

GLEN DIMPLEX HOMES APPLIANCES LTD

November 2024

CONTROLLED WATERS RISK ASSESSMENT GLEN DIMPLEX, PRESCOT

1. INTRODUCTION

1.1. BACKGROUND & OBJECTIVES

Glen Dimplex Homes Appliances Ltd (the client) has commissioned E3P to undertake a phase of supplementary ground investigation at the Glen Dimplex Factory, Stoney Lane, Rainhill, Prescott, L35 2XW, hereafter referred to as the site.

E3P understands that Glen Dimplex is considering the proposed sale of the former Glen Dimplex factory in Prescott for future redevelopment into low-rise residential housing with associated private gardens, roadways and associated infrastructure. At present, a proposed development plan has not been confirmed for the site.

1.2. CURRENT AND HISTORIAL USES

CURRENT SITE USE

The site is an irregularly shaped parcel of land situated to the south of Stoney Lane in Rainhill, Prescott. Presently, the site is occupied by the Glen Dimplex Home Appliances manufacturing factory, which predominantly comprises a large factory structure with associated smaller buildings and infrastructure, including a gas governor to the north and two electricity substations to the west and south. Surrounding the main factory structure, a service road is present to the south and the west, connecting to Stoney Lane at the north. An associated area of hardstanding car parking is noted at the east of the site.

Small areas of soft cover landscaping (managed grasses) are noted at the north and east of the structure, with sporadic semi-mature trees towards the northern boundary.

At the time of writing the report, the factory is undergoing decommissioning works, with all internal processes no longer active and all internal plant removed.

HISTORICAL SITE USE

Following a review of pertinent Ordnance Survey mapping circa 1850, the site appears to be utilised as vacant agricultural land with a small dwelling situated at the centre of the southern boundary. A roadway leading to the dwelling is running parallel to the southern boundary. A well is noted adjacent to the dwelling at the southern boundary. Several segmenting tree-lined field boundaries are present, with the site comprising seven smaller fields. Two small ponds are recorded; one situated at the northern boundary towards the east, with another pond situated towards the centre of the southern boundary.



Historical mapping was unavailable between 1907 and 1925. However, records held by Heritage Gateway indicates a factory had been developed on the site, and that it was being used as a Munitions Works during the First World War (1914-1918) and up until at least 1925 (likely for the manufacturing of military based explosives and propellants).

Minor changes were noted in the mapping with significant changes noted in mapping circa 1925, where the site was completely redeveloped and now comprises an Iron Foundry with associated railway sidings across the site. The works structures consisted of two large structures segmented by a railway siding traversing east to west through the centre of the site. Multiple small outbuildings were noted along the western sector of the main factory structure and the outbuilding situated to the south of the main factory structure is assumed to be associated with the railway sidings. Subsequent mapping circa 1927 identified minor compositional changes to the main factory structure with a tank situated towards the south.

Following mapping dated 1937, the site was renamed to Rainhill Stove works, with minor compositional changes to the structure noted.

Records held by Heritage Gateway indicates the factory was repurposed as a Munitions Works during the Second World War (1939-1945), again likely for the manufacturing of military based explosives and propellants.

Alterations continued to the main factory structure identified in mapping circa 1954 with the main factory structures now recorded as one large structure, with the former segmenting sidings removed. Additional outbuildings were constructed towards the northeast of the site, with an electricity substation noted at the northwest of the main factory structure and a small pond noted at the southern boundary adjacent to the sidings towards the east.

By 1978, all railway and tramway sidings were removed with a segmenting boundary noted at the eastern sector of the site, separating the area from the main works structure. It is assumed this is the construction of the car parking area.

Minor expansions of the main factory structure were noted in following mapping, but predominantly the present-day composition was first noted in aerial imaging dated 2000.

1.3. PREVIOUS SITE INVESTIGATIONS & IDENTIFIED CONTAMINATION

E3P have completed a previous phase of site investigation at the subject site, the findings of which are summarised within the E3P Phase I and II Geoenvironmental Site Assessment (Report Ref: 17-500-R1-2, dated June 2024). Further works were completed in a phase of Supplementary Ground Investigation (Dated October 2024). The findings of the previous phases of investigation are summarised below.

Chemical soil samples submitted for analysis identified extensive exceedances of heavy metals within the Made Ground deposits across the site, as well as further exceedances of Volatile Organic Compounds (VOCs) within both Made Ground and natural superficial deposits in southern window sample probeholes (WS101-WS103).

Widespread Trichloroethene (TCE), Dichloroethene (cis 1,2-Dichloroethene, and Trans 1,2-Dichloroethene), and Vinyl Chloride contamination and localised heavy metal exceedances were identified in the groundwater analysis at the site. It was noted that where there were exceedances of VOCs in soils, exceedances in groundwater were often recorded. Therefore, it was considered that there is likely an on-site source of contamination which may be leaching across the site and into the underlying groundwater, and subsequently, the principal bedrock aquifer.



A singular instance of elevated Trichloroethene (TCE) has been identified within Made Ground deposits in WS208 during supplementary investigation at 0.80 m bgl, situated to the southwest of the main factory structure. It should be noted that the concentrations were at the GAC threshold, however due to known extensive TCE contamination to the east of this location, further assessment is required.

Marginal detections of VOCs and SVOCs were identified within the supplementary site investigation contained in WS207 at 1.00 m bgl for Isopropylbenzene (0.058 mg/kg), N-Propylbenzene (0.11 mg/kg), 1,3,5-Trimethylbenzene (0.22 mg/kg), sec-butylbenzene (0.11 mg/kg) and 4-Isopropyltoluene (0.15 mg/kg). However, it should be noted these were either below the GAC threshold, or no GAC threshold is currently available for the specific compound.

An elevated concentration of total Mercury has been identified within shallow Made Ground deposits towards the southwest part of the site (WS211 at 0.80 m bgl). Following the identification of the elevated concentrations, an additional sample of Made Ground was taken from adjacent rotary borehole RB102 at 0.80 m bgl to determine the potential lateral extent of Mercury impact. The sample submitted from RB102 at 0.80 m bgl did not identify elevated concentrations of inorganic, methyl, or elemental Mercury. Therefore, it is assumed that the elevated Mercury identified within WS211 at 0.80 m bgl is a localised instance, and it is deemed unlikely to be present in its elemental form.



2. SUPPLEMENTARY CONTROLLED WATERS RISK ASSESSMENT

2.1. SCOPE OF INVESTIGATION AND LABORATORY ANALYSIS

The E3P preliminary ground investigation confirmed the presence of widespread Trichloroethene (TCE), Dichloroethene (cis 1,2-Dichloroethene, and Trans 1,2-Dichloroethene), and Vinyl Chloride contamination and localised heavy metal exceedances in the groundwater analysis at the site. Due to exceedances mirrored in the soil analysis, it is considered there is a likely on-site source of contamination which is leaching into the underlying groundwater, and thus posing a potential risk to the underlying Principal aquifer.

Further to this, additional marginal concentrations of Trichloroethene, Isopropylbenzene, N-Propylbenzene, 1,3,5-Trimethylbenzene, sec-butylbenzene, and 4-Isopropyltoluene were identified within the Made Ground deposits in two locations, presenting further risk to underlying groundwater.

In order to determine the full extent of VOC impact and assess the risk to the underlying Principal aquifer, two deep environmental monitoring wells were installed within the bedrock to obtain groundwater samples (Stage 2 supplementary ground investigation). The Exploratory Hole Logs for RB101 and RB102, are appended to this letter report. The environmental monitoring wells were installed within RB101 and RB102 to the southeast and southwest of the site respectively, to determine the full extent of the VOC plume previously suggested within the preliminary ground investigation.

Ground water samples were submitted for a range of chemical analysis, as summarised below:

- ✿ Metals;
- ✿ pH;
- ✿ Cyanide;
- ✿ Phenols;
- ✿ Total and speciated polycyclic aromatic hydrocarbons (PAHs);
- ✿ Speciated and banded total petroleum hydrocarbons (TPHs);
- ✿ Volatile Organic Compounds (VOCs);
- ✿ Semi-Volatile Organic Compounds (SVOCs).

Chemical analysis has been undertaken by an accredited laboratory with the testing results summarised and discussed in Section 2.2 and the testing certificates included in the appendix.

2.2. TIER 2 RISK ASSESSMENT

E3P has undertaken a controlled waters risk assessment for the site based on the consideration of the conceptual site model and the sensitive receptors which are summarised in Table 1.



Table 1 **Controlled Waters Conceptual Model and Sensitivity Profile**

DISCUSSION		SENSITIVITY RATING
Contaminant Source		
MADE GROUND Heavy metal, SVOC, and VOC contamination has been identified within Made Ground infill materials, with the heavy metals recorded towards the north and VOCs identified extending across the south. Variable Made Ground with high-level (predominantly low-solubility in water; LQM/CIEH 2014) VOC impact is present throughout the Made Ground which has subsequently leached into underlying natural deposits to a proven depth of 1.40 m bgl.		High
OVEN FACTORY The oven manufacturing factory is situated in the centre of the site and a known enamel slurry waste storage area is located towards the southeast of the site, adjacent to WS103. Due to the industrial usage of the site, significant potential sources of VOCs and SVOCs are anticipated which may leach into the underlying ground within areas of below ground tanks.		High
MUNITIONS WORKS The historical site use as a Munitions works presents further issues of widespread explosive compounds, VOCs, SVOCs, and Propellants. All compound risks are considered likely to be mobile contaminants which in turn present a further risk to the underlying bedrock.		High
Pathway		
Vertical Migration The majority of the site is underlain by low permeability superficial deposits which will offer some protection to the underlying aquifer and inhibit vertical migration of any contaminants towards the underlying principal aquifer. However, towards the north of the site, shallow bedrock (<5.00 m bgl) was encountered, therefore these areas are at increased risk of vertical migration as a sufficient clay aquitard is not present to afford protection to the underlying principal aquifer.		Low
Lateral migration Lateral migration of contaminants is considered possible due to the presence of granular alluvium deposits across the site. However, the majority of identified deposits consist of low permeability CLAY therefore reducing the overall likelihood of lateral migration.		Medium
Receptor		
Aquifer Classification in Superficial Deposits	Secondary Undifferentiated aquifer and Secondary A aquifer (eastern sector)	Medium
Aquifer Classification in Bedrock	Principal aquifer	High
Groundwater Source Protection Zone or Drinking Water Safeguard Zone	The site is situated within a Source Protection Zone 3 – therefore the total area needed to support the abstraction or discharge from the protected groundwater source.	High
Distance to the Closest Groundwater Abstraction Point	An active groundwater abstraction point located 16 m SE of the site, pertaining to Elis UK Ltd and used for laundry purposes. This increases the sensitivity of the underlying aquifer.	High



Is the site Located Within 50 m of a Surface Watercourse?	No surface watercourses are situated within 50 m of the site boundary.	Low
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The ICSM developed within the context of the site setting has a viable pollutant pathway, which would be the downward migration of potentially mobile phase-soluble contaminants towards the underlying principal aquifer.

In addition to above, E3P has developed a diagrammatic Controlled Waters Conceptual Model presented as drawing 17-500-027.

E3P has undertaken a Tier 2 assessment in line with LCRM (2023), which has included a comparison of groundwater samples obtained from shallow (Table 1) and deeper (Table 2) boreholes. Samples for shallow groundwater within the superficial stratum were taken in May 2024 and include an assessment of leachate samples taken from March 2024. Groundwater samples from deeper boreholes installed in the Principal Aquifer (bedrock) were taken from September to October 2024 and results are presented within Table 2.

Given the lack of surface water receptor, the DWS thresholds will be utilised as the priority, however, where no DWS GACs are present, EQS thresholds will be utilised in their absence.

These are presented in Table 1 and Table 2.



Table 1 Comparison of Groundwater and Leachate Analysis with Tier 2 Screening Levels (Superficial)

DETERMINAND	UNIT	DWS _{3,4}	NO. OF GW SAMPLES	MAX CONC. IN GW	LOC. OF EX.	NO. OF LEACHATE SAMPLES	MAX CONC. IN LEACHATE	LOC. OF EX.	ASSESSMENT
Arsenic	µg/l	10	8	3.6	N/A	3	5.2	N/A	No Further Action
Cadmium	µg/l	5	8	0.31	N/A	3	0.51	N/A	No Further Action
Chromium (VI)	µg/l	–	8	< 20	N/A	3	< 20	N/A	No Further Action
Chromium (III)	µg/l	50	8	0.89	N/A	3	10	N/A	No Further Action
Copper	µg/l	2000	8	2.6	N/A	3	15	N/A	No Further Action
Total Cyanide	µg/l	50	8	< 0.0050	N/A	3	< 0.0050	N/A	No Further Action
Lead	µg/l	10	8	< 0.50	N/A	3	4.8	N/A	No Further Action
Mercury	µg/l	1.0	8	< 0.010	N/A	3	< 0.05	N/A	No Further Action
Nickel	µg/l	20	8	29	CP101	3	7.9	N/A	Further Action
Selenium	µg/l	10	8	1.3	N/A	3	1.7	N/A	No Further Action
Zinc	µg/l	–	8	13	N/A	3	14	N/A	No Further Action
pH	6–9		8	5.7	CP101	3	8.0	N/A	Further Action
Polycyclic Aromatic Hydrocarbons									
Naphthalene	µg/l	10*	8	< 0.50	N/A	3	< 0.010	N/A	No Further Action
Anthracene	µg/l	10*	8	< 0.50	N/A	3	< 0.010	N/A	No Further Action
Benzo[b]fluoranthene	µg/l	10*	8	< 0.50	N/A	3	< 0.010	N/A	No Further Action
Benzo[k]fluoranthene	µg/l	10*	8	< 0.50	N/A	3	< 0.010	N/A	No Further Action
Benzo(a)pyrene	µg/l	10*	8	< 0.50	N/A	3	< 0.010	N/A	No Further Action
Indeno(123-cd)pyrene	µg/l	10*	8	< 0.50	N/A	3	< 0.010	N/A	No Further Action
Fluoranthene	µg/l	10*	8	< 0.50	N/A	3	< 0.010	N/A	No Further Action
Benzo(ghi)perylene	µg/l	10*	8	< 0.50	N/A	3	< 0.010	N/A	No Further Action



DETERMINAND	UNIT	DWS _{3,4}	NO. OF GW SAMPLES	MAX CONC. IN GW	LOC. OF EX.	NO. OF LEACHATE SAMPLES	MAX CONC. IN LEACHATE	LOC. OF EX.	ASSESSMENT
Aromatic Hydrocarbon									
TPH C5-C7 (benzene)	µg/l	1	8	8.0	WS102	3	< 0.10	N/A	Further Action
TPH C7-C8 (toluene)	µg/l	700	8	18	N/A	3	< 0.10	N/A	No Further Action
TPH C8-C10 (xylene)	µg/l	300	8	< 0.10	N/A	3	< 0.10	N/A	No Further Action
TPH C10-C12 (naphthalene)	µg/l	90	8	< 5.0	N/A	3	< 0.10	N/A	No Further Action
TPH C12-C16	µg/l	90	8	< 0.10	N/A	3	< 0.10	N/A	No Further Action
TPH C16-C35	µg/l	90	8	< 0.10	N/A	3	< 0.10	N/A	No Further Action
Aliphatic Hydrocarbon									
TPH C5-C6	µg/l	1000 ⁵	8	< 0.10	N/A	3	< 0.10	N/A	No Further Action
TPH C6-C8	µg/l	1000 ⁵	8	< 0.10	N/A	3	< 0.10	N/A	No Further Action
TPH C8-C10	µg/l	300	8	< 0.10	N/A	3	< 0.10	N/A	No Further Action
TPH C10-C12	µg/l	300	8	< 0.10	N/A	3	< 0.10	N/A	No Further Action
TPH C12-C16	µg/l	300	8	< 0.10	N/A	3	< 0.10	N/A	No Further Action
TPH C16-C21	µg/l	300 ^{**}	8	< 0.10	N/A	3	< 0.10	N/A	No Further Action
TPH C21-C35	µg/l	300 ^{**}	8	< 0.10	N/A	3	< 0.10	N/A	No Further Action
Volatile Organic Compounds									
Tetrachloroethylene	µg/l	10	8	< 10	–	–	–	–	No Further Action
Trichloroethylene (TCE)	µg/l	10	8	> 10 000	WS102 WS103 WS107 CP101 CP102	–	–	–	Further Action



DETERMINAND	UNIT	DWS _{3,4}	NO. OF GW SAMPLES	MAX CONC. IN GW	LOC. OF EX.	NO. OF LEACHATE SAMPLES	MAX CONC. IN LEACHATE	LOC. OF EX.	ASSESSMENT
Trichlorobenzene	µg/l	–	8	< 1.0	N/A	–	–	–	No Further Action
Trichloromethane	µg/l	–	8	< 1.0	N/A	–	–	–	No Further Action
Dichloromethane	µg/l	200	8	<1.0	N/A	–	–	–	No Further Action
Cis 1,2-Dichloroethene	µg/l	–	8	>10 000	WS102 WS103 WS107 CP101 CP102	–	–	–	Further Action
Trans 1,2-Dichloroethene	µg/l	–	8	150	WS102 CP102	–	–	–	Further Action
1,1-Dichloroethene	µg/l	3	8	27	WS102 CP102	–	–	–	Further Action
Vinyl Chloride	µg/l	0.3	8	>10 000	WS102 WS103 WS107 CP102	–	–	–	Further Action

Notes

Solubility <0.01µg/l

AA – Annual Average

* Polyaromatic hydrocarbons (PAH) - Benzo(a)pyrene (BaP), Benzo(b)fluoranthene, Benzo(k)fluoranthene, Benzo(g,h,i)-perylene and Indeno(1,2,3-cd)-pyrene. Benzo(a)pyrene can be considered as a marker for the other PAHs, hence only benzo(a)pyrene needs to be monitored for comparison with the biota EQS or the corresponding AA-EQS in water.

** There are no WHO Guideline Values for aliphatic fractions C16-C21 and C21-C35, therefore the guideline value for aliphatic fractions inclusive of C8-C16 (300µg/l) has been applied.

1. [The Water Framework Directive \(Standards and Classification\) Directions \(England and Wales\) 2015 \(legislation.gov.uk\)](#)

2. [The Water Supply \(Water Quality\) Regulations 2018 \(legislation.gov.uk\)](#)

3. [Guidelines for drinking-water quality, 4th edition, incorporating the 1st addendum \(who.int\)](#)

4. [CL:AIRE publishes Petroleum Hydrocarbons in Groundwater guidance \(claire.co.uk\)](#)

5. A total TPH criteria of 1000 mg/kg will act as a surrogate criterion for remaining aliphatic and aromatic TPH fractions.

Table 2 Comparison of Groundwater Analysis with Tier 2 Screening Levels (Bedrock)



DETERMINAND	UNIT	DWS _{3,4}	NO. OF GW SAMPLES	MAX CONC. IN GW	LOC. OF EX.	ASSESSMENT
Arsenic	µg/l	10	6	0.90	N/A	No Further Assessment
Cadmium	µg/l	5	6	0.17	N/A	No Further Assessment
Chromium (VI)	µg/l	–	6	<20	N/A	No Further Assessment
Chromium (III)	µg/l	50	6	1.10	N/A	No Further Assessment
Copper	µg/l	2000	6	4.10	N/A	No Further Assessment
Total Cyanide	µg/l	50	6	<5	N/A	No Further Assessment
Lead	µg/l	10	6	0.52	N/A	No Further Assessment
Mercury	µg/l	1.0	6	<0.010	N/A	No Further Assessment
Nickel	µg/l	20	6	5.30	N/A	No Further Assessment
Selenium	µg/l	10	6	<0.50	N/A	No Further Assessment
Zinc	µg/l	–	6	22	N/A	No Further Assessment
pH	6–9		6	7.1-8.2	N/A	No Further Assessment

Polycyclic Aromatic Hydrocarbons

Naphthalene	µg/l	10*	6	< 0.50	N/A	No Further Assessment
Anthracene	µg/l	10*	6	< 0.50	N/A	No Further Assessment
Benzo[b]fluoranthene	µg/l	10*	6	< 0.50	N/A	No Further Assessment
Benzo[k]fluoranthene	µg/l	10*	6	< 0.50	N/A	No Further Assessment
Benzo(a)pyrene	µg/l	10*	6	< 0.50	N/A	No Further Assessment
Indeno(123-cd)pyrene	µg/l	10*	6	< 0.50	N/A	No Further Assessment
Fluoranthene	µg/l	10*	6	< 0.50	N/A	No Further Assessment
Benzo(ghi)perylene	µg/l	10*	6	< 0.50	N/A	No Further Assessment

Aromatic Hydrocarbon



DETERMINAND	UNIT	DWS _{3,4}	NO. OF GW SAMPLES	MAX CONC. IN GW	LOC. OF EX.	ASSESSMENT
TPH C5-C7 (benzene)	µg/l	1	6	<0.10	N/A	No Further Assessment
TPH C7-C8 (toluene)	µg/l	700	6	<0.10	N/A	No Further Assessment
TPH C8-C10 (xylene)	µg/l	300	6	<0.10	N/A	No Further Assessment
TPH C10-C12 (naphthalene)	µg/l	90	6	<0.10	N/A	No Further Assessment
TPH C12-C16	µg/l	90	6	<0.10	N/A	No Further Assessment
TPH C16-C35	µg/l	90	6	<0.20	N/A	No Further Assessment
Aliphatic Hydrocarbon						
TPH C5-C6	µg/l	1000 ⁵	6	<0.10	N/A	No Further Assessment
TPH C6-C8	µg/l	1000 ⁵	6	<0.10	N/A	No Further Assessment
TPH C8-C10	µg/l	300	6	<0.10	N/A	No Further Assessment
TPH C10-C12	µg/l	300	6	<0.10	N/A	No Further Assessment
TPH C12-C16	µg/l	300	6	<0.10	N/A	No Further Assessment
TPH C16-C21	µg/l	300 ^{**}	6	<0.10	N/A	No Further Assessment
TPH C21-C35	µg/l	300 ^{**}	6	<0.10	N/A	No Further Assessment
Volatile Organic Compounds						
Tetrachloroethylene	µg/l	10	6	<1.0	N/A	No Further Assessment
Trichloroethylene	µg/l	10	6	<1.0	N/A	No Further Assessment
Trichlorobenzene	µg/l	–	6	<1.0	N/A	No Further Assessment
Trichloromethane	µg/l	–	6	14 2.4	RB102 RB102	Further Action
Vinyl Chloride	µg/l	0.3	6	<1.0	N/A	No Further Assessment



This comparison indicates that the data exceeds the DWS values for the following inorganic compounds:

Table 3 Summary of Controlled Waters Risk Assessment DWS Exceedances

EXCEEDANCE IN SUPERFICIAL GROUNDWATER	EXCEEDANCE IN BEDROCK GROUNDWATER
✳ Nickel; ✳ pH; ✳ TPH C5-C7 (Benzene); ✳ Trichloroethene (TCE); ✳ Cis 1,2-Dichloroethene; ✳ Trans 1,2-Dichloroethene; ✳ 1,1-Dichloroethene; and ✳ Vinyl chloride.	✳ Trichloromethane

In relation to the VOC exceedances, Table 4 provides a summary. Where multiple data from a singular well has been obtained (WS102, WS107, CP101, RB102), the largest concentration over the two visits has been recorded below.

Table 4 Summary of Maximum Elevated Contaminants in Groundwater

CONTAMINANT	CONTAMINANT SOURCE					
	WS102 (µG/L)	WS103 (µG/L)	WS107 (µG/L)	CP101 (µG/L)	CP102 (µG/L)	RB102 (µG/L)
TPH C5-C7 (Benzene)	8	–	–	–	–	–
Trichloroethene (TCE)	>10,000	27	20	2.1	6900	–
1,1-Dichloroethene	18	–	–	–	27	–
Trans 1,2-Dichloroethene	190	–	–	–	73	–
Cis 1,2-Dichloroethene	>10,000	38	12	3.7	9600	–
Vinyl Chloride	6100	3.4	1.3	–	400	–
Trichloromethane	–	–	–	–	–	14

2.3. DISCUSSION OF CONTROLLED WATERS RISK ASSESSMENT

SITE INVESTIGATION ASSESSMENT

Historically, the site has been subjected to extensive infilling and a number of industrial uses including an Iron Foundry, Munitions Factory, and most recently an Oven Manufacturing Factory which, at the time of writing the report is still present however is undergoing decommissioning. Chemical by-products of manufacturing processes and compounds within the Made Ground may have subsequently leached down into underlying ground and contaminated groundwater both within Made Ground and natural superficial deposits.



The site is underlain by a mixed geology, generally cohesive clay in the south of the site with discrete areas of interbedded cohesive and granular materials towards the north, and southwest. The granular deposits will afford less protection to the underlying principal aquifer in the bedrock in comparison to the remainder of the site, where generally clay deposits are anticipated to, or proven in excess of 5.00 m in areas. Furthermore, towards the northwestern sector of the site, bedrock was encountered at lesser depths (<5.00 m bgl), further increasing the risk of vertical migration of compounds towards the underlying bedrock aquifer as cohesive material are not present within suitable quantities to afford protection to the underlying aquifer.

The site is also situated within a Source Protection Zone 3, further increasing the sensitivity of the underlying aquifer. Overall, it is deemed the Principal Bedrock Aquifer is a high risk to on-site contamination, as extensive sources of contamination and potential pathways (vertical migration) have been established.

Widespread Trichloroethene (TCE), Dichloroethene (cis 1,2-Dichloroethene, and Trans 1,2-Dichloroethene), and Vinyl Chloride contamination and localised heavy metal exceedances have been identified in the groundwater analysis at the site.

It is noted that where there are exceedances of VOCs in soils, exceedances in groundwater were often recorded. Therefore, it is considered that there is a likely on-site source of contamination which may be leaching across the site and into the underlying groundwater, and subsequently the Principal aquifer.

Based upon the significantly higher concentrations of VOCs recorded within two sets of groundwater samples within WS102, and in addition to a larger number of different elevated concentrations of compounds, WS102 is considered the most likely point-source of contamination which is subsequently leaching into the surrounding areas. Based upon the location of WS102, and the identified visual/olfactory impact within both the natural and MADE GROUND deposits, it is assumed the contamination is leaching from the main factory structure and the enamel slurry waste storage area located to the north / northeast of the borehole.

A plume of Trichloroethene (TCE), Dichloroethene variants, and Vinyl Chloride has been identified within groundwater monitoring data, extending from WS107 towards the northwestern entrance of the site, through to CP102 towards the southeast of the factory. No groundwater samples were obtained from WS101, as the environmental monitoring well did not contain enough groundwater for laboratory testing. However as exceedances of the known Trichloroethene, Dichloroethene variants, and Vinyl Chloride were identified within the soil testing, it is considered likely groundwater within the vicinity of WS101 will be contaminated with the aforementioned VOCs. It is noted that concentrations of VOCs were significantly higher in deeper groundwater monitoring wells, which suggests the plume is formed of DNAPL.

A Groundwater Contamination Issues Plan is presented as Drawing 17-500-018 in **Error! Reference source not found.**

The groundwater flow plan (Drawing 17-500-029) shows that, in general, groundwater is flowing in a south-westerly direction. When consulting the cross section plans of the site (**Error! Reference source not found.**) it can be seen that groundwater levels range between 58.00 m AOD in the northeast and 54.00 m AOD in the southwest. At present, the cross sections show that the groundwater flows through both Made Ground and natural deposits at the site, particularly in the south of the site. This is potentially allowing for the dispersion of the identified elevated contaminants within the groundwater.

Principal Aquifer



Site wide Trichloroethene (TCE), Dichloroethene variants, and Vinyl Chloride impact was been identified with the tested soils and groundwaters across the site within wells situated in the natural superficial drift deposits.

To assess whether leaching had occurred of the identified contaminants into the underlying Principal aquifer through contaminated groundwater, two boreholes were advanced into the bedrock, situated at the south west and south eastern most points of the site. The wells were installed within the two furthest opposing points of the southern boundary to assess whether the contamination was present, and thus spanned across the entirety of southern boundary of the site.

The Tier 2 assessment of groundwater samples shows only elevated concentrations of Trichloromethane contained within the underlying Principal aquifer when compared against DWS values. The elevated concentrations were contained within RB102 towards the southwest of the site, identified in two samples submitted at concentrations of 14 µg/l (Visit 1) and 2.40 µg/l (Visit 3). Visit 2 did not identified concentrations above the laboratory limit of detection.

No evidence of Trichloromethane was recorded within the surrounding locations Made Ground or natural superficial deposits above the laboratory LOD within the tested soil analysis. However, towards the southwest of the site, where the exceedance was identified, the materials were recorded to contain a greater proportion of granular and cohesive interbedded stratum which may have facilitated the migration of the compounds from an on-site source which has not yet been identified.

As the assumed groundwater flow is generally in a south-westerly direction, it is likely that any contaminated groundwater within the underlying Principal aquifer would migrate from the source point and be identified within RB102. Further investigations across the southern boundary are required to obtain both additional soil and groundwater samples to identify the potential source of Trichloromethane to understand the potential extent of the compounds contamination across the site and assess required remedial work.

As no other instances of elevated VOCs including Trichloroethane, Dichloroethane variants, or Vinyl Chloride were identified within the submitted groundwater samples obtained from the Principal Aquifer, it is deemed the pathway is not complete and these compounds have not leached from superficial groundwater and contaminated the underlying bedrock. The presence of low permeability cohesive deposits may be limiting the migration of compounds within certain areas of the site to the underlying aquifer. As the south is at present believed to be the most contaminated area of the site based upon the initial and supplementary stages of investigation, the overall risk of contamination contained within the Principal aquifer is significantly reduced. However, it is still suggested that further boreholes are completed within the centre of the site within the footprint of the factory, and towards the north, in order to fully assess the condition of the underlying aquifer and groundwater across the entirety of the site.

2.4. CONCLUSIONS

A comparison of superficial and bedrock groundwater samples from boreholes to the Tier 2 criteria (Table 1) has shown exceedances of heavy metals and VOCs are typically confined to the superficial artesian water. No instances of any compounds found within the surrounding soil or superficial groundwater analysis have been reflected within the deeper bedrock groundwater samples. As a result of this, it can be said that the contaminants present within the upper superficial deposits do not have a complete pollutant pathway and have not at present contaminated the underlying Principal Aquifer.



The exceedance relating to Trichloromethane in the groundwater sample within one location (RB102) was recorded within two of the three sampling visits, with the maximum recorded concentration at 14 µg/l. However, it must be noted that at present, no identified sources of Trichloromethane have been noted within soil analysis or shallow groundwater sampling thus it is not yet proven the source of the compound.

During the remediation and enabling works, substantial monitoring of the Principal Aquifer will be required to confirm the absence of any release of potentially harmful compounds. Should concentrations within the monitoring samples show any significant changes or increases in concentrations when compared to the baseline samples, then further risk assessment will be required.

As the south is at present believed to be the most contaminated area of the site based upon the initial and supplementary stages of investigation, the overall risk of contamination contained within the Principal aquifer is significantly reduced. However, it is still suggested that further boreholes are completed within the centre of the site, particularly within the footprint of the factory, and towards the north, in order to fully assess the condition of the underlying aquifer and groundwater across the entirety of the site.

I trust this information is satisfactory to your requirements, and should I be able to be of any further assistance, please do not hesitate to contact me.

Yours sincerely,

For and on behalf of E3P Ltd

Written by:

Iona Diack
Geoenvironmental Consultant

Reviewed by:

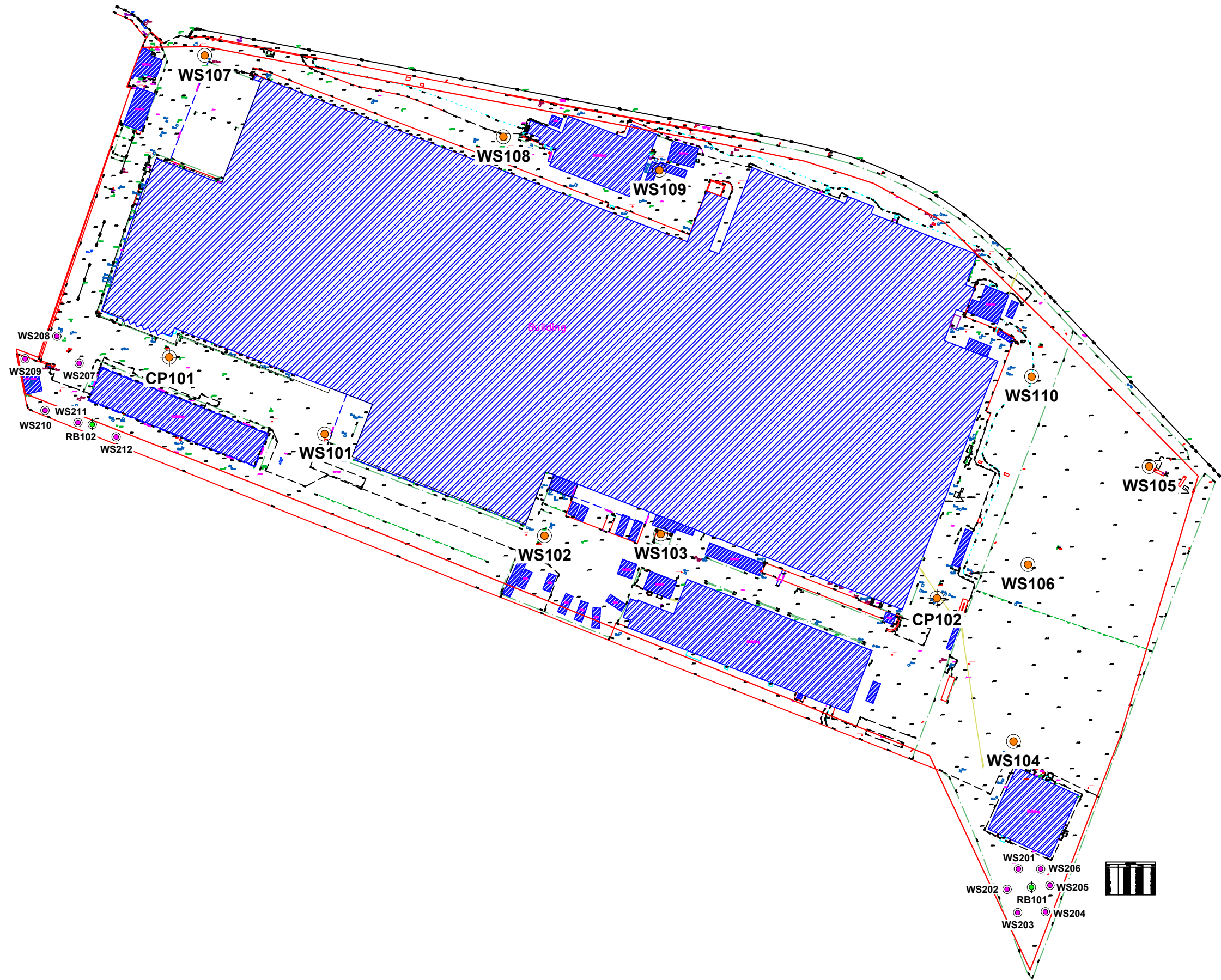
Rebecca Hodnett
Associate Director

Approved by:



Enclosed

- | | |
|---------------------|--|
| Appendix I | Drawings
17-500-005 – Exploratory Hole Plan
17-500-018 – Groundwater Contamination Exceedances Plan
17-500-027 – Controlled Waters Conceptual Site Model Plan
17-500-029 – Depth to Groundwater Plan |
| Appendix II | Exploratory Hole Logs |
| Appendix III | Chemical Analysis Testing Results |



Location Symbols

- Approximate Window Sample Probable Hole Location (E3P February 2024)
- Approximate Cable Percussive Borehole Location (E3P February 2024)
- Proposed Window Sample Probable Hole Location
- Proposed Rotary Borehole Location

Notes:

P1	REVC	07.10.2024	OW	ID	MW
P1	REVB	13.05.2024	EB	ID	MW
P1	REVA	22.03.2024	EB	ID	MW
Phase	Issue	Date	Drawn	Checked	PM

Client:

Glen Dimplex

Job Title:

Prescott

Job No:

17-500

Drawing No:

005

Drawing Title:

Exploratory Hole Location Plan

Date:

07.10.2024

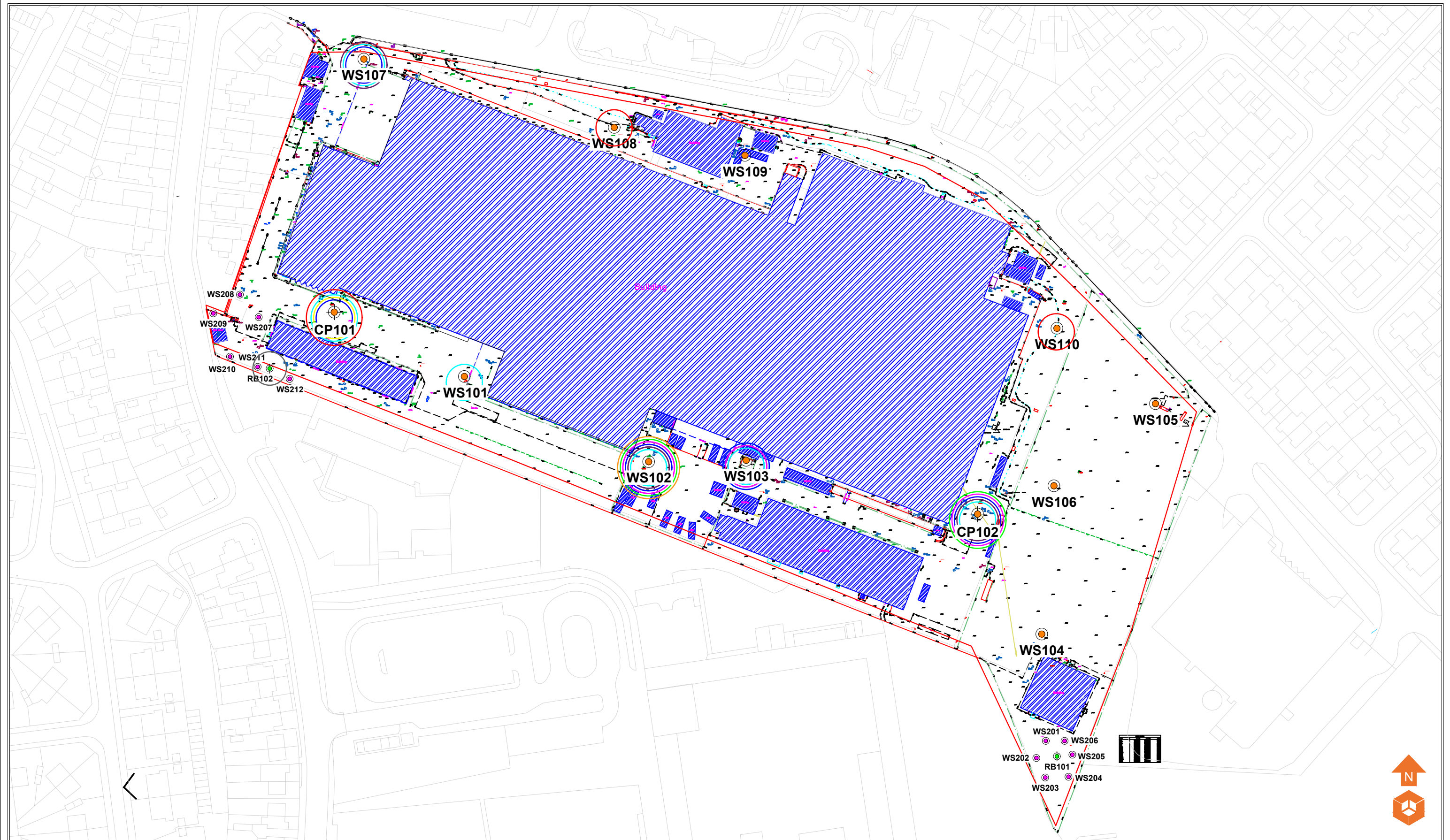
Scale:

NTS @ A3



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- Location Symbols**
- Approximate Window Sample Probehole Location (E3P February 2024)
 - Approximate Cable Percussive Borehole Location (E3P February 2024)

- Contamination Exceedances**
- Trichloroethene
 - Vinyl Chloride
 - Cis 1, 2 - Dichloroethene
 - Trans 1, 2 - Dichloroethene
 - 1 - 1 Dichloroethene
 - Benzene
 - Nickel
 - pH
 - Trichloromethane

Notes:

P1	REVC	12.11.2024	TG	ID	MW
P1	REVB	21.05.2024	OW	ID	MW
P1	REVA	13.05.2024	EB	ID	MW
Phase	Issue	Date	Drawn	Checked	PM

Client:

Glen Dimplex

Job Title:

Prescott

Job No:
17-500
Drawing No:
018

Date:
12.11.2024
Scale:
NTS @ A3

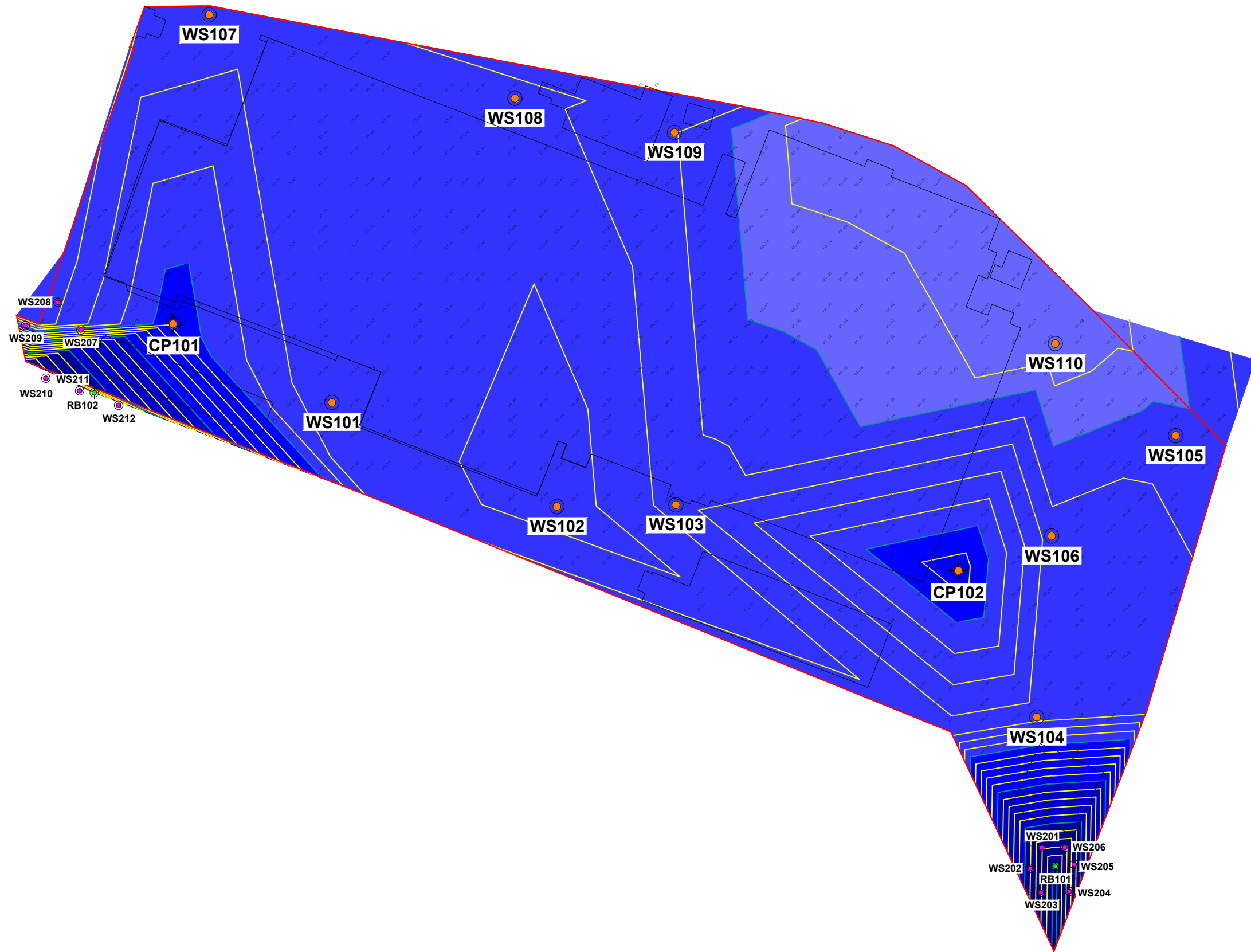
Drawing Title:

Groundwater Contamination Exceedances Plan



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Location Symbols

- Approximate Window Sample Probehole Location (E3P February 2024)
- Approximate Cable Percussive Borehole Location (E3P February 2024)
- Approximate Rotary Borehole Location (E3P February 2024)

Groundwater Depth (m AOD)

- Depth of Groundwater 43.00 - 45.99m AOD
- Depth of Groundwater 46.00 - 48.99m AOD
- Depth of Groundwater 49.00 - 51.99m AOD
- Depth of Groundwater 52.00 - 54.99m AOD
- Depth of Groundwater 55.00 - 57.99m AOD
- Depth of Groundwater 58.00 - 60.99m AOD
- Depth of Groundwater 61.00 - 63.99m AOD
- Depth of Groundwater >64.00m AOD

Notes:

P1	REVB	12.11.2024	TG	MW	MW
P1	REVA	22.05.2024	EB	MW	MW
Phase	Issue	Date	Drawn	Checked	PM

Client:

Glen Dimplex

Job Title:

Prescott

Job No:

17-500

Drawing No:

029

Date:

12.11.2024

Scale:

NTS @ A3

Drawing Title:

Depth to Groundwater Plan



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Borehole Log

Borehole No.

WS101

Sheet 1 of 1

Project Name: Glen Dimplex

Project No.
17500

Co-ords: 347914.00 - 391519.35

Hole Type
WS

Location: Prescot

Level: 59.27

Scale
1:50

Client: Glen Dimplex

Dates: 19/03/2024 -

Logged By
I.Diack

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
					0.35	58.92		MADE GROUND: Concrete.	
		1.00		N=6 (1,1/1,1,2,2)				MADE GROUND: Grey slightly sandy gravel. Gravel is fine to coarse, angular to subrounded of concrete and limestone (MOT sub-base).	1
		1.30	ES		1.20	58.07			
					1.70	57.57		MADE GROUND: Black slightly gravelly very silty very sandy clay with rare cobble. Gravel is fine to coarse, very angular to subrounded of slag, brick, concrete, sandstone, and mudstone with frequent inclusions of ash. Cobble is subangular of brick. (Slight Hydrocarbon Odour). Loose dark orangish brown slightly silty very clayey fine to medium SAND.	2
		2.00		N=7 (1,1/1,2,2,2)					
		2.40	ES						
		3.00		N=8 (1,2/2,2,2,2)	3.00	56.27		Firm low strength light brown mottled red slightly gravelly very sandy CLAY. Gravel is fine to medium, subangular to rounded of sandstone.	3
		4.00		N=21 (8,5/6,5,5,5)	4.10	55.17			4
								Very stiff very high strength brown very sandy CLAY with frequent bands of brown clayey fine to medium SAND.	
		5.00		N=20 (3,4/4,5,5,6)					5
					5.45	53.82		End of borehole at 5.45 m	6
									7
									8
									9
									10

Remarks

1. Complete. 2. Environmental monitoring well installed - reponse zone 1.00 - 1.50mbgl. 3. A slight hydrocarbon odour was encountered in MADE GROUND 1.20 - 1.70m bgl.



Borehole Log

Borehole No.

WS102

Sheet 1 of 1

Project Name: Glen Dimplex

Project No.
17500

Co-ords: 347982.95 - 391485.64

Hole Type
WS

Location: Prescot

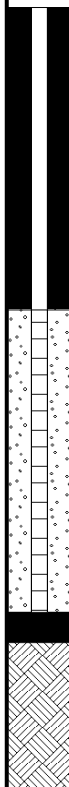
Level: 59.21

Scale
1:50

Client: Glen Dimplex

Dates: 20/03/2024 -

Logged By
I.Diack

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description		
		Depth (m)	Type	Results						
					0.30	58.91		MADE GROUND: Concrete.		
					0.50	58.71		MADE GROUND: Dark grey slightly sandy gravel with frequent cobbles. Gravel is fine to coarse, angular to subrounded of concrete, sandstone, brick, mudstone, coal and slag. Cobbles are angular of concrete.		
					0.70	58.51				
		0.90	ES	N=5 (1,1/1,1,1,2)						
		1.00							1	
		1.40	ES		1.30	57.91		MADE GROUND: Black very sandy gravel. Gravel is fine to coarse, subangular to rounded of sandstone and slag with frequent fragments of timber and ash inclusions.		
		2.00		N=8 (1,1/1,2,2,3)				Firm low strength black slightly gravelly CLAY. Gravel is fine to medium, subangular to well rounded of sandstone and mudstone (Strong hydrocarbon odour).	2	
		3.00		N=13 (2,3/3,3,3,4)				Firm low strength light orange mottled brown slightly sandy gravelly CLAY. Gravel is fine to medium, subangular to subrounded of sandstone and mudstone. (Becoming stiff medium strength at 3.00mbgl). (Becoming very stiff high strength at 4.00mbgl.). (Becoming very stiff very high strength at 4.80mbgl).	3	
		3.60	ES							
		4.00		N=33 (4,6/7,8,9,9)					4	
4.80			50 (5,10/50 for 215mm)	5.16	54.05		5			
End of borehole at 5.16 m									6	
									7	
									8	
									9	
									10	

Remarks

1. Borehole terminated due to refusal on very stiff CLAY at 5.16 m bgl. 2. Environmental monitoring well installed - response zone 2.00 - 4.00m bgl. 3. Strong hydrocarbon odour encountered within MADE GROUND from 0.30 - 1.30m bgl.

Borehole Log

Borehole No.

WS103

Sheet 1 of 1

Project Name: Glen Dimplex

Project No.
17500

Co-ords: 348023.96 - 391482.91

Hole Type
WS

Location: Prescot

Level: 59.35

Scale
1:50

Client: Glen Dimplex

Dates: 20/03/2024 -

Logged By
I.Diack

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
		0.25			0.25	59.10		MADE GROUND: Concrete.	
		0.80	ES	N=5 (1,1/1,1,1,2)	0.70	58.65		MADE GROUND: Red sandy gravel. Gravel is fine to coarse, very angular to subrounded of brick, sandstone, concrete, and coal with frequent fragments of timber and rare glass.	1
		1.00						MADE GROUND: Red sandy gravel. Gravel is fine to coarse, very angular to subrounded of brick, sandstone, concrete, and coal with frequent fragments of timber and rare glass.	
		1.60	ES		1.40	57.95		Grey very silty very clayey fine to medium SAND. (Strong hydrocarbon odour)	
		2.00		N=7 (1,1/1,2,2,2)	1.70	57.65		Loose grey very silty very clayey fine to medium SAND. (Strong hydrocarbon odour)	2
		2.50	ES					Loose light grey and orange very clayey very silty fine to medium SAND with bands of light brown very sandy CLAY.	
		3.00		N=19 (2,3/4,4,5,6)	3.00	56.35		Very stiff high strength dark reddish brown slightly gravelly sandy CLAY. Gravel is fine to medium, subangular to subrounded of mudstone.	3
		4.00		N=28 (4,4/5,6,8,9)					4
		5.00		N=43 (4,4/7,8,12,16)					5
					5.45	53.90		End of borehole at 5.45 m	6

Remarks

1. Complete. 2. Environmental monitoring well installed - response zone 0.50 - 1.40 mbgl. 3. Strong hydrocarbon odour encountered within MADE GROUND from 0.7 - 1.40m bgl. 4. Strong Hydrocarbon Odour encountered within natural SAND deposits from 1.40 - 1.70m bgl.

Borehole Log

Borehole No.

WS104

Sheet 1 of 1

Project Name: Glen Dimplex

Project No.
17500

Co-ords: 348144.97 - 391416.66

Hole Type
WS

Location: Prescot

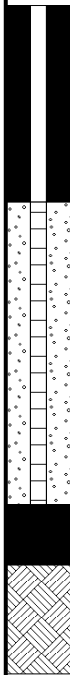
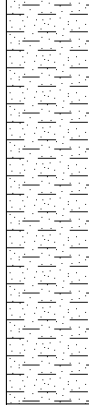
Level: 59.75

Scale
1:50

Client: Glen Dimplex

Dates: 19/03/2024 -

Logged By
I.Diack

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
		0.15			0.15	59.60		MADE GROUND: Asphalt.	
		0.30			0.30	59.45		MADE GROUND: White and light grey slightly sandy gravel. Gravel is fine to coarse, very angular to rounded of limestone and concrete (MOT sub-base).	
		0.60	ES						
		1.00		N=8 (1,1/1,2,2,3)					1
		1.50	ES		1.30	58.45		MADE GROUND: Red and brown clayey very sandy gravel with rare cobbles. Gravel is fine to coarse, very angular to subrounded of brick, sandstone, and rare concrete with rare fragments of timber and plastic. Cobbles are angular of concrete.	
		2.00		N=10 (1,2/2,2,3,3)	1.60	58.15		Loose dark reddish brown clayey fine to medium SAND.	2
		3.00		N=38 (4,5/7,12,8,11)				Stiff medium strength dark reddish brown very sandy CLAY. (Becoming very stiff very high strength at 3.00mbgl).	3
		4.00		50 (4,4/50 for 275mm)					4
		4.42			4.42	55.33		End of borehole at 4.42 m	5
									6
									7
									8
									9
									10

Remarks

1. Borehole terminated due to refusal on very stiff CLAY at 4.42m bgl. 2. Hole collapse from 3.50 - 4.00m bgl. 3. Environmental monitoring well installed - response zone 1.30 - 3.30m bgl. 4. Water strike encountered as seepage at 1.00m bgl within MADE GROUND.

Borehole Log

Borehole No.

WS105

Sheet 1 of 1

Project Name: Glen Dimplex

Project No.
17500

Co-ords: 348178.67 - 391506.66

Hole Type
WS

Location: Prescot

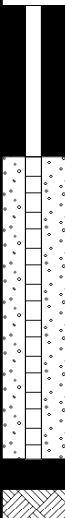
Level: 62.13

Scale
1:50

Client: Glen Dimplex

Dates: 19/03/2024 -

Logged By
I.Diack

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
		0.15			0.15	61.98		MADE GROUND: Asphalt.	
		0.40	ES		0.60	61.53		MADE GROUND: Black very gravelly clay. Gravel is fine to coarse, very angular to subrounded of brick, asphalt, slag, sandstone, mudstone and concrete, with frequent fragments of coal, plastic, ash and rare glass.	
		1.00	ES	N=8 (1,2/2,2,2,2)				Stiff medium strength brown mottled grey silty sandy CLAY with pockets of orange clayey fine to medium SAND. (Becoming very stiff very high strength at 2.00mbgl).	1
		1.10							
		2.00		N=37 (2,3/8,11,8,10)					2
		3.00		50 (4,6/50 for 250mm)					3
		3.40			3.40	58.73		End of borehole at 3.40 m	4
									5
									6
									7
									8
									9
									10

Remarks

1. Borehole terminated due to refusal on very stiff CLAY at 3.40m bgl. 2. Environmental monitoring well installed - response zone 1.00 - 3.00m bgl.



Borehole Log

Borehole No.

WS106

Sheet 1 of 1

Project Name: Glen Dimplex

Project No.
17500

Co-ords: 348152.49 - 391484.31

Hole Type
WS

Location: Prescot

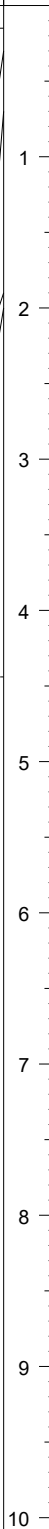
Level: 61.15

Scale
1:50

Client: Glen Dimplex

Dates: 19/03/2024 -

Logged By
I.Diack

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
		0.15	ES	N=6 (1,2/2,2,1,1)	0.15	61.00		MADE GROUND: Asphalt.	
		0.30			0.30	60.85		MADE GROUND: Grey very clayey gravel. Gravel is fine to coarse, very angular to subrounded of concrete and limestone (MOT sub-base).	
		0.70			0.70	60.45		MADE GROUND: Black clayey very sandy gravel with rare cobbles. Gravel is fine to coarse, very angular to subrounded of sandstone, brick, slag, concrete with fragments of glass, ash, and timber. Cobbles are angular of concrete.	
		0.80	ES	N=33 (2,3/5,8,10,10)	1.90	59.25		MADE GROUND: Black very gravelly clay. Gravel is fine to coarse, very angular to subrounded of slag, concrete, and brick with rare concrete (Slight hydrocarbon odour).	
		1.00			2.00	59.15		Grey very sandy very silty CLAY with frequent pockets of black fine to medium SAND.	
		2.00						Dense orange medium SAND.	
		2.20							
		3.00							
		4.00							
									
									
									
					4.44	56.71		End of borehole at 4.44 m	

Remarks

1. Borehole terminated due to refusal on dense SAND at 4.44m bgl. 2. Environmental monitoring well installed - response zone from 0.50 - 1.90m bgl. 3. Slight hydrocarbon odour encountered within MADE GROUND from 0.70 - 1.90m bgl.



Borehole Log

Borehole No.

WS107

Sheet 1 of 1

Project Name: Glen Dimplex

Project No.
17500

Co-ords: 347873.05 - 391637.54

Hole Type
WS

Location: Prescot

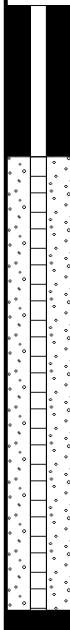
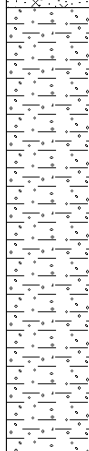
Level: 59.54

Scale
1:50

Client: Glen Dimplex

Dates: 20/03/2024 -

Logged By
I.Diack

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
		0.40	ES		0.30	59.24		MADE GROUND: Concrete.	
					0.70	58.84		MADE GROUND: Brown slightly clayey very gravelly fine to medium sand. Gravel is fine to medium, subangular to rounded of sandstone, mudstone and concrete.	
		1.00		N=6 (1,1/1,1,2,2)	0.90	58.64		Grey clayey silty fine to medium SAND.	1
								Firm low strength orange mottled grey slightly sandy slightly gravelly CLAY with frequent bands of grey silty fine to medium SAND. Gravel is fine of sandstone with rare pockets of coal. (Becoming stiff medium strength at 2.00mbgl). (Becoming very stiff high strength at 3.00mbgl). (Becoming very stiff very high strength at 3.90mbgl).	2
		2.00		N=12 (2,2/2,3,3,4)					
		3.00		N=29 (3,3/6,7,7,9)					3
		3.90		50 (5,10/50 for 195mm)	4.00	55.54			
					4.24	55.30		Dense dark orangish red very gravelly medium to coarse SAND. Gravel is fine to coarse, angular to subrounded of sandstone. (Highly Weathered SANDSTONE).	4
								End of borehole at 4.24 m	5
									6
									7
									8
									9
									10

Remarks

1. Borehole terminated due to refusal on shallow SANDSTONE bedrock at 4.24m bgl. 2. Environmental monitoring well installed - response zone from 1.00 - 4.00m bgl.



Borehole Log

Borehole No.

WS108

Sheet 1 of 1

Project Name: Glen Dimplex

Project No.
17500

Co-ords: 347964.62 - 391614.14

Hole Type
WS

Location: Prescot

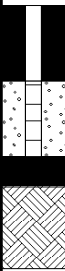
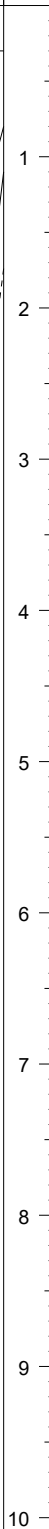
Level: 58.31

Scale
1:50

Client: Glen Dimplex

Dates: 20/03/2024 -

Logged By
I.Diack

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
					0.30	58.01		MADE GROUND: Concrete.	
		0.60	ES		0.80	57.51		MADE GROUND: Dark reddish brown very gravelly clay with occasional cobbles. Gravel is fine to medium, subangular to subrounded of brick, and sandstone. Cobbles are subangular of brick.	
		1.00		N=23 (3,3/4,6,6,7)	1.10	57.21		MADE GROUND: Dark reddish brown slightly gravelly clay. Gravel is fine to medium, subangular to rounded of brick, sandstone and coal.	
		1.30	ES						
		1.60		50 (25 for 75mm/50 for 70mm)	1.74	56.57		Very stiff very high strength brown sandy very gravelly CLAY. Gravel is fine to medium, very angular to subrounded of sandstone, coal and rare quartz.	
								End of borehole at 1.74 m	

Remarks

1. Borehole terminated due to refusal on very stiff CLAY at 1.74m bgl. 2. Environmental monitoring well installed 0.50 - 1.00m bgl.



Borehole Log

Borehole No.

WS109

Sheet 1 of 1

Project Name: Glen Dimplex

Project No.
17500

Co-ords: 348026.84 - 391601.61

Hole Type
WS

Location: Prescot

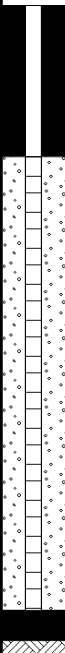
Level: 58.95

Scale
1:50

Client: Glen Dimplex

Dates: 20/03/2024 -

Logged By
I.Diack

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
		0.30			0.30	58.65		MADE GROUND: Concrete.	
		0.60	ES		0.50	58.45		MADE GROUND: Black slightly clayey very sandy gravel. Gravel is fine to medium, subangular to rounded of asphalt and rare concrete.	
		1.00		N=15 (1,2/3,4,4,4)	0.90	58.05		MADE GROUND: Black mottled orange silty very sandy clay (reworked CLAY). Dense reddish orange clayey fine to medium SAND. (Becoming medium dense at 3.00mbgl).	1
		2.00		N=35 (3,6/6,8,9,12)					2
		3.00		N=30 (4,4/6,6,8,10)					3
		3.20	ES						
		4.00		50 (25 for 90mm/50 for 220mm)	4.00	54.95			4
					4.31	54.64		Dense dark orangish red very gravelly medium to coarse SAND. Gravel is fine to coarse, angular to subrounded of sandstone. (Highly Weathered SANDSTONE). End of borehole at 4.31 m	5
									6
									7
									8
									9
									10

Remarks

1. Borehole terminated due to refusal on shallow SANDSTONE bedrock at 4.31m bgl. 2. Environmental monitoring well installed - response zone from 1.00 - 4.00m bgl.

Borehole Log

Borehole No.

WS110

Sheet 1 of 1

Project Name: Glen Dimplex

Project No.
17500

Co-ords: 348145.95 - 391549.65

Hole Type
WS

Location: Prescot

Level: 62.27

Scale
1:50

Client: Glen Dimplex

Dates: 20/03/2024 -

Logged By
I.Diack

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
		0.10			0.10	62.17		MADE GROUND: Dark brown slightly sandy clay with frequent rootlets (reworked topsoil).	
		0.70	ES					MADE GROUND: Black very sandy very gravelly clay with rare cobbles. Gravel is fine to coarse, very angular to subrounded of brick, slag, coal, sandstone, concrete, and mudstone with frequent fragments of timber, glass and ash. Cobbles are angular of brick. (Strong hydrocarbon odour).	1
		1.00		N=7 (1,1/1,2,2,2)	1.10	61.17		Firm low strength orangish brown mottled grey slightly sandy CLAY with frequent bands of orange fine to medium SAND.	2
		2.00		N=8 (1,2/2,2,2,2)	2.20	60.07		Very stiff very high strength brown slightly gravelly CLAY. Gravel is fine to medium, subangular to rounded of sandstone, mudstone, and rare coal.	3
		2.90 3.00	ES	50 (7,9/50 for 250mm)	3.40	58.87		End of borehole at 3.40 m	4
									5
									6
									7
									8
									9
									10

Remarks

1. Borehole terminated due to refusal on very stiff CLAY at 3.40m bgl. 2. Environmental monitoring well installed - response zone from 0.50 - 1.00m bgl.

Borehole Log

Borehole No.

CP101

Sheet 1 of 1

Project Name: Glen Dimplex

Project No.
17500

Co-ords: 347862.33 - 391549.36

Hole Type
CP

Location: Prescot

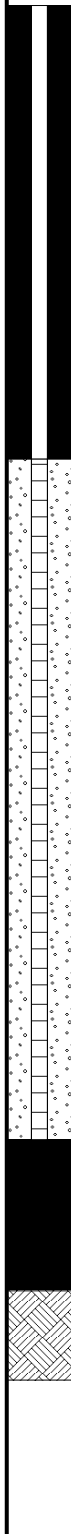
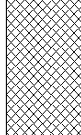
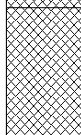
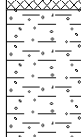
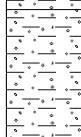
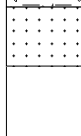
Level: 59.03

Scale
1:50

Client: Glen Dimplex

Dates: 18/03/2024 -

Logged By
I.Diack

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
		0.10			0.10	58.92		MADE GROUND: Concrete.	1
		0.60 - 1.20	B					MADE GROUND: Brown mottled black slightly sandy very gravelly clay with rare cobbles. Gravel is fine to coarse, angular to subrounded of brick, concrete, sandstone, and mudstone with frequent fragments of timber, coal, and ash. Cobbles are angular of brick.	
		1.20		N=4 (1,0/1,1,1,1)					
		1.20 - 1.65	B						
		2.00		N=6 (1,1/1,2,1,2)	1.80	57.22		MADE GROUND: Brown mottled black slightly sandy gravelly clay. Gravel is fine to medium, angular to subrounded of sandstone, mudstone, coal and rare brick. (Reworked CLAY).	2
		2.00 - 2.45	B						
		3.00 - 3.45	U	Ublow=51	2.70	56.32		Stiff medium strength orangish brown mottled grey gravelly CLAY. Gravel is fine to medium, subangular to subrounded of sandstone and mudstone with rare coal fragments.	3
		4.00		N=14 (2,2/3,3,4,4)					4
		4.00 - 4.45	B						
		5.00 - 5.45	U	Ublow=88	5.00	54.02		Very stiff high strength orangish brown mottled grey sandy gravelly CLAY. Gravel is fine to medium, subangular to subrounded of sandstone, and mudstone with rare coal fragments.	5
		6.00		N=32 (6,6/7,7,8,10)					6
		6.00 - 6.45	B						
		7.50		N=21 (3,4/4,5,6,6)					7
		8.70		50 (25 for 60mm/50 for 65mm)	8.70	50.32		Dense dark orangish red very gravelly medium to coarse SAND. Gravel is fine to coarse, angular to subrounded of sandstone. (Highly Weathered SANDSTONE).	9
		9.00		50 (25 for 40mm/50 for 50mm)	9.09	49.94		End of borehole at 9.09 m	10

Remarks

1. Borehole terminated due to refusal on SANDSTONE bedrock at 9.09m bgl. 2. Chiselled in SANDSTONE bedrock from 8.70 - 9.10 m bgl for 45 minutes. 3. Water strikes encountered as seepages at 3.50m and 7.00 m bgl. 4. Deep environmental monitoring well installed - response zone 3.00 - 7.50m bgl.



Borehole Log

Borehole No.
CP102

Sheet 1 of 1

Project Name: Glen Dimplex

Project No. 17500

Co-ords: 348113.53 - 391472.20

Hole Type
CP

Location: Prescot

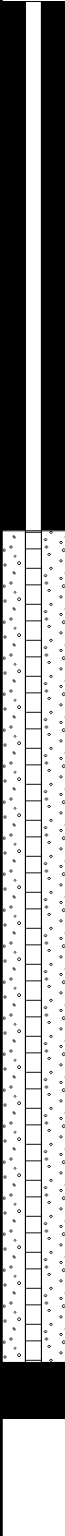
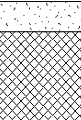
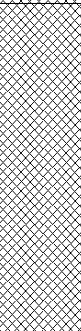
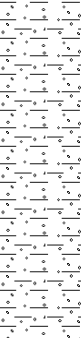
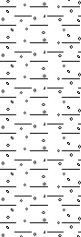
Level: 59.91

Scale
1:50

Client: Glen Dimplex

Dates: 19/03/2024 -

Logged By
I.Diack

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
		0.20 - 0.80	B		0.20	59.71	 MADE GROUND: Concrete.	MADE GROUND: Soft brown mottled black slightly sandy very gravelly clay with rare cobbles. Gravel is fine to coarse, angular to subrounded of brick, concrete, sandstone, and mudstone with frequent fragments of timber, coal, and ash. Cobbles are angular of brick.	1
		0.80 - 1.20	B		0.80	59.11			
	1.20		N=4 (1,1/1,1,1,1)						
			2.00		N=7 (1,1/1,2,2,2)			 MADE GROUND: Soft to firm brown mottled black slightly sandy gravelly clay. Gravel is fine to medium, angular to subrounded of sandstone, mudstone, coal and rare brick. (Reworked CLAY).	2
		3.00		50 (25 for 95mm/50 for 40mm)	3.00	56.91			
	3.00 - 3.45	B			3.50	56.41			
			4.00 - 4.45	U	Ublow=120			 Dense dark orangish red very clayey fine to medium SAND and GRAVEL. Gravel is fine to coarse, angular to subrounded of sandstone.	3
		5.00		N=40 (7,8/9,9,10,12)					
		6.00 - 6.45	U	Ublow=120					
			7.50		N=46 (8,8/10,10,12,14)			 Very stiff very high strength orangish brown mottled grey gravelly CLAY. Gravel is fine to medium, subangular to subrounded of sandstone, mudstone and fragments of coal.	4
		9.00		50 (25 for 40mm/50 for 50mm)	9.00	50.91	 Dense dark orangish red very gravelly medium to coarse SAND. Gravel is fine to coarse, angular to subrounded of sandstone. (Highly Weathered SANDSTONE).	5	
		9.30		50 (25 for 30mm/50 for 40mm)	9.37	50.54			
							End of borehole at 9.37 m		6
									7
									8
									9
									10

Remarks

1. Borehole terminated due to refusal on SANDSTONE bedrock at 9.37m bgl. 2. Chiselled in SANDSTONE bedrock from 9.00-9.40m bgl for 45 minutes. 3. Deep environmental monitoring well installed - repsonse zone 3.50 - 9.00 mbgl.



Borehole Log

Borehole No.

WS201

Sheet 1 of 1

Project Name: Glen Dimplex

Project No.
17500

Co-ords: 348142.86 - 391385.04

Hole Type
WS

Location: Prescot

Level: 59.89

Scale
1:50

Client: Glen Dimplex Homes Appliances Ltd

Dates: 19/08/2024 -

Logged By
I.Diack

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
		0.30	ES	PID=0	0.20 0.40	59.69 59.49		MADE GROUND: Dark brown slightly sandy CLAY with frequent rootlets (Reworked Topsoil).	1
		1.00	ES	N=4 (1,1/1,1,1,1) PID=0	0.80	59.09		MADE GROUND: Brown gravelly clay. Gravel is fine to coarse, subangular to subrounded of mudstone, coal, and metal.	
		1.20						MADE GROUND: Black sandy gravel. Gravel is fine to coarse, subangular to subrounded of brick, ash, slag, concrete, coal and mudstone.	
		2.00		N=11 (1,2/2,3,3,3)				Firm low strength brown mottled black and grey sandy CLAY. (Becoming stiff medium strength at 2.00 m bgl).	2
		3.00	ES	N=23 (5,5/5,6,6,6)	3.10	56.79		Medium dense brown very clayey fine to medium SAND.	3
		3.60			3.60	56.29		Very stiff very high strength brown slightly sandy CLAY with frequent bands of brown fine to medium SAND.	4
		4.00		88 (5,6/88 for 290mm)	4.44	55.45			5
								End of borehole at 4.44 m	6
									7
									8
									9
									10

Remarks

1. Refusal on stiff CLAY at 4.44 m bgl. 2. Water Strike encountered at 3.30 m bgl within SAND. 3. No elevated PID readings. 4. No odours encountered.



Borehole Log

Borehole No.

WS202

Sheet 1 of 1

Project Name: Glen Dimplex

Project No.
17500

Co-ords: 348137.17 - 391379.87

Hole Type
WS

Location: Prescot

Level: 59.69

Scale
1:50

Client: Glen Dimplex Homes Appliances Ltd

Dates: 19/08/2024 -

Logged By
I.Diack

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
		0.25	ES	PID=0	0.25	59.44		MADE GROUND: Dark brown sandy clay with frequent rootlets (Reworked Topsoil).	
		0.30			0.30	59.39		MADE GROUND: Brown very sandy gravel with rare cobbles. Gravel is fine to coarse, subangular to subrounded of concrete, brick, mudstone, metal, tile, fabric, ash and mudstone. Cobbles are angular of concrete.	
		0.60	ES	N=6 (1,1/2,2,1,1) PID=0	1.20	58.49		MADE GROUND: Brown mottled orange and black gravelly clay. Gravel is fine to medium, subangular to rounded of sandstone, mudstone and rare cloth at 1.10 m bgl.	
		1.00						Stiff medium strength greyish brown very sandy CLAY. (Becoming very stiff high strength at 3.00 m bgl).	
		1.90		N=15 (1,2/3,3,4,5)					
		2.00	ES						
		3.00		N=18 (2,2/3,3,5,7)					
		3.30							
		3.40						Very stiff high strength brown mottled grey slightly gravelly CLAY.	
		3.80		92 (7,12/92 for 275mm)				Stiff brown slightly gravelly very sandy CLAY. Gravel is fine to medium, subangular to rounded of mudstone.	
		4.00						Dense brown very clayey fine to medium SAND.	
		4.43			4.43	55.26		End of borehole at 4.43 m	

Remarks

1. Refusal on stiff CLAY at 4.43 m bgl. 2. No groundwater encountered. 3. No elevated PID readings. 4. No odours encountered.



Borehole Log

Borehole No.

WS203

Sheet 1 of 1

Project Name: Glen Dimplex

Project No.
17500

Co-ords: 348137.56 - 391372.38

Hole Type
WS

Location: Prescot

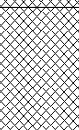
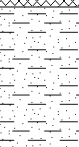
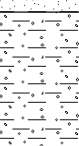
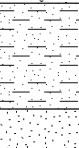
Level: 59.56

Scale
1:50

Client: Glen Dimplex Homes Appliances Ltd

Dates: 19/08/2024 -

Logged By
I.Diack

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description					
		Depth (m)	Type	Results									
				PID=0	0.20 0.35	59.36 59.21		MADE GROUND: Brown sandy clay with frequent rootlets (Reworked Topsoil). MADE GROUND: Brown very gravelly clay. Gravel is fine to medium, subangular to rounded of mudstone (Reworked CLAY). MADE GROUND: Brown mottled black very sandy slightly gravelly clay. Gravel is fine to coarse, angular to subrounded of brick, concrete, sandstone, coal and rare ash. Cobbles are angular of brick. Stiff medium strength greyish brown sandy CLAY.	1				
		1.00	ES	N=5 (1,1/1,1,1,2) PID=0	1.20	58.36							
		1.10											
		2.00	ES	N=16 (2,2/3,4,4,5)	2.20	57.36				2			
		2.60											
		3.00		N=19 (2,3/3,4,5,7)			3.10				56.46		3
		4.00		98 (13,25/98 for 280mm)			3.80				55.76		
				4.43	55.13								
		End of borehole at 4.43 m								5			
										6			
										7			
								8					
								9					
								10					

Remarks

1. Refusal on stiff CLAY at 4.43 m bgl. 2. No groundwater encountered. 3. No elevated PID readings. 4. No odours encountered.

Borehole Log

Borehole No.

WS204

Sheet 1 of 1

Project Name: Glen Dimplex

Project No.
17500

Co-ords: 348145.75 - 391365.73

Hole Type
WS

Location: Prescot

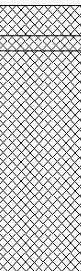
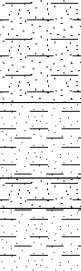
Level: 59.61

Scale
1:50

Client: Glen Dimplex Homes Appliances Ltd

Dates: 19/08/2024 -

Logged By
I.Diack

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
		0.20	ES	PID=0	0.20 0.30	59.41 59.31		MADE GROUND: Brown slightly sandy gravelly clay with frequent rootlets. Gravel is fine to medium, subangular to rounded of brick. MADE GROUND: Black gravel fine to medium sand. Gravel is fine to coarse, very angular to subrounded of ash and concrete. MADE GROUND: Brown sandy very gravelly clay. Gravel is fine to coarse, subangular to rounded of mudstone with rare mudstone cobble at 1.60 m bgl.	1
		1.00		N=5 (1,1/1,1,1,2) PID=0					
		2.00		N=18 (2,3/5,5,4,4)	1.80	57.81		Medium dense brown and grey very clayey fine to medium SAND.	2
		2.50			2.50	57.11		Firm greyish brown sandy CLAY.	
		3.00 3.10	ES	N=14 (3,3/3,3,4,4)	3.00 3.20	56.61 56.41		Medium dense greyish brown very clayey fine to medium SAND. Very stiff very high strength reddish brown very sandy CLAY.	3
		4.00		88 (4,9/88 for 290mm)	4.44	55.17		End of borehole at 4.44 m	4
									5
									6
									7
									8
									9
									10

Remarks

1. Refusal on stiff CLAY at 4.44 m bgl. 2. Water strike encountered at 3.30 m bgl within CLAY. 3. No elevated PID readings. 4. No odours encountered.

Borehole Log

Borehole No.

WS205

Sheet 1 of 1

Project Name: Glen Dimplex

Project No.
17500

Co-ords: 348152.76 - 391376.42

Hole Type
WS

Location: Prescot

Level: 59.89

Scale
1:50

Client: Glen Dimplex Homes Appliances Ltd

Dates: 19/08/2024 -

Logged By
I.Diack

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
		0.20			0.20	59.69		MADE GROUND: Brown sandy clay with frequent rootlets (Reworked Topsoil).	
		0.50	ES	PID=0	0.80	59.09		MADE GROUND: Dark brown gravelly clay. Gravel is fine to medium, angular to subrounded of brick, concrete, mudstone, ash, and rare slag.	
		1.00		N=8 (1,2/2,1,2,3) PID=0	1.10	58.79		MADE GROUND: Brown mottled grey very sandy with frequent bands of orange very clayey fine to medium sand (Reworked CLAY).	1
		1.40	ES					Stiff medium strength brown mottled black and grey slightly silty sandy gravelly CLAY. Gravel is fine to medium, subangular to rounded of mudstone.	
		2.00		N=19 (2,2/3,3,6,7)	2.10	57.79			2
					2.60	57.29		Very stiff high strength brown very sandy CLAY with frequent bands of brown fine to medium SAND.	
		3.00		N=19 (3,4/4,3,5,7)				Medium dense brown very clayey fine to medium SAND. (Becoming dense at 4.00 m bgl).	3
		4.00		80 (8,11/80 for 210mm)					4
					4.36	55.53			
								End of borehole at 4.36 m	5

Remarks

1. Refusal on stiff CLAY at 4.36 m bgl. 2. Water strike encountered at 3.10 m bgl within SAND. 3. No elevated PID readings. 4. No odours encountered.



Borehole Log

Borehole No.

WS206

Sheet 1 of 1

Project Name: Glen Dimplex

Project No.
17500

Co-ords: 348148.34 - 391382.50

Hole Type
WS

Location: Prescot

Level: 59.99

Scale
1:50

Client: Glen Dimplex Homes Appliances Ltd

Dates: 19/08/2024 -

Logged By
I.Diack

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
					0.20	59.79		MADE GROUND: Brown sandy clay with frequent rootlets (Reworked Topsoil).	
		0.60	ES	PID=0	0.50	59.49		MADE GROUND: Dark brown very sandy very gravelly clay. Gravel is fine to coarse, very angular to subrounded of brick, ash, coal, mudstone and sandstone.	
		1.00		N=4 (1,1/1,1,1,1) PID=0	0.70	59.29			
					0.90	59.09		MADE GROUND: Black slightly sandy gravel. Gravel is fine to coarse, very angular to subrounded of ash, coal, slag, brick, sulphates and spent oxides	1
		2.00		N=16 (3,3/3,4,4,5)				MADE GROUND: Brown gravelly clay. Gravel is fine to medium, subangular to rounded of mudstone (Reworked CLAY).	
		2.30	ES					Firm low strength brown sandy CLAY with bands of orange fine to medium SAND. (Becoming stiff medium strength at 2.00 m bgl). (Becoming very stiff very high strength at 4.00 m bgl).	2
		3.00		N=14 (2,2/3,3,4,4)					3
		4.00		88 (6,8/88 for 285mm)					4
					4.44	55.55			
								End of borehole at 4.44 m	5
									6
									7
									8
									9
									10

Remarks

1. Refusal on stiff CLAY at 4.44 m bgl. 2. Water strike encountered at 3.10 m bgl within SAND bands. 3. No elevated PID readings. 4. No odours encountered.



Borehole Log

Borehole No.

WS207

Sheet 1 of 1

Project Name: Glen Dimplex

Project No.
17500

Co-ords: 347839.21 - 391545.35

Hole Type
WS

Location: Prescot

Level: 58.76

Scale
1:50

Client: Glen Dimplex Homes Appliances Ltd

Dates: 20/08/2024 -

Logged By
I.Diack

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
		0.30	ES	N=9 (2,3/3,2,2,2) PID=273	0.30	58.46		MADE GROUND: Concrete.	1
		0.60			0.60	58.16		MADE GROUND: Black slightly silty very sandy gravel. Gravel is fine to coarse, very angular to subrounded of ash, asphalt, brick and concrete.	
		1.00			1.10	57.66		MADE GROUND: Dark yellow and black slightly gravelly slightly clayey fine to medium sand. Gravel is fine to medium, angular to subangular of concrete (Very strong hydrocarbon and chemical odour).	
		1.30			1.30	57.46		Loose brown slightly silty fine to medium SAND. Stiff medium strength brown very gravelly sandy CLAY. Gravel is fine to medium, subangular to rounded of mudstone.	
		2.00			2.20	56.56		Stiff medium strength brown very clayey fine to medium SAND.	
		3.00	ES	N=10 (3,3/2,3,3,2)	2.80	55.96		Stiff medium strength brown very sandy gravelly CLAY. Gravel is fine to medium, subangular to rounded of mudstone.	3
		3.30			3.10	55.66		Medium Dense brown fine to medium SAND.	
		4.00			4.60	54.16		Medium dense brown GRAVEL. Gravel is fine to medium, subangular to rounded of mudstone and sandstone.	
		5.00			5.45	53.31		End of borehole at 5.45 m	

Remarks

1. Complete. 2. Water strike encountered at 0.90 m bgl and 4.00 m bgl. 3. Very strong hydrocarbon and chemical odour encountered in MADE GROUND 0.30 - 1.10 m bgl. 4. Peak PID reading of 273ppm within MADE GROUND 1.00 m bgl.



Borehole Log

Borehole No.

WS208

Sheet 1 of 1

Project Name: Glen Dimplex

Project No.
17500

Co-ords: 347824.41 - 391547.19

Hole Type
WS

Location: Prescot

Level: 58.78

Scale
1:50

Client: Glen Dimplex Homes Appliances Ltd

Dates: 20/08/2024 -

Logged By
I.Diack

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
					0.30	58.48		MADE GROUND: Concrete.	
					0.60	58.18		MADE GROUND: Grey slightly sandy gravel. Gravel is fine to coarse, angular to subrounded of concrete and limestone (sub base).	
		1.00	ES	N=5 (0,0/1,1,1,2) PID=0	1.10	57.68		MADE GROUND: Black silty sandy gravelly clay with rare cobbles. Gravel is fine to coarse, very angular to subrounded of brick, concrete, mudstone, sandstone. Cobbles are angular of brick. (Strong hydrocarbon odour).	1
		1.00						Firm low strength brown silty very sandy CLAY. (Slight hydrocarbon odour).	
		1.50	ES						
		2.00		N=8 (2,2/3,2,1,2)					2
					2.60	56.18		Medium dense brown very clayey fine to medium SAND. (Very slightly hydrocarbon odour). (Becoming loose at 4.00 m bgl).	3
		3.00		N=23 (3,3/3,5,6,9)					
		4.00		N=10 (4,4/4,2,2,2)					4
					4.45	54.33	End of borehole at 4.45 m		
								6	
								7	
								8	
								9	
								10	

Remarks

1. Terminated due to collapse in SAND at 4.45 m bgl. 2. Water strike encountered at 0.80 m bgl. 3. Strong Hydrocarbon odour noted in MADE GROUND / CLAY / SAND deposits at 0.60 - 4.45 m bgl. 4. No elevated PID readings recorded.





Borehole Log

Borehole No.

WS209

Sheet 1 of 1

Project Name: Glen Dimplex

Project No.
17500

Co-ords: 347816.77 - 391543.94

Hole Type
WS

Location: Prescot

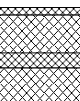
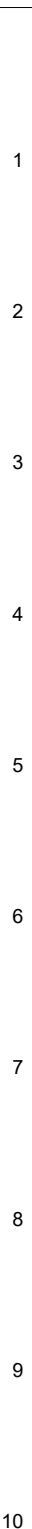
Level: 58.42

Scale
1:50

Client: Glen Dimplex Homes Appliances Ltd

Dates: 20/08/2024 -

Logged By
I.Diack

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
		0.60	ES	PID=0	0.05	58.37		MADE GROUND: Asphalt recovered as: Black Gravel. Gravel is fine to coarse of asphalt.	
					0.30	58.12		MADE GROUND: Black and red clayey sand and gravel with frequent cobbles. Gravel is fine to coarse, very angular to subrounded of brick, concrete, mudstone, slate, sandstone, ash, and rare metal. Cobbles are angular of metal rebar at 0.25 m. (Strong hydrocarbon odour).	
					0.40	58.02		MADE GROUND: Assumed concrete slab.	
					0.65	57.77		MADE GROUND: Brown and red very clayey gravel with frequent cobbles. Gravel is fine to coarse, very angular to subrounded of brick, mudstone, ash, sandstone, metal and slag. Cobbles are very angular to angular of brick. (Strong hydrocarbon odour).	
End of borehole at 0.65 m									

Remarks

1. Terminated due to assumed concrete slab limiting ability to Hand Pit and associated risk with proximity to services. 2. No groundwater encountered. 3. No elevated PID readings. 4. Strong hydrocarbon odour encountered in MADE GROUND at 0.05-0.30 m bgl and 0.40-0.65 m bgl.





Borehole Log

Borehole No.

WS211

Sheet 1 of 1

Project Name: Glen Dimplex

Project No.
17500

Co-ords: 347834.74 - 391524.29

Hole Type
WS

Location: Prescot

Level: 58.88

Scale
1:50

Client: Glen Dimplex Homes Appliances Ltd

Dates: 20/08/2024 -

Logged By
I.Diack

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
		0.10			0.10	58.78		MADE GROUND: Asphalt recovered as: Black Gravel. Gravel is fine to coarse of asphalt.	
		0.40			0.40	58.48		MADE GROUND: Red and black clayey gravel. Gravel is fine to coarse, very angular to subrounded of brick, concrete, ash, mudstone, sandstone, metal and rare tile. Cobbles are angular of brick.	
		0.80	ES	PID=8				MADE GROUND: Black silty very gravelly sandy CLAY. Gravel is fine to coarse, very angular to subrounded of brick and mudstone. (Strong hydrocarbon odour).	1
		1.00		N=10 (2,2/2,3,2,3)	1.10	57.78		MADE GROUND: Black silty very gravelly sandy CLAY. Gravel is fine to coarse, very angular to subrounded of brick and mudstone. (Strong hydrocarbon odour).	
					1.60	57.28		Stiff medium strength grey silty very sandy CLAY. Soft to firm brown sandy CLAY.	
		2.00		N=2 (0,0/1,0,0,1)	2.00	56.88		Very soft extremely low strength brown mottled black very sandy CLAY. (Slight hydrocarbon odour).	2
		2.40	ES					Medium dense brown very clayey fine to medium SAND. (Becoming loose at 5.00 m bgl).	
		2.50			2.50	56.38			
		3.00		N=20 (3,3/4,5,5,6)					3
		4.00		N=18 (3,3/4,5,4,5)					4
		5.00		N=12 (2,2/3,2,3,4)					5
					5.45	53.43		End of borehole at 5.45 m	6
									7
									8
									9
									10

Remarks

1. Completed. 2. Hole collapsed back to 5.00m bgl following SPT test. 3. No groundwater encountered. 4. Peak PID reading of 7.7ppm at 0.80 m bgl. 5. Strong hydrocarbon odour encountered within MADE GROUND from 0.40 - 1.00 m bgl. 6. Slight hydrocarbon odour within natural CLAY deposits from 2.00-2.50 m bgl.





Borehole Log

Borehole No.

WS212

Sheet 1 of 1

Project Name: Glen Dimplex

Project No.
17500

Co-ords: 347845.47 - 391520.04

Hole Type
WS

Location: Prescot

Level: 59.10

Scale
1:50

Client: Glen Dimplex Homes Appliances Ltd

Dates: 20/08/2024 -

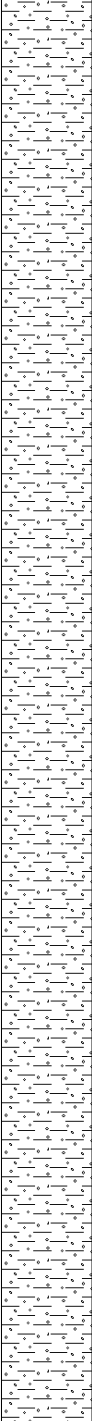
Logged By
I.Diack

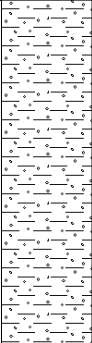
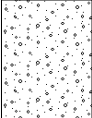
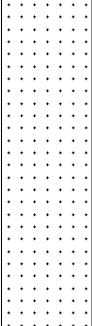
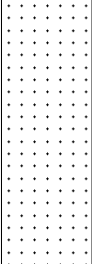
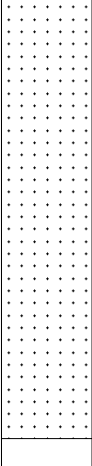
Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
		0.10	ES	N=4 (0,0/1,0,2,1) PID=4	0.10	59.00		MADE GROUND: Asphalt recovered as: Black Gravel. Gravel is fine to coarse of asphalt. MADE GROUND: Red and black clayey gravel with occasional cobbles. Gravel is fine to coarse, very angular to subrounded of brick, concrete, ash, slag and mudstone. Cobbles are angular to subangular of brick.	1
		0.60			0.80	58.30			
		1.00			1.10	58.00			
		1.70	ES	N=14 (2,2/3,2,3,6)				MADE GROUND: Black silty sandy clay with occasional with occasional cobbles. Gravel is fine to coarse, very angular to subrounded of brick, mudstone, ash and rare slag. Cobbles are angular to brick. Stiff medium strength brown mottled grey gravelly very sandy CLAY. Gravel is fine to medium, subangular to rounded of mudstone. (Becoming very stiff very high strength at 3.00 m bgl).	2
		2.00							
		3.00		50 (5,5/50 for 295mm)					3
					3.45	55.65		End of borehole at 3.45 m	4
									5
									6
									7
									8
									9
									10

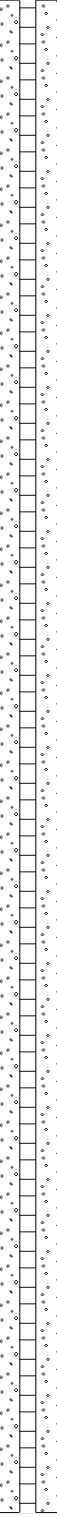
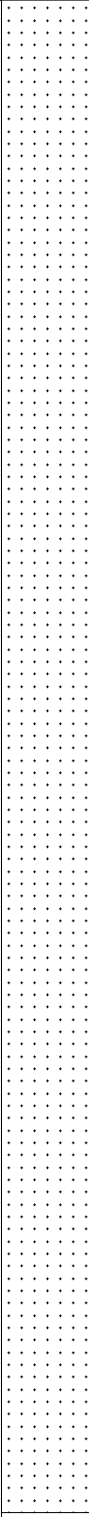
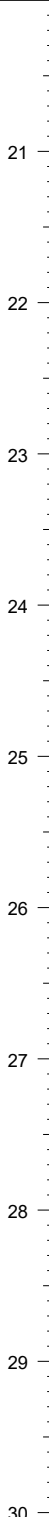
Remarks

1. Refusal on CLAY at 3.45 m bgl. 2. No groundwater encountered. 3. Peak PID reading of 4.0ppm at 1.00 m bgl within MADE GROUND. 4. Strong Hydrocarbon odour encountered within WS212 from 0.80-1.10 m bgl.



					Borehole Log			Borehole No. RB101 Sheet 1 of 3		
Project Name: Glen Dimplex					Project No. 17500		Co-ords: 348145E - 391377N		Hole Type RO	
Location: Prescot					Level: 59.80 m AOD			Scale 1:50		
Client: Glen Dimplex Homes Appliances Ltd					Dates: 02/09/2024			Logged By I.Diack		
Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description		
		Depth (m)	Type	Results						
					0.20	59.80		MADE GROUND: Dark brown slightly sandy clay with frequent rootlets (Reworked Topsoil).	1	
					0.40	59.60				
								Brown sandy very gravelly CLAY. Gravel is fine to medium, subangular to rounded of mudstone.	2	
									3	
									4	
									5	
									6	
									7	
									8	
									9	
									10	
Remarks										
1. Complete. 2. Environmental Monitoring Well Installed - Response Zone 17.00-30.00m bgl.										

				Borehole Log				Borehole No. RB101 Sheet 2 of 3			
Project Name: Glen Dimplex				Project No. 17500		Co-ords: 348145E - 391377N		Hole Type RO			
Location: Prescot						Level: 59.80 m AOD		Scale 1:50			
Client: Glen Dimplex Homes Appliances Ltd						Dates: 02/09/2024		Logged By I.Diack			
Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description			
		Depth (m)	Type	Results							
					12.30	59.40		Brown sandy very gravelly CLAY. Gravel is fine to medium, subangular to rounded of mudstone.	11		
								Reddish brown very sandy GRAVEL. Gravel is fine to coarse, very angular to rounded of sandstone. (Assumed highly weathered SANDSTONE).	12		
									Highly weathered SANDSTONE recovered as: Reddish brown very sandy GRAVEL with frequent cobbles. Gravel is fine to coarse, very angular to rounded of sandstone. Cobbles are very angular to rounded of sandstone.	13	
										Red SANDSTONE.	14
											
		16									
			17								
				18							
					19						
					20						
	Remarks										
	1. Complete. 2. Environmental Monitoring Well Installed - Response Zone 17.00-30.00m bgl.										

				Borehole Log				Borehole No. RB101	
Project Name: Glen Dimplex				Project No. 17500		Co-ords: 348145E - 391377N		Sheet 3 of 3	
Location: Prescot				Level: 59.80 m AOD		Hole Type RO		Scale 1:50	
Client: Glen Dimplex Homes Appliances Ltd				Dates: 02/09/2024		Logged By I.Diack			
Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
								Red SANDSTONE.	
				30.00	44.50	End of Borehole at 30.00m		30	
Remarks									
1. Complete. 2. Environmental Monitoring Well Installed - Response Zone 17.00-30.00m bgl.									



Sheet 1 of 3

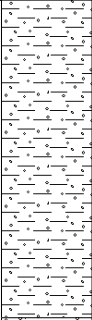
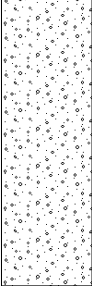
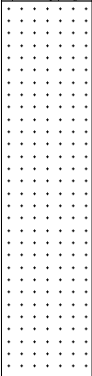
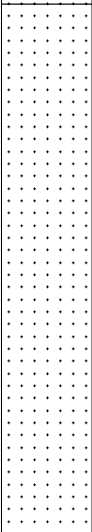
Hole Type
RO

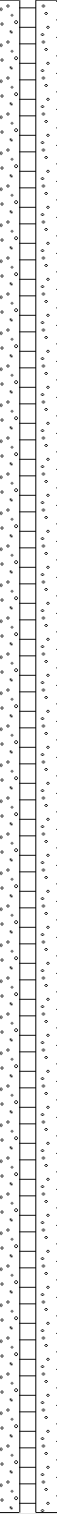
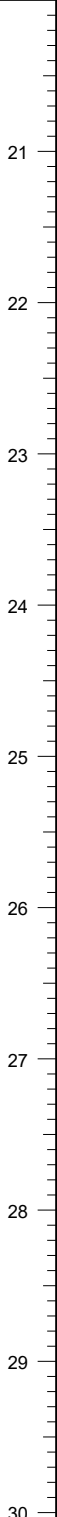
Scale
1:50

Logged By
I.Diack

Remarks	
1. Complete. 2. Environmental Monitoring Well Installed - Response Zone 17.00-30.00m bgl. 3. Mercury Speciation testing completed on MADE GROUND.	



				Borehole Log				Borehole No. RB102 Sheet 2 of 3	
Project Name: Glen Dimplex				Project No. 17500		Co-ords: 347841E - 391522N		Hole Type RO	
Location: Prescot						Level: 59.15 m AOD		Scale 1:50	
Client: Glen Dimplex Homes Appliances Ltd						Dates: 02/09/2024		Logged By I.Diack	
Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
					12.10	57.95		Brown sandy very gravelly CLAY with occasional bands of clayey GRAVEL. Gravel is fine to medium, subangular to rounded of mudstone and sandstone.	11
								Reddish brown slightly clayey fine to medium SAND and GRAVEL. Gravel is fine to coarse, very angular to rounded of sandstone. (Assumed highly weathered SANDSTONE bedrock).	12
					14.00	47.05		Highly weathered SANDSTONE recovered as: Reddish brown very sandy GRAVEL with frequent cobbles. Gravel is fine to coarse, very angular to rounded of sandstone. Cobbles are very angular to rounded of sandstone.	14
					16.50	45.15		Red SANDSTONE.	17
									18
									19
									20
Remarks									
1. Complete. 2. Environmental Monitoring Well Installed - Response Zone 17.00-30.00m bgl. 3. Mercury Speciation testing completed on MADE GROUND.									
									

				Borehole Log				Borehole No. RB102	
Project Name: Glen Dimplex				Project No. 17500		Co-ords: 347841E - 391522N		Sheet 3 of 3 Hole Type RO	
Location: Prescott				Level: 59.15 m AOD		Scale 1:50			
Client: Glen Dimplex Homes Appliances Ltd				Dates: 02/09/2024		Logged By I.Diack			
Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
								Red SANDSTONE.	
				30.00	42.65	End of Borehole at 30.00m		30	
Remarks									
1. Complete. 2. Environmental Monitoring Well Installed - Response Zone 17.00-30.00m bgl. 3. Mercury Speciation testing completed on MADE GROUND.									



2183

Final Report

Report No.: 24-10704-1

Initial Date of Issue: 12-Apr-2024

Re-Issue Details:

Client E3P

Client Address: Taylor Road
Trafford Park
Urmston
Manchester
M41 7JQ

Contact(s):

Project 17-500 - Glen Dimplex, Prescot

Quotation No.: Q23-31421

Date Received: 08-Apr-2024

Order No.: 007850

Date Instructed: 08-Apr-2024

No. of Samples: 3

Turnaround (Wkdays): 5

Results Due: 12-Apr-2024

Date Approved: 12-Apr-2024

Approved By:

Details: David Smith, Technical Director

For details about application of accreditation to specific matrix types, please refer to the Table at the back of this report

Results - Water

Project: 17-500 - Glen Dimplex, Prescott

Client: E3P		Chemtest Job No.:				24-10704	24-10704	24-10704
Quotation No.: Q23-31421		Chemtest Sample ID.:				1789876	1789877	1789878
		Client Sample ID.:				CP101	WS102	WS107
		Sample Type:				WATER	WATER	WATER
		Sample Sub Type:						
		Date Sampled:				04-Apr-2024	04-Apr-2024	04-Apr-2024
		Time Sampled:				12:00	12:00	12:00
Determinand	HWOL Code	Accred.	SOP	Units	LOD			
pH at 20C		U	1010		4.0	5.7	7.3	7.7
Cyanide (Total) Low-Level		N	1300	mg/l	0.0050	< 0.0050	< 0.0050	< 0.0050
Arsenic (Dissolved)		U	1455	µg/l	0.20	0.85	2.3	0.96
Cadmium (Dissolved)		U	1455	µg/l	0.11	< 0.11	< 0.11	0.31
Chromium (Dissolved)		U	1455	µg/l	0.50	< 0.50	< 0.50	< 0.50
Copper (Dissolved)		U	1455	µg/l	0.50	< 0.50	< 0.50	2.6
Nickel (Dissolved)		U	1455	µg/l	0.50	29	7.2	11
Lead (Dissolved)		U	1455	µg/l	0.50	< 0.50	< 0.50	< 0.50
Selenium (Dissolved)		U	1455	µg/l	0.50	< 0.50	0.57	0.69
Zinc (Dissolved)		U	1455	µg/l	2.5	12	4.2	13
Mercury Low Level		U	1460	µg/l	0.010	< 0.010	< 0.010	< 0.010
Chromium (Hexavalent)		U	1490	µg/l	20	[B] < 20	[B] < 20	[B] < 20
Aliphatic TPH >C5-C6	EH_2D_AL_#1	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10
Aliphatic TPH >C6-C8	EH_2D_AL_#1	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10
Aliphatic TPH >C8-C10	EH_2D_AL_#1	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10
Aliphatic TPH >C10-C12	EH_2D_AL_#1	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10
Aliphatic TPH >C12-C16	EH_2D_AL_#1	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10
Aliphatic TPH >C16-C21	EH_2D_AL_#1	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10
Aliphatic TPH >C21-C35	EH_2D_AL_#1	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10
Aliphatic TPH >C35-C44	EH_2D_AL_#1	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10
Total Aliphatic Hydrocarbons	EH_2D_AL_#1	N	1675	µg/l	5.0	< 5.0	< 5.0	< 5.0
Aromatic TPH >C5-C7	EH_2D_AR_#1	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10
Aromatic TPH >C7-C8	EH_2D_AR_#1	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10
Aromatic TPH >C8-C10	EH_2D_AR_#1	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10
Aromatic TPH >C10-C12	EH_2D_AR_#1	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10
Aromatic TPH >C12-C16	EH_2D_AR_#1	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10
Aromatic TPH >C16-C21	EH_2D_AR_#1	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10
Aromatic TPH >C21-C35	EH_2D_AR_#1	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10
Aromatic TPH >C35-C44	EH_2D_AR_#1	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10
Total Aromatic Hydrocarbons	EH_2D_AR_#1	N	1675	µg/l	5.0	< 5.0	< 5.0	< 5.0
Total Petroleum Hydrocarbons	EH_2D_Total_#1	N	1675	µg/l	10	< 10	< 10	< 10
Dichlorodifluoromethane		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0
Chloromethane		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0
Vinyl Chloride		N	1760	µg/l	1.0	< 1.0	> 10000	1.3
Bromomethane		U	1760	µg/l	5	< 5	< 5	< 5
Chloroethane		U	1760	µg/l	2.0	< 2.0	< 2.0	< 2.0
Trichlorofluoromethane		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0
1,1-Dichloroethene		U	1760	µg/l	1.0	< 1.0	15	< 1.0
Trans 1,2-Dichloroethene		U	1760	µg/l	1.0	< 1.0	150	< 1.0

Results - Water

Project: 17-500 - Glen Dimplex, Prescott

Client: E3P		Chemtest Job No.:				24-10704	24-10704	24-10704
Quotation No.: Q23-31421		Chemtest Sample ID.:				1789876	1789877	1789878
		Client Sample ID.:				CP101	WS102	WS107
		Sample Type:				WATER	WATER	WATER
		Sample Sub Type:						
		Date Sampled:				04-Apr-2024	04-Apr-2024	04-Apr-2024
		Time Sampled:				12:00	12:00	12:00
Determinand	HWOL Code	Accred.	SOP	Units	LOD			
1,1-Dichloroethane		U	1760	µg/l	1.0	< 1.0	11	< 1.0
cis 1,2-Dichloroethene		U	1760	µg/l	1.0	1.6	> 10000	12
Bromochloromethane		U	1760	µg/l	5	< 5	< 5	< 5
Trichloromethane		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0
1,1,1-Trichloroethane		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0
Tetrachloromethane		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0
1,1-Dichloropropene		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0
Benzene		U	1760	µg/l	1.0	< 1.0	7.7	< 1.0
1,2-Dichloroethane		U	1760	µg/l	2.0	< 2.0	< 2.0	< 2.0
Trichloroethene		N	1760	µg/l	1.0	< 1.0	> 10000	20
1,2-Dichloropropane		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0
Dibromomethane		U	1760	µg/l	10	< 10	< 10	< 10
Bromodichloromethane		U	1760	µg/l	5	< 5	< 5	< 5
cis-1,3-Dichloropropene		N	1760	µg/l	10	< 10	< 10	< 10
Toluene		U	1760	µg/l	1.0	< 1.0	18	1.8
Trans-1,3-Dichloropropene		N	1760	µg/l	10	< 10	< 10	< 10
1,1,2-Trichloroethane		U	1760	µg/l	10	< 10	< 10	< 10
Tetrachloroethene		U	1760	µg/l	1.0	< 1.0	5.3	< 1.0
1,3-Dichloropropane		U	1760	µg/l	2.0	< 2.0	< 2.0	< 2.0
Dibromochloromethane		U	1760	µg/l	10	< 10	< 10	< 10
1,2-Dibromoethane		U	1760	µg/l	5	< 5	< 5	< 5
Chlorobenzene		N	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0
1,1,1,2-Tetrachloroethane		U	1760	µg/l	2.0	< 2.0	< 2.0	< 2.0
Ethylbenzene		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0
m & p-Xylene		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0
o-Xylene		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0
Styrene		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0
Tribromomethane		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0
Isopropylbenzene		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0
Bromobenzene		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0
1,2,3-Trichloropropane		N	1760	µg/l	50	< 50	< 50	< 50
N-Propylbenzene		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0
2-Chlorotoluene		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0
1,3,5-Trimethylbenzene		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0
4-Chlorotoluene		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0
Tert-Butylbenzene		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0
1,2,4-Trimethylbenzene		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0
Sec-Butylbenzene		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0
1,3-Dichlorobenzene		N	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0

Results - Water

Project: 17-500 - Glen Dimplex, Prescott

Client: E3P		Chemtest Job No.:				24-10704	24-10704	24-10704
Quotation No.: Q23-31421		Chemtest Sample ID.:				1789876	1789877	1789878
		Client Sample ID.:				CP101	WS102	WS107
		Sample Type:				WATER	WATER	WATER
		Sample Sub Type:						
		Date Sampled:				04-Apr-2024	04-Apr-2024	04-Apr-2024
		Time Sampled:				12:00	12:00	12:00
Determinand	HWOL Code	Accred.	SOP	Units	LOD			
4-Isopropyltoluene		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0
1,4-Dichlorobenzene		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0
N-Butylbenzene		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0
1,2-Dichlorobenzene		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0
1,2-Dibromo-3-Chloropropane		U	1760	µg/l	50	< 50	< 50	< 50
1,2,4-Trichlorobenzene		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0
Hexachlorobutadiene		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0
1,2,3-Trichlorobenzene		U	1760	µg/l	2.0	< 2.0	< 2.0	< 2.0
Methyl Tert-Butyl Ether		N	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0
N-Nitrosodimethylamine		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50
Phenol		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50
2-Chlorophenol		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50
Bis-(2-Chloroethyl)Ether		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50
1,3-Dichlorobenzene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50
1,4-Dichlorobenzene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50
1,2-Dichlorobenzene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50
2-Methylphenol (o-Cresol)		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50
Bis(2-Chloroisopropyl)Ether		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50
Hexachloroethane		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50
N-Nitrosodi-n-propylamine		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50
4-Methylphenol		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50
Nitrobenzene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50
Isophorone		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50
2-Nitrophenol		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50
2,4-Dimethylphenol		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50
Bis(2-Chloroethoxy)Methane		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50
2,4-Dichlorophenol		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50
1,2,4-Trichlorobenzene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50
Naphthalene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50
4-Chloroaniline		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50
Hexachlorobutadiene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50
4-Chloro-3-Methylphenol		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50
2-Methylnaphthalene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50
Hexachlorocyclopentadiene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50
2,4,6-Trichlorophenol		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50
2,4,5-Trichlorophenol		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50
2-Chloronaphthalene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50
2-Nitroaniline		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50
Acenaphthylene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50

Results - Water

Project: 17-500 - Glen Dimplex, Prescott

Client: E3P		Chemtest Job No.:				24-10704	24-10704	24-10704
Quotation No.: Q23-31421		Chemtest Sample ID.:				1789876	1789877	1789878
		Client Sample ID.:				CP101	WS102	WS107
		Sample Type:				WATER	WATER	WATER
		Sample Sub Type:						
		Date Sampled:				04-Apr-2024	04-Apr-2024	04-Apr-2024
		Time Sampled:				12:00	12:00	12:00
Determinand	HWOL Code	Accred.	SOP	Units	LOD			
Dimethylphthalate		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50
2,6-Dinitrotoluene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50
Acenaphthene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50
3-Nitroaniline		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50
Dibenzofuran		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50
4-Chlorophenylphenylether		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50
2,4-Dinitrotoluene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50
Fluorene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50
Diethyl Phthalate		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50
4-Nitroaniline		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50
2-Methyl-4,6-Dinitrophenol		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50
Azobenzene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50
4-Bromophenylphenyl Ether		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50
Hexachlorobenzene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50
Phenanthrene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50
Anthracene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50
Carbazole		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50
Di-N-Butyl Phthalate		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50
Fluoranthene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50
Pyrene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50
Butylbenzyl Phthalate		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50
Benzo[a]anthracene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50
Chrysene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50
Bis(2-Ethylhexyl)Phthalate		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50
Di-N-Octyl Phthalate		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50
Benzo[b]fluoranthene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50
Benzo[k]fluoranthene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50
Benzo[a]pyrene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50
Indeno(1,2,3-c,d)Pyrene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50
Dibenz(a,h)Anthracene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50
Benzo[g,h,i]perylene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50
4-Nitrophenol		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50
Total Phenols		U	1920	mg/l	0.030	< 0.030	< 0.030	< 0.030

Deviations

In accordance with UKAS Policy on Deviating Samples TPS 63. Chemtest have a procedure to ensure 'upon receipt of each sample a competent laboratory shall assess whether the sample is suitable with regard to the requested test(s)'. This policy and the respective holding times applied, can be supplied upon request. The reason a sample is declared as deviating is detailed below. Where applicable the analysis remains UKAS/MCERTs accredited but the results may be compromised.

Sample:	Sample Ref:	Sample ID:	Sample Location:	Sampled Date:	Deviation Code(s):	Containers Received:
1789876		CP101		04-Apr-2024	B	Coloured Winchester 1000ml
1789876		CP101		04-Apr-2024	B	EPA Vial 40ml
1789876		CP101		04-Apr-2024	B	Plastic Bottle 1000ml
1789877		WS102		04-Apr-2024	B	Coloured Winchester 1000ml
1789877		WS102		04-Apr-2024	B	EPA Vial 40ml
1789877		WS102		04-Apr-2024	B	Plastic Bottle 1000ml
1789878		WS107		04-Apr-2024	B	Coloured Winchester 1000ml
1789878		WS107		04-Apr-2024	B	EPA Vial 40ml
1789878		WS107		04-Apr-2024	B	Plastic Bottle 1000ml

Test Methods

SOP	Title	Parameters included	Method summary	Water Accred.
1010	pH Value of Waters	pH at 20°C	pH Meter	RE PW TE TS PL DW GW
1300	Cyanides & Thiocyanate in Waters	Free (or easy liberatable) Cyanide; total Cyanide; complex Cyanide; Thiocyanate	Continuous Flow Analysis.	
1455	Metals in Waters by ICP-MS	Metals, including: Antimony; Arsenic; Barium; Beryllium; Boron; Cadmium; Chromium; Cobalt; Copper; Lead; Manganese; Mercury; Molybdenum; Nickel; Selenium; Tin; Vanadium; Zinc	Filtration of samples followed by direct determination by inductively coupled plasma mass spectrometry (ICP-MS).	RE PW PL SW DW GW
1460	Mercury low-level in Waters by AFS	Mercury	Atomic Fluorescence Spectrometry, with collimated UV source, wavelength 253.7 nm.	PL GW
1490	Hexavalent Chromium in Waters	Chromium [VI]	Automated colorimetric analysis by 'Aquakem 600' Discrete Analyser using 1,5-diphenylcarbazide.	PL GW
1675	TPH Aliphatic/Aromatic split in Waters by GC-FID(cf. Texas Method 1006 / TPH CWG)	Aliphatics: >C5–C6, >C6–C8, >C8– C10, >C10–C12, >C12–C16, >C16–C21, >C21–C35, >C35– C44 Aromatics: >C5–C7, >C7–C8, >C8– C10, >C10–C12, >C12–C16, >C16– C21, >C21– C35, >C35– C44	Pentane extraction / GCxGC FID detection	
1760	Volatile Organic Compounds (VOCs) in Waters by Headspace GC-MS	Volatile organic compounds, including BTEX and halogenated Aliphatic/Aromatics. (cf. USEPA Method 8260)	Automated headspace gas chromatographic (GC) analysis of water samples with mass spectrometric (MS) detection of volatile organic compounds.	PL GW
1790	Semi-Volatile Organic Compounds (SVOCs) in Waters by GC-MS	Semi-volatile organic compounds	Solvent extraction / GCMS detection	
1920	Phenols in Waters by HPLC	Phenolic compounds including: Phenol, Cresols, Xylenols, Trimethylphenols Note: Chlorophenols are excluded.	Determination by High Performance Liquid Chromatography (HPLC) using electrochemical detection.	PL GW

Report Information

Key

U	UKAS accredited
M	MCERTS and UKAS accredited
N	Unaccredited
S	This analysis has been subcontracted to a UKAS accredited laboratory that is accredited for this analysis
SN	This analysis has been subcontracted to a UKAS accredited laboratory that is not accredited for this analysis
T	This analysis has been subcontracted to an unaccredited laboratory
I/S	Insufficient Sample
U/S	Unsuitable Sample
N/E	not evaluated
<	"less than"
>	"greater than"
SOP	Standard operating procedure
LOD	Limit of detection

Comments or interpretations are beyond the scope of UKAS accreditation

The results relate only to the items tested

Uncertainty of measurement for the determinands tested are available upon request

None of the results in this report have been recovery corrected

All results are expressed on a dry weight basis

The following tests were analysed on samples as received and the results subsequently corrected to a dry weight basis TPH, BTEX, VOCs, SVOCs, PCBs, Phenols

For all other tests the samples were dried at < 37°C prior to analysis

All Asbestos testing is performed at the indicated laboratory

Issue numbers are sequential starting with 1 all subsequent reports are incremented by 1

Sample Deviation Codes

- A - Date of sampling not supplied
- B - Sample age exceeds stability time (sampling to extraction)
- C - Sample not received in appropriate containers
- D - Broken Container
- E - Insufficient Sample (Applies to LOI in Trommel Fines Only)

Sample Retention and Disposal

All soil samples will be retained for a period of 30 days from the date of receipt

All water samples will be retained for 14 days from the date of receipt

Charges may apply to extended sample storage

Water Sample Category Key for Accreditation

- DW - Drinking Water
- GW - Ground Water
- LE - Land Leachate
- NA - Not Applicable
- PL - Prepared Leachate
- PW - Processed Water

Report Information

RE - Recreational Water
SA - Saline Water
SW - Surface Water
TE - Treated Effluent
TS - Treated Sewage
UL - Unspecified Liquid

Clean Up Codes

NC - No Clean Up
MC - Mathematical Clean Up
FC - Florisil Clean Up

HWOL Acronym System

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 - Aromatic only
2D - GC-GC – Double coil gas chromatography
#1 - EH_2D_Total but with humics mathematically subtracted
#2 - EH_2D_Total but with fatty acids mathematically subtracted
+ - Operator to indicate cumulative e.g. EH+EH_Total or EH_CU+HS_Total

If you require extended retention of samples, please email your requirements to:
customerservices@chemtest.com



2183

Final Report

Report No.: 24-13091-1

Initial Date of Issue: 01-May-2024

Re-Issue Details:

Client E3P

Client Address: Taylor Road
Trafford Park
Urmston
Manchester
M41 7JQ

Contact(s):

Project 17-500 - Glen Dimplex, Prescot

Quotation No.: Q23-31421

Date Received: 25-Apr-2024

Order No.: 007850

Date Instructed: 25-Apr-2024

No. of Samples: 5

Turnaround (Wkdays): 5

Results Due: 01-May-2024

Date Approved: 01-May-2024

Approved By:



Details: David Smith, Technical Director

For details about application of accreditation to specific matrix types, please refer to the Table at the back of this report

Results - Water

Project: 17-500 - Glen Dimplex, Prescott

Client: E3P		Chemtest Job No.:		24-13091	24-13091	24-13091	24-13091	24-13091
Quotation No.: Q23-31421		Chemtest Sample ID.:		1799089	1799090	1799091	1799092	1799093
Order No.: 007850		Client Sample Ref.:		WS102	WS103	WS107	CP101	CP102
		Client Sample ID.:		WS102	WS103	WS107	CP101	CP102
		Sample Location:		WS102	WS103	WS107	CP101	CP102
		Sample Type:		WATER	WATER	WATER	WATER	WATER
		Sample Sub Type:						
		Top Depth (m):		-	-	-	-	-
		Bottom Depth (m):		-	-	-	-	-
		Date Sampled:		23-Apr-2024	23-Apr-2024	23-Apr-2024	23-Apr-2024	23-Apr-2024
		Time Sampled:		12:00	12:00	12:00	12:00	12:00
Determinand	HWOL Code	Accred.	SOP	Units	LOD			
pH at 20C		U	1010		4.0	7.0	7.8	8.3
Cyanide (Total) Low-Level		N	1300	mg/l	0.0050	< 0.0050	< 0.0050	< 0.0050
Arsenic (Dissolved)		U	1455	µg/l	0.20	2.4	3.6	1.1
Cadmium (Dissolved)		U	1455	µg/l	0.11	< 0.11	< 0.11	< 0.11
Chromium (Dissolved)		U	1455	µg/l	0.50	< 0.50	< 0.50	< 0.50
Copper (Dissolved)		U	1455	µg/l	0.50	< 0.50	1.7	1.2
Manganese (Dissolved)		U	1455	µg/l	0.50	2300	2200	5900
Nickel (Dissolved)		U	1455	µg/l	0.50	1.7	8.0	4.7
Lead (Dissolved)		U	1455	µg/l	0.50	< 0.50	< 0.50	< 0.50
Selenium (Dissolved)		U	1455	µg/l	0.50	0.80	1.3	0.67
Zinc (Dissolved)		U	1455	µg/l	2.5	< 2.5	6.2	6.8
Mercury Low Level		U	1460	µg/l	0.010	< 0.010	< 0.010	< 0.010
Chromium (Hexavalent)		U	1490	µg/l	20	< 20	< 20	< 20
Aliphatic TPH >C5-C6	EH_2D_AL_#1	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10
Aliphatic TPH >C6-C8	EH_2D_AL_#1	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10
Aliphatic TPH >C8-C10	EH_2D_AL_#1	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10
Aliphatic TPH >C10-C12	EH_2D_AL_#1	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10
Aliphatic TPH >C12-C16	EH_2D_AL_#1	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10
Aliphatic TPH >C16-C21	EH_2D_AL_#1	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10
Aliphatic TPH >C21-C35	EH_2D_AL_#1	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10
Aliphatic TPH >C35-C44	EH_2D_AL_#1	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10
Total Aliphatic Hydrocarbons	EH_2D_AL_#1	N	1675	µg/l	5.0	< 5.0	< 5.0	< 5.0
Aromatic TPH >C5-C7	EH_2D_AR_#1	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10
Aromatic TPH >C7-C8	EH_2D_AR_#1	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10
Aromatic TPH >C8-C10	EH_2D_AR_#1	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10
Aromatic TPH >C10-C12	EH_2D_AR_#1	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10
Aromatic TPH >C12-C16	EH_2D_AR_#1	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10
Aromatic TPH >C16-C21	EH_2D_AR_#1	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10
Aromatic TPH >C21-C35	EH_2D_AR_#1	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10
Aromatic TPH >C35-C44	EH_2D_AR_#1	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10
Total Aromatic Hydrocarbons	EH_2D_AR_#1	N	1675	µg/l	5.0	< 5.0	< 5.0	< 5.0
Total Petroleum Hydrocarbons	EH_2D_Total_#1	N	1675	µg/l	10	< 10	< 10	< 10
Dichlorodifluoromethane		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0
Chloromethane		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0
Vinyl Chloride		N	1760	µg/l	1.0	6100	3.4	< 1.0

Results - Water

Project: 17-500 - Glen Dimplex, Prescott

Client: E3P		Chemtest Job No.:	24-13091	24-13091	24-13091	24-13091	24-13091
Quotation No.: Q23-31421		Chemtest Sample ID.:	1799089	1799090	1799091	1799092	1799093
Order No.: 007850		Client Sample Ref.:	WS102	WS103	WS107	CP101	CP102
		Client Sample ID.:	WS102	WS103	WS107	CP101	CP102
		Sample Location:	WS102	WS103	WS107	CP101	CP102
		Sample Type:	WATER	WATER	WATER	WATER	WATER
		Sample Sub Type:					
		Top Depth (m):	-	-	-	-	-
		Bottom Depth (m):	-	-	-	-	-
		Date Sampled:	23-Apr-2024	23-Apr-2024	23-Apr-2024	23-Apr-2024	23-Apr-2024
		Time Sampled:	12:00	12:00	12:00	12:00	12:00
Determinand	HWOL Code	Accred.	SOP	Units	LOD		
Bromomethane		U	1760	µg/l	5	< 5	< 5
Chloroethane		U	1760	µg/l	2.0	< 2.0	< 2.0
Trichlorofluoromethane		U	1760	µg/l	1.0	< 1.0	< 1.0
1,1-Dichloroethene		U	1760	µg/l	1.0	18	< 1.0
Trans 1,2-Dichloroethene		U	1760	µg/l	1.0	190	< 1.0
1,1-Dichloroethane		U	1760	µg/l	1.0	11	3.4
cis 1,2-Dichloroethene		U	1760	µg/l	1.0	> 10000	38
Bromochloromethane		U	1760	µg/l	5	< 5	< 5
Trichloromethane		U	1760	µg/l	1.0	< 1.0	< 1.0
1,1,1-Trichloroethane		U	1760	µg/l	1.0	< 1.0	< 1.0
Tetrachloromethane		U	1760	µg/l	1.0	< 1.0	< 1.0
1,1-Dichloropropene		U	1760	µg/l	1.0	< 1.0	< 1.0
Benzene		U	1760	µg/l	1.0	8.0	< 1.0
1,2-Dichloroethane		U	1760	µg/l	2.0	< 2.0	< 2.0
Trichloroethene		N	1760	µg/l	1.0	> 10000	27
1,2-Dichloropropane		U	1760	µg/l	1.0	< 1.0	< 1.0
Dibromomethane		U	1760	µg/l	10	< 10	< 10
Bromodichloromethane		U	1760	µg/l	5	< 5	< 5
cis-1,3-Dichloropropene		N	1760	µg/l	10	< 10	< 10
Toluene		U	1760	µg/l	1.0	13	6.1
Trans-1,3-Dichloropropene		N	1760	µg/l	10	< 10	< 10
1,1,2-Trichloroethane		U	1760	µg/l	10	< 10	< 10
Tetrachloroethene		U	1760	µg/l	1.0	1.3	< 1.0
1,3-Dichloropropane		U	1760	µg/l	2.0	< 2.0	< 2.0
Dibromochloromethane		U	1760	µg/l	10	< 10	< 10
1,2-Dibromoethane		U	1760	µg/l	5	< 5	< 5
Chlorobenzene		N	1760	µg/l	1.0	< 1.0	< 1.0
1,1,1,2-Tetrachloroethane		U	1760	µg/l	2.0	< 2.0	< 2.0
Ethylbenzene		U	1760	µg/l	1.0	< 1.0	< 1.0
m & p-Xylene		U	1760	µg/l	1.0	< 1.0	< 1.0
o-Xylene		U	1760	µg/l	1.0	2.2	< 1.0
Styrene		U	1760	µg/l	1.0	< 1.0	< 1.0
Tribromomethane		U	1760	µg/l	1.0	< 1.0	< 1.0
Isopropylbenzene		U	1760	µg/l	1.0	< 1.0	< 1.0
Bromobenzene		U	1760	µg/l	1.0	< 1.0	< 1.0

Results - Water

Project: 17-500 - Glen Dimplex, Prescott

Client: E3P		Chemtest Job No.:	24-13091	24-13091	24-13091	24-13091	24-13091
Quotation No.: Q23-31421		Chemtest Sample ID.:	1799089	1799090	1799091	1799092	1799093
Order No.: 007850		Client Sample Ref.:	WS102	WS103	WS107	CP101	CP102
		Client Sample ID.:	WS102	WS103	WS107	CP101	CP102
		Sample Location:	WS102	WS103	WS107	CP101	CP102
		Sample Type:	WATER	WATER	WATER	WATER	WATER
		Sample Sub Type:					
		Top Depth (m):	-	-	-	-	-
		Bottom Depth (m):	-	-	-	-	-
		Date Sampled:	23-Apr-2024	23-Apr-2024	23-Apr-2024	23-Apr-2024	23-Apr-2024
		Time Sampled:	12:00	12:00	12:00	12:00	12:00
Determinand	HWOL Code	Accred.	SOP	Units	LOD		
1,2,3-Trichloropropane		N	1760	µg/l	50	< 50	< 50
N-Propylbenzene		U	1760	µg/l	1.0	< 1.0	< 1.0
2-Chlorotoluene		U	1760	µg/l	1.0	< 1.0	< 1.0
1,3,5-Trimethylbenzene		U	1760	µg/l	1.0	< 1.0	< 1.0
4-Chlorotoluene		U	1760	µg/l	1.0	< 1.0	< 1.0
Tert-Butylbenzene		U	1760	µg/l	1.0	< 1.0	< 1.0
1,2,4-Trimethylbenzene		U	1760	µg/l	1.0	< 1.0	< 1.0
Sec-Butylbenzene		U	1760	µg/l	1.0	< 1.0	< 1.0
1,3-Dichlorobenzene		N	1760	µg/l	1.0	< 1.0	< 1.0
4-Isopropyltoluene		U	1760	µg/l	1.0	< 1.0	< 1.0
1,4-Dichlorobenzene		U	1760	µg/l	1.0	< 1.0	< 1.0
N-Butylbenzene		U	1760	µg/l	1.0	< 1.0	< 1.0
1,2-Dichlorobenzene		U	1760	µg/l	1.0	< 1.0	< 1.0
1,2-Dibromo-3-Chloropropane		U	1760	µg/l	50	< 50	< 50
1,2,4-Trichlorobenzene		U	1760	µg/l	1.0	< 1.0	< 1.0
Hexachlorobutadiene		U	1760	µg/l	1.0	< 1.0	< 1.0
1,2,3-Trichlorobenzene		U	1760	µg/l	2.0	< 2.0	< 2.0
Methyl Tert-Butyl Ether		N	1760	µg/l	1.0	< 1.0	< 1.0
N-Nitrosodimethylamine		N	1790	µg/l	0.50	< 0.50	< 0.50
Phenol		N	1790	µg/l	0.50	< 0.50	< 0.50
2-Chlorophenol		N	1790	µg/l	0.50	< 0.50	< 0.50
Bis-(2-Chloroethyl)Ether		N	1790	µg/l	0.50	< 0.50	< 0.50
1,3-Dichlorobenzene		N	1790	µg/l	0.50	< 0.50	< 0.50
1,4-Dichlorobenzene		N	1790	µg/l	0.50	< 0.50	< 0.50
1,2-Dichlorobenzene		N	1790	µg/l	0.50	< 0.50	< 0.50
2-Methylphenol (o-Cresol)		N	1790	µg/l	0.50	< 0.50	< 0.50
Bis(2-Chloroisopropyl)Ether		N	1790	µg/l	0.50	< 0.50	< 0.50
Hexachloroethane		N	1790	µg/l	0.50	< 0.50	< 0.50
N-Nitrosodi-n-propylamine		N	1790	µg/l	0.50	< 0.50	< 0.50
4-Methylphenol		N	1790	µg/l	0.50	< 0.50	< 0.50
Nitrobenzene		N	1790	µg/l	0.50	< 0.50	< 0.50
Isophorone		N	1790	µg/l	0.50	< 0.50	< 0.50
2-Nitrophenol		N	1790	µg/l	0.50	< 0.50	< 0.50
2,4-Dimethylphenol		N	1790	µg/l	0.50	< 0.50	< 0.50
Bis(2-Chloroethoxy)Methane		N	1790	µg/l	0.50	< 0.50	< 0.50

Results - Water

Project: 17-500 - Glen Dimplex, Prescott

Client: E3P		Chemtest Job No.:				24-13091	24-13091	24-13091	24-13091	24-13091
Quotation No.: Q23-31421		Chemtest Sample ID.:				1799089	1799090	1799091	1799092	1799093
Order No.: 007850		Client Sample Ref.:				WS102	WS103	WS107	CP101	CP102
		Client Sample ID.:				WS102	WS103	WS107	CP101	CP102
		Sample Location:				WS102	WS103	WS107	CP101	CP102
		Sample Type:				WATER	WATER	WATER	WATER	WATER
		Sample Sub Type:								
		Top Depth (m):				-	-	-	-	-
		Bottom Depth (m):				-	-	-	-	-
		Date Sampled:				23-Apr-2024	23-Apr-2024	23-Apr-2024	23-Apr-2024	23-Apr-2024
		Time Sampled:				12:00	12:00	12:00	12:00	12:00
Determinand	HWOL Code	Accred.	SOP	Units	LOD					
2,4-Dichlorophenol		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,2,4-Trichlorobenzene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Naphthalene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
4-Chloroaniline		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Hexachlorobutadiene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
4-Chloro-3-Methylphenol		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
2-Methylnaphthalene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Hexachlorocyclopentadiene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
2,4,6-Trichlorophenol		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
2,4,5-Trichlorophenol		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
2-Chloronaphthalene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
2-Nitroaniline		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Acenaphthylene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Dimethylphthalate		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
2,6-Dinitrotoluene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Acenaphthene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
3-Nitroaniline		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Dibenzofuran		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
4-Chlorophenylphenylether		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
2,4-Dinitrotoluene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Fluorene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Diethyl Phthalate		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
4-Nitroaniline		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
2-Methyl-4,6-Dinitrophenol		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Azobenzene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
4-Bromophenylphenyl Ether		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Hexachlorobenzene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Phenanthrene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Anthracene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Carbazole		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Di-N-Butyl Phthalate		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Fluoranthene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Pyrene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Butylbenzyl Phthalate		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Benzo[a]anthracene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50

Results - Water

Project: 17-500 - Glen Dimplex, Prescott

Client: E3P		Chemtest Job No.:				24-13091	24-13091	24-13091	24-13091	24-13091
Quotation No.: Q23-31421		Chemtest Sample ID.:				1799089	1799090	1799091	1799092	1799093
Order No.: 007850		Client Sample Ref.:				WS102	WS103	WS107	CP101	CP102
		Client Sample ID.:				WS102	WS103	WS107	CP101	CP102
		Sample Location:				WS102	WS103	WS107	CP101	CP102
		Sample Type:				WATER	WATER	WATER	WATER	WATER
		Sample Sub Type:								
		Top Depth (m):				-	-	-	-	-
		Bottom Depth (m):				-	-	-	-	-
		Date Sampled:				23-Apr-2024	23-Apr-2024	23-Apr-2024	23-Apr-2024	23-Apr-2024
		Time Sampled:				12:00	12:00	12:00	12:00	12:00
Determinand	HWOL Code	Accred.	SOP	Units	LOD					
Chrysene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Bis(2-Ethylhexyl)Phthalate		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Di-N-Octyl Phthalate		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Benzo[b]fluoranthene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Benzo[k]fluoranthene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Benzo[a]pyrene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Indeno(1,2,3-c,d)Pyrene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Dibenz(a,h)Anthracene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Benzo[g,h,i]perylene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
4-Nitrophenol		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Total Phenols		U	1920	mg/l	0.030	< 0.030	0.14	< 0.030	< 0.030	< 0.030

Test Methods

SOP	Title	Parameters included	Method summary	Water Accred.
1010	pH Value of Waters	pH at 20°C	pH Meter	RE PW TE TS PL DW GW
1300	Cyanides & Thiocyanate in Waters	Free (or easy liberatable) Cyanide; total Cyanide; complex Cyanide; Thiocyanate	Continuous Flow Analysis.	
1455	Metals in Waters by ICP-MS	Metals, including: Antimony; Arsenic; Barium; Beryllium; Boron; Cadmium; Chromium; Cobalt; Copper; Lead; Manganese; Mercury; Molybdenum; Nickel; Selenium; Tin; Vanadium; Zinc	Filtration of samples followed by direct determination by inductively coupled plasma mass spectrometry (ICP-MS).	RE PW PL SW DW GW
1460	Mercury low-level in Waters by AFS	Mercury	Atomic Fluorescence Spectrometry, with collimated UV source, wavelength 253.7 nm.	PL GW
1490	Hexavalent Chromium in Waters	Chromium [VI]	Automated colorimetric analysis by 'Aquakem 600' Discrete Analyser using 1,5-diphenylcarbazide.	PL GW
1675	TPH Aliphatic/Aromatic split in Waters by GC-FID(cf. Texas Method 1006 / TPH CWG)	Aliphatics: >C5–C6, >C6–C8, >C8– C10, >C10–C12, >C12–C16, >C16–C21, >C21–C35, >C35– C44 Aromatics: >C5–C7, >C7–C8, >C8– C10, >C10–C12, >C12–C16, >C16– C21, >C21– C35, >C35– C44	Pentane extraction / GCxGC FID detection	
1760	Volatile Organic Compounds (VOCs) in Waters by Headspace GC-MS	Volatile organic compounds, including BTEX and halogenated Aliphatic/Aromatics. (cf. USEPA Method 8260)	Automated headspace gas chromatographic (GC) analysis of water samples with mass spectrometric (MS) detection of volatile organic compounds.	PL GW
1790	Semi-Volatile Organic Compounds (SVOCs) in Waters by GC-MS	Semi-volatile organic compounds	Solvent extraction / GCMS detection	
1920	Phenols in Waters by HPLC	Phenolic compounds including: Phenol, Cresols, Xylenols, Trimethylphenols Note: Chlorophenols are excluded.	Determination by High Performance Liquid Chromatography (HPLC) using electrochemical detection.	PL GW

Report Information

Key

U	UKAS accredited
M	MCERTS and UKAS accredited
N	Unaccredited
S	This analysis has been subcontracted to a UKAS accredited laboratory that is accredited for this analysis
SN	This analysis has been subcontracted to a UKAS accredited laboratory that is not accredited for this analysis
T	This analysis has been subcontracted to an unaccredited laboratory
I/S	Insufficient Sample
U/S	Unsuitable Sample
N/E	not evaluated
<	"less than"
>	"greater than"
SOP	Standard operating procedure
LOD	Limit of detection

This report shall not be reproduced except in full, and only with the prior approval of the laboratory.

Any comments or interpretations are outside the scope of UKAS accreditation.

The Laboratory is not accredited for any sampling activities and reported results relate to the samples 'as received' at the laboratory.

Uncertainty of measurement for the determinands tested are available upon request .

None of the results in this report have been recovery corrected.

All results are expressed on a dry weight basis.

The following tests were analysed on samples 'as received' and the results subsequently corrected to a dry weight basis EPH, VPH, TPH, BTEX, VOCs, SVOCs, PCBs, Phenols.

For all other tests the samples were dried at $\leq 30^{\circ}\text{C}$ prior to analysis.

All Asbestos testing is performed at the indicated laboratory .

Issue numbers are sequential starting with 1 all subsequent reports are incremented by 1.

Sample Deviation Codes

- A - Date of sampling not supplied
- B - Sample age exceeds stability time (sampling to extraction)
- C - Sample not received in appropriate containers
- D - Broken Container
- E - Insufficient Sample (Applies to LOI in Trommel Fines Only)

Sample Retention and Disposal

All soil samples will be retained for a period of 30 days from the date of receipt.

All water samples will be retained for 14 days from the date of receipt.

Charges may apply to extended sample storage.

Water Sample Category Key for Accreditation

- DW - Drinking Water
- GW - Ground Water
- LE - Land Leachate
- NA - Not Applicable

Report Information

PL - Prepared Leachate
PW - Processed Water
RE - Recreational Water
SA - Saline Water
SW - Surface Water
TE - Treated Effluent
TS - Treated Sewage
UL - Unspecified Liquid

Clean Up Codes

NC - No Clean Up
MC - Mathematical Clean Up
FC - Florisil Clean Up

HWOL Acronym System

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 - Aromatic only
2D - GC-GC – Double coil gas chromatography
#1 - EH_2D_Total but with humics mathematically subtracted
#2 - EH_2D_Total but with fatty acids mathematically subtracted
+ - Operator to indicate cumulative e.g. EH+EH_Total or EH_CU+HS_Total

If you require extended retention of samples, please email your requirements to:
customerservices@chemtest.com



2183

Final Report

Report No.: 24-29284-1

Initial Date of Issue: 17-Sep-2024

Re-Issue Details:

Client E3P

Client Address: Taylor Road
Trafford Park
Urmston
Manchester
M41 7JQ

Contact(s):

Project 17-500 - Glen Dimplex, Prescott

Quotation No.: Q23-31421

Date Received: 12-Sep-2024

Order No.: 009385

Date Instructed: 12-Sep-2024

No. of Samples: 2

Turnaround (Wkdays): 5

Results Due: 18-Sep-2024

Date Approved: 17-Sep-2024

Approved By:

Details: David Smith, Technical Director

For details about application of accreditation to specific matrix types, please refer to the Table at the back of this report

Results - Water

Project: 17-500 - Glen Dimplex, Prescott

Client: E3P		Chemtest Job No.:			24-29284	24-29284
Quotation No.: Q23-31421		Chemtest Sample ID.:			1865128	1865129
Order No.: 009385		Client Sample Ref.:			RB101	RB102
		Client Sample ID.:			RB101	RB102
		Sample Location:			RB101	RB102
		Sample Type:			WATER	WATER
		Sample Sub Type:				
		Top Depth (m):			-	-
		Bottom Depth (m):			-	-
		Date Sampled:			10-Sep-2024	10-Sep-2024
		Time Sampled:			12:00	12:00
Determinand	HWOL Code	Accred.	SOP	Units	LOD	
pH at 20C		U	1010		4.0	8.1
Cyanide (Total) Low-Level		N	1300	mg/l	0.0050	< 0.0050
Calcium (Dissolved)		U	1455	mg/l	2.00	150
Arsenic (Dissolved)		U	1455	µg/l	0.20	0.40
Cadmium (Dissolved)		U	1455	µg/l	0.11	< 0.11
Chromium (Dissolved)		U	1455	µg/l	0.50	0.61
Copper (Dissolved)		U	1455	µg/l	0.50	1.0
Manganese (Dissolved)		U	1455	µg/l	0.50	190
Nickel (Dissolved)		U	1455	µg/l	0.50	5.3
Lead (Dissolved)		U	1455	µg/l	0.50	< 0.50
Selenium (Dissolved)		U	1455	µg/l	0.50	< 0.50
Zinc (Dissolved)		U	1455	µg/l	2.5	8.4
Mercury Low Level		U	1460	µg/l	0.010	< 0.010
Chromium (Hexavalent)		U	1490	µg/l	20	< 20
Dissolved Organic Carbon		U	1610	mg/l	2.0	< 2.0
Aliphatic TPH >C5-C6	EH_2D_AL_#1	N	1675	µg/l	0.10	< 0.10
Aliphatic TPH >C6-C8	EH_2D_AL_#1	N	1675	µg/l	0.10	< 0.10
Aliphatic TPH >C8-C10	EH_2D_AL_#1	N	1675	µg/l	0.10	< 0.10
Aliphatic TPH >C10-C12	EH_2D_AL_#1	N	1675	µg/l	0.10	< 0.10
Aliphatic TPH >C12-C16	EH_2D_AL_#1	N	1675	µg/l	0.10	< 0.10
Aliphatic TPH >C16-C21	EH_2D_AL_#1	N	1675	µg/l	0.10	< 0.10
Aliphatic TPH >C21-C35	EH_2D_AL_#1	N	1675	µg/l	0.10	< 0.10
Aliphatic TPH >C35-C44	EH_2D_AL_#1	N	1675	µg/l	0.10	< 0.10
Total Aliphatic Hydrocarbons	EH_2D_AL_#1	N	1675	µg/l	5.0	< 5.0
Aromatic TPH >C5-C7	EH_2D_AR_#1	N	1675	µg/l	0.10	< 0.10
Aromatic TPH >C7-C8	EH_2D_AR_#1	N	1675	µg/l	0.10	< 0.10
Aromatic TPH >C8-C10	EH_2D_AR_#1	N	1675	µg/l	0.10	< 0.10
Aromatic TPH >C10-C12	EH_2D_AR_#1	N	1675	µg/l	0.10	< 0.10
Aromatic TPH >C12-C16	EH_2D_AR_#1	N	1675	µg/l	0.10	< 0.10
Aromatic TPH >C16-C21	EH_2D_AR_#1	N	1675	µg/l	0.10	< 0.10
Aromatic TPH >C21-C35	EH_2D_AR_#1	N	1675	µg/l	0.10	< 0.10
Aromatic TPH >C35-C44	EH_2D_AR_#1	N	1675	µg/l	0.10	< 0.10
Total Aromatic Hydrocarbons	EH_2D_AR_#1	N	1675	µg/l	5.0	< 5.0
Total Petroleum Hydrocarbons	EH_2D_Total_#1	N	1675	µg/l	10	< 10
Dichlorodifluoromethane		U	1760	µg/l	1.0	< 1.0

Results - Water

Project: 17-500 - Glen Dimplex, Prescott

Client: E3P		Chemtest Job No.:				24-29284	24-29284
Quotation No.: Q23-31421		Chemtest Sample ID.:				1865128	1865129
Order No.: 009385		Client Sample Ref.:				RB101	RB102
		Client Sample ID.:				RB101	RB102
		Sample Location:				RB101	RB102
		Sample Type:				WATER	WATER
		Sample Sub Type:					
		Top Depth (m):				-	-
		Bottom Depth (m):				-	-
		Date Sampled:				10-Sep-2024	10-Sep-2024
		Time Sampled:				12:00	12:00
Determinand	HWOL Code	Accred.	SOP	Units	LOD		
Chloromethane		U	1760	µg/l	1.0	< 1.0	< 1.0
Vinyl Chloride		N	1760	µg/l	1.0	< 1.0	< 1.0
Bromomethane		U	1760	µg/l	5	< 5	< 5
Chloroethane		U	1760	µg/l	2.0	< 2.0	< 2.0
Trichlorofluoromethane		U	1760	µg/l	1.0	< 1.0	< 1.0
1,1-Dichloroethene		U	1760	µg/l	1.0	< 1.0	< 1.0
Trans 1,2-Dichloroethene		U	1760	µg/l	1.0	< 1.0	< 1.0
1,1-Dichloroethane		U	1760	µg/l	1.0	< 1.0	< 1.0
cis 1,2-Dichloroethene		U	1760	µg/l	1.0	< 1.0	< 1.0
Bromochloromethane		U	1760	µg/l	5	< 5	< 5
Trichloromethane		U	1760	µg/l	1.0	< 1.0	14
1,1,1-Trichloroethane		U	1760	µg/l	1.0	< 1.0	< 1.0
Tetrachloromethane		U	1760	µg/l	1.0	< 1.0	< 1.0
1,1-Dichloropropene		U	1760	µg/l	1.0	< 1.0	< 1.0
Benzene		U	1760	µg/l	1.0	< 1.0	< 1.0
1,2-Dichloroethane		U	1760	µg/l	2.0	< 2.0	< 2.0
Trichloroethene		N	1760	µg/l	1.0	< 1.0	< 1.0
1,2-Dichloropropane		U	1760	µg/l	1.0	< 1.0	< 1.0
Dibromomethane		U	1760	µg/l	10	< 10	< 10
Bromodichloromethane		U	1760	µg/l	5	< 5	< 5
cis-1,3-Dichloropropene		N	1760	µg/l	10	< 10	< 10
Toluene		U	1760	µg/l	1.0	< 1.0	< 1.0
Trans-1,3-Dichloropropene		N	1760	µg/l	10	< 10	< 10
1,1,2-Trichloroethane		U	1760	µg/l	10	< 10	< 10
Tetrachloroethene		U	1760	µg/l	1.0	< 1.0	< 1.0
1,3-Dichloropropane		U	1760	µg/l	2.0	< 2.0	< 2.0
Dibromochloromethane		U	1760	µg/l	10	< 10	< 10
1,2-Dibromoethane		U	1760	µg/l	5	< 5	< 5
Chlorobenzene		N	1760	µg/l	1.0	< 1.0	< 1.0
1,1,1,2-Tetrachloroethane		U	1760	µg/l	2.0	< 2.0	< 2.0
Ethylbenzene		U	1760	µg/l	1.0	< 1.0	< 1.0
m & p-Xylene		U	1760	µg/l	1.0	< 1.0	< 1.0
o-Xylene		U	1760	µg/l	1.0	< 1.0	< 1.0
Styrene		U	1760	µg/l	1.0	< 1.0	< 1.0
Tribromomethane		U	1760	µg/l	1.0	< 1.0	< 1.0

Results - Water

Project: 17-500 - Glen Dimplex, Prescott

Client: E3P		Chemtest Job No.:				24-29284	24-29284
Quotation No.: Q23-31421		Chemtest Sample ID.:				1865128	1865129
Order No.: 009385		Client Sample Ref.:				RB101	RB102
		Client Sample ID.:				RB101	RB102
		Sample Location:				RB101	RB102
		Sample Type:				WATER	WATER
		Sample Sub Type:					
		Top Depth (m):				-	-
		Bottom Depth (m):				-	-
		Date Sampled:				10-Sep-2024	10-Sep-2024
		Time Sampled:				12:00	12:00
Determinand	HWOL Code	Accred.	SOP	Units	LOD		
Isopropylbenzene		U	1760	µg/l	1.0	< 1.0	< 1.0
Bromobenzene		U	1760	µg/l	1.0	< 1.0	< 1.0
1,2,3-Trichloropropane		N	1760	µg/l	50	< 50	< 50
N-Propylbenzene		U	1760	µg/l	1.0	< 1.0	< 1.0
2-Chlorotoluene		U	1760	µg/l	1.0	< 1.0	< 1.0
1,3,5-Trimethylbenzene		U	1760	µg/l	1.0	< 1.0	< 1.0
4-Chlorotoluene		U	1760	µg/l	1.0	< 1.0	< 1.0
Tert-Butylbenzene		U	1760	µg/l	1.0	< 1.0	< 1.0
1,2,4-Trimethylbenzene		U	1760	µg/l	1.0	< 1.0	< 1.0
Sec-Butylbenzene		U	1760	µg/l	1.0	< 1.0	< 1.0
1,3-Dichlorobenzene		N	1760	µg/l	1.0	< 1.0	< 1.0
4-Isopropyltoluene		U	1760	µg/l	1.0	< 1.0	< 1.0
1,4-Dichlorobenzene		U	1760	µg/l	1.0	< 1.0	< 1.0
N-Butylbenzene		U	1760	µg/l	1.0	< 1.0	< 1.0
1,2-Dichlorobenzene		U	1760	µg/l	1.0	< 1.0	< 1.0
1,2-Dibromo-3-Chloropropane		U	1760	µg/l	50	< 50	< 50
1,2,4-Trichlorobenzene		U	1760	µg/l	1.0	< 1.0	< 1.0
Hexachlorobutadiene		U	1760	µg/l	1.0	< 1.0	< 1.0
1,2,3-Trichlorobenzene		U	1760	µg/l	2.0	< 2.0	< 2.0
Methyl Tert-Butyl Ether		N	1760	µg/l	1.0	< 1.0	< 1.0
N-Nitrosodimethylamine		N	1790	µg/l	0.50	< 0.50	< 0.50
Phenol		N	1790	µg/l	0.50	< 0.50	< 0.50
2-Chlorophenol		N	1790	µg/l	0.50	< 0.50	< 0.50
Bis-(2-Chloroethyl)Ether		N	1790	µg/l	0.50	< 0.50	< 0.50
1,3-Dichlorobenzene		N	1790	µg/l	0.50	< 0.50	< 0.50
1,4-Dichlorobenzene		N	1790	µg/l	0.50	< 0.50	< 0.50
1,2-Dichlorobenzene		N	1790	µg/l	0.50	< 0.50	< 0.50
2-Methylphenol (o-Cresol)		N	1790	µg/l	0.50	< 0.50	< 0.50
Bis(2-Chloroisopropyl)Ether		N	1790	µg/l	0.50	< 0.50	< 0.50
Hexachloroethane		N	1790	µg/l	0.50	< 0.50	< 0.50
N-Nitrosodi-n-propylamine		N	1790	µg/l	0.50	< 0.50	< 0.50
4-Methylphenol		N	1790	µg/l	0.50	< 0.50	< 0.50
Nitrobenzene		N	1790	µg/l	0.50	< 0.50	< 0.50
Isophorone		N	1790	µg/l	0.50	< 0.50	< 0.50
2-Nitrophenol		N	1790	µg/l	0.50	< 0.50	< 0.50

Results - Water

Project: 17-500 - Glen Dimplex, Prescott

Client: E3P		Chemtest Job No.:				24-29284	24-29284
Quotation No.: Q23-31421		Chemtest Sample ID.:				1865128	1865129
Order No.: 009385		Client Sample Ref.:				RB101	RB102
		Client Sample ID.:				RB101	RB102
		Sample Location:				RB101	RB102
		Sample Type:				WATER	WATER
		Sample Sub Type:					
		Top Depth (m):				-	-
		Bottom Depth (m):				-	-
		Date Sampled:				10-Sep-2024	10-Sep-2024
		Time Sampled:				12:00	12:00
Determinand	HWOL Code	Accred.	SOP	Units	LOD		
2,4-Dimethylphenol		N	1790	µg/l	0.50	< 0.50	< 0.50
Bis(2-Chloroethoxy)Methane		N	1790	µg/l	0.50	< 0.50	< 0.50
2,4-Dichlorophenol		N	1790	µg/l	0.50	< 0.50	< 0.50
1,2,4-Trichlorobenzene		N	1790	µg/l	0.50	< 0.50	< 0.50
Naphthalene		N	1790	µg/l	0.50	< 0.50	< 0.50
4-Chloroaniline		N	1790	µg/l	0.50	< 0.50	< 0.50
Hexachlorobutadiene		N	1790	µg/l	0.50	< 0.50	< 0.50
4-Chloro-3-Methylphenol		N	1790	µg/l	0.50	< 0.50	< 0.50
2-Methylnaphthalene		N	1790	µg/l	0.50	< 0.50	< 0.50
2,4,6-Trichlorophenol		N	1790	µg/l	0.50	< 0.50	< 0.50
2,4,5-Trichlorophenol		N	1790	µg/l	0.50	< 0.50	< 0.50
2-Chloronaphthalene		N	1790	µg/l	0.50	< 0.50	< 0.50
2-Nitroaniline		N	1790	µg/l	0.50	< 0.50	< 0.50
Acenaphthylene		N	1790	µg/l	0.50	< 0.50	< 0.50
Dimethylphthalate		N	1790	µg/l	0.50	< 0.50	< 0.50
2,6-Dinitrotoluene		N	1790	µg/l	0.50	< 0.50	< 0.50
Acenaphthene		N	1790	µg/l	0.50	< 0.50	< 0.50
3-Nitroaniline		N	1790	µg/l	0.50	< 0.50	< 0.50
Dibenzofuran		N	1790	µg/l	0.50	< 0.50	< 0.50
4-Chlorophenylphenylether		N	1790	µg/l	0.50	< 0.50	< 0.50
2,4-Dinitrotoluene		N	1790	µg/l	0.50	< 0.50	< 0.50
Fluorene		N	1790	µg/l	0.50	< 0.50	< 0.50
Diethyl Phthalate		N	1790	µg/l	0.50	< 0.50	< 0.50
4-Nitroaniline		N	1790	µg/l	0.50	< 0.50	< 0.50
2-Methyl-4,6-Dinitrophenol		N	1790	µg/l	0.50	< 0.50	< 0.50
Azobenzene		N	1790	µg/l	0.50	< 0.50	< 0.50
4-Bromophenylphenyl Ether		N	1790	µg/l	0.50	< 0.50	< 0.50
Hexachlorobenzene		N	1790	µg/l	0.50	< 0.50	< 0.50
Phenanthrene		N	1790	µg/l	0.50	< 0.50	< 0.50
Anthracene		N	1790	µg/l	0.50	< 0.50	< 0.50
Carbazole		N	1790	µg/l	0.50	< 0.50	< 0.50
Di-N-Butyl Phthalate		N	1790	µg/l	0.50	< 0.50	< 0.50
Fluoranthene		N	1790	µg/l	0.50	< 0.50	< 0.50
Pyrene		N	1790	µg/l	0.50	< 0.50	< 0.50
Butylbenzyl Phthalate		N	1790	µg/l	0.50	< 0.50	< 0.50

Results - Water

Project: 17-500 - Glen Dimplex, Prescott

Client: E3P		Chemtest Job No.:				24-29284	24-29284
Quotation No.: Q23-31421		Chemtest Sample ID.:				1865128	1865129
Order No.: 009385		Client Sample Ref.:				RB101	RB102
		Client Sample ID.:				RB101	RB102
		Sample Location:				RB101	RB102
		Sample Type:				WATER	WATER
		Sample Sub Type:					
		Top Depth (m):				-	-
		Bottom Depth (m):				-	-
		Date Sampled:				10-Sep-2024	10-Sep-2024
		Time Sampled:				12:00	12:00
Determinand	HWOL Code	Accred.	SOP	Units	LOD		
Benzo[a]anthracene		N	1790	µg/l	0.50	< 0.50	< 0.50
Chrysene		N	1790	µg/l	0.50	< 0.50	< 0.50
Bis(2-Ethylhexyl)Phthalate		N	1790	µg/l	0.50	< 0.50	< 0.50
Di-N-Octyl Phthalate		N	1790	µg/l	0.50	< 0.50	< 0.50
Benzo[b]fluoranthene		N	1790	µg/l	0.50	< 0.50	< 0.50
Benzo[k]fluoranthene		N	1790	µg/l	0.50	< 0.50	< 0.50
Benzo[a]pyrene		N	1790	µg/l	0.50	< 0.50	< 0.50
Indeno(1,2,3-c,d)Pyrene		N	1790	µg/l	0.50	< 0.50	< 0.50
Dibenz(a,h)Anthracene		N	1790	µg/l	0.50	< 0.50	< 0.50
Benzo[g,h,i]perylene		N	1790	µg/l	0.50	< 0.50	< 0.50
4-Nitrophenol		N	1790	µg/l	0.50	< 0.50	< 0.50
Total Phenols		U	1920	mg/l	0.030	< 0.030	< 0.030

Test Methods

SOP	Title	Parameters included	Method summary	Water Accred.
1010	pH Value of Waters	pH at 20°C	pH Meter	RE PW TE TS PL DW GW
1300	Cyanides & Thiocyanate in Waters	Free (or easy liberatable) Cyanide; total Cyanide; complex Cyanide; Thiocyanate	Continuous Flow Analysis.	
1455	Metals in Waters by ICP-MS	Metals, including: Antimony; Arsenic; Barium; Beryllium; Boron; Cadmium; Chromium; Cobalt; Copper; Lead; Manganese; Mercury; Molybdenum; Nickel; Selenium; Tin; Vanadium; Zinc	Filtration of samples followed by direct determination by inductively coupled plasma mass spectrometry (ICP-MS).	RE PW PL SW DW GW
1460	Mercury low-level in Waters by AFS	Mercury	Atomic Fluorescence Spectrometry, with collimated UV source, wavelength 253.7 nm.	PL GW
1490	Hexavalent Chromium in Waters	Chromium [VI]	Automated colorimetric analysis by 'Aquakem 600' Discrete Analyser using 1,5-diphenylcarbazide.	PL GW
1610	Total/Dissolved Organic Carbon in Waters	Organic Carbon	TOC Analyser using Catalytic Oxidation	PL SW GW
1675	TPH Aliphatic/Aromatic split in Waters by GC-FID(cf. Texas Method 1006 / TPH CWG)	Aliphatics: >C5–C6, >C6–C8, >C8– C10, >C10–C12, >C12–C16, >C16–C21, >C21–C35, >C35– C44 Aromatics: >C5–C7, >C7–C8, >C8– C10, >C10–C12, >C12–C16, >C16– C21, >C21– C35, >C35– C44	Pentane extraction / GCxGC FID detection	
1760	Volatile Organic Compounds (VOCs) in Waters by Headspace GC-MS	Volatile organic compounds, including BTEX and halogenated Aliphatic/Aromatics. (cf. USEPA Method 8260)	Automated headspace gas chromatographic (GC) analysis of water samples with mass spectrometric (MS) detection of volatile organic compounds.	PL GW
1790	Semi-Volatile Organic Compounds (SVOCs) in Waters by GC-MS	Semi-volatile organic compounds	Solvent extraction / GCMS detection	
1920	Phenols in Waters by HPLC	Phenolic compounds including: Phenol, Cresols, Xylenols, Trimethylphenols Note: Chlorophenols are excluded.	Determination by High Performance Liquid Chromatography (HPLC) using electrochemical detection.	PL GW

Report Information

Key

U	UKAS accredited
M	MCERTS and UKAS accredited
N	Unaccredited
S	This analysis has been subcontracted to a UKAS accredited laboratory that is accredited for this analysis
SN	This analysis has been subcontracted to a UKAS accredited laboratory that is not accredited for this analysis
T	This analysis has been subcontracted to an unaccredited laboratory
I/S	Insufficient Sample
U/S	Unsuitable Sample
N/E	not evaluated
<	"less than"
>	"greater than"
SOP	Standard operating procedure
LOD	Limit of detection

This report shall not be reproduced except in full, and only with the prior approval of the laboratory.

Any comments or interpretations are outside the scope of UKAS accreditation.

The Laboratory is not accredited for any sampling activities and reported results relate to the samples 'as received' at the laboratory.

Uncertainty of measurement for the determinands tested are available upon request .

None of the results in this report have been recovery corrected.

All results are expressed on a dry weight basis.

The following tests were analysed on samples 'as received' and the results subsequently corrected to a dry weight basis EPH, VPH, TPH, BTEX, VOCs, SVOCs, PCBs, Phenols.

For all other tests the samples were dried at $\leq 30^{\circ}\text{C}$ prior to analysis.

All Asbestos testing is performed at the indicated laboratory .

Issue numbers are sequential starting with 1 all subsequent reports are incremented by 1.

Sample Deviation Codes

- A - Date of sampling not supplied
- B - Sample age exceeds stability time (sampling to extraction)
- C - Sample not received in appropriate containers
- D - Broken Container
- E - Insufficient Sample (Applies to LOI in Trommel Fines Only)

Sample Retention and Disposal

All soil samples will be retained for a period of 30 days from the date of receipt.

All water samples will be retained for 14 days from the date of receipt.

Charges may apply to extended sample storage.

Water Sample Category Key for Accreditation

- DW - Drinking Water
- GW - Ground Water
- LE - Land Leachate
- NA - Not Applicable

Report Information

PL - Prepared Leachate
PW - Processed Water
RE - Recreational Water
SA - Saline Water
SW - Surface Water
TE - Treated Effluent
TS - Treated Sewage
UL - Unspecified Liquid

Clean Up Codes

NC - No Clean Up
MC - Mathematical Clean Up
FC - Florisil Clean Up

HWOL Acronym System

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 - Aromatic only
2D - GC-GC – Double coil gas chromatography
#1 - EH_2D_Total but with humics mathematically subtracted
#2 - EH_2D_Total but with fatty acids mathematically subtracted
+ - Operator to indicate cumulative e.g. EH+EH_Total or EH_CU+HS_Total

If you require extended retention of samples, please email your requirements to:
customerservices@chemtest.com



2183

Final Report

Report No.: 24-31039-1

Initial Date of Issue: 03-Oct-2024

Re-Issue Details:

Client E3P

Client Address: Taylor Road
Trafford Park
Urmston
Manchester
M41 7JQ

Contact(s):

Project 17-500 - Glen Dimplex, Prescot

Quotation No.: Q23-31421

Date Received: 26-Sep-2024

Order No.: 009529

Date Instructed: 26-Sep-2024

No. of Samples: 2

Turnaround (Wkdays): 5

Results Due: 02-Oct-2024

Date Approved: 03-Oct-2024

Approved By:

Details: David Smith, Technical Director

For details about application of accreditation to specific matrix types, please refer to the Table at the back of this report

Results - Water

Project: 17-500 - Glen Dimplex, Prescott

Client: E3P		Chemtest Job No.:			24-31039	24-31039
Quotation No.: Q23-31421		Chemtest Sample ID.:			1872186	1872187
Order No.: 009529		Client Sample Ref.:			RB101	RB102
		Client Sample ID.:			RB101	RB102
		Sample Location:			RB101	RB102
		Sample Type:			WATER	WATER
		Sample Sub Type:				
		Top Depth (m):			-	-
		Bottom Depth (m):			-	-
		Date Sampled:			24-Sep-2024	24-Sep-2024
		Time Sampled:			12:00	12:00
Determinand	HWOL Code	Accred.	SOP	Units	LOD	
pH at 20C		U	1010		4.0	7.1
Cyanide (Total) Low-Level		N	1300	mg/l	0.0050	< 0.0050
Calcium (Dissolved)		U	1455	mg/l	2.00	180
Arsenic (Dissolved)		U	1455	µg/l	0.20	0.90
Cadmium (Dissolved)		U	1455	µg/l	0.11	< 0.11
Chromium (Dissolved)		U	1455	µg/l	0.50	0.53
Copper (Dissolved)		U	1455	µg/l	0.50	0.79
Manganese (Dissolved)		U	1455	µg/l	0.50	52
Nickel (Dissolved)		U	1455	µg/l	0.50	2.0
Lead (Dissolved)		U	1455	µg/l	0.50	< 0.50
Selenium (Dissolved)		U	1455	µg/l	0.50	< 0.50
Zinc (Dissolved)		U	1455	µg/l	2.5	2.6
Mercury Low Level		U	1460	µg/l	0.010	< 0.010
Chromium (Hexavalent)		U	1490	µg/l	20	< 20
Dissolved Organic Carbon		U	1610	mg/l	2.0	2.9
Aliphatic TPH >C5-C6	EH_2D_AL_#1	N	1675	µg/l	0.10	< 0.10
Aliphatic TPH >C6-C8	EH_2D_AL_#1	N	1675	µg/l	0.10	< 0.10
Aliphatic TPH >C8-C10	EH_2D_AL_#1	N	1675	µg/l	0.10	< 0.10
Aliphatic TPH >C10-C12	EH_2D_AL_#1	N	1675	µg/l	0.10	< 0.10
Aliphatic TPH >C12-C16	EH_2D_AL_#1	N	1675	µg/l	0.10	< 0.10
Aliphatic TPH >C16-C21	EH_2D_AL_#1	N	1675	µg/l	0.10	< 0.10
Aliphatic TPH >C21-C35	EH_2D_AL_#1	N	1675	µg/l	0.10	< 0.10
Aliphatic TPH >C35-C44	EH_2D_AL_#1	N	1675	µg/l	0.10	< 0.10
Total Aliphatic Hydrocarbons	EH_2D_AL_#1	N	1675	µg/l	5.0	< 5.0
Aromatic TPH >C5-C7	EH_2D_AR_#1	N	1675	µg/l	0.10	< 0.10
Aromatic TPH >C7-C8	EH_2D_AR_#1	N	1675	µg/l	0.10	< 0.10
Aromatic TPH >C8-C10	EH_2D_AR_#1	N	1675	µg/l	0.10	< 0.10
Aromatic TPH >C10-C12	EH_2D_AR_#1	N	1675	µg/l	0.10	< 0.10
Aromatic TPH >C12-C16	EH_2D_AR_#1	N	1675	µg/l	0.10	< 0.10
Aromatic TPH >C16-C21	EH_2D_AR_#1	N	1675	µg/l	0.10	< 0.10
Aromatic TPH >C21-C35	EH_2D_AR_#1	N	1675	µg/l	0.10	< 0.10
Aromatic TPH >C35-C44	EH_2D_AR_#1	N	1675	µg/l	0.10	< 0.10
Total Aromatic Hydrocarbons	EH_2D_AR_#1	N	1675	µg/l	5.0	< 5.0
Total Petroleum Hydrocarbons	EH_2D_Total_#1	N	1675	µg/l	10	< 10
Dichlorodifluoromethane		U	1760	µg/l	1.0	< 1.0

Results - Water

Project: 17-500 - Glen Dimplex, Prescott

Client: E3P		Chemtest Job No.:				24-31039	24-31039
Quotation No.: Q23-31421		Chemtest Sample ID.:				1872186	1872187
Order No.: 009529		Client Sample Ref.:				RB101	RB102
		Client Sample ID.:				RB101	RB102
		Sample Location:				RB101	RB102
		Sample Type:				WATER	WATER
		Sample Sub Type:					
		Top Depth (m):				-	-
		Bottom Depth (m):				-	-
		Date Sampled:				24-Sep-2024	24-Sep-2024
		Time Sampled:				12:00	12:00
Determinand	HWOL Code	Accred.	SOP	Units	LOD		
Chloromethane		U	1760	µg/l	1.0	< 1.0	< 1.0
Vinyl Chloride		N	1760	µg/l	1.0	< 1.0	< 1.0
Bromomethane		U	1760	µg/l	5	< 5	< 5
Chloroethane		U	1760	µg/l	2.0	< 2.0	< 2.0
Trichlorofluoromethane		U	1760	µg/l	1.0	< 1.0	< 1.0
1,1-Dichloroethene		U	1760	µg/l	1.0	< 1.0	< 1.0
Trans 1,2-Dichloroethene		U	1760	µg/l	1.0	< 1.0	< 1.0
1,1-Dichloroethane		U	1760	µg/l	1.0	< 1.0	< 1.0
cis 1,2-Dichloroethene		U	1760	µg/l	1.0	< 1.0	< 1.0
Bromochloromethane		U	1760	µg/l	5	< 5	< 5
Trichloromethane		U	1760	µg/l	1.0	< 1.0	< 1.0
1,1,1-Trichloroethane		U	1760	µg/l	1.0	< 1.0	< 1.0
Tetrachloromethane		U	1760	µg/l	1.0	< 1.0	< 1.0
1,1-Dichloropropene		U	1760	µg/l	1.0	< 1.0	< 1.0
Benzene		U	1760	µg/l	1.0	< 1.0	< 1.0
1,2-Dichloroethane		U	1760	µg/l	2.0	< 2.0	< 2.0
Trichloroethene		N	1760	µg/l	1.0	< 1.0	< 1.0
1,2-Dichloropropane		U	1760	µg/l	1.0	< 1.0	< 1.0
Dibromomethane		U	1760	µg/l	10	< 10	< 10
Bromodichloromethane		U	1760	µg/l	5	< 5	< 5
cis-1,3-Dichloropropene		N	1760	µg/l	10	< 10	< 10
Toluene		U	1760	µg/l	1.0	< 1.0	< 1.0
Trans-1,3-Dichloropropene		N	1760	µg/l	10	< 10	< 10
1,1,2-Trichloroethane		U	1760	µg/l	10	< 10	< 10
Tetrachloroethene		U	1760	µg/l	1.0	< 1.0	< 1.0
1,3-Dichloropropane		U	1760	µg/l	2.0	< 2.0	< 2.0
Dibromochloromethane		U	1760	µg/l	10	< 10	< 10
1,2-Dibromoethane		U	1760	µg/l	5	< 5	< 5
Chlorobenzene		N	1760	µg/l	1.0	< 1.0	< 1.0
1,1,1,2-Tetrachloroethane		U	1760	µg/l	2.0	< 2.0	< 2.0
Ethylbenzene		U	1760	µg/l	1.0	< 1.0	< 1.0
m & p-Xylene		U	1760	µg/l	1.0	< 1.0	< 1.0
o-Xylene		U	1760	µg/l	1.0	< 1.0	< 1.0
Styrene		U	1760	µg/l	1.0	< 1.0	< 1.0
Tribromomethane		U	1760	µg/l	1.0	< 1.0	< 1.0

Results - Water

Project: 17-500 - Glen Dimplex, Prescott

Client: E3P		Chemtest Job No.:				24-31039	24-31039
Quotation No.: Q23-31421		Chemtest Sample ID.:				1872186	1872187
Order No.: 009529		Client Sample Ref.:				RB101	RB102
		Client Sample ID.:				RB101	RB102
		Sample Location:				RB101	RB102
		Sample Type:				WATER	WATER
		Sample Sub Type:					
		Top Depth (m):				-	-
		Bottom Depth (m):				-	-
		Date Sampled:				24-Sep-2024	24-Sep-2024
		Time Sampled:				12:00	12:00
Determinand	HWOL Code	Accred.	SOP	Units	LOD		
Isopropylbenzene		U	1760	µg/l	1.0	< 1.0	< 1.0
Bromobenzene		U	1760	µg/l	1.0	< 1.0	< 1.0
1,2,3-Trichloropropane		N	1760	µg/l	50	< 50	< 50
N-Propylbenzene		U	1760	µg/l	1.0	< 1.0	< 1.0
2-Chlorotoluene		U	1760	µg/l	1.0	< 1.0	< 1.0
1,3,5-Trimethylbenzene		U	1760	µg/l	1.0	< 1.0	< 1.0
4-Chlorotoluene		U	1760	µg/l	1.0	< 1.0	< 1.0
Tert-Butylbenzene		U	1760	µg/l	1.0	< 1.0	< 1.0
1,2,4-Trimethylbenzene		U	1760	µg/l	1.0	< 1.0	< 1.0
Sec-Butylbenzene		U	1760	µg/l	1.0	< 1.0	< 1.0
1,3-Dichlorobenzene		N	1760	µg/l	1.0	< 1.0	< 1.0
4-Isopropyltoluene		U	1760	µg/l	1.0	< 1.0	< 1.0
1,4-Dichlorobenzene		U	1760	µg/l	1.0	< 1.0	< 1.0
N-Butylbenzene		U	1760	µg/l	1.0	< 1.0	< 1.0
1,2-Dichlorobenzene		U	1760	µg/l	1.0	< 1.0	< 1.0
1,2-Dibromo-3-Chloropropane		U	1760	µg/l	50	< 50	< 50
1,2,4-Trichlorobenzene		U	1760	µg/l	1.0	< 1.0	< 1.0
Hexachlorobutadiene		U	1760	µg/l	1.0	< 1.0	< 1.0
1,2,3-Trichlorobenzene		U	1760	µg/l	2.0	< 2.0	< 2.0
Methyl Tert-Butyl Ether		N	1760	µg/l	1.0	< 1.0	< 1.0
N-Nitrosodimethylamine		N	1790	µg/l	0.50	< 0.50	< 0.50
Phenol		N	1790	µg/l	0.50	< 0.50	< 0.50
2-Chlorophenol		N	1790	µg/l	0.50	< 0.50	< 0.50
Bis-(2-Chloroethyl)Ether		N	1790	µg/l	0.50	< 0.50	< 0.50
1,3-Dichlorobenzene		N	1790	µg/l	0.50	< 0.50	< 0.50
1,4-Dichlorobenzene		N	1790	µg/l	0.50	< 0.50	< 0.50
1,2-Dichlorobenzene		N	1790	µg/l	0.50	< 0.50	< 0.50
2-Methylphenol (o-Cresol)		N	1790	µg/l	0.50	< 0.50	< 0.50
Bis(2-Chloroisopropyl)Ether		N	1790	µg/l	0.50	< 0.50	< 0.50
Hexachloroethane		N	1790	µg/l	0.50	< 0.50	< 0.50
N-Nitrosodi-n-propylamine		N	1790	µg/l	0.50	< 0.50	< 0.50
4-Methylphenol		N	1790	µg/l	0.50	< 0.50	< 0.50
Nitrobenzene		N	1790	µg/l	0.50	< 0.50	< 0.50
Isophorone		N	1790	µg/l	0.50	< 0.50	< 0.50
2-Nitrophenol		N	1790	µg/l	0.50	< 0.50	< 0.50

Results - Water

Project: 17-500 - Glen Dimplex, Prescott

Client: E3P		Chemtest Job No.:				24-31039	24-31039
Quotation No.: Q23-31421		Chemtest Sample ID.:				1872186	1872187
Order No.: 009529		Client Sample Ref.:				RB101	RB102
		Client Sample ID.:				RB101	RB102
		Sample Location:				RB101	RB102
		Sample Type:				WATER	WATER
		Sample Sub Type:					
		Top Depth (m):				-	-
		Bottom Depth (m):				-	-
		Date Sampled:				24-Sep-2024	24-Sep-2024
		Time Sampled:				12:00	12:00
Determinand	HWOL Code	Accred.	SOP	Units	LOD		
2,4-Dimethylphenol		N	1790	µg/l	0.50	< 0.50	< 0.50
Bis(2-Chloroethoxy)Methane		N	1790	µg/l	0.50	< 0.50	< 0.50
2,4-Dichlorophenol		N	1790	µg/l	0.50	< 0.50	< 0.50
1,2,4-Trichlorobenzene		N	1790	µg/l	0.50	< 0.50	< 0.50
Naphthalene		N	1790	µg/l	0.50	< 0.50	< 0.50
4-Chloroaniline		N	1790	µg/l	0.50	< 0.50	< 0.50
Hexachlorobutadiene		N	1790	µg/l	0.50	< 0.50	< 0.50
4-Chloro-3-Methylphenol		N	1790	µg/l	0.50	< 0.50	< 0.50
2-Methylnaphthalene		N	1790	µg/l	0.50	< 0.50	< 0.50
2,4,6-Trichlorophenol		N	1790	µg/l	0.50	< 0.50	< 0.50
2,4,5-Trichlorophenol		N	1790	µg/l	0.50	< 0.50	< 0.50
2-Chloronaphthalene		N	1790	µg/l	0.50	< 0.50	< 0.50
2-Nitroaniline		N	1790	µg/l	0.50	< 0.50	< 0.50
Acenaphthylene		N	1790	µg/l	0.50	< 0.50	< 0.50
Dimethylphthalate		N	1790	µg/l	0.50	< 0.50	< 0.50
2,6-Dinitrotoluene		N	1790	µg/l	0.50	< 0.50	< 0.50
Acenaphthene		N	1790	µg/l	0.50	< 0.50	< 0.50
3-Nitroaniline		N	1790	µg/l	0.50	< 0.50	< 0.50
Dibenzofuran		N	1790	µg/l	0.50	< 0.50	< 0.50
4-Chlorophenylphenylether		N	1790	µg/l	0.50	< 0.50	< 0.50
2,4-Dinitrotoluene		N	1790	µg/l	0.50	< 0.50	< 0.50
Fluorene		N	1790	µg/l	0.50	< 0.50	< 0.50
Diethyl Phthalate		N	1790	µg/l	0.50	< 0.50	< 0.50
4-Nitroaniline		N	1790	µg/l	0.50	< 0.50	< 0.50
2-Methyl-4,6-Dinitrophenol		N	1790	µg/l	0.50	< 0.50	< 0.50
Azobenzene		N	1790	µg/l	0.50	< 0.50	< 0.50
4-Bromophenylphenyl Ether		N	1790	µg/l	0.50	< 0.50	< 0.50
Hexachlorobenzene		N	1790	µg/l	0.50	< 0.50	< 0.50
Phenanthrene		N	1790	µg/l	0.50	< 0.50	< 0.50
Anthracene		N	1790	µg/l	0.50	< 0.50	< 0.50
Carbazole		N	1790	µg/l	0.50	< 0.50	< 0.50
Di-N-Butyl Phthalate		N	1790	µg/l	0.50	< 0.50	< 0.50
Fluoranthene		N	1790	µg/l	0.50	< 0.50	< 0.50
Pyrene		N	1790	µg/l	0.50	< 0.50	< 0.50
Butylbenzyl Phthalate		N	1790	µg/l	0.50	< 0.50	< 0.50

Results - Water

Project: 17-500 - Glen Dimplex, Prescott

Client: E3P		Chemtest Job No.:				24-31039	24-31039
Quotation No.: Q23-31421		Chemtest Sample ID.:				1872186	1872187
Order No.: 009529		Client Sample Ref.:				RB101	RB102
		Client Sample ID.:				RB101	RB102
		Sample Location:				RB101	RB102
		Sample Type:				WATER	WATER
		Sample Sub Type:					
		Top Depth (m):				-	-
		Bottom Depth (m):				-	-
		Date Sampled:				24-Sep-2024	24-Sep-2024
		Time Sampled:				12:00	12:00
Determinand	HWOL Code	Accred.	SOP	Units	LOD		
Benzo[a]anthracene		N	1790	µg/l	0.50	< 0.50	< 0.50
Chrysene		N	1790	µg/l	0.50	< 0.50	< 0.50
Bis(2-Ethylhexyl)Phthalate		N	1790	µg/l	0.50	< 0.50	< 0.50
Di-N-Octyl Phthalate		N	1790	µg/l	0.50	< 0.50	< 0.50
Benzo[b]fluoranthene		N	1790	µg/l	0.50	< 0.50	< 0.50
Benzo[k]fluoranthene		N	1790	µg/l	0.50	< 0.50	< 0.50
Benzo[a]pyrene		N	1790	µg/l	0.50	< 0.50	< 0.50
Indeno(1,2,3-c,d)Pyrene		N	1790	µg/l	0.50	< 0.50	< 0.50
Dibenz(a,h)Anthracene		N	1790	µg/l	0.50	< 0.50	< 0.50
Benzo[g,h,i]perylene		N	1790	µg/l	0.50	< 0.50	< 0.50
4-Nitrophenol		N	1790	µg/l	0.50	< 0.50	< 0.50
Total Phenols		U	1920	mg/l	0.030	< 0.030	< 0.030

Test Methods

SOP	Title	Parameters included	Method summary	Water Accred.
1010	pH Value of Waters	pH at 20°C	pH Meter	RE PW TE TS PL DW GW
1300	Cyanides & Thiocyanate in Waters	Free (or easy liberatable) Cyanide; total Cyanide; complex Cyanide; Thiocyanate	Continuous Flow Analysis.	
1455	Metals in Waters by ICP-MS	Metals, including: Antimony; Arsenic; Barium; Beryllium; Boron; Cadmium; Chromium; Cobalt; Copper; Lead; Manganese; Mercury; Molybdenum; Nickel; Selenium; Tin; Vanadium; Zinc	Filtration of samples followed by direct determination by inductively coupled plasma mass spectrometry (ICP-MS).	RE PW PL SW DW GW
1460	Mercury low-level in Waters by AFS	Mercury	Atomic Fluorescence Spectrometry, with collimated UV source, wavelength 253.7 nm.	PL GW
1490	Hexavalent Chromium in Waters	Chromium [VI]	Automated colorimetric analysis by 'Aquakem 600' Discrete Analyser using 1,5-diphenylcarbazide.	PL GW
1610	Total/Dissolved Organic Carbon in Waters	Organic Carbon	TOC Analyser using Catalytic Oxidation	PL SW GW
1675	TPH Aliphatic/Aromatic split in Waters by GC-FID(cf. Texas Method 1006 / TPH CWG)	Aliphatics: >C5–C6, >C6–C8, >C8– C10, >C10–C12, >C12–C16, >C16–C21, >C21–C35, >C35– C44 Aromatics: >C5–C7, >C7–C8, >C8– C10, >C10–C12, >C12–C16, >C16– C21, >C21– C35, >C35– C44	Pentane extraction / GCxGC FID detection	
1760	Volatile Organic Compounds (VOCs) in Waters by Headspace GC-MS	Volatile organic compounds, including BTEX and halogenated Aliphatic/Aromatics. (cf. USEPA Method 8260)	Automated headspace gas chromatographic (GC) analysis of water samples with mass spectrometric (MS) detection of volatile organic compounds.	PL GW
1790	Semi-Volatile Organic Compounds (SVOCs) in Waters by GC-MS	Semi-volatile organic compounds	Solvent extraction / GCMS detection	
1920	Phenols in Waters by HPLC	Phenolic compounds including: Phenol, Cresols, Xylenols, Trimethylphenols Note: Chlorophenols are excluded.	Determination by High Performance Liquid Chromatography (HPLC) using electrochemical detection.	PL GW

Report Information

Key

U	UKAS accredited
M	MCERTS and UKAS accredited
N	Unaccredited
S	This analysis has been subcontracted to a UKAS accredited laboratory that is accredited for this analysis
SN	This analysis has been subcontracted to a UKAS accredited laboratory that is not accredited for this analysis
T	This analysis has been subcontracted to an unaccredited laboratory
I/S	Insufficient Sample
U/S	Unsuitable Sample
N/E	not evaluated
<	"less than"
>	"greater than"
SOP	Standard operating procedure
LOD	Limit of detection

This report shall not be reproduced except in full, and only with the prior approval of the laboratory.

Any comments or interpretations are outside the scope of UKAS accreditation.

The Laboratory is not accredited for any sampling activities and reported results relate to the samples 'as received' at the laboratory.

Uncertainty of measurement for the determinands tested are available upon request .

None of the results in this report have been recovery corrected.

All results are expressed on a dry weight basis.

The following tests were analysed on samples 'as received' and the results subsequently corrected to a dry weight basis EPH, VPH, TPH, BTEX, VOCs, SVOCs, PCBs, Phenols.

For all other tests the samples were dried at $\leq 30^{\circ}\text{C}$ prior to analysis.

All Asbestos testing is performed at the indicated laboratory .

Issue numbers are sequential starting with 1 all subsequent reports are incremented by 1.

Sample Deviation Codes

- A - Date of sampling not supplied
- B - Sample age exceeds stability time (sampling to extraction)
- C - Sample not received in appropriate containers
- D - Broken Container
- E - Insufficient Sample (Applies to LOI in Trommel Fines Only)

Sample Retention and Disposal

All soil samples will be retained for a period of 30 days from the date of receipt.

All water samples will be retained for 14 days from the date of receipt.

Charges may apply to extended sample storage.

Water Sample Category Key for Accreditation

- DW - Drinking Water
- GW - Ground Water
- LE - Land Leachate
- NA - Not Applicable

Report Information

PL - Prepared Leachate
PW - Processed Water
RE - Recreational Water
SA - Saline Water
SW - Surface Water
TE - Treated Effluent
TS - Treated Sewage
UL - Unspecified Liquid

Clean Up Codes

NC - No Clean Up
MC - Mathematical Clean Up
FC - Florisil Clean Up

HWOL Acronym System

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 - Aromatic only
2D - GC-GC – Double coil gas chromatography
#1 - EH_2D_Total but with humics mathematically subtracted
#2 - EH_2D_Total but with fatty acids mathematically subtracted
+ - Operator to indicate cumulative e.g. EH+EH_Total or EH_CU+HS_Total

If you require extended retention of samples, please email your requirements to:
customerservices@chemtest.com



2183

Final Report

Report No.: 24-32626-1

Initial Date of Issue: 15-Oct-2024

Re-Issue Details:

Client E3P

Client Address: Taylor Road
Trafford Park
Urmston
Manchester
M41 7JQ

Contact(s):

Project 17-500 - Glen Dimplex, Prescot

Quotation No.: Q23-31421

Date Received: 09-Oct-2024

Order No.: 009662

Date Instructed: 09-Oct-2024

No. of Samples: 2

Turnaround (Wkdays): 5

Results Due: 15-Oct-2024

Date Approved: 15-Oct-2024

Approved By:

Details: David Smith, Technical Director

For details about application of accreditation to specific matrix types, please refer to the Table at the back of this report

Results - Water

Project: 17-500 - Glen Dimplex, Prescott

Client: E3P		Chemtest Job No.:			24-32626	24-32626
Quotation No.: Q23-31421		Chemtest Sample ID.:			1878194	1878195
Order No.: 009662		Client Sample Ref.:			RB101	RB102
		Client Sample ID.:			RB101	RB102
		Sample Location:			RB101	RB102
		Sample Type:			WATER	WATER
		Sample Sub Type:				
		Top Depth (m):			-	-
		Bottom Depth (m):			-	-
		Date Sampled:			07-Oct-2024	07-Oct-2024
		Time Sampled:			12:00	12:00
Determinand	HWOL Code	Accred.	SOP	Units	LOD	
pH at 20C		U	1010		4.0	8.1
Cyanide (Total) Low-Level		N	1300	mg/l	0.0050	< 0.0050
Calcium (Dissolved)		U	1455	mg/l	2.00	180
Arsenic (Dissolved)		U	1455	µg/l	0.20	0.51
Cadmium (Dissolved)		U	1455	µg/l	0.11	< 0.11
Chromium (Dissolved)		U	1455	µg/l	0.50	< 0.50
Copper (Dissolved)		U	1455	µg/l	0.50	1.9
Manganese (Dissolved)		U	1455	µg/l	0.50	31
Nickel (Dissolved)		U	1455	µg/l	0.50	1.5
Lead (Dissolved)		U	1455	µg/l	0.50	< 0.50
Selenium (Dissolved)		U	1455	µg/l	0.50	< 0.50
Zinc (Dissolved)		U	1455	µg/l	2.5	5.6
Mercury Low Level		U	1460	µg/l	0.010	< 0.010
Chromium (Hexavalent)		U	1490	µg/l	20	< 20
Dissolved Organic Carbon		U	1610	mg/l	2.0	< 2.0
Aliphatic TPH >C5-C6	EH_2D_AL_#1	N	1675	µg/l	0.10	< 0.10
Aliphatic TPH >C6-C8	EH_2D_AL_#1	N	1675	µg/l	0.10	< 0.10
Aliphatic TPH >C8-C10	EH_2D_AL_#1	N	1675	µg/l	0.10	< 0.10
Aliphatic TPH >C10-C12	EH_2D_AL_#1	N	1675	µg/l	0.10	< 0.10
Aliphatic TPH >C12-C16	EH_2D_AL_#1	N	1675	µg/l	0.10	< 0.10
Aliphatic TPH >C16-C21	EH_2D_AL_#1	N	1675	µg/l	0.10	< 0.10
Aliphatic TPH >C21-C35	EH_2D_AL_#1	N	1675	µg/l	0.10	< 0.10
Aliphatic TPH >C35-C44	EH_2D_AL_#1	N	1675	µg/l	0.10	< 0.10
Total Aliphatic Hydrocarbons	EH_2D_AL_#1	N	1675	µg/l	5.0	< 5.0
Aromatic TPH >C5-C7	EH_2D_AR_#1	N	1675	µg/l	0.10	< 0.10
Aromatic TPH >C7-C8	EH_2D_AR_#1	N	1675	µg/l	0.10	< 0.10
Aromatic TPH >C8-C10	EH_2D_AR_#1	N	1675	µg/l	0.10	< 0.10
Aromatic TPH >C10-C12	EH_2D_AR_#1	N	1675	µg/l	0.10	< 0.10
Aromatic TPH >C12-C16	EH_2D_AR_#1	N	1675	µg/l	0.10	< 0.10
Aromatic TPH >C16-C21	EH_2D_AR_#1	N	1675	µg/l	0.10	< 0.10
Aromatic TPH >C21-C35	EH_2D_AR_#1	N	1675	µg/l	0.10	< 0.10
Aromatic TPH >C35-C44	EH_2D_AR_#1	N	1675	µg/l	0.10	< 0.10
Total Aromatic Hydrocarbons	EH_2D_AR_#1	N	1675	µg/l	5.0	< 5.0
Total Petroleum Hydrocarbons	EH_2D_Total_#1	N	1675	µg/l	10	< 10
Dichlorodifluoromethane		U	1760	µg/l	1.0	< 1.0

Results - Water

Project: 17-500 - Glen Dimplex, Prescott

Client: E3P		Chemtest Job No.:				24-32626	24-32626
Quotation No.: Q23-31421		Chemtest Sample ID.:				1878194	1878195
Order No.: 009662		Client Sample Ref.:				RB101	RB102
		Client Sample ID.:				RB101	RB102
		Sample Location:				RB101	RB102
		Sample Type:				WATER	WATER
		Sample Sub Type:					
		Top Depth (m):				-	-
		Bottom Depth (m):				-	-
		Date Sampled:				07-Oct-2024	07-Oct-2024
		Time Sampled:				12:00	12:00
Determinand	HWOL Code	Accred.	SOP	Units	LOD		
Chloromethane		U	1760	µg/l	1.0	< 1.0	< 1.0
Vinyl Chloride		N	1760	µg/l	1.0	< 1.0	< 1.0
Bromomethane		U	1760	µg/l	5	< 5	< 5
Chloroethane		U	1760	µg/l	2.0	< 2.0	< 2.0
Trichlorofluoromethane		U	1760	µg/l	1.0	< 1.0	< 1.0
1,1-Dichloroethene		U	1760	µg/l	1.0	< 1.0	< 1.0
Trans 1,2-Dichloroethene		U	1760	µg/l	1.0	< 1.0	< 1.0
1,1-Dichloroethane		U	1760	µg/l	1.0	< 1.0	< 1.0
cis 1,2-Dichloroethene		U	1760	µg/l	1.0	< 1.0	< 1.0
Bromochloromethane		U	1760	µg/l	5	< 5	< 5
Trichloromethane		U	1760	µg/l	1.0	< 1.0	2.4
1,1,1-Trichloroethane		U	1760	µg/l	1.0	< 1.0	< 1.0
Tetrachloromethane		U	1760	µg/l	1.0	< 1.0	< 1.0
1,1-Dichloropropene		U	1760	µg/l	1.0	< 1.0	< 1.0
Benzene		U	1760	µg/l	1.0	< 1.0	< 1.0
1,2-Dichloroethane		U	1760	µg/l	2.0	< 2.0	< 2.0
Trichloroethene		N	1760	µg/l	1.0	< 1.0	< 1.0
1,2-Dichloropropane		U	1760	µg/l	1.0	< 1.0	< 1.0
Dibromomethane		U	1760	µg/l	10	< 10	< 10
Bromodichloromethane		U	1760	µg/l	5	< 5	< 5
cis-1,3-Dichloropropene		N	1760	µg/l	10	< 10	< 10
Toluene		U	1760	µg/l	1.0	< 1.0	< 1.0
Trans-1,3-Dichloropropene		N	1760	µg/l	10	< 10	< 10
1,1,2-Trichloroethane		U	1760	µg/l	10	< 10	< 10
Tetrachloroethene		U	1760	µg/l	1.0	< 1.0	< 1.0
1,3-Dichloropropane		U	1760	µg/l	2.0	< 2.0	< 2.0
Dibromochloromethane		U	1760	µg/l	10	< 10	< 10
1,2-Dibromoethane		U	1760	µg/l	5	< 5	< 5
Chlorobenzene		N	1760	µg/l	1.0	< 1.0	< 1.0
1,1,1,2-Tetrachloroethane		U	1760	µg/l	2.0	< 2.0	< 2.0
Ethylbenzene		U	1760	µg/l	1.0	< 1.0	< 1.0
m & p-Xylene		U	1760	µg/l	1.0	< 1.0	< 1.0
o-Xylene		U	1760	µg/l	1.0	< 1.0	< 1.0
Styrene		U	1760	µg/l	1.0	< 1.0	< 1.0
Tribromomethane		U	1760	µg/l	1.0	< 1.0	< 1.0

Results - Water

Project: 17-500 - Glen Dimplex, Prescott

Client: E3P		Chemtest Job No.:				24-32626	24-32626
Quotation No.: Q23-31421		Chemtest Sample ID.:				1878194	1878195
Order No.: 009662		Client Sample Ref.:				RB101	RB102
		Client Sample ID.:				RB101	RB102
		Sample Location:				RB101	RB102
		Sample Type:				WATER	WATER
		Sample Sub Type:					
		Top Depth (m):				-	-
		Bottom Depth (m):				-	-
		Date Sampled:				07-Oct-2024	07-Oct-2024
		Time Sampled:				12:00	12:00
Determinand	HWOL Code	Accred.	SOP	Units	LOD		
Isopropylbenzene		U	1760	µg/l	1.0	< 1.0	< 1.0
Bromobenzene		U	1760	µg/l	1.0	< 1.0	< 1.0
1,2,3-Trichloropropane		N	1760	µg/l	50	< 50	< 50
N-Propylbenzene		U	1760	µg/l	1.0	< 1.0	< 1.0
2-Chlorotoluene		U	1760	µg/l	1.0	< 1.0	< 1.0
1,3,5-Trimethylbenzene		U	1760	µg/l	1.0	< 1.0	< 1.0
4-Chlorotoluene		U	1760	µg/l	1.0	< 1.0	< 1.0
Tert-Butylbenzene		U	1760	µg/l	1.0	< 1.0	< 1.0
1,2,4-Trimethylbenzene		U	1760	µg/l	1.0	< 1.0	< 1.0
Sec-Butylbenzene		U	1760	µg/l	1.0	< 1.0	< 1.0
1,3-Dichlorobenzene		N	1760	µg/l	1.0	< 1.0	< 1.0
4-Isopropyltoluene		U	1760	µg/l	1.0	< 1.0	< 1.0
1,4-Dichlorobenzene		U	1760	µg/l	1.0	< 1.0	< 1.0
N-Butylbenzene		U	1760	µg/l	1.0	< 1.0	< 1.0
1,2-Dichlorobenzene		U	1760	µg/l	1.0	< 1.0	< 1.0
1,2-Dibromo-3-Chloropropane		U	1760	µg/l	50	< 50	< 50
1,2,4-Trichlorobenzene		U	1760	µg/l	1.0	< 1.0	< 1.0
Hexachlorobutadiene		U	1760	µg/l	1.0	< 1.0	< 1.0
1,2,3-Trichlorobenzene		U	1760	µg/l	2.0	< 2.0	< 2.0
Methyl Tert-Butyl Ether		N	1760	µg/l	1.0	< 1.0	< 1.0
N-Nitrosodimethylamine		N	1790	µg/l	0.50	< 0.50	< 0.50
Phenol		N	1790	µg/l	0.50	< 0.50	< 0.50
2-Chlorophenol		N	1790	µg/l	0.50	< 0.50	< 0.50
Bis-(2-Chloroethyl)Ether		N	1790	µg/l	0.50	< 0.50	< 0.50
1,3-Dichlorobenzene		N	1790	µg/l	0.50	< 0.50	< 0.50
1,4-Dichlorobenzene		N	1790	µg/l	0.50	< 0.50	< 0.50
1,2-Dichlorobenzene		N	1790	µg/l	0.50	< 0.50	< 0.50
2-Methylphenol (o-Cresol)		N	1790	µg/l	0.50	< 0.50	< 0.50
Bis(2-Chloroisopropyl)Ether		N	1790	µg/l	0.50	< 0.50	< 0.50
Hexachloroethane		N	1790	µg/l	0.50	< 0.50	< 0.50
N-Nitrosodi-n-propylamine		N	1790	µg/l	0.50	< 0.50	< 0.50
4-Methylphenol		N	1790	µg/l	0.50	< 0.50	< 0.50
Nitrobenzene		N	1790	µg/l	0.50	< 0.50	< 0.50
Isophorone		N	1790	µg/l	0.50	< 0.50	< 0.50
2-Nitrophenol		N	1790	µg/l	0.50	< 0.50	< 0.50

Results - Water

Project: 17-500 - Glen Dimplex, Prescott

Client: E3P		Chemtest Job No.:				24-32626	24-32626
Quotation No.: Q23-31421		Chemtest Sample ID.:				1878194	1878195
Order No.: 009662		Client Sample Ref.:				RB101	RB102
		Client Sample ID.:				RB101	RB102
		Sample Location:				RB101	RB102
		Sample Type:				WATER	WATER
		Sample Sub Type:					
		Top Depth (m):				-	-
		Bottom Depth (m):				-	-
		Date Sampled:				07-Oct-2024	07-Oct-2024
		Time Sampled:				12:00	12:00
Determinand	HWOL Code	Accred.	SOP	Units	LOD		
2,4-Dimethylphenol		N	1790	µg/l	0.50	< 0.50	< 0.50
Bis(2-Chloroethoxy)Methane		N	1790	µg/l	0.50	< 0.50	< 0.50
2,4-Dichlorophenol		N	1790	µg/l	0.50	< 0.50	< 0.50
1,2,4-Trichlorobenzene		N	1790	µg/l	0.50	< 0.50	< 0.50
Naphthalene		N	1790	µg/l	0.50	< 0.50	< 0.50
4-Chloroaniline		N	1790	µg/l	0.50	< 0.50	< 0.50
Hexachlorobutadiene		N	1790	µg/l	0.50	< 0.50	< 0.50
4-Chloro-3-Methylphenol		N	1790	µg/l	0.50	< 0.50	< 0.50
2-Methylnaphthalene		N	1790	µg/l	0.50	< 0.50	< 0.50
2,4,6-Trichlorophenol		N	1790	µg/l	0.50	< 0.50	< 0.50
2,4,5-Trichlorophenol		N	1790	µg/l	0.50	< 0.50	< 0.50
2-Chloronaphthalene		N	1790	µg/l	0.50	< 0.50	< 0.50
2-Nitroaniline		N	1790	µg/l	0.50	< 0.50	< 0.50
Acenaphthylene		N	1790	µg/l	0.50	< 0.50	< 0.50
Dimethylphthalate		N	1790	µg/l	0.50	< 0.50	< 0.50
2,6-Dinitrotoluene		N	1790	µg/l	0.50	< 0.50	< 0.50
Acenaphthene		N	1790	µg/l	0.50	< 0.50	< 0.50
3-Nitroaniline		N	1790	µg/l	0.50	< 0.50	< 0.50
Dibenzofuran		N	1790	µg/l	0.50	< 0.50	< 0.50
4-Chlorophenylphenylether		N	1790	µg/l	0.50	< 0.50	< 0.50
2,4-Dinitrotoluene		N	1790	µg/l	0.50	< 0.50	< 0.50
Fluorene		N	1790	µg/l	0.50	< 0.50	< 0.50
Diethyl Phthalate		N	1790	µg/l	0.50	< 0.50	< 0.50
4-Nitroaniline		N	1790	µg/l	0.50	< 0.50	< 0.50
2-Methyl-4,6-Dinitrophenol		N	1790	µg/l	0.50	< 0.50	< 0.50
Azobenzene		N	1790	µg/l	0.50	< 0.50	< 0.50
4-Bromophenylphenyl Ether		N	1790	µg/l	0.50	< 0.50	< 0.50
Hexachlorobenzene		N	1790	µg/l	0.50	< 0.50	< 0.50
Phenanthrene		N	1790	µg/l	0.50	< 0.50	< 0.50
Anthracene		N	1790	µg/l	0.50	< 0.50	< 0.50
Carbazole		N	1790	µg/l	0.50	< 0.50	< 0.50
Di-N-Butyl Phthalate		N	1790	µg/l	0.50	< 0.50	< 0.50
Fluoranthene		N	1790	µg/l	0.50	< 0.50	< 0.50
Pyrene		N	1790	µg/l	0.50	< 0.50	< 0.50
Butylbenzyl Phthalate		N	1790	µg/l	0.50	< 0.50	< 0.50

Results - Water

Project: 17-500 - Glen Dimplex, Prescott

Client: E3P		Chemtest Job No.:				24-32626	24-32626
Quotation No.: Q23-31421		Chemtest Sample ID.:				1878194	1878195
Order No.: 009662		Client Sample Ref.:				RB101	RB102
		Client Sample ID.:				RB101	RB102
		Sample Location:				RB101	RB102
		Sample Type:				WATER	WATER
		Sample Sub Type:					
		Top Depth (m):				-	-
		Bottom Depth (m):				-	-
		Date Sampled:				07-Oct-2024	07-Oct-2024
		Time Sampled:				12:00	12:00
Determinand	HWOL Code	Accred.	SOP	Units	LOD		
Benzo[a]anthracene		N	1790	µg/l	0.50	< 0.50	< 0.50
Chrysene		N	1790	µg/l	0.50	< 0.50	< 0.50
Bis(2-Ethylhexyl)Phthalate		N	1790	µg/l	0.50	< 0.50	< 0.50
Di-N-Octyl Phthalate		N	1790	µg/l	0.50	< 0.50	< 0.50
Benzo[b]fluoranthene		N	1790	µg/l	0.50	< 0.50	< 0.50
Benzo[k]fluoranthene		N	1790	µg/l	0.50	< 0.50	< 0.50
Benzo[a]pyrene		N	1790	µg/l	0.50	< 0.50	< 0.50
Indeno(1,2,3-c,d)Pyrene		N	1790	µg/l	0.50	< 0.50	< 0.50
Dibenz(a,h)Anthracene		N	1790	µg/l	0.50	< 0.50	< 0.50
Benzo[g,h,i]perylene		N	1790	µg/l	0.50	< 0.50	< 0.50
4-Nitrophenol		N	1790	µg/l	0.50	< 0.50	< 0.50
Total Phenols		U	1920	mg/l	0.030	< 0.030	< 0.030

Test Methods

SOP	Title	Parameters included	Method summary	Water Accred.
1010	pH Value of Waters	pH at 20°C	pH Meter	RE PW TE TS PL DW GW
1300	Cyanides & Thiocyanate in Waters	Free (or easy liberatable) Cyanide; total Cyanide; complex Cyanide; Thiocyanate	Continuous Flow Analysis.	
1455	Metals in Waters by ICP-MS	Metals, including: Antimony; Arsenic; Barium; Beryllium; Boron; Cadmium; Chromium; Cobalt; Copper; Lead; Manganese; Mercury; Molybdenum; Nickel; Selenium; Tin; Vanadium; Zinc	Filtration of samples followed by direct determination by inductively coupled plasma mass spectrometry (ICP-MS).	RE PW PL SW DW GW
1460	Mercury low-level in Waters by AFS	Mercury	Atomic Fluorescence Spectrometry, with collimated UV source, wavelength 253.7 nm.	PL GW
1490	Hexavalent Chromium in Waters	Chromium [VI]	Automated colorimetric analysis by 'Aquakem 600' Discrete Analyser using 1,5-diphenylcarbazide.	PL GW
1610	Total/Dissolved Organic Carbon in Waters	Organic Carbon	TOC Analyser using Catalytic Oxidation	PL SW GW
1675	TPH Aliphatic/Aromatic split in Waters by GC-FID(cf. Texas Method 1006 / TPH CWG)	Aliphatics: >C5–C6, >C6–C8, >C8– C10, >C10–C12, >C12–C16, >C16–C21, >C21–C35, >C35– C44 Aromatics: >C5–C7, >C7–C8, >C8– C10, >C10–C12, >C12–C16, >C16– C21, >C21– C35, >C35– C44	Pentane extraction / GCxGC FID detection	
1760	Volatile Organic Compounds (VOCs) in Waters by Headspace GC-MS	Volatile organic compounds, including BTEX and halogenated Aliphatic/Aromatics. (cf. USEPA Method 8260)	Automated headspace gas chromatographic (GC) analysis of water samples with mass spectrometric (MS) detection of volatile organic compounds.	PL GW
1790	Semi-Volatile Organic Compounds (SVOCs) in Waters by GC-MS	Semi-volatile organic compounds	Solvent extraction / GCMS detection	
1920	Phenols in Waters by HPLC	Phenolic compounds including: Phenol, Cresols, Xylenols, Trimethylphenols Note: Chlorophenols are excluded.	Determination by High Performance Liquid Chromatography (HPLC) using electrochemical detection.	PL GW

Report Information

Key

U	UKAS accredited
M	MCERTS and UKAS accredited
N	Unaccredited
S	This analysis has been subcontracted to a UKAS accredited laboratory that is accredited for this analysis
SN	This analysis has been subcontracted to a UKAS accredited laboratory that is not accredited for this analysis
T	This analysis has been subcontracted to an unaccredited laboratory
I/S	Insufficient Sample
U/S	Unsuitable Sample
N/E	not evaluated
<	"less than"
>	"greater than"
SOP	Standard operating procedure
LOD	Limit of detection

This report shall not be reproduced except in full, and only with the prior approval of the laboratory.

Any comments or interpretations are outside the scope of UKAS accreditation.

The Laboratory is not accredited for any sampling activities and reported results relate to the samples 'as received' at the laboratory.

Uncertainty of measurement for the determinands tested are available upon request .

None of the results in this report have been recovery corrected.

All results are expressed on a dry weight basis.

The following tests were analysed on samples 'as received' and the results subsequently corrected to a dry weight basis EPH, VPH, TPH, BTEX, VOCs, SVOCs, PCBs, Phenols.

For all other tests the samples were dried at $\leq 30^{\circ}\text{C}$ prior to analysis.

All Asbestos testing is performed at the indicated laboratory .

Issue numbers are sequential starting with 1 all subsequent reports are incremented by 1.

Sample Deviation Codes

- A - Date of sampling not supplied
- B - Sample age exceeds stability time (sampling to extraction)
- C - Sample not received in appropriate containers
- D - Broken Container
- E - Insufficient Sample (Applies to LOI in Trommel Fines Only)

Sample Retention and Disposal

All soil samples will be retained for a period of 30 days from the date of receipt.

All water samples will be retained for 14 days from the date of receipt.

Charges may apply to extended sample storage.

Water Sample Category Key for Accreditation

- DW - Drinking Water
- GW - Ground Water
- LE - Land Leachate
- NA - Not Applicable

Report Information

PL - Prepared Leachate
PW - Processed Water
RE - Recreational Water
SA - Saline Water
SW - Surface Water
TE - Treated Effluent
TS - Treated Sewage
UL - Unspecified Liquid

Clean Up Codes

NC - No Clean Up
MC - Mathematical Clean Up
FC - Florisil Clean Up

HWOL Acronym System

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 - Aromatic only
2D - GC-GC – Double coil gas chromatography
#1 - EH_2D_Total but with humics mathematically subtracted
#2 - EH_2D_Total but with fatty acids mathematically subtracted
+ - Operator to indicate cumulative e.g. EH+EH_Total or EH_CU+HS_Total

If you require extended retention of samples, please email your requirements to:
customerservices@chemtest.com