

PUMPING TEST DATA

CONSTANT RATE PUMPING TEST							
CONSENT NO.						Description of datum point from which measurements were made (eg ground level, flange, dip tube/other) Top of Casing Height above ground level (metres): 0.35 mbgl	
Pumping Test at		Storrington Pumping Test					
NGR							
Observations from		BH01					
NGR		TQ337806					
Date	Time	Elapsed time		Depth of water level below datum (metres)	Drawdown (metres)	Meter readings (m ³) or Discharge rate (m ³ /hr)	Comments (eg pump started, pumping rate changed, pump stopped)
		Minutes	Hours				
		120	2				
		140					
		160					
		180	3				
		200					
		220					
		240	4				
		260					
		280					
		300	5				
		350					
		400					
		450					
		500					
		550					
25/09/24	01:45	600	10				
		650					
		700					
		750					
		800					
		850					
	06:45	900	15				
	07:35	950		14.775		91.28	
	08:25	1000		14.775		94.12	
	10:05	1100		14.775		100	Intermittent Rain (medium)
	11:45	1200	20	14.78		105.84	
	13:25	1300		14.78		111.70	
	15:05	1400		14.775		117.51	
	15:45	1500		14.77		119.82	
		1600					
		1700					
		1800	30				



PUMPING TEST DATA

CONSTANT RATE PUMPING TEST - RECOVERY							
CONSENT NO.						Description of datum point from which measurements were made (eg ground level, flange, dip tube/other) Top of Casing Height above ground level (metres): 0.35 mbgl	
Pumping Test at		Storrington Pumping Test					
NGR							
Observations from		BH01					
NGR		TQ337806					
Date	Time	Elapsed time		Depth of water level below datum (metres)	Drawdown (metres)	Meter readings (m³) or Discharge rate (m³/hr)	Comments (eg pump started, pumping rate changed, pump stopped)
		Minutes	Hours				
	15.45	0		14.77			
		1		14.76			
		2		14.76			
		3		14.76			
		4		14.76			
		5		14.76			
		6		14.76			
		7		14.76			
		8		14.76			
		9		14.76			
		10		14.76			
		12		14.76			
		14		14.76			
		16		14.76			
		18		14.76			
		20		14.755			
		25		14.755			
		30		14.755			
		35		14.755			
		40		14.755			
		45		14.755			
		50		14.755			Groundwater recovered to above initial groundwater level
		55					PDL left site with the diver operational.
		60	1				
		70					
		80					
		90					
		100					



PUMPING TEST DATA

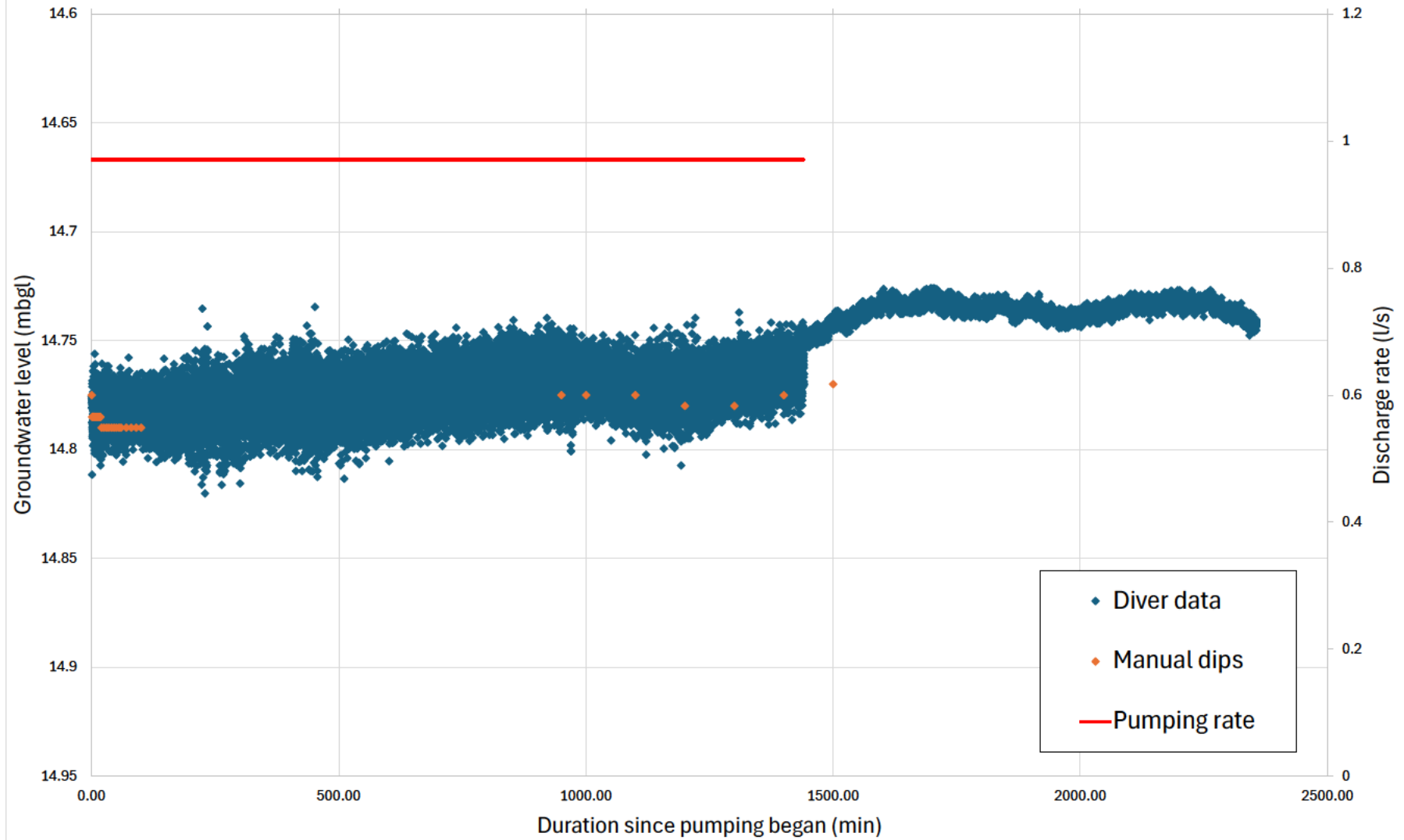
CONSTANT RATE PUMPING TEST - RECOVERY

CONSENT NO.						Description of datum point from which measurements were made (eg ground level, flange, dip tube/other) Top of Casing Height above ground level (metres): 0.35 mbgl	
Pumping Test at		Storrington Pumping Test					
NGR							
Observations from		BH01					
NGR		TQ337806					
Date	Time	Elapsed time		Depth of water level below datum (metres)	Drawdown (metres)	Meter readings (m ³) or Discharge rate (m ³ /hr)	Comments (eg pump started, pumping rate changed, pump stopped)
		Minutes	Hours				
		200					
		220					
		240	4				
		260					
		280					
		300	5				
		350					
		400					
		450					
		500					
		550					
		600	10				
		650					
		700					
		750					
		800					
		850					
		900	15				
		950					
		1000					
		1100					
		1200	20				
		1300					
		1400					
		1500					
		1600					
		1700					
		1800	30				

Appendix D

Constant rate test data – Dip meter and manual dips with graphical presentation.

Long duration pump test - Diver and manula dips



Hydrock		Groundwater Sampling Data Form																			
Project Information	Project Name:		Thakeham Tiles																		
	Project Number:		8347																		
	Sampling Date:		23/09/2024				Sampled by:		LC												
	Weather:		sunny, heavy rain AM																		
	Well Notes - e.g. Condition, Access, Safety:																				
Monitoring Information	Water Quality Meter Used:		YSI Pro Plus		Water Level Meter Used (as applicable):		Interface Probe:														
							Dip Meter:		Y												
	Water Quality Meter Last Calibrated:		Dissolved Oxygen:				pH, ORP, Specific Conductivity:														
	Typical Parameter Stabilisation Criteria for Low-Flow Sampling		Dissolved Oxygen (D.O.)				0.3 mg/l														
			Specific Conductivity (Sp.Cond)				3%														
			p.H				0.1 unit														
			Oxygen Reduction Potential (ORP)				10mV														
		* For REDOX correction, see separate guidance																			
Well Location		BH1		Purge Start Time						Depth to Water		Corr. REDOX		Notes / Flow							
Well Diameter (mm)		126		Time (HH:mm)		Temp (oC)		Sp.Cond (µS/cm)		D.O. (mg/l)		pH (units)		ORP (mV)		Water (mTOC)		(mV)*		(ml/min)	
Well Material				13.42		12.6		600.7		162.4		7.31		175.3		14.37				tub sample	
Static Water Level (m bgl)		14.37		13.43		13.2		589.5		122.2		7.31		127.9						% reading ta	
LNAPL Present?		Y N x		13.44		13.3		591		116.9		7.31		106.7							
LNAPL Level (mTOC)		n/a		13.45		13.3		591.6		115.1		7.31		91.8							
Well Headspace Reading (PID/FID)				13.46		13.6		588.8		113.4		7.32		85.7							
				13.48		14		587.7		112.5		7.32		77.7							
				13.49		14.1		588.9		111.9		7.33		70.5							
Purge Method		Low Flow step		13.51		14.4		588.2		110.8		7.34		65.4							
		Other: x testing		13.52		14.5		588.3		109.8		7.35		61.1							
Sampling Method		Peristaltic Other:		13.53		14.6		587.4		109.3		7.34		58.8							
		Bladder		13.55		15.1		585.5		108		7.34		51.4							
Pump Intake Depth (m bgl)		50.455m bgl		13.56		15.1		587		108.4		7.35		49.6							
Well Depth (m bgl)		56.07		Sampling Notes (e.g. oil/colour/odour), Reasons if not monitored								clear									
DNAPL Present?		Y N x		Sample Containers Obtained								0 - test sample									
DNAPL Level (mTOC)				Sample Collection Time																	
Well Location				Purge Start Time								Depth to Water		Corr. REDOX		Notes / Flow					
Well Diameter (mm)				Time (HH:mm)		Temp (oC)		Sp.Cond (µS/cm)		D.O. (mg/l)		pH (units)		ORP (mV)		Water (mTOC)		(mV)*		(ml/min)	
Well Material																					
Static Water Level (mTOC)																					
LNAPL Present?		Y N																			
LNAPL Level (mTOC)																					
Well Headspace Reading (PID/FID)																					
Purge Method		Low Flow X																			
		Other:																			
Sampling Method		Peristaltic Other:																			
		Bladder																			
Pump Intake Depth (mTOC)				Sampling Notes (e.g. oil/colour/odour), Reasons if not monitored																	
Well Depth (mTOC)																					
DNAPL Present?		Y N		Sample Containers Obtained																	
DNAPL Level (mTOC)				Sample Collection Time																	
mTOC = Metres below top of casing level. Record if measurements are taken to an alternate datum (e.g. ground level)														Page:		1					

Project Information	Project Name:	Thakeham Tiles				
	Project Number:	8347				
	Sampling Date:	24-Sep	Sampled by:	MG		
	Weather:	cloudy warm				
	Well Notes - e.g. Condition, Access, Safety:					
Monitoring Information	Water Quality Meter Used:	YSI Pro Plus	Water Level Meter Used (as applicable):	Interface Probe:		
				Dip Meter:	✓	
	Water Quality Meter Last Calibrated:	Dissolved Oxygen:		pH, ORP, Specific Conductivity:		
	Typical Parameter Stabilisation Criteria for Low-Flow Sampling	Dissolved Oxygen (D.O.)			0.3 mg/l	
		Specific Conductivity (Sp.Cond)			3%	
		p.H			0.1 unit	
		Oxygen Reduction Potential (ORP)			10mV	
* For REDOX correction, see separate guidance						

Well Location	BH1	Purge Start Time						Depth to Water (mTOC)	Corr. REDOX (mV)*	Notes / Flow (ml/min)
Well Diameter (mm)	126	Time (HH:mm)	Temp (oC)	Sp.Cond (µS/cm)	D.O. (mg/l)	pH (units)	ORP (mV)			
Well Material		16.00	12.6	599	9.12	7.29	117.7	14.43		
Static Water Level (mTOC)	14.43									
LNAPL Present?	Y <input type="checkbox"/> N <input checked="" type="checkbox"/>									
LNAPL Level (mTOC)										
Well Headspace Reading (PID/FID)										
Purge Method	Low Flow <input checked="" type="checkbox"/> Other: <input checked="" type="checkbox"/> start of constant rate									
Sampling Method	Peristaltic <input type="checkbox"/> Bladder <input type="checkbox"/> Other: <input type="checkbox"/>									
Pump Intake Depth (m bgl)	50.455									
Well Depth (m bgl)	56.07	Sampling Notes (e.g. oil/colour/odour), Reasons if not monitored				clear				
DNAPL Present?	Y <input type="checkbox"/> N <input checked="" type="checkbox"/>	Sample Containers Obtained				10				
DNAPL Level (mTOC)		Sample Collection Time				15.4				

Well Location		Purge Start Time						Depth to Water (mTOC)	Corr. REDOX (mV)*	Notes / Flow (ml/min)
Well Diameter (mm)		Time (HH:mm)	Temp (oC)	Sp.Cond (µS/cm)	D.O. (mg/l)	pH (units)	ORP (mV)			
Well Material										
Static Water Level (mTOC)										
LNAPL Present?	Y <input type="checkbox"/> N <input type="checkbox"/>									
LNAPL Level (mTOC)										
Well Headspace Reading (PID/FID)										
Purge Method	Low Flow <input checked="" type="checkbox"/> Other: <input type="checkbox"/>									
Sampling Method	Peristaltic <input type="checkbox"/> Bladder <input type="checkbox"/> Other: <input type="checkbox"/>									
Pump Intake Depth (mTOC)										
Well Depth (mTOC)		Sampling Notes (e.g. oil/colour/odour), Reasons if not monitored								
DNAPL Present?	Y <input type="checkbox"/> N <input type="checkbox"/>	Sample Containers Obtained								
DNAPL Level (mTOC)		Sample Collection Time								

Project Information	Project Name:	Thakeham Tiles				
	Project Number:	8347				
	Sampling Date:	25-Sep	Sampled by:		LC	
	Weather:	cloudy				
	Well Notes - e.g. Condition, Access, Safety:					
Monitoring Information	Water Quality Meter Used:	YSI Pro Plus	Water Level Meter Used (as applicable):	Interface Probe:		
				Dip Meter:	✓	
	Water Quality Meter Last Calibrated:	Dissolved Oxygen:		pH, ORP, Specific Conductivity:		
	Typical Parameter Stabilisation Criteria for Low-Flow Sampling	Dissolved Oxygen (D.O.)			0.3 mg/l	
		Specific Conductivity (Sp.Cond)			3%	
		p.H			0.1 unit	
		Oxygen Reduction Potential (ORP)			10mV	
* For REDOX correction, see separate guidance						

Well Location	BH1	Purge Start Time			D.O.	pH	ORP	Depth to Water (mTOC)	Corr. REDOX (mV)*	Notes / Flow (ml/min)
Well Diameter (mm)	126	Time (HH:mm)	Temp (oC)	Sp.Cond (µS/cm)	(mg/l)	(units)	(mV)			
Well Material		8.39	12.3	601.2	8.75	7.26	112.1	14.425		
Static Water Level (m bgl)	14.425	8.40	12.3	598.3	7.74	7.24	77.1			
LNAPL Present?	Y <input type="checkbox"/> N <input checked="" type="checkbox"/>	8.41	12.4	596.9	7.57	7.25	64.1			
LNAPL Level (mTOC)		8.42	12.5	596.5	7.51	7.25	54.8			
Well Headspace Reading (PID/FID)		8.43	12.5	596.4	7.63	7.25	49.6			
		8.44	12.5	596.3	7.63	7.25	46.4			
		8.45	12.6	596	7.67	7.26	43.7			
Purge Method	Low Flow <input type="checkbox"/> Other: <input checked="" type="checkbox"/> Middle or constant rate	8.46	12.6	595.9	7.64	7.26	41			
		8.47	12.6	595.7	7.75	7.26	38.5			
Sampling Method	Peristaltic <input type="checkbox"/> Other: <input type="checkbox"/>	8.48	12.7	595.5	7.68	7.26	34.9			
	Bladder <input type="checkbox"/>	8.49	12.7	595.1	7.78	7.26	33.3			
Pump Intake Depth (m bgl)	50.455	8.50	12.7	595.3	7.92	7.27	30.3			
Well Depth (m bgl)	56.07	Sampling Notes (e.g. oil/colour/odour), Reasons if not monitored					clear			
DNAPL Present?	Y <input type="checkbox"/> N <input checked="" type="checkbox"/>	Sample Containers Obtained					10			
DNAPL Level (mTOC)		Sample Collection Time					08:00			

Well Location	BH1	Purge Start Time			D.O.	pH	ORP	Depth to Water (mTOC)	Corr. REDOX (mV)*	Notes / Flow (ml/min)
Well Diameter (mm)	126	Time (HH:mm)	Temp (oC)	Sp.Cond (µS/cm)	(mg/l)	(units)	(mV)			
Well Material		11.28	12.6	605.9	11.72	7.25	71.3	14.425		
Static Water Level (mTOC)	14.425	11.29	12.6	602.4	10.93	7.24	51.7			
LNAPL Present?	Y <input type="checkbox"/> N <input checked="" type="checkbox"/>	11.30	12.6	600.9	10.62	7.23	35.8			
LNAPL Level (mTOC)		11.31	12.6	600.6	10.63	7.23	30.4			
Well Headspace Reading (PID/FID)		11.32	12.7	600.1	10.56	7.24	24.9			
		11.33	12.7	599.9	10.56	7.24	20.9			
		11.34	12.8	599.5	10.61	7.24	17.5			
Purge Method	Low Flow <input type="checkbox"/> Other: <input type="checkbox"/> constant rate	11.35	12.9	599.5	10.6	7.25	14.5			
		11.36	12.9	599.3	10.66	7.25	12.5			
Sampling Method	Peristaltic <input type="checkbox"/> Other: <input type="checkbox"/>	11.37	13	599.2	10.57	7.25	10.7			
	Bladder <input type="checkbox"/>	11.38	13.1	599.2	10.57	7.25	9.1			
Pump Intake Depth (mTOC)	50.455	Sampling Notes (e.g. oil/colour/odour), Reasons if not monitored					clear			
Well Depth (mTOC)	56.07	Sample Containers Obtained					0			
DNAPL Present?	Y <input type="checkbox"/> N <input checked="" type="checkbox"/>	Sample Collection Time					n/a			
DNAPL Level (mTOC)										

mTOC = Metres below top of casing level. Record if measurements are taken to an alternate datum (e.g. ground level)

Project Information	Project Name:	Thakeham Tiles				
	Project Number:	C-03491				
	Sampling Date:	25-Sep	Sampled by:	LC		
	Weather:	cloudy				
	Well Notes - e.g. Condition, Access, Safety:					
Monitoring Information	Water Quality Meter Used:	YSI Pro Plus	Water Level Meter Used (as applicable):	Interface Probe:	✓	
				Dip Meter:		
	Water Quality Meter Last Calibrated:	Dissolved Oxygen:		pH, ORP, Specific Conductivity:		
	Typical Parameter Stabilisation Criteria for Low-Flow Sampling	Dissolved Oxygen (D.O.)			0.3 mg/l	
		Specific Conductivity (Sp.Cond)			3%	
		p.H			0.1 unit	
Oxygen Reduction Potential (ORP)			10mV			
* For REDOX correction, see separate guidance						

Well Location	BH1		Purge Start Time						Depth to Water (mTOC)	Corr. REDOX (mV)*	Notes / Flow (ml/min)
Well Diameter (mm)	126		Time (HH:mm)	Temp (oC)	Sp.Cond (µS/cm)	D.O. (mg/l)	pH (units)	ORP (mV)			
Well Material			13.19	12.6	602.3	9.58	7.27	56.8	14.425		
Static Water Level (mTOC)	14.425		13.20	12.8	598.7	9.08	7.27	45.2			
			13.21	12.7	596.7	8.62	7.26	29.2			
LNAPL Present?	Y	N	13.22	12.8	596.5	8.66	7.26	20.2			
LNAPL Level (mTOC)			13.23	12.8	596.7	8.65	7.26	17.2			
Well Headspace Reading (PID/FID)			13.24	12.8	596.8	8.73	7.25	13.2			
			13.25	12.9	596.8	8.8	7.26	9.6			
Purge Method	Low Flow	constant rate	13.26	13	596	8.91	7.26	7			
	Other:	x	13.27	13.1	595.8	8.98	7.26	5			
Sampling Method	Peristaltic	Other:	13.28	13.1	596.2	9.12	7.26	3.6			
	Bladder										
Pump Intake Depth (mTOC)	50.455		Sampling Notes (e.g. oil/colour/odour), Reasons if not monitored								
Well Depth (mTOC)	56.07										
DNAPL Present?	Y	N	Sample Containers Obtained								
DNAPL Level (mTOC)			Sample Collection Time								

Well Location	BH1		Purge Start Time						Depth to Water (mTOC)	Corr. REDOX (mV)*	Notes / Flow (ml/min)
Well Diameter (mm)	126		Time (HH:mm)	Temp (oC)	Sp.Cond (µS/cm)	D.O. (mg/l)	pH (units)	ORP (mV)			
Well Material			15.15	12.5	603.9	3.34	7.25	47.7	14.425		
Static Water Level (m bgl)	14.425		15.16	12.6	602.6	1.67	7.25	25.4			
			15.17	12.9	598.4	1.36	7.23	14.5			
LNAPL Present?	Y	N	15.18	12.7	601.1	1.32	7.23	11			
LNAPL Level (mTOC)			15.19	12.8	599.8	1.17	7.23	6.8			
Well Headspace Reading (PID/FID)			15.20	13	598.3	1.15	7.24	3.3			
			15.21	13.1	597.7	1.11	7.24	0.8			
Purge Method	Low Flow	constant rate	15.22	13.1	598.6	1.19	7.24	0			
	Other:	x	15.25	13.3	599.1	1.04	7.26	-3.4			
Sampling Method	Peristaltic	Other:									
	Bladder										
Pump Intake Depth (mTOC)	50.455		Sampling Notes (e.g. oil/colour/odour), Reasons if not monitored								
Well Depth (mTOC)	56.07										
DNAPL Present?	Y	N	Sample Containers Obtained								
DNAPL Level (mTOC)			Sample Collection Time								

mTOC = Metres below top of casing level. Record if measurements are taken to an alternate datum (e.g. ground level)

Appendix F Laboratory results and assessment sheets

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Analytical Report Number : 24-044134

Project / Site name:	Thakeham Tiles	Samples received on:	25/09/2024
Your job number:	08347	Samples instructed on/ Analysis started on:	25/09/2024
Your order number:	PO36666	Analysis completed by:	15/10/2024
Report Issue Number:	1	Report issued on:	15/10/2024
Samples Analysed:	2 water samples		

Signed:

Adan Cazas Garcia
Key Account Manager
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41-711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils - 4 weeks from reporting
leachates - 2 weeks from reporting
waters - 2 weeks from reporting
asbestos - 6 months from reporting

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Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

Analytical Report Number: 24-044134
Project / Site name: Thakeham Tiles

Your Order No: PO36666

Lab Sample Number	328020	328021
Sample Reference	BH1	BH1
Sample Number	P1	P2
Depth (m)	None Supplied	None Supplied
Date Sampled	24/09/2024	25/09/2024
Time Taken	1540	0800
Analytical Parameter (Water Analysis)	Units	Test Limit of detection
		Test Accreditation Status

General Inorganics

pH (L099)	pH Units	N/A	ISO 17025	7.6	7.5
Colour	Hazen	1	NONE	37	28
Electrical Conductivity at 20°C	µS/cm	10	ISO 17025	540	540
Turbidity	NTU	1	NONE	11	3.4
Total Cyanide	µg/l	10	ISO 17025	< 10	< 10
Sulphate as SO ₄	mg/l	0.045	ISO 17025	37.5	36.9
Chloride	mg/l	0.15	ISO 17025	26	28
Fluoride	µg/l	50	ISO 17025	130	140
Ammoniacal Nitrogen as NH ₄ ⁺	µg/l	15	ISO 17025	19	49
Total Organic Carbon (TOC)	mg/l	0.1	ISO 17025	1.11	0.88
Nitrate as N	mg/l	0.01	ISO 17025	0.01	0.01
Nitrate as NO ₃	mg/l	0.05	ISO 17025	0.05	0.05
Nitrite as NO ₂	µg/l	5	ISO 17025	< 5.0	< 5.0
Bromate by IC	mg/l	0.002	ISO 17025	< 0.002	< 0.002

Speciated PAHs

Naphthalene	µg/l	0.01	ISO 17025	< 0.01	< 0.01
Acenaphthylene	µg/l	0.01	ISO 17025	< 0.01	< 0.01
Acenaphthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01
Fluorene	µg/l	0.01	ISO 17025	< 0.01	< 0.01
Phenanthrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01
Anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01
Fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01
Pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01
Benzo(a)anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01
Chrysene	µg/l	0.01	ISO 17025	< 0.01	< 0.01
Benzo(b)fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01
Benzo(k)fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01
Benzo(a)pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01
Indeno(1,2,3-cd)pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01
Dibenz(a,h)anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01
Benzo(ghi)perylene	µg/l	0.01	ISO 17025	< 0.01	< 0.01

Total PAH

Total EPA-16 PAHs	µg/l	0.16	ISO 17025	< 0.16	< 0.16
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Analytical Report Number: 24-044134
Project / Site name: Thakeham Tiles

Your Order No: P036666

Lab Sample Number	328020	328021
Sample Reference	BH1	BH1
Sample Number	P1	P2
Depth (m)	None Supplied	None Supplied
Date Sampled	24/09/2024	25/09/2024
Time Taken	1540	0800
Analytical Parameter (Water Analysis)	Units	Test Limit of detection
		Test Accreditation Status

Heavy Metals / Metalloids

Aluminium (dissolved)	µg/l	1	ISO 17025	2.1	2.5
Antimony (dissolved)	µg/l	0.4	ISO 17025	0.6	0.5
Arsenic (dissolved)	µg/l	0.15	ISO 17025	0.56	0.29
Cadmium (dissolved)	µg/l	0.02	ISO 17025	< 0.02	< 0.02
Chromium (dissolved)	µg/l	0.2	ISO 17025	< 0.2	< 0.2
Copper (dissolved)	µg/l	0.5	ISO 17025	1.2	1
Lead (dissolved)	µg/l	0.2	ISO 17025	< 0.2	< 0.2
Manganese (dissolved)	µg/l	0.05	ISO 17025	29	24
Mercury (dissolved)	µg/l	0.05	ISO 17025	< 0.05	< 0.05
Nickel (dissolved)	µg/l	0.5	ISO 17025	2.8	1.5
Selenium (dissolved)	µg/l	0.6	ISO 17025	< 0.6	< 0.6

Boron (dissolved)	µg/l	10	ISO 17025	39	38
Iron (dissolved)	mg/l	0.004	ISO 17025	0.01	0.004
Sodium (dissolved)	mg/l	0.01	ISO 17025	14	15

Petroleum Hydrocarbons

TPH - Aliphatic >EC5 - EC6 _{HS_1D_AL}	µg/l	1	ISO 17025	< 1.0	< 1.0
TPH - Aliphatic >EC6 - EC8 _{HS_1D_AL}	µg/l	1	ISO 17025	< 1.0	< 1.0
TPH - Aliphatic >EC8 - EC10 _{HS_1D_AL}	µg/l	1	ISO 17025	< 1.0	< 1.0
TPH - Aliphatic >EC10 - EC12 _{EH_1D_AL_MS}	µg/l	10	NONE	< 10	< 10
TPH - Aliphatic >EC12 - EC16 _{EH_1D_AL_MS}	µg/l	10	NONE	< 10	< 10
TPH - Aliphatic >EC16 - EC21 _{EH_1D_AL_MS}	µg/l	10	NONE	< 10	< 10
TPH - Aliphatic >EC21 - EC35 _{EH_1D_AL_MS}	µg/l	10	NONE	< 10	< 10
TPH - Aliphatic >EC5 - EC35 _{HS+EH_1D_AL_MS}	µg/l	10	NONE	< 10	< 10
TPH - Aliphatic >EC35 - EC40 _{EH_1D_AL_MS}	µg/l	10	NONE	< 10	< 10
TPH - Aliphatic >EC35 - EC44 _{EH_1D_AL_MS}	µg/l	10	NONE	< 10	< 10
TPH - Aliphatic >EC40 - EC44 _{EH_1D_AL_MS}	µg/l	10	NONE	< 10	< 10
TPH - Aliphatic >EC5 - EC44 _{HS+EH_1D_AL_MS}	µg/l	10	NONE	< 10	< 10

TPH - Aromatic >EC5 - EC7 _{HS_1D_AR}	µg/l	1	ISO 17025	< 1.0	< 1.0
TPH - Aromatic >EC7 - EC8 _{HS_1D_AR}	µg/l	1	ISO 17025	< 1.0	< 1.0
TPH - Aromatic >EC8 - EC10 _{HS_1D_AR}	µg/l	1	ISO 17025	< 1.0	< 1.0
TPH - Aromatic >EC10 - EC12 _{EH_1D_AR_MS}	µg/l	10	NONE	< 10	< 10
TPH - Aromatic >EC12 - EC16 _{EH_1D_AR_MS}	µg/l	10	NONE	< 10	< 10
TPH - Aromatic >EC16 - EC21 _{EH_1D_AR_MS}	µg/l	10	NONE	< 10	< 10
TPH - Aromatic >EC21 - EC35 _{EH_1D_AR_MS}	µg/l	10	NONE	< 10	< 10
TPH - Aromatic >EC5 - EC35 _{HS+EH_1D_AR_MS}	µg/l	10	NONE	< 10	< 10
TPH - Aromatic >EC35 - EC40 _{EH_1D_AR_MS}	µg/l	10	NONE	< 10	< 10
TPH - Aromatic >EC35 - EC44 _{EH_1D_AR_MS}	µg/l	10	NONE	< 10	< 10
TPH - Aromatic >EC40 - EC44 _{EH_1D_AR_MS}	µg/l	10	NONE	< 10	< 10
TPH - Aromatic >EC5 - EC44 _{HS+EH_1D_AR_MS}	µg/l	10	NONE	< 10	< 10

VOCs

Chloromethane	µg/l	3	ISO 17025	< 3.0	< 3.0
Chloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0
Bromomethane	µg/l	3	ISO 17025	< 3.0	< 3.0
Vinyl Chloride	µg/l	3	NONE	< 3.0	< 3.0
Trichlorofluoromethane	µg/l	3	NONE	< 3.0	< 3.0
1,1-Dichloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0
1,1,2-Trichloro-1,2,2-trifluoroethane	µg/l	3	ISO 17025	< 3.0	< 3.0

Analytical Report Number: 24-044134
Project / Site name: Thakeham Tiles

Your Order No: P036666

Lab Sample Number				328020	328021
Sample Reference				BH1	BH1
Sample Number				P1	P2
Depth (m)				None Supplied	None Supplied
Date Sampled				24/09/2024	25/09/2024
Time Taken				1540	0800
Analytical Parameter (Water Analysis)	Units	Test Limit of detection	Test Accreditation Status		
Trans 1,2-dichloroethylene	µg/l	3	ISO 17025	< 3.0	< 3.0
MTBE (Methyl Tertiary Butyl Ether)	µg/l	3	ISO 17025	< 3.0	< 3.0
1,1-Dichloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0
2,2-Dichloropropane	µg/l	3	NONE	< 3.0	< 3.0
Chloroform	µg/l	3	ISO 17025	< 3.0	< 3.0
1,1,1-Trichloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0
1,2-Dichloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0
1,1-Dichloropropene	µg/l	3	ISO 17025	< 3.0	< 3.0
Cis-1,2-dichloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0
Benzene	µg/l	3	ISO 17025	< 3.0	< 3.0
Carbontetrachloride	µg/l	3	ISO 17025	< 3.0	< 3.0
1,2-Dichloropropane	µg/l	3	ISO 17025	< 3.0	< 3.0
Trichloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0
Dibromomethane	µg/l	3	ISO 17025	< 3.0	< 3.0
Bromodichloromethane	µg/l	3	ISO 17025	< 3.0	< 3.0
Cis-1,3-dichloropropene	µg/l	3	ISO 17025	< 3.0	< 3.0
Trans-1,3-dichloropropene	µg/l	3	ISO 17025	< 3.0	< 3.0
Toluene	µg/l	3	ISO 17025	< 3.0	< 3.0
1,1,2-Trichloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0
1,3-Dichloropropane	µg/l	3	ISO 17025	< 3.0	< 3.0
Dibromochloromethane	µg/l	3	ISO 17025	< 3.0	< 3.0
Tetrachloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0
1,2-Dibromoethane	µg/l	3	ISO 17025	< 3.0	< 3.0
Chlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0
1,1,1,2-Tetrachloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0
Ethylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0
p & m-xylene	µg/l	3	ISO 17025	< 3.0	< 3.0
Styrene	µg/l	3	ISO 17025	< 3.0	< 3.0
Bromoform	µg/l	3	ISO 17025	< 3.0	< 3.0
o-xylene	µg/l	3	ISO 17025	< 3.0	< 3.0
Isopropylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0
1,1,2,2-Tetrachloroethane	µg/l	3	NONE	< 3.0	< 3.0
Bromobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0
n-Propylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0
2-Chlorotoluene	µg/l	3	ISO 17025	< 3.0	< 3.0
4-Chlorotoluene	µg/l	3	ISO 17025	< 3.0	< 3.0
1,3,5-Trimethylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0
tert-Butylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0
1,2,4-Trimethylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0
sec-Butylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0
1,3-Dichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0
p-Isopropyltoluene	µg/l	3	ISO 17025	< 3.0	< 3.0
1,4-Dichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0
1,2-Dichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0
Butylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0
1,2-Dibromo-3-chloropropane	µg/l	3	ISO 17025	< 3.0	< 3.0
1,2,4-Trichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0
Hexachlorobutadiene	µg/l	3	ISO 17025	< 3.0	< 3.0
1,2,3-Trichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0

Analytical Report Number: 24-044134
Project / Site name: Thakeham Tiles

Your Order No: P036666

Lab Sample Number				328020	328021
Sample Reference				BH1	BH1
Sample Number				P1	P2
Depth (m)				None Supplied	None Supplied
Date Sampled				24/09/2024	25/09/2024
Time Taken				1540	0800
Analytical Parameter (Water Analysis)				Units	Test Limit of detection
				Test Accreditation Status	

1,2,3-Trichloropropane	µg/l	3	NONE	< 3.0	< 3.0
Bromochloromethane	µg/l	3	NONE	< 3.0	< 3.0
Dichloromethane	µg/l	3	NONE	< 3.0	< 3.0
Carbon disulphide	µg/l	3	NONE	< 3.0	< 3.0
Total Trihalomethanes	µg/l	12	NONE	< 12	< 12

VOC extended

Diethylbenzene	µg/l	3	NONE	< 3.0	< 3.0
1,3,5-Trichlorobenzene	µg/l	3	NONE	< 3.0	< 3.0

Pesticides

Azinphos-ethyl	µg/l	0.03	NONE	< 0.03	< 0.03
Azinphos-methyl	µg/l	0.03	NONE	< 0.03	< 0.03
1,2,3-Trichlorobenzene	µg/l	0.03	NONE	< 0.03	< 0.03
1,3,5-Trichlorobenzene	µg/l	0.03	NONE	< 0.03	< 0.03
Chlorfenvinphos	µg/l	0.03	NONE	< 0.03	< 0.03
Chlorpyrifos	µg/l	0.03	NONE	< 0.03	< 0.03
Chlorothalonil	µg/l	0.03	NONE	< 0.03	< 0.03
Carbophenothion	µg/l	0.03	NONE	< 0.03	< 0.03
2,6-Dichlorobenzonitrile	µg/l	0.03	NONE	< 0.03	< 0.03
Dimethoate	µg/l	0.03	NONE	< 0.03	< 0.03
Dimethylvinphos	µg/l	0.03	NONE	< 0.03	< 0.03
Demeton-O	µg/l	0.03	NONE	< 0.03	< 0.03
Demeton-S	µg/l	0.03	NONE	< 0.03	< 0.03
Heptachlor Exo-epoxide	µg/l	0.03	NONE	< 0.03	< 0.03
Endrin Aldehyde	µg/l	0.03	NONE	< 0.03	< 0.03
Endrin Ketone	µg/l	0.03	NONE	< 0.03	< 0.03
Endosulfan I (alpha isomer)	µg/l	0.03	NONE	< 0.03	< 0.03
Endosulfan II (beta isomer)	µg/l	0.03	NONE	< 0.03	< 0.03
Endosulfan Sulfate	µg/l	0.03	NONE	< 0.03	< 0.03
Ethionfos	µg/l	0.03	NONE	< 0.03	< 0.03
Fenthion	µg/l	0.03	NONE	< 0.03	< 0.03
Hexachlorobutadiene	µg/l	0.03	NONE	< 0.03	< 0.03
Hexachlorobenzene	µg/l	0.03	NONE	< 0.03	< 0.03
Isodrin	µg/l	0.03	NONE	< 0.03	< 0.03
Methacrifos	µg/l	0.03	NONE	< 0.03	< 0.03
O,p'-DDD	µg/l	0.03	NONE	< 0.03	< 0.03
O,p'-DDE	µg/l	0.03	NONE	< 0.03	< 0.03
O,p'-DDT	µg/l	0.03	NONE	< 0.03	< 0.03
Parathion	µg/l	0.03	NONE	< 0.03	< 0.03
Parathion-methyl	µg/l	0.03	NONE	< 0.03	< 0.03
Phorate	µg/l	0.03	NONE	< 0.03	< 0.03
Phosalone	µg/l	0.03	NONE	< 0.03	< 0.03
Pirimiphos-ethyl	µg/l	0.03	NONE	< 0.03	< 0.03
P,p'-DDD	µg/l	0.03	NONE	< 0.03	< 0.03
P,p'-DDE	µg/l	0.03	NONE	< 0.03	< 0.03
P,p'-Methoxychlor	µg/l	0.03	NONE	< 0.03	< 0.03
Propetamphos	µg/l	0.03	NONE	< 0.03	< 0.03
Phosphamidon I	µg/l	0.03	NONE	< 0.03	< 0.03
Triazophos	µg/l	0.03	NONE	< 0.03	< 0.03
1,2,4,5-Tetrachlorobenzene	µg/l	0.03	NONE	< 0.03	< 0.03

Analytical Report Number: 24-044134
Project / Site name: Thakeham Tiles

Your Order No: PO36666

Lab Sample Number				328020	328021
Sample Reference				BH1	BH1
Sample Number				P1	P2
Depth (m)				None Supplied	None Supplied
Date Sampled				24/09/2024	25/09/2024
Time Taken				1540	0800
Analytical Parameter (Water Analysis)	Units	Test Limit of detection	Test Accreditation Status		
Tecnazene	µg/l	0.03	NONE	< 0.03	< 0.03
Triadimefon	µg/l	0.03	NONE	< 0.03	< 0.03
Alpha-BHC (benzene hexachloride)	µg/l	0.03	NONE	< 0.03	< 0.03
Aldrin	µg/l	0.03	NONE	< 0.03	< 0.03
Beta-BHC	µg/l	0.03	NONE	< 0.03	< 0.03
Delta-BHC	µg/l	0.03	NONE	< 0.03	< 0.03
Dichlorvos	µg/l	0.03	NONE	< 0.03	< 0.03
Dieldrin	µg/l	0.03	NONE	< 0.03	< 0.03
Diazinon	µg/l	0.03	NONE	< 0.03	< 0.03
Endrin	µg/l	0.03	NONE	< 0.03	< 0.03
Ethion	µg/l	0.03	NONE	< 0.03	< 0.03
Fenitrothion	µg/l	0.03	NONE	< 0.03	< 0.03
Gamma-BHC (Lindane, gamma HCH)	µg/l	0.03	NONE	< 0.03	< 0.03
Heptachlor	µg/l	0.03	NONE	< 0.03	< 0.03
Malathion	µg/l	0.03	NONE	< 0.03	< 0.03
Mevinphos , E+Z	µg/l	0.03	NONE	< 0.03	< 0.03
Pentachlorobenzene	µg/l	0.03	NONE	< 0.03	< 0.03
Pendimethalin	µg/l	0.03	NONE	< 0.03	< 0.03
Pirimiphos-methyl	µg/l	0.03	NONE	< 0.03	< 0.03
P,p'-DDT	µg/l	0.03	NONE	< 0.03	< 0.03
Propyzamide	µg/l	0.03	NONE	< 0.03	< 0.03
Trifluralin	µg/l	0.03	NONE	< 0.03	< 0.03
Cis-Chlordane	µg/l	0.03	NONE	< 0.03	< 0.03
Trans-Chlordane	µg/l	0.03	NONE	< 0.03	< 0.03
Cis-Permethrin	µg/l	0.1	NONE	< 0.10	< 0.10
Deltramethrin	µg/l	0.1	NONE	< 0.1	< 0.1
Trans-Permethrin	µg/l	0.1	NONE	< 0.10	< 0.10
Cypermethrin	µg/l	0.1	NONE	< 0.10	< 0.10
Cyfluthrin	µg/l	0.1	NONE	< 0.10	< 0.10

Environmental Forensics

Acrylamide	µg/l	0.1	NONE	< 0.1	< 0.1
Dichlorodifluoromethane	mg/l	0.1	NONE	< 0.1	< 0.1

Subcontracted Analysis

Clostridium Perfringens (Subcontracted)		N/A	NONE	See Attached	See Attached
E.coli (Subcontracted)		N/A	NONE	See Attached	See Attached
Enterococci (Subcontracted)		N/A	NONE	See Attached	See Attached
Epichlorohydrin (Subcontracted)		N/A	NONE	See Attached	See Attached
Odour & Taste Quantitative (Subcontracted)		N/A	NONE	See Attached	See Attached
Total Coliforms (Subcontracted)		N/A	NONE	See Attached	See Attached
TVC (37 & 22) (Subcontracted)		N/A	NONE	See Attached	See Attached
Vinyl Chloride (Subcontracted)		N/A	NONE	See Attached	See Attached

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

Analytical Report Number : 24-044134

Project / Site name: Thakeham Tiles

Water matrix abbreviations:

Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Bromate in water by IC	Determination of bromate in water by ion chromatography. Accredited matrices: SW, PW, GW	In-house method based on Standard Methods for the Analysis of Water and Waste Water, method 4500	L008B	W	ISO 17025
Metals in water by ICP-MS (dissolved)	Determination of metals in water by acidification followed by ICP-MS. Accredited matrices: SW, PW, GW, except B - SW, GW, Hg - SW, PW, Al - SW, PW	In-house method based on USEPA Method 6020 & 200.8 for the determination of trace elements in water by ICP-MS	L012B	W	ISO 17025
Electrical Conductivity at 20°C in water	Determination of electrical conductivity in water by electrochemical measurement. Accredited matrices: SW, PW, GW, FSE	In-house method	L031B	W	ISO 17025
Fluoride in water	Determination of fluoride in water by 1:1 ratio with a buffer solution followed by ion selective electrode. Accredited matrices: SW, PW, GW, FSE, LL	In-house method based on Use of Total Ionic Strength Adjustment Buffer for Electrode Determination	L033B	W	ISO 17025
Total Organic Carbon in water	Determination of total organic carbon in water by TOC/DOC NDIR Analyser. Accredited matrices: SW, PW, GW, FSE, LL	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L037B	W	ISO 17025
Dichlorodifluoromethane and Trichlorofluoromethane	Determination of Dichlorodifluoromethane and Trichlorofluoromethane in water by HS-GC MS	In-house method	PL	W	NONE
Metals in water by ICP-OES (dissolved)	Determination of metals in water by acidification followed by ICP-OES. Accredited matrices: SW, PW, GW, FSE, LL; PrW, DI PrW (Al, Cu, Fe, Zn)	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil	L039B	W	ISO 17025
Acrylamide by LC-MS/MS	Determination of Acrylamide in water by LC-MS/MS	In-house method	PL	W	NONE
Pyrethroids by GC-MS	Determination of Pyrethroids in water by GC MS/MS	In-house method	PL	W	NONE
Total Petroleum Hydrocarbons with carbon banding in water by GC-MS	Determination of total petroleum hydrocarbons in water by GC-MS with carbon banding aliphatic and aromatic	In-house method	L070B	W	NONE
Volatile organic compounds in water extended	Determination of volatile organic compounds in water by headspace GC-MS	In-house method based on USEPA 8260	L073B	W	NONE
BTEX and/or Volatile Organic Compounds in water	Determination of volatile organic compounds in water by headspace GC-MS. Accredited matrices: SW, PW, GW	In-house method based on USEPA 8260	L073B	W	ISO 17025
Nitrate as N in water	Determination of nitrate by reaction with sodium salicylate followed by colorimetry. Accredited matrices: SW, PW, GW, FSE, LL	In-house method based on Examination of Water and Wastewater & Polish Standard Method PN-82/C-04579.08	L078-PL	W	ISO 17025
Nitrate in water	Determination of nitrate by reaction with sodium salicylate followed by colorimetry. Accredited matrices: SW, PW, GW, FSE, LL	In-house method based on Examination of Water and Wastewater & Polish Standard Method PN-82/C-04579.08	L078-PL	W	ISO 17025
Total cyanide in water	Determination of total cyanide in water by distillation followed by colorimetry. Accredited matrices: SW, PW, GW, FSE, LL	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L080-PL	W	ISO 17025
Chloride in water	Determination of chloride in water by colorimetry using discrete analyser. Accredited matrices: SW, PW, GW, FSE, LL	In-house based on MEWAM Method ISBN 0117516260	L082B	W	ISO 17025

Analytical Report Number : 24-044134

Project / Site name: Thakeham Tiles

Water matrix abbreviations:

Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Colour	Determination of sample colour (Hazen units)	MEWAM 1996	L082B	W	NONE
Ammonium as NH ₄ in water	Determination of ammonium/ammonia/ammoniacal nitrogen by the colorimetric salicylate/nitroprusside method using discrete analyser. Accredited matrices: SW, PW, GW, FSE, LL	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L082B	W	ISO 17025
Nitrite in water	Determination of nitrite in water by addition of sulphanilamide and NED followed by colorimetry using discrete analyser. Accredited matrices: SW, PW, GW, FSE, LL	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L082B	W	ISO 17025
Turbidity of water	Determination of sample turbidity by colorimeter and comparison with standard reference samples	In-house method based on Standard Method 8237	L083-PL	W	NONE
Total Petroleum Hydrocarbons in water by HS-GC-MS	Determination of total petroleum hydrocarbons in water by headspace GC-MS. Accredited matrices: SW, PW, GW	In-house method	L088-PL	W	ISO 17025
pH of water at 20°C (automated)	Determination of pH of water by electrochemical measurement. Accredited matrices: SW, PW, GW, FSE, LL	In-house method	L099-PL	W	ISO 17025
Speciated PAHs and/or Semi-volatile organic compounds in water	Determination of semi-volatile organic compounds (including PAHs) in water by extraction in dichloromethane followed by GC-MS. Accredited matrices (PAHs): SW, PW, GW	In-house method based on USEPA 8270	L102B	W	ISO 17025
Pesticides by GC-MS/MS	Determination of pesticides in water by GC-MS/MS	In-house method	L112B	W	NONE
Subcontracted analysis (water)	Subcontracted analysis - see attached subcon report.	Subcontracted analysis - see attached subcon report.			NONE
Sulphate in water	Determination of sulphate in water after filtration by acidification followed by ICP-OES. Accredited matrices: SW, PW, GW, PrW, DI PrW, FSE, LL	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil	L039B	W	ISO 17025

For method numbers ending in 'UK' or 'A' analysis have been carried out in our laboratory in the United Kingdom (Watford).

For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).

For method numbers ending in 'PL' or 'B' analysis have been carried out in our laboratory in Poland.

Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30°C.

Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Analytical Report Number : 24-044134
Project / Site name: Thakeham Tiles

Water matrix abbreviations:

Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
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Information in Support of Analytical Results

List of HWOL Acronyms and Operators

Acronym	Descriptions
HS	Headspace Analysis
MS	Mass spectrometry
FID	Flame Ionisation Detector
GC	Gas Chromatography
EH	Extractable Hydrocarbons (i.e. everything extracted by the solvent(s))
CU	Clean-up - e.g. by Florisil®, silica gel
1D	GC - Single coil/column gas chromatography
2D	GC-GC - Double coil/column gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics
AR	Aromatics
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_Total but with fatty acids mathematically subtracted
-	Operator - underscore to separate acronyms (exception for +)
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total

Quality control parameter failure associated with individual result applies to calculated sum of individuals.
The result for sum should be interpreted with caution



4041



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Analytical Report Number : 24-044539-2

Replaces Analytical Report Number: 24-044539, issue no. 1
Additional analysis undertaken.

Total Trihalomethanes analysis added by the laboratory

Project / Site name:	Thakeham Tiles	Samples received on:	26/09/2024
Your job number:	08347	Samples instructed on/ Analysis started on:	26/09/2024
Your order number:	PO36666	Analysis completed by:	04/11/2024
Report Issue Number:	2	Report issued on:	04/11/2024
Samples Analysed:	1 water sample		

Signed:



Tuhina Mukerjee
Senior Customer Service Advisor
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41-711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils - 4 weeks from reporting
leachates - 2 weeks from reporting
waters - 2 weeks from reporting
asbestos - 6 months from reporting

Excel copies of reports are only valid when accompanied by this PDF certificate.

Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

Analytical Report Number: 24-044539
Project / Site name: Thakeham Tiles

Your Order No: P036666

Lab Sample Number				330383
Sample Reference				BH1
Sample Number				P3
Depth (m)				None Supplied
Date Sampled				25/09/2024
Time Taken				1500
Analytical Parameter (Water Analysis)	Units	Test Limit of detection	Test Accreditation Status	

General Inorganics

pH (L099)	pH Units	N/A	ISO 17025	7.4
Colour	Hazen	1	NONE	16
Electrical Conductivity at 20°C	µS/cm	10	ISO 17025	550
Turbidity	NTU	1	NONE	2.4
Total Cyanide	µg/l	10	ISO 17025	< 10
Sulphate as SO ₄	mg/l	0.045	ISO 17025	34.3
Chloride	mg/l	0.15	ISO 17025	26
Fluoride	µg/l	50	ISO 17025	140
Ammoniacal Nitrogen as NH ₄ ⁺	µg/l	15	ISO 17025	46
Total Organic Carbon (TOC)	mg/l	0.1	ISO 17025	0.66
Nitrate as N	mg/l	0.01	ISO 17025	0.01
Nitrate as NO ₃	mg/l	0.05	ISO 17025	0.05
Nitrite as NO ₂	µg/l	5	ISO 17025	< 5.0
Bromate by IC	mg/l	0.002	ISO 17025	< 0.002

Speciated PAHs

Naphthalene	µg/l	0.01	ISO 17025	< 0.01
Acenaphthylene	µg/l	0.01	ISO 17025	< 0.01
Acenaphthene	µg/l	0.01	ISO 17025	< 0.01
Fluorene	µg/l	0.01	ISO 17025	< 0.01
Phenanthrene	µg/l	0.01	ISO 17025	< 0.01
Anthracene	µg/l	0.01	ISO 17025	< 0.01
Fluoranthene	µg/l	0.01	ISO 17025	< 0.01
Pyrene	µg/l	0.01	ISO 17025	< 0.01
Benzo(a)anthracene	µg/l	0.01	ISO 17025	< 0.01
Chrysene	µg/l	0.01	ISO 17025	< 0.01
Benzo(b)fluoranthene	µg/l	0.01	ISO 17025	< 0.01
Benzo(k)fluoranthene	µg/l	0.01	ISO 17025	< 0.01
Benzo(a)pyrene	µg/l	0.01	ISO 17025	< 0.01
Indeno(1,2,3-cd)pyrene	µg/l	0.01	ISO 17025	< 0.01
Dibenz(a,h)anthracene	µg/l	0.01	ISO 17025	< 0.01
Benzo(ghi)perylene	µg/l	0.01	ISO 17025	< 0.01

Total PAH

Total EPA-16 PAHs	µg/l	0.16	ISO 17025	< 0.16
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Heavy Metals / Metalloids

Aluminium (dissolved)	µg/l	1	ISO 17025	3.2
Antimony (dissolved)	µg/l	0.4	ISO 17025	< 0.4
Arsenic (dissolved)	µg/l	0.15	ISO 17025	0.35
Cadmium (dissolved)	µg/l	0.02	ISO 17025	< 0.02
Chromium (dissolved)	µg/l	0.2	ISO 17025	< 0.2
Copper (dissolved)	µg/l	0.5	ISO 17025	3.2
Lead (dissolved)	µg/l	0.2	ISO 17025	< 0.2
Manganese (dissolved)	µg/l	0.05	ISO 17025	27
Mercury (dissolved)	µg/l	0.05	ISO 17025	< 0.05
Nickel (dissolved)	µg/l	0.5	ISO 17025	1.6
Selenium (dissolved)	µg/l	0.6	ISO 17025	< 0.6

Boron (dissolved)	µg/l	10	ISO 17025	36
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Analytical Report Number: 24-044539
Project / Site name: Thakeham Tiles

Your Order No: P036666

Lab Sample Number				330383
Sample Reference				BH1
Sample Number				P3
Depth (m)				None Supplied
Date Sampled				25/09/2024
Time Taken				1500
Analytical Parameter (Water Analysis)	Units	Test Limit of detection	Test Accreditation Status	
Iron (dissolved)	mg/l	0.004	ISO 17025	0.011
Sodium (dissolved)	mg/l	0.01	ISO 17025	15

Analytical Report Number: 24-044539
Project / Site name: Thakeham Tiles

Your Order No: P036666

Lab Sample Number				330383
Sample Reference				BH1
Sample Number				P3
Depth (m)				None Supplied
Date Sampled				25/09/2024
Time Taken				1500
Analytical Parameter (Water Analysis)	Units	Test Limit of detection	Test Accreditation Status	

Petroleum Hydrocarbons

TPH - Aliphatic >EC5 - EC6 _{HS_1D_AL}	µg/l	1	ISO 17025	< 1.0
TPH - Aliphatic >EC6 - EC8 _{HS_1D_AL}	µg/l	1	ISO 17025	< 1.0
TPH - Aliphatic >EC8 - EC10 _{HS_1D_AL}	µg/l	1	ISO 17025	< 1.0
TPH - Aliphatic >EC10 - EC12 _{EH_1D_AL_MS}	µg/l	10	NONE	< 10
TPH - Aliphatic >EC12 - EC16 _{EH_1D_AL_MS}	µg/l	10	NONE	< 10
TPH - Aliphatic >EC16 - EC21 _{EH_1D_AL_MS}	µg/l	10	NONE	< 10
TPH - Aliphatic >EC21 - EC35 _{EH_1D_AL_MS}	µg/l	10	NONE	< 10
TPH - Aliphatic >EC5 - EC35 _{HS+EH_1D_AL_MS}	µg/l	10	NONE	< 10
TPH - Aliphatic >EC35 - EC40 _{EH_1D_AL_MS}	µg/l	10	NONE	< 10
TPH - Aliphatic >EC35 - EC44 _{EH_1D_AL_MS}	µg/l	10	NONE	< 10
TPH - Aliphatic >EC40 - EC44 _{EH_1D_AL_MS}	µg/l	10	NONE	< 10
TPH - Aliphatic >EC5 - EC44 _{HS+EH_1D_AL_MS}	µg/l	10	NONE	< 10

TPH - Aromatic >EC5 - EC7 _{HS_1D_AR}	µg/l	1	ISO 17025	< 1.0
TPH - Aromatic >EC7 - EC8 _{HS_1D_AR}	µg/l	1	ISO 17025	< 1.0
TPH - Aromatic >EC8 - EC10 _{HS_1D_AR}	µg/l	1	ISO 17025	< 1.0
TPH - Aromatic >EC10 - EC12 _{EH_1D_AR_MS}	µg/l	10	NONE	< 10
TPH - Aromatic >EC12 - EC16 _{EH_1D_AR_MS}	µg/l	10	NONE	< 10
TPH - Aromatic >EC16 - EC21 _{EH_1D_AR_MS}	µg/l	10	NONE	< 10
TPH - Aromatic >EC21 - EC35 _{EH_1D_AR_MS}	µg/l	10	NONE	< 10
TPH - Aromatic >EC5 - EC35 _{HS+EH_1D_AR_MS}	µg/l	10	NONE	< 10
TPH - Aromatic >EC35 - EC40 _{EH_1D_AR_MS}	µg/l	10	NONE	< 10
TPH - Aromatic >EC35 - EC44 _{EH_1D_AR_MS}	µg/l	10	NONE	< 10
TPH - Aromatic >EC40 - EC44 _{EH_1D_AR_MS}	µg/l	10	NONE	< 10
TPH - Aromatic >EC5 - EC44 _{HS+EH_1D_AR_MS}	µg/l	10	NONE	< 10

VOCs

Chloromethane	µg/l	3	ISO 17025	< 3.0
Chloroethane	µg/l	3	ISO 17025	< 3.0
Bromomethane	µg/l	3	ISO 17025	< 3.0
Vinyl Chloride	µg/l	3	NONE	< 3.0
Trichlorofluoromethane	µg/l	3	NONE	< 3.0
1,1-Dichloroethene	µg/l	3	ISO 17025	< 3.0
1,1,2-Trichloro-1,2,2-trifluoroethane	µg/l	3	ISO 17025	< 3.0
Trans 1,2-dichloroethylene	µg/l	3	ISO 17025	< 3.0
MTBE (Methyl Tertiary Butyl Ether)	µg/l	3	ISO 17025	< 3.0
1,1-Dichloroethane	µg/l	3	ISO 17025	< 3.0
2,2-Dichloropropane	µg/l	3	NONE	< 3.0
Chloroform	µg/l	3	ISO 17025	< 3.0
1,1,1-Trichloroethane	µg/l	3	ISO 17025	< 3.0
1,2-Dichloroethane	µg/l	3	ISO 17025	< 3.0
1,1-Dichloropropene	µg/l	3	ISO 17025	< 3.0
Cis-1,2-dichloroethene	µg/l	3	ISO 17025	< 3.0
Benzene	µg/l	3	ISO 17025	< 3.0
Carbontetrachloride	µg/l	3	ISO 17025	< 3.0
1,2-Dichloropropane	µg/l	3	ISO 17025	< 3.0
Trichloroethene	µg/l	3	ISO 17025	< 3.0
Dibromomethane	µg/l	3	ISO 17025	< 3.0
Bromodichloromethane	µg/l	3	ISO 17025	< 3.0
Cis-1,3-dichloropropene	µg/l	3	ISO 17025	< 3.0

Analytical Report Number: 24-044539
Project / Site name: Thakeham Tiles

Your Order No: P036666

Lab Sample Number				330383
Sample Reference				BH1
Sample Number				P3
Depth (m)				None Supplied
Date Sampled				25/09/2024
Time Taken				1500
Analytical Parameter (Water Analysis)	Units	Test Limit of detection	Test Accreditation Status	
Trans-1,3-dichloropropene	µg/l	3	ISO 17025	< 3.0
Toluene	µg/l	3	ISO 17025	< 3.0
1,1,2-Trichloroethane	µg/l	3	ISO 17025	< 3.0
1,3-Dichloropropane	µg/l	3	ISO 17025	< 3.0
Dibromochloromethane	µg/l	3	ISO 17025	< 3.0
Tetrachloroethene	µg/l	3	ISO 17025	< 3.0
1,2-Dibromoethane	µg/l	3	ISO 17025	< 3.0
Chlorobenzene	µg/l	3	ISO 17025	< 3.0
1,1,1,2-Tetrachloroethane	µg/l	3	ISO 17025	< 3.0
Ethylbenzene	µg/l	3	ISO 17025	< 3.0
p & m-xylene	µg/l	3	ISO 17025	< 3.0
Styrene	µg/l	3	ISO 17025	< 3.0
Bromoform	µg/l	3	ISO 17025	< 3.0
o-xylene	µg/l	3	ISO 17025	< 3.0
Isopropylbenzene	µg/l	3	ISO 17025	< 3.0
1,1,2,2-Tetrachloroethane	µg/l	3	NONE	< 3.0
Bromobenzene	µg/l	3	ISO 17025	< 3.0
n-Propylbenzene	µg/l	3	ISO 17025	< 3.0
2-Chlorotoluene	µg/l	3	ISO 17025	< 3.0
4-Chlorotoluene	µg/l	3	ISO 17025	< 3.0
1,3,5-Trimethylbenzene	µg/l	3	ISO 17025	< 3.0
tert-Butylbenzene	µg/l	3	ISO 17025	< 3.0
1,2,4-Trimethylbenzene	µg/l	3	ISO 17025	< 3.0
sec-Butylbenzene	µg/l	3	ISO 17025	< 3.0
1,3-Dichlorobenzene	µg/l	3	ISO 17025	< 3.0
p-Isopropyltoluene	µg/l	3	ISO 17025	< 3.0
1,4-Dichlorobenzene	µg/l	3	ISO 17025	< 3.0
1,2-Dichlorobenzene	µg/l	3	ISO 17025	< 3.0
Butylbenzene	µg/l	3	ISO 17025	< 3.0
1,2-Dibromo-3-chloropropane	µg/l	3	ISO 17025	< 3.0
1,2,4-Trichlorobenzene	µg/l	3	ISO 17025	< 3.0
Hexachlorobutadiene	µg/l	3	ISO 17025	< 3.0
1,2,3-Trichlorobenzene	µg/l	3	ISO 17025	< 3.0

Analytical Report Number: 24-044539
Project / Site name: Thakeham Tiles

Your Order No: P036666

Lab Sample Number				330383
Sample Reference				BH1
Sample Number				P3
Depth (m)				None Supplied
Date Sampled				25/09/2024
Time Taken				1500
Analytical Parameter (Water Analysis)	Units	Test Limit of detection	Test Accreditation Status	

1,2,3-Trichloropropane	µg/l	3	NONE	< 3.0
Bromochloromethane	µg/l	3	NONE	< 3.0
Dichloromethane	µg/l	3	NONE	< 3.0
Carbon disulphide	µg/l	3	NONE	< 3.0
Total Trihalomethanes	µg/l	12	NONE	< 12

VOC extended

1,3,5-Trichlorobenzene	µg/l	3	NONE	< 3.0
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Pesticides

Azinphos-ethyl	µg/l	0.03	NONE	< 0.03
Azinphos-methyl	µg/l	0.03	NONE	< 0.03
1,2,3-Trichlorobenzene	µg/l	0.03	NONE	< 0.03
1,3,5-Trichlorobenzene	µg/l	0.03	NONE	< 0.03
Chlorfenvinphos	µg/l	0.03	NONE	< 0.03
Chlorpyrifos	µg/l	0.03	NONE	< 0.03
Chlorothalonil	µg/l	0.03	NONE	< 0.03
Carbophenothion	µg/l	0.03	NONE	< 0.03
2,6-Dichlorobenzonitrile	µg/l	0.03	NONE	< 0.03
Dimethoate	µg/l	0.03	NONE	< 0.03
Dimethylvinphos	µg/l	0.03	NONE	< 0.03
Demeton-O	µg/l	0.03	NONE	< 0.03
Demeton-S	µg/l	0.03	NONE	< 0.03
Heptachlor Exo-epoxide	µg/l	0.03	NONE	< 0.03
Endrin Aldehyde	µg/l	0.03	NONE	< 0.03
Endrin Ketone	µg/l	0.03	NONE	< 0.03
Endosulfan I (alpha isomer)	µg/l	0.03	NONE	< 0.03
Endosulfan II (beta isomer)	µg/l	0.03	NONE	< 0.03
Endosulfan Sulfate	µg/l	0.03	NONE	< 0.03
Etrinfos	µg/l	0.03	NONE	< 0.03
Fenthion	µg/l	0.03	NONE	< 0.03
Hexachlorobutadiene	µg/l	0.03	NONE	< 0.03
Hexachlorobenzene	µg/l	0.03	NONE	< 0.03
Isodrin	µg/l	0.03	NONE	< 0.03
Methacrifos	µg/l	0.03	NONE	< 0.03
O,p'-DDD	µg/l	0.03	NONE	< 0.03
O,p'-DDE	µg/l	0.03	NONE	< 0.03
O,p'-DDT	µg/l	0.03	NONE	< 0.03
Parathion	µg/l	0.03	NONE	< 0.03
Parathion-methyl	µg/l	0.03	NONE	< 0.03
Phorate	µg/l	0.03	NONE	< 0.03
Phosalone	µg/l	0.03	NONE	< 0.03
Pirimiphos-ethyl	µg/l	0.03	NONE	< 0.03
P,p'-DDD	µg/l	0.03	NONE	< 0.03
P,p'-DDE	µg/l	0.03	NONE	< 0.03
P,p'-Methoxychlor	µg/l	0.03	NONE	< 0.03
Propetamphos	µg/l	0.03	NONE	< 0.03
Phosphamidon I	µg/l	0.03	NONE	< 0.03
Triazophos	µg/l	0.03	NONE	< 0.03
1,2,4,5-Tetrachlorobenzene	µg/l	0.03	NONE	< 0.03
Tecnazene	µg/l	0.03	NONE	< 0.03

Analytical Report Number: 24-044539
Project / Site name: Thakeham Tiles

Your Order No: P036666

Lab Sample Number				330383
Sample Reference				BH1
Sample Number				P3
Depth (m)				None Supplied
Date Sampled				25/09/2024
Time Taken				1500
Analytical Parameter (Water Analysis)	Units	Test Limit of detection	Test Accreditation Status	
Triadimefon	µg/l	0.03	NONE	< 0.03
Alpha-BHC (benzene hexachloride)	µg/l	0.03	NONE	< 0.03
Aldrin	µg/l	0.03	NONE	< 0.03
Beta-BHC	µg/l	0.03	NONE	< 0.03
Delta-BHC	µg/l	0.03	NONE	< 0.03
Dichlorvos	µg/l	0.03	NONE	< 0.03
Dieldrin	µg/l	0.03	NONE	< 0.03
Diazinon	µg/l	0.03	NONE	< 0.03
Endrin	µg/l	0.03	NONE	< 0.03
Ethion	µg/l	0.03	NONE	< 0.03
Fenitrothion	µg/l	0.03	NONE	< 0.03
Gamma-BHC (Lindane, gamma HCH)	µg/l	0.03	NONE	< 0.03
Heptachlor	µg/l	0.03	NONE	< 0.03
Malathion	µg/l	0.03	NONE	< 0.03
Mevinphos , E+Z	µg/l	0.03	NONE	< 0.03
Pentachlorobenzene	µg/l	0.03	NONE	< 0.03
Pendimethalin	µg/l	0.03	NONE	< 0.03
Pirimiphos-methyl	µg/l	0.03	NONE	< 0.03
P,p'-DDT	µg/l	0.03	NONE	< 0.03
Propyzamide	µg/l	0.03	NONE	< 0.03
Trifluralin	µg/l	0.03	NONE	< 0.03
Cis-Chlordane	µg/l	0.03	NONE	< 0.03
Trans-Chlordane	µg/l	0.03	NONE	< 0.03
Cis-Permethrin	µg/l	0.1	NONE	< 0.10
Deltramethrin	µg/l	0.1	NONE	< 0.1
Trans-Permethrin	µg/l	0.1	NONE	< 0.10
Cypermethrin	µg/l	0.1	NONE	< 0.10
Cyfluthrin	µg/l	0.1	NONE	< 0.10

Environmental Forensics

Acrylamide	µg/l	0.1	NONE	< 0.1
Dichlorodifluoromethane	mg/l	0.1	NONE	< 0.1

Subcontracted Analysis

Clostridium Perfringens (Subcontracted)		N/A	NONE	See Attached
E.coli (Subcontracted)		N/A	NONE	See Attached
Enterococci (Subcontracted)		N/A	NONE	See Attached
Epichlorohydrin (Subcontracted)		N/A	NONE	See Attached
Odour & Taste Quantitative (Subcontracted)		N/A	NONE	See Attached
Total Coliforms (Subcontracted)		N/A	NONE	See Attached
TVC (37 & 22) (Subcontracted)		N/A	NONE	See Attached
Vinyl Chloride (Subcontracted)		N/A	NONE	See Attached



Analytical Report Number: 24-044539
Project / Site name: Thakeham Tiles

Your Order No: P036666

Lab Sample Number				330383
Sample Reference				BH1
Sample Number				P3
Depth (m)				None Supplied
Date Sampled				25/09/2024
Time Taken				1500
Analytical Parameter (Water Analysis)	Units	Test Limit of detection	Test Accreditation Status	

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

Analytical Report Number : 24-044539

Project / Site name: Thakeham Tiles

Water matrix abbreviations:

Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Bromate in water by IC	Determination of bromate in water by ion chromatography. Accredited matrices: SW, PW, GW	In-house method based on Standard Methods for the Analysis of Water and Waste Water, method 4500	L008B	W	ISO 17025
Metals in water by ICP-MS (dissolved)	Determination of metals in water by acidification followed by ICP-MS. Accredited matrices: SW, PW, GW, except B - SW, GW, Hg - SW, PW, Al - SW, PW	In-house method based on USEPA Method 6020 & 200.8 for the determination of trace elements in water by ICP-MS	L012B	W	ISO 17025
Electrical Conductivity at 20°C in water	Determination of electrical conductivity in water by electrochemical measurement. Accredited matrices: SW, PW, GW, FSE	In-house method	L031B	W	ISO 17025
Fluoride in water	Determination of fluoride in water by 1:1 ratio with a buffer solution followed by ion selective electrode. Accredited matrices: SW, PW, GW, FSE, LL	In-house method based on Use of Total Ionic Strength Adjustment Buffer for Electrode Determination	L033B	W	ISO 17025
Total Organic Carbon in water	Determination of total organic carbon in water by TOC/DOC NDIR Analyser. Accredited matrices: SW, PW, GW, FSE, LL	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L037B	W	ISO 17025
Dichlorodifluoromethane and Trichlorofluoromethane	Determination of Dichlorodifluoromethane and Trichlorofluoromethane in water by HS-GC MS	In-house method	PL	W	NONE
Metals in water by ICP-OES (dissolved)	Determination of metals in water by acidification followed by ICP-OES. Accredited matrices: SW, PW, GW, FSE, LL; PrW, DI PrW (Al, Cu, Fe, Zn)	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil	L039B	W	ISO 17025
Acrylamide by LC-MS/MS	Determination of Acrylamide in water by LC-MS/MS	In-house method	PL	W	NONE
Pyrethroids by GC-MS	Determination of Pyrethroids in water by GC MS/MS	In-house method	PL	W	NONE
Total Petroleum Hydrocarbons with carbon banding in water by GC-MS	Determination of total petroleum hydrocarbons in water by GC-MS with carbon banding aliphatic and aromatic	In-house method	L070B	W	NONE
Volatile organic compounds in water extended	Determination of volatile organic compounds in water by headspace GC-MS	In-house method based on USEPA 8260	L073B	W	NONE
BTEX and/or Volatile Organic Compounds in water	Determination of volatile organic compounds in water by headspace GC-MS. Accredited matrices: SW, PW, GW	In-house method based on USEPA 8260	L073B	W	ISO 17025
Nitrate as N in water	Determination of nitrate by reaction with sodium salicylate followed by colorimetry. Accredited matrices: SW, PW, GW, FSE, LL	In-house method based on Examination of Water and Wastewater & Polish Standard Method PN-82/C-04579.08	L078-PL	W	ISO 17025
Nitrate in water	Determination of nitrate by reaction with sodium salicylate followed by colorimetry. Accredited matrices: SW, PW, GW, FSE, LL	In-house method based on Examination of Water and Wastewater & Polish Standard Method PN-82/C-04579.08	L078-PL	W	ISO 17025
Total cyanide in water	Determination of total cyanide in water by distillation followed by colorimetry. Accredited matrices: SW, PW, GW, FSE, LL	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L080-PL	W	ISO 17025

Analytical Report Number : 24-044539

Project / Site name: Thakeham Tiles

Water matrix abbreviations:

Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Chloride in water	Determination of chloride in water by colorimetry using discrete analyser. Accredited matrices: SW, PW, GW, FSE, LL	In-house based on MEWAM Method ISBN 0117516260	L082B	W	ISO 17025
Colour	Determination of sample colour (Hazen units)	MEWAM 1996	L082B	W	NONE
Ammonium as NH ₄ in water	Determination of ammonium/ammonia/ammoniacal nitrogen by the colorimetric salicylate/nitroprusside method using discrete analyser. Accredited matrices: SW, PW, GW, FSE, LL	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L082B	W	ISO 17025
Nitrite in water	Determination of nitrite in water by addition of sulphanilamide and NED followed by colorimetry using discrete analyser. Accredited matrices: SW, PW, GW, FSE, LL	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L082B	W	ISO 17025
Turbidity of water	Determination of sample turbidity by colorimeter and comparison with standard reference samples	In-house method based on Standard Method 8237	L083-PL	W	NONE
Total Petroleum Hydrocarbons in water by HS-GC-MS	Determination of total petroleum hydrocarbons in water by headspace GC-MS. Accredited matrices: SW, PW, GW	In-house method	L088-PL	W	ISO 17025
pH of water at 20°C (automated)	Determination of pH of water by electrochemical measurement. Accredited matrices: SW, PW, GW, FSE, LL	In-house method	L099-PL	W	ISO 17025
Speciated PAHs and/or Semi-volatile organic compounds in water	Determination of semi-volatile organic compounds (including PAHs) in water by extraction in dichloromethane followed by GC-MS. Accredited matrices (PAHs): SW, PW, GW	In-house method based on USEPA 8270	L102B	W	ISO 17025
Pesticides by GC-MS/MS	Determination of pesticides in water by GC-MS/MS	In-house method	L112B	W	NONE
Subcontracted analysis (water)	Subcontracted analysis - see attached subcon report.	Subcontracted analysis - see attached subcon report.			NONE
Sulphate in water	Determination of sulphate in water after filtration by acidification followed by ICP-OES. Accredited matrices: SW, PW, GW, PrW, DI PrW, FSE, LL	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil	L039B	W	ISO 17025

For method numbers ending in 'UK' or 'A' analysis have been carried out in our laboratory in the United Kingdom (Watford).

For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).

For method numbers ending in 'PL' or 'B' analysis have been carried out in our laboratory in Poland.

Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30°C.

Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Information in Support of Analytical Results

List of HWOL Acronyms and Operators

Acronym	Descriptions
HS	Headspace Analysis
MS	Mass spectrometry
FID	Flame Ionisation Detector

Analytical Report Number : 24-044539
Project / Site name: Thakeham Tiles

Water matrix abbreviations:

Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
GC	Gas Chromatography				
EH	Extractable Hydrocarbons (i.e. everything extracted by the solvent(s))				
CU	Clean-up - e.g. by Florisil®, silica gel				
1D	GC - Single coil/column gas chromatography				
2D	GC-GC - Double coil/column gas chromatography				
Total	Aliphatics & Aromatics				
AL	Aliphatics				
AR	Aromatics				
#1	EH_2D_Total but with humics mathematically subtracted				
#2	EH_2D_Total but with fatty acids mathematically subtracted				
_	Operator - underscore to separate acronyms (exception for +)				
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total				

Quality control parameter failure associated with individual result applies to calculated sum of individuals.
The result for sum should be interpreted with caution



**F.A.O Reception
i2 Analytical UK Ltd
7 Woodshoots Meadow
Croxley Green Business Park
Watford WD18 8YS**

ALS Laboratories (UK) Limited

Unit 11
Silkwood Park
Janes Hill
Off Albert Drive
Wakefield
WF5 9TG

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F: +44 (0)1924 818101
www.alsenvironmental.co.uk

17 October 2024

Test Report: WAK/2723898/2024

Dear F.A.O Reception

Analysis of your sample(s) submitted on 24 September 2024 is now complete and we have pleasure in enclosing the appropriate test report(s).

An invoice for the analysis carried out will be sent under separate cover.

Should you have any queries regarding this report(s) or any part of our service, please contact Customer Services on +44 (0)1924 818100 who will be happy to discuss your requirements.

If you would like to arrange any further analysis, please contact Customer Services. To arrange container delivery or sample collection, please call the Couriers Department directly on 024 7685 6562.

Thank you for using ALS Laboratories (UK) Limited and we look forward to receiving your next samples.

Yours Sincerely,

Signed:

Name:

L. McComb

Title:

Chemistry Manager



1314



EMS675527

OHS 542058



Report Summary

F.A.O . Reception
i2 Analytical UK Ltd
7 Woodshoots Meadow
Croxley Green Business Park
Watford
WD18 8YS

ANALYSED BY



Date of Issue **17 October 2024**

Report Number: **WAK/2723898/2024**

Issue **3**

This issue replaces all previous issues

Number of Samples

included in this report **1**

Number of Test Results

included in this report **14**

Site Name: **24-044539**

Sample Date: **24 September 2024**

Job Received: **24 September 2024**

Analysis Commenced: **25 September 2024**

Signed:

Name: **L. McComb**

Date: **17 October 2024**

Title: **Chemistry Manager**

ALS Laboratories (UK) Limited was not responsible for sampling unless otherwise stated.

Information on the methods of analysis and performance characteristics are available on request. Opinions and interpretations expressed herein are outside the scope of UKAS accreditation. The results relate only to the items tested and where relevant sampled. Information supplied by the customer may affect the validity of results. Tests marked 'Not UKAS Accredited' in this Report/Certificate are not included in the UKAS Accreditation Schedule for our laboratory. This test report is not a statement of conformity to any specification or standard.

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Certificate of Analysis

ANALYSED BY



Site Name: **24-044539**
Sample Source: **i2 Analytical UK Ltd**
Order No: **PO_S_C7224**

Report Number: **WAK/2723898/2024**
Samples Received: **24 September 2024**
Analysis Complete: **17 October 2024**

Issue **3**

Sample	Sample Date	Sample Description	Test Description	Unit	Result	Accred.	Method
24487548	24 September 2024	328020 - BH1 P1	Clostridium Perfringens, Pres	cfu/100ml	0	Y Cov	W8
	24 September 2024		TVC 22C 3 day	cfu/ml	>1000	Y Cov	W1
	24 September 2024		Total Coliform presump	cfu/100ml	12	Y Cov	W10
	24 September 2024		Total Coliforms confirmed	cfu/100ml	8	Y Cov	W10
	24 September 2024		E.coli presumptive	cfu/100ml	0	Y Cov	W10
	24 September 2024		Escherichia coli confirmed	cfu/100ml	0	Y Cov	W10
	24 September 2024		Enterococci presumptive	cfu/100ml	6	Y Cov	W7
	24 September 2024		Enterococci confirmed	cfu/100ml	6	Y Cov	W7
	24 September 2024		Clostridium Perfringens, Conf	cfu/100ml	0	Y Cov	W8
	24 September 2024		Vinyl Chloride	ug/l	Analyst Comment	Y Wak	WPC63
	24 September 2024		Qualitative Taste	Text	Analyst Comment	N Cov	W56
	24 September 2024		Qualitative Odour	Text	0	N Cov	W56
	24 September 2024		Taste No.Dilution Number	Number	99	Y Cov	W56
	24 September 2024		Odour No.Dilution Number	Number	0	Y Cov	W56

Sample Matrix for 24487548: Drinking Water

Analyst Comments for 24487548: {/}*}Unable to analyse for taste as the sample is turbid.
Vinyl Chloride Analysis: Initial analysis subject to AQC failure, no spare received. {*/} Total coliforms identified as Citrobater gillenii and Citrobacter species. Enterococci identified as Enterococcus casseliflavus, Enterococcus gilvus, Enterococcus species, Enterococcus faecalis. TVC Estimated.

This issue replaces all previous issues

Accreditation Codes: Y = UKAS / ISO17025 Accredited, N = Not UKAS / ISO17025 Accredited, M = MCERTS.


Analysed at: CHE = Chester(CH5 3US), COV = Coventry(CV4 9GU), S = Subcontracted, TRB = Subcontracted to Trowbridge(BA14 0XD), WAK = Wakefield(WF5 9TG), F = Data supplied by customer.

For Microbiological determinands 0 or ND=Not Detected, For Legionella ND=Not Detected in volume of sample filtered. The LOD for the Legionella analysis will increase where the volume analysed is <1000g (1g is approximately equivalent to 1ml for sample volume analysed). I/S=Insufficient sample. For soil/sludge samples: AR=As received, DW=Dry weight.

ALS Laboratories (UK) Limited

Unit 11, Silkwood Park, Janes Hill, Off Albert Drive, Wakefield, WF5 9TG Tel:+44 (0)1924 818100 Fax:+44 (0)1924 818101

Signed:



Name: **L. McComb**

Date: **17 October 2024**

Title: **Chemistry Manager**

This issue replaces all previous issues

Accreditation Codes: Y = UKAS / ISO17025 Accredited, N = Not UKAS / ISO17025 Accredited, M = MCERTS.

Analysed at: CHE = Chester(CH5 3US), COV = Coventry(CV4 9GU), S = Subcontracted, TRB = Subcontracted to Trowbridge(BA14 0XD), WAK = Wakefield(WF5 9TG), F = Data supplied by customer.

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F.A.O Reception
i2 Analytical UK Ltd
7 Woodshoots Meadow
Croxley Green Business Park
Watford WD18 8YS

17 October 2024

Test Report: COV/2725090/2024

Dear F.A.O Reception

Analysis of your sample(s) submitted on 26 September 2024 is now complete and we have pleasure in enclosing the appropriate test report(s).

An invoice for the analysis carried out will be sent under separate cover.

Should you have any queries regarding this report(s) or any part of our service, please contact Customer Services on +44 (0)24 7642 1213 who will be happy to discuss your requirements.

If you would like to arrange any further analysis, please contact Customer Services. To arrange container delivery or sample collection, please call the Couriers Department directly on 024 7685 6562.

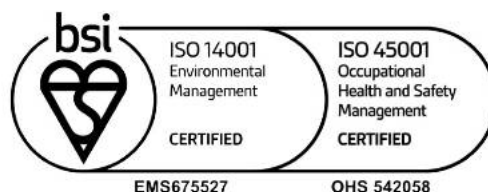
Thank you for using ALS Laboratories (UK) Limited and we look forward to receiving your next samples.

Yours Sincerely,

Signed: 

Name: H. Nolan

Title: Microbiology Senior Analyst



Report Summary

F.A.O . Reception
i2 Analytical UK Ltd
7 Woodshoots Meadow
Croxley Green Business Park
Watford
WD18 8YS

ANALYSED BY



Date of Issue **17 October 2024**

Report Number: **COV/2725090/2024**

Issue **3**

This issue replaces all previous issues

Number of Samples

included in this report **2**

Number of Test Results

included in this report **24**

Site Name: **24-044134**

Sample Date: **25 September 2024**

Job Received: **26 September 2024**

Analysis Commenced: **27 September 2024**

Signed:



Name: **H. Nolan**

Date: **17 October 2024**

Title: **Microbiology Senior Analyst**

ALS Laboratories (UK) Limited was not responsible for sampling unless otherwise stated.

Information on the methods of analysis and performance characteristics are available on request. Opinions and interpretations expressed herein are outside the scope of UKAS accreditation. The results relate only to the items tested and where relevant sampled. Information supplied by the customer may affect the validity of results. Tests marked 'Not UKAS Accredited' in this Report/Certificate are not included in the UKAS Accreditation Schedule for our laboratory. This test report is not a statement of conformity to any specification or standard.

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Certificate of Analysis

ANALYSED BY



Site Name: **24-044134**
Sample Source: **i2 Analytical UK Ltd**
Order No: **PO_S_C7219**

Report Number: **COV/2725090/2024**
Samples Received: **26 September 2024**
Analysis Complete: **17 October 2024**

Issue **3**

Sample	Sample Date	Sample Description	Test Description	Unit	Result	Accred.	Method
24494765	25 September 2024	328021 - BH1 P2	Clostridium Perfringens, Pres	cfu/100ml	0	Y Cov	W8
	25 September 2024		TVC 22C 3 day	cfu/ml	>1000	Y Cov	W1
	25 September 2024		Total Coliform presumpt	cfu/100ml	2	Y Cov	W10
	25 September 2024		Total Coliforms confirmed	cfu/100ml	2	Y Cov	W10
	25 September 2024		E.coli presumptive	cfu/100ml	0	Y Cov	W10
	25 September 2024		Escherichia coli confirmed	cfu/100ml	0	Y Cov	W10
	25 September 2024		Enterococci presumptive	cfu/100ml	0	Y Cov	W7
	25 September 2024		Enterococci confirmed	cfu/100ml	0	Y Cov	W7
	25 September 2024		Clostridium Perfringens, Conf	cfu/100ml	0	Y Cov	W8
	25 September 2024		Vinyl Chloride	ug/l	<0.113	Y Wak	WPC63
	25 September 2024		Qualitative Taste	Text	Analyst Comment	N Cov	W56
	25 September 2024		Qualitative Odour	Text	0	N Cov	W56

Sample Matrix for 24494765: Drinking Water

Analyst Comments for 24494765: This sample has been analysed for Total Coliforms confirmed, Escherichia coli confirmed, Total Coliform presumpt, E.coli presumptive, TVC 22C 3 day, Enterococci confirmed, Enterococci presumptive, Clostridium Perfringens, Conf, Clostridium Perfringens, Pres outside recommended stability times. It is therefore possible that the results provided may be compromised. Confirmation process not been carried out for coliforms due to nature of the sample. Confirmation process not been carried out for coliforms due to nature of the sample. {*/}Unable to analyse the sample for taste due to microbiology analysis not being carried out within stability.{*/} TVC Estimated.

24494766	25 September 2024	330383 - BH1 P3	Clostridium Perfringens, Pres	cfu/100ml	0	Y Cov	W8
	25 September 2024		TVC 22C 3 day	cfu/ml	>1000	Y Cov	W1

This issue replaces all previous issues

Accreditation Codes: Y = UKAS / ISO17025 Accredited, N = Not UKAS / ISO17025 Accredited, M = MCERTS.

Analysed at: CHE = Chester(CH5 3US), COV = Coventry(CV4 9GU), S = Subcontracted, TRB = Subcontracted to Trowbridge(BA14 0XD), WAK = Wakefield(WF5 9TG), F = Data supplied by customer.

For Microbiological determinands 0 or ND=Not Detected, For Legionella ND=Not Detected in volume of sample filtered. The LOD for the Legionella analysis will increase where the volume analysed is <1000g (1g is approximately equivalent to 1ml for sample volume analysed). I/S=Insufficient sample. For soil/sludge samples: AR=As received, DW=Dry weight.

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Certificate of Analysis

ANALYSED BY



Site Name: 24-044134
Sample Source: i2 Analytical UK Ltd
Order No: PO_S_C7219

Report Number: COV/2725090/2024
Samples Received: 26 September 2024
Analysis Complete: 17 October 2024

Issue 3

Sample	Sample Date	Sample Description	Test Description	Unit	Result	Accred.	Method
24494766	25 September 2024	330383 - BH1 P3	Total Coliform presumpt	cfu/100ml	2	Y Cov	W10
	25 September 2024		Total Coliforms confirmed	cfu/100ml	2	Y Cov	W10
	25 September 2024		E.coli presumptive	cfu/100ml	0	Y Cov	W10
	25 September 2024		Escherichia coli confirmed	cfu/100ml	0	Y Cov	W10
	25 September 2024		Enterococci presumptive	cfu/100ml	0	Y Cov	W7
	25 September 2024		Enterococci confirmed	cfu/100ml	0	Y Cov	W7
	25 September 2024		Clostridium Perfringens, Conf	cfu/100ml	0	Y Cov	W8
	25 September 2024		Vinyl Chloride	ug/l	<0.113	Y Wak	WPC63
	25 September 2024		Qualitative Taste	Text	Analyst Comment	N Cov	W56
	25 September 2024		Qualitative Odour	Text	0	N Cov	W56

Sample Matrix for 24494766: Drinking Water

Analyst Comments for 24494766: This sample has been analysed for Total Coliforms confirmed, Escherichia coli confirmed, Total Coliform presumpt, E.coli presumptive, TVC 22C 3 day, Enterococci confirmed, Enterococci presumptive, Clostridium Perfringens, Conf, Clostridium Perfringens, Pres outside recommended stability times. It is therefore possible that the results provided may be compromised. Total coliforms identified as Citrobacter gillenii. {(*)}Unable to analyse the sample for taste due to microbiology analysis not being carried out within stability. {(*)} TVC Estimated.

Signed:



Name: H. Nolan

Date: 17 October 2024

Title: Microbiology Senior Analyst

This issue replaces all previous issues

Accreditation Codes: Y = UKAS / ISO17025 Accredited, N = Not UKAS / ISO17025 Accredited, M = MCERTS.

Analysed at: CHE = Chester(CH5 3US), COV = Coventry(CV4 9GU), S = Subcontracted, TRB = Subcontracted to Trowbridge(BA14 0XD), WAK = Wakefield(WF5 9TG), F = Data supplied by customer.

For Microbiological determinands 0 or ND=Not Detected, For Legionella ND=Not Detected in volume of sample filtered. The LOD for the Legionella analysis will increase where the volume analysed is <1000g (1g is approximately equivalent to 1ml for sample volume analysed). I/S=Insufficient sample. For soil/sludge samples: AR=As received, DW=Dry weight.

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Certificate of Analysis

Report No.: 24-07645-2

Issue No.: 2
Date of Issue 16/10/2024

Customer Details: i2 Analytical Ltd, 7 Woodshots Meadow, Croxley Green Business Park, Watford, Hertfordshire, WD18 8YS, United Kingdom

Customer Contact: Quotes

Customer Order No.: PO_S_C7221

Customer Reference: Not Supplied

Quotation Reference: Q24-02065 (Issue: 29)

Description: 2 water samples

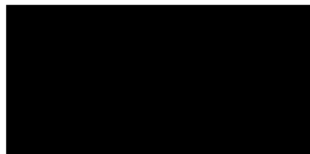
Date Received: 30/09/2024

Date Started: 30/09/2024

Date Completed: 03/10/2024

Test Methods: Details available on request (refer to SOP code against relevant result/s)

Notes: This report replaces issue 1 in its entirety



Approved By: David Long, LIMS Manager

This certificate is issued in accordance with the accreditation requirements of the United Kingdom Accreditation Service.

This certificate shall not be reproduced except in full without the prior written approval of the laboratory.

Observations and interpretations are outside of the scope of UKAS accreditation.

Results reported herein relate only to the items supplied to the laboratory for testing.

Results on an Interim Report are not dry-weight corrected.

Where the laboratory is not responsible for the sampling, results apply to the sample(s) as they were received.

The laboratory shall not be responsible for any information that is supplied by the customer that may affect the validity of results.

Results Summary

Report No.: 24-07645-2

Customer Reference: Not Supplied

Customer Order No: PO_S_C7221

Customer Sample No	328020	328021
Customer Sample ID	24-044134	24-044134
RPS Sample No	70412	70413
Sample Type	WATER	WATER
Sample Matrix	W	W
Sampling Date	24/09/2024	25/09/2024
Sampling Time	15:40	8:00

Determinand	CAS No	Codes	SOP	RL	Units		
epichlorohydrin	106-89-8	N	L034	0.1	µg/L	< 0.10	< 0.10

Comments

Report No.: 24-07645-2

Customer Reference: Not Supplied

Customer Order No: PO_S_C7221

Job	Description	Document History
24-07645	n/a	Included results for sample 70413

Deviating Samples

Report No.: 24-07645-2

Customer Reference: Not Supplied

Customer Order No: PO_S_C7221

Our policy on Deviating Samples has been implemented in accordance with UKAS Policy on Deviating Samples (TPS63).

RPS is not responsible for the integrity of samples as received, unless RPS personnel performed the sampling. Samples submitted may be declared to be deviating.

Where applicable the analysis method remains UKAS accredited, however results reported for a deviating sample may be compromised.

Where no sampling date was supplied, samples have been declared to be deviating. If the date can be supplied, results may be reissued if assessed not deviating.

Where the sample container used was unsuitable or broken, the sample is flagged as deviating and re-sampling/re-submission may be required.

RPS No.	Customer No.	Customer ID	Date Sampled	Containers Received	Deviating	Reason for Deviation
70412	328020	24-044134	24/09/2024	GAB500 500 mL amber glass bottle	No	
70412	328020	24-044134	24/09/2024	GAB500 500 mL amber glass bottle	No	
70413	328021	24-044134	25/09/2024	GAB500 500 mL amber glass bottle	No	
70413	328021	24-044134	25/09/2024	GAB500 500 mL amber glass bottle	No	

Report No.: 24-07645-2

Type	Matrix Code	Description
Food	CEREALPROD	Cereals, grains & products
Food	DRIEDFRUIT	Dried fruits
Food	FRIEDBAKED	Fried or baked food
Food	LEGUME	Legumes
Food	MEAT	Meat
Food	POWDERED	Powdered food
Food	PULSE	Pulses (dried legumes)
Food	VEGETABLES	Vegetables
Gas	TDTUBE	TD Tube
Gas	TENAX	Tenax Tube
Gas	TUBE	Tube
Gas	VAPOUR	Gas
Geological	SED_MAR	Marine Sediment
Geological	SED_RIV	River Sediment
Geological	SLUDG_SOL	Sludge (solid only)
Geological	SOIL	Soil
Liquid	BEVERAGE	Beverage
Liquid	BLOOD	Blood
Liquid	CONDENSATE	Condensate
Liquid	FOAM_LIQ	Liquid foam
Liquid	FORMULATN	Formula
Liquid	LEACHATE	Leachate
Liquid	OIL/GREASE	Oil or grease
Liquid	SLUDG_LIQ	Sludge (liquid only)
Liquid	SOLVENT	Solvent
Liquid	URINE	Urine
Sludge	SLUDG_WHL	Sludge for bulk route
Solid	BADGE	Badge
Solid	BEDDING	Bedding
Solid	BIOTA	Biota (general)
Solid	BIOTA_F	Biota (fish)
Solid	BIOTA_SF	Biota (shellfish)
Solid	CONSTRCTN	Construction materials
Solid	FABRIC	Fabrics & furnishing materials
Solid	FEED	Animal feed
Solid	FERTILISER	Fertiliser
Solid	FILTER	Filter
Solid	FOAM	Solid foam material
Solid	LATEX	Latex/Rubber
Solid	PACKAGING	Packaging material
Solid	PAPER	Paper
Solid	PLANT	Plant (vegetation)
Solid	POWDER	Powder
Solid	SWAB	Swab
Water	BAL	Ballast Water
Water	BIL	Bilge Water
Water	DW	Drinking Water
Water	EFFLUENT	Effluent
Water	GW	Ground Water
Water	INFLUENT	Influent
Water	MINEW	Mine Water
Water	SALTW	Salt Water
Water	SW	Surface Water
Water	TW	Tap Water
Water	W	Unknown Water

Report No.: 24-07645-2

Key Code	Description
N	Not Accredited Test
U	UKAS Accredited Test - UKAS accreditation is only implied if the report carries the UKAS logo
UF	UKAS Flexible Scope Test
M	MCERTS Accredited Test - MCERTS accreditation is only implied if the report carries the MCERTS logo
O	Marine Management Organisation (MMO) Validated
SN	Subcontracted to approved laboratory not accredited for the test
SU	Subcontracted to approved laboratory UKAS Accredited for the test
SM	Subcontracted to approved laboratory MCERTS/UKAS Accredited for the test
SIN	Subcontracted to internal RPS Group laboratory not accredited for the test
SIU	Subcontracted to internal RPS Group laboratory UKAS Accredited for the test
SIM	Subcontracted to internal RPS Group laboratory MCERTS/UKAS Accredited for the test
*	Modified standard method
I/S (in results)	Insufficient Sample
U/S (in results)	Unsuitable Sample
S/C (in results)	See Comments
ND (in results)	Not Detected
DW (in units)	Results are expressed on a dry weight basis
L (in results)	Result is outside normal limits
Sample Type	Sample Retention and Disposal Period
Foodstuff	1 month (if frozen) from the issue date of this report
Waters	2 weeks from the issue date of this report
Other Liquids	1 month from the issue date of this report
Solids / Soils	1 month from the issue date of this report
Sediments	1 month from the issue date of this report

Note: Sample retention may be subject to agreement with the customer for particular projects

Dev code	Description
D	No sampling date provided.
T	No sampling time provided.
Z	Temperature of samples exceeded in transit/storage.
V	Excessive headspace for volatile determinands.
P	Sample submitted without required preservative(s).
C	Incorrect container.
H	Holding time exceeded (sampling to extraction).
X	Holding time exceeded (sampling to receipt).

Note: Where the following information is included in this certificate, it has usually been supplied by the customer: Customer Sample ID, Sample Location, Sample Depth, Sampling Date and Sampling Time. The laboratory shall not be responsible for any information that is supplied by the customer that may affect the validity of results.

Certificate of Analysis

Report No.: 24-07697-2

Issue No.: 2
Date of Issue 18/10/2024

Customer Details: i2 Analytical Ltd, 7 Woodshots Meadow, Croxley Green Business Park, Watford, Hertfordshire, WD18 8YS, United Kingdom

Customer Contact: Quotes

Customer Order No.: PO_S_C7225

Customer Reference: Not Supplied

Quotation Reference: Q24-02065 (Issue: 29)

Description: 1 water sample

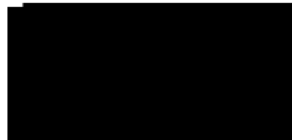
Date Received: 01/10/2024

Date Started: 02/10/2024

Date Completed: 11/10/2024

Test Methods: Details available on request (refer to SOP code against relevant result/s)

Notes: This report replaces issue 1 in its entirety



Approved By: David Long, LIMS Manager

This certificate is issued in accordance with the accreditation requirements of the United Kingdom Accreditation Service.

This certificate shall not be reproduced except in full without the prior written approval of the laboratory.

Observations and interpretations are outside of the scope of UKAS accreditation.

Results reported herein relate only to the items supplied to the laboratory for testing.

Results on an Interim Report are not dry-weight corrected.

Where the laboratory is not responsible for the sampling, results apply to the sample(s) as they were received.

The laboratory shall not be responsible for any information that is supplied by the customer that may affect the validity of results.

Results Summary

Report No.: 24-07697-2

Customer Reference: Not Supplied

Customer Order No: PO_S_C7225

Customer Sample No	330383
RPS Sample No	70615
Sample Type	WATER
Sample Matrix	W
Sampling Date	25/09/2024
Sampling Time	15:00

Determinand	CAS No	Codes	SOP	RL	Units	
epichlorohydrin	106-89-8	N	L034	0.1	µg/L	< 0.10

Comments

Report No.: 24-07697-2

Customer Reference: Not Supplied

Customer Order No: PO_S_C7225

Job	Description	Document History
24-07697	n/a	Sample ID amended.

Deviating Samples

Report No.: 24-07697-2

Customer Reference: Not Supplied

Customer Order No: PO_S_C7225

Our policy on Deviating Samples has been implemented in accordance with UKAS Policy on Deviating Samples (TPS63).

RPS is not responsible for the integrity of samples as received, unless RPS personnel performed the sampling. Samples submitted may be declared to be deviating.

Where applicable the analysis method remains UKAS accredited, however results reported for a deviating sample may be compromised.

Where no sampling date was supplied, samples have been declared to be deviating. If the date can be supplied, results may be reissued if assessed not deviating.

Where the sample container used was unsuitable or broken, the sample is flagged as deviating and re-sampling/re-submission may be required.

RPS No.	Customer No.	Customer ID	Date Sampled	Containers Received	Deviating	Reason for Deviation
70615	330383		25/09/2024	GAB500 500 mL amber glass bottle	No	
70615	330383		25/09/2024	GAB500 500 mL amber glass bottle	No	

Report No.: 24-07697-2

Type	Matrix Code	Description
Food	CEREALPROD	Cereals, grains & products
Food	DRIEDFRUIT	Dried fruits
Food	FRIEDBAKED	Fried or baked food
Food	LEGUME	Legumes
Food	MEAT	Meat
Food	POWDERED	Powdered food
Food	PULSE	Pulses (dried legumes)
Food	VEGETABLES	Vegetables
Gas	TDTUBE	TD Tube
Gas	TENAX	Tenax Tube
Gas	TUBE	Tube
Gas	VAPOUR	Gas
Geological	SED_MAR	Marine Sediment
Geological	SED_RIV	River Sediment
Geological	SLUDG_SOL	Sludge (solid only)
Geological	SOIL	Soil
Liquid	BEVERAGE	Beverage
Liquid	BLOOD	Blood
Liquid	CONDENSATE	Condensate
Liquid	FOAM_LIQ	Liquid foam
Liquid	FORMULATN	Formula
Liquid	LEACHATE	Leachate
Liquid	OIL/GREASE	Oil or grease
Liquid	SLUDG_LIQ	Sludge (liquid only)
Liquid	SOLVENT	Solvent
Liquid	URINE	Urine
Sludge	SLUDG_WHL	Sludge for bulk route
Solid	BADGE	Badge
Solid	BEDDING	Bedding
Solid	BIOTA	Biota (general)
Solid	BIOTA_F	Biota (fish)
Solid	BIOTA_SF	Biota (shellfish)
Solid	CONSTRCTN	Construction materials
Solid	FABRIC	Fabrics & furnishing materials
Solid	FEED	Animal feed
Solid	FERTILISER	Fertiliser
Solid	FILTER	Filter
Solid	FOAM	Solid foam material
Solid	LATEX	Latex/Rubber
Solid	PACKAGING	Packaging material
Solid	PAPER	Paper
Solid	PLANT	Plant (vegetation)
Solid	POWDER	Powder
Solid	SWAB	Swab
Water	BAL	Ballast Water
Water	BIL	Bilge Water
Water	DW	Drinking Water
Water	EFFLUENT	Effluent
Water	GW	Ground Water
Water	INFLUENT	Influent
Water	MINEW	Mine Water
Water	SALTW	Salt Water
Water	SW	Surface Water
Water	TW	Tap Water
Water	W	Unknown Water

Report No.: 24-07697-2

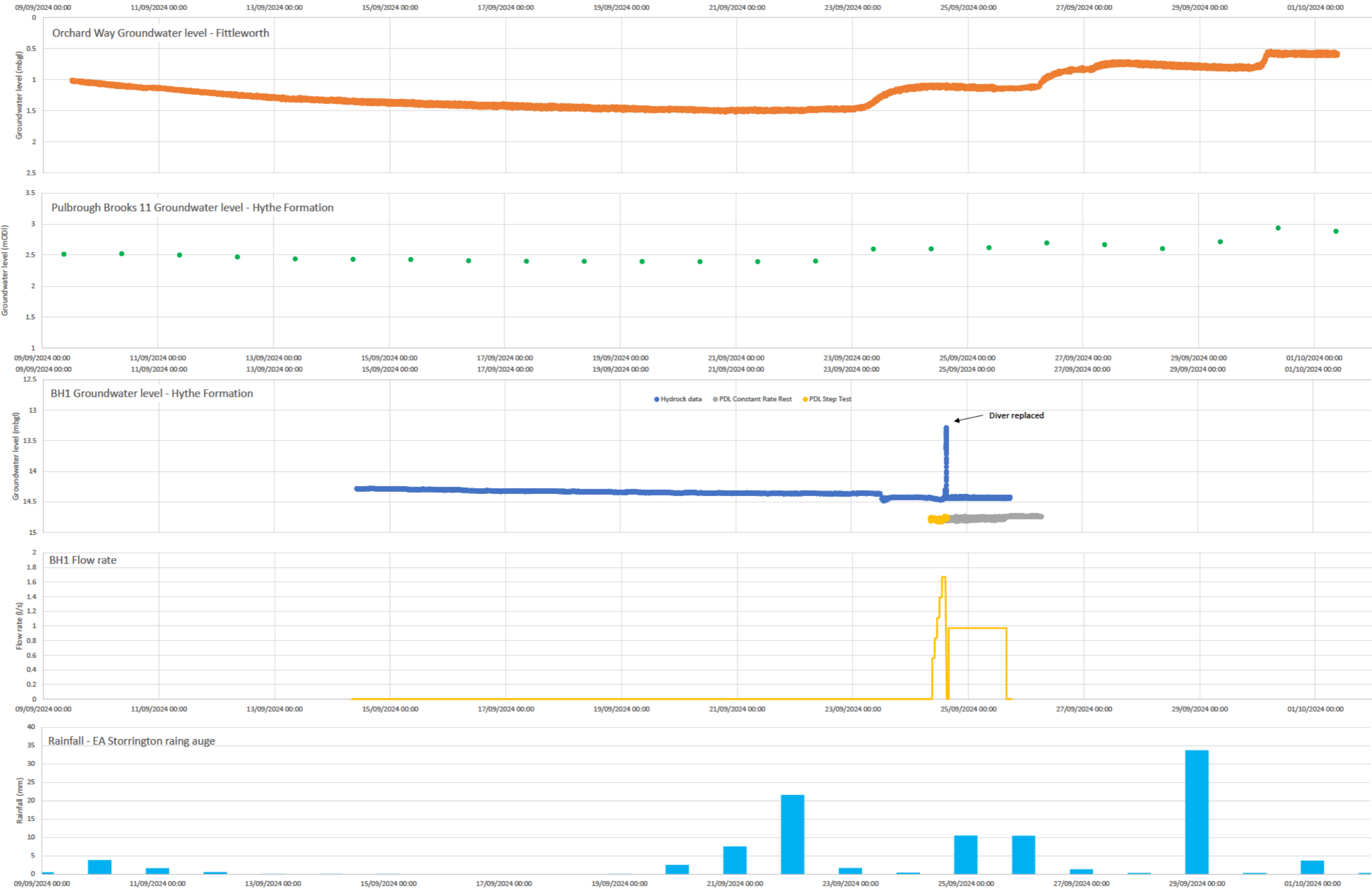
Key Code	Description
N	Not Accredited Test
U	UKAS Accredited Test - UKAS accreditation is only implied if the report carries the UKAS logo
UF	UKAS Flexible Scope Test
M	MCERTS Accredited Test - MCERTS accreditation is only implied if the report carries the MCERTS logo
O	Marine Management Organisation (MMO) Validated
SN	Subcontracted to approved laboratory not accredited for the test
SU	Subcontracted to approved laboratory UKAS Accredited for the test
SM	Subcontracted to approved laboratory MCERTS/UKAS Accredited for the test
SIN	Subcontracted to internal RPS Group laboratory not accredited for the test
SIU	Subcontracted to internal RPS Group laboratory UKAS Accredited for the test
SIM	Subcontracted to internal RPS Group laboratory MCERTS/UKAS Accredited for the test
*	Modified standard method
I/S (in results)	Insufficient Sample
U/S (in results)	Unsuitable Sample
S/C (in results)	See Comments
ND (in results)	Not Detected
DW (in units)	Results are expressed on a dry weight basis
L (in results)	Result is outside normal limits
Sample Type	Sample Retention and Disposal Period
Foodstuff	1 month (if frozen) from the issue date of this report
Waters	2 weeks from the issue date of this report
Other Liquids	1 month from the issue date of this report
Solids / Soils	1 month from the issue date of this report
Sediments	1 month from the issue date of this report

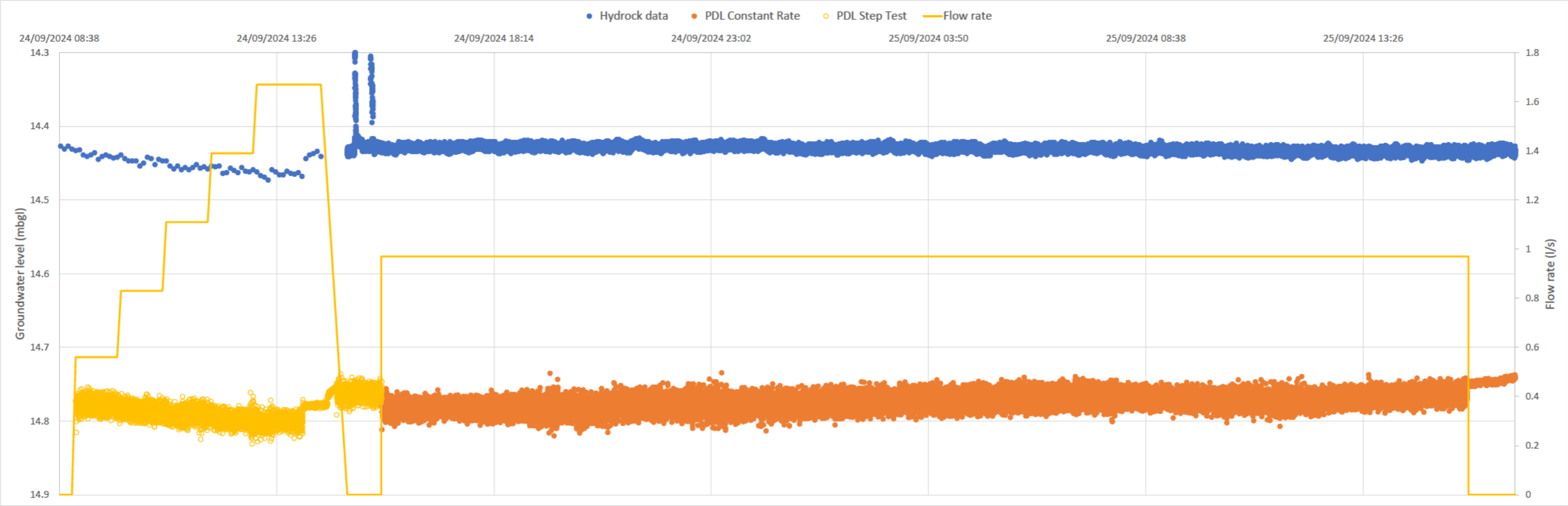
Note: Sample retention may be subject to agreement with the customer for particular projects

Dev code	Description
D	No sampling date provided.
T	No sampling time provided.
Z	Temperature of samples exceeded in transit/storage.
V	Excessive headspace for volatile determinands.
P	Sample submitted without required preservative(s).
C	Incorrect container.
H	Holding time exceeded (sampling to extraction).
X	Holding time exceeded (sampling to receipt).

Note: Where the following information is included in this certificate, it has usually been supplied by the customer: Customer Sample ID, Sample Location, Sample Depth, Sampling Date and Sampling Time. The laboratory shall not be responsible for any information that is supplied by the customer that may affect the validity of results.

Appendix G Groundwater level data





Appendix H Groundsure Report

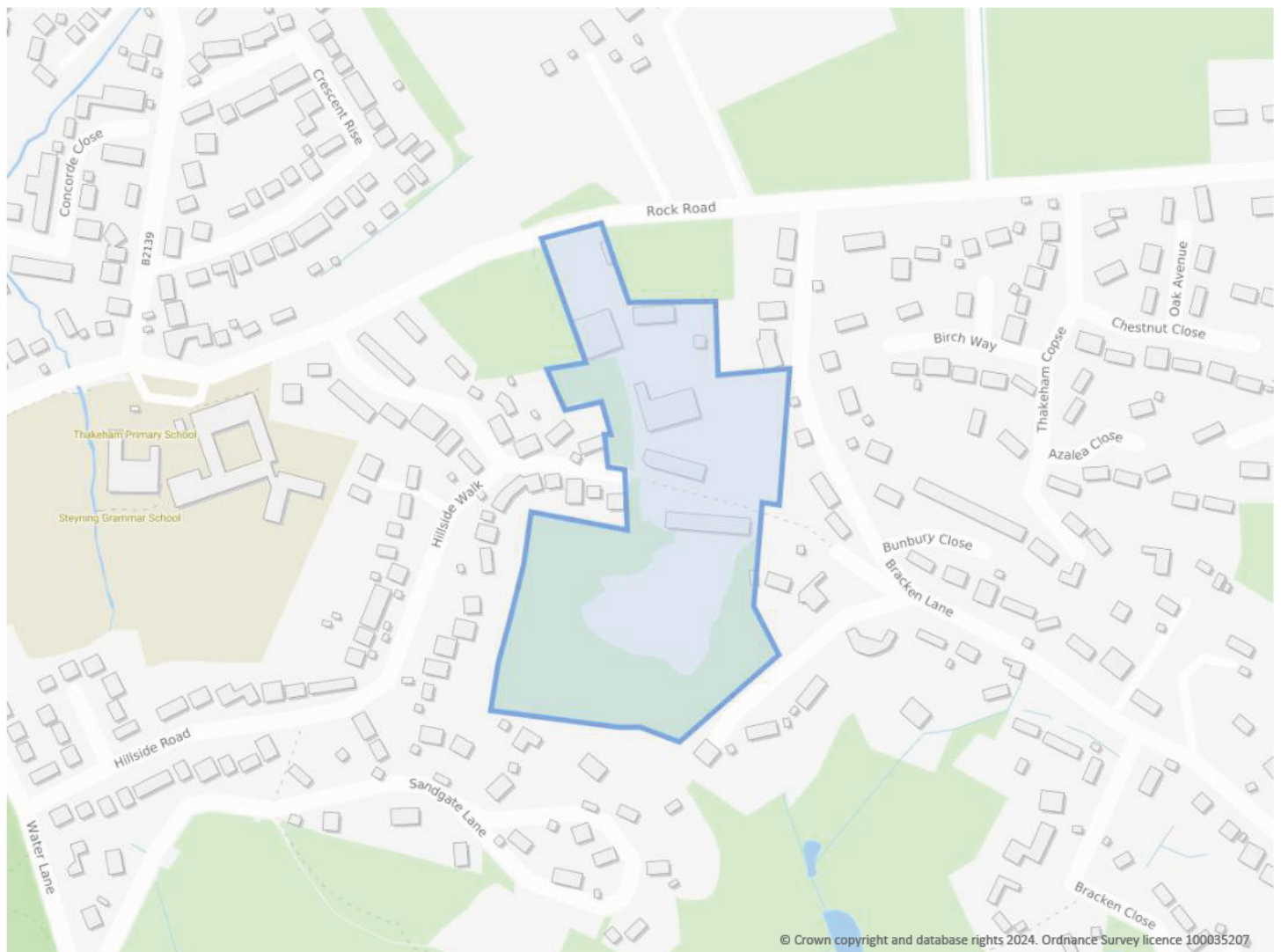
08347-GELO

Order Details

Date: 08/11/2024
Your ref: PO37797
Our Ref: HYD-RUN-II2-BUB-YCC

Site Details

Location: 510393 114876
Area: 4.91 ha
Authority: [Horsham District Council](#) ↗



[Summary of findings](#)

[p.2 > Aerial image](#)

[p.9 >](#)

[OS MasterMap site plan](#)

[p.14 > Insight User Guide](#) ↗

Contact us with any questions at:

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Summary of findings

Page	Section	Past land use >	On site	0-50m	50-250m	250-500m	500-2000m
15 >	1.1 >	Historical industrial land uses >	15	3	5	10	-
17 >	1.2 >	Historical tanks >	1	0	0	0	-
17 >	1.3 >	Historical energy features >	0	0	9	4	-
18	1.4	Historical petrol stations	0	0	0	0	-
18 >	1.5 >	Historical garages >	0	0	3	0	-
19	1.6	Historical military land	0	0	0	0	-
Page	Section	Past land use - un-grouped >	On site	0-50m	50-250m	250-500m	500-2000m
20 >	2.1 >	Historical industrial land uses >	16	3	5	14	-
22 >	2.2 >	Historical tanks >	1	0	0	0	-
22 >	2.3 >	Historical energy features >	0	0	17	8	-
23	2.4	Historical petrol stations	0	0	0	0	-
24 >	2.5 >	Historical garages >	0	0	3	0	-
Page	Section	Waste and landfill >	On site	0-50m	50-250m	250-500m	500-2000m
25	3.1	Active or recent landfill	0	0	0	0	-
25	3.2	Historical landfill (BGS records)	0	0	0	0	-
26	3.3	Historical landfill (LA/mapping records)	0	0	0	0	-
26 >	3.4 >	Historical landfill (EA/NRW records) >	1	0	0	0	-
26	3.5	Historical waste sites	0	0	0	0	-
26	3.6	Licensed waste sites	0	0	0	0	-
27 >	3.7 >	Waste exemptions >	0	0	0	4	-
Page	Section	Current industrial land use >	On site	0-50m	50-250m	250-500m	500-2000m
28 >	4.1 >	Recent industrial land uses >	1	0	3	-	-
29 >	4.2 >	Current or recent petrol stations >	0	0	0	1	-
29	4.3	Electricity cables	0	0	0	0	-
29	4.4	Gas pipelines	0	0	0	0	-
29	4.5	Sites determined as Contaminated Land	0	0	0	0	-



30	4.6	Control of Major Accident Hazards (COMAH)	0	0	0	0	-
30	4.7	Regulated explosive sites	0	0	0	0	-
30	4.8	Hazardous substance storage/usage	0	0	0	0	-
30	4.9	Historical licensed industrial activities (IPC)	0	0	0	0	-
30	4.10	Licensed industrial activities (Part A(1))	0	0	0	0	-
31 >	4.11 >	Licensed pollutant release (Part A(2)/B) >	1	0	0	0	-
31	4.12	Radioactive Substance Authorisations	0	0	0	0	-
31 >	4.13 >	Licensed Discharges to controlled waters >	0	0	4	4	-
33	4.14	Pollutant release to surface waters (Red List)	0	0	0	0	-
33	4.15	Pollutant release to public sewer	0	0	0	0	-
33	4.16	List 1 Dangerous Substances	0	0	0	0	-
33	4.17	List 2 Dangerous Substances	0	0	0	0	-
33 >	4.18 >	Pollution Incidents (EA/NRW) >	0	2	0	2	-
34	4.19	Pollution inventory substances	0	0	0	0	-
34	4.20	Pollution inventory waste transfers	0	0	0	0	-
35	4.21	Pollution inventory radioactive waste	0	0	0	0	-
Page	Section	Hydrogeology >	On site	0-50m	50-250m	250-500m	500-2000m
36 >	5.1 >	Superficial aquifer >	Identified (within 500m)				
38 >	5.2 >	Bedrock aquifer >	Identified (within 500m)				
40 >	5.3 >	Groundwater vulnerability >	Identified (within 50m)				
41	5.4	Groundwater vulnerability- soluble rock risk	None (within 0m)				
41	5.5	Groundwater vulnerability- local information	None (within 0m)				
42 >	5.6 >	Groundwater abstractions >	0	0	0	2	11
45	5.7	Surface water abstractions	0	0	0	0	0
46 >	5.8 >	Potable abstractions >	0	0	0	0	2
46	5.9	Source Protection Zones	0	0	0	0	-
47	5.10	Source Protection Zones (confined aquifer)	0	0	0	0	-
Page	Section	Hydrology >	On site	0-50m	50-250m	250-500m	500-2000m
48 >	6.1 >	Water Network (OS MasterMap) >	0	0	21	-	-



50 >	6.2 >	Surface water features >	0	0	13	-	-
50 >	6.3 >	WFD Surface water body catchments >	1	-	-	-	-
51 >	6.4 >	WFD Surface water bodies >	0	0	0	-	-
51 >	6.5 >	WFD Groundwater bodies >	1	-	-	-	-
Page	Section	River and coastal flooding	On site	0-50m	50-250m	250-500m	500-2000m
52	7.1	Risk of flooding from rivers and the sea	None (within 50m)				
52	7.2	Historical Flood Events	0	0	0	-	-
52	7.3	Flood Defences	0	0	0	-	-
53	7.4	Areas Benefiting from Flood Defences	0	0	0	-	-
53	7.5	Flood Storage Areas	0	0	0	-	-
54	7.6	Flood Zone 2	None (within 50m)				
54	7.7	Flood Zone 3	None (within 50m)				
Page	Section	Surface water flooding >					
55 >	8.1 >	Surface water flooding >	1 in 30 year, 0.1m - 0.3m (within 50m)				
Page	Section	Groundwater flooding >					
57 >	9.1 >	Groundwater flooding >	Negligible (within 50m)				
Page	Section	Environmental designations >	On site	0-50m	50-250m	250-500m	500-2000m
58 >	10.1 >	Sites of Special Scientific Interest (SSSI) >	0	0	0	1	1
59	10.2	Conserved wetland sites (Ramsar sites)	0	0	0	0	0
59	10.3	Special Areas of Conservation (SAC)	0	0	0	0	0
59	10.4	Special Protection Areas (SPA)	0	0	0	0	0
59	10.5	National Nature Reserves (NNR)	0	0	0	0	0
60	10.6	Local Nature Reserves (LNR)	0	0	0	0	0
60 >	10.7 >	Designated Ancient Woodland >	0	0	0	0	11
61	10.8	Biosphere Reserves	0	0	0	0	0
61	10.9	Forest Parks	0	0	0	0	0
61	10.10	Marine Conservation Zones	0	0	0	0	0
61	10.11	Green Belt	0	0	0	0	0
61	10.12	Proposed Ramsar sites	0	0	0	0	0



62	10.13	Possible Special Areas of Conservation (pSAC)	0	0	0	0	0
62	10.14	Potential Special Protection Areas (pSPA)	0	0	0	0	0
62	10.15	Nitrate Sensitive Areas	0	0	0	0	0
62	10.16	Nitrate Vulnerable Zones	0	0	0	0	0
63 >	10.17 >	SSSI Impact Risk Zones >	3	-	-	-	-
65 >	10.18 >	SSSI Units >	0	0	0	1	1
Page	Section	Visual and cultural designations >	On site	0-50m	50-250m	250-500m	500-2000m
67	11.1	World Heritage Sites	0	0	0	-	-
68	11.2	Area of Outstanding Natural Beauty	0	0	0	-	-
68	11.3	National Parks	0	0	0	-	-
68 >	11.4 >	Listed Buildings >	0	0	1	-	-
69	11.5	Conservation Areas	0	0	0	-	-
69	11.6	Scheduled Ancient Monuments	0	0	0	-	-
69	11.7	Registered Parks and Gardens	0	0	0	-	-
Page	Section	Agricultural designations >	On site	0-50m	50-250m	250-500m	500-2000m
70 >	12.1 >	Agricultural Land Classification >	Grade 4 (within 250m)				
71	12.2	Open Access Land	0	0	0	-	-
71 >	12.3 >	Tree Felling Licences >	0	0	2	-	-
72	12.4	Environmental Stewardship Schemes	0	0	0	-	-
72	12.5	Countryside Stewardship Schemes	0	0	0	-	-
Page	Section	Habitat designations >	On site	0-50m	50-250m	250-500m	500-2000m
73 >	13.1 >	Priority Habitat Inventory >	7	3	17	-	-
75 >	13.2 >	Habitat Networks >	0	0	2	-	-
75	13.3	Open Mosaic Habitat	0	0	0	-	-
75	13.4	Limestone Pavement Orders	0	0	0	-	-
Page	Section	Geology 1:10,000 scale >	On site	0-50m	50-250m	250-500m	500-2000m
76 >	14.1 >	10k Availability >	Identified (within 500m)				
78 >	14.2 >	Artificial and made ground (10k) >	2	0	0	2	-
80 >	14.3 >	Superficial geology (10k) >	0	0	1	3	-

81	14.4	Landslip (10k)	0	0	0	0	-
82 >	14.5 >	Bedrock geology (10k) >	3	1	0	5	-
83	14.6	Bedrock faults and other linear features (10k)	0	0	0	0	-
Page	Section	Geology 1:50,000 scale >	On site	0-50m	50-250m	250-500m	500-2000m
84 >	15.1 >	50k Availability >	Identified (within 500m)				
85 >	15.2 >	Artificial and made ground (50k) >	2	0	0	2	-
86 >	15.3 >	Artificial ground permeability (50k) >	1	0	-	-	-
87 >	15.4 >	Superficial geology (50k) >	0	0	1	2	-
88	15.5	Superficial permeability (50k)	None (within 50m)				
88	15.6	Landslip (50k)	0	0	0	0	-
88	15.7	Landslip permeability (50k)	None (within 50m)				
89 >	15.8 >	Bedrock geology (50k) >	2	0	1	4	-
90 >	15.9 >	Bedrock permeability (50k) >	Identified (within 50m)				
90	15.10	Bedrock faults and other linear features (50k)	0	0	0	0	-
Page	Section	Boreholes	On site	0-50m	50-250m	250-500m	500-2000m
91	16.1	BGS Boreholes	0	0	0	-	-
Page	Section	Natural ground subsidence >					
92 >	17.1 >	Shrink swell clays >	Negligible (within 50m)				
93 >	17.2 >	Running sands >	Low (within 50m)				
95 >	17.3 >	Compressible deposits >	Very low (within 50m)				
97 >	17.4 >	Collapsible deposits >	Very low (within 50m)				
98 >	17.5 >	Landslides >	Very low (within 50m)				
99 >	17.6 >	Ground dissolution of soluble rocks >	Negligible (within 50m)				
Page	Section	Mining and ground workings >	On site	0-50m	50-250m	250-500m	500-2000m
101 >	18.1 >	BritPits >	0	0	0	4	-
102 >	18.2 >	Surface ground workings >	4	3	10	-	-
103	18.3	Underground workings	0	0	0	0	0
103	18.4	Underground mining extents	0	0	0	0	-
104 >	18.5 >	Historical Mineral Planning Areas >	0	0	0	3	-



104 >	18.6 >	Non-coal mining >	2	0	0	2	2
105	18.7	JPB mining areas	None (within 0m)				
105	18.8	The Coal Authority non-coal mining	0	0	0	0	-
105	18.9	Researched mining	0	0	0	0	-
106	18.10	Mining record office plans	0	0	0	0	-
106	18.11	BGS mine plans	0	0	0	0	-
106	18.12	Coal mining	None (within 0m)				
106	18.13	Brine areas	None (within 0m)				
107	18.14	Gypsum areas	None (within 0m)				
107	18.15	Tin mining	None (within 0m)				
107	18.16	Clay mining	None (within 0m)				
Page	Section	Ground cavities and sinkholes	On site	0-50m	50-250m	250-500m	500-2000m
108	19.1	Natural cavities	0	0	0	0	-
108	19.2	Mining cavities	0	0	0	0	0
108	19.3	Reported recent incidents	0	0	0	0	-
108	19.4	Historical incidents	0	0	0	0	-
109	19.5	National karst database	0	0	0	0	-
Page	Section	Radon >					
110 >	20.1 >	Radon >	Between 1% and 3% (within 0m)				
Page	Section	Soil chemistry >	On site	0-50m	50-250m	250-500m	500-2000m
112 >	21.1 >	BGS Estimated Background Soil Chemistry >	3	5	-	-	-
112	21.2	BGS Estimated Urban Soil Chemistry	0	0	-	-	-
113	21.3	BGS Measured Urban Soil Chemistry	0	0	-	-	-
Page	Section	Railway infrastructure and projects >	On site	0-50m	50-250m	250-500m	500-2000m
114	22.1	Underground railways (London)	0	0	0	-	-
114	22.2	Underground railways (Non-London)	0	0	0	-	-
115	22.3	Railway tunnels	0	0	0	-	-
115 >	22.4 >	Historical railway and tunnel features >	11	0	0	-	-
116	22.5	Royal Mail tunnels	0	0	0	-	-



116	22.6	Historical railways	0	0	0	-	-
116	22.7	Railways	0	0	0	-	-
116	22.8	Crossrail 2	0	0	0	0	-
116	22.9	HS2	0	0	0	0	-

Recent aerial photograph



Capture Date: 22/04/2021

Site Area: 4.91ha



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Date: 8 November 2024

Recent site history - 2018 aerial photograph



Aerial photography supplied by Getmapping PLC. © Copyright Getmapping PLC 2024. All Rights Reserved.

Capture Date: 26/06/2018

Site Area: 4.91ha



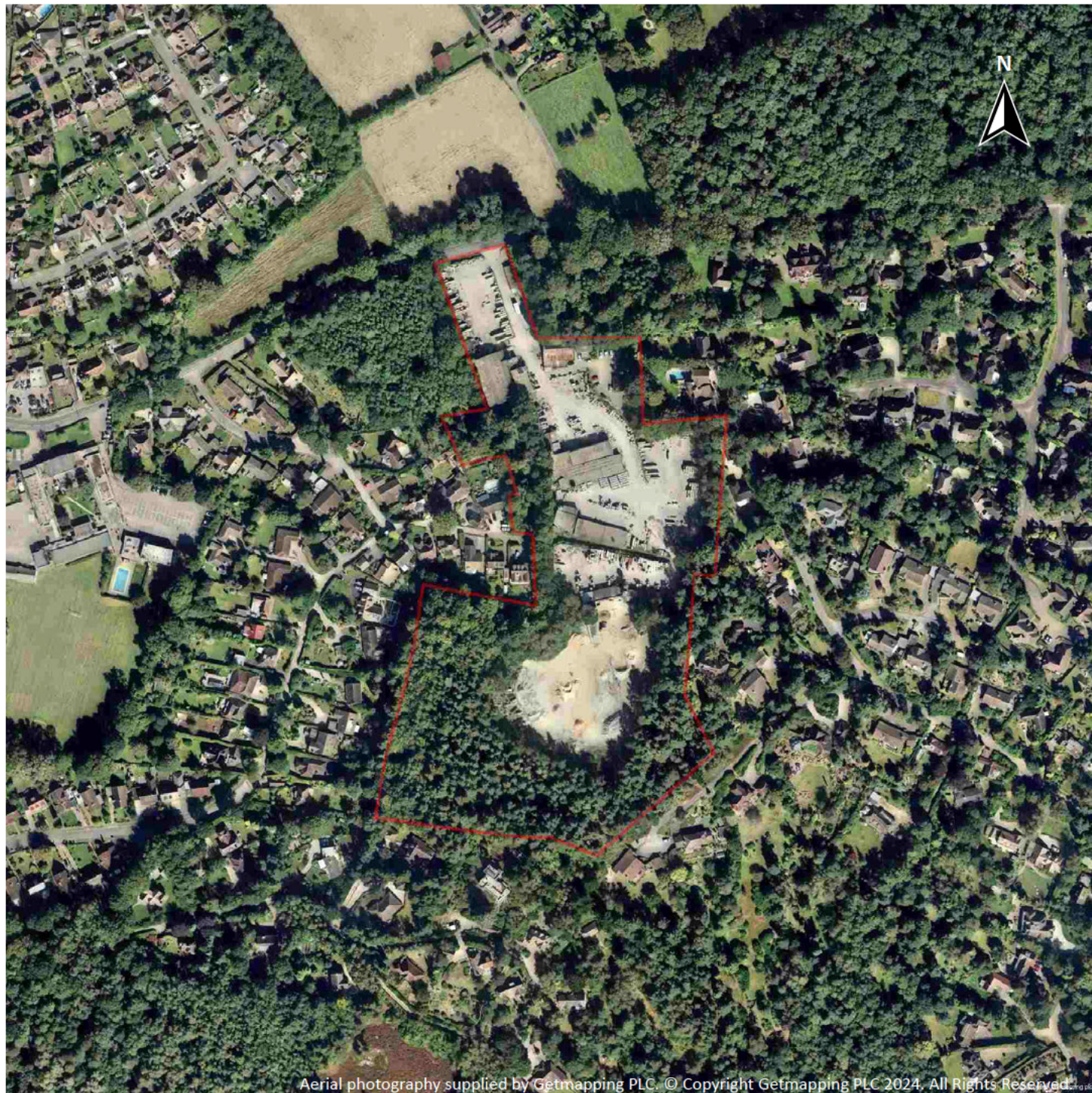
Contact us with any questions at:

info@groundsure.com

01273 257 755

Date: 8 November 2024

Recent site history - 2012 aerial photograph



Capture Date: 31/08/2012

Site Area: 4.91ha



Contact us with any questions at:

info@groundsure.com

01273 257 755

Date: 8 November 2024

Recent site history - 2009 aerial photograph



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Capture Date: 22/08/2009

Site Area: 4.91ha



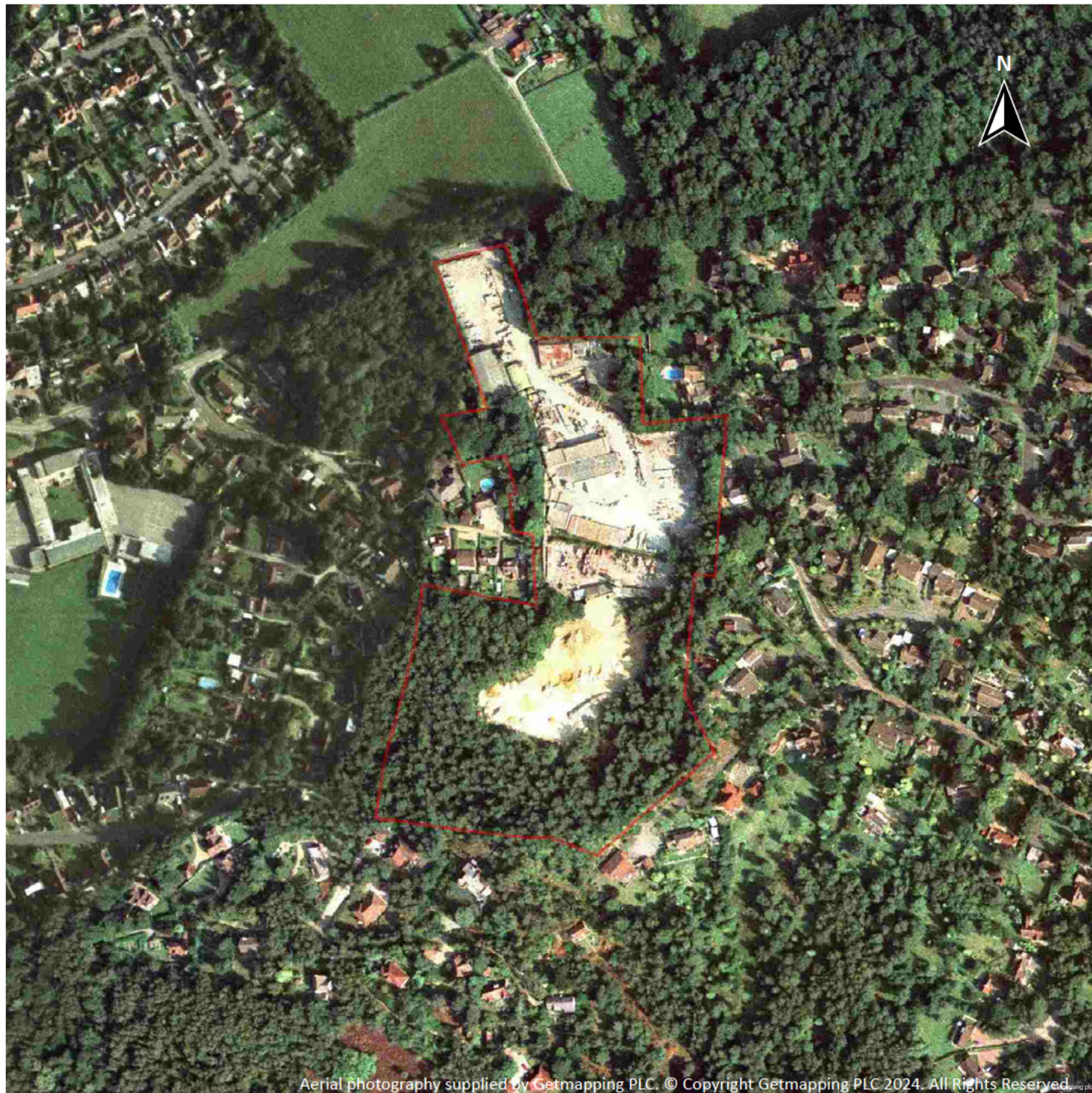
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Date: 8 November 2024

Recent site history - 1999 aerial photograph



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Capture Date: 29/08/1999

Site Area: 4.91ha



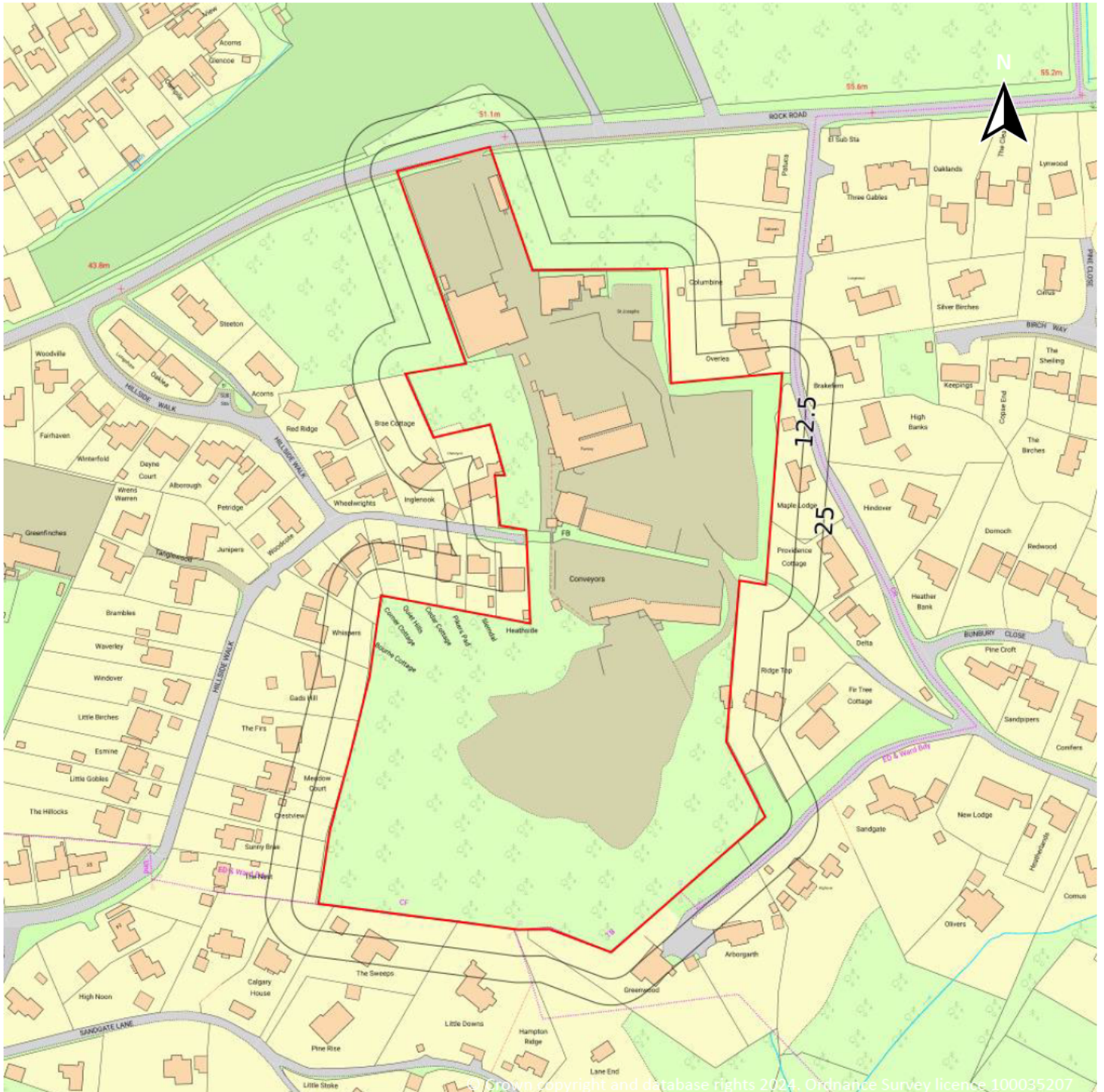
Contact us with any questions at:

info@groundsure.com

01273 257 755

Date: 8 November 2024

OS MasterMap site plan



Site Area: 4.91ha



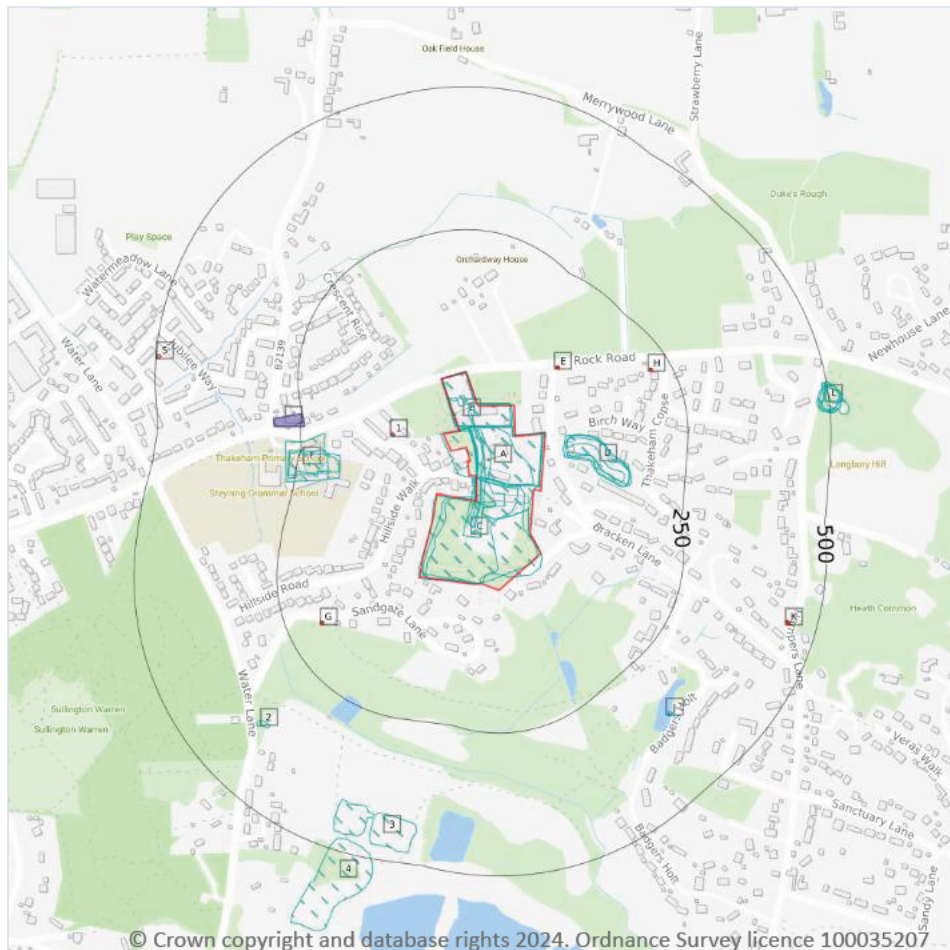
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Date: 8 November 2024

1 Past land use



- Site Outline
- Search buffers in metres (m)
- Historical industrial land uses
- Historical tanks
- Historical energy features
- Historical garages

1.1 Historical industrial land uses

Records within 500m

33

Potentially contaminative land use features digitised from historical Ordnance Survey mapping at 1:10,000 and 1:10,560 scale, intelligently grouped into contiguous features. To prevent misrepresentation of the size of historical features at any given time, features are only grouped if they have similar geometries within immediately preceding or succeeding map editions. See section 2 for a breakdown of grouping if required. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

Features are displayed on the Past land use map on [page 15](#) >

ID	Location	Land use	Dates present	Group ID
A	On site	Works	1971	2167179



ID	Location	Land use	Dates present	Group ID
A	On site	Unspecified Works	1980	2235745
A	On site	Tile Works	1946	2271798
A	On site	Unspecified Works	1961	2284123
A	On site	Railway Sidings	1946	2284385
A	On site	Railway Sidings	1980	2292500
A	On site	Railway Sidings	1971	2304725
A	On site	Railway Sidings	1961	2306757
B	On site	Unspecified Commercial/Industrial	1957	2171252
B	On site	Tile Works	1980	2207619
B	On site	Railway Sidings	1957	2249228
C	On site	Wind Pump	1971	2173249
C	On site	Unspecified Disused Pit	1980	2198877
C	On site	Sand Pit	1946	2231013
C	On site	Sand Pit	1961 - 1971	2236139
D	34m NE	Unspecified Heap	1961	2186777
D	37m NE	Unspecified Ground Workings	1971	2163367
D	39m NE	Sand Pit	1946	2174099
F	173m W	Unspecified Workhouse	1909	2285216
F	175m W	Unspecified Workhouse	1896	2217035
F	193m W	Unspecified Workhouse	1875	2250915
F	203m W	Unspecified Tank	1875	2190705
F	227m W	Unspecified Tank	1875	2190706
J	355m SE	Boat House	1914 - 1961	2267992
J	360m SE	Boat House	1971	2231560
2	369m SW	Unspecified Heap	1875	2186776
3	411m S	Sand Pit	1980	2174100
4	476m SW	Sand Pit	1961 - 1971	2327357
L	478m E	Old Sand Pit	1896	2185996



ID	Location	Land use	Dates present	Group ID
L	481m E	Unspecified Pit	1957	2282523
L	484m E	Unspecified Pit	1909 - 1946	2220373
L	487m E	Sand Pit	1875	2268754
L	491m E	Sand Pit	1980	2247812

This data is sourced from Ordnance Survey / Groundsure.

1.2 Historical tanks

Records within 500m

1

Tank features digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale, intelligently grouped into contiguous features. To prevent misrepresentation of the size of historical features at any given time, features are only grouped if they have similar geometries within immediately preceding or succeeding map editions. See section 2 for a breakdown of grouping if required. Grouped and the original ungrouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

Features are displayed on the Past land use map on [page 15 >](#)

ID	Location	Land use	Dates present	Group ID
A	On site	Unspecified Tank	1972	394340

This data is sourced from Ordnance Survey / Groundsure.

1.3 Historical energy features

Records within 500m

13

Energy features digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale, intelligently grouped into contiguous features. To prevent misrepresentation of the size of historical features at any given time, features are only grouped if they have similar geometries within immediately preceding or succeeding map editions. See section 2 for a breakdown of grouping if required. Grouped and the original ungrouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

Features are displayed on the Past land use map on [page 15 >](#)

ID	Location	Land use	Dates present	Group ID
1	85m NW	Electricity Substation	1972 - 1993	283059
E	98m NE	Electricity Substation	1966	302094
E	98m NE	Electricity Substation	1993	311792



ID	Location	Land use	Dates present	Group ID
E	99m NE	Electricity Substation	1974	319011
G	186m SW	Electricity Substation	1972	289148
G	186m SW	Electricity Substation	1993	297609
G	186m SW	Electricity Substation	1980 - 1990	297015
H	213m NE	Electricity Substation	1966	312095
H	213m NE	Electricity Substation	1993	318753
K	445m SE	Electricity Substation	1993	318605
K	445m SE	Electricity Substation	1980 - 1990	279424
K	446m SE	Electricity Substation	1972	301237
5	491m NW	Electricity Substation	1982 - 1991	287366

This data is sourced from Ordnance Survey / Groundsure.

1.4 Historical petrol stations

Records within 500m	0
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Petrol stations digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale, intelligently grouped into contiguous features. To prevent misrepresentation of the size of historical features at any given time, features are only grouped if they have similar geometries within immediately preceding or succeeding map editions. See section 2 for a breakdown of grouping if required. Grouped and the original ungrouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

This data is sourced from Ordnance Survey / Groundsure.

1.5 Historical garages

Records within 500m	3
---------------------	---

Garages digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale, intelligently grouped into contiguous features. To prevent misrepresentation of the size of historical features at any given time, features are only grouped if they have similar geometries within immediately preceding or succeeding map editions. See section 2 for a breakdown of grouping if required. Grouped and the original ungrouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

Features are displayed on the Past land use map on [page 15 >](#)

ID	Location	Land use	Dates present	Group ID
I	243m W	Garage	1966	82819



ID	Location	Land use	Dates present	Group ID
I	244m W	Garage	1974	85787
I	244m W	Garage	1993	88260

This data is sourced from Ordnance Survey / Groundsure.

1.6 Historical military land

Records within 500m

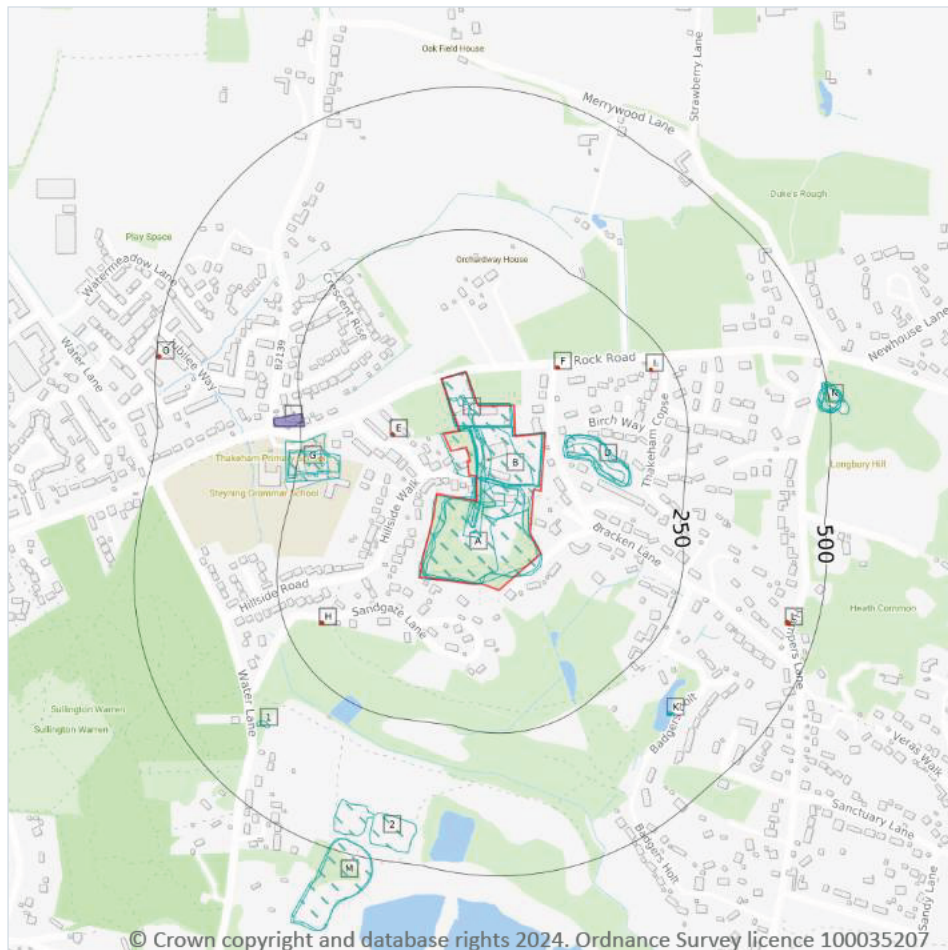
0

Areas of military land digitised from multiple sources including the National Archives, local records, MOD records and verified other sources, intelligently grouped into contiguous features.

This data is sourced from Ordnance Survey / Groundsure / other sources.



2 Past land use - un-grouped



- Site Outline
- Search buffers in metres (m)
- Historical industrial land uses
- Historical tanks
- Historical energy features
- Historical garages

2.1 Historical industrial land uses

Records within 500m

38

Potentially contaminative land use features digitised from historical Ordnance Survey mapping at 1:10,000 and 10,560 scale. Any records shown are available intelligently grouped in section 1. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

Features are displayed on the Past land use - un-grouped map on [page 20](#) >

ID	Location	Land Use	Date	Group ID
A	On site	Unspecified Disused Pit	1980	2198877
A	On site	Sand Pit	1961	2236139
A	On site	Sand Pit	1946	2231013



ID	Location	Land Use	Date	Group ID
A	On site	Wind Pump	1971	2173249
A	On site	Sand Pit	1971	2236139
B	On site	Unspecified Works	1980	2235745
B	On site	Railway Sidings	1980	2292500
B	On site	Railway Sidings	1971	2304725
B	On site	Works	1971	2167179
B	On site	Railway Sidings	1946	2284385
B	On site	Tile Works	1946	2271798
B	On site	Railway Sidings	1961	2306757
B	On site	Unspecified Works	1961	2284123
C	On site	Unspecified Commercial/Industrial	1957	2171252
C	On site	Railway Sidings	1957	2249228
C	On site	Tile Works	1980	2207619
D	34m NE	Unspecified Heap	1961	2186777
D	37m NE	Unspecified Ground Workings	1971	2163367
D	39m NE	Sand Pit	1946	2174099
G	173m W	Unspecified Workhouse	1909	2285216
G	175m W	Unspecified Workhouse	1896	2217035
G	193m W	Unspecified Workhouse	1875	2250915
G	203m W	Unspecified Tank	1875	2190705
G	227m W	Unspecified Tank	1875	2190706
K	355m SE	Boat House	1914	2267992
K	358m SE	Boat House	1961	2267992
K	358m SE	Boat House	1914	2267992
K	360m SE	Boat House	1971	2231560
1	369m SW	Unspecified Heap	1875	2186776
2	411m S	Sand Pit	1980	2174100
M	476m SW	Sand Pit	1961	2327357



ID	Location	Land Use	Date	Group ID
M	476m S	Sand Pit	1971	2327357
N	478m E	Old Sand Pit	1896	2185996
N	481m E	Unspecified Pit	1957	2282523
N	484m E	Unspecified Pit	1946	2220373
N	484m E	Unspecified Pit	1909	2220373
N	487m E	Sand Pit	1875	2268754
N	491m E	Sand Pit	1980	2247812

This data is sourced from Ordnance Survey / Groundsure.

2.2 Historical tanks

Records within 500m

1

Tank features digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale. Any records shown are available intelligently grouped in section 1. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

Features are displayed on the Past land use - un-grouped map on [page 20](#) >

ID	Location	Land Use	Date	Group ID
B	On site	Unspecified Tank	1972	394340

This data is sourced from Ordnance Survey / Groundsure.

2.3 Historical energy features

Records within 500m

25

Energy features digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale. Any records shown are available intelligently grouped in section 1. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

Features are displayed on the Past land use - un-grouped map on [page 20](#) >

ID	Location	Land Use	Date	Group ID
E	85m NW	Electricity Substation	1972	283059
E	85m NW	Electricity Substation	1980	283059
E	85m NW	Electricity Substation	1985	283059



ID	Location	Land Use	Date	Group ID
E	85m NW	Electricity Substation	1990	283059
E	85m NW	Electricity Substation	1990	283059
E	85m NW	Electricity Substation	1993	283059
F	98m NE	Electricity Substation	1966	302094
F	98m NE	Electricity Substation	1993	311792
F	99m NE	Electricity Substation	1974	319011
H	186m SW	Electricity Substation	1972	289148
H	186m SW	Electricity Substation	1993	297609
H	186m SW	Electricity Substation	1980	297015
H	186m SW	Electricity Substation	1985	297015
H	186m SW	Electricity Substation	1990	297015
H	186m SW	Electricity Substation	1990	297015
I	213m NE	Electricity Substation	1966	312095
I	213m NE	Electricity Substation	1993	318753
L	445m SE	Electricity Substation	1993	318605
L	445m SE	Electricity Substation	1980	279424
L	445m SE	Electricity Substation	1985	279424
L	445m SE	Electricity Substation	1990	279424
L	445m SE	Electricity Substation	1990	279424
L	446m SE	Electricity Substation	1972	301237
O	491m NW	Electricity Substation	1982	287366
O	493m NW	Electricity Substation	1991	287366

This data is sourced from Ordnance Survey / Groundsure.

2.4 Historical petrol stations

Records within 500m

0

Petrol stations digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale. Any records shown are available intelligently grouped in section 1. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.



This data is sourced from Ordnance Survey / Groundsure.

2.5 Historical garages

Records within 500m

3

Garages digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale. Any records shown are available intelligently grouped in section 1. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

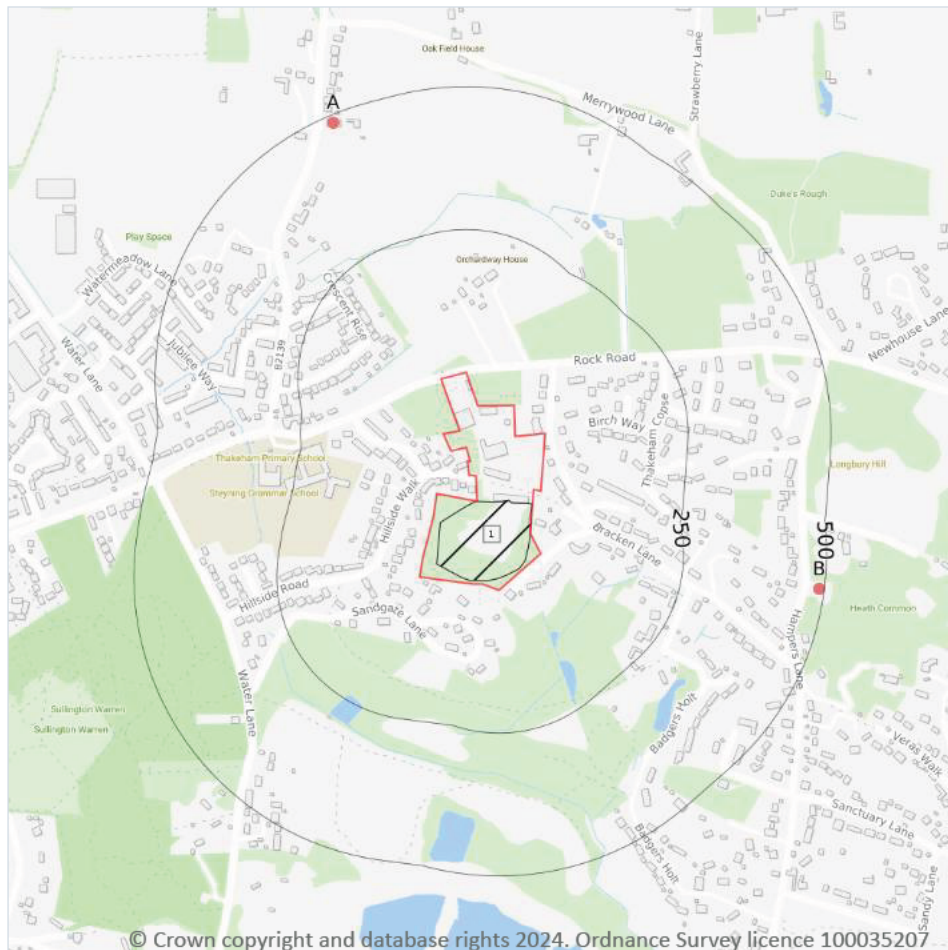
Features are displayed on the Past land use - un-grouped map on [page 20 >](#)

ID	Location	Land Use	Date	Group ID
J	243m W	Garage	1966	82819
J	244m W	Garage	1974	85787
J	244m W	Garage	1993	88260

This data is sourced from Ordnance Survey / Groundsure.



3 Waste and landfill



- Site Outline
- Search buffers in metres (m)
- Historical landfill (EA/NRW)
- Waste exemptions

3.1 Active or recent landfill

Records within 500m

0

Active or recently closed landfill sites under Environment Agency/Natural Resources Wales regulation.

This data is sourced from the Environment Agency and Natural Resources Wales.

3.2 Historical landfill (BGS records)

Records within 500m

0

Landfill sites identified on a survey carried out on behalf of the DoE in 1973. These sites may have been closed or operational at this time.

This data is sourced from the British Geological Survey.



3.3 Historical landfill (LA/mapping records)

Records within 500m

0

Landfill sites identified from Local Authority records and high detail historical mapping.

This data is sourced from the Ordnance Survey/Groundsure and Local Authority records.

3.4 Historical landfill (EA/NRW records)

Records within 500m

1

Known historical (closed) landfill sites (e.g. sites where there is no PPC permit or waste management licence currently in force). This includes sites that existed before the waste licensing regime and sites that have been licensed in the past but where a licence has been revoked, ceased to exist or surrendered and a certificate of completion has been issued.

Features are displayed on the Waste and landfill map on [page 25 >](#)

ID	Location	Details		
1	On site	Site Address: Thakeham Tiles, Storrington, Sussex Licence Holder Address: -	Waste Licence: Yes Site Reference: WD27/212, WD13/38 Waste Type: Inert Environmental Permitting Regulations (Waste) Reference: - Licence Issue: 09/06/1980 Licence Surrender: 30/04/1994	Operator: - Licence Holder: Thakeham Tiles Limited First Recorded 31/12/1970 Last Recorded: 31/12/1982

This data is sourced from the Environment Agency and Natural Resources Wales.

3.5 Historical waste sites

Records within 500m

0

Waste site records derived from Local Authority planning records and high detail historical mapping.

This data is sourced from Ordnance Survey/Groundsure and Local Authority records.

3.6 Licensed waste sites

Records within 500m

0

Active or recently closed waste sites under Environment Agency/Natural Resources Wales regulation.

This data is sourced from the Environment Agency and Natural Resources Wales.



3.7 Waste exemptions

Records within 500m**4**

Activities involving the storage, treatment, use or disposal of waste that are exempt from needing a permit. Exemptions have specific limits and conditions that must be adhered to.

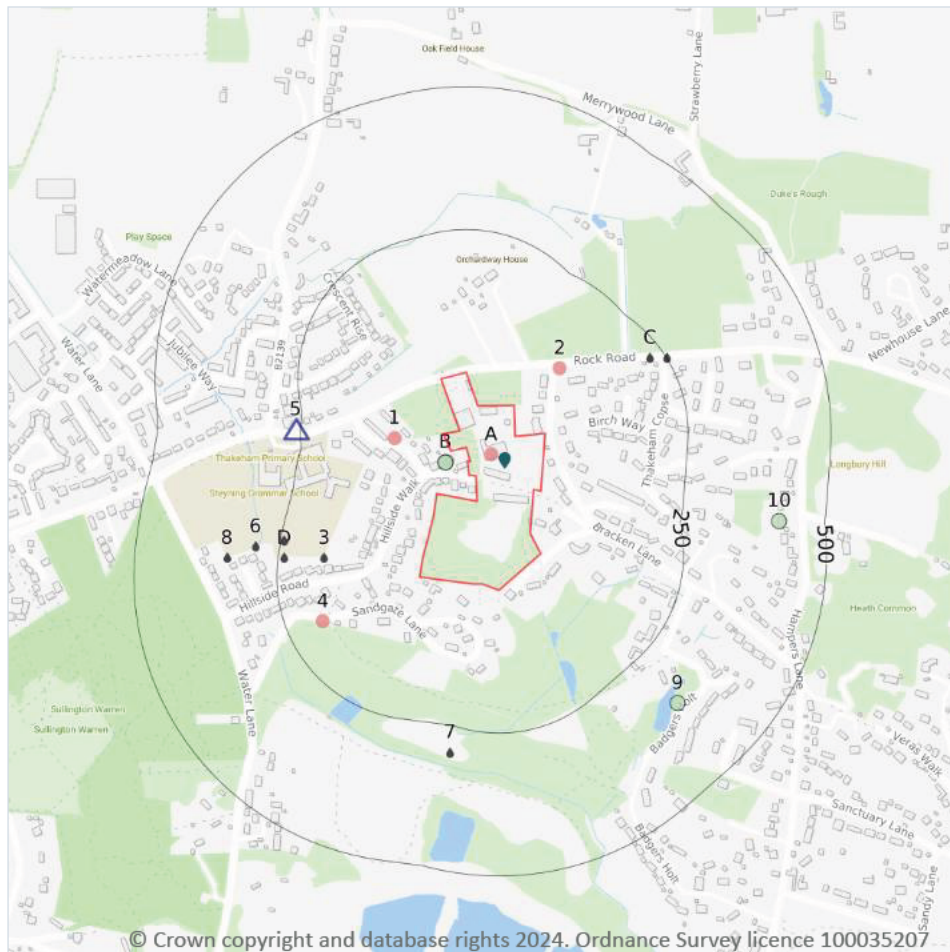
Features are displayed on the Waste and landfill map on [page 25](#) >

ID	Location	Site	Reference	Category	Sub-Category	Description
A	486m N	Fairlands, Storrington Road, Thakeham, Pulborough, Rh20 3ed	WEX298418	Disposing of waste exemption	Not on a farm	Burning waste in the open
A	486m N	Fairlands, Storrington Road, Thakeham, Pulborough, Rh20 3ed	WEX160865	Disposing of waste exemption	Not on a farm	Burning waste in the open
B	491m E	Capel, Hampers Lane, Storrington, Pulborough, Rh20 3hy	WEX405541	Disposing of waste exemption	Not on a farm	Burning waste in the open
B	491m E	Capel, Hampers Lane, Storrington, Pulborough, Rh20 3hy	WEX276962	Disposing of waste exemption	Not on a farm	Burning waste in the open

This data is sourced from the Environment Agency and Natural Resources Wales.



4 Current industrial land use



- Site Outline
- Search buffers in metres (m)
- Recent industrial land uses
- ▲ Current or recent petrol stations
- Licensed pollutant release (Part A(2)/B)
- Licensed Discharges to controlled waters
- Pollution Incidents (EA/NRW)

4.1 Recent industrial land uses

Records within 250m

4

Current potentially contaminative industrial sites.

Features are displayed on the Current industrial land use map on [page 28](#) >

ID	Location	Company	Address	Activity	Category
A	On site	Factory	West Sussex, RH20	Unspecified Works Or Factories	Industrial Features
1	86m NW	Electricity Sub Station	West Sussex, RH20	Electrical Features	Infrastructure and Facilities
2	103m NE	Electricity Sub Station	West Sussex, RH20	Electrical Features	Infrastructure and Facilities



ID	Location	Company	Address	Activity	Category
4	187m SW	Electricity Sub Station	West Sussex, RH20	Electrical Features	Infrastructure and Facilities

This data is sourced from Ordnance Survey.

4.2 Current or recent petrol stations

Records within 500m	1
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Open, closed, under development and obsolete petrol stations.

Features are displayed on the Current industrial land use map on [page 28](#) >

ID	Location	Company	Address	LPG	Status
5	259m W	MURCO	Rock Road, Storrington Road, Heath Common, Storrington, West Sussex, RH20 3AB	Not Applicable	Obsolete

This data is sourced from Experian.

4.3 Electricity cables

Records within 500m	0
---------------------	---

High voltage underground electricity transmission cables.

This data is sourced from National Grid.

4.4 Gas pipelines

Records within 500m	0
---------------------	---

High pressure underground gas transmission pipelines.

This data is sourced from National Grid.

4.5 Sites determined as Contaminated Land

Records within 500m	0
---------------------	---

Contaminated Land Register of sites designated under Part 2a of the Environmental Protection Act 1990.

This data is sourced from Local Authority records.



4.6 Control of Major Accident Hazards (COMAH)

Records within 500m

0

Control of Major Accident Hazards (COMAH) sites. This data includes upper and lower tier sites, and includes a historical archive of COMAH sites and Notification of Installations Handling Hazardous Substances (NIHHS) records.

This data is sourced from the Health and Safety Executive.

4.7 Regulated explosive sites

Records within 500m

0

Sites registered and licensed by the Health and Safety Executive under the Manufacture and Storage of Explosives Regulations 2005 (MSER). The last update to this data was in April 2011.

This data is sourced from the Health and Safety Executive.

4.8 Hazardous substance storage/usage

Records within 500m

0

Consents granted for a site to hold certain quantities of hazardous substances at or above defined limits in accordance with the Planning (Hazardous Substances) Regulations 2015.

This data is sourced from Local Authority records.

4.9 Historical licensed industrial activities (IPC)

Records within 500m

0

Integrated Pollution Control (IPC) records of substance releases to air, land and water. This data represents a historical archive as the IPC regime has been superseded.

This data is sourced from the Environment Agency and Natural Resources Wales.

4.10 Licensed industrial activities (Part A(1))

Records within 500m

0

Records of Part A(1) installations regulated under the Environmental Permitting (England and Wales) Regulations 2016 for the release of substances to the environment.

This data is sourced from the Environment Agency and Natural Resources Wales.



4.11 Licensed pollutant release (Part A(2)/B)

Records within 500m

1

Records of Part A(2) and Part B installations regulated under the Environmental Permitting (England and Wales) Regulations 2016 for the release of substances to the environment.

Features are displayed on the Current industrial land use map on [page 28](#) >

ID	Location	Address	Details	
A	On site	Thakeham Tiles Ltd, Rock Road, Heath Common, Storrington, West Sussex, RH20 3AD	Process: Use of Bulk Cement Status: Current Permit Permit Type: Part B	Enforcement: No Enforcements Notified Date of enforcement: No Enforcements Notified Comment: No Enforcements Notified

This data is sourced from Local Authority records.

4.12 Radioactive Substance Authorisations

Records within 500m

0

Records of the storage, use, accumulation and disposal of radioactive substances regulated under the Radioactive Substances Act 1993.

This data is sourced from the Environment Agency and Natural Resources Wales.

4.13 Licensed Discharges to controlled waters

Records within 500m

8

Discharges of treated or untreated effluent to controlled waters under the Water Resources Act 1991.

Features are displayed on the Current industrial land use map on [page 28](#) >

ID	Location	Address	Details	
3	171m W	ESTATE ROADS, ESTATE ROADS, WATER LANE (EAST SIDE), SULLINGTON WEST SUSSEX	Effluent Type: MISCELLANEOUS DISCHARGES - SURFACE WATER Permit Number: S01145 Permit Version: 1 Receiving Water: FRESHWATER RIVER	Status: LAPSED UNDER SCHEDULE 23 ENVIRONMENT ACT 1995 Issue date: 29/03/1962 Effective Date: 29/03/1962 Revocation Date: 31/03/1997
C	226m NE	RESIDENTIAL DEVELOPMENT, RESIDENTIAL DEVELOPMENT, LAND ADJOINING YAFFLES, ROCK ROA, THAKEHAM, WEST SUSSEX	Effluent Type: MISCELLANEOUS DISCHARGES - SURFACE WATER Permit Number: N01405 Permit Version: 1 Receiving Water: FRESHWATER RIVER	Status: PRE NRA LEGISLATION WHERE ISSUE DATE 01-SEP-89 (HISTORIC ONLY) Issue date: 14/01/1974 Effective Date: 14/01/1974 Revocation Date: 01/07/1991



ID	Location	Address	Details	
D	240m W	ESTATE ROADS, ESTATE ROADS, WATER LANE (EAST SIDE), SULLINGTON WEST SUSSEX	Effluent Type: MISCELLANEOUS DISCHARGES - SURFACE WATER Permit Number: S01145 Permit Version: 1 Receiving Water: FRESHWATER RIVER	Status: LAPSED UNDER SCHEDULE 23 ENVIRONMENT ACT 1995 Issue date: 29/03/1962 Effective Date: 29/03/1962 Revocation Date: 31/03/1997
D	245m W	ESTATE ROADS, ESTATE ROADS, WATER LANE (EAST SIDE), SULLINGTON WEST SUSSEX	Effluent Type: MISCELLANEOUS DISCHARGES - SURFACE WATER Permit Number: S01145 Permit Version: 1 Receiving Water: FRESHWATER RIVER	Status: LAPSED UNDER SCHEDULE 23 ENVIRONMENT ACT 1995 Issue date: 29/03/1962 Effective Date: 29/03/1962 Revocation Date: 31/03/1997
C	251m NE	RESIDENTIAL DEVELOPMENT, RESIDENTIAL DEVELOPMENT, LAND ADJOINING YAFFLES, ROCK ROA, THAKEHAM, WEST SUSSEX	Effluent Type: MISCELLANEOUS DISCHARGES - SURFACE WATER Permit Number: N01405 Permit Version: 1 Receiving Water: FRESHWATER RIVER	Status: PRE NRA LEGISLATION WHERE ISSUE DATE 01-SEP-89 (HISTORIC ONLY) Issue date: 14/01/1974 Effective Date: 14/01/1974 Revocation Date: 01/07/1991
6	292m W	ESTATE ROADS, ESTATE ROADS, WATER LANE (EAST SIDE), SULLINGTON WEST SUSSEX	Effluent Type: MISCELLANEOUS DISCHARGES - SURFACE WATER Permit Number: S01145 Permit Version: 1 Receiving Water: FRESHWATER RIVER	Status: LAPSED UNDER SCHEDULE 23 ENVIRONMENT ACT 1995 Issue date: 29/03/1962 Effective Date: 29/03/1962 Revocation Date: 31/03/1997
7	296m S	SANDGATE PIT, SANDGATE PIT, WATER LANE, STORRINGTON, WEST SUSSEX, RH20 3LY	Effluent Type: TRADE DISCHARGES - MINERAL WORKINGS Permit Number: S02231 Permit Version: 1 Receiving Water: FRESHWATER STREAM OR RIVER	Status: PRE NRA LEGISLATION WHERE ISSUE DATE 01-SEP-89 (HISTORIC ONLY) Issue date: 12/11/1973 Effective Date: 12/11/1973 Revocation Date: -
8	339m W	ESTATE ROADS, ESTATE ROADS, WATER LANE (EAST SIDE), SULLINGTON WEST SUSSEX	Effluent Type: MISCELLANEOUS DISCHARGES - SURFACE WATER Permit Number: S01145 Permit Version: 1 Receiving Water: FRESHWATER RIVER	Status: LAPSED UNDER SCHEDULE 23 ENVIRONMENT ACT 1995 Issue date: 29/03/1962 Effective Date: 29/03/1962 Revocation Date: 31/03/1997

This data is sourced from the Environment Agency and Natural Resources Wales.



4.14 Pollutant release to surface waters (Red List)

Records within 500m

0

Discharges of specified substances under the Environmental Protection (Prescribed Processes and Substances) Regulations 1991.

This data is sourced from the Environment Agency and Natural Resources Wales.

4.15 Pollutant release to public sewer

Records within 500m

0

Discharges of Special Category Effluents to the public sewer.

This data is sourced from the Environment Agency and Natural Resources Wales.

4.16 List 1 Dangerous Substances

Records within 500m

0

Discharges of substances identified on List I of European Directive E 2006/11/EC, and regulated under the Environmental Damage (Prevention and Remediation) Regulations 2015.

This data is sourced from the Environment Agency and Natural Resources Wales.

4.17 List 2 Dangerous Substances

Records within 500m

0

Discharges of substances identified on List II of European Directive E 2006/11/EC, and regulated under the Environmental Damage (Prevention and Remediation) Regulations 2015.

This data is sourced from the Environment Agency and Natural Resources Wales.

4.18 Pollution Incidents (EA/NRW)

Records within 500m

4

Records of substantiated pollution incidents. Since 2006 this data has only included category 1 (major) and 2 (significant) pollution incidents.

Features are displayed on the Current industrial land use map on [page 28](#) >



ID	Location	Details	
B	22m NW	Incident Date: 26/07/2001 Incident Identification: 19314 Pollutant: General Biodegradable Materials and Wastes Pollutant Description: Natural Organic Material	Water Impact: Category 3 (Minor) Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)
B	22m NW	Incident Date: 26/07/2001 Incident Identification: 19314 Pollutant: General Biodegradable Materials and Wastes Pollutant Description: Natural Organic Material	Water Impact: Category 3 (Minor) Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)
9	354m SE	Incident Date: 13/03/2003 Incident Identification: 142829 Pollutant: Sewage Materials Pollutant Description: Crude Sewage	Water Impact: Category 3 (Minor) Land Impact: Category 3 (Minor) Air Impact: Category 3 (Minor)
10	420m E	Incident Date: 18/02/2003 Incident Identification: 137737 Pollutant: Oils and Fuel Pollutant Description: Gas and Fuel Oils	Water Impact: Category 3 (Minor) Land Impact: Category 3 (Minor) Air Impact: Category 3 (Minor)

This data is sourced from the Environment Agency and Natural Resources Wales.

4.19 Pollution inventory substances

Records within 500m

0

The pollution inventory (substances) includes reporting on annual emissions of certain regulated substances to air, controlled waters and land. A reporting threshold for each substance is also included. Where emissions fall below the reporting threshold, no value will be given. The data is given for the most recent complete year available.

This data is sourced from the Environment Agency and the Scottish Environment Protection Agency.

4.20 Pollution inventory waste transfers

Records within 500m

0

The pollution inventory (waste transfers) includes reporting on annual transfers and recovery/disposal of controlled wastes from a site. A reporting threshold for each waste type is also included. Where releases fall below the reporting threshold, no value will be given. The data is given for the most recent complete year available.

This data is sourced from the Environment Agency and the Scottish Environment Protection Agency.



4.21 Pollution inventory radioactive waste

Records within 500m

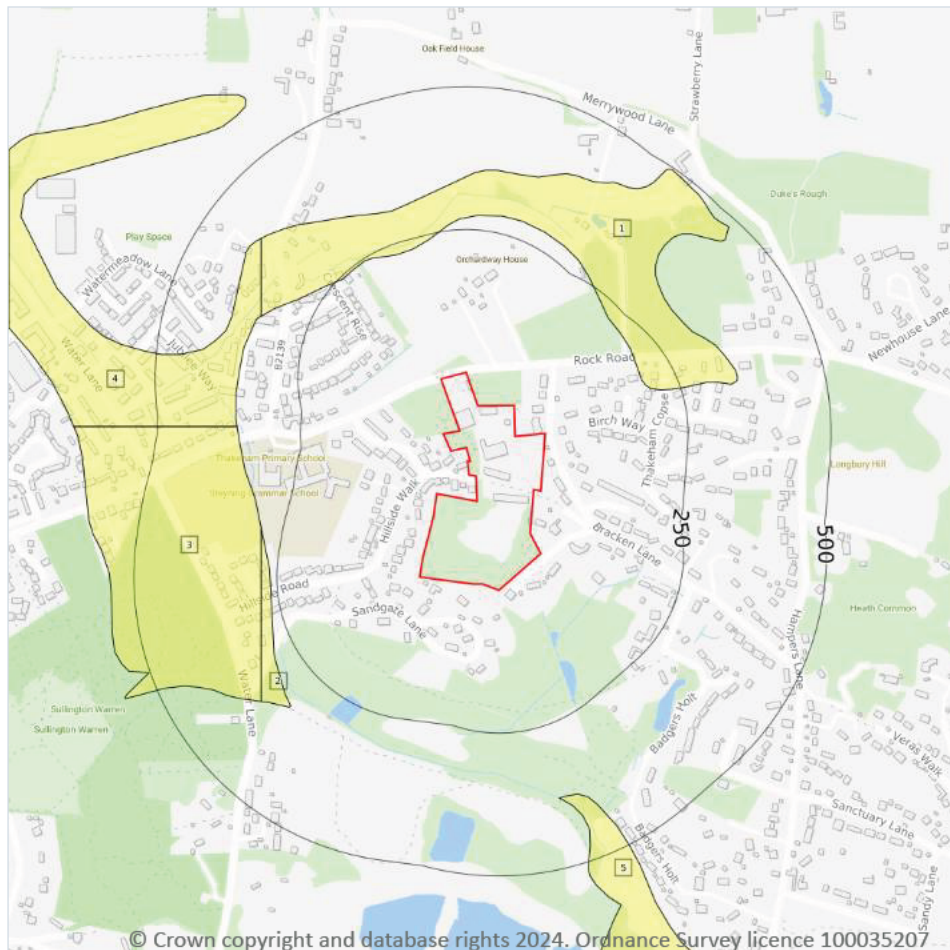
0

The pollution inventory (radioactive wastes) includes reporting on annual releases of radioactive substances from a site, including the means of release. Where releases fall below the reporting threshold, no value will be given. The data is given for the most recent complete year available.

This data is sourced from the Environment Agency and the Scottish Environment Protection Agency.



5 Hydrogeology - Superficial aquifer



- Site Outline**
- Search buffers in metres (m)**
- Principal
 - Secondary A
 - Secondary B
 - Secondary Undifferentiated
 - Unproductive
 - Unknown

5.1 Superficial aquifer

Records within 500m

5

Aquifer status of groundwater held within superficial geology.

Features are displayed on the Hydrogeology map on [page 36](#) >

ID	Location	Designation	Description
1	193m NE	Secondary Undifferentiated	Assigned where it is not possible to attribute either category A or B to a rock type. In general these layers have previously been designated as both minor and non-aquifer in different locations due to the variable characteristics of the rock type
2	262m W	Secondary Undifferentiated	Assigned where it is not possible to attribute either category A or B to a rock type. In general these layers have previously been designated as both minor and non-aquifer in different locations due to the variable characteristics of the rock type

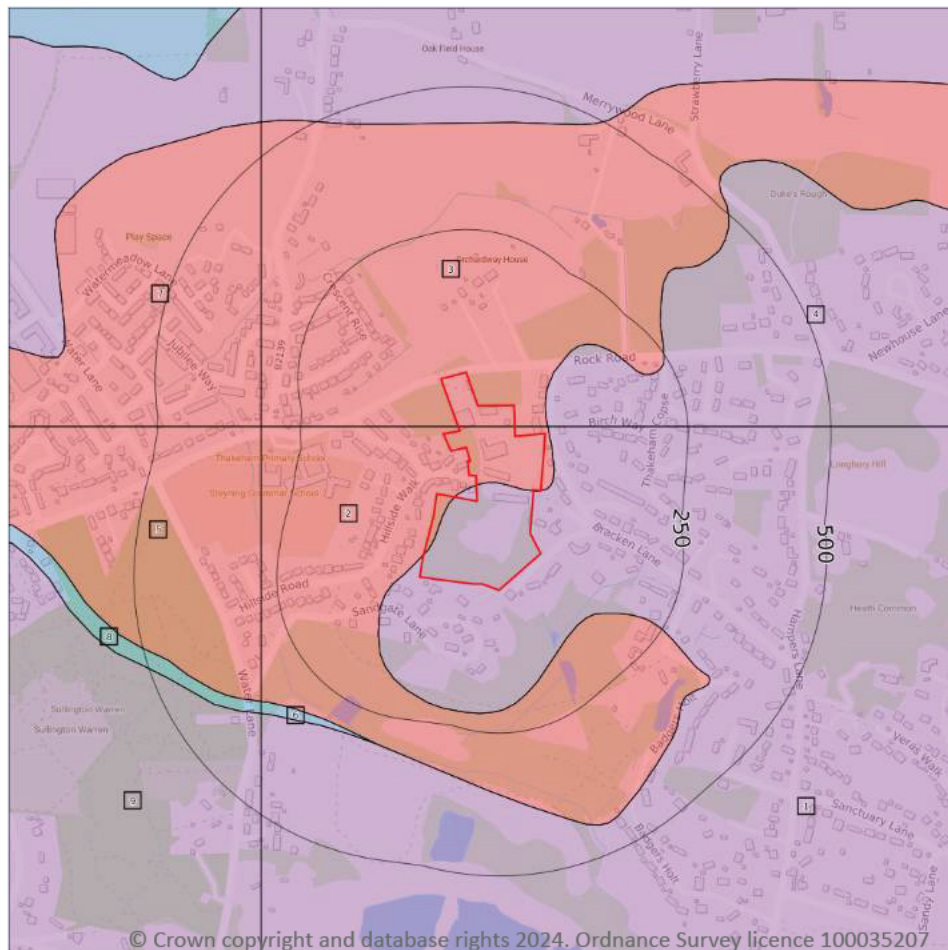


ID	Location	Designation	Description
3	278m W	Secondary Undifferentiated	Assigned where it is not possible to attribute either category A or B to a rock type. In general these layers have previously been designated as both minor and non-aquifer in different locations due to the variable characteristics of the rock type
4	333m NW	Secondary Undifferentiated	Assigned where it is not possible to attribute either category A or B to a rock type. In general these layers have previously been designated as both minor and non-aquifer in different locations due to the variable characteristics of the rock type
5	379m S	Secondary Undifferentiated	Assigned where it is not possible to attribute either category A or B to a rock type. In general these layers have previously been designated as both minor and non-aquifer in different locations due to the variable characteristics of the rock type

This data is sourced from the British Geological Survey, the Environment Agency and Natural Resources Wales.



Bedrock aquifer



- Site Outline**
- Search buffers in metres (m)**
- Principal
 - Secondary A
 - Secondary B
 - Secondary Undifferentiated
 - Unproductive

5.2 Bedrock aquifer

Records within 500m

9

Aquifer status of groundwater held within bedrock geology.

Features are displayed on the Bedrock aquifer map on [page 38](#) >

ID	Location	Designation	Description
1	On site	Principal	Geology of high intergranular and/or fracture permeability, usually providing a high level of water storage and may support water supply/river base flow on a strategic scale. Generally principal aquifers were previously major aquifers
2	On site	Secondary A	Permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers. These are generally aquifers formerly classified as minor aquifers

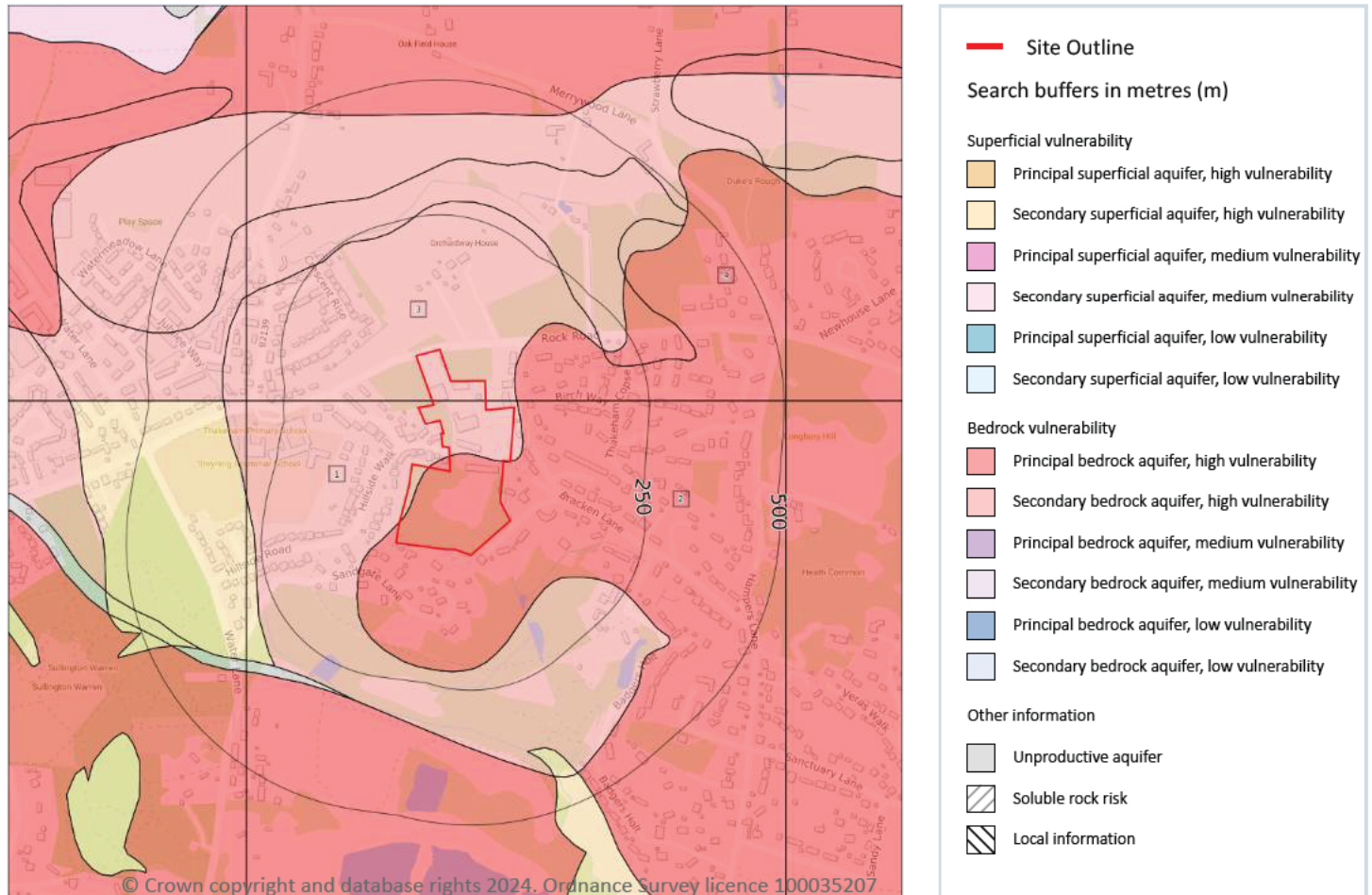


ID	Location	Designation	Description
3	On site	Secondary A	Permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers. These are generally aquifers formerly classified as minor aquifers
4	13m NE	Principal	Geology of high intergranular and/or fracture permeability, usually providing a high level of water storage and may support water supply/river base flow on a strategic scale. Generally principal aquifers were previously major aquifers
5	278m W	Secondary A	Permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers. These are generally aquifers formerly classified as minor aquifers
6	296m SW	Unproductive	These are rock layers or drift deposits with low permeability that have negligible significance for water supply or river base flow
7	315m NW	Secondary A	Permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers. These are generally aquifers formerly classified as minor aquifers
8	353m SW	Unproductive	These are rock layers or drift deposits with low permeability that have negligible significance for water supply or river base flow
9	366m SW	Principal	Geology of high intergranular and/or fracture permeability, usually providing a high level of water storage and may support water supply/river base flow on a strategic scale. Generally principal aquifers were previously major aquifers

This data is sourced from the British Geological Survey, the Environment Agency and Natural Resources Wales.



Groundwater vulnerability



5.3 Groundwater vulnerability

Records within 50m

4

An assessment of the vulnerability of groundwater to a pollutant discharged at ground level based on the hydrological, geological, hydrogeological and soil properties within a one kilometre square grid. Groundwater vulnerability is described as High, Medium or Low as follows:

- High - Areas able to easily transmit pollution to groundwater. They are likely to be characterised by high leaching soils and the absence of low permeability superficial deposits.
- Medium - Intermediate between high and low vulnerability.
- Low - Areas that provide the greatest protection from pollution. They are likely to be characterised by low leaching soils and/or the presence of superficial deposits characterised by a low permeability.

Features are displayed on the Groundwater vulnerability map on [page 40](#) >

ID	Location	Summary	Soil / surface	Superficial geology	Bedrock geology
1	On site	Summary Classification: Secondary bedrock aquifer - High Vulnerability Combined classification: Productive Bedrock Aquifer, No Superficial Aquifer	Leaching class: High Infiltration value: >70% Dilution value: >550mm/year	Vulnerability: - Aquifer type: - Thickness: <3m Patchiness value: <90% Recharge potential: No Data	Vulnerability: High Aquifer type: Secondary Flow mechanism: Well connected fractures
2	On site	Summary Classification: Principal bedrock aquifer - High Vulnerability Combined classification: Productive Bedrock Aquifer, No Superficial Aquifer	Leaching class: High Infiltration value: >70% Dilution value: >550mm/year	Vulnerability: - Aquifer type: - Thickness: <3m Patchiness value: <90% Recharge potential: No Data	Vulnerability: High Aquifer type: Principal Flow mechanism: Well connected fractures
3	On site	Summary Classification: Secondary bedrock aquifer - High Vulnerability Combined classification: Productive Bedrock Aquifer, No Superficial Aquifer	Leaching class: Intermediate Infiltration value: >70% Dilution value: 300- 550mm/year	Vulnerability: - Aquifer type: - Thickness: <3m Patchiness value: <90% Recharge potential: No Data	Vulnerability: High Aquifer type: Secondary Flow mechanism: Well connected fractures
4	13m NE	Summary Classification: Principal bedrock aquifer - High Vulnerability Combined classification: Productive Bedrock Aquifer, No Superficial Aquifer	Leaching class: Intermediate Infiltration value: >70% Dilution value: 300- 550mm/year	Vulnerability: - Aquifer type: - Thickness: <3m Patchiness value: <90% Recharge potential: No Data	Vulnerability: High Aquifer type: Principal Flow mechanism: Well connected fractures

This data is sourced from the British Geological Survey, the Environment Agency and Natural Resources Wales.

5.4 Groundwater vulnerability- soluble rock risk

Records on site

0

This dataset identifies areas where solution features that enable rapid movement of a pollutant may be present within a 1km grid square.

This data is sourced from the British Geological Survey and the Environment Agency.

5.5 Groundwater vulnerability- local information

Records on site

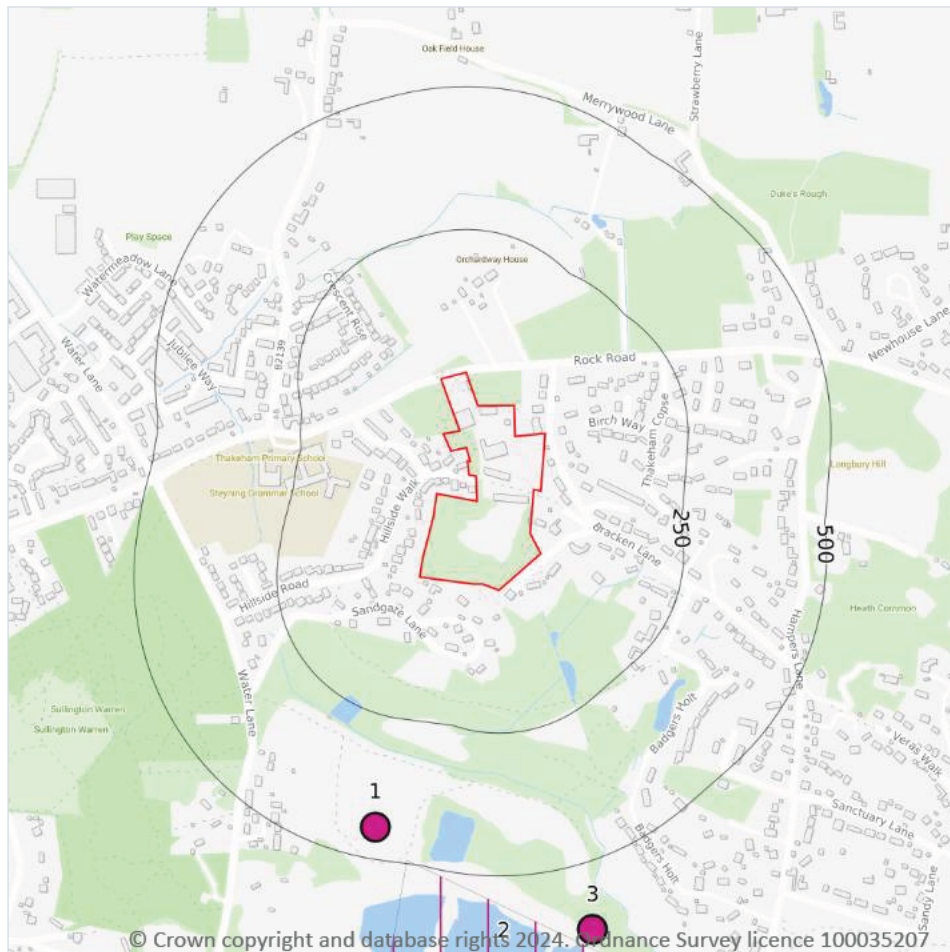
0

This dataset identifies areas where additional local information affecting vulnerability is held by the Environment Agency. Further information can be obtained by contacting the Environment Agency local Area groundwater team through the Environment Agency National Customer Call Centre on 03798 506 506 or by email on enquiries@environment-agency.gov.uk ↗.

This data is sourced from the British Geological Survey and the Environment Agency.



Abstractions and Source Protection Zones



- Site Outline
- Search buffers in metres (m)**
- Source Protection Zone 1
Inner catchment
- Source Protection Zone 2
Outer catchment
- Source Protection Zone 3
Total catchment
- Source Protection Zone 4
Zone of Special Interest
- Source Protection Zone 1c
Inner catchment - confined aquifer
- Source Protection Zone 2c
Outer catchment - confined aquifer
- Source Protection Zone 3c
Total catchment - confined aquifer
- Drinking water abstraction licences
Polygon features
- Drinking water abstraction licences
Linear features
- Groundwater abstraction licence (point)
- Groundwater abstraction licence (area)
- Groundwater abstraction licence (linear)
- Surface Water Abstractions (point)
- Surface Water Abstractions (area)
- Surface Water Abstractions (linear)

5.6 Groundwater abstractions

Records within 2000m

13

Licensed groundwater abstractions for sites extracting more than 20 cubic metres of water a day and includes active and historical records. The data may be for a single abstraction point, between two points (line data) or a larger area.

Features are displayed on the Abstractions and Source Protection Zones map on [page 42](#) >

ID	Location	Details	
1	443m S	Status: Active Licence No: 25/084 Details: Mineral Washing Direct Source: Southern Region Groundwater Point: POINT A, SANDGATE PIT, STORRINGTON Data Type: Point Name: Cemex UK Materials Ltd Easting: 510200 Northing: 114300	Annual Volume (m ³): 250000 Max Daily Volume (m ³): 910 Original Application No: NPS/WR/030715 Original Start Date: 21/05/1993 Expiry Date: - Issue No: 103 Version Start Date: 21/12/2018 Version End Date: -
2	494m S	Status: Active Licence No: SO/041/0025/006 Details: Dewatering Direct Source: Southern Region Groundwater Point: FOKLSTONE BEDS AT SANDGATE QUARRY Data Type: Poly4 Name: Cemex UK Materials Ltd Easting: 510255 Northing: 114241	Annual Volume (m ³): 2295120 Max Daily Volume (m ³): 6288 Original Application No: NPS/NA/000103 Original Start Date: 18/01/2022 Expiry Date: 31/03/2028 Issue No: 1 Version Start Date: 18/01/2022 Version End Date: -
3	616m S	Status: Active Licence No: 25/084 Details: Mineral Washing Direct Source: Southern Region Groundwater Point: POINT B, SANDGATE PIT, STORRINGTON Data Type: Point Name: Cemex UK Materials Ltd Easting: 510580 Northing: 114120	Annual Volume (m ³): 250000 Max Daily Volume (m ³): 910 Original Application No: NPS/WR/030715 Original Start Date: 21/05/1993 Expiry Date: - Issue No: 103 Version Start Date: 21/12/2018 Version End Date: -
-	918m W	Status: Active Licence No: SO/041/0025/012 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: Southern Region Groundwater Point: BOREHOLE B DOWNSVIEW AVENUE Data Type: Point Name: Croudace Homes Limited Easting: 509405 Northing: 115203	Annual Volume (m ³): 11805 Max Daily Volume (m ³): 33 Original Application No: NPS/WR/036778 Original Start Date: 21/09/2023 Expiry Date: 31/03/2040 Issue No: 1 Version Start Date: 21/09/2023 Version End Date: -
-	932m W	Status: Active Licence No: SO/041/0025/012 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: Southern Region Groundwater Point: BOREHOLE A DOWNSVIEW AVENUE Data Type: Point Name: Croudace Homes Limited Easting: 509386 Northing: 115156	Annual Volume (m ³): 11805 Max Daily Volume (m ³): 33 Original Application No: NPS/WR/036778 Original Start Date: 21/09/2023 Expiry Date: 31/03/2040 Issue No: 1 Version Start Date: 21/09/2023 Version End Date: -



ID	Location	Details	
-	1184m SW	Status: Active Licence No: 10/41/415407 Details: Mineral Washing Direct Source: Southern Region Groundwater Point: SAND QUARRY AT CHANTRY LANE Data Type: Point Name: Dudman Chantry (Industries) Ltd Easting: 509430 Northing: 113910	Annual Volume (m ³): 99000 Max Daily Volume (m ³): 660 Original Application No: - Original Start Date: 10/07/1989 Expiry Date: - Issue No: 102 Version Start Date: 16/04/2019 Version End Date: -
-	1428m E	Status: Historical Licence No: 10/41/331102 Details: Animal Watering & General Use in non Farming situations Direct Source: Southern Region Groundwater Point: BARNARDS NURSERY Data Type: Point Name: Muntz Easting: 511910 Northing: 114640	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: - Expiry Date: - Issue No: 100 Version Start Date: 20/01/1966 Version End Date: -
-	1841m E	Status: Active Licence No: 23/073 Details: Spray Irrigation - Direct Direct Source: Southern Region Groundwater Point: WASHINGTON GARDEN CENTRE Data Type: Point Name: D J Squire & Company Ltd Easting: 512250 Northing: 114240	Annual Volume (m ³): 8000 Max Daily Volume (m ³): 40 Original Application No: NPS/WR/011325 Original Start Date: 10/12/1999 Expiry Date: - Issue No: 3 Version Start Date: 01/04/2016 Version End Date: -
-	1842m N	Status: Historical Licence No: 10/41/415302 Details: Horticultural Watering Direct Source: Southern Region Groundwater Point: CHESSWOOD NURSERIES POINT 2 Data Type: Point Name: Heveco Mushrooms Ltd Easting: 510210 Northing: 116930	Annual Volume (m ³): 88650 Max Daily Volume (m ³): 330 Original Application No: - Original Start Date: - Expiry Date: - Issue No: 101 Version Start Date: 01/04/2001 Version End Date: -
-	1842m N	Status: Historical Licence No: 25/097 Details: Horticultural Watering Direct Source: Southern Region Groundwater Point: CHESSWOOD NURSERIES POINT B Data Type: Point Name: Thakeham Mushrooms Limited Easting: 510210 Northing: 116930	Annual Volume (m ³): 88650 Max Daily Volume (m ³): 330 Original Application No: - Original Start Date: 06/10/2008 Expiry Date: 31/03/2016 Issue No: 2 Version Start Date: 06/06/2013 Version End Date: -



ID	Location	Details	
-	1845m N	Status: Historical Licence No: 25/097/R01 Details: Horticultural Watering Direct Source: Southern Region Groundwater Point: CHESSWOOD NURSERIES POINT B Data Type: Point Name: Thakeham Mushrooms Limited Easting: 510179 Northing: 116931	Annual Volume (m ³): 88650 Max Daily Volume (m ³): 330 Original Application No: - Original Start Date: 04/05/2016 Expiry Date: 31/03/2028 Issue No: 1 Version Start Date: 04/05/2016 Version End Date: -
-	1848m E	Status: Historical Licence No: 23/072 Details: Fish Farm/Cress Pond Throughflow Direct Source: Southern Region Groundwater Point: THE BUNGALOW, WASHINGTON Data Type: Point Name: Quick Easting: 512300 Northing: 114410	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: 03/12/1999 Expiry Date: 02/12/2004 Issue No: 1 Version Start Date: 03/12/1999 Version End Date: -
-	1976m N	Status: Historical Licence No: 10/41/415302 Details: Horticultural Watering Direct Source: Southern Region Groundwater Point: CHESSWOOD NURSERIES POINT 1 Data Type: Point Name: Heveco Mushrooms Ltd Easting: 510350 Northing: 117070	Annual Volume (m ³): 88650 Max Daily Volume (m ³): 330 Original Application No: - Original Start Date: - Expiry Date: - Issue No: 101 Version Start Date: 01/04/2001 Version End Date: -

This data is sourced from the Environment Agency and Natural Resources Wales.

5.7 Surface water abstractions

Records within 2000m

0

Licensed surface water abstractions for sites extracting more than 20 cubic metres of water a day and includes active and historical records. The data may be for a single abstraction point, a stretch of watercourse or a larger area.

This data is sourced from the Environment Agency and Natural Resources Wales.



5.8 Potable abstractions

Records within 2000m

2

Licensed potable water abstractions for sites extracting more than 20 cubic metres of water a day and includes active and historical records. The data may be for a single abstraction point, a stretch of watercourse or a larger area.

Features are displayed on the Abstractions and Source Protection Zones map on [page 42](#) >

ID	Location	Details	
-	918m W	Status: Active Licence No: SO/041/0025/012 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: Southern Region Groundwater Point: BOREHOLE B DOWNSVIEW AVENUE Data Type: Point Name: Croudace Homes Limited Easting: 509405 Northing: 115203	Annual Volume (m ³): 11805 Max Daily Volume (m ³): 33 Original Application No: NPS/WR/036778 Original Start Date: 21/09/2023 Expiry Date: 31/03/2040 Issue No: 1 Version Start Date: 21/09/2023 Version End Date: -
-	932m W	Status: Active Licence No: SO/041/0025/012 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: Southern Region Groundwater Point: BOREHOLE A DOWNSVIEW AVENUE Data Type: Point Name: Croudace Homes Limited Easting: 509386 Northing: 115156	Annual Volume (m ³): 11805 Max Daily Volume (m ³): 33 Original Application No: NPS/WR/036778 Original Start Date: 21/09/2023 Expiry Date: 31/03/2040 Issue No: 1 Version Start Date: 21/09/2023 Version End Date: -

This data is sourced from the Environment Agency and Natural Resources Wales.

5.9 Source Protection Zones

Records within 500m

0

Source Protection Zones define the sensitivity of an area around a potable abstraction site to contamination.

This data is sourced from the Environment Agency and Natural Resources Wales.



5.10 Source Protection Zones (confined aquifer)

Records within 500m

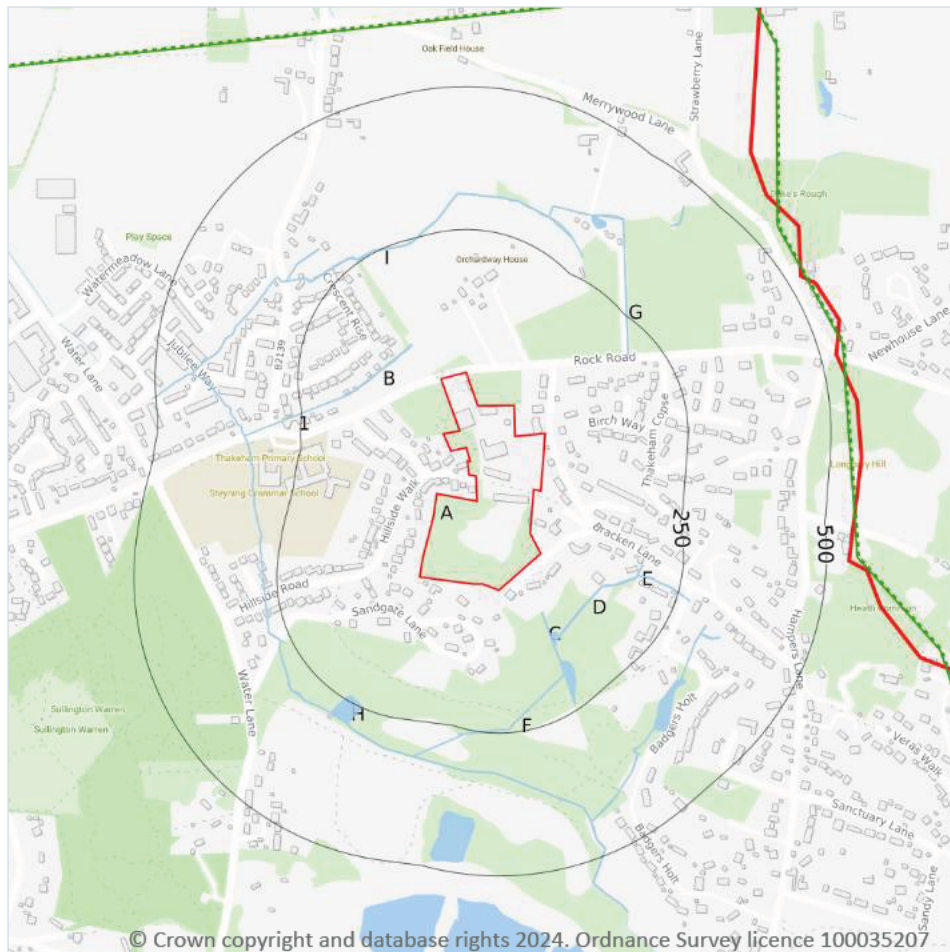
0

Source Protection Zones in the confined aquifer define the sensitivity around a deep groundwater abstraction to contamination. A confined aquifer would normally be protected from contamination by overlying geology and is only considered a sensitive resource if deep excavation/drilling is taking place.

This data is sourced from the Environment Agency and Natural Resources Wales.



6 Hydrology



- Site Outline
- Search buffers in metres (m)
- Water Network (OS MasterMap)
- Surface water features (wider than 5m)
- Surface water features (narrower than 5m)
- WFD River, canal and surface water transfer water bodies
- WFD Lake water bodies
- WFD Transitional and coastal water bodies
- WFD Surface water body catchments boundaries
- WFD Groundwater body boundaries

6.1 Water Network (OS MasterMap)

Records within 250m

21

Detailed water network of Great Britain showing the flow and precise central course of every river, stream, lake and canal.

Features are displayed on the Hydrology map on [page 48](#) >

ID	Location	Type of water feature	Ground level	Permanence	Name
B	78m NW	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-



ID	Location	Type of water feature	Ground level	Permanence	Name
C	78m SE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
D	118m SE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
C	124m SE	Lake, loch or reservoir.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
C	132m SE	Lake, loch or reservoir.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
C	135m SE	Lake, loch or reservoir.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
C	139m SE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
1	164m NW	Inland river not influenced by normal tidal action.	Not provided	Watercourse contains water year round (in normal circumstances)	-
C	165m SE	Lake, loch or reservoir.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
E	173m SE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
E	173m SE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
E	179m SE	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-
E	184m SE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
C	187m SE	Lake, loch or reservoir.	On ground surface	Watercourse contains water year round (in normal circumstances)	-



ID	Location	Type of water feature	Ground level	Permanence	Name
F	187m SE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
C	191m SE	Lake, loch or reservoir.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
G	200m NE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
E	206m SE	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-
E	217m SE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
H	241m SW	Lake, loch or reservoir.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
I	242m N	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-

This data is sourced from the Ordnance Survey.

6.2 Surface water features

Records within 250m

13

Covering rivers, streams and lakes (some overlap with OS MasterMap Water Network data in previous section) but additionally covers smaller features such as ponds. Rivers and streams narrower than 5m are represented as a single line. Lakes, ponds and rivers or streams wider than 5m are represented as polygons.

Features are displayed on the Hydrology map on [page 48](#) >

This data is sourced from the Ordnance Survey.

6.3 WFD Surface water body catchments

Records on site

1

The Water Framework Directive is an EU-led framework for the protection of inland surface waters, estuaries, coastal waters and groundwater through river basin-level management planning. In terms of surface water, these basins are broken down into smaller units known as management, operational and water body catchments.



Features are displayed on the Hydrology map on [page 48 >](#)

ID	Location	Type	Water body catchment	Water body ID	Operational catchment	Management catchment
A	On site	River	Stor	GB107041012100	Arun Lower	Arun and Western Streams

This data is sourced from the Environment Agency and Natural Resources Wales.

6.4 WFD Surface water bodies

Records identified	1
--------------------	---

Surface water bodies under the Directive may be rivers, lakes, estuary or coastal. To achieve the purpose of the Directive, environmental objectives have been set and are reported on for each water body. The progress towards delivery of the objectives is then reported on by the relevant competent authorities at the end of each six-year cycle. The river water body directly associated with the catchment listed in the previous section is detailed below, along with any lake, canal, coastal or artificial water body within 250m of the site. Click on the water body ID in the table to visit the EA Catchment Explorer to find out more about each water body listed.

Features are displayed on the Hydrology map on [page 48 >](#)

ID	Location	Type	Name	Water body ID	Overall rating	Chemical rating	Ecological rating	Year
-	2661m W	River	Stor	GB107041012100 ↗	Moderate	Fail	Moderate	2019

This data is sourced from the Environment Agency and Natural Resources Wales.

6.5 WFD Groundwater bodies

Records on site	1
-----------------	---

Groundwater bodies are also covered by the Directive and the same regime of objectives and reporting detailed in the previous section is in place. Click on the water body ID in the table to visit the EA Catchment Explorer to find out more about each groundwater body listed.

Features are displayed on the Hydrology map on [page 48 >](#)

ID	Location	Name	Water body ID	Overall rating	Chemical rating	Quantitative	Year
A	On site	Lower Greensand Arun & Western Streams	GB40701G503100 ↗	Poor	Poor	Good	2019

This data is sourced from the Environment Agency and Natural Resources Wales.



7 River and coastal flooding

7.1 Risk of flooding from rivers and the sea

Records within 50m

0

The chance of flooding from rivers and/or the sea in any given year, based on cells of 50m within the Risk of Flooding from Rivers and Sea (RoFRaS)/Flood Risk Assessment Wales (FRAW) models. Each cell is allocated one of four flood risk categories, taking into account flood defences and their condition. The risk categories for RoFRaS for rivers and the sea and FRAW for rivers are; Very low (less than 1 in 1000 chance in any given year), Low (less than 1 in 100 but greater than or equal to 1 in 1000 chance), Medium (less than 1 in 30 but greater than or equal to 1 in 100 chance) or High (greater than or equal to 1 in 30 chance). The risk categories for FRAW for the sea are; Very low (less than 1 in 1000 chance in any given year), Low (less than 1 in 200 but greater than or equal to 1 in 1000 chance), Medium (less than 1 in 30 but greater than or equal to 1 in 200 chance) or High (greater than or equal to 1 in 30 chance).

This data is sourced from the Environment Agency and Natural Resources Wales.

7.2 Historical Flood Events

Records within 250m

0

Records of historic flooding from rivers, the sea, groundwater and surface water. Records began in 1946 when predecessor bodies started collecting detailed information about flooding incidents, although limited details may be included on flooding incidents prior to this date. Takes into account the presence of defences, structures, and other infrastructure where they existed at the time of flooding, and includes flood extents that may have been affected by overtopping, breaches or blockages.

This data is sourced from the Environment Agency and Natural Resources Wales.

7.3 Flood Defences

Records within 250m

0

Records of flood defences owned, managed or inspected by the Environment Agency and Natural Resources Wales. Flood defences can be structures, buildings or parts of buildings. Typically these are earth banks, stone and concrete walls, or sheet-piling that is used to prevent or control the extent of flooding.

This data is sourced from the Environment Agency and Natural Resources Wales.



7.4 Areas Benefiting from Flood Defences

Records within 250m

0

Areas that would benefit from the presence of flood defences in a 1 in 100 (1%) chance of flooding each year from rivers or 1 in 200 (0.5%) chance of flooding each year from the sea.

This data is sourced from the Environment Agency and Natural Resources Wales.

7.5 Flood Storage Areas

Records within 250m

0

Areas that act as a balancing reservoir, storage basin or balancing pond to attenuate an incoming flood peak to a flow level that can be accepted by the downstream channel or to delay the timing of a flood peak so that its volume is discharged over a longer period.

This data is sourced from the Environment Agency and Natural Resources Wales.



River and coastal flooding - Flood Zones

7.6 Flood Zone 2

Records within 50m	0
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Areas of land at risk of flooding, when the presence of flood defences are ignored. Covering land between Flood Zone 3 (see next section) and the extent of the flooding from rivers or the sea with a 1 in 1000 (0.1%) chance of flooding each year.

This data is sourced from the Environment Agency and Natural Resources Wales.

7.7 Flood Zone 3

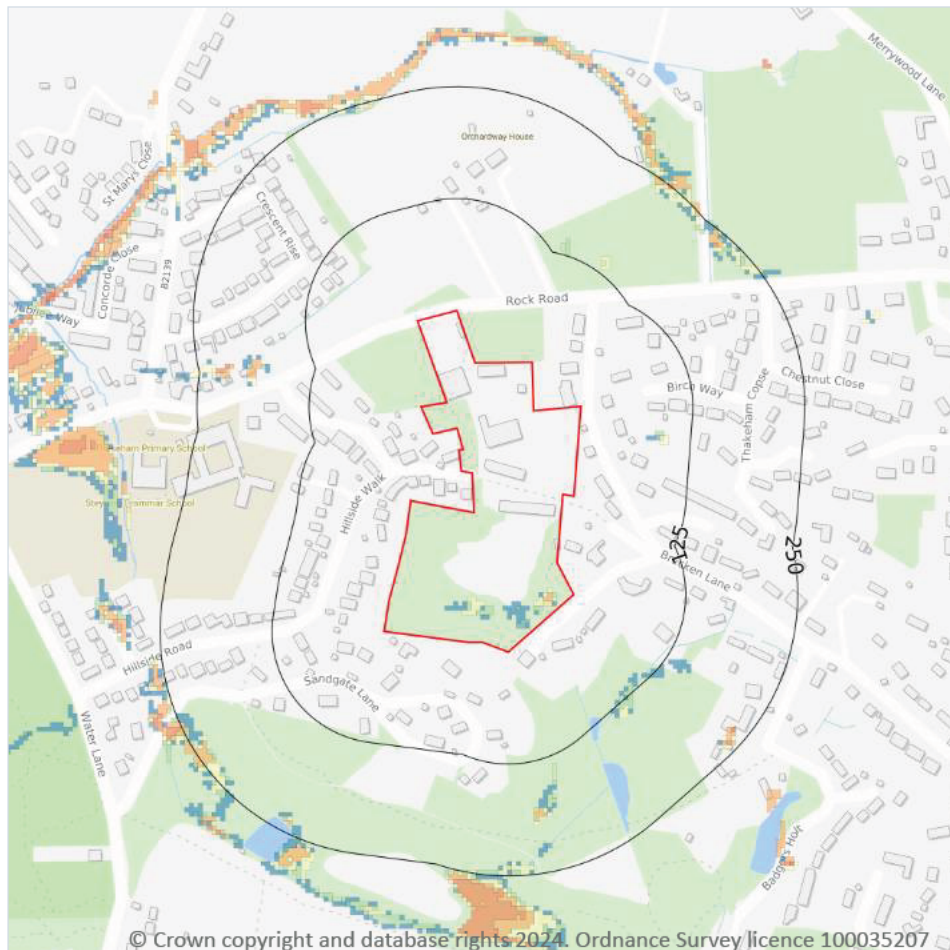
Records within 50m	0
--------------------	---

Areas of land at risk of flooding, when the presence of flood defences are ignored. Covering land with a 1 in 100 (1%) or greater chance of flooding each year from rivers or a 1 in 200 (0.5%) or greater chance of flooding each year from the sea.

This data is sourced from the Environment Agency and Natural Resources Wales.



8 Surface water flooding



— Site Outline

Search buffers in metres (m)

1 in 1000 return period

- Depth between 0.1m - 0.3m
- Depth between 0.3m - 1.0m
- Depth greater than 1.0m

1 in 250 return period

- Depth between 0.1m - 0.3m
- Depth between 0.3m - 1.0m
- Depth greater than 1.0m

1 in 100 return period

- Depth between 0.1m - 0.3m
- Depth between 0.3m - 1.0m
- Depth greater than 1.0m

1 in 30 return period

- Depth between 0.1m - 0.3m
- Depth between 0.3m - 1.0m
- Depth greater than 1.0m

8.1 Surface water flooding

Highest risk on site

1 in 30 year, 0.1m - 0.3m

Highest risk within 50m

1 in 30 year, 0.1m - 0.3m

Ambiental Risk Analytics surface water (pluvial) FloodMap identifies areas likely to flood as a result of extreme rainfall events, i.e. land naturally vulnerable to surface water ponding or flooding. This data set was produced by simulating 1 in 30 year, 1 in 100 year, 1 in 250 year and 1 in 1,000 year rainfall events. Modern urban drainage systems are typically built to cope with rainfall events between 1 in 20 and 1 in 30 years, though some older ones may flood in a 1 in 5 year rainfall event.

Features are displayed on the Surface water flooding map on [page 55](#) >

The data shown on the map and in the table above shows the highest likelihood of flood events happening at the site. Lower likelihood events may have greater flood depths and hence a greater potential impact on a site.

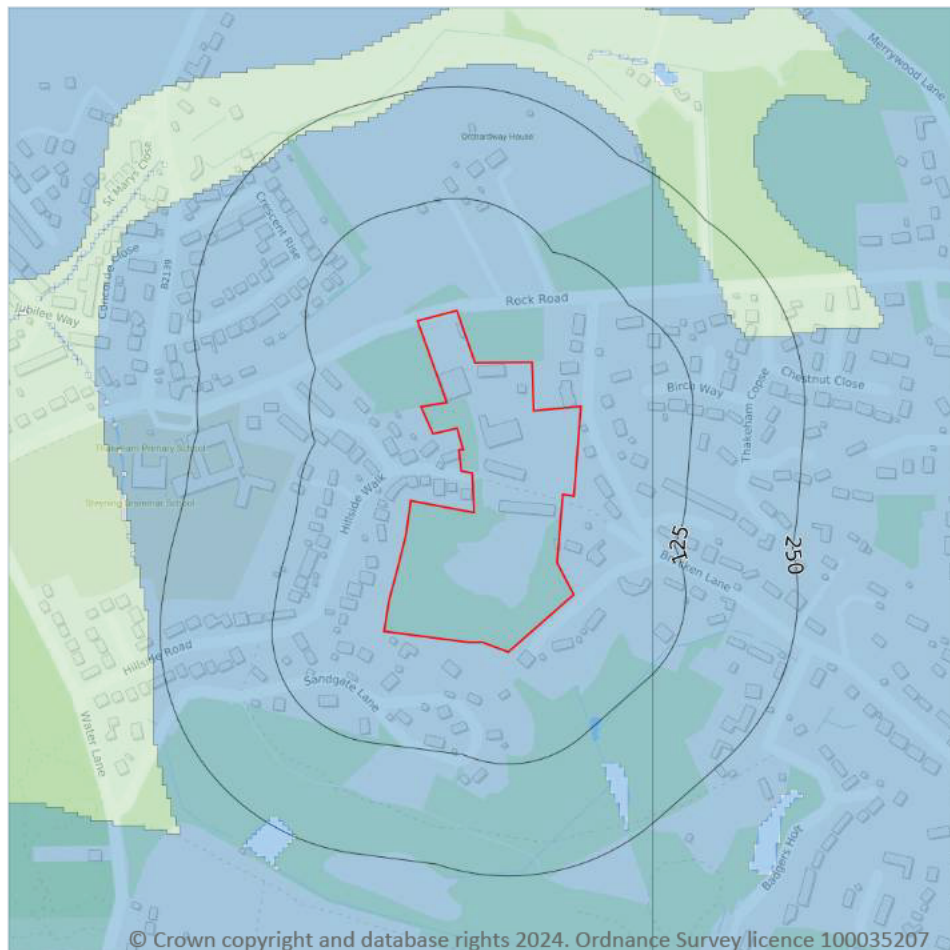
The table below shows the maximum flood depths for a range of return periods for the site.

Return period	Maximum modelled depth
1 in 1000 year	Between 0.3m and 1.0m
1 in 250 year	Between 0.3m and 1.0m
1 in 100 year	Between 0.3m and 1.0m
1 in 30 year	Between 0.1m and 0.3m

This data is sourced from Ambiantal Risk Analytics.



9 Groundwater flooding



— Site Outline
Search buffers in metres (m)

- High
- Moderate - High
- Moderate
- Low
- Negligible

9.1 Groundwater flooding

Highest risk on site

Negligible

Highest risk within 50m

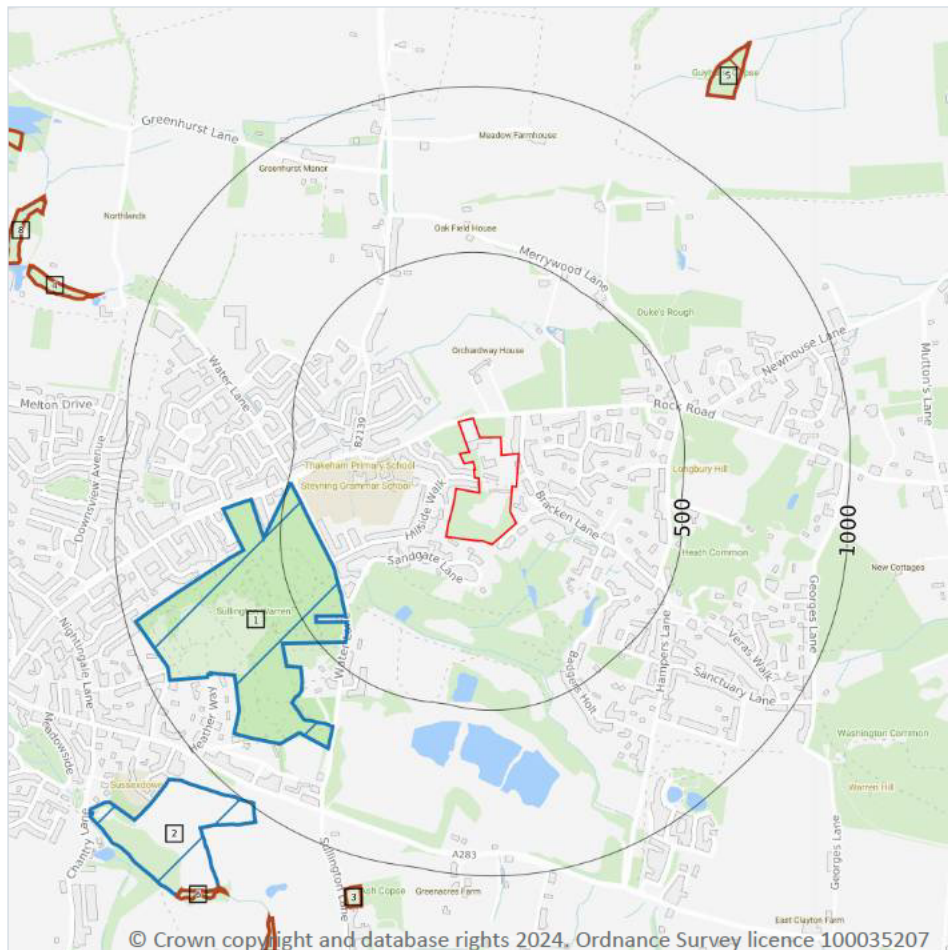
Negligible

Groundwater flooding is caused by unusually high groundwater levels. It occurs when the water table rises above the ground surface or within underground structures such as basements or cellars. Groundwater flooding tends to exhibit a longer duration than surface water flooding, possibly lasting for weeks or months, and as a result it can cause significant damage to property. This risk assessment is based on a 1 in 100 year return period and a 5m Digital Terrain Model (DTM).

Features are displayed on the Groundwater flooding map on [page 57 >](#)

This data is sourced from Ambient Risk Analytics.

10 Environmental designations



- Site Outline
- Search buffers in metres (m)
- Sites of Special Scientific Interest (SSSI)
- Designated Ancient Woodland

10.1 Sites of Special Scientific Interest (SSSI)

Records within 2000m

2

Sites providing statutory protection for the best examples of UK flora, fauna, or geological or physiographical features. Originally notified under the National Parks and Access to the Countryside Act 1949, SSSIs were re-notified under the Wildlife and Countryside Act 1981. Improved provisions for the protection and management of SSSIs were introduced by the Countryside and Rights of Way Act 2000 (in England and Wales) and (in Scotland) by the Nature Conservation (Scotland) Act 2004 and the Wildlife and Natural Environment (Scotland) Act 2010.

Features are displayed on the Environmental designations map on [page 58](#) >

ID	Location	Name	Data source
1	351m SW	Sullington Warren	Natural England



ID	Location	Name	Data source
2	991m SW	Chantry Mill	Natural England

This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.

10.2 Conserved wetland sites (Ramsar sites)

Records within 2000m	0
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Ramsar sites are designated under the Convention on Wetlands of International Importance, agreed in Ramsar, Iran, in 1971. They cover all aspects of wetland conservation and wise use, recognizing wetlands as ecosystems that are extremely important for biodiversity conservation in general and for the well-being of human communities. These sites cover a broad definition of wetland; marsh, fen, peatland or water, whether natural or artificial, permanent or temporary, with water that is static or flowing, fresh, brackish or salt, and even some marine areas.

This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.

10.3 Special Areas of Conservation (SAC)

Records within 2000m	0
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Areas which have been identified as best representing the range and variety within the European Union of habitats and (non-bird) species listed on Annexes I and II to the Directive. SACs are designated under the EC Habitats Directive.

This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.

10.4 Special Protection Areas (SPA)

Records within 2000m	0
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Sites classified by the UK Government under the EC Birds Directive, SPAs are areas of the most important habitat for rare (listed on Annex I to the Directive) and migratory birds within the European Union.

This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.

10.5 National Nature Reserves (NNR)

Records within 2000m	0
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Sites containing examples of some of the most important natural and semi-natural terrestrial and coastal ecosystems in Great Britain. They are managed to conserve their habitats, provide special opportunities for scientific study or to provide public recreation compatible with natural heritage interests.

This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.

