank supported on an integral plastic bund above a concrete base. Tank 34 stores chemical waste for off haul. The bund is lidded to prevent rain water ingress. Tank 34 is fitted with a non-return valve which limits capacity. Level gauges are linked to the PLC within building 97 which indicates tanks capacity. The tank roof contains a swan neck free vent.
Clean Bay B110	A5	Cold Rinse - Traces of Super Bee 300 FLG, Solids, Metals, Oil.	1000	1	2.57	8	20.56	None	2.57	VAT (Stainless Steel)	Clean Bay Floor Bund Area 3	3.46	VAT on concrete hardstanding within Clean Bay area with low level concrete bund walls.	Effluent is routed to Sump 7 in B110 within single pipe run contained within bunded area.	8.04	Sump S7	None	0	Building acts a containment for above ground pipe work routed to sump 7 within B110. Spill kit provided in area.
Clean Bay B110	A6	Empty	N/A	0	0.00	0	0.00	None identified	0	VAT (Stainless Steel)	Clean Bay Floor Bund Area 3	3.46	VAT on concrete hardstanding within Clean Bay area with low level concrete bund walls.	Effluent is routed to Sump 12 in B110 within single pipe run contained within bunded area.	3.78	Sump S12	None	0	Building acts a containment for above ground pipe work routed to sump 12 within B110. Spill kit provided in area.
Clean Bay B110	A7	Cold Rinse - Traces of Ardrox 185, Sodium Hydroxide, Solids, Metals, Oil.	1000	1	2.57	8	20.56	None identified	2.57	VAT (Stainless Steel)	Clean Bay Floor Bund Area 3	3.46	VAT on concrete hardstanding within Clean Bay area with low level concrete bund walls.	Effluent is routed to Sump 13 in B110 within single pipe run contained within bunded area.	3.79	Sump S 13	None	0	Building acts a containment for above ground pipe work routed to sump 13 within B110. Spill kit provided in area.
Clean Bay B110	A8	Ardrox 185 (450ml/L) Water	950 1000	0.45 0.55	2.51	1	2.51	Keep away from highly acidic or alkaline substances & oxidants. N/A	2.57	VAT (Stainless Steel)	Clean Bay Floor Bund Area 3	3.46	VAT on concrete hardstanding within Clean Bay area with low level concrete bund walls.	Effluent is routed to Sump 14 in B110 within single pipe run contained within bunded area.	3.53	Sump S14	None	0	Building acts a containment for above ground pipe work routed to sump 14 within B110. Spill kit provided in area.
Clean Bay B110	A9	Shower	1000	1	3.79	0	0.00	None	3.79	Sump 13	Clean Bay Floor Bund Area 3	3.46	VAT on concrete hardstanding within Clean Bay area with low level concrete bund walls.	Effluent is routed to Sump 13 in B110 within single pipe run contained within bunded area.	3.79	Sump S 13	None	0	Building acts a containment for above ground pipe work routed to sump 13 within B110. Spill kit provided in area.
Clean Bay B110	A10	Sodium Hydroxide (210g/L) Water	1000 1000	0.01 0.99	2.57	1	2.57	Reacts with water. Avoid strong acids. Reacts with fluorine, nitroalkane forming explosive compounds. Ignites on contact with cinnamaldehyde or zinc. Avoid strong acids. N/A	2.57	VAT (Stainless Steel)	Clean Bay Floor Bund Area 4	7.29	VAT on hardstanding within Clean Bay area containing building bund linked to Sump 12.	Effluent is routed to Sump 14 in B110 within single pipe run contained within bunded area.	3.53	Sump S14	None	0	Building acts a containment for above ground pipe work routed to sump 14 within B110. Spill kit provided in area.
Clean Bay B110	A11	Ardrox 185 (450ml/L) Water	950 1000	0.45 0.55	2.51	1	2.51	Keep away from highly acidic or alkaline substances & oxidants. N/A	2.57	VAT (Stainless Steel)	Clean Bay Floor Bund Area 4	7.29	VAT on hardstanding within Clean Bay area containing building bund linked to Sump 12.	Effluent is routed to Sump 14 in B110 within single pipe run contained within bunded area.	3.53	Sump S14	None	0	Building acts a containment for above ground pipe work routed to sump 14 within B110. Spill kit provided in area.
Clean Bay B110	A12	Cold Rinse - Traces of Ardrox 185, Sodium Hydroxide, Solids, Metals, Oil.	1000	1	2.57	8	20.56	None identified	2.57	VAT (Stainless Steel)	Clean Bay Floor Bund Area 4	7.29	VAT on hardstanding within Clean Bay area containing building bund linked to Sump 12.	Effluent is routed to Sump 1 in B110 within single pipe run contained within bunded area.	5.74	Sump S1	None	0	Building acts a containment for above ground pipe work routed to sump 1 within B110. Spill kit provided in area.
B108	Tank 1 (Nickel Strike)	Cold Rinse - Traces of Sulphuric Acid, Nickle Chloride	1000	1	0.06	8	0.48	None identified	0.06	VAT (Stainless Steel)	B108 Concrete Floor	0.18	VAT assembly is located on a stainless steel bund.	N/A	N/A	N/A	N/A	N/A	N/A
B108	Tank 2 (Nickel Strike)	S54 / Sulphuric Acid (300ml/L) Water	1000 1000	0.3 0.55	0.05	0.2	0.01	Avoid strong alkalis oxidising and reducing agents. N/A	0.06	VAT (Stainless Steel)	B108 Concrete Floor	0.18	VAT assembly is located on a stainless steel bund.	N/A	N/A	N/A	N/A	N/A	N/A
B108	Tank 3 (Nickel Strike)	Nickel Chloride (350g/L) Water	1000 1000	0.35 0.65	0.06	0.2	0.01	Reacts with chlorine nitrate, potassium. N/A	0.06	VAT (Stainless Steel)	B108 Concrete Floor	0.18	VAT assembly is located on a stainless steel bund.	N/A	N/A	N/A	N/A	N/A	N/A

H+S Clean Bay B118	H+S Chromate Rinse Water - GE Tanks. Alocrom Rinse.	Complex chemistry Water	1000 1000	0.01 0.99	0.04	121	4.84	Stung bases N/A	0.04	Sump (H+S)	Tank 0.08 inc Free board	5.13	Bund is W17.86m x D5.77m x H0.05m. Capacity 5.15m³. Polypropylene.	Effluent routed to Tank Farm B97 in concentric pipe run above ground. Concentric Pipe. UPVC Class E. Inner 1 inch, Outer 3 inch.	15	Tank T29	Tank Bund	17	Storage Tank Diameter 2000 x 4880 mm High. Capacity 15m3. Material PP/GRP. Storage tank T29B (bund) Diameter 3000 x 2440 mm High. Capacity 17m3. Material PP/GRP. Concentric pipe have automatic leak detection and warning installed. Visual leak detection is also installed.
H+S Clean Bay B118	H+S General Rinse Water - Trace Ardour 5503, 3968, 2302, 6376, 185, 1218, 1873, 188, 1618, 6333A. Nitric Acid.	Complex chemistry Water	1000 1000	0.01 0.99	0.09	121	10.77	None identified N/A	0.089	Sump (H+S)	Tank 0.178 Inc Free Board	5.13	Bund is W17.86m x D5.77m x H0.05m. Capacity 5.15m³. Polypropylene.	Effluent routed to Tank Farm B97 in concentric pipe run above ground. Concentric Pipe. UPVC Class E. Inner 1 inch, Outer 3 inch.	30	Tank T31	Tank Bund	31	T31 is a Thermoplastic vertical tank supported on an integral plastic bund above a concrete base. Tank 31 stores a chemical, General Regenerates. The bund is lidded to prevent rain water ingress. Tank 34 is fitted with a non-return valve which limits capacity. Level gauges are linked to the PLC within building 97 which indicates tanks capacity. The tank roof contains a swan neck free vent. Storage Tank Diameter 3000 x 4270 mm High. Capacity 30m3. Material PP/GRP. Storage tank T31B (bund) Diameter 4000 x 2440mm High. Capacity 31m3. Material PP/GRP.
Clean Bay B110	Sump S1	Cold Rinse A12 Cold Rinse - Traces of Ardrox 185, Sodium Hydroxide.	1000	1	5.74	121	694.54	Negligible - Only trace quantities.	5.74	Sump S1	None	0	Sump Size 3878 x 2570 , 730mm. Capacity 5.74 m3 Gross. Materials PP/GRP. Flow rate in 2.0 m3/hr max. float switches installed in sump. Low & High triggers with High level alarm at panel.	Effluent routed to Tank Farm B97 in single pipe run below ground in concrete lined trench inclined back to sump. Any above ground pipework double skinned with trace heating provided. Pipe 1 inch. Flow rate 2.2 m3/hr max.	4.5	T30 Off Haul	Tank Bund	31	Thermoplastic vertical tank supported on an integral plastic bund above a concrete base. Tank 31 stores a chemical, General Regenerates. The bund is lidded to prevent rain water ingress. Tank 34 is fitted with a non-return valve which limits capacity. Level gauges are linked to the PLC within building 97 which indicates tanks capacity. The tank roof contains a swan neck free vent. Storage Tank Diameter 2000 x 1600 mm High. Capacity 4.5m3. Material PP/GRP. Storage tank T30B (bund) Diameter 3000 x 700 mm High. Capacity 4.5m3. Material PP/GRP. Liquid waste is manually pumped to a 30m3 tanker. Drip trays are used as required. Spill kit located in area.
Clean Bay B110	Sump S7	Cold Rinse A5 - Traces of SuperBee 300 FLG, Solids and metals.	1000	1	8.04	121	972.84	Negligible - Only trace quantities.	8.04	Sump S7	None	0	Sump Size 3878 x 2570 , 1040mm. Capacity 8.04 m3 Gross. Materials PP/GRP. Flow rate in 2.278 m3/hr max. float switches installed in sump. Low, High & High High triggers with High High level alarm at panel.	Effluent routed to Tank Farm B97 in single pipe run below ground in concrete lined trench inclined back to sump. Any above ground pipework double skinned with trace heating provided. Pipe (1 Inch output) Flow Rate 1.9m3 Max.	6	T42 Pumping Tank	ETP Sump	32.4	The ETP has a concrete lined below ground sump used to contain process floor waters and out of specification outfall tanks effluent.
Clean Bay B110	Sump S12	A6 - Empty. D11 - IRIDITE 15 D14 -Chromic Acid H+S Chromic Rinse.	0 1000 1000 1000	0 0.4 0.4 0.2	3.78	121	457.38	Stung Oxidising Substances. Strong reducing Agents. Flammable Materials. Strong Alkalis. None information given TBD	3.78	Sump S12	None	0	Sump Size 1806 x 2570 , 1040mm. Capacity 3.78 m3 Gross. Materials PP/GRP. Float switches installed in sump. Low Low, High, Low and High triggers with High Level alarm at panel. 1 inch pipe input.	Effluent routed to Tank Farm B97 in single pipe run below ground in concrete lined trench inclined back to sump. Any above ground pipework double skinned with trace heating provided. Pipe 3/4 Inch	15	T29 Storage Tank	Tank Bund	17	T29 is a thermoplastic vertical tank supported on an integral plastic bund above a concrete base. Tank 29 stores a chemical, Chromate Regenerates. The bund is lidded to prevent rain water ingress. Tank 36 is fitted with a non-return valve which limits capacity. Level gauges are linked to the PLC within building 97 which indicates tanks capacity. The tank roof contains a swan neck free vent. Regen chemical to clean chromate media. Storage Tank Diameter 2000 x 4880 mm High. Capacity 15m3. Material PP/GRP. Storage tank T29B (bund) Diameter 3000 x 2440 mm High. Capacity 17m3. Material PP/GRP.
Clean Bay B110	Sump S13	Cold Rinse A7 - Ardrox 185 traces Shower Water A9 Cold Rinse B8 Cold Rinse - Traces of Ardox 1435 B6 - Safety Shower D10 - Cold rinse. Traces of Iridite 15. Bonderite M-CR 1200 S. Chromic Acid. D15- Cold rinse. Traces of Iridite 15. Bonderite M-CR 1200 S. Chromic Acid.	1000 1000 1000 1000 1000 1000	0.25 0 0.25 0 0.25 0.25	3.79	121	458.59	Negligible - Only trace quantities. Negligible - Only trace quantities. Negligible - Only trace quantities. Negligible - Only trace quantities. Negligible - Only trace quantities. Negligible - Only trace quantities.	3.79	Sump S13	None	0	Sump Size 2570 diameter x 730mm deep. Capacity 3.79 m3 Gross. Materials PP/GRP. Flow rate in 2.57 m3/hr max. float switches installed in sump. Low, High & High High triggers with High High level alarm at panel.	Effluent routed to ETP B97 in single pipe run below ground in concrete lined trench inclined back to sump. Any above ground pipework double skinned with trace heating provided. Pipe 1 inch (Flow Rate out 2.5 m3)	1.02	T41 Permanganate Reduction Tank	ETP Sump	32.4	The ETP has a concrete lined below ground sump used to contain process floor waters and out of specification outfall tanks effluent. Details of sump TBD.
Clean Bay B110	Sump S14	A8, A11 - Ardrox 185 (45%) & Water Mix. - Trace Solids, Metals, oil. Sodium Hydroxide (20%) & Water Mix. - Trace Solids, Metals, oil.	1000 1000	0.5 0.5	3.53	121	427.13	Keep away from highly acidic or alkaline substances & oxidants. Reacts with water. Avoid strong acids. Reacts with fluorine, nitroalkane forming explosive compounds. Ignites on contact with cinnamaldehyde or zinc. Avoid strong acids.	3.53	Sump S14	None	0	Sump Size 2398 x 2570 , 730mm deep. Capacity 3.53 m3 Gross. Materials PP/GRP. Float switches installed in sump. Low and High triggers with High Level alarm at panel. 1 inch pipe input.	Effluent routed to Tank Farm B97 in single pipe run below ground in concrete lined trench inclined back to sump. Any above ground pipework double skinned with trace heating provided.	4.5 / 25	T30 / T36 Off Haul Tank	Tank Bund	4.5 / 27	T36 is a thermoplastic vertical tank supported on an integral plastic bund above a concrete base. Tank 36 stores a chemical, Cadmium Waste Off haul. The bund is lidded to prevent rain water ingress. Tank 36 is fitted with a non-return valve which indicates tanks capacity. The tank roof contains a swan neck free vent. Storage Tank Diameter 2820 x 3950 mm High. Capacity 25m3. Material PP/GRP. Storage tank T36B (bund) Diameter 4000 x 2135 mm High. Capacity 27m3. Material PP/GRP. Capacity 4.5m3. Material PP/GRP. Liquid waste is manually pumped to a 30m3 tanker. Drip trays are used as required. Spill kit located in area.
Clean Bay B110	Sump S15	Safety Shower A3, C10, D8. Cold Rinse D10. Traces of Super Bee 300 FLG, Iridite 15, Bonderite M-CR 1200, Chromic Acid. Solids, Metals, Oils.	1000 1000	0.5 0.5	80.40	121	9728.40	Negligible - Only trace quantities. Negligible - Only trace quantities.	80.4	Sump S15	None	0	Sump Size 3878 x 2570 , 1040mm. Capacity 8.04 m3 Gross. Materials PP/GRP. Flow rate in 8.0 m3/hr max. float switches installed in sump. Low, High & High High triggers with High High level alarm at panel.	Effluent routed to Tank Farm B97 in single pipe run below ground in concrete lined trench inclined back to sump. Any above ground pipework double skinned with trace heating provided. Pipe 2 Inch (Flow Rate 8.9m3)	30	T31 Storage Tanks	Tank Bund	31	T31 is a Thermoplastic vertical tank supported on an integral plastic bund above a concrete base. Tank 31 stores a chemical, General Regenerates. The bund is lidded to prevent rain water ingress. Tank 34 is fitted with a non-return valve which limits capacity. Level gauges are linked to the PLC within building 97 which indicates tanks capacity. The tank roof contains a swan neck free vent. Storage Tank Diameter 3000 x 4270 mm High. Capacity 30m3. Material PP/GRP. Storage tank T31B (bund) Diameter 4000 x 2440mm High. Capacity 31m3. Material PP/GRP.
Clean Bay B110	Sump S21	Cold Rinse A2 - Traces of SuperBee 300 FLG, Suspended, Solids, Metals. Cold Rinse B3 - Ardrox 185, Suspended Solids, Metals. Cold Rinse B5 - Ardrox 185, Ardrox 1435 (A&B), Suspended Solids, Metals. Cold Rinse B10 - Ardrox 1873A, Super Bee 300FLG, Suspended Solids, Metals. Cold Rinse C9 - Ardrox 1218, Super Bee 300 FLG, Suspended Solids, Metals. Cold Rinse C12 - Super Bee 300 FLG, Ardrox 2302, Suspended Solids, Metals. Cold Rinse D7 - Super Bee 300FLG Hot Rinse C3 - Ardrox 3705, Suspended Solids, Metals. General Line Floor Waters	1000 1000 1000 1000 1000 1000 1000 1000 1000	0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.2	3.78	121	457.38	Negligible - Only trace quantities. Negligible - Only trace quantities. Negligible - Only trace quantities. Negligible - Only trace quantities. Negligible - Only trace quantities. Negligible - Only trace quantities. Negligible - Only trace quantities. Negligible - Only trace quantities. None identified	3.78	Sump S21	None	0	Sump Size 1806 x 2570 , 1040mm. Capacity 3.78 m3 Gross. Materials PP/GRP. Float switches installed in sump. Low Low, High, Low and High triggers with High Level alarm at panel. 1 inch pipe input.	Effluent routed to Tank Farm B97 in single pipe run below ground in concrete lined trench inclined back to sump. Any above ground pipework double skinned with trace heating provided. Pipe (1 inch out)	30	T31 Storage Tanks	Tank Bund	31	T31 is a Thermoplastic vertical tank supported on an integral plastic bund above a concrete base. Tank 31 stores a chemical, General Regenerates. The bund is lidded to prevent rain water ingress. Tank 34 is fitted with a non-return valve which limits capacity. Level gauges are linked to the PLC within building 97 which indicates tanks capacity. The tank roof contains a swan neck free vent. Storage Tank Diameter 3000 x 4270 mm High. Capacity 30m3. Material PP/GRP. Storage tank T31B (bund) Diameter 4000 x 2440mm High. Capacity 31m3. Material PP/GRP.

NDT B110	Sump S22	Zyglo - ZL37 Zyglo - ZL-60D Zyglo - ZL-67B Zyglo - ZR-10C	1000 1000 1000 1000	0.25 0.25 0.25 0.25	5.74	121	694.54	Oxidising substances None identified Stung Acids and Bases, Oxidising Substances. Stung Acids and Bases, Oxidising Substances.	5.74	Sump S22	None	0	Sump Size 3897 x 2570 , 730mm deep. Capacity 5.74 m3 Gross. Materials PP/GRP. Float switches installed in sump. Low Low, High, and High High triggers with High Level alarm at panel. 1 inch pipe input. 4.0 m3 /hr inlet pipe.	Effluent routed to Tank Farm B97 in single pipe run below ground in concrete lined trench inclined back to sump. Any above ground pipework double skinned with trace heating provided. Pipe. 1 & 1/2 inch pipe. 4.4 m3 / Hr max flow rate.	15	Tank T32	Tank Bund	17	T32 is a thermoplastic vertical tank supported on an integral plastic bund above a concrete base. Tank 32 stores a chemical, NDT Regenerates. The bund is lidded to prevent rain water ingress. Tank 34 is fitted with a non-return valve which limits capacity. Level gauges are linked to the PLC within building 97 which indicates tanks capacity. The tank roof contains a swan neck free vent. Storage Tank Diameter 2000 x 4880 mm High. Capacity 15m3. Material PP/GRP. Storage tank T32B (bund) Diameter 3000 x 2440 mm High. Capacity 17m3. Material PP/GRP.
Clean Bay B110	Sump S28	Not in use	1000	1	4.84	121	585.64	N/A	4.84	Sump S28	Sump S28	0	Sump Size 2398 x 2570 , 730mm deep. Capacity 4.84 m3 Gross. Materials PP/GRP. Float switches installed in sump. Low and High triggers with High Level alarm at panel. 1 inch pipe input.	Effluent routed to Tank Farm B97 in single pipe run below ground in concrete lined trench inclined back to sump. Any above ground pipework double skinned with trace heating provided. Pipe 1 inch pipe.	25	T35 Off Haul Tank	Tank Bund	27	T35 is a stainless steel vertical tank supported on an integral plastic bund above a concrete base. Tank 35 stores a chemical, NDT waste off haul. The bund is lidded to prevent rain water ingress. Tank 35 is fitted with a non-return valve which limits capacity. Level gauges are linked to the PLC within building 97 which indicates tanks capacity. The tank roof contains a swan neck free vent. Storage Tank Diameter 2820 x 3950 mm High. Capacity 25m3. Material PP/GRP. Storage tank T35B (bund) Diameter 4000 x 2135 mm High. Capacity 27m3. Material PP/GRP. Capacity 4.5m3. Material PP/GRP. Liquid waste is manually pumped to a 30m3 tanker. Drip trays are used as required. Spill kit located in area.
Tank Farm B97	Storage Tank T29 - Chro	A6 - Empty. D11 Iridite 15. D14 Chromic Acid, H+S Chromic Rinse. Cold Rinse A7, Shower Water A9, B6, Cold Rinse B8, D10 & D15 filter back wash and regen.	1000 1000	0.5 0.5	15.00	121	1815.00	Negligible - Only trace quantities. Negligible - Only trace quantities.	15	Storage Tank T29 (PP/GRP)	Tank Bund	17	T29 is a thermoplastic vertical tank supported on an integral plastic bund above a concrete base. Tank 29 stores a chemical, Chromate Regenerates. The bund is lidded to prevent rain water ingress. Tank 36 is fitted with a non-return valve which limits capacity. Level gauges are linked to the PLC within building 97 which indicates tanks capacity. The tank roof contains a swan neck free vent. Regen chemical to clean chromate media. Storage Tank Diameter 2000 x 4880 mm High. Capacity 15m3. Material PP/GRP. Storage tank T29B (bund) Diameter 3000 x 2440 mm High. Capacity 17m3. Material PP/GRP.	Effluent routed to the ETP B97 in single pipe run below ground in concrete lined trench inclined back to sump.	0.5	Tank T61	ETP Sump	32.4	The ETP has a concrete lined below ground sump used to contain process floor waters and out of specification outfall tanks effluent. Details of sump TBD.
Tank Farm B97	Storage Tank T30	A8, A11 - Ardrox 185 A10 - Sodium Hydroxide Cold Rinse A12 Back Wash & Filter Regen	1000 1000 1000	0.333 0.333 0.333	4.50	2	8.99	Keep away from highly acidic or alkaline substances & oxidants. Reacts with water. Avoid strong acids. Reacts with fluorine, nitroalkane forming explosive compounds. Ignites on contact with cinnamaldehyde or zinc. Avoid strong acids. Negligible - Only trace quantities.	4.5	Tank T30 (PP/GRP)	Tank Bund	4.5	T30 is a Thermoplastic vertical tank supported on an integral plastic bund above a concrete base. Tank 30 stores a chemical, Cadmium Regenerates. The bund is lidded to prevent rain water ingress. Tank 34 is fitted with a non-return valve which limits capacity. Level gauges are linked to the PLC within building 97 which indicates tanks capacity. The tank roof contains a swan neck free vent. Storage Tank Diameter 2000 x 1600 mm High. Capacity 4.5m3. Material PP/GRP. Storage tank T30B (bund) Diameter 3000 x 700 mm High. Capacity 4.5m3. Material PP/GRP. A level sensor is provided in the bund, if the bund fills, it switches off the send pump automatically. This is mitigation for the low bund capacity.	Effluent routed to Tank T36 in Tank Farm.	25	T36 Off Haul Storage Tank	Tank Bund	27	T36 is a thermoplastic vertical tank supported on an integral plastic bund above a concrete base. Tank 36 stores a chemical, Cadmium Waste Off haul. The bund is lidded to prevent rain water ingress. Tank 36 is fitted with a non-return valve which limits capacity. Level gauges are linked to the PLC within building 97 which indicates tanks capacity. The tank roof contains a swan neck free vent. T36 - Storage Tank Diameter 2820 x 3950 mm High. Capacity 25m3. Material PP/GRP. Storage tank T36B (bund) Diameter 4000 x 2135 mm High. Capacity 27m3. Material PP/GRP. Capacity 4.5m3. Material PP/GRP. Liquid waste is manually pumped to a 30m3 tanker. Drip trays are used as required. Spill kit located in area.
Tank Farm B97	Storage Tank T31	Cold Rinse A2 - Trace Super Bee 300FLG), Solids, oil & metals. Cold Rinse B3 - Trace Ardrox 185, Solids, oil & metals. Cold Rinse B5 - Trace Ardrox 185, 1435, Solids, oil and Metals. Cold Rinse B10 - Trace Ardrox 1873A, Super Bee 300 FLG, solids, oil and metals. Cold Rinse C9 - Trace Super Bee 300 FLG, Ardrox 1218, solids, oil and metals. Cold Rinse C12 - Trace Ardrox 2302, Super Bee 300 FLG, solids, oil and metals. Cold Rinse D7 - Trace Super Bee 300 FLG , solids, oil and metals. Hot Rinse C3 - Trace Ardrox 3705 , Nitric Acid, solids, oil and metals. Cold Rinse D10 filter back wash and regen - Trace Iridite 15, Bonderite M-CR 1200S, Chromic Acid, solids, oils and metal. Safety Shower A3, C10, D8	1000 1000 1000 1000 1000 1000 1000 1000 1000 1000	0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1	30.00	121	3630.00	Negligible - Only trace quantities. Negligible - Only trace quantities. Negligible - Only trace quantities. Negligible - Only trace quantities. Negligible - Only trace quantities. Negligible - Only trace quantities. Negligible - Only trace quantities. Negligible - Only trace quantities. Negligible - Only trace quantities. Negligible - Only trace quantities.	30	Storage Tank T31 (PP/GRP)	Tank Bund	31	T31 is a Thermoplastic vertical tank supported on an integral plastic bund above a concrete base. Tank 31 stores a chemical, General Regenerates. The bund is lidded to prevent rain water ingress. Tank 34 is fitted with a non-return valve which limits capacity. Level gauges are linked to the PLC within building 97 which indicates tanks capacity. The tank roof contains a swan neck free vent. Storage Tank Diameter 3000 x 4270 mm High. Capacity 30m3. Material PP/GRP. Storage tank T31B (bund) Diameter 4000 x 2440mm High. Capacity 31m3. Material PP/GRP. A level sensor is provided in the bund, if the bund fills, it switches off the send pump automatically. This is mitigation for the low bund capacity.	Effluent routed to the ETP B97 in single pipe run below ground in concrete lined trench inclined back to sump.	1	Tank 61	ETP Sump	32.4	The ETP has a concrete lined below ground sump used to contain process floor waters and out of specification outfall tanks effluent. Details of sump TBD.
Tank Farm B97	Storage Tank T32	Zyglo - ZL37 Zyglo - ZL-60D Zyglo - ZL-67B Zyglo - ZR-10C	1000 1000 1000 1000	0.25 0.25 0.25 0.25	15.00	121	1815.00	Oxidising substances None identified Stung Acids and Bases, Oxidising Substances. Stung Acids and Bases, Oxidising Substances.	15	Storage Tank T32 (PP/GRP)	Tank Bund	17	T32 is a thermoplastic vertical tank supported on an integral plastic bund above a concrete base. Tank 32 stores a chemical, NDT Regenerates. The bund is lidded to prevent rain water ingress. Tank 34 is fitted with a non-return valve which limits capacity. Level gauges are linked to the PLC within building 97 which indicates tanks capacity. The tank roof contains a swan neck free vent. Storage Tank Diameter 2000 x 4880 mm High. Capacity 15m3. Material PP/GRP. Storage tank T32B (bund) Diameter 3000 x 2440 mm High. Capacity 17m3. Material PP/GRP.	Effluent routed to the ETP B97 in single pipe run below ground in concrete lined trench inclined back to sump.	1	Tank T70	ETP Sump	32.4	The ETP has a concrete lined below ground sump used to contain process floor waters and out of specification outfall tanks effluent. Details of sump TBD.

Tank Farm B97	Storage Tank T33	B9, C7 - Empty B11 - Ardrox 1873A B12 - Super Bee 300 FLG C6 - Nitric Acid C13 - Ardrox 2302 D13 - Bonderite	1000 1000 1000 1000 1000 1000	0 0.2 0.2 0.2 0.2 0.2	25.00	2	50.00	N/A Keep away from highly acidic or alkaline substances & oxidants. Avoid strong oxidizing agents and acids. Reacts exothermically with water. Avoid reducing agents, metals, alcohols, chlorates, steel, chromic acid, copper, alkalis, organic matter, flammable materials, powder metals & chlorides. Reactivity: None Avoid Strong oxidizing agents & acids. (Vapours may form explosive mixture in air) Stung bases	25	Tank T33 (PP/GRP) with Stainless Steel cover.	Tank Bund	27	Tank 33 is a stainless steel vertical tank supported on an integral plastic bund above a concrete base. Tank 33 stores a chemical, Acid waste off haul. The bund is lidded to prevent rain water ingress. Tank 34 is fitted with a non-return valve which limits capacity. Level gauges are linked to the PLC within building 97 which indicates tanks capacity. The tank roof contains a swan neck free vent. Storage Tank Diameter 2820 x 3950 mm High. Capacity 25m3. Material PP/GRP. Storage tank T33B (bund) Diameter 4000 x 2135mm High. Capacity 27m3. Material PP/GRP.	Off Haul Tanker	N/A	N/A	N/A	N/A	N/A
Tank Farm B97	Storage Tank T34	A1, A4, C11, D6, D9 SuperBee 300 FLG B1, B4 Ardox 185 B2 - Hot Rinse Water (Traces of Ardrox 185) B7 - Ardrox 1435 C4, D1 - Empty	1000 1000 1000 1000 1000	0.25 0.25 0.25 0.25 0	25.00	2	50.00	Avoid strong oxidizing agents and acids. Keep away from highly acidic or alkaline substances & oxidants. Keep away from highly acidic or alkaline substances & oxidants. Keep away from highly acidic or alkaline substances & oxidants. N/A	25	Tank T34 (PP/GRP)	Tank Bund	27	Tank 34 is a thermoplastic vertical tank supported on an integral plastic bund above a concrete base. Tank 34 stores chemical & alkali waste for off haul. The bund is lidded to prevent rain water ingress. Tank 34 is fitted with a non-return valve which limits capacity. Level gauges are linked to the PLC within building 97 which indicates tanks capacity. The tank roof contains a swan neck free vent. Storage Tank Diameter 2820 x 3950 mm High. Capacity 25m3. Material PP/GRP. Storage tank T34B (bund) Diameter 4000 x 2135mm High. Capacity 27m3. Material PP/GRP. Waste stored for off haul.	Off Haul Tanker	N/A	N/A	N/A	N/A	N/A
Tank Farm B97	Storage Tank T35	Not In Use	1000	1	0.00	0	0.00	N/A	25	Tank T35 (PP/GRP with stainless steel cover)	Tank Bund	27	T35 is a stainless steel vertical tank supported on an integral plastic bund above a concrete base. Tank 35 stores a chemical, NDT waste off haul. The bund is lidded to prevent rain water ingress. Tank 35 is fitted with a non-return valve which limits capacity. Level gauges are linked to the PLC within building 97 which indicates tanks capacity. The tank roof contains a swan neck free vent. Storage Tank Diameter 2820 x 3950 mm High. Capacity 25m3. Material PP/GRP. Storage tank T35B (bund) Diameter 4000 x 2135 mm High. Capacity 27m3. Material PP/GRP.	Off Haul Tanker	N/A	N/A	N/A	N/A	N/A
Tank Farm B97	Storage Tank T36	A8, A11 - Ardrox 185 A10 - Sodium Hydroxide	1000 1000	0.5 0.5	25.00	2	50.00	Keep away from highly acidic or alkaline substances & oxidants. Reacts with water. Avoid strong acids. Reacts with fluorine, nitroalkane forming explosive compounds. Ignites on contact with cinnamaldehyde or zinc. Avoid strong acids.	25	Tank T36 (PP/GRP)	Double Skinned Tank	27	T36 is a thermoplastic vertical tank supported on an integral plastic bund above a concrete base. Tank 36 stores a chemical, Cadmium Waste Off haul. The bund is lidded to prevent rain water ingress. Tank 36 is fitted with a non-return valve which limits capacity. Level gauges are linked to the PLC within building 97 which indicates tanks capacity. The tank roof contains a swan neck free vent. Storage Tank Diameter 2820 x 3950 mm High. Capacity 25m3. Material PP/GRP. Storage tank T36B (bund) Diameter 4000 x 2135 mm High. Capacity 27m3. Material PP/GRP.	Off Haul Tanker	N/A	N/A	N/A	N/A	N/A
ETP B97	Check Pumping Tank T6	Demin Water	1000	1	6.00	121	726.00	None identified	6	Storage Tank T6 (Polypropylene)	ETP Floor Sump	32.4	Storage tank diameter 1770mm x 2440 High. Capacity 6m3. A loss of containment would be captured within the floor sump.	Pipe 2.4m3 / Hr	N/A	N/A	N/A	N/A	N/A
ETP B97	Return Pumping Tank T11	Demin Water	1000	1	6.00	121	726.00	None identified	6	Storage Tank T11 (Polypropylene)	ETP Floor Sump	32.4	Storage tank diameter 1770mm x 2440 High. Capacity 6m3. A loss of containment would be captured within the floor sump.	Pipe 2 inches 8.0m3 / Hr	See rinse tank information	Clean Bay sumps for rinse VATs	Concrete Floor to Sumps	See rinse VAT information.	Demin water is routed back to process tanks. Containment is provided as per VAT details.
ETP B97	Return Pumping Tank T20	Demin Water	1000	1	6.00	121	726.00	None identified	6	Storage Tank T20 (Polypropylene)	ETP Floor Sump	32.4	Storage tank diameter 1770mm x 2440 High. Capacity 6m3.	Pipe 2 inches 8.0m3 / Hr. Return to process rinse and immersion tanks.	See rinse tank information	Clean Bay sumps for rinse VATs	Concrete Floor to Sumps	See rinse VAT information.	Demin water is routed back to process tanks. Containment is provided as per VAT details.
ETP B97	Return Pumping Tank T27	Demin Water	1000	1	6.00	121	726.00	None identified	6	Storage Tank T27 (Polypropylene)	ETP Floor Sump	32.4	Storage tank diameter 1770mm x 2440 High. Capacity 6m3. A loss of containment would be captured within the floor sump.	Pipe 1 1/2 inches 4.0m3 / Hr to process rinse baths and sprays	See rinse tank information	Clean Bay sumps for rinse VATs	Concrete Floor to Sumps	See rinse VAT information.	Demin water is routed back to process tanks. Containment is provided as per VAT details.
ETP B97	Sodium Bisulphate Reagent Tank T40	Sodium Bisulphate	1000	1	1.00	1	1.00	Generates toxic gas in contact with acid. Avoid strong oxidising agents. Strong acids.	1	Storage Tank T40 (Polypropylene)	ETP Floor Sump	32.4	Storage tank diameter 1070 x 1350mm high. Polyethylene. A loss of containment would be captured within the floor sump.	Dosing line to T41	1.02	Tank T41	ETP Floor sump via floor drains.	32.4	The ETP has a concrete lined below ground sump used to contain process floor waters and out of specification outfall tanks effluent. Details of sump TBD
ETP B97	Permanganate Reduction Tank T41	Sodium Bisulphate Permanganate rinse waters S13	1000 1000	0.5 0.5	1.02	121	123.42	Generates toxic gas in contact with acid. Avoid strong oxidising agents. Strong acids. Negligible - Only trace quantities.	1.02	Storage Tank T41 (Polypropylene)	ETP Floor Sump	43.2	Storage tank diameter 800 x 2440mm high. Polyethylene. A loss of containment would be captured within the floor sump.	Pipe to T42	6	Tank T 42	ETP Floor sump via floor drains.	32.4	The ETP has a concrete lined below ground sump used to contain process floor waters and out of specification outfall tanks effluent. Details of sump TBD
ETP B97	Pumping Tank T42	Sump S7 Permanganate Rinses Sumo S13 - Chromate Rinses Sodium Bisulphate Hydrochloric Acid	1000 1000 1000 1000	0.25 0.25 0.25 0.25	6.00	121	726.00	Negligible - Only trace quantities. Negligible - Only trace quantities. Generates toxic gas in contact with acid. Avoid strong oxidising agents. Strong acids. May generate heat with alkalis. Avoid strong alkalis, oxidising agents, common metals.	6	Storage Tank T42 (Polypropylene)	ETP Floor Sump	32.4	Storage tank diameter 1770 x 2440mm high. Polyethylene. A loss of containment would be captured within the floor sump.	Pipe to T11	6	T11	ETP Floor sump via floor drains.	32.4	The ETP has a concrete lined below ground sump used to contain process floor waters and out of specification outfall tanks effluent. Details of sump TBD
ETP B97	Separation Tank T43	Filtered Cadmium rinse water from sump S1 Filtered Cadmium rinse water from sump S1 Back Wash & Regen Effluent from Filter Media.	1000 1000	0.5 0.5	2.00	121	242.00	None identified None identified	2	Storage Tank T43 (Polypropylene)	ETP Floor Sump	32.4	Storage tank Capacity 0.5m3. A loss of containment would be captured within ETP Sump linked by floor drains. ETP sump routes to general line holding tank T31.	Pipe 2.4m3 / Hr	4.5	Tank T30	Tank Bund	4.5	T30 is a Thermoplastic vertical tank supported on an integral plastic bund above a concrete base. Tank 30 stores a chemical, Cadmium Regenerates. The bund is lidded to prevent rain water ingress. Tank 34 is fitted with a non-return valve which limits capacity. Level gauges are linked to the PLC within building 97 which indicates tanks capacity. The tank roof contains a swan neck free vent. Storage Tank Diameter 2000 x 1600 mm High. Capacity 4.5m3. Material PP/GRP. Storage tank T30B (bund) Diameter 3000 x 700 mm High. Capacity 4.5m3. Material PP/GRP.
ETP B97	Hydrochloric Acid (30%) Dosing Tank T44	Hydrochloric Acid	1000	1	1.00	1	1.00	May generate heat with alkalis. Avoid strong alkalis, oxidising agents, common metals.	1	Storage Tank T44 (Polypropylene)	Bund	1.1	Storage tank diameter 1070mm x 1350 High. Capacity 1m3. A loss of containment would be captured within the bund.	Single skin pipe 1 inch.	See details of tanks / media.	Tank T60/ T41/ Filters media.	ETP Floor sump via floor drains.	32.4	Dosing pipes are routed to identified ETP tanks and filer media for back wash and regen. A loss of containment within the ETP would be routed to the floor sump via floor drains.
ETP B97	Sodium Hydroxide Dosing Tank T45	Sodium Hydroxide	1000	1	1.00	1	1.00	Avoid strong acids, oxidising agents.	1	Storage Tank T45 (Polypropylene)	Bund	1.1	Storage tank diameter 1070mm x 1350 High. Capacity 1m3. A loss of containment would be captured within the bund.	Single skin pipe 1 inch.	See details of tanks / media.	Tank T60/ T41/ Filters media.	ETP Floor sump via floor drains.	32.4	Dosing pipes are routed to identified ETP tanks and filter media for back wash and regen. A loss of containment within the ETP would be routed to the floor sump via floor drains.

ETP B97	Chorme Reduction Tank T60	Chrome Line Effluent from Storage Tank T29 Hydrochloric Acid	1000 1000	0.5 0.5	0.50	121	60.50	Negligible - Only trace quantities. May generate heat with alkalis. Avoid strong alkalis, oxidising agents, common metals.	0.5	Storage Tank 60 (Polypropylene)	EPT Sump	32.4	Storage tank Capacity 0.5m3. A loss of containment would be captured within ETP Sump linked by floor drains. ETP sump routes to general line holding tank T31.	Single skin pipe from EPT sump to T61.	1 inch pipe	pipe	ETP Floor sump via floor drains.	32.4	The ETP has a concrete lined below ground sump used to contain process floor waters and out of specification outfall tanks effluent. Details of sump TBD
ETP B97	Precipitation Tank T61	Chrome Line Effluent from Storage Tank T29 Hydrochloric Acid Ferric Sulphate	1000 1000 1000	0.333 0.333 0.333	1.00	121	120.88	Negligible - Only trace quantities. May generate heat with alkalis. Avoid strong alkalis, oxidising agents, common metals. Reacts violently with water. Avoid strong acids, halogenated organics. Contact with some metals may produce hydrogen gas.	1	Storage Tank 61 (Polypropylene)	EPT Sump	32.4	Storage tank Capacity 1m3. A loss of containment would be captured within ETP Sump linked by floor drains. ETP sump routes to general line holding tank T31.	Single skin pipe from EPT sump to T62.	1 inch pipe	pipe	ETP Floor sump via floor drains.	32.4	The ETP has a concrete lined below ground sump used to contain process floor waters and out of specification outfall tanks effluent. Details of sump TBD
ETP B97	Secondary Precipitation Tank T62	Chrome Line Effluent from Storage Tank T29 Hydrochloric Acid Ferric Sulphate Kalic T76 Back Wash & Reagents	1000 1000 1000 1000 1000	0.2 0.2 0.2 0.2 0.2	1.00	121	121.00	Negligible - Only trace quantities. May generate heat with alkalis. Avoid strong alkalis, oxidising agents, common metals. Reacts violently with water. Avoid strong acids, halogenated organics. Contact with some metals may produce hydrogen gas. Avoid contact with strong oxidisers. As above	1	Storage Tank 62 (Polypropylene)	EPT Sump	32.4	Storage tank Capacity 1m3. A loss of containment would be captured within ETP Sump linked by floor drains. ETP sump routes to general line holding tank T31.	Single skin pipe from EPT sump to T63.	1 inch pipe	pipe	ETP Floor sump via floor drains.	32.4	The ETP has a concrete lined below ground sump used to contain process floor waters and out of specification outfall tanks effluent. Details of sump TBD
ETP B97	Pumping Tank T63	Chrome Line Effluent from Storage Tank T29 Hydrochloric Acid Ferric Sulphate Filter press water Kalic T76 Back Wash & Reagents	1000 1000 1000 1000 1000 1000	0.2 0.2 0.2 0.1 0.2 0.1	1.00	121	121.00	Negligible - Only trace quantities. May generate heat with alkalis. Avoid strong alkalis, oxidising agents, common metals. Reacts violently with water. Avoid strong acids, halogenated organics. Contact with some metals may produce hydrogen gas. None identified Avoid contact with strong oxidisers. As above	1	Storage Tank 63 (Polypropylene)	EPT Sump	32.4	Storage tank Capacity 1m3. A loss of containment would be captured within ETP Sump linked by floor drains. ETP sump routes to general line holding tank T31.	Single skin pipe from EPT sump to T64.	1 inch pipe	pipe	ETP Floor sump via floor drains.	32.4	The ETP has a concrete lined below ground sump used to contain process floor waters and out of specification outfall tanks effluent. Details of sump TBD
ETP B97	Settlement Tank T64	Chrome Line Effluent from Storage Tank T29 Hydrochloric Acid Ferric Sulphate Kalic T76 Back Wash & Reagents	1000 1000 1000 1000 1000	0.2 0.2 0.2 0.2 0.2	24.00	121	2904.00	Negligible - Only trace quantities. May generate heat with alkalis. Avoid strong alkalis, oxidising agents, common metals. Reacts violently with water. Avoid strong acids, halogenated organics. Contact with some metals may produce hydrogen gas. Avoid contact with strong oxidisers. As above	24	Storage Tank 64 Steel	Concrete block construction with GRP surface finish.	25.3 (19.9m3)	A loss of containment from Settlement tank T64 would be captured within the concrete block bund it sits in. There is a pump located within the bund to remove rain water accumulations to a central holding tank within the bund. This holding tank measures diameter 3 by 1.2 meters high. The effective bund volume is 25.3 - 8.4m = 19.9m3. The bund is slightly under capacity but the mitigation is removal of rain water automatically by pump. Also the tanks will contain approximately 40% solids that will not readily leak from primary containment.	Single skin pipe to T66/T65.	1 inch pipe	pipe	ETP Floor sump via floor drains.	32.4	The ETP has a concrete lined below ground sump used to contain process floor waters and out of specification outfall tanks effluent. Details of sump TBD
ETP B97	Sludge Holding Tank T65	Chrome Line Effluent from Storage Tank T29 Hydrochloric Acid Ferric Sulphate Kalic T76 Back Wash & Reagents	1000 1000 1000 1000 1000	0.2 0.2 0.2 0.2 0.2	1.00	121	121.00	Negligible - Only trace quantities. May generate heat with alkalis. Avoid strong alkalis, oxidising agents, common metals. Reacts violently with water. Avoid strong acids, halogenated organics. Contact with some metals may produce hydrogen gas. Avoid contact with strong oxidisers. As above	1	Storage Tank 65 (Polypropylene)	EPT Sump	32.4	A loss of containment would be captured within ETP sump linked by floor drains. ETP sump routes to general line holding tank T31.	Single skin pipe to FP76 Dewatering Process	N/A	Pipe	ETP Floor sump via floor drains.	32.4	The ETP has a concrete lined below ground sump used to contain process floor waters and out of specification outfall tanks effluent. Details of sump TBD
ETP B97	Pumping Tank Post Sediment T66	Chrome Line Effluent from Storage Tank T29 Hydrochloric Acid Ferric Sulphate Kalic T76 Back Wash & Reagents	1000 1000 1000 1000 1000	0.2 0.2 0.2 0.2 0.2	2.75	121	332.75	Negligible - Only trace quantities. May generate heat with alkalis. Avoid strong alkalis, oxidising agents, common metals. Reacts violently with water. Avoid strong acids, halogenated organics. Contact with some metals may produce hydrogen gas. Avoid contact with strong oxidisers. As above	2.75	Storage Tank 66 (Polypropylene)	EPT Sump	32.4	Storage tank Capacity 1m3. A loss of containment would be captured within ETP Sump linked by floor drains. ETP sump routes to general line holding tank T31.	Single skin pipe from EPT sump to T70	1	Tank T70	ETP Floor sump via floor drains.	32.4	The ETP has a concrete lined below ground sump used to contain process floor waters and out of specification outfall tanks effluent. Details of sump TBD
ETP B97	Neutralisation Tank T70	Treated effluent from T29, Via Sump S12 Chromate Sodium Hydroxide T45	1000 1000	0.5 0.5	1.00	12410	12410.00	Negligible - Only trace quantities. Avoid strong acids, oxidising agents.	1	Storage Tank 70 (Polypropylene)	EPT Floor Sump	32.4	The ETP has a concrete lined below ground sump used to contain process floor waters and out of specification outfall tanks effluent. Details of sump TBD.	Single skin pipe 1 inch to Tank 71	1	Tank T71 Outfall	ETP Floor sump via floor drains.	32.4	The ETP has a concrete lined below ground sump used to contain process floor waters and out of specification outfall tanks effluent. Details of sump TBD.
ETP B97	Outfall T71	None	1000	1	1.00	12410	12410.00	None Identified	1	Storage Tank 70 (GRP)	EPT Floor Sump	32.4	Storage tank Capacity TBD. A loss of containment would be captured within the concrete bund.	Pipe to foul drain	N/A	N/A	None	32.4	No containment on foul drain to Fareham Road
ETP B97	Ferric Reagent T73	Ferric Sulphate	1000	1	0.55	1	0.55	May generate heat on contact with acids. On contact with some metals, may generate hydrogen gas.	0.55	Storage Tank 73 (Polypropylene)	ETP Floor Sump	32.4	A loss of containment would be captured within the ETP below ground sump.	Single skin pipe 1 inch.	1	Tank T 61	ETP Floor sump via floor drains.	32.4	Dosing tank and pipe are routed to identified ETP tanks and filter media for back wash and regen. A loss of containment within the ETP would be routed to the floor sump via floor drains.
ETP B97	Storage Tank T74	Cationic Polyelectrolyte Betzdearborn AE1125	1000	1	0.50	1	0.50	Avoid strong oxidising agents, ammonia, carbon oxides, nitrogen oxides.	0.5	Storage Tank 74 (Polypropylene)	ETP Floor Sump	32.4	A loss of containment would be captured within the ETP below ground sump.	Single skin pipe 1 inch.	24	Tank T64	ETP Floor sump via floor drains.	32.4	Dosing tank and pipe are routed to identified ETP tanks and filter media for back wash and regen. A loss of containment within the ETP would be routed to the floor sump via floor drains.
ETP B97	Storage Tank T75	Cationic Polyelectrolyte Betzdearborn AE1125	1000	1	0.50	1	0.50	Avoid strong oxidising agents, ammonia, carbon oxides, nitrogen oxides.	0.5	Storage Tank 75 (Polypropylene)	ETP Floor Sump	32.4	A loss of containment would be captured within the ETP below ground sump.	Single skin pipe 1 inch.	24	Tank T64	ETP Floor sump via floor drains.	32.4	Dosing tank and pipe are routed to identified ETP tanks and filter media for back wash and regen. A loss of containment within the ETP would be routed to the floor sump via floor drains.

ETP B97	Backwash & Reagent Tank T76	Chrome Line Effluent from Storage Tank T29 Hydrochloric Acid Ferric Sulphate Kalic T76 Back Wash & Reagents	1000 1000 1000 1000 1000	0.2 0.2 0.2 0.2 0.2	1.00	121	121.00	Negligible - Only trace quantities. May generate heat with alkalis. Avoid strong alkalis, oxidising agents, common metals. Reacts violently with water. Avoid strong acids, halogenated organics. Contact with some metals may produce hydrogen gas. Avoid contact with strong oxidisers. As above	1	Storage Tank 76 (Polypropylene)	EPT Sump	32.4	Storage tank Capacity 1m3. A loss of containment would be captured within ETP Sump linked by floor drains. ETP sump routes to general line holding tank T31.	Single skin pipe from EPT sump to T31.	1 inch pipe	pipe	Below ground concrete lined floor trench with gravity feed to holding sump.	32.4	Below ground concrete lined and capped trench contain pipe to T31 in tank farm. Trench is routed back to a holding sump within the tank farm.
Bulk Chemical Storage Area	Area 99 - Containers 1 to 5	All Chemicals used in process. IBCs, 205L Drums, 25L Drums.	1000	1	42.00	1	42.00	Segregation in line with HSE & EA guidelines.	42	Steel Chemical Container	Container Floor Sump / Bund	2.2	5 x Dual purpose storage units designed to house both 205 litre drums and 1000l IBC's are used to store bulk chemical inventory. Up to 8 IBC or 32 Drums may be stored in each container. Constructed from 2mm profiled mild steel sheet over 100mm x 50mm x3mm RHS with a fully welded leakproof sump over the entire base area with a capacity of 2200L. The units come with steel bar flooring as well as high and low level flame arrested vents. Supplied as standard with padlockable sliding doors.	N/A	N/A	N/A	N/A	N/A	N/A
Bulk Chemical Storage Area	Area 99 Shed	All Chemicals used in process. IBCs, 205L Drums, 25L Drums.	1000	1	2.00	1	2.00	Segregation in line with HSE & EA guidelines.	2	IBC (Polypropylene) or 205L Drum or 25L Drum	Chemical Packaging	1.1	A secure enclosure is provided within area 99 to store a limited quaintly of drums or IBC. Two IBC/Drum polyethylene pallet bunds are provided as secondary containment. Each bund can either store 1 IBC or 4 205L drums.	N/A	N/A	N/A	N/A	N/A	N/A
Hazardous Waste Storage Area	MRF	Empty Drums and IBCs. Expired or waste chemical within containers i.e. IBC, Drums. Waste from spills.	N/A	N/A	N/A	N/A	N/A	Segregation in line with HSE & EA guidelines.	20	Storage Tank 75 (Polypropylene)	ETP Floor Sump	26.3	Haz waste is stored within a suitable IBC, drum or similar container appropriate for the waste type i.e. if acid, polyethylene screw top drum. Waste inventories are stored on an impermeable hard standing that is inclined to a closed acro drain of 0.741 m3 capacity. The haz waste storage areas is partially enclosed to prevent rain ingress. MRF measurements of bund wall area. Bund height 330mm (Rear), Bund height 185mm (Front), Difference between front and back 145mm. Length front to back 14,680mm Width 24,200mm. Volume 25.6m3. Total Volume 26.3 m3.	N/A	N/A	N/A	N/A	N/A	N/A
Chemical Delivery Point B97	B97 Chem Delivery	Hydrochloric Acid Sodium Bisulphate Ferric Sulphate Kalic Sodium Hydroxide	N/A	N/A	N/A	N/A	N/A	Segregation in line with HSE & EA guidelines. (only position for 2 IBCs on Bund)	1	IBC	Polyethylene IBC Bund. Concrete block and resin lined bund.	1.1	The chemical delivery point to the rear of B97 for dosing chemical comprises a plastic bund tray suitable for two IBCs side by side located within a concrete block bund wall. The block wall construction measures 2.65 x 3 x 0.45m high. Its volume is 3.5m3. The plastic bund within the has a volume of 2.2 m3 this the effective inner bund for IBC containment is 2.2 m3 and the outer is 1.3 m3. Adequate containment would be achieved in both circumstances.	5 pipe situated at the delivery point route dosing tanks within the ETP. See above.	N/A - Pipe	Single skin pipe.	Below ground concrete lined floor trench with gravity feed to holding sump.	32.4	Below ground concrete lined and capped trench contain pipe to T31 in tank farm. Trench is routed back to a holding sump within the tank farm.
Clean Bay B110	A4 Boiler	Oil (Loss of Containment)	N/A	N/A	N/A	N/A	N/A	None	1	IBC	Bund	1.1	The A4 boiler heats oil contained within insulated pipe work within a recirculating system. The heated oil pipes are used to heat designated process VATs. An IBC of oil, located in the boiler room, is used to supply the boiler system. No secondary containment was provided. Oil circuits containing oil are mainly routed over the VAT bund system. IBC Bund on order.	N/A	N/A	N/A	N/A	N/A	N/A
Clean Bay B110	Scrubber A1 (Line A)	Trace: Super Bee 300 FLG, Ardrox 185, Sodium Hydroxide. EWC: 11.01.12 Non Hazardous	1000	1	6.20	1	6.20	As per constituents	6.2	GRP Tank	Concrete Block on concrete hard standing. Surfaces painted with water resistant sealing paint.	3.8	Although bund is under capacity, its contents is pumped to sump 13 via a 1 inch pipe at 60Ltrs per minute. The sump pump is used as risk mitigation for the low capacity bund. Contents of tank is considered non hazardous.	Liquid waste within scrubber pond is manually pumped out by tanker.	300	Tanker	Double Skinned	N/A	Spill kits on vehicles and site. Drip tray used as required.
Clean Bay B110	Scrubber A2 (Line B&C)	Trace: Ardrox 3705, Nitic Acid, Ardrox 1218, Super Bee 300 FLG, **Ardrox 2302**, Ardrox 185, Ardrox 1435, Ardrox 1873A. EWC: 11.01.12 Non Hazardous	1000	1	8.40	1	8.40	As per constituents	8.4	GRP Tank	Concrete Block on concrete hard standing. Surfaces painted with water resistant sealing paint.	4.6	Although bund is under capacity, its contents is pumped to sump 13 via a 1 inch pipe at 60Ltrs per minute. The sump pump is used as risk mitigation for the low capacity bund. Contents of tank is considered non hazardous.	Liquid waste within scrubber pond is manually pumped out by tanker.	300	Tanker	Double Skinned	N/A	Spill kits on vehicles and site. Drip tray used as required.
Clean Bay B110	Scrubber A3 (Line D)	Trace: Super Bee 300FLG, **Ardrox 2302, Iridite 15, Bonderite M-CR 1200, Chromic Acid.** EWC: 11.01.12 Non Hazardous	1000	1	6.20	1	6.20	As per constituents	6.2	GRP Tank	Concrete Block on concrete hard standing. Surfaces painted with water resistant sealing paint.	3.6	Although bund is under capacity, its contents is pumped to sump 13 via a 1 inch pipe at 60Ltrs per minute. The sump pump is used as risk mitigation for the low capacity bund. Contents of tank is considered non hazardous.	Liquid waste within scrubber pond is manually pumped out by tanker.	3000	Tanker	Double Skinned	N/A	Spill kits on vehicles and site. Drip tray used as required.

APPENDIX I

Inspection Photo Record

ACS
ANALYTICAL CONSTRUCTION SERVICES
A PHENNA GROUP COMPANY

Fig 1 – New bunded liquid chemicals storage bay adjacent Building 99.

Fig 2 – Bunded storage area for dry chemicals adjacent Building 99.

Fig 3 – Cleaning Bay.

Fig 4 – Paired cleaning and rinse water tanks in Cleaning Bay.

Fig 5 – Corrosion damage at exit manifold from Cleaning bay tank A13.

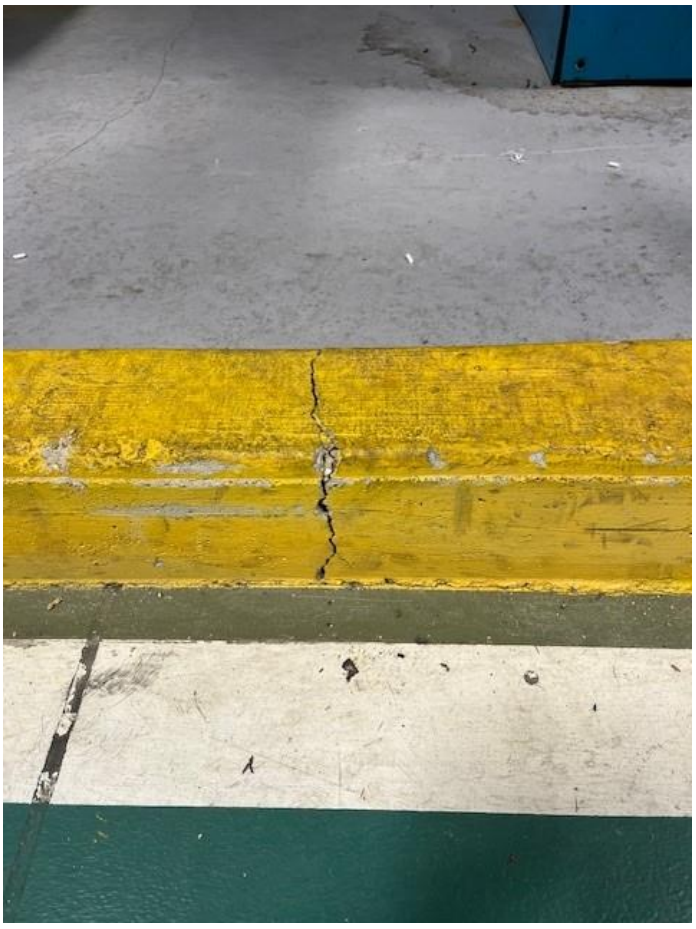

Fig 6 - Cracked peripheral concrete bund at front of spray booths area.

Fig 7 – Spray booth with integral sump.

Fig 8 – Example of basal sump serving Cleaning Bay & adjacent activities.

Fig 9 – Loading area for chemicals into ETP.

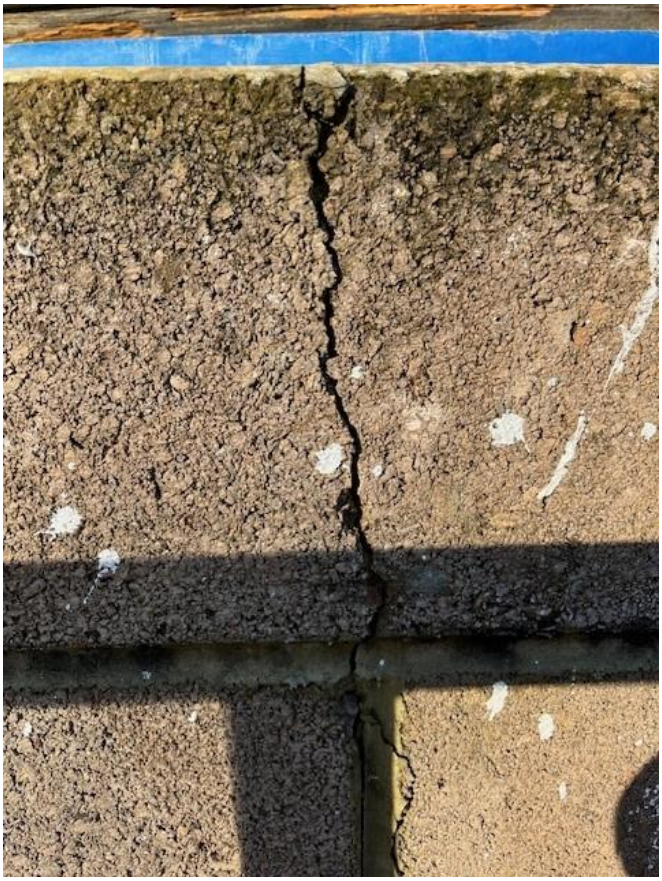

Fig 10 – Cracked peripheral concrete bund at front of ETP chemical loading area.

Fig 11 – Bunded chemical dosing tanks within the ETP.

Fig 12 – Example of Off-haul tank.

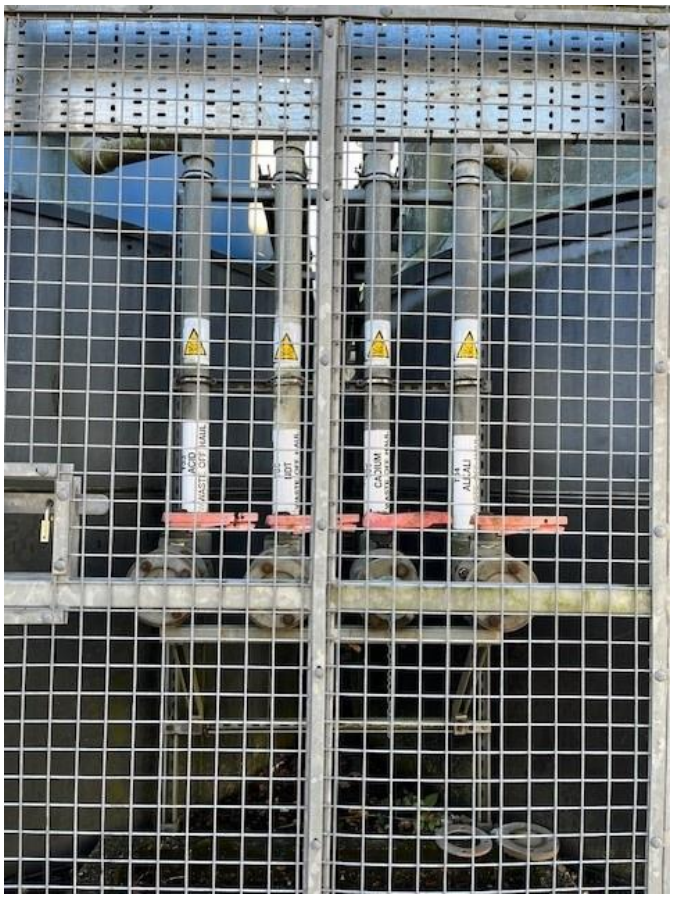

Fig 13 – Connection manifolds from Off-haul tanks with limited drip & spill containment.

Fig 14 – Solid wastes within bunded steel holding area in MRF.

Fig 15 – Liquid waste in IBC within MRF.

Fig 16 – Sealed channel drain at rear of MRF.