



APPENDIX C

Site Photographs









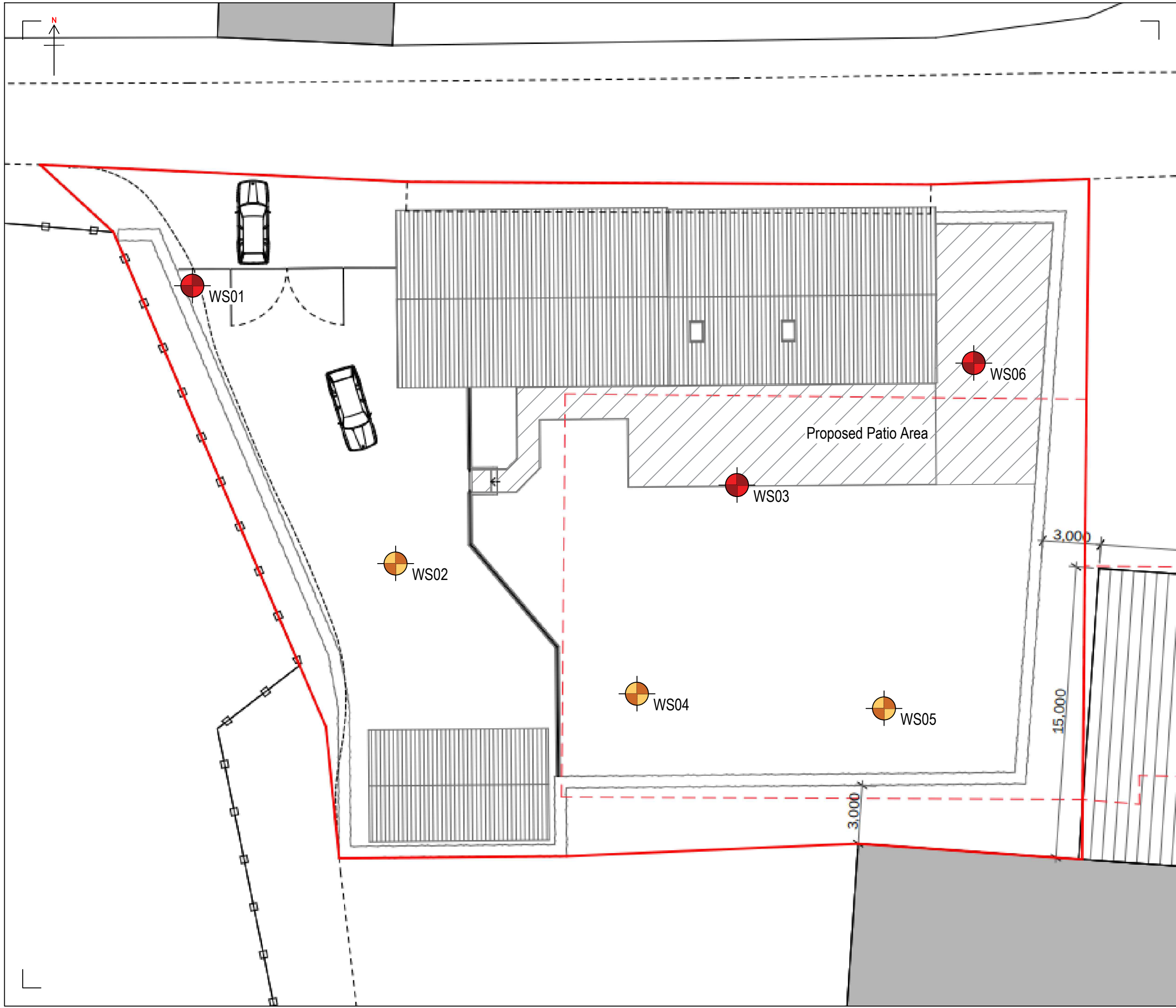






APPENDIX D

Exploratory Hole Information



Key:
 Dynamic Sampling Borehole
 Dynamic Sampling Borehole (including combined gas and groundwater install)

Status
FINAL

JPC Environmental Services
 (A Division of J P Chick & Partners Ltd)
 Consulting Civil & Structural Engineers

7 Museum Street,
 Ipswich, Suffolk.
 IP1 1HQ.
 T: (01473) 280699 W: www.chick.co.uk
 F: (01473) 280701 E: ipswich@chick.co.uk

Also at:
 8 Atlantic Square,
 Station Rd. Witham,
 Essex, CM8 2TL.
 T: (01376) 503020

23 St Stephens Road, Norwich,
 Norfolk, NR1 3SP
 T: (01603) 619093
 F: (01603) 610840

Client
Will Scott

Project
Flemings Hall Farm


Drawing Title
Exploratory Hole Location Plan

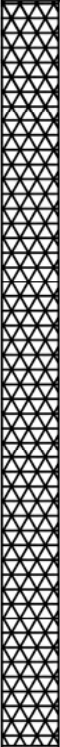






Scale N.T.S	Checked AS	Date 31.10.22
Date 31.10.2022	Drawn By DF	
Drawing Number NE22-009/1/001		Rev
THIS DRAWING IS COPYRIGHT		

Project Flemings Barn, Hall Road, Bedingfield		Project No. NE22/009	JPC Environmental Services (A Division of J P Chick & Partners Ltd) Consulting Civil & Structural Engineers
Dates Start: 03/06/22 End: 03/06/22 Logged: 06/10/22	Grid Reference 619227, 267815	Ground Level 62mAOD	
Contractor/ Plant: Cowan Drilling Services/ Premier 110 Dynamic Sampler		Location ID: WS01	


Install/ Backfill	Water	STRATA				SAMPLES & TESTS		
		Reduced Level	Legend	Depth (Thickness)	DESCRIPTION	Depth	Type No	N Value
		61.80		(0.20)	Dark brown fine to medium SAND. (TOPSOIL)			
		61.55		(0.25)	Brown fine to medium slightly gravelly SAND. Gravel is fine to medium subangular to rounded flint. (TOPSOIL)	0.30	ES1	
		60.95		(0.15)				
		60.60		(0.35)	Brown fine to medium very gravelly SAND. Gravel is fine to medium angular to subrounded brick concrete and flint. (MADE GROUND)			
		60.55		(0.05)	Yellow coarse very gravelly SAND. Gravel is fine to medium angular to subrounded brick concrete and flint. (MADE GROUND)	1.00	ES2	
				(1.00)	Orange coarse gravelly SAND. Gravel is fine to medium angular to subrounded brick concrete and flint. (MADE GROUND)			
			58.55		(2.00)	Yellow brown grey mottled stiff gravelly CLAY. Gravel is fine to medium angular to subrounded chalk and flint. (LOWESTOFT FORMATION)		
				3.00	Exploratory Hole Terminated at 3.00mbgl (Target depth).			

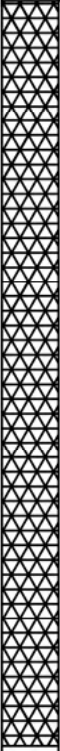





Boring Progress and Water Observations						Chiselling			Water Added		GENERAL REMARKS
Date	Time	Depth	Casing Depth	Casing Dia. mm	Water Depth	From	To	Hours	From	To	
03/06/22	14:30	1.00m	1.00m	76	DRY						Abundant rootlets from ground level to 0.20mbgl. Frequent rootlets from 0.20mbgl to 0.45mbgl.

Project Flemings Barn, Hall Road, Bedingfield		Project No. NE22/009	 JPC Environmental Services (A Division of J P Chick & Partners Ltd) Consulting Civil & Structural Engineers
Dates Start: 03/06/22 End: 03/06/22 Logged: 06/10/22	Grid Reference 619227, 267815	Ground Level 62mAOD	
Contractor/ Plant: Cowan Drilling Services/ Premier 110 Dynamic Sampler		Location ID: WS02	


Install/ Backfill	Water	STRATA				SAMPLES & TESTS			
		Reduced Level	Legend	Depth (Thickness)	DESCRIPTION	Depth	Type No	N Value	
		61.80		(0.20)	Concrete. (CONCRETE)				
		61.60		(0.20)	Brownish grey mottled firm slightly gravelly CLAY. Gravel is fine to medium angular to subrounded chalk and flint.	0.40	ES1		
		61.40		(0.20)	(MADE GROUND)				
		61.20		(0.20)	Brown grey mottled firm slightly gravelly CLAY. Gravel is fine to medium angular to subrounded chalk and flint.	0.80	ES2		
				(0.20)	(MADE GROUND)				
				0.80	Blackish brown mottled soft CLAY. (MADE GROUND)				
			60.70		(0.50)	Brown grey mottled firm slightly gravelly CLAY. Gravel is fine to medium angular to subrounded chalk and flint.			
					1.30	(LOWESTOFT FORMATION)			
						Yellowish brown grey mottled stiff gravelly CLAY. Gravel is fine to medium angular to subrounded chalk and flint. (LOWESTOFT FORMATION)			
			59.00		(1.70)				
				3.00	Exploratory Hole Terminated at 3.00mbgl (Target depth).				

Boring Progress and Water Observations						Chiselling			Water Added		GENERAL REMARKS
Date	Time	Depth	Casing Depth	Casing Dia. mm	Water Depth	From	To	Hours	From	To	
03/06/22	14:05	1.00m	1.00m	76	DRY						Slight hydrocarbon odour from 0.60mbgl to 0.80mbgl. Dark brown roots from 1.30mbgl to 1.50mbgl.

Project Flemings Barn, Hall Road, Bedingfield		Project No. NE22/009	 JPC Environmental Services (A Division of J.P. Chick & Partners Ltd) Consulting Civil & Structural Engineers
Dates Start: 03/06/22 End: 03/06/22 Logged: 06/10/22	Grid Reference 619227, 267815	Ground Level 62mAOD	
Contractor/ Plant: Cowan Drilling Services/ Premier 110 Dynamic Sampler		Location ID: WS03	

Install/ Backfill	Water	STRATA				SAMPLES & TESTS		
		Reduced Level	Legend	Depth (Thickness)	DESCRIPTION	Depth	Type No	N Value
		61.80		(0.20)	Concrete. (CONCRETE)			
		61.60		0.20 (0.20)	Brown gravelly coarse SAND. Gravel is fine to coarse and angular to subrounded brick concrete and flint.			
		61.40		0.40 (0.20)	(MADE GROUND)			
				0.60	Brownish orange soft CLAY. (MADE GROUND)	0.60	ES1	
					0.90	Brown grey mottled stiff gravelly CLAY. Gravel is fine to medium angular to subrounded chalk and flint. (LOWESTOFT FORMATION)	0.90	ES2
		60.00		(1.40)				
				2.00				
		59.00		(1.00)	Brown grey mottled stiff gravelly CLAY. Gravel is fine to medium angular to subrounded chalk and flint. (LOWESTOFT FORMATION)			
				3.00	Exploratory Hole Terminated at 3.00mbgl (Target depth).			

Boring Progress and Water Observations						Chiselling			Water Added		GENERAL REMARKS
Date	Time	Depth	Casing Depth	Casing Dia. mm	Water Depth	From	To	Hours	From	To	
03/06/22	09:10	3.00m	1.00m	76	DRY						

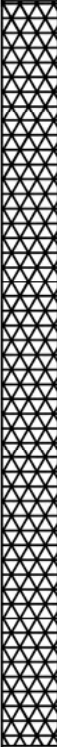








Project Flemings Barn, Hall Road, Bedingfield		Project No. NE22/009	 JPC Environmental Services (A Division of J P Chick & Partners Ltd) Consulting Civil & Structural Engineers
Dates Start: 03/06/22 End: 03/06/22 Logged: 06/10/22	Grid Reference 619227, 267815	Ground Level 62mAOD	
Contractor/ Plant: Cowan Drilling Services/ Premier 110 Dynamic Sampler		Location ID: WS04	

Install/ Backfill	Water	Reduced Level	Legend	Depth (Thickness)	STRATA	SAMPLES & TESTS		
					DESCRIPTION	Depth	Type No	N Value
		61.80		(0.20) 0.20	Concrete. (CONCRETE)			
		61.30		(0.50) 0.70	Brown gravelly course SAND. Gravel is fine to coarse and angular to subrounded brick concrete and flint. (MADE GROUND)			
		61.10		(0.20) 0.90	Brown grey mottled clayey course SAND. (MADE GROUND)	0.80	ES1	
		60.60		(0.50) 1.40	Brown grey black mottled clayey course SAND. (MADE GROUND)	1.10	EW1	
						1.30	ES2	
		59.00		(1.60) 3.00	Brown grey mottled stiff gravelly CLAY. Gravel is fine to medium angular to subrounded chalk and flint. (LOWESTOFT FORMATION)			
					Exploratory Hole Terminated at 3.00mbgl (Target depth).			

Boring Progress and Water Observations						Chiselling			Water Added		GENERAL REMARKS
Date	Time	Depth	Casing Depth	Casing Dia. mm	Water Depth	From	To	Hours	From	To	
03/06/22	09:55	0.90m	1.40m	76	1.10						Strong hydrocarbon odour between 0.70mbgl and 0.90mbgl. One large dark brown root and frequent dark brown rootlets between 0.70mbgl and 0.90mbgl.


All dimensions in metres Scale 1:64	Client W Barber	Logged By: TS Checked By: AS	Issue FINAL Sheet 1 of 1
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





Project Flemings Barn, Hall Road, Bedingfield		Project No. NE22/009	 JPC Environmental Services (A Division of J P Chick & Partners Ltd) Consulting Civil & Structural Engineers
Dates Start: 03/06/22 End: 03/06/22 Logged: 06/10/22	Grid Reference 619227, 267815	Ground Level 62mAOD	
Contractor/ Plant: Cowan Drilling Services/ Premier 110 Dynamic Sampler		Location ID: WS05	

Install/ Backfill	Water	STRATA				SAMPLES & TESTS			
		Reduced Level	Legend	Depth (Thickness)	DESCRIPTION	Depth	Type No	N Value	
		61.70		(0.30)	Concrete. (CONCRETE)				
				0.30					
		61.35		(0.35)	Brownish orange soft CLAY. (MADE GROUND)	0.40	ES1		
				0.65					
		61.35		(0.35)	Orange firm CLAY. (MADE GROUND)	0.80	ES2		
				1.00					
		60.95		(0.40)	Yellowish brown grey mottled stiff gravelly CLAY. Gravel is fine to medium angular to subrounded chalk and flint. (MADE GROUND)				
		1.40							
60.85		(0.10)	Orange fine to medium SAND. (MADE GROUND)						
		1.50							
		59.05		(0.90)	Yellowish brown grey mottled stiff gravelly CLAY. Gravel is fine to medium angular to subrounded chalk and flint. (LOWESTOFT FORMATION)				
		2.40							
58.45		(0.60)	Brownish grey mottled stiff gravelly CLAY. Gravel is fine to medium angular to subrounded chalk and flint. (LOWESTOFT FORMATION)						
		3.00							
Exploratory Hole Terminated at 3.00mbgl (Target depth).									

Boring Progress and Water Observations						Chiselling			Water Added		GENERAL REMARKS
Date	Time	Depth	Casing Depth	Casing Dia. mm	Water Depth	From	To	Hours	From	To	
06/03/22	10:50	3.00m	1.00m	76	0.75						One large dark brown root between 0.65mbgl and 1.00mbgl. Abundant rootlets between 1.00mbgl and 1.40 mbgl.

All dimensions in metres Scale 1:64	Client W Barber	Logged By: TS Checked By: AS	Issue FINAL Sheet 1 of 1
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Project Flemings Barn, Hall Road, Bedingfield		Project No. NE22/009	 JPC Environmental Services (A Division of J P Chick & Partners Ltd) Consulting Civil & Structural Engineers
Dates Start: 03/06/22 End: 03/06/22 Logged: 06/10/22	Grid Reference 619227, 267815	Ground Level 62mAOD	
Contractor/ Plant: Cowan Drilling Services/ Premier 110 Dynamic Sampler		Location ID: WS06	

Install/ Backfill	Water	STRATA				SAMPLES & TESTS		
		Reduced Level	Legend	Depth (Thickness)	DESCRIPTION	Depth	Type No	N Value
		61.80		(0.20) 0.20	Concrete. (CONCRETE)			
		61.40		(0.40) 0.60	Brownish gravelly soft CLAY. Gravel is fine to coarse angular to subrounded brick concrete and flint. (MADE GROUND)	0.50	ES1	
		61.20		(0.20) 0.80	Brown grey mottled firm gravelly CLAY. Gravel is fine to medium angular to subrounded chalk and flint. (MADE GROUND)			
		60.90		(0.30) 1.10	Black medium to coarse clayey SAND. (MADE GROUND)	1.00	ES2	
		60.00		(0.90) 2.00	Brown grey mottled firm gravelly CLAY. Gravel is fine to coarse angular to subrounded chalk and flint. (LOWESTOFT FORMATION)			
	46.00		(1.00) 3.00	Brown grey mottled stiff gravelly CLAY. Gravel is fine to coarse angular to subrounded chalk and flint. (LOWESTOFT FORMATION)				
Exploratory Hole Terminated at 3.00mbgl (Target depth).								

Boring Progress and Water Observations						Chiselling			Water Added		GENERAL REMARKS
Date	Time	Depth	Casing Depth	Casing Dia. mm	Water Depth	From	To	Hours	From	To	
06/03/22	11:40	3.00m	1.00m	76	DRY						Slight hydrocarbon odour between 0.80mbgl and 1.10mbgl.

All dimensions in metres Scale 1:64	Client W Barber	Logged By: TS Checked By: AS	Issue FINAL Sheet 1 of 1
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APPENDIX E

Laboratory Results



Final Report

Report No.: 22-38203-1
Initial Date of Issue: 17-Oct-2022
Client: J P Chick & Partners Limited
Client Address: 7 Museum Street
Ipswich
Suffolk
IP1 1HQ
Contact(s): Andrew Cartwright
Project: NE22/009 Felmings Hall Farm
Quotation No.: Q22-27056
Date Received: 06-Oct-2022
Order No.:
Date Instructed: 06-Oct-2022
No. of Samples: 9
Turnaround (Wkdays): 5
Results Due: 12-Oct-2022
Date Approved: 17-Oct-2022

Approved By:

Details: Stuart Henderson, Technical
Manager

Results - Soil

Project: NE22/009 Felmings Hall Farm

Client: J P Chick & Partners Limited		Chemtest Job No.:		22-38203	22-38203	22-38203	22-38203	22-38203	22-38203	22-38203	22-38203	22-38203
Quotation No.: Q22-27056		Chemtest Sample ID.:		1519905	1519907	1519908	1519909	1519911	1519912	1519913	1519915	
Order No.:		Client Sample Ref.:		WS01	WS02	WS02	WS03	WS04	WS04	WS05	WS06	
		Client Sample ID.:		ES1	ES1	ES2	ES1	ES1	ES2	ES1	ES1	
		Sample Location:		WS01	WS02	WS02	WS03	WS04	WS04	WS05	WS06	
		Sample Type:		SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	
		Top Depth (m):		0.1	0.3	0.6	0.4	0.7	1.1	0.3	0.3	
		Bottom Depth (m):		0.3	0.4	0.8	0.6	0.8	1.3	0.4	0.5	
		Date Sampled:		03-Oct-2022	03-Oct-2022	03-Oct-2022	03-Oct-2022	03-Oct-2022	03-Oct-2022	03-Oct-2022	03-Oct-2022	
		Asbestos Lab:		DURHAM	DURHAM	DURHAM	DURHAM	DURHAM	DURHAM	DURHAM	DURHAM	
Determinand	Accred.	SOP	Units	LOD								
ACM Type	U	2192		N/A	-	-	-	-	-	-	-	-
Asbestos Identification	U	2192		N/A	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected
Moisture	N	2030	%	0.020	21	18	13	15	12	11	13	19
pH	U	2010		4.0	7.9	8.2	8.3	8.3	8.2	8.2	8.3	8.1
Boron (Hot Water Soluble)	U	2120	mg/kg	0.40	1.9	0.88	1.2	0.88	1.3	< 0.40	1.6	0.42
Sulphate (2:1 Water Soluble) as SO4	U	2120	g/l	0.010	0.025	0.57	< 0.010	0.085	0.071	0.24	< 0.010	0.010
Cyanide (Free)	U	2300	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Cyanide (Total)	U	2300	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Thiocyanate	U	2300	mg/kg	5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Sulphide (Easily Liberatable)	N	2325	mg/kg	0.50	10	30	17	7.0	20	17	10	23
Sulphate (Total)	U	2430	%	0.010	0.053	0.092	0.15	0.032	0.092	0.16	0.031	0.058
Arsenic	U	2455	mg/kg	0.5	6.8	4.9	8.2	5.2	4.4	5.9	5.5	3.7
Cadmium	U	2455	mg/kg	0.10	0.18	< 0.10	0.19	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Chromium	U	2455	mg/kg	0.5	8.2	7.6	15	8.7	7.0	4.1	10	6.4
Copper	U	2455	mg/kg	0.50	19	6.7	12	4.9	5.9	3.9	5.3	5.3
Mercury	U	2455	mg/kg	0.05	0.07	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Nickel	U	2455	mg/kg	0.50	9.2	10	17	9.7	9.1	6.1	10	7.4
Lead	U	2455	mg/kg	0.50	50	9.7	15	8.4	9.4	4.1	7.7	15
Selenium	U	2455	mg/kg	0.25	0.32	0.26	0.53	0.39	< 0.25	< 0.25	0.32	< 0.25
Zinc	U	2455	mg/kg	0.50	70	16	42	18	15	8.8	19	21
Chromium (Hexavalent)	N	2490	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Organic Matter	U	2625	%	0.40	3.7	0.74	1.0	0.79	1.1	< 0.40	0.76	0.71
TPH >C6-C10	N	2670	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH >C10-C21	N	2670	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH >C21-C40	N	2670	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Total TPH >C6-C40	U	2670	mg/kg	10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Naphthalene	N	2800	mg/kg	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	0.11
Acenaphthylene	N	2800	mg/kg	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	0.59
Acenaphthene	N	2800	mg/kg	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	0.31
Fluorene	N	2800	mg/kg	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	1.0
Phenanthrene	N	2800	mg/kg	0.010	2.5	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	5.1
Anthracene	N	2800	mg/kg	0.010	0.77	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	2.2
Fluoranthene	N	2800	mg/kg	0.010	4.8	< 0.010	< 0.010	< 0.010	0.72	< 0.010	< 0.010	6.5
Pyrene	N	2800	mg/kg	0.010	4.1	< 0.010	< 0.010	< 0.010	0.58	< 0.010	< 0.010	5.2
Benzo[a]anthracene	N	2800	mg/kg	0.010	2.4	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	2.4

Results - Soil

Project: NE22/009 Felmings Hall Farm

Client: J P Chick & Partners Limited		Chemtest Job No.:		22-38203	22-38203	22-38203	22-38203	22-38203	22-38203	22-38203	22-38203	22-38203
Quotation No.: Q22-27056		Chemtest Sample ID.:		1519905	1519907	1519908	1519909	1519911	1519912	1519913	1519915	
Order No.:		Client Sample Ref.:		WS01	WS02	WS02	WS03	WS04	WS04	WS05	WS06	
		Client Sample ID.:		ES1	ES1	ES2	ES1	ES1	ES2	ES1	ES1	
		Sample Location:		WS01	WS02	WS02	WS03	WS04	WS04	WS05	WS06	
		Sample Type:		SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	
		Top Depth (m):		0.1	0.3	0.6	0.4	0.7	1.1	0.3	0.3	
		Bottom Depth (m):		0.3	0.4	0.8	0.6	0.8	1.3	0.4	0.5	
		Date Sampled:		03-Oct-2022	03-Oct-2022	03-Oct-2022	03-Oct-2022	03-Oct-2022	03-Oct-2022	03-Oct-2022	03-Oct-2022	
		Asbestos Lab:		DURHAM	DURHAM	DURHAM	DURHAM	DURHAM	DURHAM	DURHAM	DURHAM	
Determinand	Accred.	SOP	Units	LOD								
Chrysene	N	2800	mg/kg	0.010	2.3	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	1.8
Benzo[b]fluoranthene	N	2800	mg/kg	0.010	3.5	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	2.3
Benzo[k]fluoranthene	N	2800	mg/kg	0.010	1.4	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	0.91
Benzo[a]pyrene	N	2800	mg/kg	0.010	3.4	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	2.3
Indeno(1,2,3-c,d)Pyrene	N	2800	mg/kg	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
Dibenz(a,h)Anthracene	N	2800	mg/kg	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
Benzo[g,h,i]perylene	N	2800	mg/kg	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
Total Of 16 PAH's	N	2800	mg/kg	0.20	25	< 0.20	< 0.20	< 0.20	1.3	< 0.20	< 0.20	31
Demeton-O	N	2820	mg/kg	0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20
Phorate	N	2820	mg/kg	0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20
Demeton-S	N	2820	mg/kg	0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20
Disulfoton	N	2820	mg/kg	0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20
Fenthion	N	2820	mg/kg	0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20
Trichloronate	N	2820	mg/kg	0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20
Prothiofos	N	2820	mg/kg	0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20
Fensulphothion	N	2820	mg/kg	0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20
Sulprofos	N	2820	mg/kg	0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20
Azinphos-Methyl	N	2820	mg/kg	0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20
Coumaphos	N	2820	mg/kg	0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20
Atraton	N	2830	mg/kg	0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20
Prometon	N	2830	mg/kg	0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20
Simazine	N	2830	mg/kg	0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20
Atrazine	N	2830	mg/kg	0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20
Propazine	N	2830	mg/kg	0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20
Terbutylazine	N	2830	mg/kg	0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20
Secbumeton	N	2830	mg/kg	0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20
Simetryn	N	2830	mg/kg	0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20
Ametryn	N	2830	mg/kg	0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20
Prometryn	N	2830	mg/kg	0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20
Terbutryn	N	2830	mg/kg	0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20
Alpha-HCH	N	2840	mg/kg	0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20
Gamma-HCH (Lindane)	N	2840	mg/kg	0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20
Beta-HCH	N	2840	mg/kg	0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20
Delta-HCH	N	2840	mg/kg	0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20
Heptachlor	N	2840	mg/kg	0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20
Aldrin	N	2840	mg/kg	0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20

Results - Soil

Project: NE22/009 Felmings Hall Farm

Client: J P Chick & Partners Limited		Chemtest Job No.:		22-38203	22-38203	22-38203	22-38203	22-38203	22-38203	22-38203	22-38203	22-38203
Quotation No.: Q22-27056		Chemtest Sample ID.:		1519905	1519907	1519908	1519909	1519911	1519912	1519913	1519915	
Order No.:	Client Sample Ref.:		WS01	WS02	WS02	WS03	WS04	WS04	WS04	WS05	WS06	
	Client Sample ID.:		ES1	ES1	ES2	ES1	ES1	ES2	ES1	ES1		
	Sample Location:		WS01	WS02	WS02	WS03	WS04	WS04	WS04	WS05	WS06	
	Sample Type:		SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	
	Top Depth (m):		0.1	0.3	0.6	0.4	0.7	1.1	0.3	0.3		
	Bottom Depth (m):		0.3	0.4	0.8	0.6	0.8	1.3	0.4	0.5		
	Date Sampled:		03-Oct-2022	03-Oct-2022	03-Oct-2022	03-Oct-2022	03-Oct-2022	03-Oct-2022	03-Oct-2022	03-Oct-2022	03-Oct-2022	
	Asbestos Lab:		DURHAM	DURHAM	DURHAM	DURHAM	DURHAM	DURHAM	DURHAM	DURHAM	DURHAM	
Determinand	Accred.	SOP	Units	LOD								
Heptachlor Epoxide	N	2840	mg/kg	0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20
Gamma-Chlordane	N	2840	mg/kg	0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20
Alpha-Chlordane	N	2840	mg/kg	0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20
Endosulfan I	N	2840	mg/kg	0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20
4,4-DDE	N	2840	mg/kg	0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20
Dieldrin	N	2840	mg/kg	0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20
Endrin	N	2840	mg/kg	0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20
4,4-DDD	N	2840	mg/kg	0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20
Endosulfan II	N	2840	mg/kg	0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20
Endrin Aldehyde	N	2840	mg/kg	0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20
4,4-DDT	N	2840	mg/kg	0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20
Endosulfan Sulphate	N	2840	mg/kg	0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20
Methoxychlor	N	2840	mg/kg	0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20
Endrin Ketone	N	2840	mg/kg	0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20
Total Phenols	U	2920	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10

Results - Soil

Project: NE22/009 Felmings Hall Farm

Client: J P Chick & Partners Limited		Chemtest Job No.:		22-38203	
Quotation No.: Q22-27056		Chemtest Sample ID.:		1519916	
Order No.:		Client Sample Ref.:		WS06	
		Client Sample ID.:		ES2	
		Sample Location:		WS06	
		Sample Type:		SOIL	
		Top Depth (m):		0.9	
		Bottom Depth (m):		1.0	
		Date Sampled:		03-Oct-2022	
		Asbestos Lab:		DURHAM	
Determinand	Accred.	SOP	Units	LOD	
ACM Type	U	2192		N/A	-
Asbestos Identification	U	2192		N/A	No Asbestos Detected
Moisture	N	2030	%	0.020	9.6
pH	U	2010		4.0	8.5
Boron (Hot Water Soluble)	U	2120	mg/kg	0.40	< 0.40
Sulphate (2:1 Water Soluble) as SO4	U	2120	g/l	0.010	< 0.010
Cyanide (Free)	U	2300	mg/kg	0.50	< 0.50
Cyanide (Total)	U	2300	mg/kg	0.50	< 0.50
Thiocyanate	U	2300	mg/kg	5.0	< 5.0
Sulphide (Easily Liberatable)	N	2325	mg/kg	0.50	16
Sulphate (Total)	U	2430	%	0.010	0.024
Arsenic	U	2455	mg/kg	0.5	3.3
Cadmium	U	2455	mg/kg	0.10	0.10
Chromium	U	2455	mg/kg	0.5	5.1
Copper	U	2455	mg/kg	0.50	3.7
Mercury	U	2455	mg/kg	0.05	< 0.05
Nickel	U	2455	mg/kg	0.50	6.5
Lead	U	2455	mg/kg	0.50	3.8
Selenium	U	2455	mg/kg	0.25	< 0.25
Zinc	U	2455	mg/kg	0.50	11
Chromium (Hexavalent)	N	2490	mg/kg	0.50	< 0.50
Organic Matter	U	2625	%	0.40	< 0.40
TPH >C6-C10	N	2670	mg/kg	1.0	< 1.0
TPH >C10-C21	N	2670	mg/kg	1.0	< 1.0
TPH >C21-C40	N	2670	mg/kg	1.0	< 1.0
Total TPH >C6-C40	U	2670	mg/kg	10	< 10
Naphthalene	N	2800	mg/kg	0.010	0.79
Acenaphthylene	N	2800	mg/kg	0.010	4.7
Acenaphthene	N	2800	mg/kg	0.010	2.2
Fluorene	N	2800	mg/kg	0.010	9.5
Phenanthrene	N	2800	mg/kg	0.010	45
Anthracene	N	2800	mg/kg	0.010	22
Fluoranthene	N	2800	mg/kg	0.010	58
Pyrene	N	2800	mg/kg	0.010	45
Benzo[a]anthracene	N	2800	mg/kg	0.010	23

Results - Soil

Project: NE22/009 Felmings Hall Farm

Client: J P Chick & Partners Limited		Chemtest Job No.:		22-38203	
Quotation No.: Q22-27056		Chemtest Sample ID.:		1519916	
Order No.:		Client Sample Ref.:		WS06	
		Client Sample ID.:		ES2	
		Sample Location:		WS06	
		Sample Type:		SOIL	
		Top Depth (m):		0.9	
		Bottom Depth (m):		1.0	
		Date Sampled:		03-Oct-2022	
		Asbestos Lab:		DURHAM	
Determinand	Accred.	SOP	Units	LOD	
Chrysene	N	2800	mg/kg	0.010	22
Benzo[b]fluoranthene	N	2800	mg/kg	0.010	22
Benzo[k]fluoranthene	N	2800	mg/kg	0.010	8.5
Benzo[a]pyrene	N	2800	mg/kg	0.010	22
Indeno(1,2,3-c,d)Pyrene	N	2800	mg/kg	0.010	12
Dibenz(a,h)Anthracene	N	2800	mg/kg	0.010	2.0
Benzo[g,h,i]perylene	N	2800	mg/kg	0.010	10
Total Of 16 PAH's	N	2800	mg/kg	0.20	310
Demeton-O	N	2820	mg/kg	0.20	< 0.20
Phorate	N	2820	mg/kg	0.20	< 0.20
Demeton-S	N	2820	mg/kg	0.20	< 0.20
Disulfoton	N	2820	mg/kg	0.20	< 0.20
Fenthion	N	2820	mg/kg	0.20	< 0.20
Trichloronate	N	2820	mg/kg	0.20	< 0.20
Prothiofos	N	2820	mg/kg	0.20	< 0.20
Fensulphothion	N	2820	mg/kg	0.20	< 0.20
Sulprofos	N	2820	mg/kg	0.20	< 0.20
Azinphos-Methyl	N	2820	mg/kg	0.20	< 0.20
Coumaphos	N	2820	mg/kg	0.20	< 0.20
Atraton	N	2830	mg/kg	0.20	< 0.20
Prometon	N	2830	mg/kg	0.20	< 0.20
Simazine	N	2830	mg/kg	0.20	< 0.20
Atrazine	N	2830	mg/kg	0.20	< 0.20
Propazine	N	2830	mg/kg	0.20	< 0.20
Terbutylazine	N	2830	mg/kg	0.20	< 0.20
Secbumeton	N	2830	mg/kg	0.20	< 0.20
Simetryn	N	2830	mg/kg	0.20	< 0.20
Ametryn	N	2830	mg/kg	0.20	< 0.20
Prometryn	N	2830	mg/kg	0.20	< 0.20
Terbutryn	N	2830	mg/kg	0.20	< 0.20
Alpha-HCH	N	2840	mg/kg	0.20	< 0.20
Gamma-HCH (Lindane)	N	2840	mg/kg	0.20	< 0.20
Beta-HCH	N	2840	mg/kg	0.20	< 0.20
Delta-HCH	N	2840	mg/kg	0.20	< 0.20
Heptachlor	N	2840	mg/kg	0.20	< 0.20
Aldrin	N	2840	mg/kg	0.20	< 0.20

Results - Soil

Project: NE22/009 Felmings Hall Farm

Client: J P Chick & Partners Limited	Chemtest Job No.:		22-38203		
Quotation No.: Q22-27056	Chemtest Sample ID.:		1519916		
Order No.:	Client Sample Ref.:		WS06		
	Client Sample ID.:		ES2		
	Sample Location:		WS06		
	Sample Type:		SOIL		
	Top Depth (m):		0.9		
	Bottom Depth (m):		1.0		
	Date Sampled:		03-Oct-2022		
	Asbestos Lab:		DURHAM		
Determinand	Accred.	SOP	Units	LOD	
Heptachlor Epoxide	N	2840	mg/kg	0.20	< 0.20
Gamma-Chlordane	N	2840	mg/kg	0.20	< 0.20
Alpha-Chlordane	N	2840	mg/kg	0.20	< 0.20
Endosulfan I	N	2840	mg/kg	0.20	< 0.20
4,4-DDE	N	2840	mg/kg	0.20	< 0.20
Dieldrin	N	2840	mg/kg	0.20	< 0.20
Endrin	N	2840	mg/kg	0.20	< 0.20
4,4-DDD	N	2840	mg/kg	0.20	< 0.20
Endosulfan II	N	2840	mg/kg	0.20	< 0.20
Endrin Aldehyde	N	2840	mg/kg	0.20	< 0.20
4,4-DDT	N	2840	mg/kg	0.20	< 0.20
Endosulfan Sulphate	N	2840	mg/kg	0.20	< 0.20
Methoxychlor	N	2840	mg/kg	0.20	< 0.20
Endrin Ketone	N	2840	mg/kg	0.20	< 0.20
Total Phenols	U	2920	mg/kg	0.10	0.23

Test Methods

SOP	Title	Parameters included	Method summary
2010	pH Value of Soils	pH	pH Meter
2030	Moisture and Stone Content of Soils(Requirement of MCERTS)	Moisture content	Determination of moisture content of soil as a percentage of its as received mass obtained at <37°C.
2040	Soil Description(Requirement of MCERTS)	Soil description	As received soil is described based upon BS5930
2120	Water Soluble Boron, Sulphate, Magnesium & Chromium	Boron; Sulphate; Magnesium; Chromium	Aqueous extraction / ICP-OES
2192	Asbestos	Asbestos	Polarised light microscopy / Gravimetry
2300	Cyanides & Thiocyanate in Soils	Free (or easy liberatable) Cyanide; total Cyanide; complex Cyanide; Thiocyanate	Alkaline extraction followed by colorimetric determination using Automated Flow Injection Analyser.
2325	Sulphide in Soils	Sulphide	Steam distillation with sulphuric acid / analysis by 'Aquakem 600' Discrete Analyser, using N,N-dimethyl-p-phenylenediamine.
2430	Total Sulphate in soils	Total Sulphate	Acid digestion followed by determination of sulphate in extract by ICP-OES.
2455	Acid Soluble Metals in Soils	Metals, including: Arsenic; Barium; Beryllium; Cadmium; Chromium; Cobalt; Copper; Lead; Manganese; Mercury; Molybdenum; Nickel; Selenium; Vanadium; Zinc	Acid digestion followed by determination of metals in extract by ICP-MS.
2490	Hexavalent Chromium in Soils	Chromium [VI]	Soil extracts are prepared by extracting dried and ground soil samples into boiling water. Chromium [VI] is determined by 'Aquakem 600' Discrete Analyser using 1,5-diphenylcarbazide.
2625	Total Organic Carbon in Soils	Total organic Carbon (TOC)	Determined by high temperature combustion under oxygen, using an Eltra elemental analyser.
2670	Total Petroleum Hydrocarbons (TPH) in Soils by GC-FID	TPH (C6–C40); optional carbon banding, e.g. 3-band – GRO, DRO & LRO*TPH C8–C40	Dichloromethane extraction / GC-FID
2800	Speciated Polynuclear Aromatic Hydrocarbons (PAH) in Soil by GC-MS	Acenaphthene*; Acenaphthylene; Anthracene*; Benzo[a]Anthracene*; Benzo[a]Pyrene*; Benzo[b]Fluoranthene*; Benzo[ghi]Perylene*; Benzo[k]Fluoranthene; Chrysene*; Dibenz[ah]Anthracene; Fluoranthene*; Fluorene*; Indeno[123cd]Pyrene*; Naphthalene*; Phenanthrene*; Pyrene*	Dichloromethane extraction / GC-MS
2820	Organophosphorus (O-P) Pesticides in Soils by GC-MS	Organophosphorus pesticide representative suite including Parathion, Malathion etc, plus client specific determinands	Dichloromethane extraction / GC-MS
2830	Organonitrogen (O-N) Pesticides in Soils by GC-MS	Organonitrogen pesticide representative suite including Triazines etc, plus client specific determinands	Dichloromethane extraction / GC-MS
2840	Organochlorine (O-Cl) Pesticides in Soils by GC-MS	Organochlorine pesticide representative suite including DDT and its metabolites, 'drins' and HCH etc, plus client specific determinands	Dichloromethane extraction / GC-MS
2920	Phenols in Soils by HPLC	Phenolic compounds including Resorcinol, Phenol, Methylphenols, Dimethylphenols, 1-Naphthol and TrimethylphenolsNote: chlorophenols are excluded.	60:40 methanol/water mixture extraction, followed by HPLC determination using electrochemical detection.

Report Information

Key

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

Comments or interpretations are beyond the scope of UKAS accreditation

The results relate only to the items tested

Uncertainty of measurement for the determinands tested are available upon request

None of the results in this report have been recovery corrected

All results are expressed on a dry weight basis

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

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

All Asbestos testing is performed at the indicated laboratory

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

Sample Deviation Codes

A - Date of sampling not supplied

B - Sample age exceeds stability time (sampling to extraction)

C - Sample not received in appropriate containers

D - Broken Container

E - Insufficient Sample (Applies to LOI in Trommel Fines Only)

Sample Retention and Disposal

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

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

Charges may apply to extended sample storage

If you require extended retention of samples, please email your requirements to:

customerservices@chemtest.com